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The Interplay of the Dirty Hands of British area bombing and the Wicked Problem of defeating Nazi Germany in World War II - A lesson in leadership ethics

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Abstract

The British area bombing of Germany in World War II has provided for enduring ethical controversy. Eschewing conventional approaches, we present area bombing as a Dirty Hands leadership response to the Wicked Problem of Britain's wartime strategic predicament. Using historical methodology, we establish two distinct phases in area bombing: 1942-1944, when this was ethically contentious but politically necessary; and 1944-1945, which lacks a Dirty Hands legitimation. The second phase follows upon a six-month lull in area bombing during Bomber Command's assignment to Overlord (D-Day) duties. It is characterised by credible alternatives to area bombing, a waning sense of proportionality in Bomber Command activity, and intensifying death and destruction without justifiable purpose. We relate the breaching of the boundaries of Dirty Hands in Phase II to a precise date - September 1944. This coincides with the mutation of the strategic Wicked Problem into a Critical Problem, visible in the stalling of the Allied land campaign in France. Mistaking this for a Tame Problem, the C-in-C of Bomber Command, Arthur Harris, exploits the political context to escalate his commitment. Following Watters' (2017) alignment of Critical Problems with Virtue Ethics, we argue that Harris' leadership in Phase II is not consistent with Virtue Ethics (of which recognition of the boundaries of Dirty Hands is a function). Harris is the archetype of the leader who gets away with exploiting a Wicked Problem because his superiors have let down their guard. In the final instance, his failure of ethical leadership becomes their own.

Introduction

From March 1942 to April 1945 Royal Air Force (RAF) Bomber Command conducted a strategic air campaign against Nazi Germany described, variously, as area, city or fire bombing. Contrary to received wisdom, the aiming points of this campaign were not industrial or military pinpoint targets, but more ‘burnable’ city centres. The campaign caused the death of an estimated 350,000 civilians and the destruction of 50 to 60 percent of the built-up area of Germany (Overy, 2013: 17, 477).

Targeting civilians in such a manner is outside the Just War code and the obvious ethical implications have stoked the fires of controversy for seven decades. A particular focus of attention attaches to the leaders who greenlighted or conducted the campaign: Arthur Harris, the Commander-in-Chief (C-in-C) of Bomber Command from early 1942, Charles Portal, the Chief of the Air Staff, and Prime Minister Winston Churchill. While some defend the campaign as a ‘necessary evil’ (Neillands, 2001; Taylor, 2005), most scholars and authors who have delved into the case take a contrary view: they consider this violation of the Just War code a significant blemish on the Allied record if not a war crime (Garrett, 1996; Coates, 1997; Walzer, 2004; Friedrich, 2006; Grayling, 2007; Primoratz, 2010). It is also one of the reasons there has never been a campaign medal awarded to Bomber Command crews, though a clasp was awarded in 2013.

These positions reflect the two principal ethical codes. For a Kantian rights and duties approach (deontology) the means are critical not the ends. For utilitarians (and consequentialists) the results or outcomes are important not the means - the ends are either ethical or they are not. In this case, however, both positions constitute epistemic dead-ends. The utilitarian case – that any means could be deployed to defeat Hitler – is too much of a broad brush; precisely the type of thinking that led to Hiroshima and Nagasaki. As to deontology, the moral default mode, one needs to factor in the wicked predicament of wartime Britain - defeating the modern epitome of evil, against overwhelming odds. In situations like these leaders would be ill-advised to disregard outcomes and act on principle alone.

The article is born from the idea that there is a third way in arguing about the bombing campaign, and that this may provide a means to resolving this long-standing debate. Alternatives are Threshold Deontology – a

temporary suspension of deontology when the consequences of adhering to this become counterproductive (Moore, 1997); or Dirty Hands – a disposition that relates to transgressions committed in the light of extraordinary circumstances (‘desperate times call for desperate measures’), and which would be deemed unethical in ‘normal’ contexts. Dirty Hands derives its name from the eponymous play by Jean-Paul Sartre (1955), set in a fictional civil war in which the secretary of the Communist Party is trying to persuade a young idealist that to secure political power requires abandoning some ethical principles for the sake of the greater good. The beginnings of a structured Dirty Hands debate stretch back to the context of the Vietnam War and the work of Michael Walzer (1973, 1977, 2004), and the theorem saw a second flowering in the wake of 9/11 (indicatively Ignatieff, 2004). Unlike common dilemmas (where no direction exists as to which action should be taken), Dirty Hands relates to situations where the necessary choice of option is painful, but obvious (Coady, 2011). Machiavelli would have concurred: the Prince sometimes needed to act immorally in an immoral world for the greater good (Nederman, 2014). And for Thomas Hobbes ethical prohibitions against certain practices could not hold when compliance with the ethics led to self-destruction, because it was ‘contrary to the ground of all laws of nature’ (Coady, 2008: 110).

For utilitarians the Dirty Hands theorem is superfluous, as they are driven by the assumption that the right course of action can be correctly calculated; and if right and wrong can be expressed in values of utility then there is no need for agonizing over Dirty Hands. This, of course, does not correspond to the reality of duress, which seldom grants the luxury of obtaining straightforward best-case solutions. Dirty Hands applies to wrong/wrong dilemmas where all existing options for action are unpalatable; and where the point is how to choose the lesser evil (Sanders, 2015; Watters, 2017). This focus on obtaining a net negative is not consistent with utilitarianism, which it reduces to absurdity.

Deontology, on the other hand, refutes Dirty Hands for the same reasons as it refutes utilitarianism. In a hypothetical situation where something unpleasant may need to be done in order to prevent worse from occurring, deontologists may expose themselves to the accusation of being moral fence-sitters:

Those acting on the presumption that the end does not justify the means open themselves to the suspicion of being obsessed with . . . their own moral purity regardless of the cost to others (Alexandra, 2007: 76-91).

Having said this, any licence taken with ethical principle should not be taken light-heartedly, as this can quickly degenerate into a slippery slope. In fact, leaders under duress may be tempted to use ruthlessness as a means to justify the unjustifiable (Ignatieff, 2004). This brings us to a first critical juncture, namely that any use of Dirty Hands as an instrument of analysis must incorporate a discussion of the boundaries of Dirty Hands. The relevant literature is surprisingly stumm on the limits governing the degree of Dirty Hands allowable to attain one's legitimate goals (Walzer 1973, 1977, 2004; Cook, 2007; Coady, 2011). This dearth clashes with the critical importance of the leadership skill of knowing where to draw the line in a situation where one is forced to abandon deontology. As we will show later, the case of Bomber Command is particularly suited to probing the limits of Dirty Hands – and the virtuous ethical leader.

In this article we square historical methodology and analysis with an application of the Wicked, Tame and Critical Problems heuristic. On this basis we are able to identify area bombing as a Dirty Hands response to the Wicked Problem of the British strategic predicament, but also an ethical zone-of-no-return in 1944-45 that lies beyond Dirty Hands.

The Wicked, Tame and Critical Problems heuristic distinguishes between Tame Problems that are complicated, but not complex (so you can take the problem out of its context, fix it, return it to the context and the context would not be altered); and Wicked Problems that are either novel or recalcitrant, have no existing solution, and are seldom fixed (Rittel and Webber, 1973). Grint (2005) suggested these might be associated with different decision-styles: Tame Problems requiring the Management of technical expertise. And Wicked Problems, the domain of leadership, requiring something rather more collaborative (because no individual was likely to have the answer); experimental (because it was not likely that anyone would be certain how to proceed so the approach had to be reversible); and involving approaches that appeared, at least on the surface, to be 'clumsy'- that is counter-intuitive and contradictory. A Critical Problem, an

addition to the original typology, was associated with Command, a decision style appropriate for acute crisis.

