Emily I. Troshynski

“Stalked by the state”: GPS surveillance technology and sex offender parolees

„Stalked by the state“: GPS-Überwachungstechnologien und Sexualstraftäter auf Bewährung

Based on feminist Science and Technology Studies (STS) frameworks that conceive of technology as both a source and consequence of gendered relations, this paper explores a criminological topic of concern: Global Positioning Systems (GPS) as a tool for the management of sex offender parolees in the community. Previous criminological research on this topic has largely focused on experimental/quantitative projects dedicated to understanding the effectiveness of GPS surveillance technology to curb re-offending patterns. Instead, this paper focuses on narratives with sex offenders in the USA as they articulate their understandings of GPS including their everyday experiences with a technology that tracks and monitors them for life. Therefore, qualitative research with sex offender parolees living with GPS will highlight themes associated with adverse feelings, body modifications, and responsiblisation techniques. Specifically, Donna Haraway’s (1991) cyborg will be used as a metaphor for analysing the sociotechnical relationships to which these participants find themselves involved.

Keywords: GPS, Surveillance, Parole, Sex Offenders, Cyborg

Der Beitrag untersucht Global Positioning Systeme (GPS) in ihrem Einsatz in der Bewährungshilfe und bedient sich dabei einer technofeministischen Perspektive. Selbige betrachtet Technologien als Quelle und Konsequenz von geschlechtlichen Beziehungen. Bisherige Forschungen zu dieser Thematik fokussieren experimentelle oder quantitative Projekte, die die Effektivität der GPS-Überwachung in den Blick nehmen und das Ziel verfolgen, Rückfälle einzudämmen. Der vorliegende Beitrag konzentriert sich demgegenüber auf die Narrative von Sexualstraftätern in ihrem Erleben und Verständnis der GPS-Technologie. Hierzu zählen die Alltagserfahrungen mit der Technologie, die ihre Bewegungen verfolgt und überwacht. Auf der Basis eines qualitativ ausgerichteten Forschungsprojekts mit Sexualstraftätern in den USA, die lebenslange Bewährung erhielten, welche mittels GPS-Überwachung erfolgt, werden die Aspekte der negativen Gefühle der Forschungsteilnehmer_innen in den Blick genommen, ihre Erfahrungen mit Körpermodifizierungen und Responsibilisierungstechniken. Die soziotechnischen Beziehungen, in die die Teilnehmer_innen involviert waren, werden insbesondere mit Verweis auf Donna Haraway’s (1991) Cyborg-Metapher analysiert.

Schlüsselwörter: GPS, Überwachung, Bewährung, Sexualstraftäter, Cyborg

Introduction

Those writing in the field of Science and Technology Studies (STS) have theorized the relationship between gender and technology as one of mutual shaping. Feminist STS scholars conceive of technology as both a source and consequence of gender relations (Cockburn/Ormond 1993; Hollister-Short et al. 2009; McNeil 2008; Wajcman 1991, 2004). In this sense, gender relations are materialized in technology; masculinity and femininity (and other identities) acquire their meaning though their embeddedness with technology. The gendering of technologies is therefore shaped in design and reconfigured at multiple points of consumption and use. Influenced by individuals, organizations, cultural meanings, and situated knowledge (Haraway 2003; Harding 1986; MacKenzie/Wajcman 1999), technology is therefore considered a sociotechnical product. Such a framework discusses user agency as the way in which people continuously interpret, appropriate, and use technological artefacts in their everyday lives. In this light, technology changes the nature and meaning of identity and introduces new social practices for knowledge building. Donna Haraway's (1985, 1991, 1997) cyborg – a hybrid human/machine – is useful in thinking about ways of constructing identity and provides a productive analytic for understanding and transforming sociotechnical relationships.

