Tanner Lectures 2015

On January 13, 2016, Peter Wall Distinguished Professor Derek Gregory of the Department of Geography of the University of British Columbia gave the Tanner Lectures 2015 before a large, appreciative audience in the auditorium of Robinson College Cambridge. The next day Professor Gregory and three respondents-- Grėgoire Chamayou, Chris Woods, and Professor Jochen von Bernstorff--returned to the Robinson auditorium for a spirited comment and question session.

Prefatory note: As one might expect, the summary that follows will touch upon the important points in the speaker's argument. In this case, however, an intellectual outline, though necessary, is not sufficient. The missing element is the extraordinarily rich audio and visual imagery in which the lectures were immersed and delivered. The lecturer's words throughout were accompanied by a continuously changing series of images—photos of people, places and things, along with quotations from a myriad of sources—that both illustrated and illuminated the ideas. The lectures were conceived and delivered as multimedia performances, but the visual dimension unfortunately is unavailable here. For this reason, the video of the lectures is highly recommended; full information to be found at the end of this review.

The two lectures, together entitled "Reach from the Sky: Aerial Violence and the Everywhere War," present a highly critical history of bombing and a historical geography of where, when, and how this bombing has taken place. The tone is set in the opening of the first lecture, "The historical geography of bombing": "Bombing is back in the headlines but it never really left, yet those who remain advocates of aerial violence don't seem to have learned from its dismal history. They also ignore the geographies that have been intrinsic to its execution, both the division between the 'bombers and the bombed'. . . and the pulsating spaces through which the bombing is performed."

Part One, "The machinery of bombing," quickly traces the development of the technology and the hardware of bombing from before World War I through to today's remote operations. Most early aviation writers believed that the primary role of military aircraft would be in reconnaissance, but they were soon being used to direct artillery fire and to conduct bombing from the air. It is striking that the idea of unmanned flight arose when the dream of flight had been realized only a decade earlier.

The development of the Predator "drone" toward the end of the twentieth century followed a similar course. Able to stay aloft from twenty-four to thirty six hours, drones were first regarded as an ideal surveillance platform. The great advance took

place in Vietnam. The Ho Chi Minh Trail in Laos and Cambodia was seeded with sensors, and when the hovering drones detected any movement, they would send a signal to operators far behind the lines who would call in air strikes. The images they transmitted, however, were not so sharp as to rule out mistakes, which meant that civilians were frequently killed.   It was then a relatively small next step for the drones themselves to be armed with bombs or missiles and their television screens to be connected, via relays and undersea cables, to operators back in the United States, who in the comfort of air-conditioned cubicles decided whether a moving light on the screen constituted a hostile target and when it should be hit.

This development was significant because it directs our attention to the wider context within which aerial violence takes place. The electronic battlefield was important not because of what it did—the interdiction program on the Ho Chi Minh Trail was a spectacular failure—but because of what it showed. It conjured up the imaginative possibility of an automated killing field, in which sensors and shooters were linked through computer systems and automatic relays. Contemporaries described the system as a "vast pinball machine," a metaphor that has had a long life even though its reduction of military violence to a video game is wholly inadequate as a characterization of today's remote operations.

The next section, "The moral economy of bombing," contains an analysis of four of the main justifications for bombing, which have been remarkably consistent over the decades. Here the arguments are set forth, along with one or more instances of how they have been radicalised or compromised by the advent of the Predator and the Reaper.

1) *"Bombing saves lives"*: Bombing raises the bar for going to war and minimizes the risk to our combatants. This rationale was advanced as long ago as the 1920s, but, as Richard Overy states," "Before 1939, bombing wars were popularly expected to be short and sharp and probably decisive. The bombing offensives conducted by Germany, Britain and the United States were instead long-drawn-out affairs, wars of attrition with high losses of men and machines, with no clear-cut end and a wide gap between ambition and outcome, a Western Front of the air."

