Monkey Cage

Ethical and methodological issues in assessing drones' civilian impacts in Pakistan

By C. Christine Fair October 6

A Pakistani demonstrator carries a burning U.S. flag as others shout slogans during a protest against drone attacks in Pakistan's tribal region, in Multan on Oct. 13, 2012. (S.S. Mirza/AFP/Getty Images)

Since 2004, the U.S. Central Intelligence Agency has conducted 379 armed drone strikes against presumed terrorists living in Pakistan's Federally Administered Tribal Areas (FATA), which is comprised of several so-called tribal agencies and governed by a colonial-era legal dispensation that effectively renders the citizens of the FATA second-class citizens. While drone strikes have occurred in all agencies, the vast majority of them have taken place in the two agencies of FATA known as North and South Waziristan. Because international media cannot travel to FATA legally and because the U.S. government refuses to

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speak about the covert program, most reports rely upon the often conflicting claims made by militant groups or parts of the Pakistani government. What is known is that American drone strikes have killed innocent persons in Pakistan (and elsewhere where drones are used). What remains unknown — and perhaps unknowable — is how many of the persons killed in U.S. drone strikes are in fact innocent civilians.

Numerous organizations, such as the New America Foundation, the Long War Journal of the Foundation for the Defense of Democracies, the Bureau of Investigative Journalism, and Columbia Law School among others, have all sought to track drone strikes and their outcomes. As well-intended as these efforts may be, the data are most certainly flawed. When one compares accounts of the same drone strike in the various databases, there is important disagreement about who was targeted and with what outcomes. Sometimes there is even disagreement about *where* the drone strike took place. Such divergence occurs because news accounts, upon which these databases rely, sometimes disagree about these details and, as described above, it is impossible to independently verify which — if any — account is accurate.

Even though there is considerable uncertainty about how many innocent persons U.S. drone strikes have killed, even those who have long opposed the use of armed drones now concede that civilian casualties in Pakistan may not be the single most salient objection to the drone program. As David E. Sanger writes in "Confront and Conceal," "it seems clear the civilian casualties have now dropped dramatically, thanks to more precision weaponry and greater care—and the casualties are far lower than if conventional bombs

were dropped."

Yet the specter of civilian casualties has motivated three major studies of the "civilian impacts" of drone strikes in Pakistan, which I term "advocacy-driven." I do not use this term normatively; rather I employ it because the organizations that have undertaken these studies have an explicit agenda that advocates against the use of armed drones. Unfortunately, while these works are widely cited and their authors are frequent commentators on this contentious issue, much of this research is not empirically robust.

Here I focus upon the three most significant of such studies: Living Under the Drones (a joint project of the legal clinics at Stanford and NYU Law School), "Will I Be Next?": U.S. Drone Strikes in Pakistan (by Amnesty International), and The Civilian Impact of Drone Strikes: Unexamined Costs, Unanswered Questions (Columbia University Law School). (While I do not formally discuss Human Right Watch's A Wedding That Became a Funeral, many of the ensuing critiques apply equally to that report on drone strikes in Yemen.) My aim is to dilate upon some of the critical methodological, analytical and empirical shortcomings of these three reports, which include: conflicts of interest; problematic sampling; excluding the views of pro-drone Pakistanis, failure to consult with avionics, forensics and munitions specialists; inadequate effort to independently verify interlocutors' reports; over-attribution of adverse outcomes exclusively to drones and, reliance upon the accounts of children. I conclude with a brief discussion of how interested parties, including advocacy organizations, can improve upon their

methodologies and thus the conclusions they proffer.

Conflicts of Interest

One of the most problematic reports is Living Under the Drones, published jointly by the law school clinics of Stanford University and New York University. The report's authors attempt to uncover and document the civilian cost of the U.S. drone program in Pakistan's tribal agency of Waziristan. First and foremost, this report was funded and aided by an explicitly anti-drone organization. In the authors' own words, "In December 2011, Reprieve, a charity based in Britain, contacted the Stanford Clinic to ask whether it would be interested in conducting independent investigations into whether, and to what extent drone strikes in Pakistan confirmed to international law and caused harm and/or injury to civilians" (p. i.). It is important to note that Reprieve, and its Pakistani partner organization The Foundation for Fundamental Rights (FFR), have been vigorous foes of the drone program and have argued forcefully for its termination. While the report acknowledges the role of these organizations in the study, it does not explain their official position on drones and their vigorous activities against the drone program. At inception, the law schools were requested to conduct research on behalf of an organization that is fundamentally opposed to drones. This represents a disturbing conflict of interest, which the authors do not acknowledge.

