

Death by Metadata and its Transliteration to Flesh

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This paper emerged from two places. One, as you know a couple of years ago, I was privileged enough to be invited here by Vijay Devadas to give a keynote for the Postcolonial Studies Network and I did my first airing on the biopolitical caesura, the split between human and animal, and began to basically articulate the effaced racialisation of the biopolitical caesura in, say, Foucault's work and Agamben's work, as a way of understanding a different constellation of biopolitical relations. So I am going to extend that notion of what I term racio-specism in this context and conjoin it to the work that I have been doing over the last few years on drone massacres effectively. And the development is that in the drone massacres I have been tracking, we now have these large military and surveillance apparatuses converging, the NSA and the US Department of Defense. And I am going to be looking at what that is enabling in terms of killing within the spaces of Yemen, Afghanistan and Pakistan.

So, drawing on the revelations of Edward Snowden and two former drone operators, in this paper I track the lines of convergence between the US Department of Defense and the National Security Agency in the conduct of the US drone kill program. The intensification and the convergence between the Department of Defense and the NSA is perhaps best exemplified by the motto deployed by the NSA and describing its collaboration with the Department of Defense, and the motto is: "We track'em you wack em."

In the first part of this paper, I am going focus on the development of new tracking programs, specifically a new geo-location program called Gilgamesh, developed by the NSA that's been incorporated in the Department of Defense drone-kill-program. I examine the increasing reliance on mathematical formula in order to identify drone targets on kill-list and to establish a calculus of probability of hostile-intent. My interest is in examining the interlocking of the NSA's metadata with the Department of Defense's algorithmic formulae in order to conduct drone kills, in which repeatedly the identities of those killed are not known. I situate what I will term the bioinformatonalisation of life within the geocorpographies of Pakistan and Yemen and Afghanistan in order to order to disclose the transliteration of abstract metadata into flesh. I conclude my paper by staging a critique of the unexamined aesthetics that inscribe and constitute the science of drone kill. And I explain why I got into the aesthetic and why I think it is crucial and deadly.

So, in the course of the debate at John Hopkins University on the NSA's bulk surveillance programs, Michael Hayden, former NSA and CIA director, uncoincidentally, confirmed the NSA general council Stuart Baker's observation that "Meta-data tells you everything about a somebody's life. If you have enough metadata, you don't really need content". I don't want presently to discuss this notion of metadata as superseding the need for content, but at this juncture I want to focus on the comments that immediately followed his confirmation of Baker's observation. After remarking that Baker's observation was absolutely correct, Hayden asserted, "We kill people based on metadata". Hayden's assertion did not come as a surprise to

scholars working in the field of US drone strikes. As has been well documented, US drone operators rely on metadata in determining what targets to terminate on their kill-lists. Furthermore, as evidence of documents released by Edward Snowden, the agency analyses metadata as well as mobile-tracking technology to determine targets without employing human intelligence to confirm a subject's identity. An unnamed drone operator succinctly outlines this practice. He says: "People get hung up that there is a targeted list of people to kill, it's really like we're targeting a cellphone. We are not going after people, we're going after their phones in the hope that the person on the other end misdialled is the bad guy." Two things in these collaborative remarks are worth unpacking. If you gather enough metadata, it will supplant the need for 'content' and that human targets become so somatechnically instrumentalised as to be entirely coextensive of the technology they use. In this case, a human subject becomes effectively indistinguishable from their mobile phone. This practice is further evidenced by another former drone operator. The former drone operator has disclosed the expansive dimensions of the NSA's surveillance and tracking sweep: "The NSA doesn't just locate cellphones of terror suspects by intercepting communications from cellphone towers and internet service providers, the agency also equips drones and other aircrafts with the devices known as virtual base-tower-transceivers, creating in effect a fake cell-phone tower that can force a targeted person's device to log onto the NSA's receiver without their knowledge. That in turn allows the military to track the cellphone, feeding the real-time data to drone operators, who conduct the missile strikes."

