

The centrality of militarised drone operators in militarised drone operations

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THE INVISIBILITIES OF THE MILITARISED DRONE

Over the course of the last two decades, militarised drones—known alternatively as ‘remotely piloted aircraft’ (RPA) or ‘un-manned aerial vehicles’ (UAVs)—have come to be the centrepiece of the United States’ (U.S.) post-9/11 military involvements, a signature means by which operations in Iraq, Afghanistan, Pakistan, Somalia, Yemen and elsewhere have been conducted. Over the course of this period, the now-retired General Atomics MQ-1 Predator and its successor the MQ-9 Reaper have come to be defined by two distinct forms of invisibility. They are invisible, in a first sense, to the populations who live below and within their telescopic gaze (See Gregory, 2011; Haraway, 1988), who can neither see the aircraft as they loiter eight thousand metres overhead, nor the pilots who fly them by remote control from half a world away; but they are also invisible, in a second sense, to the people on whose behalf the drone is supposedly deployed. This latter form of invisibility, perhaps better termed ‘in-transparency’, captures the organisational, institutional, and procedural means by which the public have been denied a view of the inner workings of the United States’ militarised drone programmes.

Against that background, this paper seeks to provide a set of ethnomethodological ‘reminders’ (see Sharrock, 2001) concerning what can reasonably be said about the militarised drone when that veil of secrecy is partially lifted. In order to do that, it draws extensively from the work of Egon Bittner (1965) and Harold Garfinkel (1967, 2002), as well as the canon of ethnomethodological studies into complex organisational environments that work initiated (see Suchman, 1985; Sharrock and Anderson, 1993; Sharrock, Anderson and Hughes, 1993). Whilst the paper contributes to the growing body of ethnomethodological studies into military operations (See Mair et al, 2012; 2013; 2016; Elsey et al, 2016; Kolanoski, 2017), my interests are not confined to military settings. Instead, throughout this paper, I will identify the dangers associated with using sociological data to shift from analyses of the specialised work of individuals embedded in large, distributed organisational assemblies to claims about those assemblies *in toto*. Drone operations and their accountabilities provide a perspicuous setting (Garfinkel, 2002) for an examination in these terms.

Ethnomethodology is a discipline often associated with micro-analytical studies of social affairs, but, as Coulter (2001) has argued, this is a misleading characterisation of the ethnomethodological project's concern for social activity. Whilst ethnomethodologists do very often produce studies of 'narrow' courses of action, the scope of ethnomethodological study is not informed by any allegiance to the 'micro' in and of itself. Rather, they are determined by the extent to which the logic of members' practical reasoning within and about a social setting is adequately discoverable within a given frame of reference. In this paper, I will work through an instance in which an institutionally produced record of the conduct of an MQ-1 Predator drone's crew *appears* to provide an appropriate frame of reference for understanding the logic of their activities, when in actual fact de-contextualised interpretations of that record serve to obscure both the reality of their activities as well as, consequently, the operations of the United States' militarised drone programmes.

In order to do so, the paper will focus on the commentary that has surrounded a catastrophic militarised drone operation that has come to be known as 'the Uruzgan incident'. This incident, which resulted in the deaths of as many as sixteen civilians, is central to public understandings of the militarised drone due to the incremental publication of the U.S. Armed Forces' internal investigations into the incident, which now constitute something close to the entirety of the available record of the inner workings of the U.S. militarised drone programme. In approaching the documents that surround the Uruzgan incident, I will focus upon a transcript of the Predator drone crew's talk. While that transcript is analytically seductive, promising a key to the whole, I will demonstrate that it provides less than straightforward insights into the activities of those individuals embedded in the apparatus of the militarised drone. Using an excerpt from Andrew Cockburn's history of the militarised drone, *Kill Chain: Drones and the Rise of the High-Tech Assassins* (2015), I will demonstrate the ways in which a reliance on 'conspicuous' definitions of the terms used by members engaged in specialised courses of action can produce misleading accounts of their activities—encouraging an over-emphasis on 'sharp end' human failures in place of far-reaching organisational failures (see Reason, 1997; Martin et al., 2007). I will ultimately argue that part of the value of ethnomethodological work is that it enables us to point to such problems in 'reconstructive' work. Before doing so, however, some amount of necessary prefacing will, of course, be necessary.

TRANSPARENCY, ACCOUNTABILITY AND THE MILITARISED DRONE

As the militarised drone has cemented itself in public consciousness, transparency has loomed large in the debates surrounding their use. This is for good reason, as the militarised drone has played a fundamental role in two of the United States' most secretive, and indeed most controversial, military practices over the course of the last two decades.

On one hand, militarised drones have been the main vehicle by which the United States' 'targeted killing programmes' have been carried out. Targeted killing involves the pre-meditated lethal targeting of specific individuals who have been nominated to 'kill

lists' by either the CIA or the military. The practice has commonly been equated with assassination—which is prohibited by both the 1907 Hague Convention and the 1998 Rome Statute—and there continue to be considerable uncertainties regarding whether targeted killings can be reconciled with international law (Jaffer, 2016: 3). On the other hand, the militarised drone has also been central to the United States' use of force outside of legally declared theatres of war, most notably in Pakistan, Yemen, and Somalia. The use of force in these states, areas in which the existence of an internationally recognised armed conflict is heavily contested, constitutes a significant challenge to state sovereignty (Stimson centre, 2010) as well as to traditionally accepted interpretations of *jus ad bellum* (Brookman-Byrne, 2016) and *jus in bello* (See Brooks, 2012) international law.

