

Interview Transcript

Interviewee	Interviewee 62 - Julian Murphy
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Research Title

The Socioethical Implications of Body Worn Computers: An Ethnography

Research Question

What are the socio-ethical implications of body worn video camera recorders on society?

Research Focus / Outcomes

This research examines the historical developments and contemporaneous challenges that location enabled body worn camera technologies pose for humanity. The potential benefits, risks or harm on society from body worn camera technologies will inform the development of a socio-ethical framework to provide context, inform and address these issues where gaps in the literature have been identified.

Alexander Hayes: Firstly, Julian Murphy, you're okay for me to record this conversation?

Julian Murphy: Yes.

Alexander Hayes: Thank you. As we have detailed in the email, I'll send that recording to yourself. And then if we decide together, that there's things there that are useful for both of our purposes, then we can use that with the appropriate attribution.

Julian Murphy: Sounds good.

Alexander Hayes: Great. Julian, the reason I responded to your article in the Overland publication was principally, not simply because we are working in very closely aligned areas, but that in the last paragraph of your article, you stated: given the many unanswered questions about body worn cameras, we should proceed cautiously. And remember that this technological fix will do nothing to address the deep structural and societal determinants of crime. Then you list poverty, educational disadvantage, mental illness, substance addiction and social exclusion. Now, that's where my parallels with my research sort of dovetail within that context. Yes, I've had a long association from many different avenues or different approaches in relation to body worn video. Or at one stage, point of view and other various differing explanations for, or different terms to denote the same intent. And that is for the body to become a carrier of a recording device, which has increasingly become networked. And as you know, more deeply connected to this whole concept of artificial intelligence, and its intervention in the whole process too. Julian, can you give me a bit of an idea, apart from what I can read, as to what you're doing and where you're from? Can you give me a bit of background on how you've come into this?

Julian Murphy: Sure. So, I worked for about three years, just shy of three years, as a criminal defence lawyer for the Aboriginal Legal Aid in the Northern Territory, specifically in the top end, the North Australian Aboriginal Justice Agency. I was working out of Katherine and Darwin, and sort of other remote communities out there. That would have been maybe from about 2013 - 2016, and I'm not exactly sure about those dates, but started to see body worn camera footage coming, being served on the defence, as part of the prosecution brief. And whether that be of victims or witnesses, or sometimes it was admissions made by a defendant. Just wrapping my head around the evidentiary value of that. But then, also seeing some worrying lack of transparency about policies and worrying on the ground practices in the sense of certain body worn footage not being commenced at the appropriate time or being stopped at inappropriate times, or not being recorded at all, or not being served on the defence when it was in fact in existence and had the potential as added material. So, just sort of grappling with what appears to be real benefit in terms of investigation and truth finding. Truth in inverted commas. And getting to the bottom of what actually happened in difficult situations, but then also having to worry about it. So that's why I came to it in a practical, practicing sense and then I just spent a year in the US at Columbia University doing a Master of Law. While I was over there, I took a few subjects in policing and had the opportunity to write a few pieces, which are still currently in the editing process before publication. Actually no, one's recently been published, I can send you a link to that, about the use of body worn cameras at public

protests. Another one is forthcoming and that's about the use of body worn cameras to combat police misconduct, specifically racial bias.

Alexander Hayes: Yes.

Julian Murphy: I can send you a link to that. So, I started thinking about it in a more academic sense and again the US [inaudible 00:05:09] literature on it. Sort of wrote that opinion piece, I guess it overlaps. That's kind of my background on it.

Alexander Hayes: That's great. Thank you, Julian. That makes it clearer for me; the context and your experience, and your connections in that whole space. Myself, I've recently moved to Perth from Broome, Western Australia. During the period of time that we lived in Broome, we saw a great deal of movement towards equipping officers with technologies for recording. As you say, there's truth seeking. Rhetoric was very much present within the explanations to community as to why these devices were important. Now, what I'm currently finishing is a PhD thesis which has taken nine years, and I've travelled from being very much involved in the development and production of body worn video and body worn computers, right back as far as Professor Steve Mann at MIT.

Julian Murphy: Wow.

Alexander Hayes: And another number of individuals that, I set out in 2013 to interview as many people as I could within the body worn computer space, with the understanding that these body worn video solutions, as they were calling them, from an engineering and information sciences' perspective, were very much dovetailed with Professor Steve Mann's notion of sousveillance and I sought out a supervisor at the University of Wollongong, whose name is Professor Katina Michael, who has been working closely with the likes of Professor Roger Clark, from the Australian Privacy Foundation. And together, over a period of seven years, we, together conducted a range of activities with the Centre for Transnational Crime Prevention, the Surveillance Studies Group in with Darren Palmer, with Toronto University, with IEEE, and ran a large conference in Toronto, Canada called ISTAS 13. I'll send you the links to that event.