Known by the codename 'Gilgamesh', the NSA's program deploys advanced mathematics to develop a new geo-location algorithm intended for operational use by drones. The former drone operator has also revealed crucial details about the NSA's use of the tracking program geo-cell. Geo-cell identifies and geolocates a tracked cellphone or sim card without necessarily determining who the person on the other end is. So, the practice of killing by metadata underscores for me the intensification of what I will term the bioinformationalisation of life. The bioinformationalisation of life results from science's demands, in Heidegger's terms, "...that nature report itself in some way or other that is identifiable through calculation ... and that it remains audible as a system of information". The convergence of metadata systems and digitalised identification programs exemplifies the rendering of life into audible systems of information through the application of algorithmic formula. Through processes of bioinformationalisation life becomes transmuted into anonymous digital data that is at once trackable and that can be killed extra-judicially, that is to say, with absolute impunity, as is happening with the US drone strikes. And I say that it is rendered anonymous precisely because such as drone signature strikes, the US repeatedly kills targets, whose identities are not known.

Geo-location technology, the Department of Defense says "...has cued and compressed numerous kill chains, that is all of the steps taking to find, track, target and engage the enemy". The investigative journalist Jeremy Scarhill explains what's at stake in the drone targeting program and its convergence with the NSA. He says, "In some cases the specific individuals are being targeted, even though the United States doesn't know their identities and may not have any actual evidence that they are involved in terrorist activity."

So, operating under the dubious rubric of exercising its right to self-defense in response to an imminent threat, the US believes that determining of terrorists as imminent threat does not require the United States to have clear evidence that a specific attack on US person or in US interest will take place in the immediate future. The extraordinary latitude in killing of target subjects that this right of self-defense to imminent threat produces, results of killing of untold numbers of people, whose names are unknown, and who, if and when, they are finally identified – and I talk about identifying the bodies in a moment – they are often found to have no connection at all targeted groups such as Al-Qaeda.

So a recent report by the social justice organisation *REPRIEVE*, which was released just last month, and they have been working with the extraordinary organisation from the UK *Bureau of Investigative Journalists* documenting the drone-strike deaths and assembling the data from a variety of survivor testimonies. So *REPRIEVE* has just released and it has brought to light that up to 874 unknowns, as they are known, have been killed by the US in the hunt for 24 targeted individuals. So for 24 people, we had 874 civilians killed. The report documents the extraordinary toll on civilians that is being enacted by these metadata drone kills and it estimates that 96.9% of the casualties from US drone strikes are actually civilians. The geo-locations technology foundational dependence on algorithmic formula provides a calculus of risk probability for a designated target whose identity remains unknown. In other words, what I am going to do now is unpack the philosophy of science underpinning this operation via Nietzsche's critique of science.

In other words, this algorithmic program works to transmute difference into serial sameness and interchangeability. Knowledge, in this scientific schema, is what Nietzsche would term "forcifying of the multifarious and incalculable into the identical, the similar and the calculable". In other words, and this is how I would gloss it, what is operative here is the serial conflation of the technological signature with the unknown identity of the user of the cellphone. The knowledge of the one is rendered interchangeable with the non-knowledge of the other. The contours of this convoluted scientific epistemology are clarified for me by Babić's critique of some key aspects of science. "Today, science", she says, "plays on the limits of knowledge, it exploits what it knows and it uses it as a template for what it doesn't know". This is how I would gloss it: in other words, once situated in the context of a geo-location drone cue and kill program, the knowledge of the cellphone's electronic signature, is transferred as a template on the unknown identity of the phone's user, in order to render the subject 'knowable', regardless of the fact, that their actual identity remains unknown. The claim to absolute truth made by contemporary science, Babić elaborates, "...is prudently a-proximative, a-symptomatic a-proliferal movement. One does not claim to have the truth, and that is the claim to one's truth". I want to gloss this in practice then.

In the practice of geo-location drone-kills, the identity of the human drone target is often 'approximative' with the cellphone location, if it is revealed the human target killed by a drone strike was based on a mistaken identity, the error is scripted by the US military as 'a-symptomatic' in the scheme of things and as 'peripheral' to the larger concern of winning the wars on terrors. In this way, science need not acknowledge its dissembling tactics. What is known and what is non-known are thus continuously connected. Nowhere is this truth perhaps more graphically evidenced

than in the US geo-location drone-kill program, where what is known is inextricably and often fatally connected to what is unknown.