The literature is particularly adamant about the dangers of mistaking a Wicked Problem for either a Tame Problem requiring the management of expertise, or a Critical problem requiring a commander (Grint, 2014: 243; Watters, 2017: 2). Rittel and Webber (1973) went as far as calling this ‘morally objectionable’, as incorrect framing of ‘a situation’ compounds already existing problems. In other words, Wicked Problems are resistant to attempts to fix them, responding merely by generating new riddles. Ironically, this makes leadership, in its definition as a collaborative and tentative approach to decision-making, more important and more difficult at the same time: leaders cannot let the cheap logic of ‘road-maps’ corrode their decision-making. But at the same time they have to exude confidence to their audiences about the ‘way forward’ or the ‘acceptable end’ (Watters, 2017: 19-20). The paradox of course is that most humans are not cognitively equipped to live with the uncertainty generated by Wicked Problems and, as a moth to the light, are drawn towards those who present a Wicked Problem as a Tame Problem.

Watters (2017) suggests an alignment between ethical theories and the Wicked, Tame and Critical Problems framework: deontology corresponding to Tame Problems, utilitarianism to Wicked Problems, and virtue ethics to Critical Problems. He also found that Time is a critical factor in Wicked Problems, but does not always receive the attention it deserves (Watters, 2017: 13). Using these devices, we establish a connection between Critical Problems, virtue ethics and the limits of Dirty Hands. We do this on the basis that the point in time when area bombing becomes incompatible with Dirty Hands is precisely datable - September 1944 - and that this converges with the morphing of a Wicked Problem into a Critical Problem calling for virtue ethics (Rittel and Webber, 1973; Watters 2017). The argument is that, by this point in the war, Harris should have been aware that defeating Nazi Germany could know no linear solution. He nevertheless chose to treat the situation as a Tame Problem, thereby becoming a peddler of elusive truths ‘who would exploit the situation to personal advantage’ and who ‘must be carefully managed’ by leaders (Watters, 2017: 20).

In terms of structure, the article begins with a review of the conventional utility-based and deontological assessments of the ethics of British bombing. We confirm that these positions do not provide appropriate frameworks for appreciating the moral complexity of the problem at hand. Our outline of the wickedness of the British strategic predicament homes in on environmental and situational constraints, and stresses the need for a dynamic notion of context. The questions guiding the approach are: under what conditions should leaders be allowed to dirty their hands? What, in fact, characterises a situation that legitimises taking a Dirty Hands approach? What are the allowable time limits? Finally, what characterises an authentic Dirty Hands leader - as opposed to a leader who uses a Dirty Hands claim as a fig leaf for wanton ruthlessness?

On this basis we are able to argue that Dirty Hands claims are not valid in any absolute sense but subject to change. Our conclusion is that area bombing was a rather unavoidable consequence of the British strategic predicament, and that a Dirty Hands legitimation existed for area bombing between 1942 and 1944. By mid-1944, however, several indicators are set for change, a signal a truly virtuous leader would have picked up. Regardless of this, Harris escalates his commitment at the first opportunity. The last eight months of the war - which witness a peak in area bombing and a massive leap in civilian death and destruction that has no demonstrable impact on winning the war - lie in the ethical zone-of-no-return. They are the consequence of Harris having mistaken the Wicked Problem of bringing the war to an end (and requiring collaborative effort) for a Tame Problem requiring the sole technical expertise of Bomber Command. Following Watters' alignment of Critical Problems with Virtue Ethics, we argue that the obvious transgression of the limits of Dirty Hands in the bombing campaign indicates a failure of ethical leadership, not merely on the part of Harris himself, but also of his superiors.

1. Conventional ethics and area bombing

The utilitarian argument

Informed observers such as the post-war strategic bombing surveys considered the campaign a relative failure, as it did not attain its intended goal - breaking civilian morale and precipitating the internal collapse of Germany, (Dyson, ch. 38; Overy, 2013: 398-402). There is a reason for this: while considerable scientific resources went into improving the striking capacity of Bomber Command or testing the burnability of German cities, the black box of morale bombing was never subjected to serious scrutiny, and the evidence from the London Blitz is that it was very unlikely to work. As Rahder (1988: 69) states, ‘there was no reasoned, utilitarian rationale for the area campaign...(R)iot, revolt, decline in productivity...were never examined under close sociological or psychological scrutiny’. German collapse was simply to occur ‘somehow’.

The most important direct benefit of bombing was a political one: to sustain the grand alliance. Bombing offered Stalin tangible proof of Britain’s trustworthiness as an ally. When Churchill visited Moscow in 1942, his proposal to wreck Germany was the only thing that found grace in the eyes of Stalin (Overy, 2013: 625). Until the Allied re-entry to Western Europe bombing was the only thing that could buy time from Stalin, who was urging the Western allies to open a second front at the earliest possible time. This aspect profiles rather neatly the option between fence-sitting and using the rather blunt and cruel tool that was bombing. On the other hand, the continuation of area bombing beyond the effective opening of the Second front demanded by Stalin, in June 1944, cannot be justified by reference to the theory either.

The utilitarian argument also carries weight where it comes to the indirect effects of bombing. It was war-winning in the sense that it forced the Germans into a massive redeployment of resources to the home front during a critical period in the war from 1942 to 1944. These resources were bound up (and often destroyed) in defending the Reich, thereby taking pressure off other theatres of war and generally reducing German fighting capability. Bombing was largely responsible for bleeding dry the *Luftwaffe* in 1943-44, 60% of which was repatriated from the East. The actual increase of German armaments production during this time, sometimes cited as proof of the ineffectiveness of the bombing campaign, actually rather confirms the effectiveness of bombing. In fact, bombing placed a ‘strict ceiling’ on the impressive growth rates of the German war economy; without this the increase would have been even higher (Overy, 1996: 103).

On the downside, ‘drawing fire’ (Hall, 1998: 16) cannot justify the escalation of the last eight months - the critical focus of this article. By late 1944 the *Luftwaffe* had been largely eliminated and there were credible alternatives to the very crude targeting strategy of the previous years. In addition, the several reverses of Western Allied military fortunes during this time prove that it had only limited impact on weakening enemy capabilities. This, however, did not seem to bother Harris, whose response was ‘more of the same’. In placing trust in the hope that further attrition would produce what earlier attrition had failed to produce, Harris bears an uncanny resemblance to those commanders who stuck to the wasteful ‘cult of the offensive’ that dominated fighting in the first three years of the First World War (Zabecki, 2015).

The deontological position

To the opposite camp – the deontologists - area bombing was unworthy of the fight of the democracies as it breached important just war standards, such as non-combatant immunity and proportionality (Walzer, 1977: 255-262; Garrett, 1996; Walzer, 2004: 33-55; Grayling, 2007; Primoratz, 2010: 113-133). The British military historian John Keegan even went as far as saying that the civilian suffering caused by bombing was such that it brought the Allies dangerously close to descending to the enemy’s moral level (Keegan, 1993: 433). This echoed earlier criticism by the renowned military historian Basil Lidell Hart who found it ironical that the ‘defenders of civilization’ would adopt such a ‘most barbaric and unskilled way’ for winning a war (quoted in Middlebrook, 1980: 343-344; see also Garrett, 1996: 207).

The major problem with this view is that it is context-less. It posits the issue in an absolute manner, but disregards the fact that British leaders were conditioned by a changing environment, and that at certain times they had only certain types of tools to do the job. Ideally, the deontological argument needs to be nuanced in line with these underlying conditions, but this would run counter to deontology itself, where principle towers above everything else. Deontologists will therefore subscribe to the notion that even in, say, 1942 or 1943, when the outcome of the war still hung in the balance, the British should have shied away from using the only effective weapons systems that allowed them to put pressure on the Nazi war effort, at a critical

juncture. This must strike one as oddly unrealistic, even irresponsible, and returns us to the other fundamental problem mentioned above, moral fence-sitting.

A final aspect is that, as Watters found, deontology seems to align with Tame Problems of greater expertise; but that defeating Germany was a Wicked problem, which aligns more with utilitarianism (Watters, 2017: 8).

