

Article

From the Beginning: Children as Subjects and Agents of Surveillance

Gary T. Marx

MIT, USA. gmarx@garymarx.net

Valerie Steeves

University of Ottawa, Canada. vsteeves@uottawa.ca

Abstract

This article examines the claims made by surveillance entrepreneurs selling surveillance to parents and government agencies responsible for children. Technologies examined include pre-natal testing, baby monitors and nanny cams, RFID-enabled clothing, GPS tracking devices, cell phones, home drug and semen tests, and surveillance toys. We argue that governments, both in the context of health care and education, use surveillance to identify and “manage” genetic or behavioural deviations from the norm. Parents, on the other hand, are encouraged to buy surveillance technologies to keep the child “safe”. Although there is a secondary emphasis on parental convenience and freedom, surveillance is predominately offered as a necessary tool of responsible and loving parenting. Entrepreneurs also claim that parents cannot trust their children to behave in pro-social ways, and must resort to spying to overcome children’s tendency to lie and hide their bad behaviour. We conclude by offering some ideas to rein in the variety and complexity of the issues raised and to help order controversies in this domain.

Introduction

Train up a child in the way he should go, and when he is old he will not depart from it.
(Proverbs: 22:6, King James Version)

The seemingly omniscient, omnipresent, colonizing power of 21st century new surveillance softly spreads ever outward and inward in society. The future gallops in on diffuse, almost invisible sensors embedded everywhere.

Nowhere is this clearer than in the case of the hierachal family with responsibility for the care of children. A focus on children and the home offers an ideal setting to see broader social forms and processes and to make comparative statements across tools, applications, life cycle stages, institutions and geographical places, and can highlight some enduring tensions.

Kids are literally the poster children for surveillance. Relative to other contexts such as work or government, children illustrate a broader (and perhaps clearer) array of central surveillance concepts and dynamics. Attention to childhood offers a unique transom into how we learn what it means to be watched and to watch and to how surveillance changes as roles and related rights and responsibilities shift over time. It also illustrates the unclear meaning of values or goals in conflict and the absence of ways for resolving tensions between them.

There is a slowly emerging literature on children and surveillance (see for example Jorgensen 2004; Katz 2006; Wagerson et. al. 2010; Nelson forthcoming). Most of it focuses on particular applications or needs (as do the articles in this volume). In contrast, we treat the broader topic of surveillance of and by children. We look at the universe of tools available and ask how can these be categorized and contrasted? What cultural messages do they send? How are they justified? How do children as subjects respond? What is distinctive about the surveillance of children and why does it seem to be a particularly contentious issue? What broader social and policy questions does the topic raise?

This article is part of broader projects that look at other settings such as work and government (Marx forthcoming) and at legal and policy questions involving children and the internet (Steeves 2006, 2007, 2009; Steeves & Webster 2008). The methods used are interviews with subjects and agents of surveillance, document analysis, observation, case studies and participant observation as children, parents and a grandparent, and our involvement in policy groups.

The article has three sections. It begins with a satirical statement from an imaginary social movement dedicated to protecting children through the use of technology. This reflects surveillphiliac themes within our culture taken to an extreme. Yet it hopefully has enough authenticity to provoke thought and contains some moral and empirical truths that even the most libertarian of parents would likely agree to. Its more controversial assertions highlight the complexity and conflicts associated with the topic, and set the stage for our examples and analysis.

We then examine the claims made by surveillance entrepreneurs selling surveillance both to parents and to government agencies responsible for children. Technologies examined include pre-natal testing, baby monitors and nanny cams, RFID-enabled clothing, GPS tracking devices, cell phones, home drug and semen tests, and surveillance toys, and span the years from pre-conception through to the late teens. Parents are encouraged to buy surveillance technologies to keep the child “safe”. Although there is a secondary emphasis on parental convenience and freedom, surveillance is predominately offered as a necessary tool of responsible and loving parenting. Entrepreneurs also claim that parents cannot trust their children to behave in pro-social ways, and must resort to spying to overcome children’s tendency to lie and hide their bad behaviour. Government, in the context of both health care and education, places the emphasis on surveillance to identify and “manage” genetic or behavioural deviations from the norm. The uses children make of surveillance in play are also considered.

We conclude by offering some ideas to rein in the variety and complexity of the issues raised and to help order controversies.

There's something PISHI going on

An Urgent Message to All Parents from PISHI
(Parents Insist on Surveillance Help Inc.)*

Don't neglect, suspect! Be safe not sorry.

Children are expensive. According to some estimates a child born in 2010 will cost parents more than 250,000 dollars before they finish college. Is your investment protected? Are you looking out for your kids by looking at them in the modern way? Do you know what your kids are hiding from you? Do you know who their friends are? Do you know who they talk to? Do you know where they go? Do you know where the convicted criminals in your neighbourhood live? Answers to such questions no longer need be

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based on surface appearances, the danger of dissimulation, or gossip. The precise discovery tools of modern science used by police, the military and titans of industry are now freely available to parents who care.

PISHI is a non-profit, nonpartisan, nondescript group of helicopter parents of all genders, races, religions, ethnicities and regions who believe that technologically supported normal families are the basic building blocks of society and that we need borders to bring order. We are supported by grants from socially responsible businesses that provide goods and services to help families help themselves. We are mission-driven and child-centred, dedicated to the development of pliant persons who respect the rules and wisdom of the past even as they prepare to embrace the future. We seek individuals who will fit in, not be cast out. The path of the straight arrow is the straight and narrow.

Our four part program provides you with expert-designed, predictive and preventive control tools for infants, toddlers, preteens and adolescents. Our products deliver healthy fun along with positive surveillance experiences in preparation for later life. All our products are field tested on animals, prisoners, third-world persons, someone else's children and computer simulators, and are guaranteed to give your little nippers the skills and tools they need to thrive in an advanced consumer society, filled with unprecedented risks.

Parents may enrol in individual programs or receive a special package deal when signing up for all four (recommended). A lot of money can be saved that way. But it's your call. No pressure on our end. Beyond helping you to cover all the bases, the full package offers free access to our artificial intelligence virtual psychologist (avoiding the wait, violations of confidentiality and embarrassment over having to reveal family problems to a warm blooded outsider).

With our method there is no need for threats or punishments. Kids need to know that you are there because you care and that you are there even when you are not. With a spoonful of sugar, safety and security can become a seamless part of everyday childhood experience. We can have it all and just be happy. Look at the wonderful example of Disney World where guards inside of Mickey Mouse and Donald Duck costumes roam the grounds making kids smile even as they are protecting them.

Some call it spying. Some call it overprotection. We at PISHI call it caring and responsibility. The horrors of delegating control to an overly intrusive, distant government of power hungry, anonymous, lockstep bureaucrats are all too well known. We emphasize the opposite: local surveillance by the loving family. What starts in the family stays in the family. We are family.

The world is not what it was. The waters are filled with sharks. The earth roils with vipers disguised as lowly worms. We can debate about whether (or when) it is ok to read a child's diary kept in a drawer. But once that diary goes out on the Internet the debate is over. It's a whole new ball game with anonymous lurkers and communicators trying to make the team. Kids have always said and done silly things which are quickly forgotten. But what if in doing these they leave a permanent electronic record? You can smell alcohol on a child's breath, but can you smell designer drugs?

The problems

Sadly we all know the problems of and from youth. We see them everywhere: drugs, drinking, smoking, concupiscence, sex without marriage, sexually transmitted disease, abortion, babies having babies, inappropriate sexual partners, predators online and in your neighbourhood, pornography, missing children, gangs, delinquency, violence, suicide, car accidents, bullying, harassment, bad attitudes, lying to and spying on parents and infecting their computers, cheating on tests, shoplifting, gambling, moodiness, manipulation by, and exposure to degrading, obscene, lewd, filthy, indecent and dirty "music" (played too loudly), television, video games and Internet (chat rooms, blogs, e-mail) communication, tattoos, body

piercing, unnatural hair colours, faces hidden by hoodies, clothes that are too tight, too loose or black, morbid jewellery, obesity, high cholesterol, diabetes, junk foods, stress, aggressive gum chewing, reading below grade level, use of vulgar, demeaning and ungrammatical language, poor consumer choices, credit card abuse, id theft, relativism, lack of true religious belief, radical ideologies and the absence of civic knowledge and virtue.

Whose fault is it?

The facts speak for themselves. Aberrant has become the new normal. Yet mega-meltdown mode is not inevitable! We say NOT ON OUR WATCH (so to speak).

The problems can't be blamed on rampaging hormones (which after all are a historical constant). Rather they reflect an antiquated, misbegotten and disproved psychology that lets parents off the hook in the name of permissiveness, experimentation and belief in the therapeutic effects of being burned. But there is no need to learn anything when mistakes are not made. The id in the kid needs a lid. It will never stop on its own.

The wilting petals of the boomer flower children have corroded the vase. For decades so-called progressive psychologists have advised parents about the importance of letting go. Our message is the opposite –hold on, see through and see it through. Of course many parents ignore children not out of philosophy, but because they are so busy and they don't know there are tools to help. Given the demands on parents and the many pulls away from the home, watching children in the traditional, labor intensive way is old-fashioned and impractical. With modern tools of scientific prediction and prevention, relying on traditional surveillance is also irresponsible.

One of our members, a mother who raised seven children, said, “love them, but don't trust them.” Remember how you hid things from your parents? Talk is cheap. Dissimilitude is rampant. Trust can come only from the validation provided by scientific suspicion. We trust because we verify. We verify because we love. Until you test them you can't be sure. Have confidence in the results not the person. Even then, all you can be sure of are yesterday's results and things change. We have to be very measured in what we do. Better to be overseen and under sight than to suffer the consequences of being overlooked.

We must become “One Nation Under Guard” in which security, like charity, begins in the home. Kids need to do their part, feel engaged and identify with the like-minded community beyond the self. Children must be trained in their communal responsibility to watch themselves as well as their peers and to report signs of trouble. As parents, beyond setting good examples, we must structure our children's environment so that they want to do the right things and are unable to do the wrong things. Working together, we can organize the world so that our children (and those who would prey upon them) can not do the wrong thing.

With technology driving on auto-pilot, you can steer clear of fear

One of our consultants, Tom “King” Leer, a famous mathematician who worked at Harvard, M.I.T. and the National Security Agency, put it best: “Be prepared! That's the Boy Scouts' solemn creed, Be prepared! And be clean in word and deed.” In a move we strongly supported the Girl Scouts of the USA in conjunction with the Department of Homeland Security recently created a preparedness patch designed to engage scouts in preparedness for all emergencies. Parents can do no less.

The tried and true expression, “safe not sorry” valorises our widely heralded emphasis on benign suspicion rather than negligent omission. Trouble rushes to those who send it an invitation. Stem the tide. Don't go with the flow. Dare to care! Listen to your children. Help them to reveal not conceal! Kids with nothing to hide get to ride. There are no secrets to safety! How many times have we heard parents lament, “if only I had known...?” Well now you can know.

Children should never be idle at home or in playgrounds, malls or pool halls, nor have uncensored, unobserved and undocumented access to communications media. Unsupervised playtime is dangerous time. We don't let weeds volunteer in our garden but prefer the things we plant. Idle hands are indeed the devil's tools. Children must be kept busy in circumscribed and documented activities with a purpose.

You can't start too early! Consider the fast-tracking, jump-starting, environment-sanitizing technology available to members! Critical brain development occurs during the first five years of life. That scientific finding calls out for immersing the child in structured learning programs. We have special baby software ("lapware") for those 6 months to 3 years which can offer a giggle. This guilt-free technology has it all – you hold the infant, offering that important human touch, and the child can diddle the keyboard (without messing up your work) and see anatomically corrected farm animal friends available for purchase.

Through our products children can acquire the requisite motivation and skills to watch themselves and others and to do their share for society as customers and (eventually) as employees. If our economy is to thrive, they must learn to be eager consumers of the bounty that is rightfully theirs. Through surveillance, the goods and services they desire will be brought to them, rather than wasting time in searches. No need for paper or electricity to bring a flood of general advertisements. Abundant childhood surveillance and communication experiences will produce ideal employees and entertained citizens who cheerfully welcome work monitoring and the new protections government must institute in a threatening global environment. They will be prepared to effectively monitor their progeny as well. Indeed if we do our job well we may eventually put ourselves out of business!

Also on the bright side – if our government were to become less free (and let's face it societies change and empires decline) the PISHI kids would be the best prepared for the new order.