As both a paradigm of analysis and mode of political action, the cyborg as an analytic, breaks down traditional binaries and dualisms (Balsamo 1996; Plant 1998) and provides a space for alternative thinking about technologies (machine) and our (human) relationships to them. Haraway (1991) discusses three major boundary breakdowns in the formation of the cyborg. The first is between nature and culture (human/animal) where „(b)iology and evolutionary theory over the past two centuries have simultaneously produced modern organisms as objects of knowledge and reduced the line between humans and animals to a faint trace re-etched in ideological struggle or professional disputes between life and social science" (1991: 152). The cyborg, then, represents a shift in understanding political and physical boundaries associated with what we have traditionally perceived as "natural." The second is between organism and machine (animal-human/machine) where "(l)ate twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines" (1991: 152). Not only are our household machines becoming more lifelike and taking on personalities, but also, humans are coupling with machines for medical purposes (i.e. pacemakers, dialysis, artificial limbs and joints, hearing aids) as well as criminological intentions (i.e. EM for home confinement, GPS for location tracking, body worn cameras for police legitimacy). The third boundary breakdown is between the physical and non-physical (organic/inorganic) where machines are ubiquitous and invisible. Haraway notes that "(m)odern machines are quintessentially microelectronic devices: they are everywhere and they are invisible" (1991: 153). This ethereal invisibility renders machines as more than a technology because "(t)hey are as hard to see politically as materially. They are about consciousness – or its simulation" (1991: 153). Therefore, the cyborg does not exist as nature or culture, but a hybrid of both and more. The cyborg used as an analytic to better understand sociotechnical relationships helps facilitate holistic questioning about how non-organic matter, to which we have negligible conscious access, can count as a legitimate part of us, even when we do not intend it to be so.

Based on these frameworks, the following analyses narratives from 47 sex offender parolees living with Global Positioning Systems (GPS) in the United States of America (USA). Through a technofeminist lens, data presented herein will highlight the connections between GPS surveillance technology as artefact and the everyday human experiences associated with it. Emphasising the unique understandings of this parolee subpopulation, this paper will also provide an analysis of how criminality is currently regulated in the USA via sociotechnical regimes that mandate surveillance for life including how this regulation is co-produced via these surveilled subjects. In so doing, this paper explores technocratic surveillance schemes employed by the United States Criminal Justice System as a means of performative and embodied communication, which limits and enables relationships.

Therefore, this paper expands upon a broad notion of science and technology ("technoscience") as a culture of "material-semiotic practice" (Haraway 1997) that focuses on the mutual shaping of gender via identity and technology. Throughout, Haraway's (1991) cyborg will be used as an analytic to understand research participants' experiences with GPS surveillance units attached to their physical bodies. By adopting such a perspective, criminological practices, such as the use of GPS surveillance technology to monitor and control parolee populations, can be analysed in new ways.

Legal And Technological Background

In November 2006, California voters passed Proposition 83, *Sex Offenders. Sexually Violent Predators. Punishment, Residence Restrictions and Monitoring. Initiative Statute*, commonly known as Jessica's Law. Referencing the original Jessica Lunsford Act passed in Florida in 2005,[1] this state law

1 Surveillance of sex offenders began in May 2005 with the passing of *The Florida Sexual Predators Act: The Jessica Lunsford Act* (Fla. St. § 775.21, 2005). This Act implemented mandatory registration, monitoring, and active surveillance of paroled sex offenders. It also imposed mandatory minimum sentencing of 25 years in prison, established a program to identify, assess, and monitor "High-Risk Sex Offenders" (HRSO) on community supervision, and incorporated lifetime monitoring of adults convicted. New felony offenses also included tampering with surveillance equipment and residing and/or working in pre-established "exclusion zones" delineated as any area within a 2,000 foot radius of a school, park, or any other public venue "where children frequent."

enforced the use of GPS to track all sex offender parolees, including juveniles, for the rest of their lives while also prohibiting and enforcing strict residency restrictions around schools, parks, and other locations where children congregate (CA Penal Code, § 3003.5(b)), regardless of if their crimes involved children. Since the passing of the original Florida law, 42 states have also approved similar legislation.

GPS incorporates battery-operated transmitters known as "units" worn around the ankle of the monitored/surveilled user. A direct radio signal is sent to a Portable Tracking Device (PTD) that operates on a battery lasting anywhere from sixteen to twenty-four hours. Depending on the size of the transmitter, the unit must be recharged two to six hours a day. With the ability to update as frequently as every ten seconds, the PTD stores exact location information that is technologically linked to real dates and times. Together, the GPS/PTD combination acts as a receiver for transmitted radio signals as well as precise location information of the unit/user. For the purposes of parole, GPS/PTD is programmed to detect if a monitored individual travels beyond any pre-programmed distances. Such distances are pre-determined, by state legislation and/or parole, and are referred to as "inclusion" and "exclusion" zones. When a GPS unit/user enters an exclusion zone, an alarm signal is sent to a central computer. The computer then sends a message to the local police or appropriate parole officer.