2) *"Bombing is manly"*: Bombing is bold and brave and is both a test and an affirmation of manhood; this hypermasculine notion led to World War II commanders organising bombing tournaments as sport for the air crews. With the advent of the electronic battlefield, this jocular he-man approach gave way to the feeling of alienation as those who launched bombs were distant and detached from the consequences of their actions.

3) *"Bombing is objective"*: Bombing is scientific, organized through an extended kill-chain that ensures efficiency and disperses responsibility. Although bombing accuracy was presented as assured by technology, the reality was otherwise. In World War II, accuracy was defined as

landing within a radius of three miles of the target, which virtually guaranteed large numbers of civilian casualties.
4) *"Bombing is law-full"*: Bombing is not only legal but is also a means of imposing law on the lawless; this argument was mainly invoked by colonial powers when the bombs were being dropped on "lesser breeds without the law"; it is now virtually extinct.

Finally, and most importantly, these rationales apply only to "our" bombs, which become "good bombs," and not "their" bombs, which become "bad" bombs. As the critic Nasser Hussain put it, "Aerial bombing of those who have no chance to retaliate is not a war but an unequal exchange, which by its very nature accelerates the process through which war becomes a policing action and the adversary becomes a criminal or a mere object of violent reprisal. Policing action both begins and ends with the criminalization of the enemy."

Lecture Two: Killing Space

The lecture begins with an expansion of the theme of the deconstruction of the battlefield. As long ago as 1921 Giulio Douhet wrote that "By virtue of this new weapon, the repercussions of war are no longer limited by the farthest artillery ranges of guns, but can be felt directly for hundreds and hundreds of miles....The battlefield will be limited only by the boundaries of the nations at war, and all of their citizens will become combatants, since all of them will be exposed to the aerial offensives of the enemy. . . There will be no distinction between soldiers and civilians." Bringing it up to date, in 2012 Frédéric Megret wrote "The development of nuclear weapons has, to a considerable degree, helped blur the notion of the battlefield....This shift was evident at Hiroshima and Nagasaki, where the attacks concretely and metaphorically annihilated the battlefield by sending the message that no place was safe from war, and that the new weapons could, in one great big flash, abolish any distinction between combatants and non-combatants."

The battlefield is now to be understood as a sort of super-organism, expanding and contracting within the political-military-technological context.

Expansion: Air campaigns always exceed their original envelopes. Thus, in World War II, the Allies not only bombed Germany, Italy, and Japan but also Belgium, Bulgaria, Denmark, France, the Netherlands, Norway, and Romania. During the Vietnam War, the United States not only bombed North Vietnam, but also dropped most of its ordnance on South Vietnam, Laos and Cambodia.

Contraction: Over that same period the accuracy of bombing increased.

Expansion: Precision targeting to be sure—but, as Samuel Weber has pointed out, "Every target is inscribed in a network or chain of events that inevitably exceeds the

opportunity that can be seized or the horizon that can be seen." Thus the effects of "precision bombing" ripple out through networks of cascading effect.

With precision bombing "the body becomes the battlefield." "The logic of warfare and intelligence have flipped, each becoming the mirror image of the other. The scale of warfare has now shifted from that of military operations to the selective targeting of individual enemies. Intelligence gathering has shifted from the selective targeting of known threats to wholesale data mining for the purpose of finding hidden threats" (Peter Scheer).

Bletchley Park and the Bombe Machines: The bombe project began at Bletchley in 1940 in a modest way, with just three people, representing the three Armed Services. Its purpose was to find the secret settings of the German Enigma cipher machine. The point here is that the intercepts were directed at military communications— today's intercepts cast a far wider net.