The combined secrecy which has surrounded both targeted killing and the use of force outside of formally declared conflicts has meant that the Bush, Obama, and Trump administrations have each demonstrated a significant reluctance to make available even the smallest fragments of information about their militarised drone programmes. As a result of these failures of transparency, journalists and civil society organisations have been concertedly engaged in a near-perpetual battle for transparency—and in turn the 'real prize' of accountability (Birchall, 2012)—maintaining that any democracy must have a robust system for ensuring the transparency of all military activities (see Diakun, 2017).

Since 2010, The Bureau of Investigative Journalism (TBIJ) has been tracking U.S. drone strikes in Pakistan, Afghanistan, Somalia, and Yemen using local news reports, statements, documents, and press releases (See TBIJ, 2020). This rigorous documentation has revealed the extent of the inadequacy of the United States' own reporting procedures, with figures released in 2016 by the Obama administration suggesting that the total number of civilian casualties caused by drones over a seven year period was *just one sixth* of TBIJ's own estimate (see Purkiss and Searle, 2017).

The American Civil Liberties Union (ACLU) has been fighting the legal battle for transparency on multiple fronts, not only litigating for information concerning both the legal and policy frameworks which govern militarised drone operations, but also for the operational details of individual strikes. Unfortunately, the shifting policy landscape makes this a never-ending task. Despite the Obama administration's promissory rhetoric regarding transparency throughout its eight years in office, the ACLU repeatedly condemned the administration's failure to engage constructively with the issues at hand, accusing them of fighting 'tooth-and-nail against releasing documents'—often refusing to either confirm or deny their existence (ACLU, 2015).

Among the ACLU's victories in the fight for governmental transparency has been the publication of the documents surrounding the Uruzgan incident, which were released following a series of freedom of information requests. The publication of these documents has made the Uruzgan incident the only militarised drone operation to have been made available to the public in its operational details, though this breakthrough can, in large part, be explained by the fact that the operation neither took place outside of a traditional battlefield, nor constituted an instance of 'targeted killing'. However, whilst the documents surrounding the Uruzgan incident fail to provide an evidentiary basis for

direct public scrutiny of the more legally fraught aspects of the use of militarised drones, they make available a great deal that was previously unknown. In the following section I will elaborate on the details of the Uruzgan incident and its investigations.

THE URUZGAN INCIDENT

At 3:00am local time on the 21st February 2010, a U.S. Special Forces team touched down just outside of Kohd, a small village in Uruzgan province, Afghanistan, accompanied by 30 soldiers from the Afghan National Police and the Afghan National Army. The village was believed to be the site of a Taliban explosives factory and the Special Forces team, or Operational Detachment Alpha (ODA), had been tasked with locating it. From the moment the troops disembarked the helicopters it was clear that the Taliban had advance warning of their arrival. The village itself was deserted, but intercepted radio communications revealed calls for the insurgent forces to prepare for an attack on the ‘infidels’ who were now moving through the settlement. In the darkness, the troops could see lights flashing around the village and figures could be seen taking cover in nearby fields.

In co-ordination with an AC-130 gunship, a heavily armed, ground attack aircraft, the ODA’s Joint Terminal Attack Controller (JTAC)—the individual responsible for co-ordinating air support in this ‘battlespace’ from a forward deployed position on the ground—identified three vehicles travelling south towards the village, and a nearby MQ-1 Predator crew, callsign Kirk97, were summoned to train a second, more powerful, camera lens on the potential threat. When the Predator crew arrived on the scene, they were not immediately able to identify any evidence that the vehicles constituted an imminent threat to the troops in Kohd. A short time later, the AC-130 departed the scene to refuel, leaving the Predator crew as the sole intelligence, reconnaissance and surveillance (ISR) unit tracking the vehicles. In fulfilling this task, the Predator crew were engaged in a relentless endeavour to interpret everything that they saw on the ground, relaying that information to the JTAC in order to maintain the ODA commander’s ‘situational awareness’, i.e., their understanding of developing events *in situ*, as they were developing (Suchman, 2015).

As the vehicles continued to move west, away from the village, the Predator crew took careful note of their every action, searching constantly for a suggestion that the vehicles might be displaying hostile intent towards the ODA and the accompanying Afghan forces. This process of seeing, interpreting and relaying continued for almost four hours. During this period, the Predator crew were primarily concerned with discovering whether or not the passengers of the vehicles were carrying weapons. Lengthy discussions took place regarding where and how such weapons might be concealed as well as how best to position the Predator in order to catch sight of them. Over the course of the operation the Predator crew identified three rifles being handled by the passengers of the vehicles. This assessment was corroborated by image analysts, commonly known as screeners, viewing the Predator feed from an airbase in Florida.

