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# Of Social Networks and Suicide Nets: Biopolitics and the Suicide Screen

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**Abstract**

This article analyzes how the Silicon Valley ethos has influenced the development of screening technologies designed to enforce survival. Although various technologies have been used to ensure the survival of clumsy, sick, depressed, or unpredictable subjects, this article focuses on recent developments in suicide screens—that is, those screening technologies that detect suicidal subjects and aim to prevent acts of suicide. Digital versions of these screens have also emerged: the U.S. military, in particular, has begun developing software designed to analyze returning veterans' social media posts for hints of suicidal tendencies. Meanwhile, Foxconn, the Asian super-manufacturer that assembles products for Silicon Valley giants like Apple and HP, notoriously developed a network of "suicide nets" designed to prevent its miserable workers from jumping to their deaths. In Foucaultian parlance, while the state and its allies routinely "let die," suicide threatens the state's sovereignty over life by introducing a rupture of political intelligibility whereby a community can come to realize its basic biopolitical autonomy.

**Keywords**

social media, suicide, screens, Foxconn, biopolitics, media

In 2013, forty-one thousand people in the United States committed suicide, making it the tenth leading cause of death in that country (Insel 2015). Similar statistics can be found in the United Kingdom, where suicide is sandwiched between throat cancer and urinary disease, making it the twelfth most common form of death in England and Scotland (Office for National Statistics 2015). These trends appear to be on the rise,

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especially among young people: as remarked by the director of the U.S. National Institutes of Mental Health (NIMH; Insel 2015),

> Unlike many of the leading causes of death, the suicide rate has shown no appreciable decline over the last fifty years; indeed, the rate among middle-aged Americans is increasing, and for young people aged fifteen to thirty-four, it is not the tenth, but the second leading cause of death. (Also see Case and Deaton 2015)

A growing social awareness of this problem has led to the development of assorted legal and cultural strategies for fighting suicide, including suicide prevention hotlines, crisis centers at schools and colleges, anti-bullying laws and policies, and public service campaigns designed to determine suicidality, discourage bullying and stalking, and establish interventions for those who might be considering killing themselves.

This article analyzes some of these prevention measures through the lens of the *suicide screen*, a variant of screening technologies that aims to detect suicidality and prevent acts of suicide. For example, let us consider transportation security technologies like airport body scanners, which are primarily deployed for the purpose of detecting suicide missions such as the 9/11 attacks. Although detecting suicide attacks is not their only function, these screening technologies were developed in direct response to suicide missions such as 9/11. According to former Homeland Security chief Michael Chertoff, the federal government mandated backscatter body screening machines in response to the attempted "Underwear Bombing" in December 2009. These machines' intrusiveness, in fact, is explicitly related to preventing suicide missions: according to Chertoff, metal detectors and dual-energy X-ray systems are often unable to detect sophisticated suicide bombs that are irremovably lodged in attackers' bodies (Eggen et al. 2009). These backscatter technologies, therefore, screen for certain signifiers of suicide attacks (underwear bombs, box cutters, shampoo and toothpaste containers, etc.), so that security agencies can intervene to ensure the survival of the suicidal subject and nearby living bodies.

These scanners have a multifaceted connection to Silicon Valley: On one hand, the Valley serves as the primary site for the intellectual production of software and digital screening technologies that make possible the tracking, profiling, and protection of living subjects; much of the screening software for naked body scanners is developed at Rapiscan's laboratories in Sunnyvale, California. But on the other hand—and perhaps more importantly—the cultural ethos of Silicon Valley, as it is manifest in the increasingly technological character of the American security apparatus, has seeped deeply into contemporary risk management systems and homeland security strategies.

So though there is considerable political diversity among Silicon Valley's ventures and personalities, the military's accelerating interest in artificial intelligence and "game changing" technologies has resulted in an increasingly cozy relationship between Silicon Valley entrepreneurs and the surveillance- and military-industrial complexes (Markoff 2015).