2. Area bombing as a Dirty Hands response to the British strategic predicament

Michael Walzer (2004) was the first scholar to apply the Dirty Hands argument to British bombing. He suggested that a Supreme Emergency threatening the viability of a moral community (what Schmitt, 2005: 5, called a 'state of exception') justified Dirty Hands. He saw such a Supreme Emergency in the possible defeat of Britain by Nazi Germany in 1940-41, the consequences of which would have been too awful to contemplate for human civilization. He therefore concedes Britain an 'ethical window' in 1940-41, when the country was fighting for survival, and when it was legitimate to override the inviolability of just war principles such as the prohibition on the bombing of civilians. Walzer's Supreme Emergency hinges, critically, upon the issue of an admissible time-frame (1940-41) that would have legitimized British ruthlessness. It is precisely for this reason that Walzer considered British strategic bombing, which only started in earnest in March 1942 and continued until 1945 (i.e. outside a conceivable ethical window), to have been inadmissible.

In making this argument Walzer underestimates just how wicked the British strategic predicament was. As a maritime power with strong overseas interests, Britain traditionally focused on naval capability, maintaining only a small professional army capable of fighting colonial wars. This was a clear recognition of the strategic focus on Empire, which had no apparent need for a strong land army capable of interfering in European conflict. Resources that had to be split between army and navy in other countries could be dedicated to naval power alone, thereby giving Britain the edge she needed to assert its supremacy over the

seas. In case of embroilment in European conflict, the country sought out continental allies, which it assisted with naval power and finance. Although Britain sometimes ended up in the undesirable position of fighting European land powers on its own, as a rule Britain never tried to overcome them on its own, but relied on building coalitions.

In summer 1940 Britain had to face a threat to its national security that was entirely unprecedented. Having been evicted from the European mainland by a German war machine that, in a matter of mere weeks, had knocked out the French army - the most serious Allied military asset - the country was exposed to imminent invasion. It had no substantial Allies, as the only country that might weigh into the balance, the United States, was still then in the throes of isolationism. Contrary to the situation during the Napoleonic Wars, when Britannia at least still ruled the waves, this time around her maritime lifelines were over-extended and threatened by the U-boat menace. In his memoirs Churchill confided that this was the one thing during the war that genuinely 'frightened' him (Churchill, 1986: 259). Had Germany brought more submarines to bear, the situation may have well become desperate.

As in the Napoleonic precedent, developing a response capable of challenging the full might of the Axis would take Britain many years; perhaps decades. In the meantime, the strategy had to revolve around avoiding direct confrontation and focus on wearing down the Germans in 'sideshowes'. This general outlook of attrition only changed in 1943, when it was replaced by a strategy of 'boots on the ground', entailing a French land campaign that was to be followed by a march on Berlin (Grint, 2008: 23-43).

These paragraphs remind us that strategic capabilities are underpinned by geopolitical disposition; and that this is easily overlooked in ethics assessments. From this point of view, Walzer's idea of an end of imminent threat in 1941 hardly does justice to the situation. As Overy (1996) makes clear, important historical watersheds such as the Battle of Britain or the Battle of Stalingrad are turning points in retrospect only. To contemporaries these events indicated no more than a moment of respite, followed by a tortuous path, and further trials, the outcomes of which were as yet uncertain. They obscure the considerable efforts that were still necessary to win this war against a formidable enemy. What this means is that the existential threat to Britain did not subside with the ebbing of the Blitz in 1941. A hypothetical German victory over the Soviet

Union in 1941 would have renewed the direct threat against Britain. Only the US entry into the war and the successful Soviet counteroffensive, both in December 1941, gave Britain genuine respite. This framing of the nature of the emergency would therefore justify a longer ‘ethical window’ than Walzer’s, until early 1942. The prominent political philosopher John Rawls placed such a ‘cutoff point’ around the time of the battle of Stalingrad, which ended in February 1943 (Rawls, 2006: 637). However, the less squeamish will have no problem in following Overy’s argument that the outcome of the war remained uncertain well into 1943 (Overy, 1996: 103). Without control of the North Atlantic an Allied landing in France was out of the question. And a third scenario to an equally unpalatable Nazi or Soviet Europe only crystallizes with Allied victory in the Battle of the Atlantic, in autumn 1943. What this means is that, from 1940 to 1944, bombing was the only British (and American) option for taking the war to Germany’s doorstep. Today, it is viewed all the more unfavourably as D-Day and the liberation of Western Europe in 1944-45 was a success. However, it helps to recall that a failure of the Normandy landings was well within the realm of the possible. Had this materialised then bombing would have once again become the Western Allied default position for taking the war to Hitler’s Reich.

Strategic lock-in and organizational history of play

A further contributing factor to Britain’s Wicked Problem in World War II were pre-war upstream decisions that created critical junctures and path-setting trends, which could not be modified retrospectively. One particular path dependency was set in motion by the decision to dedicate public resources to Bomber Command in the mid-1930s. At this time, the experience of the Zeppelin raids of the First World War was still heavily engrained on the British mind. While the material and human damage of these raids was negligible, the psychological impact was all the greater, for they had showcased that in modern wars Britain’s insularity no longer guaranteed invulnerability from attack. Public fears were kindled by the early theoreticians of airpower who held that massed bomber fleets could level entire cities, generate mass panic and cajole countries into suing for peace. Military and political leaders were rattled by these alarmist assessments, holding that a deterrent was necessary in order to prevent this type of scenario from becoming

reality. Acting as a complement to the policy of appeasement, the purpose of the bomber was to prevent war rather than make it more likely (Ferguson, 2006: 558-559). If push nevertheless came to shove, then the bomber would serve the purpose of sparing ground troops the ordeal of the trenches and minimizing losses. Destroying the enemy's war waging potential or morale from the air was seen as a way to deal a decisive blow. The idea that it was possible to displace warfare from the frontline to the enemy's territory was one of the flawed lessons learnt from the massive bloodletting of the Great War. It is this *Zeitgeist* that led Britain to develop a sizeable strategic (rather than tactical) bomber force (Overy, 1989), based on a division of labour between the French and the British.

The strategic choice of the 1930s led to a lock-in, giving Bomber Command a large (and continuous) stake in British resource allocation¹, if for no other reason than the fact that a heavy investment in bombers had already been made (Garrett, 1996: 184; Overy, 2013: 612). Paradoxically, when hostilities commenced in September 1939, Britain possessed a weapon whose primary role, to act as a deterrent, was already redundant, and which at the same time could not be deployed as a tactical force. As it would turn out, its strategic role was also limited. As the Butt report of August 1941 demonstrated, denting enemy capabilities through targeted raids turned out to be a utopian goal. Forced into bombing at night almost from the beginning of the conflict, RAF navigation and targeting were inaccurate to the point that less than one-third of deployed aircraft managed to get within 5 miles of their targets (cited in Longmate, 1983: 121); and the actual number of bombs dropped onto their targets represented an even smaller proportion. According to Richards (1953: 239) about half of all British bombs dropped on South-West Germany between May 1940 and May 1941 fell onto open country. Finally, those few bombers that did get to targets worth bombing were greeted with concentrated fire and suffered unsustainably high attrition rates.

The about-turn of 1941

Although it would probably have been even better if Bomber Command resources had been employed elsewhere, such a drastic reshuffle was out of the question in wartime, when organisational inertia is even more pronounced than under ordinary circumstances. In any case, suggestions about redirecting resources to

other arms certainly did not get past Portal, the Chief of the Air Staff. Supported by Lord Cherwell, the government scientific advisor, Portal argued that Bomber Command could significantly weaken the enemy, if only moral scruples could be set aside (Holmes, 2001, at 9'03''; Probert, 2006: 126, 132). The logic of 'making do' with what one's got (rather than getting the job done with what one would have genuinely needed) was finally forcing British leaders into making arbitrages between ethics and effectiveness. The practical key was to change the mode of operation and invert the advantage that allowed the defender to concentrate his strength around high priority targets where an attack could be expected. Pinpoint targeting was to be replaced by a general offensive where targeting was unpredictable and that would wreak havoc in built-up inner cities. This would create destruction on a scale where the defenders' resources were stretched to breaking point. One notable discovery was the fact that fire was more destructive than explosives, especially if the attackers managed to create a firestorm, such as had occurred in London on the night of 29-30 December 1940. The new bombing cocktail would therefore include a high proportion of incendiary devices rather than explosive bombs. Secondly, the bombers would target tightly built-up and highly burnable medieval city centres rather than the urban sprawl in outlying areas where industrial plant was typically located. In line with the thinking of the 1930s, massed bomber forces would now 'de-house' millions of German industrial workers, thereby precipitating a collapse of morale that would deliver the decisive hammer blow.