As General Michael Hayden (director of NSA (1999-2005) and then of CIA (2006-2009) has memorably put it, "We kill people based on metadata." As we now know from the Snowden revelations, NSA conducts data harvesting on a vast scale via intercepts of foreign communications travelling through submarine fiber-optic cables at switching stations in the United States or through overseas intelligence services. These are known as *upstream* intercepts. NSA also collects data from the servers of major internet companies (Google, Microsoft, AOL, etc.) in response to demands that require ISPs to turn over any data that match court-approved search terms. These are *downstream* intercepts because the data has already been collected by the companies concerned. The data include e-mails and social network activity; taken together these intercepts are the major source of raw intelligence. There follow numerous examples of methods of tracking individuals, primarily through cell phones and e-mails.

Remote Splits: intimacy and detachment: This introduces the second theme of the lecture—a discussion of the effects on the people involved in grand-scale data harvesting. During the Combined Bomber Offensive and later campaigns there was an intimacy between members of a bomber crew, brought about in part by a so-called bioconvergence--"The bombing men are becoming part of the bombing planes. . . there are no individuals here, no line between men and machines" (Daniel Swift, *Bomber County*)--and partly by a mutual dependence accentuated by the confines of the aircraft." "Each one was directly or indirectly dependent on the other for his survival. There was mutual trust and reliance. This promoted fondness, affection, and respect. Friendships thus forged had a depth and unique quality that never existed with friendship before, and for me never after" (Doug Mourton, *RAF Bomber Command*).

All this stands in stark contrast to what *Life* magazine in December 1943 called "the aviator's sense of remoteness from his target." Here is Charles Lindbergh: "You press

a button and death flies down. One second the bomb is hanging harmlessly in your racks, completely under your control. The next it is hurtling through the air, and nothing in your power can revoke what you have done. . . . It is like listening to a radio account of a battle on the other side of the earth. It is too far away, too separated to hold reality." Testimonies abound; here is one example: "I sometimes thought it was as well no picture came into his mind of shattered limbs, of burning clothing, of living bodies crushed by rubble. He only saw a coloured target-indicator, as he squinted through his bomb-sight and thumbed the release button." Another: "It's one good thing about being in an aeroplane at war, you never touch the enemy. You never see the whites of their eyes. When we shot a Messerschmidt ME-109 down, it was shooting an article down, it wasn't shooting a person down. . .You drop a four-thousand-pound cookie and kill a thousand people but you never see one of them."

The same sentiments arise in later wars too.

Vietnam: Joseph Treaster (*New York Times*, October 1972) reported that a B-52 strike was a chillingly spectacular event for those on the ground, but for the aircrew, "sitting in their air-conditioned compartments more than five miles above the jungle, it was merely a familiar technical exercise. The crew knew virtually nothing about their targets and showed no curiosity. 'We're so far away,' one of them explained, 'that it's a highly impersonal war for us.' His crew saw themselves as instruments of policy. 'Where they put the bombs is someone else's decision and someone else's responsibility. If we are killing anybody down there with our bombs, I have to think we're bombing the enemy and not civilians.' "

There is an instructive contrast between these statements and the rather more complicated detachment felt by many crews on remote [i.e., drone] operations. Here we have a combination of the same emotional distance along with the selective intimacy they insist they had with those on the ground: "Pilots and sensor operators weren't partners who flew the same shift. We also didn't play volleyball together in our off time. Flying the Predator was shift work. . . I remember going to the Christmas party one year and meeting guys in my squadron for the first time. . . . They were on a different shift. But even then I didn't have a lot of close relationships with the other guys because we rarely flew together, and even if we were in the same shift, working a dozen feet from each other, I might be flying in Iraq and and the other pilot might be flying in Afghanistan."

At the same time there is an almost universal insistence on the feeling of intimacy with the ground--18 inches away (eyes to screen).