Generous grants from the SBC (Suspicion Breeds Confidence) Corporation and NTHF (The Nothing to Hide Foundation) keep our prices on recommended products and services below market value.* It doesn't cost anything to become a member of PISHI and share in the many protective tools and play-learning toys that guard and educate children.* But in return, we'd like to know a little about you for our files.

We seek your feedback through on-line surveys. We hear you! We offer you and your children (known around our office as "the little pishers") a chance to participate and to make your voice heard. Make some democratic noise! Design the future! Get the attention of concerned merchants, educators and policy makers who, if they are to do their job well, need to know what you think. Stand up and be counted and join a global community of concerned parents with cuddled and coddled kids. After filling out five surveys you qualify for a free designer T-shirt with our logo, a plush toy and an automatic upgrade to our top of the kennel virtual pets.

The information you provide will help us to better serve you with life coaching, parenting advice, timely tips, updates and information on the products you need and new must-haves. We will treat this

* To be an approved PISHI supplier a company must offer the right stuff and indicate support for our mission by donating a percentage of their proceeds. Since there is nothing worse than selling a problem without a solution, this mission includes facilitating rapid awareness of new problems, technologies and services and assisting in the transfer of technology solutions to families, the government and critical infrastructure marketplaces. Any corporate proceeds are used only for operating expenses. Each company undergoes thorough screening before they qualify to provide benefits to PISHI members. Continuous monitoring of customer service and product performance helps us maintain quality assurance and high standards.

* We welcome partnerships with organizations, merchants and media outlets that share our goals. If you are interested in becoming a Friend of PISHI, a Strategic Partner or in advertising in our newsletter ROC (aka The Rod of Correction) please contact us via the form on the web page. Point of view or opinions expressed above are those of PISHI, and do not necessarily represent the official position or policies of the U.S. government or our sponsors (but they are not far off).

information as if it were our own. It will stay within the trusted family of companies and non-profits sharing our goals.

Finally, please note that because of our buying power we are able to offer highly competitive prices. But this is not about money. It is about love and the future of civilization. Your purchase shows the love. Together we can make the world a better place – one child at a time!

The tools

“They’re going to slap that baby’s bottom, then slip an ID chip in their neck or between their shoulders so you can keep track of your kid.”

Scott McNealy, Sun Microsystems CEO

As noted, the PISHI statement is fictional but it is factual. It is a composite based on the claims that surveillance entrepreneurs (whether in social movements or commerce) make in marketing their products. This section considers some of the many technologies available to meet these concerns. The emphasis is on parents and the state as surveillance agents and data consumers, with brief mention of the role of commercial interests such as providers of online content for children and marketers targeting youth. We examine examples of the major forms of surveillance tools for children. Our review illustrates, but hardly exhausts, the range of tools, or the multiplicity of similar tools within types. We have focused on representative forms where the surveillance definition is clear and involves physical activity beyond video games or books.

Children as subjects of surveillance

Matching and monitoring from the beginning

The watchful parent can make use of a number of technologies before conception to ensure that his or her partner will be an appropriate match. Computerized dating services use software to ensure that long term relationships are no longer left to accidents of contiguity, or the attractions of risk taking. Instead, the successful match is determined by scientific search and analysis. At eHarmony (2009), for example, a “patented Compatibility Matching System®” profiles potential partners on the basis of 29 personality Dimensions™ (including “family goals”) that are “scientifically-based predictors of long-term relationship success.” This system is based (as of 2009) on 35 years of clinical experience and “rigorous” research to determine those qualities that are statistically associated with successful relationships. e-Harmony’s “scientifically proven system” enables the service to predict “happier, healthier long-term relationships”.

Genetic dating services analyze mouth swabs to identify matches based on genetic compatibility. For example, ScientificMatch.com (2009b) uses the “science of love” to find “the most perfect matches possible.” The advertised benefits include higher rates of fertility and “a greater chance of having healthier children with more robust immune [sic].” GenePartner has “isolated the compatibility gene” (Gene Partner 2009a); it tells its clients that choosing a mate with a matching genetic code will lower the risk of miscarriage and allow “our offspring [to] prosper” (Gene Partner 2009b).

However, as ScientificMatch (2009a) warns, successful relationships also depend on social compatibility and trustworthiness. To “promote honesty”, the company verifies the age, marital status and bankruptcy history of all its members. It also conducts detailed background checks and bans identified felons. Individuals currently in relationships are encouraged to use a number of similar services to reduce the risk of committing to an unreliable partner (see Andrejevic 2005). “If you date, investigate” advises Datesmart.com (2009), a company offering “Private Investigations and Confidential Background Verification Dedicated to Personal Relationships” to help people find out the “truth” about their partners. Its web site warns that, “If that new relationship you’re in seems a little too perfect, you’re probably

right,” and promises to help people find out “who’s lying next to you [sic]”. Full confidence at the outset that a partner is who he or she claims to be is needed for a life long relationship. That of course does not obviate the need for subsequent checking.

Once the partners decide to have a child and conception occurs, embryo monitoring can identify genetic diseases such as Down syndrome, trisomy 18 or an open neural tube defect. Health authorities emphasize the importance of early monitoring: “The earlier a woman sees her health care provider, the more options she will have” (BC Prenatal Screening Program 2009b). Mothers who receive a positive result are given information regarding options, including having an abortion, putting the baby up for adoption after it is born or making arrangements to care for a special needs child. Although the decision to intervene is “highly personal,” mothers are not alone: “Your health care provider, your genetic counsellor and your family will help you make a decision about what’s right for you and your pregnancy” (BC Prenatal Screening Program 2009a).

Expectant parents can also avail themselves of genetic testing to determine the gender. Baby Gender Mentor (2009) using a home blood letting kit offers parents “A Total Advantage … [a] safe, quick and easy” way to determine if they are having a boy or a girl.

Minding the kids: Surveillance of infants and toddlers

Once the baby is born, two streams of surveillance tools target the young child. Governments continue to exhibit interest in deviations from the norm – whether genetic or behavioural – while parents are encouraged to buy surveillance technologies to keep the child “safe”.

Newborns are screened for dozens of genetic disorders for early diagnosis and potential treatment. A number of states have created databases, without parental consent or knowledge, for storing blood samples routinely taken at birth for neo-natal PKU screening. While identifying information is stripped from the samples, in principle it could be tied back to a given individual (Stein 2009). In South Carolina 30 expectant mothers receiving prenatal services were even arrested as a result of non-consensual drug testing done on samples gathered for other purposes. The Supreme Court found this unconstitutional (Campbell 2006; *Ferguson v. City of Charleston* 2001).

Parents are required to disclose a great deal of information when they apply for a birth certificate. In contrast to the early 1900s, when a birth certificate recorded not much more than child and parents names and date and place of birth, the modern birth certificate application collects several hundred pieces of information, including the parents’ race, the child’s pulse, respiration and activity rates at one and five minutes after birth, 12 medical risk factors, 16 possible complications of labour/delivery, and 33 abnormalities (Sweeney 2001). Given an interest in “risk factors” birth certificates now require information about the mother’s alcohol and cigarette use during pregnancy and the start date of prenatal medical care.¹

Risk management is similarly a motivating factor behind the United Kingdom’s national database for children (BBC 2009). The database was created after a child was murdered by her guardians in spite of the fact that authorities knew she was a child at risk. Britain now tracks all of its 11 million children. The information collected includes home address, contact information for both parents, doctor’s information, school records and information about the child held by social services. The data is periodically reviewed for indications that the child might be at risk and if so, child protection agents are notified. An earlier

¹ A detailed discussion of risk is beyond the scope of this paper; however, risk is frequently cited as a reason to institute surveillance of children. The relatively small magnitude of many risks can be overwhelmed by the imperative to keep children safe. This approach frequently under-estimates or ignores the possibility that the intervention may harm the child, and tends to collapse deviations from an assumed normal into “risks” that must be managed.

version of the database identified “potential criminals” as young as three years of age who exhibited “cheekiness, minor vandalism and causing nuisances”; after a child was identified as such, he or she was monitored at school and on the street (Garrett 2004).²

There is a popular conception that an estimated ten per cent of fathers are “deceived” about the paternity of the children they are raising. According to Anderson (2006) the actual number is closer to two per cent. Whatever the exact figure, concerned parties can use commercial services to determine paternity or maternity with “99.9999” per cent accuracy (easyDNA UK 2009). The test can be conducted with or without the cooperation of both parents, for “medical, legal or personal reasons” (Genetrack Biolabs 2009). Beyond mere curiosity, such information can permit the non-responsible adult male to avoid the legal responsibility for raising a child or the biological father to be identified.

Once the child is home, a plethora of surveillance tools are available to keep a child “safe,” as well as to promote parental convenience and freedom. Consider the advertisement for baby monitors on TargetWoman (2009): “A new mom cannot stop worrying about the troubles that the newborn will face even if she is away for a few minutes.” Safety 1st tells prospective purchasers that “This silent watchman gives you piece of mind every moment you need it” (Crib Source 2009). Babysense says that its Infant Movement Monitor is “A must for any parent, grandparent or day-care provider” delivering “Inexpensive peace of mind!” (Health Check Systems 2009).

That peace of mind is delivered through the capacity for constant monitoring of an infant’s image, sounds, breathing and/or movement. It is this seamless surveillance that promises “the most comforting feeling ... being able to see your baby snug and safe” (BabyMonitor.com 2009a). A number of monitors come equipped with infrared night vision so the parents “can see baby in the dark,” and the technical capabilities of audio and video components are so advanced, “it’s practically like peering over the crib rail.”

Surveillance and related communication are offered as tools of responsible parenting and convenience. Parents can “care” for the child without their anachronistic physical presence. For example, BabyMonitor.com (BabyMonitor.com 2009b) says, “Baby monitors give parents the freedom to sleep in a separate room at night or do chores during the day” and Graco tells parents that purchasing a monitor “means you can enjoy dinner on the deck or movies in the basement while still keeping an eye and ear on baby” (Babies R Us 2009). If the baby does need you, monitors enable you to respond remotely by talking through a microphone, or flipping a switch to play soothing music to lull the baby. Similar functionality on Japanese smart toilets allows a parent to record and play a message encouraging their child’s toilet behaviour without having to accompany the child to the bathroom (live two-way communication can easily be imagined as well). Some smart toilet models sense the identity of the user (through weight and other sensors embedded in the seat) and can be pre-set to automatically turn on the message from mommy. Automated chemical analysis of urine is also possible (perhaps a feature of interest for parents of teenagers).

Surveillance products can also help protect against harm from external dangers that might come into the home. The creator of a line of RFID-enabled infant pajamas was motivated to create an electronic fence around sleeping children because, “You look at these kids and think, ‘I would do everything to protect them’” (Sullivan 2009). Parents who buy the infant sleepwear can wire their house with RFID readers so, in the event a predator breaks into the house and tries to remove the baby, the monitors will sound an alarm. The sleepwear comes with an optional SmartWear database which stores photographs of the child and other “vital information” for parents to give to police if their child is kidnapped. The database is

² President Nixon explored (but did not act upon) a proposal by his personal physician to scan pre-school children for criminal tendencies.

linked to police computers and the Amber Alert system so the information can be transmitted “within seconds”.

Under development is an RFID tag that works with both an in-house monitoring and alarm system and the retailer’s supply-chain tracking system. Privacy concerns are dismissed because the tag is not linked to the child’s name and the parents control both the tracking system at home and the information that is collected by the database.

Marketing material for nanny cams also emphasizes the need to protect the child from harmful others, even supposedly trusted caretakers. Prospective customers are encouraged to “Protect your child: find out how your nanny treats your child” (MySpyCam 2009). A testimonial on MySpyCam.com reflects this: “Manny” tells a “shocking” story about his nephew’s seizures being linked to nanny abuse that was only discovered when he installed a nanny cam. The abuse, harassment and torment he saw “horrified” him, but he “became a hero to my nephew and family” when the nanny cam evidence forced the “evil nanny” to leave.

On the move: Electronic fences and watchdogs

Once the child is old enough to leave the house, the number of potential dangers multiplies, and there are accordingly a number of tools to track the child’s location to keep him safe. The Bladerunner jacket, for example, has a battery-operated device embedded in the seams of the jacket that tracks a child’s position anywhere in the world to within a four meter radius; by interacting with Google maps, it is able to send updates every 10 seconds to the parent’s computer, cell phone or personal digital device pinpointing the child’s location (Ubergizmo 2007). The Wherify Wristwatch offers a similar GPS tracking device installed in a child’s wristwatch. The watch is locked to the child’s wrist to prevent loss or unwanted removal. There is a remote unlock feature allowing the “watchful” parent to govern when the child can take off the watch (e.g., for swimming). If the watch is lost or stolen the parent can locate it.