The Predator crew were also heavily involved in attempts to specify the demographic profiles of the passengers of the vehicles. This work was a regular source of disagreement between the screeners and the Predator crew. On more than one occasion the Predator crew contested the screeners' calls that children had been seen near the vehicles. These calls were eventually downgraded to 'adolescents'—a far less restrictive categorisation in terms of the rules of engagement—following an extended negotiation between the image analysts, the Predator crew, and the JTAC. In the JTAC's words: 'Twelve to thirteen years old with a weapon is just as dangerous' (Department of the Air Force, 2010: 100).

Over the course of the four hours the crew spent observing the vehicles, there is no doubt that they were convinced that the vehicles constituted a hostile force, and they routinely discussed their preference for engaging them kinetically: 'that truck would make a beautiful target' (Department of the Air Force, 2010: 70). This 'outcome oriented' mode of tracking meant that the vehicles' movements were seen and described in terms that rendered them suitable for targeting. The vehicles' westward trajectory was, for instance, described in terms of 'tactical manoeuvring' and 'flanking' and the vehicles were described as forming a 'convoy'. The 'membership categorisation devices' brought into play through these descriptions allow the pilots to find 'duplicative organisation' in the vehicles' movements which render the vehicles, and by extension the drivers and passengers, intelligible as constituting a hostile force (Sacks, 1992 Vi; See also Watson, 2009; Stokoe, 2012). In turn, this locally elaborated way of seeing makes the activities of the passengers' during the period in which they had disembarked the vehicles describable in terms that are characterised by a propensity for violence. At 05:40am, when a 'scuffle' was seen outside one of the vehicles, the JTAC was immediately informed that the crew had observed the 'potential use of human shields' (Department of the Air Force, 2010: 72). Just 20 minutes later, when the vehicles stopped and the occupants got out and began to pray, the Predator pilot remarked: 'This is definitely it, this is their force. Praying? I mean seriously, that's what they do' (Department of the Air Force, 2010: 82).

Given the Predator crew's intimate involvement with tracking the vehicles, as well as their significant role in maintaining the ODA commander's situational awareness, it is noteworthy that when a decision was finally made regarding the fate of the vehicles it appears to come as a surprise to the crew—suggesting that whilst the crew were central to monitoring 'the convoy' as it drove west, they were ultimately peripheral to the decision-making processes that negotiated how the vehicles should be engaged. At 08:46am, a team of two Kiowa helicopters arrived on the scene and, following the authorisation of the Ground Force Commander, engaged and destroyed all three of the vehicles. At the time of the strike the vehicles were 21km away from the village of Kohd and they had been travelling west for almost three hours. Much to the surprise of the Predator crew, who were preparing to engage any passengers who attempted to flee the vehicles, the passengers surrendered immediately, making no effort to leave the vicinity of the vehicles following the strike. Within six minutes the first call was made that women had been seen nearby the wreckage. Within 25 minutes the first children were identified. Amidst the confusion of the aftermath of the strike, the Predator crew scoured the area around

the vehicles in search of weapons, though by this time it was becoming increasingly clear that there were no weapons to be found.

After the Predator's eventual departure, assessments of the scene would uncover no evidence that the vehicles constituted a hostile force. The passengers of the vehicles had not been carrying weapons and they were not Taliban insurgents. In fact, they were Hazaras, an ethnic group that has seen considerable persecution by the Taliban, seeking safety in numbers and in darkness as they made the journey to Kandahar through what they knew to be Taliban territory. The precautions they had taken for their own safety had been read as evidence of their guilt as they were unwittingly judged from above for crimes they had taken no part in. In the days following the incident, estimates suggested that the death toll could be as high as 33, with most reports stating that 27 men, women and children had been killed in the attack (See *The Telegraph*, 2010; *The New York Times*, 2010). The U.S. military's formal investigations into the incident were somewhat more conservative in their estimates, concluding that as many as sixteen people had been killed in the strike. These investigations, which I shall examine next, began the following day.

INVESTIGATIONS INTO THE URUZGAN INCIDENT

By 30th June 2010, two investigations into the Uruzgan incident had been conducted: a customary 'AR 15-6' investigation into the 'facts and circumstances of the incident' (U.S. Central Command, 2010), and subsequently a 'Commander Directed Investigation (CDI)' into the conduct of the Predator crew specifically (Department of the Air Force, 2010). For present purposes, I am less concerned with the details of these investigations as I am with the documents that have accompanied them into the public domain. A sketch of the details will therefore be sufficient here.

Major General Timothy P. McHale's AR 15-6 investigation into the events of the 21st February 2010 constitutes what Lynch and Bogen would describe as the 'master narrative' of the incident, which is to say, it is a document which provides a 'plain and practical version' of events 'that [was] rapidly and progressively disseminated through [the] relevant community' (1996: 71). Drawing from a vast body of documentary evidence, McHale was tasked primarily with providing a militarily adequate account of what took place. The report itself is around 75 pages long and provides a detailed timeline of events as well as extensive interrogation of what led to the incident, termed its 'causal factors'. These were: (1): 'ineffective command posts'; (2) 'Predator crew actions'; (3) 'the ground force commander's decision to engage'; and (4) 'ill-defined terminology'. The report is dwarfed by its appendices, which run to well over 2,000 pages and include: a record of pre-operation briefing slides; victim's medical reports; transcripts of interviews that were conducted with those involved; and, most significantly given our present concerns, a transcript of all of the talk that passed either in or out of the Predator crew's radios during the operation.