Julian Murphy: Great.

Alexander Hayes: And present at that event were most of the world's leading luminaries at the time and also chief advocates for, or chief skeptics, with respect to smart technologies and body worn, wearable computer technology. These included people from Autographer, Memoto, Axon, Pivothead. Most of the providers were present, but also large consortiums like Google Glass, Intel, Epsom, all of the various larger players in the field who are interested in the data that comes off those devices, not necessarily the devices' development. What's come from the nine-year experience, Julian, is pretty much similar to what you have outlined in your article. There is a great deal, in my opinion, of ethical and social impact, statements and inquiry which are not being met by those particular, forceful or, as I say, power differential agencies that are pushing their way fast into our fabric of society. And that is from both a judicial perspective, but also from a cultural perspective. In terms of cultural perspective, I have great reserves for how

facial profiling and social profiling, and particularly social ranking, is going to play out when an officer who has had discretionary policing stripped off him, or her, to become a carrier of a technology which identifies, extracts and provides, as you were mentioning earlier, a form of truth from a certain perspective. It has, I believe, a chilling effect on the communities that the officers are equipped and the biggest part of the discussion, Julian, is, I've been looking at this from every perspective, as well as policing. Educationally, from the education paradigm, from life logging with Cathal Gurrin through the University of Dublin. I've looked at the quantified self-groups. I've looked at just about every, I think, known facet of body worn video and body worn camera discussions. I interviewed fifty people and each of those interviews go for close to an hour. And they addressed ten core questions that I had for them. They started from where we started in our discussion, which is the general introduction, and the primary conclusions were around their perception of impact on society. That thesis is due out in mid-2019. The reason why I contacted you is, I feel, having read many, many different perspectives from different people, they have excluded or failed to address, or failed to include, what you have particularly included at the end of your piece there, which is around those social agencies that we already understand and the effects that it has upon community that we need to consider, as well as the judicial and municipal controls for society. What is your response to where I'm coming from, in that respect?

Julian Murphy: My response is that I don't think I am going to be able to tell you much that you don't know. It sounds like you have been doing this research for a long time. I have come to it relatively recently, but I have to admit, my area of knowledge, for what it is, is limited to the policing context. But I'm not the sort of aware of the educational, I could almost say, recreational, personal use context. Aware that it's sort of starting to creep out of policing into other sort of security type uses in hospitals and public employees in lots of different fields, but that's really the extent of my area of knowledge. Even on those issues that I mentioned at the end of that piece, I have to say I don't have a deep understanding of them, but it is just my, sort of intuition when I was in the US, and reading the literature and watching the... I guess I was in the US at a particular time, which was post Trump election and the Department of Justice, the perception at least that, the Department of Justice under Sessions (Jeff) was really changing from the Obama administration and some of their practices. It was, as I understand, it was under the Obama administration that a whole lot of these body worn cameras started to be rolled out, or at least that was accelerated under the Obama administration. After events like Ferguson and this idea that they could be a really powerful tool in modifying police behaviour and increasing transparencies and stuff like that. And, whether this is true or not, there seems to be in the literature and what sort of sampling there was of public opinion, a perception that the cameras were now being used for over-surveillance of minority communities. That seemed to me to be a problem, and that's something I'm concerned about, but one thing that it made me think about is, 'Well, the other thing was, there was a big study that came out from Washington BC, it might be connected to one of the Universities. But it raised some questions about the efficacy of these things in modifying behaviour. I can send you the name of that study, but you might already know it. So, the combination of fear of over-surveillance of minority groups and admittedly it was just one study suggesting that the effects on modifying behaviour might not be what was suggested by a number of other studies, not conclusive in any way. But those two question marks just made me reflect on the fact, on the sort of foundations of the whole project, which is why are we sort of fetishizing these

technological tools and what they can do for us when everyone seems to be starting to acknowledge that there are a whole lot of tricky issues with them, that we haven't really addressed. And even in a best case scenario, they sort of seem like a bit of a Band-Aid at the end of it, and maybe we'd be better off piling all this money and energy into all the things that we know in the long-term lower crime numbers, like education and health and building communities and things like that. So, it's not a novel thought in any way, but I think it was more than anything, reading the literature over the last seven years in the US, towards writing these publications, and just getting a real sense of this trajectory of hope to disillusionment. And hope and optimism to almost fear. And thinking about, maybe that hope was misplaced in the first place, in the sense that we know that these kind of fixes at the very end of the stream are always going to be less effective than extreme social intervention. I guess that's kind of a slight expansion on the points that I mentioned at the end of that piece that you read.