Personal GPS devices can be inserted into a child’s backpack or pocket to help “Keep a Watchful Eye on Your Wandering Child” (BrickHouse 2009a). Some, like Loc8or Plus, allow parents to set “safety zones”; if your child leaves the pre-selected radius, the device sets off an alarm so the parent is alerted. Devices can also include “panic tags” the child can use to “hit the panic button” when the child wants to “[call] for assistance” (ChildLOCATOR.com 2009), and automatic “locates” called “breadcrumbs” which “ensure your child arrives safely” as she goes about her day³ (BrickHouse 2009a). Kiditel can even predict what route children are expected to take based on where they have been (INSTA GPS 2008).

Cell phone companies also offer products and features to track and control children’s physical location. Sprint Family Locator’s Safety ChecksSM service will automatically notify parents when children arrive at “school on time or at home by curfew.” Parents “never need to ‘bother’ [the child] again, but will always know where they are. Nothing is more comforting than knowing where a child is when you need to” (Sprint 2009a). With Kajeet, “the cell phone service made for kids,” parents can remotely turn off their child’s phone, “like off during math class,” and block calls and texts from “people you don’t want”. They can also arrange for their own calls to their children “to get through no matter what” (Kajeet 2009).

Parents can also piggy back on school surveillance systems to check up on their children throughout the school day. RFID-enabled school uniforms in Japan, California and the United Kingdom allow both parents and schools to track a child as she goes from class to class, often replacing the taking of

³ Some devices will beep when a child arrives at a pre-determined location. Others will send a message to a computer or cell phone at regular intervals showing the child’s location on a map. However unless a chip is embedded in the child or otherwise uses a biometric, what it actually shows is the location of the transmitting device. This permits spoofing by nefarious others or a mischievous child.

attendance (Newton 2007; Williams 2007). My Nutrikids.com is linked with the school cafeteria payment system, allowing parents to both pre-pay school lunches and monitor exactly what their children are eating (MyNutriKids.com 2009). GradeSpeed is a web-based system for teachers and school administrators that enables parents to go online and see exactly what homework has been assigned each day and review their child's ongoing test results (GradeSpeed 2009).

Surveillance creep

Once surveillance systems are in place, schools often expand their use to monitor and control student behaviour, with benefits claimed for both parents and teachers. For example, fingerprint and iris scanners, originally installed to let children pay for lunch in the school cafeteria or take out books from the school library, are now being used in some schools to reduce truancy (Mail Online 2007). School bus cameras both "improve behaviour and overall safety" and "offer reassurance to youngsters and their parents" who are worried about bullying and abusive behaviour (Encyclopedia.com 2008). Since "Vandalism, abusive behaviour and bullying are unfortunately common problems on school transport vehicles - with the number of reported incidents increasing rapidly over the last few years," cameras are said to deter potential bullies as well as provide evidence that "often leads to temporary or permanent exclusion of [problem] pupils from use of school transport" (and often no doubt from the school) (activcameras 2009).⁴

Peace of mind in a dangerous world

All of these devices are designed to give "parents peace of mind in a way that simply has not been possible before" (BrickHouse 2009a). BrickHouse Security reminds parents that, "Safety and security are paramount concerns in today's uncertain world. Keeping track of ... children is on everyone's mind" (ChildLOCATOR.com 2009).

Promotional material emphasizes the sudden risks to children and suggests that these are more pronounced than previously. Manufacturers pepper their sites with factoids about missing children: "It's Not You. All Children Wander; 2,185 Go Missing Every Day." Although "It's a truly sad commentary on society that there's even a need for a tracking system like this, ... given the tragic fates of several young children in California, Oregon, Utah, and other locations over the past couple of years, the need for a device like this is beyond any doubt. Here's all you need to know: [Monitoring] may save the life of your little one" (BrickHouse 2009a).

Responsible parents should be fearful, at least until they purchase the protective product: "We all know what it's like to turn your head for a fraction of a second and lose sight of your child" (*ibid*). That momentary anxiety is normalized as a persistent fear. Kiditel informs parents it is normal to worry when the children are out of their sight (INSTA GPS 2008).

As children mature and are exposed to more risks, there are a number of tools to protect them from their own bad judgment and evil influences. Alltrack USA not only lets parents "see your teen's car from anywhere in the world, including while at home, at work, on a business trip or on vacation"; the black box installed under the dashboard also reports the vehicle's speed, hard accelerations, and braking time. Parents can remotely disable the starter and lock or unlock the doors (Alltrack USA 2009c). "It can even optionally beep at the driver if he/she surpasses speed, acceleration and braking levels that YOU define. Wow!" (Alltrack USA 2009a). The Teen Safe Driver Program places a camera behind the rear view mirror that records the view inside and outside the car 10 seconds before and after erratic movements. The video is reviewed by staff at DriveCam's Event Analysis Centre where experts provide parents with coaching tips. Parents also receive a weekly driving report that compares their child's score to that of other teens in the program (TeenSafe Driver Program 2009).

⁴ In an irony of social control, this may simply create a new problem as students are now idle in the streets.

Parents who worry that their children are sexually active can “Find Out The Truth With The Semen Spy!” Since, “In today’s day and age it’s hard for parents to keep a constant eye on their children,” children can sometimes “get involved in dangerous activities or with the wrong people without their parents consent” (BrickHouse 2009b) After all, “one of the most harmful” risks a child can take is “their engagement of (sic) teen sexual activities” (BrickHouse 2009c). Luckily, parents can “collect evidence for an accurate semen test,” “create undeniable evidence,” and “Stay Informed By Testing Sexual Activity Instantly” This involves swabbing the child’s undergarments with a chemical substance that, within 10 seconds, turns colour if there is any PSA (protein specific antigen, one of the major proteins found in seminal fluid) on the garment. In spite of the law enforcement language of the marketing material, the company assures parents that using the Semen Spy will enable them to “prove sexual activity so you can open up an honest dialogue with your child or teen” (BrickHouse 2009b).⁵

A more low-tech preventive means “chaste couture” (waitwear 2009), speaks for itself:



Figure 1: No Trespassing



Figure 2: Virginity Rules



Figure 3: Generation Pure

This organization promotes abstinence through a variety of clothes and other products including messaged pajamas and underwear.⁶

CheckMate has refitted a field rape kit used by law enforcements agencies for home use. According to BrickHouse Security, “it’s become the rage with parents who aren’t sure when to have that conversation about sex with their kids” (BrickHouse 2009c). Parents who want to have a conversation about drug use

⁵ These after the fact means contrast with traditional chastity belts and chemical and literal castration. There is no equivalent apparel for males saying, “my mother is watching”.

⁶ These real products contrast with spoofs that in the current climate are taken to be real. Consider an ad for “forget-me-not panties™”, a product promising undergarments with GPS and heat and heart rate monitors “embedded into a piece of fabric so seamlessly she will never know it’s there.” The ad generates suspicion and responsibility in creating the need for the product:

Ever worry about your wife cheating? Want to know where your daughter is late at night? Need to know when your girlfriend’s temperature is rising? ... forget-me-not panties will help protect the women in your life! [The information can be sent] via satellite, to your cell phone, PDA, and PC simultaneously! Use our patented mapping system, pantyMap®, to find the exact location of your loved one 24 hours a day (forget-me-not panties 2009).

Within a very short time after the spoof ad was posted, the web page was visited over a million times, thousands sought to purchase it and hundreds of distributor requests were received. There was extensive press coverage, 90% of which treated it as real. The page was done as an art project and cost \$18 to set up.

can use similar kits to detect traces of marijuana, hashish, cocaine, crack, amphetamines, methamphetamines, and heroin (BrickHouse 2009b).

One at home drug testing kit uses a small vacuum cleaner-like device that samples the air around a child's desk in search of tell-tale drug molecules; another uses a drug-identifying spray on personal possessions such as a wallet or books to identify drug residue. But while these may indicate the presence of drugs, they don't reveal how they got there. An innocent child's air or property might have been contaminated by someone else. Urine drug tests, whether done with the child's knowledge or not, is another option. A variety of at home urine test kits are available.

Firstcheckfamily.com (2009b) reports that it can "provide you results in 5 minutes and most products are over 99% accurate." It can identify five prescription and seven illicit drugs and "is committed to be the leader in providing the highest quality home diagnostic kits to assist people in living safer and healthier lives ... [and] to give you the answers you need in the privacy of your own home." Satisfied customers report, "this lets my kids know I am serious about drug prevention" and "by setting the box on the table, our family had the best 'drug talk' ever."

The community-minded company "is a proud sponsor and supporter of Project 7th Grade," a national drug prevention program "aimed at parents of middle school students. The project "introduced the concept of home drug testing as a prevention tool for parents and continues to educate parents about how to create a proactive family drug prevention plan" (First Check 2009a).

The rationale for the program is clear:

Parents often have the 'not my kid' mentality, thinking, 'My kid would never try drugs.' The truth is, parents don't generally know their kids have tried or have become addicted to drugs until the kids are two years into the addictive behaviour. By educating parents of middle school students we can work together to protect children. Middle school students are more likely to still respect and listen to their parents, at least more often than a high school student (First Check 2009a).

A part of this working together is to present programs to "educate parents and teachers about current drug trends, terminology, and paraphernalia. At the end of the presentation each attendee is offered a complimentary First Check Home Drug Test kit."⁷

Online fears

The fear that children who are unwatched might make bad decisions is particularly acute in virtual spaces. Online fences, like their GPS counterparts, therefore limit where young people can go and keep a close watch on what they say and do. The Parental Controls in Verizon's Internet Security Suite are typical. The software automatically blocks over 70 million web sites that Verizon has identified as "questionable," and parents can block specific sites as well.⁸ The Suite creates a permanent log of the child's online activities, so parents can see exactly what the child is doing, including whether or not the child tries to access blocked material. Parents can also use the software to schedule their child's time online, by automatically controlling the length of sessions and restricting access during preset times (Verizon 2009).

⁷ Some observers may see something disingenuous about this high mindedness since self testing by the person tested can also be a means of beating drug tests via experimentation. It would be interesting to know what percentage of such company's business comes from concerned parents and what from neutralizers.

⁸ Netcraft (2009) estimates that, as of October 2008, there were 182 million sites on the Web. Verizon is therefore censoring approximately 39% of all web sites.

Parental monitoring software is marketed as essential because “The Internet Really Is A Dangerous Place For Your Child” (PC Tatteltale 2009). In addition to the questionable content they may access, “Studies have shown that one in five children have received some type of sexual related solicitation online. With an 87% growth rate of children online and not being monitored, now is the best time to begin a proactive stance in your children’s lives to prevent your children from being witness to the virtually infinite number of dangers online.” Luckily, there are “many tools out there that can keep you, the parent in control” (BrickHouse 2009c). The message from Sentry at Home: “Your Child Online = Danger. Protect Them Now” (Sentry Parental Controls 2009).

Failing to monitor the child’s computer “is just asking for trouble” because “No matter how much you trust your child to do the right thing, there are just too many peer pressures and other dangers lurking in cyberspace.” With parental monitoring software, “you can relax knowing that you have a ‘secret back door’ that you can use to see exactly what they see, and what they are doing online. Do NOT risk your child becoming a potential victim. Take Control of Your Child’s Online Experiences And Keep Them Safe” (PC Tatteltale 2009).

Tracking – online and offline – is presented as an essential part of effective and loving parenting. The “sensible, safety-conscious parent” will protect their child from the “horrors” of the Internet through constant monitoring. After all, “You don’t let your children decorate their rooms with violent or pornographic images … You certainly wouldn’t approve of them bringing home friends who call themselves SuicideLullaby or PeeStandingUp. So why would you let them get away with this and more on MySpace?” (ParentalSoftware.org 2009).

In this new world software scans the child’s instant messages, wall posts, emails, comments and profile information to detect – with an “accuracy rating of 98.4%” (imsafer 2009b) – dangers such as grooming by paedophiles, bullying and self-harm suicide conversations. Parents “don’t have to worry about it” (imsafer 2009a) unless they receive an email indicating that the software has detected “an inappropriate relationship” (imsafer 2009c).