Situated in the geocorpographies of Pakistan, Afghanistan and in Yemen, which are the key countries where the US conducts its drone strikes, these deaths by metadata are effectively rendering such spaces, I would argue, into experimental laboratories for testing of new military technology, in which thousands of civilians have been killed with absolute impunity. In proceeding to analyse the bioinformationalisation of life I want to disclose the ways, in which the US Department of Defense's increasing reliance on death by metadata is inscribed by a biopolitics that is predicated by anthropocentric hierarchies of life. The manner in which these surveillance and war technologies foundationally informed by both the biopolitical caesura, with its violent division between animal and human, and a virulent anthropocentrism, is powerfully captured by the words of a Yemeni mother of a US drone strike victim.

The drone strike in questioned occurred on December 2013, and you might have heard about this, because it made some international headlines, killing 12 people at a wedding procession in Yemen. In flagrant denial of the testimonies provided by the survivors of this drone attack, the Pentagon continues to insist that everyone killed or wounded in this attack was an Al-Qaeda militant and therefore a lawful military target. In the wake of the fatal drone strike, the Yemeni mother says, "Whatever we do, they will never look at us as human beings, we end up with wounds they cannot see". Two things are noteworthy here, in articulating that 'whatever we do, they will never look at us as human beings', this Yemeni civilian draws our attention to the mediating forces that inform and calibrate those very same technologies trained on the Yemeni targets. What is operative here the graphic disembodiment of the bioinformationalisation of life through a series of algorithms and the compounding biopolitical violence of what I have elsewhere termed racio-specism, that configures its targets forms of life in the scale of anthropocentric hierarchy, and I presently elaborate on this in detail.

What I want to do in this next section of the paper is begin to do that mapping of transliteration of this abstract of metadata to flesh on the ground. In the course of an interview on the cruise missile US strike in Al-Majalah in Yemen, Jeremy Scarhill describes the account of the survivors and the toll of the strike on that village. He says, "I talked to tribal elders who went there within 24 hours of the strike and they describe the scene where the flesh of livestock and humans was melted together and they couldn't determine if it was goats or sheep or human flesh and they were trying to figure out how even to bury the dead." These accounts of human and animal flesh, inextricably bound in the moment of violent death caused by US drone or cruise missile strike are to be found across numerous investigative reports that document the civilian toll of these attacks.

In a statement of the US Senate judiciary commission on drone wars, Faria Al-muslimini, a Yemeni farmer describes the strike by a US missile on the village of Al-Majalah in Yemen, and he says, "In the poor village that day more than forty civilians were killed, including four pregnant women. Bin Farid was one of the first people to the scene, he and others tried to rescue civilians. He told me the bodies were so decimated it was impossible to differentiate between the children, the women and

their animals. Some of these innocent people were buried in the same grave as animals.”

In both these profoundly moving accounts, human and animal are fused into composite residue of inextricable flesh through the violence of war, the one melts into the other, one is buried with the other. Taking these harrowing accounts of fused flesh as my point of departure, I want to proceed to delineate the contours of an ethical ground that would encompass the human and the animal as grievable forms of life in the face of the violence of war. I can think of no more appropriate way of doing this than by enfleshing the world by the work of Maurice Merleau-Ponty. In conceptualising our relation to the world, Merleau-Ponty posits the flesh as that which conjoins one to the other. He writes “the presence of the world is precisely the presence of its flesh to my flesh.”