There are noted technological limitations of GPS/PTD: GPS-denied environments are frequently encountered by wearers and include urban environments where tall buildings block signals, ocean and lake environments where large bodies of water drop signals, and locations where signal "drift" occurs. Other technical difficulties include wearers being shocked when the unit comes into contact with water during a shower, bath, or heavy rainfall (Crowe et al. 2002; Troshynski 2011). In order to circumvent these hindrances, parole boards created additional conditions prohibiting parolees from water-related activities. Additionally, companies promoting the GPS/PTD combination frequently label their transmitters as "tamper-proof", however; users/wearers and experienced criminal justice practitioners accurately describe them as "tamper-resistant", because they can be successfully cut off of the ankle at any time (Downing 2006). Due to such vulnerabilities, GPS/PTD is also programmed to receive and store notice of tampering with or removal of the anklet. Because of this flaw, legal clauses were added that prohibited parolees from interfering and/or tampering with their GPS device. If tampering occurred, parolees received a felony technical violation that resulted in reincarceration.[2]

2 Since 2005, 18,000 individuals have been tracked and more than 3,600 arrests have been made due to GPS technical violations, mostly due to tampering and infringements (Troshynski 2011). During the project timeframe, the U.S. Bureau of Justice Statistics (BJS) announced that close to 100,000 individuals were on EM including older RFD as well as newer GPS/PTD systems. With approximately 40,000 individuals under passive or active GPS, growth was expected to continue at 35-50 % per year for the next several years (see Sipes 2009).

Methods Of The Study

This project is unlike previous mainstream criminology projects that employ quantitative evaluations to test the effectiveness of GPS on reoffending behaviour (Armstrong/Freeman 2011; Button et al. 2009; Padgett et al. 2006). In talking to these surveilled subjects about their experiences, information collected is "grounded" and, more importantly, based on actual everyday involvements with surveillance and attendant criminal justice policies.

Participants of this study include individuals convicted of a range of sex offenses who were previously incarcerated, released and going through the process of reintegrating back into society while on parole. Seven focus groups resulted in 47 participants who provided their thoughts about GPS and of Jessica's Law more broadly. Participants were White (51.9 %), Black (29.5 %), and Hispanic (14.8 %) men with a mean age of 44. Half of them had children. Many had been married at some point yet only 20 % were married at the time of the research project. Two-thirds had a high school degree or some level of college education and roughly 60 % were employed. Additionally, approximately 75 % had been arrested prior to their current sex offense. Participants were similar to the sex offender parolees throughout the entire state.[3]

Focus group questions ranged from initial reactions to Jessica's Law, including how GPS impacts their everyday lives, and thoughts on the benefits and weaknesses to being monitored by GPS. Inductive and deductive approaches to thematic development were used as was open-coding schemes (Emerson et al. 1995). In analyzing more complex narratives, Strauss and Corbin's (1998) framework for conceptualization was also utilized as was a helpful line-by-line coding process for discovery provided by Charmaz (2006). Narrative data was compared/contrasted until robust theoretical codes were derived and then further refined via additive heuristic methods (Abbott 2004) and semiotic clustering techniques (Feldman 1995; Manning 1987).[4] Through this mode of inquiry, information about how differently situated individuals understand their surveillance experience was revealed including the particulars of living with a surveillance unit that monitors you 24/7.[5]

Thematic Findings

The following presents a description of a contemporary cyborg illustration where the body and technology are conjoined. Here, GPS surveillance tech-

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3 For further comparison, please see Turner et al. (2007) and Troshynski (2011).

4 Excerpts are reproduced as spoken by participants and include agreement, consensus, dissent, non-verbal communication, and other physical gesturing as presented in brackets [ ].

5 Full Institutional Review Board (IRB) approval was obtained (HS #2005-4681; EMOD #3178).

nology takes on organic functions while the human body attached to it is materially redesigned via a constitutive relationship of human/machine. Operating together, this human/machine relationship is an example of a network of relations that Donna Haraway describes as "informatics of domination" (1991: 161-165) and contributes to our understanding of how the body is newly produced (re-formed with GPS technology), replicated (simulated via constant tracking that produces virtual location information), and disciplined both intimately (internalization of stigma associated with GPS) and physically (experiencing social and physical mobility restrictions).

From a feminist technoscience perspective, the below details how the body (the organic thing of nature) is transformed into a sign or artefact of modern-day culture. In documenting how "natural" bodies have been dramatically refashioned via the application of GPS surveillance technology, we come to understand how individual and group identities are also changing, as are routine behaviours and attitudes about GPS. Specifically, the following themes document feelings that are deleterious, routines and bodies that are modified, and responsibilisation attitudes that are developed. Together, these three themes, categorized as feeling/performing/caring cyborg, provide illustrative examples of the sociotechnical connection between human/machine.