In the real world, the question is, “How much do you love your child? More than the dog you’re careful to keep on a leash every time you take him outside for a walk? I’ll bet you do.” The solution? “[A] snazzy-looking digital wristwatch for your child that just happens to contain a satellite homing device so you can pinpoint junior’s whereabouts at any given moment” (BrickHouse 2009a). Alltrack USA (2009b) concludes:

The bottom line is that your teenager’s life and safety is priceless! Leave Nothing To Chance!! Know everything, and I mean Everything, about your [teen] … ! Better safe than sorry. Your teenager doesn’t have the wisdom of an adult yet. That’s why they need your close supervision and attention. These products help you do your job of being a parent to keep your [teen] … safe and injury-free.

Messages about the child’s safety are mixed in with messages about the convenience of knowing where your “things” are. The child is just one of a plethora of “tagged items” that can be managed through technology: “Loc8or Plus is the solution you’ve been waiting for! This fantastic handled device allows you to track your personal property, pets and children all with one, simple and easy to use device that you can take with you anywhere. With Alert mode, you can stop losing things in the first place!” (ChildLOCATOR.com 2009).

Parents can also be relieved of the burden of interacting with their children; cell phone monitoring means parents can be “free from the constant cell phones calls [that] used to connect families with constant calls

all day long,” and instead “quietly keep track of them throughout the day” from the convenience of their home or office (Sprint 2009b).

Spying as an essential parenting tool

Spying becomes an enhanced parenting tool. In this new world, marketing material soberly reminds parents of their children’s tendency to lie and hide bad behaviour – a presumed universal truth made more worrying by the availability of new technologies that children use:

Without Parental monitoring software you have no way of knowing what your kids do or where they go when they’re online. And even if they are not supposed to, we all know that your child WILL go online unsupervised if they think that no one will find out! (PC Tatteltale 2009).

It’s no secret that teens drive one way when parents are in the car versus when they’re not. … When parents urge their teen to be careful driving, they reply “yeah, yeah, yeah” (Alltrack USA 2009b).

We are faced with the dilemma that our children know more about the computer than we do and continuously find ways around parental control software… Sentry Parental Controls’ products are designed from the ground up to prevent your child from disabling any of its features, in fact your child won’t even know they are being monitored (Sentry Parental Controls 2009).

The “first step for parents is to get over their fear of monitoring [their children]. Parents must learn how to monitor” (SpyOnYourKids 2009). Then, you can choose to monitor in one of “two different ways. Either you tell your children that you’re monitoring [them], which means that they’re likely to be much more cautious and sensible – essentially, it’ll be as if you’re standing next to them, asking ‘should you really be doing that?’⁹ The other option is to [monitor] in total stealth mode, and find out exactly what your children do and who they talk to when you’re not around” (ParentalSoftware.org 2009).

SpyMasterTools asks:

Is your DAUGHTER wasting her time on that NO GOOD PUNK?

Are your FAMILY members wasting too many unnecessary minutes on your PHONE CONTRACT?

Are your children TEXTING or TALKING on the phone when they should be doing their homework or household chores? (SPY Master Tools 2009).

Now parents can get the answers they want. Using SnoopStick, a parent can watch their child’s computer screen, in real time, from anywhere on the Web. Its components “are completely hidden, and there are no telltale signs that the computer is being monitored” (CYBERSITTER 2009a). “You can also remotely cut off Internet access, log off all users, or shut down the computer. There’s no revealing message when you cut off the Internet—it just looks like a network problem” (CYBERSITTER 2009b). PCWebWatcher “redefines Spy Software … [Its] Unparalleled Invisibility Technology … doesn’t appear ANYWHERE. No one will ever know it’s there” (WebWATCHER 2009). Alltrack USA reassures parents who ask, “Can it be hidden? – Yes, it’s usually completely out of sight behind the dashboard” (Alltrack USA 2009b). And with Spy Phone, you can turn a cell phone into a surreptitious listening device: “you will be able to dial in

⁹ In that sentence “cautions” presumably refers to careful and conforming but it also, perhaps unwittingly conveys the accurate message that the child can become alert to the need to hide or otherwise defeat the oversight.

and listen to the surrounding sounds and conversations coming from around the target phone from ANYWHERE in the world without any indication of a connected call" (The Spy Phone.com 2009).

A satisfied customer reports:

My teenage daughters were posting ‘questionable’ pictures on their My Space accounts, and hiding them so that I did not see them. One of them even made a video and posted it. Using PC Tattletale I immediately found out and made them take all that stuff off the internet. They still have no idea how I know, because I use the stealth setting on PC Tattletale. It is an awesome tool! (PC Tattletale 2009).

Now that there is a multiplicity of tools to watch your child, “It’s OK to Spy on Your Kids! (SpyOnYourKids 2009).

Playing for the future: Simulations, spy toys, children as informers, on-line playgrounds

Simulations

Beyond providing surveillance of children as in the above, the topic involves children playing games and reporting on themselves and others to commercial interests or the state.

Secrecy and discovery are central to many forms of children’s play. Discovering and sharing secrets is fun. Games available in the culture such as peek-a-boo, hide and seek and Easter egg and treasure hunts stay local. These games are an end in themselves and fit the classic understanding of play (Goldstein, Buckingham & Brougère 2004, 3). They contrast with commercially sponsored computer play and the use of search technologies to be discussed.

Play may involve simulated activity imitating adult behaviour. With Scan It ® the child plays at being an agent. This “Approved Certified Tested Toy” detects metal objects and simulates an X-ray scan as it glides articles over its metal detector path.¹⁰ It beeps and lights up when metallic items are present.

It is designed to help “children become acclimated with airport public space security.” The “healthy fun” it provides also serves to generate “education and awareness of the security measures that people face in real life” (Wizard Industries 2009). Additional projects and education on airport and public spaces security is available at a child-friendly web page: OperationCheckpoint.com (2009).

In 1997 President Clinton required government agencies to add child friendly learning and play material to their websites. Beyond history, safety tips, cartoons and talking animals, these offer mazes, puzzles, code breaking, tests on knowledge and pictures to colour.

Anthropomorphic dogs play a major role on these pages. The National Security Agency (2009a) offers Decipher Dog. The Federal Bureau of Investigation (2009a) takes children on a field trip with bomb-sniffing black Labs Darrel and Shirley. The Central Intelligence Agency introduced “Ace Photo Pigeon” Harry Recon and his twin sister Aerial in 2001 (cartome.org 2009), while the National Reconnaissance Office’s NRO Jr. site (2009) has moved from using an extraterrestrial called Whirly Lizard to a satellite named Ollie. An eagle called CSS Sam heads Operation: Dit-Dah, a code breaking game (National Security Agency 2009b).

¹⁰ The certification refers to “No Lead Paint and No Small Parts.” There is no testing or certification for whether it creates trusting, well informed, secure and relaxed children or suspicious, duped, insecure and fearful children.

The FBI site “is designed for children and their parents to learn more about the FBI through age-appropriate games, tips, stories and interactivities. We also introduce you to our working dogs and show how FBI special agents and analysts investigate cases”¹¹ (Federal Bureau of Investigation 2009a). Children (5-11 years of age) can pretend to be agents and are asked “can you help Special Agent Bobby Bureau get in disguise for his undercover assignment? He’s depending on you ... Help Bobby Bureau Go Undercover” (Federal Bureau of Investigation 2009b).

Older children (12-18 years of age) can take the Special Agent Challenge:

This is the Special Agent (SA) Challenge. Presently, you’re a New Agent. As a New Agent you are still training at the FBI Academy located in the Marine Corps Base in Quantico, Virginia. You are taking part in 16 weeks of intensive training that includes physical training, firearms, and classroom instruction. You hope to be an FBI Agent in the Anchorage, Alaska Field Office. To be an Agent, you need to know not only FBI procedures and what is being investigated now, but past cases and FBI history. Search our website and increase your knowledge of the FBI. Your position in the FBI as a Special Agent will depend on how well you do!

Each search task is worth one point. The more points you earn, the higher your position at the FBI will be! Print out this page to keep track of the questions while you search our website (Federal Bureau of Investigation 2009c).

The child-friendly sites of national security and law enforcement agencies are descriptive. They offer an idealized and simplistic view of their organization.¹² However their tone contrasts markedly with the fear-mongering of some of those selling surveillance goods and services. The emphasis is on educating children rather than directly cultivating them as sources of information. However, there are links to pages to “Submit a Crime Tip”, “Report an Internet Crime” and “submit an anonymous tip online” although no guidance about how to use these or how reporting can be misused is offered.

Spy toys

Play may also involve real spy tools. “Toy” listening devices or children serving as informers contrast with the pretend measures. Most traditional games have a logic and rules of discovery. While secrecy and deception are often present, players are aware of this and seek to protect their own information and to discover that of others. They act as both agents and subjects. Surveillance is reciprocal and symmetrical. In contrast, with the solitary play of spy toys, surveillance is non-reciprocal and can involve unwitting subjects. In extending the senses these toys are examples of the new surveillance.

“Super Ears” – an early example – can “help you detect even the slightest sounds! Slip on the headset and aim the dish; even if your target is far away, you’ll hear every rustle, every footstep, every breath, every word!” A stethoscope-like device permits hearing “quiet breathing, through a concrete wall a foot thick” and with “fidelity good enough to record.” Consider the play and other possibilities with a Dyna-Mike Transmitter: smaller than a quarter, it “will transmit every sound in a room to an FM radio tuned to the proper frequency” up to two miles away. A voice-activated miniature tape recorder that can be slipped into a pocket, a drawer or under the bed offer other possibilities (Marx 1988).

¹¹ Shirley the talking dogs says, “So, you’ve been thinking about working for the FBI? When I was a small pup, I wanted to work for the FBI, too. I want you to meet some of the people who work with me” (Federal Bureau of Investigation 2009).

¹² There is no critical discussion of J. Edgar Hoover, the FBI’s role in COINTEL or Watergate, NSA eavesdropping, DNA or the polygraph, nor consideration of what is unique about policing in a democratic society. Kids are told “when someone breaks a law we call it a crime” without distinguishing between types of crime, civil and criminal offences and legislative, judicial and regulatory rules or considering the role of discretion and non-legal factors in law enforcement (Federal Bureau of Investigation 2009d).

The “SpyChix Micro Surveillance Kit” offers a cornucopia of contrivance – a pocket-sized audio recorder that doubles as a fashion accessory, a sports watch to “synchronize missions” and a compass to “target your mission.” Its’ “Micro Agent Listener” has a microphone that extends around corners, through open windows, or over couches, so children can “still get the information.” The “Mobile Spy Ear” can hear through walls, the “EyeClops Night Vision Infrared Stealth Goggles” can see in the dark, and the “Spy Audio Car” has a microphone hidden in a remote controlled toy car.

“No mission is impossible” with the state of the art equipment sold by “Top Secret Spy Gear”. Along with its “high-tech listening device that lets you hear conversations up to 40 feet away” there are rear-view spy glasses, a secret agent walkie-talkie, monocular with a tripod and invisible ink pen. This comes with a warning about CHOKING HAZARD, but no mention of any SOCIAL HAZARD (toys to grow on 2009).

Children as informers

“Who denounced you?” said Winston. “It was my little daughter … She listened at the keyhole. Heard what I was saying and nipped off to the patrols the very next day. Pretty smart for a nipper of seven, eh? I don’t bear her any grudge for it. In fact I’m proud of her. It shows I brought her up in the right spirit, anyway” (Orwell 1984).

Children learn early that good citizenship in any group involves obeying the rules. They also learn that they have an obligation to report violations and that democratic orders value citizen participation. Siblings are encouraged to look out for each other and for some parents that means reporting misbehaviour.¹³ Children are encouraged to report swearing and bullying on the playground. Hall monitors in grammar schools report on running in the halls.

The same kind of behaviour is encouraged in the online world. For \$5.95 a month Club Penguin, a virtual community, permits young children to customize and interact with penguin characters and chat and play games with other penguins. After the first month they receive an invitation to become a member of the Penguin Secret Agency (P.S.A.) complete with a spyphone, the F.I.S.H. (Factual Informative Spy Book) and the ability to enter HQ. Virtual rewards are offered for good spying. Members are told that “*your duty*” (as an agent) is to report any penguin that says bad words, asks or reveals personal information or is rude, mean or breaks any of the other rules (italics added). Reporting is done by clicking on the penguin’s player card.

¹³ Here information flows from siblings to parents reproduce issues around information flows from the family to the broader society.