Merleau-Ponty’s theorising of flesh disrupts the circumscription of an anthropocentric frame. Flesh emerges for him as both the specific and general modality of being-in-the-world. It is a general modality of flesh signifies the conditions of possibility of being-in-the-world. It is simultaneously a specific modality as the particular subject is always-already enfleshed, hence coming into being. The moment of death enunciates the inevitable falling away of the flesh, and its gradual dissolution into something other. We’ll talk about that some more in a moment. Even after its disintegration into ashes or dust, the flesh of the dead still persists in signifying a binding, if transient, relation to the world. In the melting of human and animal flesh after the violence of a missile strike, there emerges a binding of one to the other that is predicated on the material fact that there is, what Merleau-Ponty would term as “this thickness of flesh between us”. For me, this ‘thickness of flesh’ is what conjoins one victim to the other, and what, post a missile strike, cannot be categorically divided and neatly assigned along the biopolitical hierarchy of life. Through this thickness of flesh, human and animal subject and object figure in ground, dissolve. The thickness of this flesh is also what evidences the materiality of the remainders of the dead, in its decomposing and shredded corporeality. This thickness of flesh is what forensically testifies to the act of fatal violence. It exposes to view what is virtually everywhere denied by the US administration. The fact that its drone strikes are neither surgical or accurate, and that they kill much more than their designated suspect targets, if these strikes can be called surgical in any way, is through their violent capacity to slice up living entities to reduce them to scattered fragments of undifferentiated flesh. ‘Flesh’, the thing that has been insistently repressed by the extracting processes of algorithmic logic and metadata, here returns, but only in a moment of shattering dismemberment, in the wake of the violence unleashed by the missile blast, there is a denucleation of the identity of one and the other. Following a drone strike upon the Yemeni village of Al-Shahir, Hassan Sulaiman describes how the victims’ bodies were “shredded”. He says, “We collected the remains without knowing who they were.” The flesh of the one is so fused into the flesh of the other, as to be reconstituted into an indeterminate sanguinity. The impossibility of unbinding this co-sanguinity calls for the burial of one with the other. As one survivor said, “It was impossible to differentiate between the women, the children, and the animals.” Some of these people were buried in the same grave as animals. Flesh, then, through this double relation of co-sanguinity and death, emerges as a transcategorical category, binds one to the other, animal – human. Sheikh bin Farid in his testimony to the report titled *A Drone and an al-Qaeda Strike*, describes the post-drone strike scene he was compelled to witness. He says, “Goats,

sheep, cows, dogs, people, you could see their bodies scattered everywhere so many metres away. The clothes of the women and the children were hanging from the treetops, with a flesh on every tree, every rock, but you did not know if the flesh was of human beings or animals. Some bodies were intact, but most were melted.” Merlau-Ponty’s conceptualisation of the flesh of the world here assumes for me an entirely different dimension. In this context, in this site of saturated violence, his concept becomes critically resignified. Reading the scene of carnage, I become a tertiary witness to a flesh of things. A ‘flesh of things’ articulates the shredding of human and animal flesh by a missile and its transmutation into a thing that literally enfleshes the world. Hanging from treetops and rocks, human and animal flesh bares witness as dispersed fragments to the rendering of lives and to the mere tissue of things, in such moments, there are not separate beings, but inter-corporeal assemblages of flesh, where individual entities have been rendered into undifferentiated biological substance, articulated through the register of harrowed flesh, literally as a geocorpography.

In quoining the term ‘geocorpographies’ some years ago, I wanted to bring into focus the impossibility of disarticulating the body from its geopolitical locus, and to materialise the multiple significations that accrue from this understanding of geocorporeal nexus. In the massacre that was perpetrated by the US military in this Yemeni village, geocorpography enunciates the violent enmeshment of the flesh and the blood of the body with the geopolitics of war and empire. The site of carnage, however, takes the concept of geocorpography to another level of signification. The bodies of humans and animals are here compelled, flesh the world, through the violence of war, in a brutally literal manner. The dismembered and melted flesh becomes the tissue of things as it biomorphically enfolds the contours of trees and rocks. What we witness in this scene of carnage, is the transliteration of metadata’s algorithms to flesh. The abstracting and decorporealising operations of metadata, without content, are in these contexts, of militarised slaughter of humans and animals, geocorpographically realised and biomorphologically grounded in the trammelled lands of the Global South.