Alexander Hayes: That's right. I concur with what you're saying there around hope, fear. There's a range of various manifestations of, and it's been evidenced across a range of different societal groups with social advocacy groups, or groups that have their key basis in protecting the civil rights of individuals. We see a lot of civil rights groups coming out against the compilation of data which profiles individuals through time. So, it's creating a log of people.

Julian Murphy: Yep.

Alexander Hayes: Julian, frankly, the nature of what I've discovered, or what I am putting forward in my PhD thesis is around what you mentioned when you said: your instinct. If you can recall what you were saying there around your instinct earlier, in the Nyikina, Aboriginal language, instinct is known as Liyan. It is the collective, but individual sense of when something feels that it is having; it's like a moral compass. We head in a direction according to how we feel. We would call that within the Western context, our instinct, in a more broad term, the moral compass that I'm hearing from people is that when people are told that, or see evidence of, a policing officer who is wearing a camera which is likely to be recording, not always, but likely to be recording. And that data is being sent to a jurisdiction which is internationally located, or off the national shores of the constabulary, and it is then accessed by the individuals or the agencies in this national sovereign data environment, to be used in a judicial sense, it immediately raises questions around the assurance that the data which is being transmitted is not being used in many other different ways. There's a question around data sovereignty. There's a question around the nature of profiling in order to create an image of an individual or groups interaction and in Australia, particularly, we've seen a great deal of issues arise from the fall downs of native title, with respect to how people have control over their country, their place, their place of being. How it comes together is that if what I've posed to a number of scenarios to people at times, is that if a policing officer who is wearing a camera arrives at your home, and that there has been a report of domestic violence which provides them with the warrant to be able to enter your property. That the camera itself is profiling not only those people that may be involved with the report of domestic violence, but anybody else, including children, within that environment, that facial recognition technology is gathering the data for it to be sent to another jurisdiction internationally. The responses I have are that this may signal a global policing force which is overriding our own constabulary and municipal controls for justice in Australia. That's the sort of responses I have been getting. And

the other aspect to it, is that I have posed the same scenario in relation to education, teaching, teachers wearing them, nurses wearing them, ambulance staff wearing them. In fact, much of ... I don't know if you've ever seen the Black Mirror series.

Julian Murphy: I haven't. I've heard it's fantastic. I think I really need to.

Alexander Hayes: Now, in that series, it posits from a science fiction and maybe closer to social fiction than science fiction that eventually humans will all be wearing cameras. Okay. So, we go to the furthest extent, the furthest end of the Richter scale and that provides the assurance of safety for the whole of community and society, by everyone wearing a camera all the time, they have the capacity to understand safety collectively and universally. Now, that obviously raises a lot of concerns for privacy advocates and a range of other people who feel that equipping people with a surveillance space technologies has, and there is real constitution for worry around the power over of other corporations that collecting evidence or collecting information on citizens can override the government's ability or in fact steer, nudge and develop ways for the government to act which eventually act against those individuals. And we're seeing some of that play out now.

Alexander Hayes: I'm wondering Julian, from your perspective, and from your time that you've had within the States, did you see an adverse reaction or social impact with the onset and use of these particular technologies in a policing sense?

Julian Murphy: I think, this doesn't directly speak to your point, or maybe it does, in a very obscure way relating to data sovereignty. I'm not sure if I'm close enough to the ground really to be an adverse response. The kind of stuff that comes out in the news media and social media and then is slowly being engaged within the academic literature, is things like the publication of footage either accidentally or deliberately of either people that have subsequently been deceased, that have been shot by police or people in really vulnerable situations. Probably some footage of that, of police engaging with a suspect or a citizen in sort of really high drama, tense situations and then that footage somehow finding its way onto YouTube and being spread across the internet. That's the sort of basic outrage about the... which obviously by putting systems in place, you would hope, to almost reduce the risk of that to zero. I think for me that more just illuminated. I think the concern about that was not only, it was some sort of discomfit with the publication of this footage across the internet to lots of people. I think people see that also, well at least what I sense, was a sort of discomfit at that footage in the first place. Not everyone realizes that these sort of really intimate and kind of... people who are in really vulnerable situations are being filmed. And I think that seeing that footage splashed across TV and the news causes people to reflect on; do we really want a victim of a potential rape or sexual assault to be filmed? Is that person in a position to give their consent to the footage or not? If there is a police policy in place that requires consent? Or do we want someone who is suffering from some sort of mental illness or a particular sort mental episode and who might then subsequently be shot by police; do we really want police to be filming in that sort of situation. What's the effect of that footage being seen by the family or not seen by the family?