While keeping these tensions and diversities in mind, I would like to approach Silicon Valley's relationship with the suicide screen on two fronts: first, I will look at the Valley as the industrial collective whose invention of the digital consumer market has given rise to acute forms of labor exploitation, especially in East Asia. The American tech industry's thirst to exploit cheap global labor is perhaps best characterized by its relationship with Asian super-manufacturers like Foxconn, which builds products for companies like HP, Apple, and other Valley giants. To safeguard the Valley's immense production of capital, Foxconn and similar manufacturers have developed innovative measures for protecting the lives and health of their workers. Although this includes meager welfare measures and morale training, it also includes architectural screening technologies that prevent miserable workers from killing themselves in what Jenny Chan and Ngai Pun (2010) have called "suicide protests." Second, I will focus on a different facet of Silicon Valley's relationship with the suicide screen: how Samaritans Radar and the U.S.-military-affiliated Project Durkheim have set the stage for artificially intelligent means of detecting suicidality. These technologies algorithmically analyze social media postings, screening for communication patterns and semantic content that might suggest users are considering suicide. The users' friends, followers, colleagues, and/or physicians are then alerted with a suicide warning, so they can intervene to safeguard the user's life. After my analysis of Samaritans Radar and Project Durkheim, I conclude by reflecting on how suicide screens illustrate some of the ways in which architectural and digital technologies are used to safeguard life from the competing sovereignty that the living subject enjoys over its own life. The suicide screen, therefore, makes possible the seizure of life from living subjects, converting it into a domain of inspection and control by capital, moral entrepreneurs, and the state. Standing at the crossroads of high-tech capitalism and digital culture, Silicon Valley's suicide screens provide perhaps the best illustration of how the political economy of industrial labor exploitation meets the cultural sorting of dangerous (and endangered) subjects. Ultimately, I conclude that the suicide screen serves to foreclose the political potential of suicide, especially inasmuch as suicide provides a stark and often spectacular illustration of a community's basic capacity to escape biopolitical control.

## Suicide and Screening Technologies

It is widely recognized that Foucault's turn to biopower in the mid-1970s signaled an analytical shift toward forms of power "centered not upon the body, but upon life" (Foucault 2003, 249). Although critical work on biopolitics is growing in popularity, considerably less attention has been paid to the negative and necessary corollary to life—death. As theorists like Timothy Campbell (2011) and Didier Fassin (2009) have emphasized, however, the regulation and prevention of death are part and parcel of this exercise of biopower. It is in this context of biopower, in fact, that Foucault renders some of his most interesting reflections on suicide. Discussing how a historical shift toward power over life was reflected in the regulation of suicide during Western modernity, Foucault (1978, 138–39) asserts that suicide

> testified to the individual and private right to die, at the borders and in the interstices of power that was exercised over life. This determination to die . . . was one of the first astonishments of a society in which political power had assigned itself the task of administering life.

No longer seen as simply an affront to the sovereign, in the nineteenth century suicide ceased to be a strictly legal matter and was viewed as a more essential attack on the health of the political body. As Mark Kelly (2013, 98) points out, within this political order suicide appeared to be a rejection of

> everything we believe in. Suicide is now not only taboo because it is out of the control of sovereign power, but because it is a deliberate choice of death, and particularly because it is premature, wasteful, useless death, which does not serve but weakens the nation.

Once subjects' lives are enveloped within the collective purview of biopower, suicide constitutes a frontal assault on the nation's economic and political vitality.

The intimate relationship between biopower and death prevention, therefore, has engendered the development of countless technologies and procedures for the measurement, reproduction, and safeguarding of life. For Foucault, these methods of survival enforcement were unique to the apparatuses of security that arose in early modern Europe, being perhaps best represented by disease prevention campaigns aimed at improving and securing the collective biological potential—the biopower—of a given population. Security technologies such as inoculation campaigns, therefore, signaled the increasing political legibility of a living "population," with its aggregate mortality rates, disease rates, and other indices of biological potential and vulnerability (Foucault 2004, 55–86). Today, of course, this cultivation of biopower continues through various technologies aimed at survival enforcement—"projects for making live," as Paul Rabinow and Nikolas Rose (2006, 203) would put it. Vaccination campaigns, for example, have notably intensified—and along with them, self-help books, disease and health awareness crusades, healthful food campaigns, and insurance-based exercise incentives, all of which have become increasingly important parts of the cultural scene (see, for example, Ouellette and Hay 2008; Pepper 2014).