I want to pause for a moment to flesh out the significance of my choice of the term, ‘transliteration’, and I want to mark my enormous debt to Susan Stryker for her landmark work in educating me on the power of ‘trans’, so I hope to do justice on that trans power. ‘Precisely’ is a term animated by a transitive prefix. This term, ‘transliteration’, establishes critical points of processual connection between metadata and flesh. Transfiguration figures forth the spatio-temporal process encompassed by necro and political practices of drone kills. Transliteration marks the process of converting an abstracted medium of numerals, algorithmic formulae, and pixels, to the earthly medium of flesh. It names the conversion of metadata’s mathematico-scientific formulae to the flesh of the world. Let me stress, that what I’m not positing here is the concept of flesh as some purely natural, biological substance always-already mediated by the very somatechnic processes that render it culturally intelligible precisely as flesh. Rather, what I’m drawing attention to, is a different order of mediation, fundamentally predicated on a militarised series of instrumental functions designed to render the flesh of the Global South into little more than disposable, biological substance ontologically abstracted from its targeted human-animal subjects. In elaborating on the flesh of the visible, Merlau-Ponty writes that “...by that concept, we mean that carnal being as a being of depths, the several leaves,

the several faces". In the wake of the drone strike in this Yemeni village, the 'flesh of the visible' becomes something else altogether for me. The human and animal beings who are its victims become, through the force of explosive shredding, deprived of the depth of their being precisely as they are transmuted into surface fragments, leaves the flesh without faces that sway from the treetops. This, then, is the biogeomorphology of a drone kill. As the abstract formula that deliver suspect patterns of life, transliterated into flesh, the ragged gaps in the earth of the mouths of the dead, flesh is the strange fruit that hangs from the treetops, human-animal hair, and shards of bone grace the contours of the debris field post the drone strike. Reading Merleau-Ponty in a necro-political context of this massacre, I'm compelled to transpose his celebratory writings of the flesh of the world to the field of war, and consequently, his writings proceed to signify a range of unintended meanings and effects. In theorising the flesh of the world, he writes, "...the space, the time of things are shreds of himself, of a multiplicity of individuals synchronically and diachronically distributed, but a relief of the simultaneous and of the successive, a spatial and temporal pulp." When I read this quote, it resonated so powerfully before me in terms of that drone strike massacre that I've just described, the animals and humans that are the victims of the US drone kill are, post the drone strike, transmuted into the 'dead time of things' in which the shreds of their flesh constitute an indeterminate multiplicity of individual caught in the violent simultaneity of the moment. The victim's flesh is diachronically inscribed through the successive acts of dispersal and their funeral gathering, the anomic genericity of suspect targeted patterns of life, as the US calls them, is, in the instant of the killing strike, transliterated into deindividuated fragments of flesh without bodies, names, or identities. I can think of no more apposite way of naming what has transpired in the US military site of carnage than the rendering of its human and animal victims into a spatial and temporal pulp that geomorphologically enfleshes the field of war. Sheik bin Farid offers us another perspective on the drone strike massacre in Al-Majalah in Yemen. Farid says, "We went there. We could not believe our eyes. I mean, if someone had a weak heart, I think he would collapse. You see goats and sheep all over, you see the heads of those who were killed here and there. You see their bodies, you see children, body parts strewn around the village, you could not tell if this meat belongs to animals or human beings. We tried to gather the body parts we could to bury the dead. As we surveyed the carnage, we saw children, old women, all kinds of sheep and goat and cows. Unbelievable." In surveying the site of this massacre, Bin Farid talks not of flesh, actually, but meat, as that which remains after a missile blast. The use of the term 'meat' brings into graphic focus the fact that the co-sanguinity that I drew attention to above, is emblematised by the manner in which the militarised violence of the Global North works to transmute the living subjects of the Global South into what I have elsewhere termed, carcasses, meat carcasses. The biopolitical caesura of this human-animal division renders all those civilians killed by the West in the course of the war on terror, in all of its manifold carnations, as so many animal carcasses, that in effect, do not 'die', but merely 'perish'. Inscribing this Western production of human carcasses from the Global South, is the metaphysics of the virulent racioanthropocentrism that finds its clinical articulations in Heidegger. For Heidegger, the animal, because it is defined by what he calls a series of "fundamental privations and captivations", cannot die in the way that dying is ascribed to human beings. He says, "The animal can only perish". The subjects of the Global South embody the anonymous genericity of the animal, and the seriality of undifferentiated and fungible carcasses incapable of embodying the figure of the human; they are

animals, when, killed by drone attacks, do not 'die', but merely come to an end and perish.