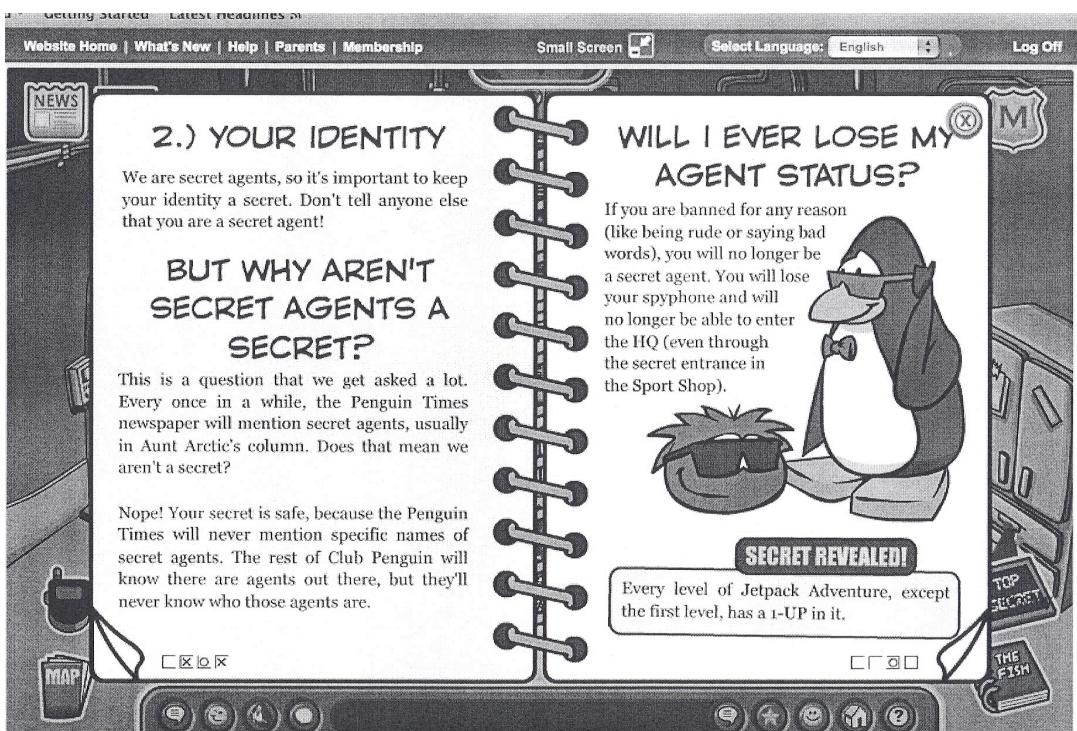


Figure 4: F.I.S.H. Your Identity

Agents also have a duty to “Keep your identity and the identity of the other Secret Agent Penguins a secret” (Club Penguin 2009). As Figure 4 suggests, publicizing the fact that there are secret agents, but keeping their identity secret is intended to create conformity through uncertainty, to catch malefactors in the act and to protect agents from cyber-retribution.

Modern society, in adding loyalty to the state and organizations alongside of what is owed family and kin, generates conflicting pressures. This is taken to an extreme in cases where states (or rigidly doctrinaire sectarian groups) demand absolute loyalty to the organization, even if it means reporting on the violations of family members and friends (often along with self-confessions).¹⁴

The archetypical case is Pavlik Morozov, a 15 year old who is said to have denounced his own father as counter-revolutionary Kulak¹⁵ to the Soviet authorities. He claimed he did it for the revolution. Along with his 9-year-old brother, he reportedly later informed on peasants who were hoarding grain and speaking against the government. Under unclear circumstances the boys were killed. After a politicized trial, four relatives, including his grandmother, were executed for murder.

Pavlik was made into a cult hero of the Pioneers, the communist youth organization. In sacrificing his own father, he was held up as a positive example for Soviet children. Writer Maxim Gorky called for a national monument to the youth and said he, “understood that a relative by blood may also be an enemy of the spirit, and that such a person should not be spared” (Figes 2006: 124).¹⁶

¹⁴ Children of course also learn about the value of loyalty to friends and the group, the meaning of trust and the dangers of betrayal. ‘Tattle tale’ is among the earliest derogatory terms children encounter. However they are unlikely to learn this from commercial games or the state.

¹⁵ Kulak is a vague term referring to privileged peasants. Its elasticity created fear and suspicion among citizens and gave authorities discretion to justify endless investigations.

¹⁶ Most of this article is concerned with parents watching children and where appropriate, reporting on them, although infrequently for political loyalty. However, former British home secretary, John Reid, advised Muslim parents to closely watch

While very different in the goals espoused, there are some functional parallels in the more than 2000 law enforcement American Explorer Scout groups that engage in simulated and real policing efforts. They are attached to units such as the Border Patrol and the Federal Bureau of Investigation. They practice law enforcement techniques and engage in competitions. Consider eight teenage boys and girls (14 and older) responding to (simulated) mayhem in Imperial, California where a distraught gunman has killed several people. They face “tripwire, a thin cloud of poisonous gas and loud shots –BAM! BAM!—fired from behind a flimsy wall. They move quickly, pellet guns drawn and masks affixed. ‘United States Border Patrol! Put your hands up!’” A sheriff’s deputy who leads one group states, “This is about being a true-blooded American guy and girl” (Steinhauer 2009). According to a news account such programs are training thousands of young people in skills used to confront terrorism, illegal immigration, and escalating border violence” (Steinhauer 2009).

Chilling content and national efforts to mobilize informing among family and friends is offensive to democratic sensibilities valuing the borders of civil society and respect for the individual. Yet in times of perceived crisis and moral panics, paler versions of children as informers may appear. This is made easier with efforts to increase citizen reporting.¹⁷

For example, the United States Customs and Border Protection Agency has enlisted children in the fight against smuggling. Customs created a Trading Card program for children aged 5-14 honouring 81 drug sniffing dogs. The trading cards were distributed to schoolchildren at “Detector Dog Demonstrations” as part of a Customs’ anti-drug outreach program. The attractive cards feature color portraits of friendly looking dogs such as “Honey Bee” and “Rocky” surrounded by a border of blue stars. As with sports trading cards, the reverse side offers statistics such as age, weight, year started and some specific to canines such as breed and most notable drug seizure.¹⁸ Alongside is the request to report suspicious activities: “YOU CAN HELP [dog’s name] STOP DRUG SMUGGLING. TO REPORT SUSPICIOUS ACTIVITIES, CALL 1-800-BE-ALERT” (Marx 2009b; Washington Post 1997). The meaning of suspicious activity is undefined.

This contrasts with children as agents in other civic activities involving non-criminal matters such as fire prevention and energy conservation. Gary T. Marx still has his “Junior Fireman” badge and certificate awarded for identifying fire hazards in the homes of family and neighbours.

their children. He said, “There’s no nice way of saying this. These fanatics are looking to groom and brainwash children, including your children, for suicide bombing, grooming them to kill themselves to murder others” (BBC 2006).

¹⁷ Most of these law mobilization efforts are for adults. Federal cabinet agencies, for example, provide hot lines for citizens to report instances of “fraud, abuse and waste” and terrorism. The Federal witness protection program provides relocation and a new identity to informers. Programs such as TIP (Turn In a Pusher) are found in hundreds of communities. Connecticut has a turn-in a poacher program and Seattle encourages motorists to dial 734-HERO to report persons wrongfully driving in expressway lanes reserved for car pools and buses. WeTIP Inc. (2009), a private organization that counts large corporations among its clients, offers a nationwide hot line for reporting suspicious activities that employees are hesitant to report locally.

¹⁸ The dogs are a varied and engaging lot. The smallest is Sparky, a two year old Spaniel hailing on the job in Chicago, Illinois weighing in at 28 ½ pounds. S’Alka, a 100 pound Labrador/Ridgeback working out of Nogales, Arizona is the largest and Elf, a German Shepherd out of Detroit, Michigan is the oldest at 10. Their personal bests vary from “awesome Dawson’s” discovery of \$1,300,000 in drug money to Jack’s discovery of 92 lbs. of heroin in a shipping container filled with 2,500 boxes of soy sauce. Then there was Sparky’s discovery of 20 grams of marijuana in the sock of a passenger arriving from Jamaica –hardly a world-class performance, but then he is only two (Marx 2009b).

**Figure 5:** Climate Cops

A program used in British schools created by German energy company npower, invites children to “save the planet this summer” by becoming “climate cops.” See Figure 5 for an image of a father found guilty of “climate crime” as a result of falling asleep with the TV still on (Booker 2008). For more information and “interactive games and fun downloads,” readers are invited to contact the Climate Cops website (2009). In comic book format this tells children how to identify seven “climate crimes,” such as leaving the TV on standby, putting hot food in a refrigerator or freezer and not using low-energy light bulbs. Identified offences can be recorded in a “climate crime case file.” Resource materials for teachers are provided.

Well meaning programs for children may have unwanted consequences. The emphasis on drug education has seen some cases of children reporting parental drug use to authorities. After hearing a police lecture, a 13-year-old girl turned in her parents who were arrested for possession of cocaine¹⁹ (L.A. Times August 14, 1986). Soon after, an 11-year-old girl who had heard from Project DARE about the dangers of drugs complained to police that her parents were using marijuana. Police went to her home and confiscated a 3½ foot tall marijuana plant (L.A. Times, September 10, 1986).

The controversial use of minors as informants and operatives in criminal cases has accompanied the war on drugs. Consider an Orange County, California boy killed before he turned 18. After an arrest for drugs he agreed to participate in a supervised undercover drug buy. He was killed shortly after that (Wall St. Journal, April 4, 1998). As a result of such cases, many states have legislation restricting the use of minors, although an exception is made for cases involving undercover purchases of cigarettes.

Online playgrounds: More than child’s play

I’m a Barbie girl, in a Barbie world. Life in plastic, it’s fantastic.
 You can brush my hair, undress me everywhere.
 Imagination, life is your creation (Aqua, 1990).

¹⁹ Echoing Gorky, a letter to the editor suggested that the girl “should be proclaimed a national heroine for her accomplishments in our nation’s war against drugs.” Nancy Reagan also reflects Gorky in praising the girl for showing the “right spirit” and said “she must have loved her parents a great deal”. Reminiscent of the Orwell quote that opened this section, the girl’s father said, “I don’t bear her any grudge for it. In fact I’m proud of her. It shows I brought her up in the right spirit, anyway” (L.A. Times, August 26, 1986).

Most of the spy, detection, adventure and protection themes in the toys previously discussed are not connected to a network and children are free to do as they wish (or at least can) with them. No record of their activity is produced or sent to unseen others. This contrasts with online playgrounds, like Barbie.com, Neopets, and Webkinz, which began appearing as soon as the Internet became a mass phenomenon. Some such as Barbie.com are explicitly gender linked.²⁰ Typically, these sites collect information from the children, both directly and indirectly, in order to extend the reach of the marketing messages embedded on the sites. The crux of the system rests on surveillance (Steeves 2006, 2007). The child is watched throughout his or her play, and data is collected about the child's preferences, activities, location,²¹ purchasing habits, communications, and friendships. This information is used for market research purposes and the delivery of contextual or targeted marketing.

Throughout their play, children on these sites are warned of the dangers of talking to people online, who may not be whom they appear to be. However, the child is encouraged to "talk" to the corporation, and the fact the child is subject to constant scrutiny is unproblematised. As with Club Penguin's spy program, the child is encouraged to report suspicious behaviour to the corporation which will then "keep the child safe" (Steeves 2007).

The online playground is attractive to corporations precisely because it opens up the child's private play to surreptitious corporate surveillance, and enables the corporation to interact directly with the child. Children are likely to be blissfully unaware that they are providing marketing data or that the fun they have can be accompanied by sugar coated, disguised, commercial messages tailored to the child. But marketing in this environment is more than the delivery of advertising; it is a way to steer the child's play and embed the brand into the child's sense of identity (*ibid*). The use of virtual spokes-characters and other branded content creates a relationship between the child and the brand, creating increasing levels of intimacy between marketers and children by dissolving the boundaries between content and commerce (Montgomery 2000) and playing and purchasing.

Implications

Contemporary means of surveillance of, and by, children have been described. This section considers some implications, with an emphasis on children in the role of subjects rather than as agents.

Given the breadth of topics covered and the temporal range from birth through adolescence, we can hardly offer a singular or simple conclusion. Rather we raise some basic questions and offer some ideas to rein in the variety and complexity and to help order controversies.

The following related topics are addressed:

1. How can the variety of child surveillance settings be best conceptualized and compared with those in other contexts?
2. How do children respond?
3. What is distinctive about the topic when children and the family are considered? What factors contribute to conflict about the topic, both within the home and as a public policy issue? What are some of the basic disagreements about children and surveillance?
4. What are some of the broader social and policy implications?