What happened here in terms of ethics tallies with the results of Watters' (2017) case study on leading in the Grey Zone of the Bosnian Civil War. This established that '(t)he moral uncertainty of leading in Bosnia's Wicked Problem generated a tendency to construct Tame Problems enabling forthright action guided by deontological principles of moral certainty'. This statement would apply to British bombing in the first two years of the war, when British leaders tried to fight an entirely 'clean war'. Watters then continues that '(t)he reality of the Wicked Problem required leaders to adopt Utilitarian judgements based on projected consequences, as the Deontological certainties did not appear valid'. This relates to the experience in 1939-41 and the change in bombing doctrine in 1941-42. The author then concludes that '(w)hen a Wicked Problem morphed into a ...Critical Problem..., the morally correct course had to be instinctive aligning with Virtue Ethics' - a point to which we shall return.

Bombing as part of a mixed strategy

After a string of British defeats and little prospect of a turn in the tide, Churchill grasped this straw and authorized Harris to try his hand at grinding down the German war machine his own way. The moral obstacle of non-combatant immunity was overruled through the area-bombing directive of 14 February 1942, which authorized the deliberate targeting of urban centres.

Bombing policy was the outcrop of the dilemma of pursuing a necessary goal - pursuing the war effort against Germany - without quite knowing how to bring the whole affair to a successful conclusion, and lacking the appropriate tools for doing so. Naturally, a taming approach could not rely on any linear solution or holistic strategy, but was dependent on a mixed strategy, characterized by improvisation, heuristics and trial-and-error experimentation. Not all assessments would and could be accurate and not all 'learnable lessons' could be expected to be taken on board. This underlying questioning mode was characteristic of recognising the problem of defeating Germany in World War II as Wicked.

Harris' approach in 1942 was still consistent with addressing the problem as a wicked one: he was right to stress that nothing like this had been attempted before; and that, in the absence of alternatives, it was a course worth pursuing (British Pathé, 1942, at 4'18"). That his initial assessments were not outlandish can be backed up by statements from leading German officials in 1943 which reveal how doubtful even they were about the ability of civilian defence to hold up against a sustained campaign.² Should Germany be knocked out of the war by an air campaign, then the need for landing Allied troops in Europe would be removed – something Churchill always sought. Otherwise, planning for a land campaign could continue in parallel; or, even if Harris's experience was inconclusive, it might provide other results that could hold the key to the way forward.

The new bombing strategy was first put into practice in March and April 1942 in two massed night-time raids on the Hanseatic cities of Lübeck and Rostock. During the next two years the attackers elaborated on their technique, through improvements in navigation and target finding and by perfecting their method for

causing maximum destruction. The standard bombing technique that evolved saw an initial deployment of blockbusters and other high explosive devices that unroofed houses, shattered windows and water pipes in a wide radius and blew craters into streets. This facilitated the quick spread of fire and prevented civilian protection units and fire brigades from accessing incident sites. In a second step incendiaries were dropped, causing myriads of small fires that would consolidate into larger blazes. Notable British campaigns between 1942 and 1944 involved the first 1,000 bomber raid on Cologne, in May 1942, the battle of the Ruhr in spring 1943, the Hamburg and Kassel firestorms, and the beginning of the sustained battering of Berlin, in 1943-1944.

The mixed approach (and its associated learning curve) continued when the US Air Force picked up precision bombing where the British had left it in 1941 and resumed daylight attacks on industrial targets. These raids at first suffered similar attrition rates as the British had experienced in 1940-41, but the ratio improved in early 1944, when close long-range fighter support became available and the German defence started to show signs of strain. It was this positive experience with US precision bombing that led to the British and American bomber fleets being assigned to duties in preparation and support of Overlord (the D-Day campaign), from April 1944. Overlord provided the Allies with important learning opportunities and lessons, and due to the political need to spare French civilians, bombing developed into a more sophisticated tool allowing for improved targeting (Boog, 2008: 780-81, 799; Garrett, 1996: 152-153; Harris, 1947: 266). By summer 1944 the Allies had attained air superiority and both the American and the British air forces were capable of striking pinpoint targets when the weather was reasonable, with decreasing attrition rates. In the months that followed they were also deployed against German transport infrastructure, and oil, synthetic rubber and other strategic industries.

It is at this point in the war that we encounter a Harris who is starting to consider the mixed approach as his *bête noire*. In early 1944 he had only reluctantly conceded to redeploying his force to attacks on the German aircraft industry and to support of the D-Day campaign. Harris and his lieutenants (one of whom, Air Vice Marshal Saundby, objected to Operation Neptune - the naval aspect of D-Day - as a “boating expedition”, cited in Overy, 2013: 612) considered this a distraction from their real mission: to score a decisive victory

from the air that would make a deployment of ground troops unnecessary. Although their campaign had failed to produce any decisive breakthrough, Harris still believed that delivering the *coup de grace* was a Tame Problem of expertise and that he held the ‘golden bullet’: final victory relied on his bombers ‘working off’ what remained of Germany’s industrial cities. Even though the evidence was not in his favour (most of these had already been ground to rubble previously), Harris was unwilling to commit to the game of a mixed strategy. This profiles a Harris who had not budged an inch from the state of the art of 1941, namely that pinpoint targeting was wasteful and could not attain any degree of accuracy. Throughout his Overlord assignment in 1944 Harris lobbied tirelessly for a return of his force to area bombing at the earliest possible time. This mirrors Staw’s experimental study where the dependent variable ‘commitment to a previously charted course’ was tested against the independent variables ‘personal responsibility’ and ‘decision consequences’. What he found was that the commitment of further resources was highest in those cases where you had a combination of high personal responsibility and negative consequences (Staw, 1976).

A temporary reversal of fortunes and Harris’ solo attempt to engineer German collapse

Harris’ efforts finally bore fruit in September 1944. The relaunch of his area campaign was situated in a context where, once the Allied ground offensive had achieved its immediate objective, the Liberation of France, it became unhinged on the approach to the Reich's borders. It is no surprise that in late August 1944 some Allied commanders toyed with the idea of a German defeat by Christmas (Overy, 2013: 378). The Germans had only 12 of 54 divisions left, bringing the ratio of Allied numerical superiority to 16:1; they could move only by night or in bad weather because of the enemy’s mastery of the skies; and their supreme leader was their greatest liability as he issued strict orders that impeded on efficiency (Ludewig, 2012). However, hopes that this might be a sequel of the situation in summer 1918, when it took the Allies until the autumn to finish off the German army, and ultimately a Tame Problem of *déjà vu*, were dashed by the unlikely recovery of the Germans, from seemingly impossible odds.