"We are shit in this society" – Feelings of Infamy (a.k.a. Feeling Cyborg)

Theories of gender and sexuality suggest that the body is generally seen as the most fundamental feature in forming identities (e.g., Butler 2011; West/Zimmerman 1987). Feminist STS scholars prompt that, in order to understand and change the politics of the body, we must understand and change the politics of science and technology as well (Fausto-Sterling 2000). Haraway's cyborg is discussed as a metaphor used to articulate the politics of a human/machine self and, like other definitions of the self, the cyborg identity is articulated as both a cultural imposition as well as an individual one.

First, it has been documented that parolees equipped with GPS ascribe deeper meanings to the surveillance units attached to them (Shklovski et al. 2015; Troshynski 2011; Troshynski et al. 2008). These include negative connotations of the self, as a member of a monitored group of parolees, as well as a heightened awareness of being excluded from society (Henne/Troshynski 2013; Troshynski/Weiner 2014). One participant noted:

> *"We're the worst thing in everybody's eyes. We're looked down on. We're hated. People kill a baby and it's not as bad. People shoot them in the head, still, not as bad,"* while another confirmed, "*In our situation, you try to keep our life as normal* [and] *as positive as possible. But this thing* [GPS] *just keeps reminding us that we are bad. We are shit. We are outcasts in our community. We are shit in this society. That makes a tremendous impact on us, our self-esteem. It's very hard."*

Many brought up similar sentiments of human dignity or a lack thereof. One explained, *"It* [GPS] *really wears on your self confidence,"* while another agreed, *"It is very depressing. It robs a piece of my humanity. I am not trying to negate my crime. We are talking about the impact of GPS on us. It put me in a depressive mode."*

Second, equating GPS to permanent physical illnesses and everlasting visible disfigurements was also common. Within one focus group, two participants corresponded: *"It's like leprosy. No one will come near us,"* and *"No one will be in a committed relationship with us either."* Others explained, "*They* [GPS] *might as well be tattoos,"* and that GPS, *"is like a disease."* Just as participants discussed how living with GPS made them feel like they had a permanent mark, they also described how GPS also made them feel like animals. Sentiments associated with deprivation and dehumanization was commonplace: "*They track you like an animal that's being followed around all the time."* Note an analogous conversation:

> Participant 9, FG3: *"I feel like I'm a cow. A cow with a collar."*
>
> Participant 8, FG3: *"I don't think it's like a cow. It's more like the fucking guy on Total Recall with the fucked up collar around his neck. It's more like that."*

Frequently, participants discussed negative labels associated with being a sex offender parolee surveilled by the state and equated these feelings to a process of dehumanization (Troshynski/Weiner 2014).

These emotional sensations developed into apprehensions about GPS being noticeable in public. Common statements included, *"I am fearful"* and, *"It feels like everyone is after you."* One poignantly noted, "*I'm Freddy Kruger mother fucker! People perceive it like that. They see the monitor and they perceive me as a predator. It's the whole ideology of being stalked by the state, by this police monitor."* Just as many participants expressed concerns about what people would think of them in public, others noted similar misgivings about what would happen if their colleagues at work noticed the GPS unit. One explained:

> *"I was working on a place on a ship, working on the scrapping, and a co-worker came by and asked if this* [pointing to his GPS] *is a gun. I said, 'No, it's not!' then walked off. I was freaked by it. Then everything came together in my head. Do I need to be last in line?... You see, the shipyard is a very man, masculine, macho world. I was worried that someone would see it and, I don't know, do something. I talked about this with the group and the group gave me some good advice. It's fine now. From then on, I wear it to the side so then, when someone is behind me, well, you can't really tell."*

Evidently, participants experienced a transformation where their identities, at the individual and group level, morphed to include a range of negative connotations associated with social abhorrence, permanent disease, and animalness. As articulated, these feelings were compounded with additional apprehensions about what people will think of (and do to) them in public if/when their GPS is discovered (Henne/Troshynski 2013; Troshynski/Weiner 2014). These emotions are connected to the politics of GPS, i.e. societal perceptions of sex offenders as predators, high-risk to re-offend, thus mandated to continuous tracking/monitoring. As a sociotechnical artefact, GPS is a combination of these socio-legal and cultural attributes. In thinking about how participants feel cyborg, the emotive aspects of this human/machine hybridity further question the dualism and personal identity associated with contemporary concerns about the effects of technology on the human 'self'. As stigmatic as these feelings are, feminist STS scholars (e.g., Haraway 1997; Orbaugh 2008) remind us that emotions experienced in a cyborg context are what keep us "human" even after our bodies have become machine/artificial.