Julian Murphy: There are those sorts of issues in the sense of adverse response or adverse effects, but that's not really anything particularly original, that's just coming from the public. I guess some cultural sort of response. And then the other sort of response which I talked about a bit before, was the sort of black lives matter response that aligns with the, or that was timed around the same time as the revelation that certain black lives matter type groups had been characterized as domestic terrorist organizations by the department of justice.

Julian Murphy: They were sort of being surveilled systematically and their membership were being surveilled systematically. The backlash to that, or the response to that, has caused some people to view the proliferation of body worn cameras on every day police and then used at public protests, but also just in whatever you call, every day policing, where the subject of this policing, whether their sort of victims or suspects, or bystanders are going to be, or depending on your neighborhood, are going to be disproportionately people of color. So, there was sort of that. I haven't expressed the two different aspects of that response. But one was over-surveillance, almost deliberately in the line with that sort of black lives matter domestic terrorist organisation and the other was over-surveillance, not necessarily deliberately but just by virtue of the fact that these minority communities are policed at a disproportionate rate.

Alexander Hayes: Yes.

Julian Murphy: So, that's probably the only two things I can say about that. The other thing is the growing, increasing call, maybe increasing isn't the right word, but the calls for caution, over a long period of time and really quite consistently and from relatively early on, from when there was a lot of optimism about the body worn camera movement from civil liberty organization, and I'm thinking particularly of the ACLU, which has always been quite concerned with privacy. But just to see their position of the ACLU and similar organizations develop and just their position as a foil or an attempt to temper the enthusiasm from other corners with acknowledgement of some of the dangers that we've been talking about. And also, I guess, this is probably something that you are far more across than me, but what I saw some of these civil liberty groups saying if, thinking forward as to the use these might in the near future, as they're combined with other technology and some of the things that you've been talking about in terms of creating profiles of people or particular groups of people, facial recognition and one of the things that we started to see was the idea that all this data is going to be harvested to be put into predictive policing, algorithms or systems. And there's already been issues with that in the US in terms of some of these predictive policing type things being shown to have racial biases. Or fear that we are feeding this monster with huge amounts of footage that's being put up on these various data servers.

Alexander Hayes: That's it. Feeding the monster, would be a great title for a paper. To sort of drill down a bit on that, what would your response be if I was to say, that as you may understand, and the fact that you've placed in Darwin and worked within the social justice environment. People often express the fact that their own image, their own personage is a sacrosanct aspect to, for either in depiction or in capture. Now if there's not consent in a societal context for that individual to be profiled as they are captured on CCTV, mobile CCTV now, and in the context of these social services. How do we address the cultural rights of individuals and first nation peoples?

Julian Murphy: I'm more aware of the issues with using images of first nation people, but I'm obviously aware of the special significance attached to these images. Because I was thinking about this more in the context of the US, that's not something that I've really grappled with, but as soon as you say it, it becomes immediately concerning, and I guess, as you were saying it, that kind of thing is so important and has a kind of cultural vallance that other things I've thought about doesn't have. For me that is a really good example of what I would see as bigger problem, which is not just involving technology in policing, but it's an example of the way that police policy, and I guess hardware, that are created and deployed, without any input from the communities, that they're going to be deployed against, you'd hope they're deployed for, is very likely going to not align with the values of that community.

Julian Murphy: I mean if that technology and hardware is being created by a small group of probably mostly white men in the higher echelons of the police force or in the higher echelons of these companies that are creating the technology. Why should we think that that is going to align with the interests, or the values, or the decisions that will be made any community being subjected to them, but by specifically communities that might have a different cultural context of a remote indigenous community in Western Australia or the Northern Territory or wherever you might be. It obviously has a kind of cultural dimension that I wasn't thinking about.