It is notorious that while the Allies had a detailed game plan for D-Day, they lacked one for its aftermath. The string of temporary setbacks started in the Norman *bocage*; it continued at Arnhem, Hürtgenwald, the

Bulge and elsewhere where combat conditions saw momentary returns to trench warfare. As one author argued, German tactical skill was as instrumental in holding up the Allies as was the latter's 'excessive caution and [...] lack of strategic boldness' (Ludewig, 2012). It would lead too far to engage in all the minutiae that made the final assault on Germany such a drawn-out affair. Suffice it to say that the adoption of a 'broad front' strategy by Allied Supreme Command under General Dwight D. Eisenhower did not concentrate strength, and that this worked into the hands of the Germans. The Allied advance was also hampered by logistical problems, in particular the lack of a suitable port (meaning: close to the front) for supplying the troops. This problem was not solved before the clearing of the banks of the Scheldt, thus allowing access to Antwerp, in November 1944. As the Allies battled their way through to the Rhine they increasingly succumbed to a bout of tunnel vision. The Germans exploited every opportunity to encourage this disposition, through their deployment of state-of-the-art fighter jets, tanks, and V weapons. Harris was only too willing to exploit the cognitive gap that resulted from the consternation and exasperation over German bounce-back. The bogging down of the ground offensive seemed to vindicate his point that a land campaign against Germany could not work. It cemented his aversion to the pursuit of a mixed strategy and presented him with the golden opportunity to prove that he could, after all, end the war his own way (Boog, 2008: 782).

Allowing Harris to return to his pet project was one symptom of the several Allied mishaps in the last eleven months of the war. He was helped along by a political pressure to convert the Allied material superiority into rapid victory (Overy, 2013: 378) and the fact that the visibility needed for hitting targets with greater precision was decreasing by the day [it is worth recalling that this would be the first winter of the bombing war where there was no lull in Allied activity, a point proven by the unprecedentedly long list of cities targeted, see Piekalkiewicz, 1982, 912-919]. In the end, Allied planners unleashed Harris again because they had momentarily run out of better ideas. He was impossible to rein in, as for too long he has been the feted poster child who took the war to the heart of Germany. Harris corresponded to the prototype of 'those who would exploit the situation to personal advantage' and who 'must be carefully managed' (Watters, 2017: 20). Those leaders who could have stopped him - on the basis that 'Wicked Problems require the transfer of

authority from individual to collective because only collective engagement can hope to address the problem' (Grint, 2014: 244) - hadn't been watching him closely enough.

The final crescendo, September 1944 – April 1945

We know from Harris' post-war account that he considered bombing before 1944 as no more than a 'warm-up' (Harris, 1947: 263). By October 1944, he had full command over the resources he considered necessary for delivering the all-out hammer blow. Two-thirds of British bombers were now redeployed to city bombing. [Area and transport targets drew 65 percent of RAF bomb drops in the last three months of 1944, oil targets only 14 percent (from January to May 1945 these figures were 50 and 26 percent respectively, Boog, 2008: 778, 782, 787)]. By this time the bomber force had grown into a well-calibrated weapon that could deal increasingly destructive blows, with smaller numbers of aircraft, and ever-greater velocity, accuracy and efficiency. This applied in particular to No. 5 Bomber Group, the elite among British fire-bombers who could typically erase an urban centre in one single nocturnal stroke often lasting not more than half-an-hour. The major cities having already been 'worked off', Bomber Command now systematically erased a list of middle-sized German cities such as Bonn, Karlsruhe, Brunswick, Königsberg, Heilbronn or Darmstadt, often invoking that they were located in the future operational zone of the Allied armies or contained valuable transport infrastructure. By the end of the year, Harris ran out of clearly identifiable urban targets 'worthy' of an attack. The heat was therefore turned back on to Berlin, which was to be knocked out by a 'thunderclap'. However, despite taking another heaving pounding from the combined British and American bomber forces on 3 February 1945, the capital refused to buckle. At the same time, Bomber Command was put under political pressure to assist the Russian offensive on the Eastern front, which led to the destruction of Dresden on 13 February 1945 (Groehler, 1990: 400-40; Boog, 2008: 791ff.; Overy, 2013: 392ff.). This marked the breaking point of a growing disenchantment with the last eight months of bombing, a period that would see more Allied bombs dropped on Germany than all the previous years together: 75 per cent of the total combined tonnage (Overy, 2013: 378). Contrary to popular belief, the climax in British bombing was only reached *after* the destruction of Dresden, in March 1945, when the

highest monthly tonnage of the entire war, over 67,000 tons, was dropped on Germany (Redding, 2015: 318). And Harris was only brought back in line at the end of the month, after several other East German cities, as well as many smaller cities and university towns of no discernible strategic value, such as Hildesheim, Giessen, Würzburg and Pforzheim had received the 'Dresden treatment'. The Pforzheim raid on 23 February 1945 was particularly devastating, erasing 83 percent of the built-up area and killing 17,600 people, i.e. one-third of the population (Boog, 2008: 783). Churchill, no doubt, was aware of the judgment of history and sensed that, in a situation where the end was nigh, continued area bombing could become a genuine blemish on the British war record. As Churchill also realized, 'an utterly ruined land' (quoted in Frankland and Webster, 1961: 112) could fall into the lap of Communism like a ripe fruit. His now famous minute of 28 March 1945 spelt the end to area bombing and a recognition that Harris's management had become counter-productive: throwing resources into area bombing would never solve the Wicked Problem of defeating the Germans.

Contrary to expectations, the Germans had been able to cope quite well with Allied bombing: by late 1944 substantial parts of German war production had been decentralised from the cities to outlying areas where they remained relatively undetected. Since the (air) battle of Berlin the consensus in the Allied air staff had been that Harris's claims - that he could offer victory - were inflated and that the genuine key lay in targeting the bottlenecks (or chokepoints) of the German war economy, such as oil and transport. Bottleneck targeting was as complex and prone to error as devising a general strategy (Overy, 2013: 403ff, 614-616) and its elementary role was only fully revealed in post-war surveys. But this is not to say that there wasn't evidence to go by at the time, notably through Ultra, the operation dealing with the decoding of German Enigma intelligence (Garrett, 1996: 164-165). However, rather than pursuing this lead, the Allies allowed for a lull in the bombing of oil targets in late 1944 which even baffled Speer, the German minister of armaments production (Groehler, 1990: 357). A similar thing happened again in January 1945, when Portal, intent on re-directing British bombing towards oil targets, was called off by political pressure urging the resumption of Thunderclap (Groehler, 1990: 383-388). By failing to take stock at a critical time, when the bomber could have broken the back of the German war economy, the war was prolonged by several weeks (Garrett, 1996: 179, Hansen, 2008: 246).

3. Critical Problems, Virtue Ethics and the limits of Dirty Hands

In this last section we shall pursue the question where Harris's 1944 relaunch – which also corresponded to a crisis - stands on the matter of Virtue Ethics. We will probe whether it necessarily had to adopt the form it did; or whether there were alternatives at this stage that were not being pursued. The objective is to establish whether (or not) the final phase of area bombing is consistent with Dirty Hands, which thereby becomes a function of virtue ethics. During the Bosnian War (1992-95) Watters found that neither the rules of engagement or UN mandate (which framed the problem as Tame) nor utilitarian or deontological ethics provided a reasonable ethical guide to dealing with Critical Problems. Ethical decision making in such situations boiled down to making the judgment call and relying on virtue ethics. In other words, the character of the leader in charge assumed fundamental importance (Watters, 2017). It is this point that we wish to explore in this final section.

One of the misleading arguments still sometimes found in the literature is that by 1944 the sophistication of the bomber was such that it would have made possible a permanent refocus on more precise bombing, regardless of weather conditions (Garrett, 1996: 177-178). This reveals a linear understanding of bombing capability. In actual fact, the idea that Allied bombing could maintain the increase in precision attained by summer 1944 needs to be stood on its head: Harris's stance received a boost through the fact that precision bombing became increasingly problematic during the winter months; and that the associated lower visibility provided vital stimulus for renewing the city bombing campaign in late 1944.