The AR 15-6 report was extremely critical of the Predator crew's conduct during the operation, stating that a 'bias for kinetic operations' as well as a failure to 'accurately and professionally pass... assessments' to senior officers played a significant causal role in the incident's tragic outcome (U.S. Central Command, 2010: 61). It is for this reason, presumably, that McHale recommended that a further investigation be initiated into the Predator crew. This second investigation, conducted by Brigadier General Robert P. Otto, further stabilises the narrative of events established by McHale in the AR 15-6. Despite agreement regarding the basic features of what had taken place, however, Otto puts forward a markedly different interpretation of the 'causal factors' evident in the conduct of the Predator crew, suggesting that McHale had overstated the overall significance of the crew's involvement in light of the other factors identified in the AR 15-6 report.

It was not long after the Uruzgan incident that the content of the two investigations began to make their way into the public domain. The executive summary of McHale's investigation was made available in the May of 2010, only a short time after its completion and prior to the completion of the second report. This executive summary gave a full account of the incident, but it did not include the documents upon which its conclusions had been built, and was not, therefore, particularly revelatory on its own. It wasn't until almost a year later that the first successful freedom of information request saw the publication of a heavily redacted version of Otto's report. Alongside the report's Executive Summary and Otto's own Statement of Opinion, the version of the report that was made available included two supplementary forms of evidence. These were various pieces of selected news coverage relating to the incident, and, second, an almost entirely un-redacted version of the transcript of the Predator Crew's talk during the incident. A year down the line, following the submission of a further freedom of information request, a full version of McHale's AR 15-6 investigation was released, including its appendices, in an almost entirely un-redacted form.

Though all of the documents that were available by 2012 have received considerable attention, the transcript of the Predator crew's talk has undoubtedly become the most prominent piece of data associated with the incident, with excerpts from the transcript figuring heavily in some of the most high-profile interrogations of militarised drones. Gregoire Chamayou's *Drone Theory* and Andrew Cockburn's *Kill Chain: Drones and the Rise of the High-Tech Assassins* each use extensive passages from the transcript in the opening chapters of their books, and the documentary *National Bird* (Kennebeck, 2016) draws heavily from the document to inform their dramatic reproduction of the incident. Furthermore, the transcript has variously appeared in geographical (e.g., Gregory, 2012; 2015a; 2015b; 2018), legal (e.g., Martin, 2015), sociological (e.g., Allinson, 2015) analyses of the incident. Where the U.S. military's internal investigations had arrived at a relatively stable version of the Uruzgan incident as an historical event, wider academic engagements with the incident were preoccupied less with the provision of differing accounts of chronology, organisation or outcome, i.e., with what the event could be said to have involved, and more with seeking to establish what the Uruzgan incident could be said to *signify*.

Though the disciplinary resources brought to bear have varied, the approach has been fairly uniform: for those interested in questions of significance and signification, the documents surrounding the Uruzgan incident, particularly the transcript of the Predator crew's talk, could be treated as representative of the United States' militarised drone programme.

Where for years critical commentators of various kinds had been unable to make substantive claims regarding the inner workings of the militarised drone, a previously unimaginable level of access had suddenly been granted. And what the insights so afforded seemed to reveal, more prominently than anything else, was the inadequacies of the conduct of a small group of individuals who, with the lives of dozens of people in their hands, seemed hot-headed, prejudiced, and ultimately unconcerned with the consequences of their actions. Matters are far from as straightforward as this, however. My warning here is that summary judgements about the failings on display in the Uruzgan incident are frequently misleading. This is because they are based on and so reproduce the overly narrow frame of reference internal to the transcript of the Predator crew's talk. Whilst it may appear that the inner workings of the U.S. militarised drone programme are discoverable in that transcript, it is vital to recognise that this is only partially the case. Whilst there is no doubt that the Predator crew's actions during the operation were consequential with regards to the incident's outcome, and that their conduct throughout the operation was often reprehensible, a great many questions remain regarding the possible significance of those actions in the context of an organisational apparatus which encompassed and extended far beyond the Predator crew and whatever they might have been doing. As a consequence, though there is a great deal to be learned from the transcript, it must be handled carefully.

THE TRANSCRIPT OF THE PREDATOR CREW'S TALK AS A RECORD OF THE URUZGAN INCIDENT

In light of the preceding discussion, in the remainder of this paper I want to investigate the ways in which the transcript of the Predator crew's talk, as well as that transcript's centrality in both military and non-military commentary on the incident, facilitates misinterpretations of the of the Predator crew's activities. In order to do so, I will begin by reflecting on the status of the transcript as an adequate record of the incident. For present purposes, when it is said that the transcript of the Predator crew's talk is a 'record' of the Uruzgan incident—or at least some part of it—it is meant that the transcript constitutes a means by which a historical event has been made available for assessment by individuals who were not present through the in-the-moment accounts of its first-hand protagonists (Raffel, 1979; Mair et al. 2013). The problematic status of records as evidence of the activities of members has a foundational place in the ethnomethodological canon, with Bittner and Garfinkel's *Good Organisational Reasons for Bad Clinic Records* (1967) demonstrating the ways in which the production of records must be reconciled with the routine ways in which any given organisational setting operates—often at the expense of what, from

the outside, might appear to constitute an ‘adequate’ record. Crucially, there is no readily available ‘story’ of the Uruzgan incident to be found in the transcript itself. As Goodwin (1994) has demonstrated in his discussion of the use of video in the Rodney King trial, audio-video materials cannot simply be treated as self-contained records of events. Instead, such documents are available for interpretation and treatment as records in light of the contingencies of their production and subsequent use. It is important therefore, to pay heed to what Derrida, in his discussion of archives, has called the ‘institutional passage from the private to the public’ (1996: 2). Gaining a strong sense of what this transcript is, in other words, means treating it, first and foremost, as a contingent artefact of the institutional processes which generated it. Rather than ‘raw’ primary data from which a unified history could be written, documents such as these are already the products of contested sets of processes by which certain aspects of the record have been retained, redacted, altered or omitted (Lynch, 1999).