Julian Murphy: But I was thinking about, I don't know if I mentioned it in that post, but this idea of democratic policing, and the idea that communities should have input and not just input, they should really be creating the policies that are used to police their community. A failure to that results in... it creates a potential for an oppositional dynamic. There's a potential for all these problems that you've been referring to about ownership of data and to an extent the jeopardy to the people of the police who are supposed to be acting on their behalf.

Alexander Hayes: Yes. The point there, cultural veillance is interesting. The nature of the discussions that I had back in 2010 through to 2013 were around the domain of veillance. Surveillance being one of oversight. Sousveillance being another of the community shooting back on that and demanding that that oversight is the power balance, the power differential is shifted. The focus of my supervisor's work is around the concept of Uberveillance and I'm wondering if you're familiar with the term Uberveillance?

Julian Murphy: I'm not, no.

Alexander Hayes: So U B E R being German, meaning the totality of all veillances coming together. Professor Roger Clark at the Australian National University, who is an emeritus professor and has been a long-term software and hardware and privacy advocate coined the term dataveillance, back in the late eighties. He could see that our electronic, digital domains were collecting information on ourselves, individuals and he was part of instrumentally thwarting the Australia card, although we all have credit cards now and people can see exactly what we're spending, where. So dataveillance, sousveillance, coming together to this context of the implantable veillance. Implantable technologies in humans. The trajectory across all interviews that I have conducted, all indicate that the nature of veillance is heading towards a

trajectory of technologies being embedded in the human. I wonder if you've come across that before?

Julian Murphy: I haven't. No.

Alexander Hayes: There's a range of things there that both I don't know of you as a person, but we will come to get to know each other. I think because of the nature of the things were looking at. I'm very much interested in the fact that there is a lack of dearth and social consultation in relation to this particular onset of the body worn surveillance environment across many different roles. The trajectory that we've tracked for the last ten years, points towards the embedding of technology in humanity and with no science fiction involved, with actual hard proof results of that. Most importantly, I think there what you indicated around the uproar that we've seen in relation to black lives matters and where the police resulted in, there's largely a complacency in Australia around why and what these technologies are doing.

Julian Murphy: Yes. Sorry, go on.

Alexander Hayes: There's a range of other aspects to this that I think are important. I think we've got some prospects there to concentrate on and bring larger players together. For instance, I worked with Professor Andrew Goldsmith through the Centre for Transnational Crime Prevention. His perspective is that body worn video cameras are a very effective method for gaining, profiling and providing jurisdictional data to implicate, and to expedite the arrest and incarceration of individuals, with a far more progressive mandate than suppositional hearsay, she says, they said, sort of anecdotal accounts on crime. His was very much around the pro-active. He thought it was a very pro-active move towards equipping people with these technologies due to the fact that it would serve the larger national crimes mandate, national crime prevention. I also interviewed a range of people, which I can't name, within the larger criminal justice systems who indicated that at a constabulary level that it may serve the best interests of the nation for this data to be made accessible in order for the protection of sovereign borders, including border police. Border police obviously are wearing these cameras. Police are wearing these cameras. They all serve a common purpose, and that is to 'surveil' deeper. The whole picture I'm trying to paint here, the whole indication I'm making is that what's lacking, and what I'm seeing from other people that have communicated with me, is social consultation, consultation with communities, awareness around this from a civil libertarians group in Australia, particularly in Australia and New Zealand, and how this plays out across that cultural mandate, given that almost 100 percent of people that are incarcerated in the Northern Territory are aboriginal. We look at the statistical likelihood of people being targeted as a result of this technology. That this onset contributes to a much larger and universal trajectory. If you're not aware of the implantable technologies current roll-outs in other countries, the indication is from most people I've interviewed is, there's a concurrency between body worn veillance cameras and the nature of the next level of implanting technologies to expedite real or accurate identity in relation to the individual. Not only is there a facial and visual profile, gait and other data collected, but there's also that person is essentially tagged and that person can prove from their tag that they are who they are. And that's an extensive and long study. There are many, many papers written by my primary supervisor and she happens to be one of the most internationally travelled people I know, who

has written this area. Her partner, MG Michael, coined the term Ueberveillance way back in the eighties. Obviously, it was attributed with nay saying and aligned with religious connotations and so on, but it seems to be that all our research points towards that being part of the trajectory. Most people say it's inevitable, the technologies are coming closer, placing constabulary, anything that provides evidence of people's behaviour, behaviour profiling, means that individuals are being profiled to be socially ranked. That's another question I have of you. Are you aware of the social ranking software's which are being expedited in China, particularly? By 2020 they wish to have every individual smart device equipped with a social ranking app which profiles individuals and gives them a social ranking score. Are you aware of that program?