Having said this, it is just as erroneous to buy into the argument that no pinpoint targeting was possible at all in worsening weather and that the best Bomber Command could do in 1944-45 was to incinerate one area target after another. In order to comprehend this aspect more fully, we need to open a parenthesis and return to the American daylight campaign, which began in summer 1943 with bombing on sight. This was more dangerous than the British night-time raids and resulted in high attrition rates. At the same it allowed for

greater precision when weather conditions were reasonable. On the other hand, American bomber fleets often remained grounded or attacks were aborted because of low visibility. From autumn 1943, however, the Americans increasingly began to rely on H2X radar. This enabled them to bomb blind through cloud cover, but also decreased accuracy. It is for this reason that over time American 'precision bombing' came to resemble British area bombing (Groehler, 1990: 351, 388; Boog, 2008: 874; Fooy, 2015: 156ff; Overy, 2013: 346ff). Despite this resemblance, however, US and British bombing were not indistinguishable. A measure of precision remained in US bombing, even when it targeted larger areas. The reason for this was that the USAAF never agreed to shift the *entire emphasis* of an attack (with the notable exception of the Thunderclap attacks in 1945) from industrial installations to city centres (Boog, 2008: 786; Overy, 2013: 347). An illustrative example of the overall dynamic is the fate of the Bavarian city of Regensburg. Paradoxically, this escaped destruction because it was a premier armaments site and therefore an American priority target for their daylight raids throughout 1943-1945. The total bomb drop on Regensburg was twice the Dresden payload, but, critically, it was targeted at military and economic hardware.³ The first RAF raid on Regensburg occurred on 20 April 1945 (Schmoll, 2015), four days after Harris had had his knuckles wrapped by Churchill a second time in a fortnight, for not converting his force to precision bombing. (Garrett, 1996: 21). Contrary to Potsdam, which was wiped out as late as 14 April, the Regensburg raid stuck to the target, the oil harbor, and the city itself sustained only minor damage. This counter-example demonstrates that RAF bombing was capable of greater accuracy, if only the emphasis was shifted away from city centres; and also that Bomber Command resisted changing its operating procedure from area to precision bombing until the very last weeks of the war.

The return of proportionality of means

As stated above, there is ample evidence to argue the continuation of Supreme Emergency beyond 1941. Garrett places the point of 'no return' for area bombing, somewhat imprecisely, in spring 1944 (Garrett, 1996: 184). Overy (2013: 379-382) supports a similar time-line, although he qualifies the final phase bombing as a 'natural escalation', based on Allied fears of miracle weapons that might save the Nazis' necks

after all (this focus on motive does not engage with the heart of the ethical discussion, namely the conditions leading to Harris's return to city bombing in late 1944). What is clear, however, is that once the Western Allies consolidated their continental foothold in July-August 1944 no conceivable form of Supreme Emergency remains, and this catapults proportionality of means back into a prominent position.

Ethical permissibility is not guided by the idea that the option that 'suggests itself' (or best suits one) is also the best overall option. By the same token, exasperation over enemy bounce-back, war weariness, combat fatigue or a desire to 'get it over with' are not sufficient reasons for massive and disproportionate violations of elementary rights (Rawls, 2006: 638-640). Any assessment must take account of indirect and direct obligations, which apply not merely to one's own, but also to enemy civilians and even combatants (Walzer, 1977: 155-175; Garrett, 1996: 152; Rawls, 2006: 635-636). Translated into practical terms, this entails that legitimate targeting is determined 'by the range of available alternatives', and that 'the amount of destruction must be the minimum compatible with the achievement of the aim' (Frankland, 1965: 113-114, cited in Garrett, 1996: 169). If the destruction of Hamburg or Kassel in 1943 could still be rationalized as an 'evil necessity' of total war, the incineration of Dresden or Würzburg in 1945 can no longer avail itself of such a rationale. It poses the issue of a disconnect between the previous bombing (and killing) as a means to an end; and killing and destruction as an end in itself.

Getting your data wrong (or having no data to work from)

A crucial factor in any assessment of moral responsibility is to check whether those who were responsible availed themselves of the necessary information. This argument, namely that the ethics of warfare involves working from a sound scientific base, is not anachronistic, but was already a recognized standard at the time. Considering Harris's level of confidence, one could be forgiven for assuming that he had extremely good reason (and compulsive evidence) to continue on his charted course. The truth, however, is that this was far from the case. Rahder (1988: 71) writes that the campaign not only lacked a clearly defined ethical position, but that it was also 'a method without a clearly defined goal – the means employed became an end'.

In his response to Churchill's draft memorandum of 28 February 1945, which put a first question mark over the area campaign, Harris responded with a lengthy letter on the 29th:

The feeling, such as there is, over Dresden, could be easily explained by any psychiatrist. It is connected with German bands and Dresden shepherdesses. Actually Dresden was a mass of munitions works, an intact government centre, and a key transportation point to the East. It is now none of these things ... I ... assume that the view under consideration is something like this: no doubt in the past we were justified in attacking German cities. But to do so was always repugnant and now that the Germans are beaten anyway we can properly abstain from proceeding with these attacks. This is a doctrine to which I could never subscribe. Attacks on cities like any other act of war are intolerable unless they are strategically justified. But they are strategically justified in so far as they tend to shorten the war and preserve the lives of Allied soldiers. To my mind we have absolutely no right to give them up unless it is certain that they will not have this effect. I do not personally regard the whole of the remaining cities of Germany as worth the bones of one British Grenadier (Saward, 1985: 292-294)

There are several things worthy of note here. First, the argument that Dresden, as an intact city, had an economic potential that warranted its destruction. Second, the reference to the strategic aim of the attacks - to shorten the war and save Allied lives. The evidence for these two is tenuous at best. By late 1944 the duress that previously justified a measure of ruthlessness is dissipating. This is the result of the destruction of the major industrial centres, the demise of the Luftwaffe, and the slow asphyxiation of oil supply and transport networks. The cumulative effects of continued area bombing to winning the war are therefore wearing very thin indeed. Although Harris still argued in November 1944 that the incremental addition of another dozen dead cities to the 45 that had already been incinerated would lead to German collapse (Groehler, 1990: 383; Probert, 2006: 308), such a thing never materialised. The benefits of further attrition against civilian targets were marginal; and adding thousands more civilian victims to the casualty list would change very little about this. As to the saving of Allied lives, there is the opening gambit where Harris shifts

the burden of proof to the other side: as long as it could not be proven that the destruction of the last cities had not contributed to the saving of British lives he was justified in persevering. However, what can be regarded as established is that area bombing was clearly not addressing the fundamentals: it had not demonstrated a critical impact on the ability of the German land forces to continue to wage war, as they had done again and again in 1944-45. There then is every reason to conclude that area bombing did not represent the best use of available resources and unnecessarily exposed Allied airmen to death and injury. The continued insistence on the coarse targeting policy of the previous years since 1942 ('cities') is an admission of defeat: if everything is a potential target, then there is no genuine target. Third, it is interesting that Harris suggests the British Grenadier is the symbolic target that he is keen to save here, and not the British aircrew who were at risk every time they flew to save the British Grenadier. This reveals the mindset of a doctor who is incapable of dosing his medicine (and who has probably not undertaken any reflection in this direction either).

For someone moving on such thin ice it would have been natural to have weighed his words. But there is no evidence of this either. The reason for this is the fatal flaw in the overall argument. It is revealing that Harris chose to characterise his wartime critics as adhering to a doctrine (that he 'could never subscribe' to); a choice of terminology that appears to say more about his own attitude than them. Take, for example, the data collection effort underpinning Bomber Command assessments, which was subject to selective and confirmation bias - the fallacy to only collect information that affirm one's assumptions without also considering evidence that might do the opposite (Cerulo, 2006). In an echo of Staw (1976), evidence running counter to Harris's assumptions is rubbished: those urging the targeting of oil, transport and other economic targets are ridiculed as 'panacea mongers' (cited in Ehlers, 280: 283), an ironical choice of words considering Harris's own fetish of area attacks.

In order to understand Harris' ultimate downfall, one need only contrast his unconstructive approach towards others dedicated to the same goal to his earlier bragging that air power could deal the hammer blow. Already in 1943 he had suggested that he could pull off a German collapse by April 1944, if Bomber Command was given top priority (Garrett, 1996: 171). His later criticism, namely that this scenario failed to realize in spring 1944 because he was not given sufficient resources (Harris, 1947: 263), is disproven by the

fact that when he did have access to ample resources six months later the outcome was fairly similar:

Germany was not brought down by air power.