The promotion of health and the prevention of illness are also tied to campaigns designed to enforce survival, and among the most interesting of these campaigns are those aimed at preventing suicide. Although laws preventing murder safeguard the sovereign's exclusive right to take the life of his or her subjects, laws against suicide have, at best, only an ambiguous legal authority. Such laws lack the retributive power characteristic of most criminal law: after all, the successful act of suicide places the perpetrator/victim beyond the reach of the state's penal procedures. In this sense, suicide is an act of rebellion against the very substance and jurisdiction of sovereignty, depriving the sovereign of its ultimate power over the life and death of its subjects. Laws, however, are not the only means that the state and allied institutions use to discourage suicide. Beyond the punitive arm of the law, the state and its allies take diverse measures to ensure that life is protected from suicidal subjects—to ensure, in other

words, that the subject that retains bodily jurisdiction over a given life cannot end that life, because ultimately it is not his or hers to take.

Technologies that screen for signs of suicide have become an essential element of public and private survival enforcement campaigns. To return to the example of airport security: while body scanners and other screening technologies might detect all kinds of contraband and criminal plots, these technologies were designed and deployed to detect suicide missions such as 9/11 and the 2009 attempted bombing of a Northwest airlines flight by the so-called underwear bomber. These scanners, alongside a host of related screening tools, empower authorities to screen for potential suicide attackers, a process that can trigger intensified scrutiny, exclusion, and even extralegal detention (Hall 2015; Magnet and Rodgers 2012). Take, for instance, how identification systems at airports are linked to databases of undesirable characteristics, criminal histories, and political affiliations. In the United States, for example, the names and social security numbers of criminal offenders, suspects, political activists, and others are routinely recorded in security databases that are consulted when fliers are processed at airports. Each day, thousands of fliers slip through screening assemblages comprised of identification documents, threat databases, metal detectors, naked body scanners, and specially trained security agents. Together these objects form a security screening apparatus—a shifting collection of technologies that identify and calculate a given subject or group of subjects' risk of breaking the law (and of course, above all, of carrying out a suicide attack). In this case, of course, the state's interest in enforcing survival is paramount: with the help of Silicon Valley's Rapiscan machines and federal surveillance networks, the Department of Homeland Security ensures that dangerous subjects will survive to be watched another day.

As a number of scholars have begun to recognize, these screening apparatuses have become an essential element of social regulation. According to Jeremy Packer (2013, 174), screening technologies

> work to separate desirable from undesirable elements, determining what can and should enter or leave. Think here of how a colander is designed to allow water to pass, but not pasta, or how an ATM machine uses cards and pass codes to determine when money should be dispensed or deposited.

The most interesting questions brought up by these screening technologies, Packer (2013, 174) suggests, are, "What can accomplish such separating? How is it known who or what should be allowed to enter or leave? Who or what has the ability to determine when and where such technologies should be used?" (174). Driven by similar concerns about the relationships between screening, enemy epistemology, and the regulation of life, the present article also seeks to examine how screening technologies empower select individuals to establish and enforce boundaries of identity, political participation, and survival. Yet a focus on the *suicide* screen raises a number of unique theoretical and political concerns. For instance, death lies at the essence of sovereign power, as it marks the event at which the individual passes out of the sovereign's political orbit and into that of the gods. According to Foucault (2003, 248), however,

as life becomes the ultimate object and expression of politics, the significance of death is transformed:

> [in early modern Europe] death was the moment of the most obvious and most spectacular manifestation of the absolute power of the sovereign; [for biopolitics] death now becomes, in contrast, the moment when the individual escapes all power, falls back on himself and retreats, so to speak into his own privacy.