So I'm at the conclusion of my paper, and I want to now shift the direction to looking out what I will call the 'denegated aestheticizing dimensions' of the scientific military killing machine. Because I think it's important, and it ties up to the whole bioinformatonalisation of life in terms of killing unknown identities. I'm trying to make sense of how this system works affectively, and I'm grappling to try and theorise these infrastructural operations. And the concluding section of this paper is called 'The Art of the Drone Kill', and you'll see why. In approaching my conclusion, I want to turn to an analysis of what I call the 'art of the drone kill'. Following the discussion on the increasing use of the Department of Defense of NSA metadata, in order to conduct its drone kills, a former drone operator proceeds to underscore the fundamentally unreliable nature of using metadata in order to kill unidentified subjects. He explains how the Gilgamesh geolocation programme instructors, at the end of their training, stress that, "This isn't a science. This is an art." So this is what their instructors say. "It's kind of a way of saying, 'It's not perfect.'" There is, of course, something disingenuous about discounting the scientific status of the Death by Metadata programme. The entirety of the programme is foundationally undergirded by the discursive practices of science, including the use of advanced mathematics, an array of surveillance imagery and military technology. The very viability, indeed, of the programme is predicated on the very dictional status of science, and it promised to deliver empirical facts. In this case, the dead bodies of targets. There is, however, for me something that effectively troubles the pure seeming scientificity of this Death by Metadata programme. That is, the identify of a target subject of a drone kill continues to remain unknown. So the knowingness of science is still predicated on that convoluted topology of known/unknown as the production of truth. Situated in this context, one can see how the laws of science appear to give way, in fact, to 'art' on at least two counts. Science is here ineluctably by the art of esoteric hermeneutics, and I'll explain why in a minute, that proceeds to identify a target from algorithmic calculus of probabilities, that constitutes a suspect pattern of life, again the target formula through which target subjects are identified, suspect patters of life. And two, science becomes art through the practice of what I would call 'allopoesis', that is, the system of science with its attendant laws, ends up producing something that appears to stand in clear contradistinction to science as such. In other words, science proceeds to produce a hermeneutic art of conjugation and fabrication, in which the facticity of the identity of the drone targets is nothing more than the product of creative interpretation with lethal effects. I'm going to edit this in a moment. I want to elaborate in the move whereby through a tropological turn, the science of killing folds into an art that appears to override the rigorous certitudes of science in the production of deaths whose identities remain unknown.

Operative in the unexamined rhetoricity of this move from science to art is a double scene that can be illuminated by drawing upon a profound Nietzschean meditation on the science-art nexus. In the interlacing of science of drone kills with art is what Nietzsche identified as "...capacity to transform visual metaphors into schema, thus to dissolve an image into a concept". The algorithmic formula that enables the drone to track and lock onto a cellphone establishes the schematic for cultural intelligibility precisely through its capacity to transform a visual metaphor, in this case, geolocation, into schema, the crosshair target, thus dissolving an image into a

concept. The transmutation of the visual metaphor into schema, and the conversion of an image into a concept, brings into focus what Nietzsche termed “science metaphysical illusion”, which, he says, “leads science again and again to its limits at which it must turn into art.” The art of the drone kill, I argue, is constituted by the following attributes: the phantom video figure that is the target of the drone strike, becomes, in effect, a screen surface without depth. Figures devoid of bodies, in drone parlance, the phantoms of video figures are termed ‘dismounts’. In other words, they are considered disembodied kinetic configurations without bodies. Aggregated abstractions coded as patterns of life, without individuated identities, as we don’t know their identities, as I said at the beginning, mobile sim signals caught in pursuant vice of the crosshairs. The screen technologies that supply the somatechnic possibilities for drone kills, ensures science redoubles into art. The planarity of the screen operates as the canvass upon which emerge the targeted dismounts and the paragonal, those multiple frames, which Derrida draws our attention to, that undo limits and contours and boundaries, because they topologically slide into each other, paragonal dimensions of the screen are further augmented by the superimposition of in-set tracking frames, that provides the diagrammatic coordinates for the crosshair target. It is within the circumscribed purview of this internal frame, this focalising crosshair, that drone screeners, or imagery analysts, can provide the visual analysis of the feed to the drone pilots manning their joysticks, proceed to deploy what I would call an ‘analytic of aesthetic judgement’. I’ll explain why in a moment.