"I almost broke my leg getting it snagged up" – Experiences with Body Modification (a.k.a. Performing Cyborg)

Just as the socio-legal and cultural attributes associated GPS were internalized, participants also discussed changes to their everyday routines where activities that were once considered "normal" without GPS were articulated as something missed. Similar to Haraway's cyborg as a "site of the potent fusions of the technical, textual, organic, mythic, and political" (1991: 24 f.), participants experienced changes in physical routines and body modifications primarily due to the distinctive human/machine relationship underway.

First, examples of missed bodily performances included conversations of both social and physical mobility. As explained by one participant, *"You're not as free to go places once you're invited to do different things. You can't do as much. You definitely can't jump in a swimming pool. Can't go in a jacuzzi. It's* [GPS] *a big life stopper."* Another noted, *"It's hard to go dancing. I can't be at a bar or club and dance because I'm afraid that someone will kick it."* Others discussed physical limitations due to the GPS unit: *"It bothers me that I can't get in the hot tub with my girl. I used to go to the beach every fucking day. Now, I can't. They* [Parole] *bar us from the beach,"* and, *"I can't go to the river or the Jacuzzi. It is no normal type of living."* Due to technological limitations of GPS, many types of physical and leisurely activities were barred, particularly if they were water-related.

Second, participants missed being physically active. Just as there was a longing for customary social activities, there was also nostalgia for athleticism. Described by one participant: *"This is bogus, this GPS. The device is expensive and huge. I can't swim – one of my favorite sports."* Another mentioned, *"I can't do yoga outside because I can't wear shorts. I have to hide it when I play tennis."* Examples of hiding GPS via changes in physical dress and health maintenance were also frequently articulated. As explained by one participant, *"You can't wear shorts. It's in the middle of the summer and I'm wearing pants. I stand out."* Several participants also commented on changes to personal hygiene. One mentioned, *"I can't take long showers with this,"* while another confirmed, *"It bothers me that I can't take a bath."*

Just as participants changed their routine behaviours due to GPS, they also experienced physical injuries. One mentioned, *"One time a unit went bad and it burnt my ankle,"* while another corroborated, *"It's* [GPS] *gotten caught and I almost broke my leg."* Concerns about physical injuries were acknowledged throughout all focus groups. Another revealed, *"I almost broke my leg getting it snagged up."* Similar exchanges occurred:

> Participant 6, FG2: [Pointing to Participants 7 and 4] *"See! They have a scar on their legs after three years.* [Both participants lift their jeans to show the group their ankles]."
>
> Participant 9, FG2: *"See, it's irritating my ankle* [lifts up jeans to show ankle]. *And I can't change it. It just has to get used to it."*
>
> Participant 8, FG2: *„It's like, have you ever been hit by a gun pellet?* [Some in the group affirmed, most did not] *What about asphalt? Falling off a dirt bike?* [All in the group affirmed] *For those, your skin pushes it out. It pushes the asphalt and the dirt out. With this, it's not pushing it out. It can't. It's just there."*

This specific human/machine relationship is complex and constitutive. Participants engaged in body and dress modifications because they were concerned with protecting themselves from public ridicule. They also altered their routine activities and hygiene practices as to not tamper with or damage GPS. Yet, despite efforts to preserve GPS, physical discomfort and injuries occurred (Henne/Troshynski 2013; Troshynski 2011). In reading the above via a cyborg metaphor, the construction of identities and subjectivities (human/machine) denote how participants' relationships with their GPS units are directly associated with changes in individual/group identity as well as variations of routine behaviour(s).[6]

Here, men (male/masculine bodies) experience disembodiment and body modifications along gendered terms. Compare, for example, women's (female/feminine) experiences with adorning their bodies with stereotypical swimming suits, where physical and leisure activities are similarly restricted via movement, comfort, and function. Activities like swimming and yoga are activities women routinely give up due to bodily restrictions (i.e., menstruation, pregnancy, cesarean sections) and the male gaze (i.e. body shaming, cosmetic surgery), as well as objectification (i.e. personal hygiene standards like shaving that limit choice). Yet for these participants, their bodily autonomy, agency,

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6 Body modifications are due to participants being forced to wear GPS. If GPS was a welcomed prosthetic, changes in body and dress modifications may be articulated differently. Future research should consider these connections.

freedom (hallmarks of traditional male privilege) is being restricted via GPS arrangements. Performing cyborg, here, equates to participants questioning the boundaries of human/machine where they are vulnerable: at the site of the body.

