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PREVENTING MASS MURDER

With gun control a no-go, early intervention is key. Might artificial intelligence help?

By Julius (Jay) Wachtel. "We're under fire! We're under fire! He's got an automatic weapon and firing at us from the synagogue. Every unit in the city needs to get here now!" Broadcast by one of the first officers at Pittsburgh's "Tree of Life" synagogue, the stunning message graphically conveys the unimaginably lethal threat that just one of America's well-armed citizens gone wrong can pose to the public and the police.

On Saturday morning, October 27, Robert Bowers, a 46-year old loner, armed himself with an AR-15 rifle and three Glock .357 pistols and burst into the Tree of Life, gunning down eleven congregants and wounding two. He then opened fire on arriving patrol officers and wounded two who approached on foot. Two SWAT team members would eventually encounter Bowers on the third floor; during an exchange of gunfire both sustained multiple gunshot wounds. According to the police chief, that officer might have bled to death had a colleague not applied a tourniquet. Bowers was also wounded, although not as seriously. While being cared for he reportedly said "that he wanted all Jews to die and also that they (Jews) were committing genocide to his people."

Apparently, those whom Bowers claimed as "his people" are white supremacists. This "isolated, awkward man who lived alone and struggled with basic human interactions" secretly wallowed in a vicious subculture, frequently posting flagrantly bigoted comments disparaging Jews on "Gab," a social media site popular with extremists:

The vast majority of [Bowers'] posts are anti-Semitic in nature, using language like "Jews are the children of satan," "kike infestation," "filthy EVIL jews" and "Stop the Kikes then worry about the Muslims." Other posts repeat standard white supremacist slogans, such as "Diversity means chasing down the last white person."

Bowers, who has a concealed-carry license, waxed enthusiastically about guns and posted photos of his Glocks. Police found three more handguns and two rifles in his residence and a shotgun in his vehicle. To law enforcement, though, the sometime truck driver was a cipher. "At this point," said the local FBI head, "we have no knowledge that Bowers was known to law enforcement before today."

Cesar Sayoc is different. Before his arrest on October 26 for mailing more than a dozen explosives-laden packages, the 56-year old bodybuilder/male stripper accumulated a criminal record that included a conviction for grand theft as well as arrests for theft, battery, fraud, drugs and, in 2002, threatening to settle a dispute with a bomb, a transgression that ultimately earned him a year's probation.

As one might suspect, Sayoc's personal life was a mess. Estranged from his birth family, divorced and bankrupt, he was living in a beat-up van festooned with pro-Trump messages. Sayoc promoted far-right conspiracy theories and lambasted liberals on social media. In contrast to Bowers, though, Sayoc posted on major platforms: Facebook and Twitter. His rants had recently turned downright scary:

He directed a tweet at Ms. Waters, the California Democrat, with a photo of what appeared to be her house. The message read: "see you soon." He sent another to Eric H. Holder Jr., an attorney general under Mr. Obama, that read, "See u soon Tick Tock." And he told Zephyr Teachout, a Democrat who ran unsuccessfully for attorney general in New York, that he had a surprise waiting for her. "We Unconquered Seminole Tribe have a special Air boat tour lined up for you here in our Swamp Everglades," he wrote. "See u real soon. Hug your loved ones."

Complaints to Twitter went unheeded. (It has since apologized.) After Sayoc's arrest family members and their lawyer came forward. Among other things, they bemoaned the absence of a "safety net" that might have kept their kin from plunging into the abyss.

Compared with Bowers and Sayoc, Scott Beierle, the deranged middle-aged Florida man who killed two and wounded five in a Tallahassee yoga studio on November 2, was really, *really* different. We say "was" because Beierle ended things by committing suicide. We emphasize "really" because he was not your archetypal terrorist. Beierle's complaint wasn't about politics or religion: it was that women refused to pay him attention, at least of the erotic kind. So he fought back with a series of YouTube videos that championed the "Incel" (involuntary celibacy) movement and praised its late spiritual master, the murderous Elliot Rodger, who in 2014 killed six and injured more than a dozen before committing suicide.

Beierle didn't simply convey beliefs – he personalized his messages, disparaging and threatening women by name (e.g., "could have ripped her head off."). Neither was his deviant behavior just online. University and local police had twice arrested Beierle for grabbing women from behind, but charges were eventually dismissed. His odd behavior was noticed by others. A former college roomate said that Beierle seemed mentally unstable but not to the point of involving the authorities:

He was very weird and made everyone uncomfortable. It worried me at the time. There was concern for sure. But there wasn't enough evidence, and I would have been wasting the police's time if I had made any kind of report. I had nothing.

What could have been done?