Here is Afghanistan: "As he's talking to me on the radio I can hear the bullets whizzing over his head and you completely lose track of the fact that you're sitting in a CONEX box sitting in Las Vegas. All of a sudden you're in the middle, you're pitched in the middle of this battle, and everything's going off like hopefully you

want it to go and, you're talking to the inbounds, you're talking to the Forward Air Controllers that's trying to get on scene, you're talking to the guy that's being shot at, you're trying to coordinate with the Pentagon, you're trying to coordinate with the Combined Air Operations Center there in Qatar and get assets to these guys, and it is a total immersion. It's astounding that your brain can all of a sudden leave where you are and you're in Afghanistan helping these guys." (Lt Col Bruce Black ASAF)

". . . the face of your enemy was staring back at you in high definition. No other pilots got to see the target like we did. . . the images on their targeting pods were tiny and fizzy compared to our high-def pods, keeping them remote to the effects on the ground. Our targeting pods not only showed us everything, but also lingered over the carnage, searing the images into our brains."

The question then arises: how much can be seen? "The video provided by a drone is not usually clear enough to detect someone carrying a weapon, even on a crystal-clear day with limited cloud cover and perfect light. This makes it incredibly difficult to identify if someone has weapons for sure. One example comes to mind: 'The feed is so pixelated, what if it's a shovel, and not a weapon?' I felt this confusion constantly, as did my fellow UAV [drone] analysts. We always wonder if we killed the right people, if we endangered the wrong people, if we destroyed an innocent civilian's life all because of a bad image or angle." (Heather Linebaugh, "I worked on the US drone program," *Guardian*, 29 December 2013.)

This inbuilt complexity and the possibilities for confusion are dramatically summed up in the brief last section of the lecture, entitled "Sweet target," entirely devoted to a forensic presentation of a single night-time mission in Afghanistan in February 2010. We overhear the voices of the various participants in the team: some are directly in the drone overhead who see lights on the road below that are probably trucks that may be carrying enemy troops or else civilians; some in combat aircraft called in by close air support controllers far away who see these same lights on their screens; and some as far away as the Pentagon—military lawyers who help decide whether the lights qualify as "legal" targets according to the rules of engagement and the Geneva conventions governing war. All their views are factors in the determination that the lights are probably hostile and therefore appropriate targets to bomb. In the event, once the sun has risen, it turned out that the trucks were full of civilians going to a pilgrimage site.

Peter Asaro, commenting on this mission: "The fact that the members of this team all have access to high-resolution imagery of the same situation does not mean that they all 'see' the same thing. The visual content and interpretation of the visual scene is the product of analysis and negotiation among the team, as well as the context given by the situational awareness, which is itself constructed." What emerges is that "a de-centralised, distributed and dispersed field of militarised vision whose fields of view expand, contract and even close at different locations engaged in the administration of military violence.

"The category of the civilian is produced through the very technologies that pretend to merely recognize civilians. . . .Whereas the Geneva Conventions make combatants responsible for identifying themselves visually 'at a distance,' aerial surveillance shifts the responsibility of visual legibility onto civilians. Civilians have to establish, perform and confirm their civilianhood by establishing and maintaining legible patterns of everyday life, by conforming to gendered and racialized expectations of mobility, and by not ever being out of place, out of time. In Afghanistan, under the watch of NATO, not only good girls, but also good civilians don't go out at night. Civilians—as the people who are produced as persons deserving not to be targeted—are 'framed and formed' through visual techniques, and they have to keep up their civilian appearances." (Christiane Wilke, *The Optics of war: bombing, performances and fantasies of distinction in international law*, 2013)

The last paragraph in Professor Gregory's text is entitled *The loneliest space of all*: the irreducible, truly dreadful loneliness of death and grief.

"I do not want to be a small number in a large one, a part of the data. . . My neighbour Ahmad did not want to be a number when he was killed trying to save his family in the al-Nada Towers. None of the killed or injured wanted it. And nobody will ever ask to hear the stories behind these numbers either. Nobody will ever uncover the beauty of the lives they led—the beauty that vanishes with every attack, disappears behind this thick, ugly curtain of counting." (Atef Abu Saif, *The drone eats with me*, 2015)

Here are the links to the videos of the lectures:

https://sms.cam.ac.uk/media/2175477

https://sms.cam.ac.uk/media/2175498

Robert Ackerman