Death, therefore, becomes an event that marks the subject's ultimate descent into privacy, illegibility, superfluity, and intransigence. Moreover, the political relationship between spectacle and death becomes transformed, if not reversed: while death was once the most spectacular expression of sovereign power, biopolitics calls for confining death to the margins of public visibility. As screening mechanisms and technologies of public health "make live," market-based economic deprivation and cultural habits "let die" (largely behind closed doors; see Foucault 2003, 240–41). Acts of self-destruction—especially those that are overtly spectacular—thus constitute a frontal attack on the liberal order's politics of visibility. Suicide, therefore, constitutes a form of "improper death" (cf. Campbell 2011) that calls for special preventive technologies and procedures.

Suicide—regardless of its perpetrators' intentions—converts death into a political act. Whether it is a suicide bombing or self-immolation, or whether it is the desperate final act of a soldier devastated by war, or of a worker reduced to a mechanical existence by capital—suicide serves as a weapon against a political order that expends so many of its resources maximizing productive life and enforcing its subjects' survival. For Nicholas Michelsen (2013, 202), the political significance of suicide resides in its capacity to reassert the subject's sovereignty over its own life and death: suicide, therefore, "enact[s] a brute rejection and subversion of sovereign authority *over death* and affirm[s] an alternative sovereignty *in death*." This exercise in "necropolitics" (Mbembe 2003) or "necroresistance" (Bargu 2014), however, is not merely a spectacular assertion of an individual's independence from biopolitical control. Rather, by demonstrating the subject's ultimate autonomy over life and death, it shifts the legibility of a community's political potential. Thus, suicide not only acts "as the assertion of the political sovereignty of [a] community" (Michelsen 2013, 203), but can also introduce a rupture of political intelligibility whereby a community comes to recognize a fundamental autonomy it already possesses (cf. Hardt and Negri 2004, 45–62). Thus, the inherent political character of suicide, as Foucault acknowledged, demands the development of an extensive host of technologies and procedures aimed at preventing this spectacular and taboo event of political transcendence.

## Architectural Screens: Foxconn's Suicide Nets

Once the world's largest electronics manufacturer, Foxconn was founded in 1974 by Taiwanese business tycoon Terry Gou. Although it was a major industrial player in Taiwan and mainland China during the 1980s and 1990s, it came to international

prominence in 2001 when Silicon Valley giant Intel hired Foxconn to manufacture motherboards and other computer components. Although Foxconn has opened factories across Latin America, Eastern Europe, Asia, and the United States, its plants in mainland China have attracted the most controversy. At the factory in question—Foxconn's industrial park in Shenzen, a city in China's southern Guangdong province—Foxconn employees are housed in administratively assigned dormitories alongside hundreds of thousands of other workers. Foxconn employees tend to spend the majority of their wages—which have recently risen to about $300 per month—at cafeterias and shops on the massive gated campuses where they each share a dorm room with seven other coworkers. Although Foxconn employees typically work twelve-hour shifts with one day off every other week, some workers have reported working twenty-four-hour shifts (Duell 2012).

Most of this massive "cyber-proletariat" (Dyer-Witheford 2015) immigrated to Shenzen from the countryside, as China's policy of urban development impoverished rural areas and gave rise to a mass exodus of Chinese youth into industrial urban centers (see Chan et al. 2013). On arrival at Foxconn's Shenzen campus, these young workers were quickly integrated into hyper-Fordist regimes of labor. Describing the routine that filled her twelve-hour shifts at the Shenzen plant, one former worker, seventeen-year-old Tian Yu, recalled,

> I take a motherboard from the line, scan the logo, put it in an anti-static bag, stick on a label and place it on the line. Each of these tasks takes two seconds. Every ten seconds I finish five tasks. (Chan 2013, 88)

In addition to this tightly disciplined regimen, Foxconn workers also receive collective punishment when a colleague in their sector underperforms. For example, at the end of a shift workers are routinely forced to stay overtime to listen to a comrade confess her or his mistakes and read a self-denunciation.