In this particular case, issues of this kind are not immediately visible in the text itself. Despite appearances, the transcript of the Predator crew’s talk is not a straightforward transcription of a single recording. It is instead an amalgam of two different sources of audio. The first of these is the Predator crew’s ‘intercom’, i.e., the intercommunication device which transmitted audio *between* the Predator crew, all of whom were co-located in a room in Creech Air Force Base in Nevada. Over the course of the five-hour recording, the intercom captured the talk of crew members in four different positions. The pilot, who controls the aircraft; the sensor operator, who controls the aircraft’s camera;¹ the mission intelligence co-ordinator, who is responsible for the management of intelligence throughout the operation—most notably via the use of military online ‘chatrooms’ (known as mIRC chats) which are used to relay information to and from the crew; and a safety observer, who provides legal assistance² in the event of the use of force. The transcript of the intercom recording documents all of the talk of the Predator crew from the moment they were assigned to the vehicles until the moment they leave the scene, and constitutes the vast majority of the talk that is documented in the transcript.

The second recording, interwoven with the first, is taken from the Predator crew’s radio transmissions. This recording includes the Predator pilot, who was responsible for making radio calls on behalf of the Predator crew, as well as four further individuals who were using the same radio channel. Each of these individuals was located in Afghanistan, either in the air or on the ground. The most prominent of these is the ODA’s JTAC, who was co-ordinating aircraft in the battlespace throughout the operation from Kohd. Also captured in this recording are the individuals responsible for communicating on behalf of the AC-130 gunship, the Kiowa helicopter team, and the ISR platform which

¹ Due to shift rotations, there were two different sensor operators present during the Uruzgan incident though no annotative distinction is made between the two in the transcript.

² When it becomes apparent that a drone crew are going to be involved in the use of force, an off-duty pilot will be assigned to the crew in order to provide additional assistance regarding the rules of engagement and strike procedures. In the words of the safety observer involved in the Uruzgan incident, the role involves “generally making sure no one is doing something unsafe during the engagement” (U.S. Central Command, 2010: 1448).

would eventually replace the Predator crew. By its nature, the fact that this source of audio draws solely from radio transmissions, means only utterances which are intendedly passed through the radios are documented in the transcript.

Title	Roles/Responsibilities
<i>*MQ-1 Predator Pilot</i>	The Predator crew’s commanding officer Responsible for controlling the Predator Responsible for the Predator crew’s radio communications
<i>*MQ-1 Predator Mission Intelligence Co-ordinator</i>	Responsible for managing both incoming and outgoing intelligence and maintaining the Predator crew’s situational awareness Responsible for mIRC communications
<i>*MQ-1 Predator Sensor Operator³</i>	Responsible for controlling the Predator’s cameras Responsible for targeting in the event of a strike
<i>*MQ-1 Predator Safety Observer</i>	Responsible for advising on the rules of engagement in the event of a strike
<i>Joint Terminal Attack Controller</i>	The most senior officer presented in the transcript Responsible for co-ordinating aircraft from a forward deployed position in Afghanistan
<i>AC-130 Gunship Navigator</i>	Responsible for the AC-130 crew’s radio communications
<i>OH-58 Kiowa Left Seat Pilot</i>	The Kiowa helicopter team’s commanding officer Responsible for targeting in the event of a strike Responsible for the Kiowa helicopter team’s radio communications
<i>Unidentified Manned ISR Aircraft</i>	Replaced the Predator crew following the strike

** An asterisk represents an individual whose talk was recorded by the Predator crew’s intercom system*

What we have, therefore, is a transcript which documents everything that the Predator crew said, as well as everything that the Predator crew heard. It does not do so ‘naturally’, it has been manufactured in this way by its producers so that the transcript can serve as an adequate record of the Predator crew’s activities. At first glance, this may appear to be inconsequential, but such a presentation does not apply to any other individual in the operation. Whilst individuals like the JTAC, who played a central, co-ordinating role throughout the incident, are included in the transcript, they are only made visible in the transcript through their direct communications *with* the Predator crew. We cannot access everything that they said, nor can we access everything that they heard. Through the transcript, in other words, the Uruzgan incident has been laid out as if the reader were placed ‘in the room’ with the Predator crew. In this way, the transcript makes available only a very narrow course of action, centralising the activities of a very

³ Due to shift rotations, there were two different sensor operators present during the Uruzgan incident though there is no annotative difference between the two in the transcript.

small number of individuals while simultaneously leaving the rest of the sprawling operational apparatus in which the militarised drone is embedded out of view, making this a trap for the analytically unwary.