²⁰ Gender, ethnicity and class are often correlated with design, use and sale of toys (Williams 2006). The spy, detection, adventure and protection themes in the toys previously discussed traditionally have been more oriented to boys. More recently, a new genre of female "kick-ass" characters have appeared, especially in the gaming world.

²¹ Some sites require postal code or other geographical information when the child registers. Others track by IP address (Steeves 2007).

Some dimensions of childhood surveillance tools

The tools we have reviewed can be organized in a variety of ways to help in thinking about explanation and evaluation. Some of these distinctions reflect inherent material factors, while others depend on policies around the tool. For simplicity of classification the dimensions below are offered as dichotomous:²²

- visible or invisible to subject
- subject aware or not
- extends agent's senses or not
- passive or active (is subject's cooperation needed)
- data recorded or not
- if recorded is record kept or not
- if recorded does it stay local or go onto a network and/or to other institutions
- primary goal(s) discovery, prevention, education, fun
- emphasis on child as a victim or offender, on protecting the child or the society
- emphasis on surveilling the child or those in child's environment or the non-human environment
- emphasis on internal control because of subject's knowledge of the surveillance or of external control
- if external is emphasis on hard engineered forms that literally prevent or on forms that alter cost-benefit ratios for the subject

Children's responses: Neutralization and counter-neutralization

Claims made for the surveillance tools and the behaviour of parents, teachers, and guards as agents have been considered. But how do children respond? Marx (2009) identifies a number of applicable strategies as surveillance subjects, whether adults or children resist control efforts and turn surveillance tools to their own ends and surveillance agents in turn adopt counter-strategies. Consider examples such as code language, using websites that offer anonymity, using clean urine in a drug test and offering false information to a web request.

A number of studies report that children routinely use similar strategies, such as minimizing screens, deleting surfing histories and instant messaging logs, and using slang, to evade surveillance on the part of parents and teachers (Livingstone 2006; Livingstone & Bober 2003, 2004; Media Awareness Network 2004; Hope 2005). Younger children often choose to communicate online rather than face-to-face or on the telephone because it makes it more difficult for parents, siblings and teachers to overhear them (Livingstone & Bober, 2003, 2004). Surveillance entrepreneurs accordingly offer counter-neutralization techniques, such as the teen chat decoders that translate “teen speak” into English (Teen Chat Decoder 2009), in a type of surveillance arms race. Merchants urge parents to spy because of the evasive actions children take.

Children under surveillance may experience it as equivalent to having their pockets picked (Livingstone & Bober, 2003, 2004) or being stalked (Burkell, Steeves & Michetti, 2007). They may complain that monitoring to protect them from the “evils” of the world may be seen as patronizing, and demonstrating a “lack of respect for the abilities of young people to make responsible decisions and choices” (Media Awareness Network 2004).

There is some evidence that children are also increasingly suspicious of the ways in which they are constantly monitored by online corporations. Although they typically “click through” meaningless consent

²² Some are certainly continuous. These are analytic distinctions and they are often entangled in a given empirical case. Nor are they necessarily mutually exclusive. The initial task is to note how these may cluster and to suggest their social implications (e.g. those that have low visibility or can be done remotely offer distinct temptations for abuse and are in need of greater regulation). A more extensive general categorization is in Marx (2002).

options so they can play or chat with friends, many of them lament their lack of ability to go about their business without being watched. As a 15-year-old girl puts it, “Like, if we had a choice to say no, I would choose no. We can’t or else we can’t go on the thing for some of them” (Burkell, Steeves & Micheti, 2007, 14). This lack of options can translate into a general distrust of the corporations that house the sites they visit. As a 17-year-old boy said, “Well, they’re taking advantage of you, that your friends have a Hotmail account, they’re on Messenger, like you have to have Messenger... It’s another way to control you” (*ibid*).

Increasingly restrictive controls are part of a broader societal trend towards a “politics of fear” (Altheide 2006; 2009) or “culture of fear” (Furedi 2002) – parents and schools simply cannot “afford” to allow children to interact without surveillance because of the proliferating “risks” that must be managed and controlled. As Valentine and Holloway (2001) note, this dynamic is particularly evident in moral panics around children’s use of information and communication technologies.

However, the use of parental fears about safety to sell products is also noteworthy because lay persons do not assess risk in the same way as technical experts and decision-makers. The former are more likely to judge risks based on the extent of the harm that could occur rather than the likelihood the harm will occur. (Slovic 1979, 1987) Even if the risk is minimal, as it is with in-house child abductions or online stalking, people will be motivated to avoid the risk if the harm is overwhelming. Marketing of many products incorporates this non-expert conception of risk; the horror of an abduction or SIDS is immeasurable and therefore the decision to place the child under surveillance is perceived as rational even though the probability of the harm occurring is negligible.

Jorgensen’s (2009) study of parental use of webcams in Denmark suggests that parents use webcams for a variety of purposes. Although some of the parents studied used the video to monitor day care workers (as seen in the film *The Nanny Diaries*), this was uncommon and constrained by the need to develop a working relationship based on trust between the parent and the day care worker. Typically, the parents’ motives were linked to their own emotional needs: to feel they were together with the child and taking part in nursery activities; to feel they were protecting the child and supporting the child’s development; to be entertained and to pass the time. When the parents’ expectations were met, they felt joyful; when not met, they felt angry, disappointed, depressed and indignant.

Awareness of this pattern helps explain why the marketing material focuses on the parent’s need to feel at ease, comfortable and secure (holding apart the value of these technologies from the child’s perspective). The parent is able to fulfill emotional needs and mitigate the effects of separation through the use of these technologies, but the child does not have that opportunity because the gaze is unidirectional. However, the surveillance itself is normalized for the child through constant monitoring and the incorporation of surveillance in play.

At the same time, constant monitoring can work against children’s developmental needs, and can make it harder for them to become more resilient (Livingstone 2009). It may also work against creating the kinds of trusting relationships that encourage children to comply with adult rules. Kerr and Stattin (2000) report that monitoring children does not encourage pro-social behaviour; instead, children are more likely to behave in pro-social ways when they are able to voluntarily disclose information to adults with whom they share a bond of trust.

In addition, self-expression is intricately linked to identity formation and a sense of self-respect (Stern 2004), and children need opportunities to interact with the world without being monitored in order to develop a sense of autonomy (Livingstone 2009). Respecting children’s need for privacy as they grow can enable them to fulfill age-appropriate developmental needs for individuation (Tang 2006), and encourage

them to go beyond the acquisition of “thin” procedural skills to develop a facility for deeper, “connected thinking” (Davis 2001, 252).

As noted above, surveillance may be actively (if with varying degrees of overtness) resisted in pursuit of the space to try on new identities, experiment with social roles, communicate with peers, and glimpse at an adult world that is otherwise closed to them (Livingstone 2006; Steeves 2006).

In spite of the exaggerated claims of some advertisers, in resource rich conflict settings there is rarely a final victory. Irony is no stranger to social control efforts. Any tool represents forgone opportunity costs and may solve one problem while creating another. The limits of mechanical control in many conflict settings are a reminder of the advantages of open communication and trust. The latter of course has its own limits and if unqualified and never unaccompanied by surveillance is a license to deceive.

Sources of conflict

The PISHI program and the real-world marketing material upon which it is based contain many *techno-fallacies* also heard in other surveillance contexts involving work, consumption or government.²³ These are beliefs about technology that are empirically or logically fallacious or ethically dubious. Some of the more prominent fallacies reflected in the PISHI statement and many advertisements are:

- The fallacy that for every problem there is a solution (and a technical one at that which is to be preferred to other kinds of solutions)
- The fallacy that greater expenditures and more powerful technology yield benefits in a linear fashion
- The fallacy of meeting rather than creating consumer needs
- The fallacy of the fail-safe system
- The fallacy of a passive non-reactive environment
- The fallacy that the facts speak for themselves
- The fallacy that individuals are best controlled through fear
- The fallacy of the free lunch or painless dentistry
- The legalistic fallacy that just because you have a legal right to do something it is the right thing to do
- The fallacy that personal information is just another kind of property to be bought and sold
- The fallacy that if some information is good, more is better
- The fallacy that technology will always remain the solution rather than become the problem

It is vital to examine claims and counter-claims about surveillance technology and to identify background assumptions. But some other PISHI statements are unsettling not because of the absence of data, challenged logic or questionable ethics. Rather it is because they fail to acknowledge conflicts of values and/or goals and to offer criteria by which competing concerns can be judged. The PISHI program and the ads it is drawn from offer the beguiling certainty of platitudes and sweeping generalizations rather than the deranging uncertainty of nuance and qualifying statements. The statement is silent on the frequent need for communication, negotiation and compromise and on the limits of mechanical means of control.

Disagreements, ambivalence, unease and even guilt about monitoring children are often tied to competing empirical and normative claims. Some conflicts are found *within* the family setting while others are located *between* social systems as with the family and the state.

Any social setting of course is a mélange of conflicting cross pressures and imperfectly integrated expectations. But the collisions seem particularly pronounced for children in the home. Awareness of

²³ This is developed in Marx (2007).

opposing social logics offers a way to organize the varied beliefs and behaviour observed. Much of the conflict and confusion surrounding children and surveillance come from the less than perfect meshing of factors shown in Table 1 below.

The factors are: informal and personal relationships; vulnerability/dependence; formal subordination; and responsibility, all occurring with the private place of the home as the child gradually gains independence. The norms and expectations associated with these factors often conflict and their intersections are grey, muddying comprehension.

Moreover, both children's experiences of technology, surveillance and control in home and school, and parental fears about safety, are contextualized by gender, race and social class and vary considerably. There has been little research on these differences (although see Nelson, forthcoming for a contrast between the "hypervigilance" of the professional middle class and other groups).²⁴

Navigating these waters becomes even more difficult when corporations seek to "mine" the family environment and commoditize social relationships in order to control the child's imagination and desires. This mining is facilitated by the blurring of the traditional boundaries between work, home and commerce and an increase in the wiring and sensoring (and potentially censoring as well) of the home. Here the membranes that bring inputs into the home for entertainment, telephone and computer communication, electric power and heat, as well as various security sensors, send back records of internal activity to distant centres. For a glimpse of one future see the ambient intelligent scenarios described in Wright et al, 2008)

A related example is Microsoft's vision of the "teenager's room of the future," presented at the 29th International Conference of Data Protection and Privacy Commissioners (Privacy Commissioner of Canada 2008). The mock-up bedroom, which was ostensibly based on technologies that were then currently under development, used photo-electric wallpaper to both display electronic information and capture all of the teen's electronic activities. The data stream would be sent, with consent, to the corporations that provided online services, so the corporations could continuously monitor the teen's actions and adjust the teen's environment, "as needed". The walls could also sense the presence of a cell phone. If another teen entered the room with his cell phone on, his text messages would automatically be displayed on the wall.

The fact that a child is involved also brings some commonalities to surveillance whether in a school, mall, workplace, public park or family home. Schools serve *in loco parentis*, workplaces face restrictions when employing minors, playgrounds are concerned with children's safety and children in shopping malls have some constitutional rights.²⁵

But in spite of the commonalities noted above, social settings also present irreducible differences. The family as a special institution and the home as a distinct place, involve a unique combination of social forces. The largely unplanned conjunction of the social factors noted in Table 1 offers a key to current controversies involving children in the home and tends to set these apart from surveillance of adults and other settings such as work, commerce and citizenship.

²⁴ For children the technology can also be a status symbol conferring display rights on those who possess it and feelings of deprivation on those denied it.

²⁵ Consider the value conflicts in a "Statement on Student Attendance" at West Virginia University: "CLASS ABSENCES: Students who are absent from class for any reason are responsible for all missed work and for contacting their instructors promptly. However, instructors can not require documentation of student illness from any medical provider as part of an attendance policy, since medical conditions are confidential and frequently not verifiable."

Variable	Value
Kind of institution	Family
Kind of relations	Primary Informal Personal Intimate Involuntary (no early exit)
Kind of place	Private Home
Subject resources for action	Dependent Vulnerable Less competent
Subject's position in hierarchy	Subordinate
Agents' rights and obligations (human and legal)	Special prerogatives and responsibilities and limits on parental authority and behaviour
Relative fixity of interaction	Dynamic (explicit) goal changes from dependence to independence

Table 1: Factors Characterizing Parental Surveillance of Children

Conflicts in the Family and Between Family and Society

There may be disagreements about the relative importance of protecting children from others in their environment (including parents), from themselves and other children, and protecting society from the child. Are children seen as potential victims and vulnerable creatures in need of protection from evil outsiders (and insiders) or is it society that has to be protected from bad seeds and the incompetent and immature young? Is the home best seen as a sanctuary, a garrison, a prison, a clinic, a school, a market, an Exploratorium, Disneyland or all of these? Is the home a refuge and a place where you have to be taken in, as Robert Frost suggests,²⁶ or is it a panoptic jail you can't leave (whether literally or symbolically)? Is the home a haven protecting the individual from the universal expectations of the public/communal sphere or is it an extension of the broader society? How are tensions between competing goals and logics managed?