As a protest against local labor conditions, in 2007, a steady stream of Foxconn workers began killing themselves on Foxconn's Shenzen campus, and by 2010, these suicides had erupted into a widespread ritual of defiance: after one employee leapt from a Foxconn building in January, three followed in March, then two in April, seven in May, one in July, and one in November. During the next two years, several other Foxconn factory workers—all between the ages of 17 and 25—followed in their coworkers' footsteps. All in all, between 2010 and 2013, at least twenty-two Foxconn employees attempted suicide at work; seventeen died from their injuries. Most of these Foxconn suicides involved workers leaping from high windows in factories or dormitories. Terry Gou, the billionaire founder of Foxconn who is today one of the richest men in Asia, responded to the suicides by reflecting on the workers who labored in his plants. While speaking at the Taipei Zoo, Gou was struck by an analogy: "[My company] has a workforce of over one million worldwide and as human beings are also animals, to manage one million animals gives me a headache" (Kwong 2012).

Although Gou seemed to find a striking similarity between his human workers and the animals confined before him, perhaps the more notable corollary is that between

Gou's suicide nets and the cages that screen the environments of the zoo's confined animals. This corollary, in fact, illustrates the diverse ways in which architectural technologies are used to screen out threats to life. To illustrate, though the zoo's screens are designed in part to prevent unauthorized human access to the cages, they are primarily designed to facilitate the circulation of certain materials—such as oxygen and carbon dioxide—while preventing the circulation of others, such as the animal bodies themselves. The influx of these elements enables the survival of the animals, allowing their respiratory and nervous systems to function despite the artificial restriction of the animals' physical environment. This screen-based system, of course, provides the basic environmental conditions for a zoo to exist: it allows the animals to survive while preventing them from penetrating into the areas of the zoo designated for human traffic. Thus, the screening function of the cage serves multiple purposes: on the surface, of course, it serves to protect the animals and the human visitors from one another. Yet the cages also serve to protect the animals from their own impulsiveness and presumed irrationality. In this sense, the screens protect the animals from themselves, ensuring that they do not leave their assigned territory and pursue activities—such as mauling passersby, or running out of the zoo and into oncoming traffic—that would likely result in that animal's capture and extermination.

It is hardly surprising, then, that Gou spoke admiringly of the zoo's success in managing its animal workforce. Speaking to the zoo's director, Gou even asserted, "I should ask you to come run my company" (Kwong 2012). Although Gou never actually hired the zoo director to run Foxconn, Gou did implement an architectural screening system that is highly reminiscent of the metal bars encaging the animals at the Taipei Zoo. Just as Gou responded to the Foxconn suicides by promising "We will leave no stone unturned and we'll make sure to find a way to reduce these suicide tendencies" (Barboza 2010), he implemented a system of preventive measures that would protect his employees from their own determination to die. Some of these measures were legal, such as the creation of a ludicrous "suicide pledge" that prevents employees and their families from pursuing legal action against Foxconn. Thus, on hire, all Foxconn employees had to sign a pledge in which they promised,

> In the event of non-accidental injuries (including suicide, self mutilation, etc.), I agree that the company has acted properly in accordance with relevant laws and regulations, and will not sue the company, bring excessive demands, take drastic actions that would damage the company's reputation or cause trouble that would hurt normal operations. (Amy Lee 2011)

Yet most interesting, of course, were the suicide nets that Gou erected around the staircases, windows, and corridors of his factories and dormitories. Following the 2010 wave of suicides, Foxconn scrambled to erect three million square meters of safety nets—what Gou calls "nets with a loving heart" (Chan and Pun 2010)—around his factories in mainland China.

By installing these nets of love, Foxconn exhibited a familiar biopolitical logic: while in recent years suicide nets have been erected on bridges and other popular