"What if your device runs out of batteries?" – Engaging in Responsibilisation Strategies (a.k.a. Caring Cyborg)

Similar to the above, the following further elucidates on participants' human/machine relationships where taking care of GPS equated to taking care of themselves. For example, in addition to the rules and regulations legislated via Jessica's Law, parole also prohibited sex offender parolees from a range of activities (i.e. using the Internet, tampering with GPS). Additionally, as a condition of parole, participants were required to participate in regular activities (i.e. registering place of residence, place of work, charging the GPS unit).

First, charging the GPS unit was intimately connected to participants' daily routines and, if employed, their work schedules. One described:

> *"See I work eight to ten hours a day three to four days a week. I get up at 3:30 to charge the thing. That's like three eighteen-hour days in a row and I have to sit there and deal with it for like three hours a day? So that's about 20 hours a week of me dealing just with parole*."

Another acknowledged time spent charging, *"The thing is, spending fourteen hours a week charging it?! If you totaled it all up, it* ***is*** [emphasized] *like a part time job."* In talking about charging schedules, another said, *"Let me think about this. I get up at 3:40 and charge until 5:00. And then I have to be to work by 6:00. But this is hard to do when I'm homeless."* These equations are accurate: If minimum time spent charging is two hours a day, each participant spends no less than fourteen hours a week just maintaining their GPS. Charging as a daily activity was something all participants shared in common. Yet, individual charging schedules were unique and based on material factors (i.e. housing, job, car, etc.).

In discussing his annoyance with charging, one participant said, *"I asked my PO* [parole officer], *'Can I charge it once every half hour?' He said, 'No.' But what if you work a job like construction where there's no electricity? What if your device runs out of batteries? What are you going to tell your boss?"* Once again, worries about the public noticing GPS were also expressed: *"You can charge it in your car, but how do you explain this to one of your employees? Employer? There is a lot to it."* Similarly, another participant revealed, *"And what if you work a double? What are you going to say? Oh, sorry, I have to charge my GPS for an hour?"* and a second agreed, *"It's hard, when you're waking up in the morning and you know you have to go to work and you don't have enough charge. Our life is scheduled around this* *thing. It has to revolve around these things."* Not only does a charging schedule govern a very diverse population of parolees but, in so doing, this condition of parole dramatically dictates the structuring of their everyday activities. Having to regularly charge GPS was viewed as an obstacle to a normal life, let alone a normal work schedule.[7] This impediment was brought up in all seven focus groups thus underscoring the importance placed on such a unique human/machine sociotechnical relationship thus highlighting issues associated with autonomy and, again, a harkening of male privilege perhaps lost.

Second, since participants were not told anything about their GPS unit (except to charge it and not tamper with it), they experienced a lack of technological literacy. In discussing information provided upon first receiving GPS, one explained:

> *"When I signed the paper… It was just about charging every ten hours. It said you have to put this on, and if it buzzes, call me on my cell, and then pretty much that's it. This is something that's going on my leg, and all I need to know is charge it every ten hours? That's it?"*

Information provided to participants about how GPS works was inconsistent and vague. The following conversation highlights these discrepancies:

> Participant 8, FG2: *"And then there are some of us who have tested the waters and know that this thing* [GPS] *can last for up to 24 hours."*
>
> Participant 5: *"Yes, but it's a violation if you don't charge."*
>
> Participant 9: *"F* [parole officer], *when he gave me mine, he said, "I'm not gonna give you specific hours, just pick two times a day and do it."*
>
> Participant 10: *"Same with H.* [parole officer]. *That's how he would do it too."*
>
> Participant 1: *"It's still very inconvenient."*
>
> Participant 11: *"Yes. It's as if the state takes away two or more hours a day. I can't reach my bathroom. I can't do anything but sit there and charge."*
>
> Participant 1: *"It's a ball and chain. That's all it is."*

Even though participants' technological literacy was lacking, they were well aware of the fact that they were continually at-risk for a technical violation and, if received, they would return to prison: *"I work seven days a week. I don't ask parole for nothing. I forget about charging this thing* [GPS] *but they are not letting you get beyond this. They'll throw you back in the hole."* Perhaps because of this very real possibility, many participants engaged in

7 The fix to these problems includes providing parolees with extra batteries and/or units. Yet, the state did not offer such solutions.

information building with one another.[8] They relied on each other to discuss the impacts of GPS including how to learn more about it, technologically; cope with it, physically; and best abide by conditions associated with it, socio-politically. In a myriad of ways, participants were involved in adjusting their behaviour and their mobility (i.e. their location) for GPS unit and technological limitations (Shklovski et al. 2009, 2015; Troshynski et al. 2008).