The predictive calculus of algorithmic formulae and the binary logic of digital technology here become inflected by what I will term, the ‘drone screener’s art of divination’. So basically, you’ve got these drone screeners who are doing all the visual analysis and telling the drone pilots what to shoot. The screeners proceed to deploy a visual hermeneutics in order to interpret the visible signs and to provide the necessary exegesis to the drone pilots. Theirs is an art of second sight that pores over the apparent literality of the visual image, in order to decode and clarify its semiotic status. The screener’s art is one invested with the very biopolitical question of who can live or be killed. In the words of one imagery analyst, “I was the only line of defence between keeping someone alive and providing the intelligence for a strike using technology not accurate enough to determine life and death”. I use the term ‘divination’ in order to describe the screeners exegetical work, as on occasions, what they divine in the visual interpretation of the visual sign on the screen remains contentious in terms of its identity status. Brandon Bryant, a former US drone operator, discusses one case for example, in which he perceives a child to be killed by a drone strike and that child is identified by the screeners, the visual analysis, as a dog. After the drone kill, Bryant questioned, “A dog on two legs?”. Evidence here is the slippage between the perceptual and the conceptual, its constitutive reliance on interpretive schemas mediated by a panoply of visual technologies, the scientific algorithmic substrate of drone kills here waivers and dissolves into schemas of creative construal, a dog, a child, or whereby a child dissolves into a dog, or vice versa.

In declaring that the Gilgamesh drone geolocation system is not a science but an art, the Department of Defense works with knowledge that the mathematical certainty, clarity and precision science gives way to drone kill programmes to the conceptually ambiguous realm of art. Specifically, in the Gilgamesh geolocation drone targeting system, the precise operations of militarised science are amiguated by the spectral

resonances of archaic poetry, the titular epic, Gilgamesh, the aleatory alludic effects of mortal combat video games, and the aesthetising frames of imaging technology, and hermeneutic practices of drone imagery analysts. So we've got a constellation, really, of aesthetic operations informing the production of the science of the drone kill. The US naming of the geolocation system after the epic poem, Gilgamesh, works to reference the opening line of the Sumerian text to state, "He who has seen into the abyss", or another translation, "He who sees the unknown". The Department of Defense's Gilgamesh metadata kill system sees into the unknown, only to identify a particular sim card or cellphone, without necessarily being able to ascertain the actual identity of the human target. The omniscient optics and transcendental vision promised by Gilgamesh, are in fact compromised by a fallacy that insists on conflating a cellphone's sim signature with the unknown identity of the user. The Gilgamesh geolocation system indeed emerges as an art, a deadly art of tropic abroccation through metonymic conflation. The drone kill Gilgamesh metadata system evidences how the epistemic certainty of science is transmuted into the epistemological uncertainty of art, with its generative abysses of unknown. In other words, the scientificity of advanced mathematics and technologies is here shown to breach its own disciplinary boundaries and to fold into an occult art where the prosaic science of precision imaging is eclipsed by an abyss of hermeneutics and occult envisions. Situated in Heideggerian terms, scientific techne, in such instances, returns to its originary ground in poesis. More precisely, the killing literality of this drone targeting system must be seen as on called 'necropoesis'. Articulated at these junctures, Nietzsche notes, "Are those boundary points on the periphery, from where one gazes to what defies illumination". At such junctures, he sardonically remarks, "science coils up at these boundaries and finally bites its own tail". To conclude, the Gilgamesh geolocation systems, what defies illumination is the targeted pattern of life-as-identity remains unknown. The bite that science-come-art delivers in such cases is only ever experienced by the misidentified drone target, at the receiving end of a Hellfire missile. The transliteration of metadata to flesh names the violent passage of drone victims through the instrumentalising circuits of science to the artefactual domain of the dead. Thank you.