sites for public suicide (e.g., the Golden Gate Bridge in San Francisco, or the Fall Creek Gorge Bridge in Ithaca, New York; see Beautrais 2007), Foxconn used suicide nets to prevent workers from disentangling their lives from a cycle of exploitation and control that has only one possible exit: death. This suicide screening system, therefore, allowed Foxconn to control labor at a uniquely intensive level. Of course, Foxconn's disciplining of working bodies is hardly new—reducing workers to their most biomechanical capacity to affix labels, assemble phones, and turn screwdrivers has always been an essential element of capital's arsenal. Yet the suicide screen's capacity to "make live" (see Foucault 2003, 240–241) signifies a more rigorous and direct capture of the worker's life. While at work, of course, working subjects surrender control over their lives by selling themselves to capital in return for a wage. Yet as capital has steadily extended its control over working subjects by restructuring their leisure time, it has developed more intensive capacities for regulating the lives of these working subjects. Foxconn's suicide screen is one of the crowning achievements in this historical process, as at this stage capital is not just developing new technologies that control how working subjects' lives are expressed. Ultimately, Foxconn's suicide nets comprise an architectural infrastructure that prevents workers from killing themselves—not only reducing, in real terms, their opportunities to rebel against capital, but also preventing them from sacrificing their lives in an activist spectacle. Although Foxconn workers can, of course, kill themselves in a less spectacular fashion elsewhere on the campuses where they spend nearly all their lives, they would do so with far less political effect. Thus, not only do Foxconn's suicide screens keep workers working, they also prevent the reemergence of a radical, sensational form of protest—a form of protest which, by generating global outrage against Silicon Valley's complicity in Chinese labor exploitation, actually resulted in some palpable gains for Foxconn workers (see Chan and Pun 2010, 8). As Nicholas Michelsen (2013, 211) argues, "[if] death is all that is left to the colonized, it becomes the final representation of living freedom, and a means to subvert the regime which dominates them." To those whose life has been colonized by such an insidious manifestation of capital, suicide represents a radical expression of the community's basic capacity to rebel against biologically attuned forms of domination and oppression.

## Digital Safety Nets: Samaritans Radar and Project Durkheim

> "Turn your social net into a safety net." (Samaritans Radar slogan)

Architectural screens, however, are not the only screening technologies used for the prevention of suicide. NIMH director Tom Insel, for instance, provides a unique perspective on suicide and its methods of prevention. According to Insel (2015), there is an important distinction between (1) "reducing access to lethal means" and (2) detecting potential signs of suicidality. Foxconn's suicide nets are an example of the former, as they are an architectural intervention designed to not only prevent bodies from falling to the ground, but also to constrain the environment in such a

way that suicide is more difficult to carry out. However, the latter—detecting potential signs of suicidality—frequently comprises a screening system that includes digital technologies that gather and process subjects' personal data to determine who is a suicide risk.

One especially interesting example of an artificially intelligent suicide screen is the app Samaritans Radar, which led a short and controversial public life before being eliminated in 2015 over privacy and ethical concerns. According to its founders, the aim of Samaritans Radar was "to look for potentially worrying tweets from people talking about their problems with the hope that their followers will respond to their Tweets—which are already public—and which otherwise may be missed" (Samaritans 2014). The legal and moral justification for Samaritans Radar, then, was based on the public status of social media postings. If a concerned party was worried that a friend, neighbor, or family member was considering suicide, that person could sign up for the Samaritans Radar app and direct its software to track the social media postings of the targeted person. Samaritans Radar would then scan that individual's public digital footprint for potential indices of suicidality, and then, if any alarming posts were found, the app would alert the concerned party that his or her target was potentially suicidal.

Of course, Samaritans Radar did not emerge in a cultural or institutional vacuum. In fact, it was simply one cultural technology deployed by the U.K.-based Samaritans organization, whose mission "is to reduce the incidence of suicide by alleviating despair, isolation, distress, and suicidal feelings among individuals in our community, twenty-four hours a day; to educate the public about suicide prevention; and to reduce the stigma associated with suicide" (Samaritans 2015). Through grief support services, crisis counseling, public outreach, and other screening and prevention technologies, Samaritans strives to identify at-risk individuals and prevent them from committing suicide. Samaritans Radar, however, was the organization's innovative first attempt at empowering individuals to carry out technologized surveillance and risk analysis on its peers. Once a user downloaded Samaritans Radar, his or her Twitter feed would be scanned for potential discursive markers of suicidal tendencies (such as "help me," "depressed," "hate myself," "tired of being alone," and "need someone to talk to"). If the app found one of these predetermined phrases, the user would receive an email alert that the friend in question is at risk of suicide. The words "View Tweet Now," in bright red text, were highlighted in the middle of the screen. After clicking, the user was transferred to a new screen that featured a copy of the threatening tweet along with a question: "Are you worried about this Tweet?" The user's response was then used to refine Samaritans Radar's algorithms, to produce a more intelligent and discriminating screening system. The Radar's screening algorithms were notoriously inaccurate, however, and they frequently misinterpreted "suicidal" social media postings and thus gave false diagnoses. Responding to early criticisms about these shortcomings, the Samaritans team reassured the public:

> Samaritans Radar is in its infancy and won't get it right every time. . . . It's not good at sarcasm or jokes yet! But there's a way for you to give feedback on whether a Samaritans Radar alert was correct, so the service improves for everyone. (Rothkopf 2014)

The app's designers hoped that in time it would succeed in synthesizing semantic and psychological insights into how suicidal subjects hint at their plans before following through with the deed.

In fact, an important rationale for Samaritans Radar was that our society's traditional social screening measures need to migrate online. We are relatively well equipped, Samaritans and its allies argued, to identify face-to-face signs of suicide. However, now that many of our social interactions take place online—where, it was argued, signs of suicidal behavior are easier to overlook—we need new surveillance technologies that supplement the work of social interpretation that once allowed subjects to monitor and interrogate their friends, family, and coworkers. Indeed, a number of social scientists have found a steady correlation between social media posts and suicide, especially among young people (see, for example, Luxton et al. 2012). Guided by this belief in the relationship between social media and suicide, one Samaritans Radar supporter argued,

> As people gather round the virtual rather than physical water cooler, it's easy to miss the sort of social cues that might suggest a friend or colleague is having a rough time. And, if you follow a lot of people on Twitter, potential cries for help might get lost in the stream without some kind of flagging aid. (Meyer 2014; also see Naomi Lee 2014)

Thus, in a time when many subjects might miss their peers' suicidal gestures—and when users are inundated with too many messages to interrogate each one for signs of depression or desperation—many observers find that Samaritans Radar provides a useful screening tool.

Samaritans Radar—as well as its successor programs, such as the U.S.-based Project Durkheim (see, for example, Poulin et al. 2014)—provided this intervention by using sentiment analysis, which is a branch of computational linguistics that classifies statements according to their perceived "sentiment" (see Pak and Paroubek 2010). To perform sentiment analysis, computer scientists build corpuses of statements, classifying their semantic implications on a broad spectrum from negative and neutral to positive. Algorithms are then used to analyze these statements and their lexical relationships, classifying certain utterances as corresponding to a range of sentiments. In the case of Samaritans Radar, if those utterances fell within the algorithms' evolving semantic bandwidth of "suicidal" discourse, the app then notified users that their target's behavior needs to be scrutinized and that, if appropriate, interventions should be devised. Specific interventions, in fact, were suggested: users were urged to reach out to the suicidal target directly or to contact a mental health professional.

Although Samaritans Radar exemplified a unique, early articulation of computational media and moral entrepreneurialism, it also nodded toward the emerging confluence of artificially intelligent screening technologies and the production of

psychological truth. Even though Samaritans Radar operated in the civilian realm in which personal privacy is still a touchy issue, another app—under development by the U.S. Department of Defense's technology research and development wing, Defense Advanced Research Projects Agency (DARPA)—is taking aim at a more or less captive audience, America's military service members. Responding to the shocking rates of suicide among American military veterans, DARPA researchers have developed a screening system which, like Samaritans Radar, uses predictive analytics to scan a target's web presence. Project Durkheim's sophisticated algorithms, however, are designed to be more semantically nuanced than Samaritan Radar's. This increased semantic sensitivity, for instance, allows Project Durkheim's technologies to incorporate a broader range of contextual factors into its analysis, allowing it to detect irony (in statements such as "If I hear this song again, I'll kill myself").