Other indicators of bias-inducing, excessively positive thinking (Collinson, 2012: 88ff) are the insistence on area bombing strategy beyond the failure in the Battle of Berlin; while, at the same time, too few experts are assigned to studying the German railway system. Finally, the cocooning at Bomber Command HQ in High Wycombe kept out the constructive dissent of naysayers like Patrick Blackett, Director of Operational Research with the Admiralty, a scientist of the highest calibre and a prominent critic of Bomber Command (Dyson, ch. 37-38; Kirby, 2003: 405–407).

The approach is yet another reminder of Harris's understanding of the situation as a Tame Problem of expertise where the collaborative arrangements and framing questions so typical of tackling a Wicked Problem were considered unnecessary. Harris treated the monumental and utterly novel job of bringing to its knees a modern economy, engaged in total war, as *déjà vu* rather than *vu jadé*. He stands for the leader who is overwhelmed by the complexity of the task but who resists any challenges to his truth; who has given up on making genuine sense; and who relies on acquired habit.

There is always a danger that leaders may fall prey to losing their way and put more faith in their reflexes and instincts than in sound judgement (understood as an effort of on-going assessment of a constantly changing situation). As Festinger's (1957) original work on Cognitive Dissonance suggested, the ability to rationalize our way out of responsibility is a skill that we all deploy in our self-defence. Treating the Wicked Problem of defeating Germany with the Tame solution of area attacks led Harris in a direction where the deeper he became entangled in the problem, the more likely he was to keep heading in the same direction, irrespective of the evidence suggesting that he was failing (Staw, 1976).

The sour grapes of unyieldingness

The Tame Problems approach is also revealed in Harris' escalation of commitment. As Staw (1976) pointed out, when the consequences of our decisions appear irrevocable and we feel personally responsible for those

consequences, it is more than likely – despite the accumulating evidence – that our commitment to the action will escalate, rather than decrease as we rationalize our initial decisions.

Harris's escalation of commitment is accompanied by what Hannah Arendt called the 'inability to think' (Arendt, 1971: 417, 423, as quoted in Assy, 1998): once the campaign is launched it becomes easier to justify its continuation simply by no longer thinking about the effects, or that there are choices still to be made. Harris was reluctant to give up the area bombing campaign not just because he had acquired the hubris so common to leaders (Beinart, 2010), but because he had invested so much in it. It's easier to persuade yourself that you are right (but just need more time and effort) than to recognize that, whatever its erstwhile value, your previous course of action is no longer defensible. This is especially the case when the decision has already led to significant harm both to the other and indeed to your own side.

Escalation of Commitment and Inability to Think are bolstered by reliance on the amorphous scientific jargon of burnability, de-housing and morale bombing, and an organisational focus on the optimisation of operating practice. In the final months of the war Bomber Command become Sorcerer's Apprentices, executing perfectly orchestrated attacks of ever growing proportions, within ever decreasing time-frames, and with ever lower attrition rates, while the finality of things is becoming more and more elusive.

As a leader, Harris got off to a good start: when he arrived at the helm Bomber Command in 1942, the force was demoralized and on the brink of dissolution. He restored the force's sense of purpose, by changing the strategy in a direction that made imminent sense at the time. Ultimately, however, Bomber Command failed to develop the organisational agility needed to respond to change and Harris's leadership was a failure. Not only did he make a vain attempt to translate the Wicked Problem of bringing Germany to her knees through the 'elegant' (internally coherent), one-size-fits-all solution of area bombing (Grint, 2010: 15ff), but he also lacked the bigger picture and therefore failed to juggle the two ends of organizational success (Saxena, 2014). It is instructive that the same pig-headedness that was at the origin of his rapid rise in 1942-44 later translated into tunnel vision leading to his precipitous fall from grace in 1944-45 (Chaloux, 2013). This then seems to point in the direction of Gautam Mukunda's argument about the 'extremes' - the truly exceptional

leaders who have a potential to be outstanding successes or abject failures, often even both, but at different times (Mukunda, 2012).

An inept political game

When Tame Solutions to Wicked Problems fail to produce the desired effect, then playing the political game - to be able to continue escalating the commitment or, if it comes to the worst, to at least save face - is often a final resort. This is a feature we can also note here.

In the course of the conflict Bomber Command developed not only a distinct organizational logic and identity, which militated in favour of area offensive doctrine (Dyson, ch. 37), but also considerable political punching power. During those long years when Britain was forced onto the defensive, the exploits of Bomber Command were one of the few positives on an otherwise lacklustre bottom-line.

The political element only increased when the Americans arrived on the scene in 1943. It was in order to leverage independence vis-à-vis the Americans, who had soon gone from junior to senior partners, that Churchill condoned Harris' stance, allowing him, for example, to ignore repeated calls to try his hand at daylight bombing (Garrett, 1996: 186-190). In the end, this pulling of political strings was a Pyric victory. It allowed Harris to, momentarily, save face; but it ultimately contributed to loss of credibility, as Harris was forced to come around to daylight bombing anyway, in the closing weeks of the war (Peloquin, 2006).

We have here a first indication that the rise in status conferred onto Harris through his role as Commander-in-Chief of Bomber Command was largely offset by the fact that he had neither the temperament nor the brinkmanship for playing the political game correctly. Two key leadership skills he lacked in particular were a sense of propitious timing (*kairos*) and phronesis, the ability of a leader to gauge his environment and read the writing on the wall (Chaloux, 2013). In effect Harris proved to be a capable manager when facing the early Tame Problem of rebuilding his force in 1942 but the tentative leadership necessary for the Wicked Problem of a complex and contradictory mixed strategy proved beyond him.

Even more serious, however, is the fact that he squandered several opportunities to swallow his pride, and thereby avoid the accusations that have continued to weigh on his force since the end of the war. The first of these was after the (air) Battle of Berlin in 1943-44, an obvious failure to deliver on the prospect of an early end to the war. For a more flexible and less doctrinaire leader this would have been the signal to engage in a thorough rethink. The second opportunity presented itself in autumn 1944, when Allied Supreme Command authorised the reassignment of his force to attacks on German cities.

Harris should have been more wary about allies as fickle as political expediency and the weather. That his force was being used for political rather than purely military gain – but that the context also was turning against him - should have been apparent in the context of the Thunderclap offensive in February-March 1945. Over the years the standard explanation for these area attacks on Berlin, Dresden and other cities in Eastern Germany has been that they were in support of the Soviet offensive (Biddle, 2008). It is strange, however, that the Soviets never specifically requested these area attacks (Overy, 2013: 393). Equally puzzling is that Thunderclap saw the USAAF stray from their usual precision bombing mode and stage their first characterized area attack, on Berlin, on 3 February 1945. This overriding of doctrinal formatting was without precedent and could have only been the result of immense political pressure.

We need to understand that Thunderclap coincided with the Yalta conference (4-11 February 1945), the only second wartime meeting to reunite the Big Three (Churchill, Roosevelt and Stalin). The conference took place in a context where the Western Allies were falling behind the Soviets: whereas they still had to make it across the Rhine, the Red Army was piling up considerable mileage on the road to Berlin since the beginning of its offensive on 12 January 1945. If there ever was a good time for Stalin to make excessive demands (and for the Allies to caution him), then this was it. Although Harris' idea of a 'hammer blow' hardly had any credit in military circles, redeploying the bomber was an attempt to make the best of a bad situation: if the Soviets expedited the Germans on their own, then the bomber would at least secure the Anglo-American claim to the second place on the podium (Groehler, 1990: 385-391; also Biddle, 2008: 427-431).