These quotes depict an everyday life that is prioritized by preserving GPS. Participants articulate angst in charging: it wastes time, dictates their daily schedules, and secludes them to sitting/standing close to an electricity outlet long enough for a full positive charge. They spend time alone charging because, again, they are protecting themselves from public indignity. Nevertheless, they charge to take care of their GPS and not receive a technical violation. This human/machine relationship is perplexing: Participants' activities revolve around the maintenance and accurate performance of the GPS unit, yet they do not receive adequate information about its functioning. What information they do receive is contradictory and inconsistent. Regardless, they have a responsibility to charge at least fourteen hours a week, approximately fifty-six hours a month, 738 hours a year, for the rest of their lives. Similar to research on state control and citizenship (e.g. Auyero 2012), participants of this research absorb the message that there is nothing else they can do but charge and wait; thus the relationship of these individuals to the socio-legal system that controls them is inundated with confusion and uncertainty.

Here, caring for GPS is another example of a gendered sociotechnical relationship where participants are engaging in changes in behavior and scheduling of time due to taking care of a surveillance artefact. For example, similar to women's experiences with traditional care-taking responsibilities (i.e. nursing/breastfeeding, child care), participants of this study describe GPS as being tied to them thus dependent upon them for successful functioning. Due to these care-taking activities, they also describe a loss of control and change in mobility particularly due to a re-structuring and/or change in ownership of their personal time.

Discussion: Incorporating Cyborg Imagery

As documented throughout, the combination of feeling/performing/caring is profoundly transformative and suggests that unique forms of human/machine relationships are underway. For sex offenders equipped with GPS, these relations are complex. First, due to the social and political meanings ascribed to

8 Experiences with joblessness and homelessness bonded this specific parolee population in distinctive ways. For example, informal tent communities were formed and functioned as "compliant" places where homeless parolees could "live" and often included parking lots close to parole offices.

GPS (i.e. sex offender, sexually violent predator, diseased, animal), negative and dehumanized *feelings* are internalized (e.g., stigmata/labels/images) and impact individual and group identities. Second, since being physically attached to a GPS unit was stress inducing for many, *performing* unique body modifications for physical and emotional comfort was commonplace. Third, participants engaged in knowledge building via understanding more about ways to *care* for their GPS units. In thinking about how these participants experience the human/machine relationship they find themselves involved in, we realize that, despite feelings of infamy, taking care of GPS is akin to protecting themselves from public scrutiny and re-imprisonment.

Inspired by Donna Haraway's cyborg imagery, narratives with 47 sex offender parolees living with GPS has been analysed via a feminist STS or technofeminist lens. Compared to methodological goals of administrative criminology (i.e. to supply data and practical guidelines to the criminal justice system to enable its agencies to manage and control crime), feminist STS focus on technology and gender as products of an ever-changing relational process, emerging from collective and individual acts of interpretation (i.e. deconstructing "natural" dualisms and binaries) provides a more holistic exploration of the realities of a modern-day human/machine relationship. Research in STS and feminist theories of technology centre upon the ways in which people and technology have evolved, thus reminding us that technology is not the inevitable result of the experimentation and application of scientific knowledge. Feminist STS and technofeminist thinking about technology further highlights the materiality of technology including how a technological artefact promotes or inhibits the doing of particular gender power relations. Consequently, a material-semiotic practice of analysis derived from feminist technoscience provides a space for re-thinking a range of criminological phenomena. The analysis described herein is albeit one example.

A cyborg lens provides a detailed account of the many ways in which these individuals have altered themselves in various cyborgian ways (i.e. reconfiguring what it is to be human and exist in congruence with technology). Indeed, the very notion that life is being redesigned via a sociotechnical surveillance artefact has very real and profound cultural consequences for all of us. Therefore, a technofeminist analysis inclusive of a cyborg reading suggests that the human/machine relationship in question is subject to a variety of interpretations and meanings and that we are *all* responsible for them. Such an analysis encourages thinking about the changing definitions of 'monitoring' and 'surveillance' and the ways in which these vicissitudes are tightly connected to transformation in socio-political structures over a period of time.