The justifications for the particular construction of this transcript are, presumably, explicable in terms of the organisational structures which saw it produced (see Galanova, 2010). The transcript was produced as part of an effort to understand the details of a military operation, and there is no doubt that the transcript provides a narratively coherent, uninterrupted, account of the talk of a set of individuals who had a good view of the 'action'. As Harris notes 'Military intelligence systems are ... often located at the centre of military command structures...' constituting a site '...where surveillance is most directly attached to purposive action' (2006: 102). As such, it may well be the case that the view afforded by this construction of the Predator crew's talked activities was the most adequate for the purposes to which the transcript would be put—namely the investigation of the incident's causes and their possible role in it. In this sense, it is worth noting, following Garfinkel and Bittner, that the difficulties associated with the transcript's unnatural construction are not members' but analysts' problems that result from efforts to put the transcript to use in unintended ways.

Up to this point I have provided a fairly extensive introduction to the Uruzgan incident and the investigations which have sought to render it coherent as a historical event. In turn, I have also gone some way towards articulating the difficulties that are likely to arise when using the incident's associated transcripts as an unproblematic resource for making claims about the U.S. militarised drone programme more generally. In what follows, I will seek to bring these concerns more sharply into focus through some empirical reflections on the Predator crew's reference a particular military concept, that of the 'kill chain', during their preparations for the strike. Following a brief discussion of this term's meaning in military literature, as well as its particular relevance to the militarised drone, I will turn to the considerably more contentious issue of what can be made of the term's meaning as and when it was used by the Predator crew during the Uruzgan incident. In order to make the concerns that will preoccupy the remainder of this paper as perspicuous as possible, my discussion of the Predator crew's use of the term 'kill chain' will approach the crew's talk as it is embedded in the opening chapter of Andrew Cockburn's *Killchain: The Rise of the High-Tech Assassins* (2015). Contextualised in this way, I will make use of Bittner's conception of 'the conspicuous meaning of expressions' (1965: 249) in order to illuminate the potentially deceptive character of technical language when it is embedded in specialised courses of activity.

THE 'KILL CHAIN'

Estimates suggest that literally hundreds of individuals are required to conduct a militarised drone operation, from the operators themselves to the intelligence analysts, observers and lawyers required to analyse the data produced by the drone and regulate the activities of the crew. Best estimates suggest that operating either an MQ-1 Predator or

an MQ-9 Reaper for 24 hours requires 61 forward deployed personnel and 149 personnel operating from within the United States (Kreuzer, 2014, 169). Over the course of McHale's AR 15-6 investigation, 57 interviews were conducted with individuals involved in the incident, and this includes several interviews with senior officers speaking on behalf of several subordinates or individuals speaking on behalf of their teams. Far from 'unmanned', therefore, the militarised drone is one of the most personnel-heavy tools at the United States' disposal. But such a vast organisational apparatus is a small price to pay for what the militarised drone enables the U.S. to do.

In military operations, the 'kill chain' refers to the amount of time that passes between the identification of an emerging target and that target's being engaged by friendly forces. At the turn of the millennium, the commander of Air Combat Command, Gen. John P. Jumper, announced that the Air Force intended to make the kill chain (then referred to as the F2T2EA: Find, Fix, Track, Target, Engage, and Assess) the 'mainstay of [their] tactical planning and execution', seeking to reduce the figure to 'single-digit minutes' (Tirpak, 2000). Even before a militarised drone had been seen in combat it was understood that they would come to play a crucial role in the future Jumper envisioned (Hebert, 2003), though it would have been difficult to predict the extent to which the U.S. Air Force would come to rely on the drone in the years that followed.

The advent of the MQ-1 Predator marked a dramatic transition for the U.S. Air Force's aspirations toward a shortened kill chain. The ISR unit which was best equipped to identify emerging targets was now also capable of launching the munitions which would eliminate them. One might think that this centralisation of military activities might reduce the number of individual's involved, but what little manpower is saved in aircraft that are no longer required is multiplied tenfold in the number of individuals needed to analyse the vast quantities of often hard to read data that the militarised drone has the capacity to produce (Kreuzer, 2014). Nevertheless, all that manpower has made a considerable difference. Where, in 2003, officers could expect a period of at least 40 minutes between the identification of a target and a strike, the militarised drone saw that time reduced to almost zero (Cockburn, 2015). This fact alone takes us a considerable distance towards explaining the drone's central role in the United States' targeted killing programmes. Given the centrality of the kill chain, it is perhaps unsurprising that the phrase makes an appearance in the Uruzgan incident. With that being said, appearances can be deceptive, and a close investigation of the Predator crew's use of the term 'kill chain' reveals a considerable incongruity between the definition discussed above and the terms operative meaning for the crew.

'REMEMBER, KILLCHAIN!'