With even a modest commitment to proper social science methods, the impact of this could have been mitigated in some measure. However, the researchers only compounded this ethical conundrum by allowing Reprieve and FFR to

provide the research team with logistical support in Pakistan. Worse yet, the FFR "assisted in contacting many of the potential interviewees, particularly those who reside in North Waziristan, and in the difficult work of arranging interviews" (p.i).

Sampling Matters

The authors of Living Under the Drones and"Will I Be Next?" U.S. Drone Strikes in Pakistan, make no attempt to describe the outcome of a "typical" drone encounter; rather, they seek out the most atypical drone attacks in which unusually large numbers of civilians are presumably killed. Consistent with this selection of events to study, these reports use small samples. For example, the authors of Living Under the Drones sought out persons who self-nominate as some form of drone victim. The authors note that their analysis is based upon a meager 130 "interviews with victims and witnesses of drone activity, their family members, current and former Pakistani government officials, representatives from five major Pakistani political parties, subject matter experts, lawyers, medical professionals, development and humanitarian workers, members of civil society, academic, and journalists" (p. 2). This sample is still relatively large compared to that employed in Will I Be Next?. According to the methodology section of that report, Amnesty International conducted some 60 interviews with "survivors or drone strikes, relatives of victims, eyewitnesses, residents of affected areas, members of armed groups and Pakistani officials" between late 2012 and September 2013.

The authors of Living Under Drones concede that they did

no interviews in North Waziristan or any of the other agencies comprising the FATA. Rather, they conducted their interviews during two separate trips to Pakistan in March and May 2012. All of the interviews were conducted in the twin cities of Islamabad and Rawalpindi, Peshawar, and Lahore. The authors claim that they conducted interviews with 69 "experiential victims." These experiential victims claimed to be "witnesses to drone strikes or surveillance, victims of strikes, or family members of victims from North Waziristan" (p.2). The authors of the report readily concede that the "majority of the experiential victims interviewed were arranged with the assistance of the Foundation for Fundamental Rights, a legal nonprofit based in Islamabad that has become the most prominent legal advocate for drone victims in Pakistan….Some interviews also included a researcher from either Reprieve or the Foundation for Fundamental Rights" (p.3).

The role of this organization in selecting and interviewing respondents raises numerous ethical and empirical concerns, not the least of which is social desirability bias. Even though the interviewees were not compensated, they were provided with travel arrangements by FFR. This also provides opportunities for respondent coercion. The respondents may fear that should they offer accounts that differ from FFR/Reprieve's preferred anti-drone position, they may be unable to return home or not be selected for future interviews, which may provide the opportunity for future travel for such purposes. This is a not a trivial benefit. One of the families at the center of Amnesty International's Will I Be Next? were brought to the United States where they testified before the U.S. Congress in

October 2013.

Silencing Inconvenient Voices?

These three reports on drones create the impression that there is universal and unquestionable opposition to drones in Pakistan. There is a serious problem with this position: it's simply not true. Polling data suggest sizeable minorities do support drone strikes, if for no other reason than doing nothing is not an option for those who live under the tyranny of the militants in FATA and because other options (e.g. Pakistani military operations) are worse. In addition, Pakistani newspapers do publish editorials by pro-drone Pakistanis. Researchers who have actually interacted with residents of Waziristan, some of whom are from the tribal areas themselves, have found that many residents in FATA vigorously support the U.S. armed drone program and even compare them to ababil, the holy swallows, mentioned in the Koran (Surat-al-Fil (Verse of the Elephant)). In that incident, Allah dispatched the ababil to repel a Yemeni warlord (Abraha) and his army of elephants that invaded Mecca by dropping black stones upon the invaders.

For many persons in FATA, there are few better means to target those militants who are terrorizing parts of the tribal areas and the rest of Pakistan. There are no police or other law enforcement entities in the tribal areas. The Pakistani security forces conduct ground offensives, artillery bombardment and air strikes that kill many innocents and displace millions. If the works cited here are culpable of ignoring pro-drone sentiments, Pakistani drone advocates may well be guilty of over-stating the numbers of persons in

FATA who support drones. What I conclude from these Pakistani accounts is that it remains an important empirical question as to who supports drones and why, and similarly, who opposes them and why. Excluding the voices of pro-drone Pakistanis from the debate is very troubling since many of them live in FATA and, thus, their lives are most directly affected by the drone program as well as Pakistani military and intelligence operations and the diverse menagerie of militants living among them.

Difficult vs. Impossible?

While it is *difficult* to independently confirm media reports of drone strikes in FATA, it is not impossible as some claim (e.g. Stanford-NYU Law School Clinics). After all, Sebastian Abbot of the Associated Press did just that. Abbot dispatched a series of Waziristan-based stringers to independently investigate 10 of the reportedly deadliest drone strikes from the previous year and a half. His team interviewed some 80 villagers at the sites. They found that a "significant majority [seventy percent] of the dead were combatants." When they exclude one specifically deadly attack on March 17, 2011 from their tabulations, they found that nearly 90 percent of the people killed were militants. Notably Amnesty International also fielded Pakistani researchers to FATA, which further demonstrates that it is possible.