The marketing material produced by surveillance entrepreneurs clearly seeks to convey the message that children are in need of protection from unseen others. However, the technology can also become a way to control an unruly or anti-social child. Products like the Semen Spy, CheckMate, PC Tattletale, Alltrack USA and home drug testing kits incorporate crime control language and technologies, and promise to help the parent discipline the child who refuses to stop seeing "THAT NO GOOD PUNK" (SPY Master Tools 2009), posts "questionable' pictures" on My Space (PC Tatteltale 2009), or commits acts of vandalism on the school bus (activcameras 2009). In addition, parental surveillance both piggybacks on and amplifies other products, such as RFID-enabled school uniforms and programs such as MyNutriKids, which focus on control and efficiency.²⁷ The child as an active agent can become enmeshed with the child status as a victim: surveillance is necessary because the child is equally vulnerable and dangerous, both unable to care for himself and yet more skilled than the adults in his life.

The tools designed to meet (create?) contradictory needs for protection and control are often positioned as a form of convenience that relieves parents from the tedium of raising a child. From baby monitors to cell phones to parental monitoring software, entrepreneurs promise parents time away from the child to eat dinner, watch movies and work, all without having to physically be with the child. The parent can escape the home (or room where the child is) because the child is tethered by electronic gadgets. Thus the

²⁶ In 'The Death of the Hired Man' Frost (1915) writes, "Home is the place that when you have to go there, they have to take you in." In the twenty-first century, it might read, "home (or at least the parental gaze) is the place you can't leave."

²⁷ Consider laptops given to children by schools with a video cam, location and use devices that permit authorities to remotely monitor students activities in the home and elsewhere (Todt 2010).

“Portable Video and Sound Monitor” (Amazon.com 2009) is mobile, being wearable around the parent’s waist. Information on older children is available via cell phone and the Internet. The home and immediate co-presence therefore both shrink and expand. There is freedom in one sense but omni-presence in another. More data may bring more questions rather than answers. As with prisons guards, always-on-call parents are also enclosed.

It is suggested that any concerns about long distance parenting are quelled because supervision is shared with others: Kiditel knows where your child is, MyNutriKids knows what your child eats, the staff at DriveCam watches your child drive and Club Penguin monitors your child’s online chat. However, since the child’s information is itself a valuable commodity, the home becomes one more source of market research data and point-of-sale transaction.²⁸ The home as a traditional refuge is under siege by connectivity from all sides. As the lines between home, play and commerce become permeable the child in constant contact with friends and family is now also in constant play as a commodity.

This may not make the role of parents any easier as they strive to maximize protection, safety and security of children while also giving them space to develop, explore, stumble and learn from mistakes. There are costs to overprotection just as there are to under protection.²⁹

The family as a primary group involves informality and trust to a much greater extent than is the case with the formality and written rules of the organization. Trust (or at least its gradual extension as the child grows) is seen as fundamental to emerging self-control and healthy development. The use of formal means of assessment such as drug testing a child or recording all of their communication can be unsettling because it fundamentally undermines that trust,³⁰ apart from any questions of privacy. Such actions communicate a lack of confidence in the individual and undercut the foundation for personal and intimate relations. Lack of private spaces (whether physical, personal or social) for children amidst omni-present parental oversight may also create an inhibiting dependence and fear.

A primary relation is partly defined by its diffuseness rather than by the narrower expectations associated with an organizational role. Family members are justified and indeed expected to attend to the most personal of issues beyond what is appropriate and formally defined for an employer, government, teacher or causal acquaintance. The breadth of the parental role can offer children a protective border and a safety net given the varied circumstances and surprises of growing up. Diffuse norms of attentiveness, care and parental responsibility are most pronounced in the case of children.

The shared physical space and the amount of time spent within the confines of the family means closer observation and greater awareness of information that may be discreditable (whether to the child, the parent or both). In situations where a child’s behaviour conflicts with standards of the broader society such

²⁸ Merchants may seek to legitimize this commodification by positioning the child as agent (Shade & Decheif 2005. Kids are no longer minors with special needs; instead they are savvy computer users and consumers who – at the young age of 13 – can consent to the collection and use of their information (see *Children’s Online Protection Privacy Act*). This type of presumed contractual protection has been criticized, especially in the context of children’s privacy (Hertzel 2000; Grimes & Shade 2005; Steeves 2009).

²⁹ The former is *surveillance smothering* and the latter *surveillance slack* (Marx, 2002). Are these best seen as the ends of a continuum of surveillance implementation reflecting linear impacts of shared causes or as distinct factors requiring separate explanations? The question of what holds back parents from exercising their full surveillance needs to be joined with that of the failure to surveil. The ratio of surveillance potential vs. surveillance use can be used to contrast settings.

³⁰ Rooney Mail discusses trust, surveillance and children elsewhere in this issue.

information may be withheld as a result of alternative standards, familial tolerance and understanding (or at least loyalty), self-protection and a desire not to lower the family's status or simply out of denial.³¹

The ostensibly benign, broad prerogatives granted parents to protect and nurture their children justify intensive and extensive crossing of personal borders. Dependence on parents, vulnerability to their threats, norms of family loyalty and the physical and legal borders separating the family and the home from external visibility can be supportive of parental abuse (whether involving doing too much or too little watching or exploitation) is not even more widespread.

The last source of conflict in Table 1 involves the dynamic nature of the parent-child relationship over time. Even if the previous conflictual factors were not present, the lack of clear points of transition as the child matures would generate conflict.

Dynamics

The dynamic and transitional nature of children's development is a central factor in surveillance controversies. The edges of transition are ragged and involve contradictory pulls.

The family is the ultimate total institution where in the beginning parents have almost all of the formal and informal power. This declines and changes form with age and can even be cyclical. It contrasts with prisons or workplaces where external control remains more constant and where the individual may be present for a lesser time period. With appropriate socialization, the child's motivation and ability to comply develops, while in adult settings these are more constant. For the developing child, surveillance and subsequent punishment may have the intended effect. In contrast, for adults in the other settings the structural conflicts are relatively unchanging.

In the early stages formal (role relationship) family surveillance is non-reciprocal and non-negotiable. Parents define the goals and conditions and monopolize a rich mixture of traditional and new surveillance tools. The goals of parents and those of the young in need of nurturance and protection overlap. However, as the child moves from dependence to independence the conflict potential and its breadth and intensity may accelerate.

Infants are poked, prodded and observed by parents at will – almost nothing is out of bounds for responsible parental inquiry. Privacy and secrecy are meaningless for the very young. For the dependent infant or child, the failure to cross personal informational borders can be irresponsible, unethical and even criminal. With maturity this is reversed and the crossing of these borders can be wrong. Although this transition from openness to closedness may appear to be linear, it is often conflictual and judgments must be contextual.³²

At a year or two, naked toddlers are photographed joyfully frolicking together in wading pools, parents inspect their bodies at will and dress and undress them in public. To the parent's consternation, the small child may freely disrobe in public. However, eventually the young child is likely to want the bathroom door closed, learn about modesty and come to value being clothed.³³

³¹ Anita Allen (2003) offers a moving account of the conflicts a protective and caring family (spouses, children, siblings, close relations) faces with respect to both the desire to help, the privacy of a wayward member and the role of the legal system. The latter can punish but also help as with treatment.

³² Evaluations must not divorce behaviour from its context. For example surveillance that denies a six-year-old girl with a love of tutus the chance of wearing them can hurt her development. On the other hand, failing to provide any limits on the clothing choices of a 13-year-old can be harmful in a different way.

³³ The process is slow and uneven. While babysitting, one of us accompanied a three year old grandson to the bathroom as he requested. Then he said he wanted some privacy. But when the door was closed and the adult left the room, he began to cry and asked for the door to be opened.

The physical and social borders that give meaning to the protection of personal information come to be understood. Closed bathroom and bedroom doors, the clothed body, desks, backpacks and learning to hide thoughts and feelings and to communicate obliquely bring the individual greater control over personal information, whether as a result of changes in norms, physical borders or new resources. With the development of language and motor skills children learn they can hide things and deceive parents.

There is a move from the absence or weakest of borders between the unborn child and the mother, to their gradual strengthening as the child emerges and ages. As an infant becomes a toddler and the toddler becomes a teen and then grows to almost adulthood, the varieties of protective surveillance (both regarding the environment and other people) decrease and change, respect for the borders of the person increases as self-surveillance (and the related self control) increase.

Childhood arenas expand beyond the clearly defined (and accessible and insulated) physical spaces of the home to the more distant spaces of day care centres, schools, malls, workplaces, cars, streets and parks beyond direct parental observation. This brings a variety of new needs and challenges for parents and opportunities for children.

As the child grows the goal of protection is supplemented by that of compliance. Surveillance seeks to discover and monitor new factors. Shared goals are joined by conflicts in goals. Formal and informal power imbalances become less pronounced. Children gain new rights and more informal power. The potential for negotiation and neutralization become more prominent. The young move from being subjects to also being agents of surveillance, within the family watching younger siblings (and sometimes even parents) and peers.

Responsible parents still watch their children and the child's environment closely. But if socialization is successful, children increasingly watch themselves (and learn to watch others for signs of danger and to report misbehaviour) and they are trusted beyond the range of direct parental observation, even as new grounds for distrust appear.

There is a gradual transition from external, mechanical control characteristic of situations where there is little or no trust (whether involving motivation or competence) to greater trust in the developing child's ability to control the self and to avoid problems from the environment. The ratio of involuntary, external forms of control relative to internal self-control changes. Managing the speed and form of this transition is a central task of parenting and a frequent source of family conflict.

Children learn the joys of secrets and dissimulation as elements of game-playing and become comfortable with surveillance. Beyond games, they also learn that self-interest is often served by avoiding the parental and adult gaze. Shifts in surveillance occur as parents and teachers may come to see children as potential suspects, in addition to continuing to see them as in need of protection.

New technologies replace the direct observation and control that is possible with younger, less mobile children. As adolescence arrives the greater opportunities for parentally disapproved behaviour, the increased salience of personal borders and new rights and resources make for less consensual surveillance and stronger reactions back. The sharing of secrets with parents is likely to decline and feelings of being intruded upon increase. The dynamic nature of the maturation process illustrates the continuing relevance of context. A parent's curiosity about the communication and possessions of an 8-year-old looks very different when applied to a 16-year-old. In the case of the latter, reading a diary, letters or computer files,

over-hearing phone and other conversations, looking through desks, drawers and clothes may be done (not to mention rubbing these for evidence of drug or sperm residue), but surreptitiously and ambivalently. This may occur more directly through monitoring of credit cards, cell phones and cars for location and even video evidence. Concerns involving drugs, liquor, companions, sex, driving and academic performance may lead to new forms of monitoring and neutralization.

As the child reaches adulthood and leaves home, surveillance declines significantly. The pattern may eventually be reversed as the adult child looks after elderly parents. This can even be formalized with the grant of a power of attorney. Technologies with equivalent functions are used for dependent parents – implants and attachments for monitoring physiology, location monitoring, systems for toilet control, enclosed areas, locked rooms and video transmissions from nursing homes via the Internet. Warning signals are also present as with panic buttons, or when an alarm is sent if the refrigerator is not opened for a period of time or an exit door is opened.

The family and the state

The factors noted in Table 1 encourage child advocates and state intervention. They might also call for a social movement urging children to watch their parents.³⁴

Ideas about civil society as a separate sphere that must be protected from (and by) the coercive powers of government are central to the questions considered, as are conflicting questions about limits on private sector behaviour. With respect to data flows to and from distinct social sectors, note disagreement over the data flows between and among various institutions and settings (private places like the home and mall, diverse government agencies, work). What happens to data from the surveillance of children? Where do they go, how long are they kept, who can see them, are children and (or if done by others) their parents informed, are there review procedures? When should the state come into the home or provide data it has collected to parents? When should the family provide data it has to the state?