During the Uruzgan incident, the Predator crew had just one conversation in which the term 'kill chain' was used, and it is with reference to this usage, and what we are to make of it, that brings us to the central arguments of this paper. Rather than approach the use of the term in the context of the transcript alone, I want to begin with reference to

Andrew Cockburn's discussion of the Uruzgan incident in his book, *'Kill Chain: Rise of the High-Tech Assassins'*. Cockburn's book is a historical investigation of the militarised drone, developing a chronology of technologies and strategies which preceded the MQ-1 Predator, shaping its development and subsequent use. His discussion of the Uruzgan incident in the opening chapter serves a primarily introductory role—consisting of neither a thorough analysis of the Uruzgan incident nor the concept of the 'kill chain'. Rather than critique Cockburn's work, my intention is to take a short passage from his introduction and use it to arrive at some reminders, to return to Sharrock (2001), concerning the frame of reference that is provided by endogenously produced records of historical events. The passage appears towards the end of Cockburn's story of the Uruzgan incident, and details a period during which the Predator crew are preparing for a possible 'clean-up' strike on individuals who they expected to flee the vehicles following the initial strike by the Kiowa helicopter team. The excerpt proceeds as follows:

The crew was now making final preparations for the attack, arming the missile and going through the final checklist. The sensor operator reminded his intelligence colleague to focus on the business at hand:

8:45 a.m.

Sensor: Hey, MC.

Mission Intelligence Controller: Yes?

Sensor: Remember, Killchain!

MIC: Will do

(Cockburn, 2015: 9–10)

My primary concern with this passage lies in Cockburn's characterisation of the sensor's use of the term 'Killchain' as being a reference to 'the business at hand'. Though there is nothing problematic about such a characterisation in and of itself, there is a great deal of ambiguity with regards to what exactly 'the business at hand' could possibly be. There are, I would propose, two distinct interpretations of the sensor's utterance in this passage, and the differences between them reflect a distinction between two ways in which the Uruzgan incident, and the Predator crew's role within that incident, can be understood.

This distinction is best approached with reference to Egon Bittner's foundational paper, *The Concept of Organisation* (1965), which marked the introduction of ethnomethodology's insights to the study of organisational phenomena by seeking to initiate a programme of studies which would investigate competent members' methodical use of organisational concepts in order to produce and maintain the orderly features of organisational settings. As a part of this, Bittner proposed a set of 'preliminary measures' that should henceforth be adopted by those engaged in investigations of organisational settings so that researchers might 'free [themselves] from the encumbrance of presumptive

understanding' (249). Of these, one measure in particular has a strong bearing on the present discussion:

... [W]e will not look to the obvious or conspicuous meaning of the expressions used in the scheme to direct us to the objects and events which they identify, Rather, we will look for the way the scheme is brought to bear on whatever happens within the scope of its jurisdiction (249).

In this sense, Bittner maintained that, by resisting the temptation to treat 'normative idealisations' of organisational concepts as though they were independently meaningful—as opposed to meaningful insofar as they are a part of members' practical reasoning within and about their social environment—researchers would make available the 'rich and ambiguous body of background information that normally competent members of society take for granted as known' (244). The Wittgensteinian (1953) overtones of these preliminary measures are evident—a serious consideration of meaning should be concerned primarily with *use*—and it is in this sense exactly that I would like to approach the sensor's use of the term 'kill chain'.

A first thing worth noting about the sensor's use of the term 'kill chain' is the particular manner in which it has been recorded in the transcript of the Predator crew's talk, which has seen the term, which is written 'kill chain' in the U.S. military's own literature on the concept, collapsed into a single, proper noun: 'Killchain!'.⁴ There is a reificatory element to this form of transcription, endowing the term with an independent conceptual status. As we shall see, this appearance of formal reference to a specific concept aids a particular reading of the term's meaning. As discussed, in the military literature 'kill chain' refers to the time that passes between the identification of an emerging military target, and the elimination of that target in a structured, step-by-step process. Without reference to any specific strike, therefore, it might be said that the kill chain is the product of a formal organisational scheme that has, as its functional objective, the identification and destruction of military targets in the shortest possible amount of time. Such a conception of the kill chain provides the resources required to formulate what we might call, following Bittner above, the 'obvious' or 'conspicuous' definition of the sensor's use of the term. That is to say, we could propose that, when the sensor says to the MIC, 'remember, Killchain!', the sensor is encouraging the MIC to focus on the work of eliminating the emerging target, i.e., the vehicles they have been following through the desert, as quickly as possible. On such a reading, the Predator crew's 'business at hand' appears to be the that of enacting of the formal organisational scheme as efficiently as possible.

Whilst the attribution of this 'conspicuous' definition of 'kill chain' to the sensor's utterance may initially appear to provide an appealing account of its meaning, it takes very little interrogation to reveal that it dissolves on contact with air. Why would the sensor operator, who is responsible for targeting the Predator's Hellfire missiles, remind

⁴ Due to the absence of audio recordings of the crew's talk, no comment can be made regarding the inclusion of an exclamation mark, though it certainly alters the perceived sense of the utterance.

the MIC, who is responsible for no part of the targeting process, of his responsibilities with regards to the kill chain? Why would the Predator crew be concerned with the kill chain at all when they are to play no active role in the initial strike, which is to be made by the incoming Kiowa helicopter team? Why would the kill chain remain an available topic for discussion after almost four hours, when it is a metric measured in minutes with an ideal duration of less than ten minutes? And why, after all of this time, would it be raised as a relevant concern only at *this* moment? If we consider the sensor's usage of the term 'kill chain' as an utterance embedded in a specialised course of action seriously, this 'conspicuous' definition simply does not add up to an adequate account of its meaning in use.