Audience question: During your presentation, there was a point where you spoke about the decimated bodies hanging from trees, and you related that to 'strange fruit'. There's a song by the title of *Strange Fruit* where 'strange fruits' is actually an analogy for lynchings. You've spoken quite a lot about the trammelled ground of the Global South that seems to indicate you have quite a decolonial interest in your stance. So in this context, I wanted to ask about what I see as a blind spot about speaking about strikes in Africa, particularly in Somalia. As far as I know, Africa, and Djibouti, has one of the largest drone bases in the world, so I wanted to ask about that if that is a blind spot, or a lack of information, and if so, why? And I also wanted to make an observation, and ask if you could speak to that as well. You spoke of these animal-human fusings in the violence of drone strikes, and it reminds me of this new geological formation called 'plastiglamoritz', where rock, sand and stone is indistinguishable and contains parts of plastic rubbish. So this seems to indicate we should think from the shit of it all, you know, we can't have this looming anxiety for the end of the world, because the end of the world has happened and we're living in it now.

Joseph Pugliese: Thank you for your questions. It's not a blind spot. In my book *State Violence*, I actually conclude the book by looking at what I call the "US drone archipelago", and the US drone archipelago encompasses the world effectively. It stretches across the Middle East, North Africa, South East Asia, the Pacific, and the US and Europe. And I name Africa's implication within the US drone kills and drone strikes programmes. Unlike Yemen, Afghanistan and Pakistan, there is a dearth of material that I have been able to access. I have wonderful material from, say, the Peshawar hikur [sic] in Pakistan, where I elaborate on this animal-human thing, precisely because livestock is property, is killed. And it gave me a real entry point to begin to amplify the issues. So really it's a question of the dearth of material I've been able to access, and I'm assiduously tracking the drone kills programme. If you can give me drone kill reports in Africa, I'd appreciate that, but I am aware of it, and I do name it. Your question [about plastiglamoritz] – I think that's a fantastic term, actually, and we could begin to situate it in a discursive formation precisely because of the enormity of the violence we've unleashed, we're creating these transmutations, unidentifiable, undifferentiated fusings. I think there's a paralogical relation where these two fusings of flesh and ground and trees and leaves runs together with this monstrous polluted toxic new entity.

Audience question: In terms of the technologies of warfare, are you describing a breach in something new, or is this the [continuation of the] dehumanisation of the enemy Other?

Joseph Pugliese: I wouldn't call it a rupture or a breach, I think that's too dramatic, I see at is a continuum inscribed by differentials, effectively. And in the drone chapter in *State Violence*, I mark those differentials. They're really space-time differentials, through the mediating technologies that are being mobilised, because they're creating different conceptualisations of how to kill. So its become 'civilianised', is what I say in the drone book, precisely because you can go execute in a place in your drone cubicle in Las Vegas, and then come home and go to the pub and take kids to soccer. There's a new topology in the possibility for militarised war. I think what I'm tracking here is the intensification of the abstraction through these tele-mediating technologies. And the intensification through these metadata surveillance systems now, which are causing abstraction to the nth degree, and the algorithmisation and bioinformatonalisation of life. So its part of that whole military complex, continuing to evolve to evolve with its own logic, speeds and lethality ... I think that's a pivtoal moment, where you see a shift, where visualising-scopic technologies, surveillance technologies suddenly take front stage. And what's interesting about that is they weren't using drones at that stage, but the transpositioning of those visualising technologies to facilitate drone kills from the United States without putting combatants in the enemy field, that's a shift, that's a differential now. And the next step of course is the automated warfare that we're moving forward into.

Audience question: Thank you for your brilliant presentation. I had a question to your references to the production of the unknown, and I was wondering when you talk about the epistemic of certainty, vis a vis the unknown being and ignorance, and it made me think of Charles Mills' idea of 'white ignorance', and how, within the epistemologies of ignorance, ignorance is often wilful. And I'm wondering if these productions of the unknowns are in fact wilful productions, like they are created to be not known, to enhance this idea of dehumanisation.

Joseph Pugliese: I think that's a really interesting angle, I haven't thought about it in those terms, and I can see how it can be elaborated in those whiteness lines. I would agree, I think it's a really interesting way for viewing it, and I think it ties into the racialised geopolitics of this exercise of power that is being played out, absolutely. And I would agree with that too, regardless of the phenotypicality of those doing the kills, and I talk about that in the book too, because I talk about Fanon's notion of penumbral whiteness, where people of colour become whitened within the military industrial complex and conduct themselves as proximitive whites. That wilful whiteness, I can see, would work very well with this know-unknown nexus.