Just as Haraway (1997) suggests that the differences in accounts of the use and function of technology may be tied up to variance that has to do with the position of the user/modest witness/surveilled subject's social structure, economic status, or other hierarchies tied to race and/or gender; our very understanding of 'what surveillance is' is intimately tied to differences in subjectivities as well. Incorporating such frameworks help to provide for alternative theoretical considerations associated with the constitutive power of the human/machine relationship including how technology can be considered a cultural artefact used to materialize the social, political, and economic arrangements associated.

Such musings stem from larger academic conversations suggesting that, just as the discipline of criminology (still) benefits from a holistic critique offered via gender studies (Chesney-Lind 2006; Gelsthorpe 2010; Walklate 2004), surveillance studies would also benefit from feminist analysis and modes of inquiry (Ball et al. 2009; Dubrofsky/Magnet 2015) inclusive of race and other intersectional identities (Browne 2015). Such contributions would prompt a re-thinking about local, discursive, performative, and embodied aspects of a range of topics, particularly if such analyses include documenting the patriarchal ideologies at play (i.e. exposing prevalent stereotypes about individuals and the technology used to help, benefit, track and/or monitor them). Acknowledging such connections between the social and the technical would further emphasize analogous feminist STS research that highlights sociotechnical systems seamless webs of material, social, and symbolic practices and relations.

Instead of a criminological focus on empirical quantitative research that assesses the "effectiveness" of surveillance technology to curb recidivism and reoffending behaviour, analysis herein provides a better understanding of the convergences and conflicts between individuals' efforts to live and cope with a surveillance technology used to monitor and control them. Yet, much of these experiences are akin to what many women (female/feminine bodies) experience and endure recurrently. Perhaps, then, a gendered analysis of the above, would suggest that modern state control of this parolee population is akin to a feminizing process where participants are no longer in control of their lives and/or mobility. Instead of a focus on pro-social reintegration, parolees provide care duties for a technological apparatus they never expected (or asked) to be connected to. Furthermore, living with GPS confers sensitivities of vulnerability/frailty, because of a requirement to "answer" and be "accountable" to the state as well as to GPS tracking them. Such analyses sheds light on how surveillance strategies impact individuals in nuanced ways; ways that may or may not have anything to do with the purported goals of the technology in question. Certainly, sex offenders on GPS can be used as an example that captures the cyborg of the popular imagination.

Conclusion: Consequences and Future Research Directions

The politics of sex offender legislation, as well as its ascendant consequences, is important to note: Recent research has documented that the political rhetoric attached to the passing of Jessica's Law was inundated with ideologies of "sick" and "incurable" individuals (Levenson et al. 2007; Socia/Stamatel 2010); where rape myths associated with a fear of "stranger danger" were further expressed as a fear of “sexual predators.”[9] These ideologies expose prevalent stereotypes about sex offenders and highlight the use of a surveillance technology to monitor and control them in the present (as well as their risk in the future). Unintended consequences of sex offender policies are antithetical to the political goals of “keeping children safe” and include preventing family reunification, restricting access to jobs, and regulating residence locations (Durling 2006; Levenson/Hern 2007; Payne/DeMichele 2011). Limited research has documented the everyday realities of parolees as they reenter society and navigate the many rules and regulations associated (Tewksbury/Lees 2006; Troshynski 2011; Zevitz/Farkas 2004). What we know from these studies is that there is a lack of pro-social bonding, services and resources, and available jobs, where homelessness is albeit one consequence.

In thinking about the ideologies used to control a population of parolees (inaccurately) considered “high-risk” to re-offend thus conjoined with GPS, we realize the complex reality of this human/machine relationship. How do these participants experience gender and masculinity when they are jobless, homeless, and unable to go back home to their families? Herein, questions about what it means to be exposed, to feel unsafe and accountable, while also feeling like a target are important. Past relationships are limited while new relationships (with other similarly-situated parolees) are burgeoning. Future research should continue to query the gendered nature of these sociotechnical arrangements. Comparative studies of men and women sex offenders could focus on GPS and the gendered aspects associated with it. Do they have the same responses to being tracked, monitored, and restricted? Or do women on GPS somehow feel that it is less of a nuisance because they are used to their movements, bodies, schedules, etc. being restricted? And what of those individuals who welcome (and consent to) being conjoined with sociotechnical artefacts? Future research should also question experiences of consent and hybridism.

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9 Please note: none of these assumptions have been (to date) well supported by research evidence (Leon 2011; Levenson 2011; Terry 2011).

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Emily I. Troshynski, Department of Criminal Justice, University of Nevada, Las Vegas, Box 455009, 4505 S. Maryland Parkway, Las Vegas, Nevada 89154-5009, emily.troshynski@unlv.edu