Julian Murphy: Yeah. Not aware of it in any depth. I've got a friend who's doing a Chinese politics PhD and told me a bit about it. My immediate impulse is to be pretty concerned about it, but I don't know a whole lot about it. I guess I can kind of see, when you're talking about this implanted technology, I can see logically, rather than a matter of kind of empirical research that you seem to have done.

Julian Murphy: It seems like a logical extension of the way the body worn cameras are going, because I've been reading, I might be wrong, and I'm sure you know a lot more about this, but that body worn cameras, if they are fitted with various other technologies can increasingly take what you would almost think of as bio-metric data. I think someone recently got a reconstructed fingerprint from a photograph. There're suggestions that body worn cameras can tell, or you can put heat in that kind of technology, that they can detect heart beats and all that kind of thing from a distance. If we're already trying to do that with body worn cameras, it seems like, as you say that the next step will be, let's just have something in the citizens. That's right. What I've noticed happening over fifteen years or so, is that science fiction writers tend to hang out with engineers. Engineers, largely expedite and test and prove usefulness, expediency and efficiency of technologies and have a lot of the time very little adherence to do with privacy or to do with ethics. The ethics and privacy side of engineering is...I've seen repeatedly, there's a lack of. From there to the social domain, when the government or a corporation engenders fear within a community, due to any number of different reasons, whether that's national security, or whether that's a social issue or to look at the fear differential. A lot of people seem to respond with; we need to have more oversight as to this and better understand this. We need more cameras, not less. They've got a lack of understanding as to how it contributes to the larger data set of themselves. We often refer to Robocop and we refer to the Terminator, we refer to science fiction film and much of what I've surveyed within that context points towards that we are moving into a minority report type of scenario, very fast. The nature of these cameras actually contributes towards a larger veillance of society. Now the cultural side is very interesting. What you were mentioning earlier; Cultural Veillance. You would be aware, that an aboriginal person, there is a high likelihood that that person between the ages of nineteen and twenty-five may have been incarcerated twice by the time they've reached the age of twenty-five. That is a high and horrible statistic of the amount of suicides and extreme violence that's shown towards a group which represent four to five percent of the Australian population. My big question is around, do body worn video cameras contribute towards that profiling of a group, which some people would say is a minority. If they are the traditional custodians of this country, and they're not afforded deep and

clear consultation in relation to this particular technological innovation, are they being excluded from a key social and civic rights perspective? And privacy is an affordance for those who even understand what privacy might even be. Many Aboriginal communities from what I understand, and from communication I've had, is that that privacy is negligible when it comes to the constabulary and other agencies in relation to their social structure. They are largely invaded from every angle in relation to who they are as people.

Alexander Hayes: You're currently conducting research under a scholarship, is that correct?

Julian Murphy: Yes, I'm in a fellowship for another two weeks which was funded by Columbia, essentially to help provide research assistance basically, to a part of Charles Darwin University. It used to run sort of an innocence project, but I think it is basically winding down at the moment, because the lead lawyer is now living in Melbourne, so she'll probably try to start it up in Melbourne. But in case, that's what I've been doing for the last two months and I'm going back to work at the Aboriginal Legal Aid from the middle of October. No doubt, I'll be dealing with body worn camera footage on a day to day basis.

Alexander Hayes: You will be.

Julian Murphy: Actually, going to your point before in terms of the complete breakdown of the privacy barrier between the state and aboriginal people. I did a bit of work for a couple of weeks ago and one of the matters I had required me to watch a bit of body worn footage. It shook me at the time, kind of reinforced just what you're saying, the significance of it. It was a car that was stopped, routine stop and a search for alcohol, in an alcohol restricted area. There are two indigenous adults in the front seat, five indigenous kids in the back seat. Two police officers, both with body worn cameras just proceed to stop the car, speak to them, get everyone out of the car, then look through the whole car, but have them standing on the side of the road while all this is happening. And I guess just thinking about it now, just to have that sort of intrusion into your life, all the while being filmed by uniformed adults. The thing that was most shocking about it is the sort of lack of reaction from the people, in the sense that you get that this is just completely normalised. Like the intrusion of the state into their lives like that and the presence of cameras as a fact. Who even knows where this footage is subsequently going to go? It's all completely normal now. It's just really shocking.