When the rules of government conflict with the somewhat autonomous spheres of the family or religion, whose expectations should apply? Consider permission and reporting requirements for abortion, sex education in schools, advocates for polygamy or parents who oppose vaccination or want to deny children needed medical treatment for religious reasons. Consider a family that seeks to shield and hope to reform a wayward member rather than have the state prosecute. A privatization theme in the ads for home testing is to keep results away from the state.³⁵

Whether intentional or unintentional, an emphasis on the family as the provider is consistent with contemporary trends involving privatization in which the state in some ways lessens its direct involvement in providing services (schools, prisons, national defence) or fails to expand them to meet new needs (e.g., the increased participation of women in the labour force is not met by adequate daycare (Katz 2006)). A turn to the private sector and technology is often the fall back position – letting the state off the hook,

³⁴ Such a movement is imagined in the case of KISHI. (Kids Insist on Surveillance Help Inc.) an organization founded by kids for kids (Marx, forthcoming). A fictitious press release says, “Calling all kids! Now is the time to take charge of our lives! We live in dangerous times. But we can make a difference. We want to love our parents and given the right environment, they will do the right thing. But no one can go it alone. Parents need lots of help... The home can be a dangerous place for kids. Consider that 80% of child abuse occurs in the home....” Such a movement is implausible but not illogical given how dangerous homes can be for children and by the lack of reciprocity in children being unable to watch parents who misuse drugs, drive under the influence and engage in unsafe or irresponsible sex.

³⁵ Some of these of course involve *the state coming into the home* as with the parents who were arrested after an innocuous photo of their child in the bathtub was taken to WalMart to be developed (Fox News 2009), while others such as mandatory school dress codes, the pledge of allegiance or curriculum requirements involve preventing *the family with different standards from coming into the school*.

while blurring the borders between public and private and perhaps lessening accountability. New markets for surveillance tools and services are created.

But is it right or wrong?

Given the breadth of the topic and the inherent value conflicts, any normative or practical conclusions must be limited. Toys and games children play differ in important ways from the tools that parents and other agents (e.g., online services) apply to children.

In much local play, as with hide and seek, relationships are relatively equitable (a feature in respecting the rules and in fairness) and the goals are manifest. Children are aware of the pretend quality of the surveillance and reciprocally respond. The activity is fun and its own end. Any data gathered are of no consequence beyond the play itself. Involvement in simulated surveillance can be a socializing experience and permits learning about information revelation, concealment, deception and trust. The child may come to see secrecy and discovery as normal (as in routine or ordinary) and such play may be preparation for later agent and subject roles. Yet it is unlikely to do direct harm to subjects the way “real” surveillance can and the ethical issues raised are less gnarly.

A different set of concerns is present when children cease to “play” (or at least “play” for real, if that isn’t contradictory) and instead perform the role of informers. New issues also appear when adults are the agents and children the subjects (and objects) and when parents rely on mechanical devices in place of trust, or when commercially generated, networked play involves on-going, direct, low (or invisible) communication between the child and the merchant.

Goals	Have the goals been clearly stated, justified and prioritized? Are they consistent with the values of a democratic society?
Law and ethics	Are the means and ends not only legal, but also ethical?
Opening doors	Has adequate thought been given to precedent-creation and long term consequences?
Golden rule	Would the controllers of the system be comfortable in being its subject, as well as its agent? Where there is a clear division between agents and subjects, is reciprocity or equivalence possible and appropriate?
Truth in use	Where personal and private information is involved does a principle of “unitary usage” apply, whereby information collected for one purpose is not used for another? Are the announced goals the real goals?
Means-ends relationships	Are the means clearly related to the end sought and proportional in costs and benefits to the goals?
Can science save us?	Can a strong empirical and logical case be made that a means will in fact have the broad positive consequences its advocates claim (the “does-it-really-work question”)?
Minimization	If risks and harm are associated with the tactic, is it applied to minimize these showing only the degree of intrusiveness and invasiveness that is absolutely necessary?
Alternatives	Are alternative solutions available that would meet the same ends with lesser costs and greater benefits (using a variety of measures not just financial)?
Inaction as action	Has consideration been given to the “sometimes it is better to do nothing” principle?
Unintended consequences	Has adequate consideration been given to undesirable consequences, including possible harm to agents, subjects and third parties? Can harm be easily discovered and compensated for?
Data protection and security	Can agents protect the information they collect?

Table 2: Questions for Judgment and Policy Across Surveillance Contexts

Holding apart the distinctive nature of children playing at surveillance, in reaching normative conclusions some general questions can be applied to adults as surveillance agents of children and to institutions such as the family, school and mall. Table 2 (above) offers some questions to help in judgment. These are expanded at greater length in Marx (1998, 2005) and questions specific to children – such as manipulation, the meaning of informed consent for a child and whether some things such as a young child's imagination ought to be beyond the reach of the corporation – also need consideration.

Let's get normative!

Parents, the private sector or a state that are overly intrusive and unrestrained in their ability to cross personal, family and place borders are hardly desirable. But neither is a situation in which there is indifference to risks and the need to protect the young and vulnerable. Extreme surveillance positions that justify indiscriminately crossing of personal borders for a worthy goal are no more appropriate than extreme anti-surveillance positions that deny the appropriateness of crossing personal borders under limited conditions. The challenge is in deciding on those conditions.

Between the extremes of parents emphasizing abstinence or permissiveness (or at least indifference) is a middle position of safe realism. This starts with acknowledging the powerful role that reality has on children's perceptions and opportunities. The PISHI manifesto recognizes that no child can avoid our sexualized culture or puberty and the opportunities our mobile culture offers for privacy. Nor can the culture's emphasis on alcohol and drugs as recreation and components of a sophisticated life style be censored away. To deny these realities and to rely on external mechanical means of enforcement can be seen as an insult to the child's intelligence and lessen the message bearer's credibility.

On the other hand, to deny the dangers that can be associated with drugs and sexual activity identified in the opening PISHI statement is naïve and irresponsible. The waters are indeed filled with sharks and worse, but there are reasonable protections as well. A position of safe realism begins with acknowledging the availability of alcohol, drugs and sex. It then emphasizes the role of the child as a moral actor capable of reasoned choices when given information.³⁶ For those who seek these activities, the parental goal should be to help children be safe by making them aware of options and of the likely consequences of their actions.³⁷

Related to this is the need to ask how real and harmful a risk is (both as to likelihood and as to severity) and to be sensitive to the complex issues in defining and measuring these. Reduced to essentials this suggests a typology involving improbable events with minor consequences at one extreme and probable (or at least those that are not improbable) events with very harmful consequences at the other. Understanding how individuals decide these matters is an important task for research.

³⁶ This emphasis on the child's subjectivity and development is consistent with a human rights approach for protecting privacy and autonomy. It contrasts with a data protection approach which emphasizes the child as a presumably savvy consumer who can contractually consent to give up privacy.

³⁷ Sex and alcohol which are, or will soon, become legal for the teenager obviously contrast with illicit drugs. Absent the higher justifications of civil disobedience involving basic human rights, parental neutrality in the face of a child's potential illegalities is not desirable. In some states the penal risks from even a small amount of marijuana are serious. But any discussion of this also needs to acknowledge other ways of framing the topic and the contested nature of criminalizing the behaviour of drug users.

Improbable and Minor	Probable and Minor
Improbable and Major	Probable and Major

Table 3: Probability and Harm

What do individuals conclude about improbable events with extreme consequences and probable events with minor consequences? One does not need to read French philosophers to know that drug addiction, sexually transmitted diseases or drunk driving – warrant action. But even then questions about the fit between means and ends must be considered. Does the tactic work? What other means are available (whether involving material or non-material technologies)? Among the latter is communication and openness.

Parents need to develop surveillance sophistication in response to the array of products they are offered and to link it to safe realism. This involves awareness of the techno-fallacies that can be so deeply embedded in North American (and perhaps increasingly world) culture. Careful analysis is needed of the claims undergirding bright, shiny, gee whiz tools that promise salvation amidst the horror awaiting parents who fail to purchase the solution.

Realistic assessments, awareness of developmental needs, communication, listening, weighing (but not necessarily balancing) conflicting interests are central, particularly for issues involving teenagers. The above can be acknowledged without falling into an immoral or amoral relativism. There are clearly some things which ought not to be negotiable and one size hardly fits all.

Conclusion

There has been relatively little legislation concerned with the surveillance of children. To the extent that the topic is on the policy agenda, it is seen to only involve narrowly conceived questions of data protection. Both European and North American policy makers have called for better education and legislation to protect children's privacy from invasive marketing practices (Council of Europe 2009; International Data Protection and Privacy Commissioners 2008; Canada's Privacy Commissioners and Privacy Oversight Officials 2008). The Council of Europe is considering restrictions on profiling even when the profiles are constructed from aggregate data, and the United States Federal Trade Commission is struggling with public concerns that voluntary industry guidelines will not adequately constrain behavioural targeting. Accordingly, children's surveillance is increasingly taking policymakers beyond mere contractual data protection principles, and calling upon a more sophisticated analysis of the impact of corporate surveillance on children. These new initiatives are informed by human rights protections for privacy and access to information that have been enshrined in the Universal Declaration of Human Rights, the Covenant on Civil and Political Rights and European human rights legislation. A human-rights approach to surveillance enables policymakers to go beyond questions of data protection and consider the social and longer range impacts.

The developments we have discussed reflect broader changes associated with the new surveillance and emerging understandings of risk, responsibility and technique – enshrouded in the instrumental rationality central to contemporary society, a society where markets for the products considered are relatively unregulated.

Cultural expectations over what can and should be done for the young and the perception and appearance of new problems need to be better understood. We see new ways of measurement, new definitions and new behaviours. Consider for example public awareness of SIDS, ADT, AIDS and rates of teen

pregnancy. The mass media is central in shaping public knowledge about this (Best 1999; Glasser 1999; Altheide 2006).

Given the complicated issues of perception and reality, it is too easy to see it only (as some social scientists do) as a reflection of marketing and moral entrepreneurs. In some ways children in developed societies have never been safer across an array of measures.³⁸ But citizen concern over a problem cannot be judged simply by comparative statistics. There is a clear need for research on public concerns and behaviour involving children, data on the extent and nature of problems and on the roles played by the mass media, including the Internet. Some questions for future research are suggested below.

If surveillance marketers are successful, children's lives will be increasingly structured by an abundance of surveillance tools aimed at them and by them. Will more complex understandings of childhood as a time of innocence/savviness, protection/exploration, nurture/autonomy be shaped by broader discourses around the relationship between fear, risk and resiliency on the one hand, and surveillance as a tool of parenting and governance on the other? Our review of surveillance marketing materials and children's games indicates that this relationship is already actively at play. Will this unreflectively promote conformity, the privileging of safety, and the equating of parental love with at-a-distance monitoring? Will this new form of parental caring lead to a view of children as both inconvenient and untrustworthy?

Is the meaning and experience of childhood being redefined as this generation of children faces an unprecedented level of measurement and technical surveillance? What does the world look and feel like to the child subjected to the new scrutiny? Will we see ever more anxious parents produce children who might be safer, but will become more apprehensive, dependent and conventional as adults, externally controlled by fear of being caught (as long as the machinery works), rather than internally controlled by a sense of right and wrong? This links to the logics of surveillance as measuring and disciplining deviations. To what extent is contemporary consumerism – in spite of the rhetoric of choice – encouraging mindless conformity?

Defenders of toy guns argue that their products are just make-believe and are harmless because they don't really work. Children can indulge their violent or protective fantasies without doing any immediate harm or confusing their game with reality. But that is not the case with many of the surveillance devices. They are attractive because they really do work. Children are no longer required even to pretend or to fantasize. In becoming accustomed to such toys and the pleasures they bring, are the seeds of an amoral and suspicious adulthood being unwittingly cultivated? Will private bugging, wiretapping, video surveillance and computer and location monitoring expand as a generation having had these devices as childhood toys or as protection come to see them as offensive and defensive necessities? Will they be more likely to uncritically accept claims made by surveillance entrepreneurs?

Surveillance of and by children is multi-faceted and not adequately understood. The topic offers a unique window into what it means to be watched and to watch under dynamic conditions and provides a glimpse into a future for which it may be difficult to muster even two cheers.

³⁸ School safety is a case in point. Monahan (2006) for example summarizes data suggesting that schools are one of the safest places for a child to be and that they have not become less safe in recent years in spite of several dramatic events. See also the conceptualizations offered by Muschert and Peguero (forthcoming) and articles in the June 2009 issue of *American Behavioral Scientist* devoted to schools and violence.

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