- As current law goes, not much. Felons and persons who have been adjudicated as mentally defective are barred from having guns. By these standards, neither Bowers nor Beierle was prohibited. Sayoc, who had a substantial criminal record, didn't use guns.
- Our pages (see, for example, "Massacre Control") have discussed various approaches to keeping America safe. One of our favorites is limiting gun lethality. Most recently in "Ban the Damned Things!" we pointed out the unparalleled killing power of assault-type rifles, whose fearsome ballistics have increasingly forced police to deploy armored cars. Even so, making highly lethal firearms available to the public seems coded into America's DNA. No matter how many massacres take place, that's unlikely to change.
- President Trump suggested posting armed guards at religious services. Of course, the most likely outcome of a shootout between a stunned guard and a determined, AR-15 toting assailant is still (you guessed it) a massacre. Perhaps fewer might have been shot at the synagogue, or the yoga studio, had one or more of those present been packing guns. On the other hand, crossfire by agitated gunslingers might have likely caused even more casualties.

So, case closed? Not so fast. "A Stitch in Time" argued for identifying those whose "documented behavior indicates they are at great risk of harming themselves or others" and applying measures such as home visits, counseling and mental "holds" preemptively, *before* they strike. To be sure, that essay's human examples – Eric Garner, Deborah Danner, Manuel Rosales – were long-term chronic disrupters, well known to local cops. Beierle might fit that mold. But picking out villains inspired by ideology such as Bowers and Sayoc may, as we suggested in "Flying Under the Radar," prove a challenging task:

Cast too wide a net and you'll be overwhelmed, swamping the system, irritating honest citizens and possibly infringing on their rights as well. Select too few and should a bomb go off you'll be criticized for overlooking what critics will quickly point out should have been obvious from the start.

On the "positive" side, Beierle, Bowers and Sayoc each used social media. Their posts brimmed with violence and hate. To be sure, parsing through the countless online messages generated each day might seem an overwhelming task. That's where artificial intelligence (AI) might help. A recent NIJ report, "Using Artificial Intelligence to Address Criminal Justice Needs" discusses the use algorithms to analyze large, crimerelated datasets. For example, video images can be scanned to "match faces, identify weapons and other objects, and detect complex events such as accidents and crimes in progress or after the fact."

AI also holds out the promise of "predicting" crime: "With AI, volumes of information on law and legal precedence, social information, and media can be used to suggest rulings, identify criminal enterprises, and predict and reveal people at risk from criminal enterprises." To that end, a recent award ("Combating Human Trafficking Using Structural Information in Online Review Sites") funds the development algorithms that could identify victims and traffickers, in part by analyzing user posts in sex "review" websites:

Machine learning models will be trained using a ground truth dataset based on online reviews recovered and processed using these keywords. The resulting models will then be trained and optimized to detect and classify online reviews, according to criteria such as trafficking, adult, and child.

Along these lines, it seems likely that algorithms could be devised to analyze social media posts and law enforcement, criminal and gun registration records and compare their contents to established "truths" derived from actual episodes of terrorism. Leads could of course be used to kick off or inform investigations, and we expect that in one form or another some of this is already being done. But our emphasis here is preventive, to use leads generated by AI or other means to expose ne'er-do-wells who have been flying under the radar so that interventions such as those mentioned in "A Stitch in Time" can be applied.

Sounds good. But we live in a democracy. What about liberty interests? A recent article in Smithsonian warns that AI's application to crime mapping has led critics to complain that using past patterns to devise algorithms creates the risk of "bias being baked into the software":

The American Civil Liberties Union [ACLU], the Brennan Center for Justice and various civil rights organizations have all raised questions about the risk of Historical data from police practices, critics contend, can create a feedback loop through which algorithms make decisions that both reflect and reinforce attitudes about which neighborhoods are "bad" and which are "good."

Still, no one is forced to reside – or post – in the "neighborhoods" of Gab, Facebook and Twitter. Reacting to the handiwork of Bowers, Sayoc and their many forebears (we can now add Beierle to the mix) *New York Times* columnist Frank Bruni complained that the web has become a "delivery system" for grotesque notions that encourage twisted minds to do the unthinkable:

It [the web] creates terrorists...I don't know exactly how we square free speech and free expression — which are paramount — with a better policing of the internet, but I'm certain that we need to approach that challenge with more urgency than we have mustered so far. Democracy is at stake. So are lives. ("The Internet Will Be the Death of Us," 10/30/18)

What's to be done? If we're certain that ordinary citizens will have invariably steady minds *and* hands, we can encourage gun-carry. Well, good luck with that. Yet with serious gun control out of favor little else of promise remains. That's where early intervention comes in. Here's hoping that the lamentable deficit in "urgency" identified by Mr. Bruni gets fixed real soon so that acting *before* the fact gets a chance to work before the next madman strikes.