Alexander Hayes: James Scott talks a lot about the nature of state. Now, a while back, about five years ago, I was thinking quite deeply about this and in one of my moments of malaise, I thought, I need to actually put this together in a figure. So, what I did was create a reverse Maslow hierarchy. At the pinnacle is the individual who's had all their needs met. In this present day and age, across the world, we seem to have a lot of governments that are controlled by corporations. That is corporations that largely have a great deal of matter in intellectual and intelligence on people far greater than the government ever collect. Because the government are actually using the services of the corporation in order to collect it. The governments are the second level, sub-strata to these large corporations who influence everything from mining through to social accord, as in Facebook, Google, Intel, any of them. They have a great deal of knowledge, more than the government has. The government itself, in its constitution has a range of municipal and other social mandates it needs to perform, but

they largely perform them under the vestiges of other nations in relation to the matter. We have things occurring in Australia which are being filmed on devices, which are being tapped by a large database in another jurisdiction, national jurisdiction. By subpoena or by agreement, that data is then being served back in order to incarcerate the very people, of which the corporation itself had implemented that oversight in the first place. The nature of social surveillance comes to play here or comes into social media or networks or surveillance as I see it are dovetailing with what I see as a wearable side. So there is a whole range of things there Julian, that I feel I would like to be able to explore with you, given the fact that you've worked closely with the Aboriginal Legal advice body. That's the major thing to me that matters to me. And in time, you'll understand why it is that that is of great interest to me. The other aspect; essentially I have three Nyikina mothers, three Kooya. I have worked in social justice environments as a documentary film maker for quite some number of years and I've worked extensively across Australia on large social justice, storytelling projects around nuclear dumps on Country, on dispossession of Country, from demolition of communities, you know, a whole range of different topics, suicide, homelessness, and so on. I have a great deal of interest from the social justice perspective and I think that's the reason why I contacted you. I can see that within what you have written; just that one, and I haven't read your other work, I can see within that one piece of information and what you're saying today, that there is a social justice core to what you're doing. It's not simply about advocating from a criminal justice perspective to implement these particular devices because they're expedient and cost effective. That's what I often see people doing. They say its efficient, it gives a better story and it better depicts the way that things are occurring for social justice to play out. I'm a bit more of a skeptic, I suppose in that regard. I don't feel that the broader consultation and the reserve to expedite things because they're efficient, necessarily supports those that are experiencing poverty or educational disadvantage. I don't believe that people that are being captured that are experiencing mental illness are necessarily advantaged by having a life log which represents that mental health episode in a visual context in their future. That's the life logging side of it. And I think there's the need for us to really question this technological fix as you say here and we do need to better address how we're going to inform, consult with, and empower those that are experiencing deep structural and societal determinants of crime, what you've put there. Social exclusion being one of them. I hope Julian, that the discussion we've had this morning, today, because I'm aware that you've got things to do, and I've got to go and shoot a ... I'm going up to Marangaroo from where I am to shoot a short film about the pesticide use on aboriginal communities in the Kimberley in the 1980's, what that led to. I have a lot of information I think that you'd be interested in. I believe that you would have a greater amount of information that I think would supplement and inform me, not only the PhD thesis, but where I want to go. I want to be able to work in this area post PhD. I've had a lot to do with Charles Darwin University in the past. I have a lot to do with aboriginal communities in the Top End. I'll be up in Broome next week and I somehow found myself in this body worn video Axon, as Axon would like to have it. The synapse spot as to where things are occurring within the nerve end of society. I'd like to do things like co-author with you. I'd like to meet you physically to be able to discuss these things in person and most importantly to be able to share what I've learned with you and hopefully that we can look at opportunities that we can engage such as a body of research that has a social emancipatory function. I don't believe it exists in its holistic context yet in Australia and we need it, because I'm seeing things occur very detrimentally in other jurisdictions of the world. Another thing that I will inform you, is that I have worked with

people who are implanted with technologies, by choice, that are linked to the automation of environments, including identification for passport control, pay wave and a whole range of other areas. To a lot of people, it's very frightening.

Julian Murphy: Yes, it will expand my horizons that's for sure.

Alexander Hayes: It will, but most importantly what I'm indicating is, it's not science fiction. It evokes a great deal of fear for people who have a religious background around being marked by the state, in that regard. And most importantly, it's the apex, or where everything is that I've heard through these interviews and analyzed, is that most of them, as you've indicated today, it seems logical and a likely trajectory. But also, inevitable. And if that's the case, body worn video cameras will provide evidence of our culture in another jurisdiction. It will only show a certain perspective of that event, it only informs a certain amount of evidence, but it certainly reveals a lot of information that people didn't have in the past, in relation to people's culture. And I think it has an erosive capacity and capability which we need to try and not only prevent but circumvent. Because these companies such as Axon and others, I don't believe have a societal mandate of that sensitivity at play. I don't believe that they understand the complexities of culture and understand the complexities of social exclusion and other things such as poverty in the Australian aboriginal community particularly.