Abbott's work stands in stark contrast to the efforts of the Stanford-NYU authors, who acknowledge that fear of retribution "from all sides—Pakistani military, intelligence services, non-state armed groups—for speaking with

outsiders about the issues raised in this report" (p. 4). Nonetheless, the authors were surprisingly willing to accept the claims of their interviewees who traveled far from home to meet them in major Pakistani cities, under the chaperone of FFR. Nor did the report's authors seem aware that the involvement of FFR in the selection, transport and ultimate interviewing of subjects could corrupt their data. Even though the authors claimed to have "made extensive efforts to check information provided by interviewees" against other sources, and collected "photographs of victims and strike sites" and "medical records documenting their injuries" as well as "reviewed pieces of missile shrapnel" (p.5), their assurances fall short.

Because the research team neither included nor consulted avionics, forensic or munitions experts, the authors are not in a position to state, with any degree of confidence, that the observed fragments are responsible for damage to human life or property, as claimed, nor are they in a position to assert that the missile was fired from a drone. There is no chain of custody associated with these artifacts proving that they came from a drone or that the fragment—or its parent missile—is responsible for any of the events in question. Even though these teams are comprised of lawyers (among others) and thus presumably understand this crippling caveat to their claims, they never acknowledge this. This reliance upon artifacts or photographs thereof brought with interlocutors is all the more troubling when the team never once traveled to FATA.

It is reasonable to demand that these teams provide evidence that the persons they claim were killed in drone

strikes actually existed in the first instance. And it is reasonable to demand that they provide evidence that injury, death or property damage is due to drones. Pakistani media has reported that individuals and groups have circulated fraudulent photos of persons whom they alleged were injured by drones but were not. It is also relatively easy to obtain falsified medical documents as well as fake birth and death certificates in Pakistan through bribery.

While the authors of the three reports discussed here contend that photos of fragments and craters are ample evidence of drone culpability, they are not for the simple reason that drones are merely a platform for delivering munitions. Not everything that falls from the sky and explodes in FATA came from a drone. Far from it.

Pakistan has launched such missiles from several platforms including F-16s, AC-130s and AH-1 Cobra attack helicopters. Pakistan's Air Force has been very active in the tribal areas. In November 2011, Pakistan's then Air Chief Marshall, Rao Qamar Suleman, addressed an Air Chiefs Conference in Dubai. On that occasion he discussed Pakistan's use of Lockheed Martin's F-16s and specially-equipped Lockheed C-130s. He further claimed that "in the first two years of counter-insurgency operations, the air force conducted more than 5,500 strike sorties, dropped 10,600 bombs and hit 4,600 targets." Pakistan has conducted several other operations since then 2011. Thus this is likely an underestimate of Pakistani sorties. By way of comparison, as of Sept. 28, 2014, there have been 379 drone strikes, according to data collected by the New

America Foundation. Despite the fact that drone strikes are outnumbered by conventional Pakistan military strikes by at least an order of magnitude, none of these reports even *considered* the possibility that the much-photographed fragments are due to anything but a U.S. drone.

This failure to account for the possibility that other explanations may better account for the events observed by the Stanford-NYU or Amnesty International teams is even more egregious if you have even a cursory familiarity with how armed drones work. For example, in "Will I Be Next?", Amnesty International focuses upon the death of a 68-year-old woman referred to as "Mamana Bibi." The report relies heavily upon the testimony of Zubair Rehman, one of her teenaged grandsons. The reliance upon Zubair's testimony is very problematic because he reports seeing things that suggest that the aircraft that killed his grandmother could not have been a drone. Zubair claims that "The drone planes were flying over our village all day and night, flying in pairs sometimes three together. We had grown used to them flying over our village all the time" (p. 19).

There are at least two problems associated with this testimony, if it is accurate. First, drones cannot fly in formation as he suggests. Predators and Reapers, the two armed system that the United States uses in Pakistan, cannot fly in pairs much less triplets because their pilots, who are seated in cubicle-like pods thousands of miles away from the theater, do not have the visibility that permits them to fly in close formation with other drones, or any other kind of aircraft for that matter. While the Air Force is seeking to develop "sense and avoid" technology that would permit drones to fly as described, that technology is still in

the experimental phase.