In actual fact, the sense of the sensor's utterance cannot be discovered using the transcript; the information needed to furnish its meaning is not available in the text alone. Fortunately, sense can be made of the exchange using insights that are to be found elsewhere in the documents surrounding the Uruzgan incident. In one of the interviews conducted by McHale's investigating team as part of the AR 15-6 investigation, the safety observer, who was present during the final minutes of the operation, is asked about the exchange, which is evidently a source of uncertainty for the interviewers in terms of why it was being raised. The safety observer's response is as follows:

I can explain that sir. I know exactly what he means by that. The crew in question that day, the MC was one of the younger airman, not anyone unequal[ified] by any means, but the sensor was fairly experienced and giving him crap to remember to put, *whenever there is a dynamic situation they keep unwanted stuff from going into the [chat] room, they type kill chain*. That keeps the screener to only typing mission related info and anyone else in the room, it should be a clue to everyone not to jump in and distract or put impertinent information and leave pertinent information not on the screen (CENTCOM, 2010: 1454, emphasis added).

In light of this account, it appears that the sensor's utterance, 'Killchain!', has altogether very little to do with the kill chain in its formal organisational guise. There is, presumably, some relation between its use in this context and the conceptual definition documented in Cockburn's book, but such a relation is hardly revelatory. As is so often the case, having taken the correct turn at a methodological crossroads we have been left with a somewhat deflationary account of the sensor's use of the term 'kill chain'—one which appears to reveal very little about the kill chain or how it operates.

With that being said, such a reading of the transcript *is* revelatory insofar as one is willing to take seriously the practical, situated work in which the Predator crew were engaged over the course of the Uruzgan incident. What is required here is a re-orientation to what the transcript of the Predator crew's talk could possibly show. A consideration of the crew's use of the term 'Killchain!' in terms of the ordinary 'shopfloor' (See Garfinkel, 2002) work with which they were undoubtedly pre-occupied makes available the concerted methods by which the Predator crew sought to manage the vast flows of

information that converged upon the militarised drone in the lead up to the strike. In this instance, that work took the form of closing down certain communication pathways such that non-essential information did not drown out information that may have been vital to the strike's successful completion. As an ISR unit, the technologically mediated production and distribution of information is central to the militarised drone's function in contemporary conflict, but it is crucial to appreciate that the management of where and when that information is available remains a distinctively social problem, and the Predator crew's use of the term 'Killchain!' provides a valuable insight into the ways in which that problem plays out over the course of an actual operation. This deflationary account may seem unsatisfactory, particularly when set against the issues of life and death, authority and violence that the airstrike brings to the fore. What I want to argue in conclusion, however, is that it will only look that way if we have a mistaken understanding of what the transcript of the Predator crew's talk makes available.

CONCLUSION: THE CENTRALITY OF MILITARY DRONE OPERATORS IN MILITARISED DRONE OPERATIONS

As I have endeavoured to show, the transcript of the Predator crew's talk places its reader in the room with a small group of individuals who represent only a tiny proportion of the large number of active personnel involved in the Uruzgan incident. Though the Predator crew played an undoubtedly consequential role in the operation, dozens of individuals, many of whom had a great deal more control over the fates of the vehicles than the Predator crew can be said to have had, have been omitted entirely. That it has emerged, in an investigation of the reality of the Predator crew's activities, that their orientation to the 'the business at hand' was to heavily contextualised, situationally specific tasks rather than a set of institution-wide objectives should come as little surprise. Those latter, institution-wide, objectives are satisfied by virtue of the concerted efforts of literally hundreds of individuals engaged in a massively heterogenous set of activities. To treat the Predator crew as though their activities provide an adequate proxy for the work of that apparatus *in toto* is to be enlisted into the construction of an unrealistic account of the crew's activities by a transcript which unnaturally and disproportionately centralises and, as a result, foregrounds their actions (cf. Lynch and Bogen, 1994). The sensor's use of the term 'Killchain!' provides a simple illustration of the ways which such a construction produces deceptive impressions of the Predator crew's activities. Though the example at hand is fairly innocuous, the belief that the Predator crew's actions *are* the actions of the entire apparatus of the militarised drone is a dangerous one. It makes it all too easy to place responsibility for the Uruzgan incident's tragic outcome on the shoulders of a small number of individuals whose inadequate conduct is made endlessly perspicuous in the available transcript at the same time as it serves to obscure the organisational assembly within which that conduct took place (cf. Martin et al. 2007; Mair et al. 2012; 2018).

All that being said, I would close by noting that, whilst the Predator crew's reference to the 'kill chain' may not provide any significant insight into the operative reality of the U.S. military's kill chain as an organisational process, the discussion of terms like these in the context of the activities in which they are embedded remains a valuable avenue of study because 'learning the common ways of using their words *is* grasping their meaning' (Coulter, 1973: 175). What is required, therefore, is an endeavour to take these words and their meanings seriously, and to investigate the ways in which they shape and are shaped by the activities of those who use them. The transcript of the Predator crew need not contain the entirety of the Uruzgan incident, or indeed the entirety of the United States' militarised drone programme, for it to be taken seriously as that which it uniquely is; an unprecedentedly detailed insight into the practical work of militarised drone operators.

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