This boost in artificial intelligence allows Project Durkheim's suicide detection technologies to use social media postings to produce the truth of a target's psychological state. Although Project Durkheim is now "human in the loop"—that is, though researchers are still alerted before medical or social authorities are informed of a target's determined suicidality—the project's team leader, Chris Poulin, asserts that the next phase of the program will involve automated interventions (Ramachandran 2013). Rather than a human agent monitoring soldiers' communications and behaviors, a machine will soon determine a target's suicide risk and will send warnings to a mental health professional, a friend, or a family member. This increasing technologization of the screening process, of course, surrenders to machines an alarming degree of diagnostic power—power which will certainly grow as militaries increasingly turn to automated technology as a cost-effective alternative to human professionals who provide services like face-to-face psychotherapy (see Packer and Reeves 2013).

While Samaritans Radar and similar programs allowed moral entrepreneurs to monitor and intervene into the lives of target individuals, Project Durkheim and similar DARPA-affiliated programs signal an emergent turn toward computers making automated determinations of dangerousness and suicidality. This automation of the suicide screen is an early step toward the surrendering of sanity determination to machines, which is paralleled elsewhere in military operations as automated psychotherapy is being used to diagnose—and will eventually be used to treat—posttraumatic stress disorder and other psychological maladies (Reeves 2016). This trend toward computerized autonomy suggests a likely course of development for the digital suicide screen: new screening technologies, which are biased in their capacity to make intelligible certain behavioral and linguistic trends, will be increasingly deployed by the state and its allies to make mental health diagnoses, assess suicide risk, and prescribe interventions. According to the hopes of Chris Poulin and other DARPA researchers, identifying the suicidal subject will become a process that is increasingly surrendered to autonomous screening machines. Even at this stage of Project Durkheim's development, autonomous machines detect suicidal gestures, analyze the language and behavior of target subjects, make diagnoses, and pass along recommendations to the program's researchers. Thus, though scholars and activists have long analyzed the problems involved in the human/expert production of insanity and dangerousness (see,

for example, Rose 1998), the emergence of the digital suicide screen calls us to watch closely as machines gain autonomy in determining which human life needs scrutiny, sedation, confinement, and other protections from the person who has bodily jurisdiction over it.

## Conclusion

Suicide screens are characterized by the screening systems that are designed to prevent subjects from taking their own lives. In the case of Foxconn's suicide screens, suicide refuses the conversion of life into capital, thus calling for an architectural screen that enforces the survival of working subjects. Although it is no secret that architectural technologies have long been used to condition the circulation and behavior of bodies (see, for example, Crampton and Elden 2007), Foxconn's suicide screens illustrate a unique trend in architectural social regulation. Not only do they prevent a highly spectacular form of protest, they also provide a stark illustration of capital's tendency to develop technological solutions for the regulated reproduction of life as well as the prevention of death. In the case of Samaritans Radar, Project Durkheim, and related programs, suicide screens sift through users' personal data to generate an algorithmic profile of those who threaten their own lives; defensive measures—for example, the crowdsourcing of threat assessment and neutralization—are then taken. While Samaritans Radar allowed moral entrepreneurs to monitor and intervene into the lives of target individuals, Project Durkheim and similar DARPA-affiliated suicide screens surrender crucial processes of truth production and death regulation to artificially intelligent machines.

Although this development could have many interesting implications, this article has focused on how screening technologies transform death into a field of political intervention—that is, how they assert control over the means and site of a subject's death. If death is one's only means of escaping particularly intensive forms of oppression, control, and/or violence (as in the case of many Foxconn workers, or in the case of veterans suffering from psychological maladies and political abandonment upon their return home), liberalism's "make live" mantra can seem especially insidious. On one hand, this defining liberal stricture deprives life of its potential to sacrifice itself in an assertion of collective political autonomy. In doing so, it prevents this spectacular self-sacrifice from rupturing and reorienting what is politically sensible to a given community. On the other hand, liberal biopolitics forces subjects to surrender to a death tied to the depoliticizing temporal forces of deterioration, accident, or deprivation. Thus, as Achille Mbembe (2003) and Michelsen (2016) point out, the taboo necropolitics of the desperate has not received the kind of critical scholarly engagement it deserves. The troubling convergence of digital capitalism and survival enforcement exemplified by the suicide screen calls for closer scrutiny from scholars and activists, especially as new screening technologies deployed by capital, moral entrepreneurs, the military, and the police apparatus promise to cross the line from care to exclusion, exploitation, and control.

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