Julian Murphy: Yeah, look I agree entirely. I'd be really interested to learn more about this and seek towards co-authoring and working together, definitely.

Alexander Hayes: Well, I'm very open person in terms of public profile. I've had a fairly radical past, in having had some investment in it, I worked as an educator in the technical and further education sector; TAFE. I worked with the Northern Territory fire, police emergency services on the very early investigations around point of view, wearable cameras for training purposes. To capture from the point of perspective, hands free what somebody was doing in relation to their duties and so on. And being able to main frame that data for training videos. We soon found that the policing side of it was around a mandate of protection of the community, obviously. And before long, within the early 2000s we saw the location, LBS and GIS market come to the fore with the devices. Around 2005, 2006, we saw the onset of artificial intelligence and as you've indicated, now we've seen the predictive, forceful, lifelong precept come into play. What we have seen recently has been for an individual, within a criminal context has their entire life log revisited. That means that the court jogs through a range of data in relation to the individual, which is not specified directly to that person's immediate crime or supposed crime.

Julian Murphy: Yep.

Alexander Hayes: And body worn videos provide a closer scrutiny on individuals in that context and the people who have, will have the most amount of data on them will obviously be the people who are, and feature more highly within the criminal context of, and unfortunately, as you know, the effects of crime and poverty are what drive that surveillance of that community.

Alexander Hayes: So, I'm wondering Julian, would you be... I think it would probably be easier for me to simply share a range of links of things that I've worked on with you.

Julian Murphy: Sounds good.

Alexander Hayes: I would love to co-author with you, in the context that I have an IEEE background, but I will also introduce you formally to my supervisors.

Julian Murphy: What's an IEEE background?

Alexander Hayes: IEEE, is the world's largest engineering body.

Julian Murphy: Okay.

Alexander Hayes: Which has a dubious mandate of saying technology for humanity, is its catch cry. Most engineers in the world have in some way affiliation with IEEE. IEEE is the foundation for most of the software's and hardware's that the world uses in relation to these technologies.

Julian Murphy: Okay.

Alexander Hayes: So, I have published in IEEE, but I've also published a range of social in a range of other publications around the... I'm interested in the social, ethical impact of these technologies, that's my particular interest.

Julian Murphy: Yep.

Alexander Hayes: Not necessarily interested in the socio technical, that's highly covered. I'm interested in the ethical impact. The ethical considerations and the social impact of this particular technology. I'll introduce you formally to my supervisor, Professor Katina Michael and also Professor Teemu Leinonen from Aalto University in Finland. That's my co-supervision point. I've had a lot to do with Toronto University in Canada and have attended quite a number of computer privacy events within the world. The last one was in Washington. It's a holistic sort of picture that I'm giving you there, but-

Julian Murphy: Yeah.

Alexander Hayes: I would like to revisit our conversation in a week or so and see where, how you feel we could potentially approach this interest, or this research focus that we find ourselves in at the moment.

Julian Murphy: Sounds good. Great, well I'll send you a link to other things I've written and then I'll chase down some of the links you sent through and then get back to you in about a week.

Alexander Hayes: That's it.

Julian Murphy: Sounds good.

Alexander Hayes: Well, I'm going to obviously cease the recording when we hang-up. I will strip it down to an MP3 and send it to you unedited to you. If you're happy, I'll then send that in to be transcribed. I think it's important if we could do that, that we build a body of our own information, because these reflective discussions we have, sometimes they're really quite powerful in going back around, like the point you made around cultural veillance, the way you coined that it's something, as of today, built in to the research output for the thesis. It hasn't been expressed by anybody in that way yet. So, you're the first person that's expressed it that way, and I think it needs to be acknowledged that way.

Julian Murphy: Sure, absolutely. I agree with that sort of working method. Sounds good.

Alexander Hayes: Well Julian, it's a pleasure. Thank you so much for the opportunity to be able to speak with you about that.

Julian Murphy: Thanks for reaching out and I hope to speak to you again soon.

Alexander Hayes: Absolutely. Thanks Julian.

Julian Murphy: Thank you

Alexander Hayes: Thanks, goodbye for now.