In the end Harris would have to pay dearly for getting his short-lived free hand in bringing the full force of Bomber Command to bear on the remaining German cities. In the aftermath of the negative publicity fallout of Dresden, the Americans did a U-turn on Thunderclap, as the series of attacks put a question mark over their reputation of being precision bombers who respected the rights of non-combatants (Connelly, 2004; Boog, 2008: 798; Overy, 2013: 395). This was not without consequence for Harris and his men, who were dropped like a hot potato. This rapid descent from poster child to virtual disgrace is in itself a prime example of a leader winning his own personal battle, but losing the war of historical memory.

Did Harris behave like a Dirty Hands leader?

A denouement involving Dirty Hands can never become a source of pride; but neither does it need to be a reason for shame (Kaplan and Friedman, 2013). Typically, Dirty Hands leaders will have an inclination to question themselves over whether they have done the right thing; and these scruples and doubts provide them with moral depth.

Churchill was never entirely taken in by the smugness of the proponents of area bombing who mistook it for an answer to their questions, including the moral ones, rather than a huge question mark. In October 1941 he remarked in a correspondence with Portal:

I deprecate, however, placing unbounded confidence in this means of attack, and still more expressing that confidence in terms of arithmetic. It is the most potent method of impairing the enemy's morale we can use at the present time...Even if all the towns of Germany were rendered largely uninhabitable, it does not follow that the military control would be weakened or even that war industry could not be carried on...One has to do the best one can, but he is an unwise man who thinks there is any certain method of winning this war, or indeed any other war between equals in strength. The only plan is to persevere (Frankland and Webster, 1961: 184-185).

Although it was rare, Churchill is known to have shown scruples about unleashing nightly hell on civilian populations (Biddle, 2008: 446). We can see this in the rhetorical “Are we beasts?” he posed after having viewed footage of destroyed German cities in 1943 (Harmon, 1991: 3-4). We can also see it in his phronesis after Dresden, when he realised, belatedly, that the British had travelled too far down the slippery slope and that it was imperative to pull Harris’s plug (Gilbert, 1988: 159). And it is hardly pride that prevented the excesses of the bombing campaign in its final days from figuring in his later war memoirs.

Harris’s die-hard attitude (‘one British grenadier’) compares unfavourably to this. For one thing, his habitual straight-talking about the necessity of area bombing betrayed a lack of tact with regard to how intolerable many people would find his ideas once the winds of war had abated.⁴ It reminds one of that ‘brutally honest’ doctor who on his first appointment tells a patient suffering from terminal cancer that he must die. His political naiveté shines through again in his expectations about the chances of reconditioning moral attitudes. These were similarly exaggerated and unrealistic as his ideas about the impact of area bombing. At the same time no second thoughts seem to have troubled Harris about what in his understanding ‘needed to be done’. Quite to the contrary, illusions were entertained that there had never been anything controversial about the campaign. Rather than self-questioning, the more characteristic disposition of Harris was to respond with witticisms or derision, or to claim that others had not understood the hard reality of war. Harris saw no reason why he should not hold his head in pride and he claimed the same right for the men in his command (Harris, 1947).

When, on one occasion during the war, a police officer stopped Harris in his car and tried to impress on him that he could kill someone with his reckless driving, his reply was: “Young man, I kill thousands every night” (Hastings, 1980: 135).⁵ Although the episode is probably apocryphal, the fact that many historians have ascribed it to Harris speaks volumes.⁶

Conclusion

The departure-line for this article was to sketch the full dimensions of the strategic Wicked Problem confronting Britain in World War II. For this, we solicited history, geopolitical analysis and path dependency theory. We concluded that the adoption of area bombing doctrine was a direct consequence of the nature of this Wicked Problem, and that it constitutes a compelling case of Dirty Hands. From February 1942 to spring 1944 this ethically controversial but politically necessary strategy remained within the bounds of legitimacy. We then turned to how, in September 1944, Harris, manoeuvred himself into a corner where he would be without Dirty Hands legitimation, and how this was connected to his own initial decision about area bombing. We disqualified Dirty Hands claims for Phase II through our historical methodology. The escalation of city bombing in the last eight months of the war had no compelling moral justification, even from a hard-line utilitarian perspective: it wasted resources, the lives of British air-crews and enemy civilians, and the probable chance to an earlier end of the war. The last phase is not controversial and can only be rationalized as an incrementalist slippery slope, supported by the power of post-hoc rationalization. Harris's justification for the return to area-bombing, in the absence of unequivocal Dirty Hands legitimation, follows a similar process that endangers all leaders facing extreme challenges, their followers, and the object of their action.

September 1944 saw not only the breaching of the limits of Dirty Hands in the bombing campaign, but also the mutation of a strategic Wicked Problem into a Critical Problem. Following Watters' (2017) alignment of Critical Problems with Virtue Ethics, we found Harris' leadership in the final months not consistent with precisely such ethics. Evidence of this are Harris' overconfidence in continuing to treat the defeat Germany as a Tame Problem of management and expertise, and his inability to recognise the boundaries of Dirty Hands. To this list one could add the underpinnings of the final phase of the area offensive (which were analytically and scientifically unsound); the lack of willingness to adapt the approach to changing circumstances and technical possibilities; the disinclination for collaborative effort; the inability to listen and ask questions; and the failing grasp of facts, political tact, environmental awareness and *kairos*. Harris is the archetype of the leader who gets away with exploiting the politics of a Wicked Problem context and escalating his commitment because his superiors have let down their guard. In the final instance, his failure of ethical leadership becomes their own.

General Sherman's dictum that 'war is hell', and that therefore 'anything goes' in war has been proven to be patently false (Walzer, 1977: 32-33, 230, 264-266; Garrett, 1996: 132-136). As Mark Grimsley, the author of a book on Union policy during the American Civil War writes, '(t)hose who wage war routinely seek to justify themselves on moral grounds, something they would hardly bother to do if moral claims did not matter' (Grimsley, 1996: 5). This tendency is also detectable among Harris endorsers seeking an end to the controversy that will see them having their cake and eating it too: they want bombing's contribution to victory recognized, but they also want a clean ethical bill, associated with the idea that only the necessary was done. The latter point is often pushed by citing the sacrifice of the 55,000 men who died serving in Bomber Command. Unfortunately, claiming the moral higher ground depends on making a clear distinction between the two phases of campaign: one that was simultaneously 'wrong and necessary'; and another that was simply 'wrong and wrong'. Coming clean on the issue why Harris was unleashed again in 1944-1945 involves probing the presence of darker motives, such as retaliation or revenge. If, in the context of a brutal and all-englobing war, the ability to dose Dirty Hands and recognise its boundaries is a measure of virtue, then there was little such virtue in the final chapter of Bomber Command.

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¹ About 40% of wartime military budget went to the RAF, Garrett, 1996, 170; Overy, 2013, 611; 25 percent of wartime RAF expenditure was allocated to Bomber Command, Boog, 2008: 868.

² In the wake of the Hamburg firestorm, on 29 July 1943, Albert Speer, minister for armaments and ammunitions, gave Germany a mere twelve weeks, 'if things continued like this'; on 2 August Field Marshal Erhard Milch, chief of air force procurement and supply, uttered that Germany could merely take another five or six attacks on a comparable scale before being forced to sue for peace (Boog, 2001: 39-40).

³ 8,000 tons on Regensburg; 3907 tons on Dresden, Groehler, 1990: 422-423; telephone conversation with Peter Schmoll, 17 November 2009.

⁴ Harris's bluntness was the reason Portal decided to not take him along to the Casablanca conference for discussion with their American counterparts, in early 1943, see Overy, 2013: 303.

⁵ According to wartime contemporary Paul Johnson, Harris uttered this phrase in the presence of the Reverend John Collins, later Canon of St Paul's Cathedral in London, Johnson P (2003) Radical drivers who did not know their left from their right. *The Spectator*. 4 October: pg. 33. Available at: <http://archive.spectator.co.uk/article/4th-october-2003/33/radical-drivers-who-did-not-know> (accessed 18 November 2017).

⁶ Email received from Dr David Hall, Defence Studies Department, King's College London and Joint Services Command and Staff College, Shrivenham, UK, 16 November 2017.