Equally disconcerting is Amnesty International's claim, without reference to any particular witness, that "Mamana Bibi was blown into pieces by at least two Hellfire missiles fired concurrently from a US drone aircraft"(p.19). To support their varied claims, Amnesty International published a photo of items provided to the organization by relatives of Mamana Bibi and asserted that the photo depicts "debris from the missiles fired from a US drone aircraft that killed Mamana Bibi" (p.22). There is nothing in the photo that demonstrates that the debris is from a Hellfire much less a Hellfire shot from a drone. As David Axe notes, the "mangled metal pieces could just as easily have come from a TOW missile or another munition launched by a Pakistani military plane or helicopter."

If Zubair's testimony is accurate, his account actually suggests that his grandmother was not killed by a drone; rather by a Pakistani fighter aircraft (e.g. F-16s of AH-1 Cobra attack helicopters), which do fly together in formation and which can launch munitions simultaneously as he suggests. This possibility must be considered given the frequency with which Pakistan's military has conducted sorties in Waziristan and elsewhere.

Disambiguation

The authors of Living under the Drones, "Will I Be Next?" and Columbia University Law School's *The* Civilian Impacts of Drone Strikes all assert that the drones have traumatized the residents of FATA not only due to the various damage

they inflict but also because their incessant buzzing deeply disturbs the residents who fear that, at any time, they may be targeted in a drone strike. These reports also attribute psychological harm to the residents' changed behavior patterns, which include no longer holding tribal jirgas (assemblies of elders), appearing in groups, or even going into sites of drone attacks fearing that "first responders" will be killed in a "double tap." These concerns are important. But they are also problematic. Why?

First, it should be understood that North Waziristan, and the rest of FATA, is not only afflicted by drones. Since the flight of the Afghan Taliban and their al Qaeda associates to Waziristan in late 2001, the residents of this tribal agency and others have been terrorized by these militants and their Pakistani allies who have sought to establish micro-emirates of Sharia throughout the FATA and nearby areas. Suicide and other attacks at markets, sporting facilities, schools, military and paramilitary outposts have become common place. Pakistani Taliban have killed reporters, politicians, government officials, barbers, purveyors of CDs as well as anyone that they believe are working with the state or the Americans to hinder their reign of impunity. In addition, Pakistan military and paramilitary organizations have also operated in the FATA, as noted. Despite the presence of several sources of physical and emotional distress, the authors of these reports assume that their interlocutors experience post-traumatic stress disorder and other disruptions to ordinary life solely due to the omnipresent drones that buzz above at all times, even when they are not firing munitions haphazardly at civilians suffering below.

A staple of nearly every advocacy-driven report on drones, including the reports by Amnesty International and the Stanford-NYU Law school clinics, opine that residents of the tribal areas are traumatized by the incessant sound of drones buzzing overhead. Amnesty International quotes an interviewee who says "When the drone plane comes and we hear the sound of 'ghommm' people feel very scared. The drone plane can launch missiles at any time" (p.29). Another interlocutor explains that "Everyone is scared and they can't get out of their house without any tension and from the fear of drone attacks. People are mentally disturbed as a result of the drone flights….We can't sleep because of the planes' loud sound. Even if they don't attack we still have the fear of attack in our mind" (p. 31). This theme figures prominently in the report of the Stanford-NYU Law School Clinics. That report claims that "Community members, mental health professionals, and journalists interviewed for this report described how the constant presence of US drones overhead leads to substantial levels of fear and stress in the civilian communities below" (pp. 79-80). The report continues:

> One man described the reaction to the sound of the drones as 'a wave of terror' coming over the community. 'Children, grown-up people, women, they are terrified. . . . They scream in terror.' Interviewees described the experience of living under constant surveillance as harrowing. In the words of one interviewee: 'God knows whether they'll strike us again or not. But they're always surveying us, they're always over us, and you never know when they're going to strike and attack.' Another interviewee who lost both his legs in a

> drone attack said that '[e]veryone is scared all the time. When we're sitting together to have a meeting, we're scared there might be a strike. When you can hear the drone circling in the sky, you think it might strike you. We're always scared. We always have this fear in our head (p. 80).

Surprisingly these claims receive virtually no criticism even though they are exceedingly untenable. First, most of the drones employed in the tribal areas are for surveillance purposes. If the drones were as omnipresent and loud as these interviewees suggest and as these reports claim, they would make for pretty inutile observation and reconnaissance platforms. Second, and related to the first, Reapers and Predators are mostly flying at altitudes that tend to be inaudible. This is, after all, why the platforms are so effective: they can orbit about persons, groups and facilities of interest for hours and even days without detection. In contrast, the AC-130 (which Pakistan does use) is known for its distinctive buzz. Other aircraft such as F-16s and attack helicopters are also very audible.

Children Witnesses

Another vexing characteristic of these advocacy-motivated reports is their reliance upon children as witnesses. Again, many of the authors are lawyers and they should well understand that the testimony of children is extremely unreliable. "Will I Be Next*?*", by Amnesty International, depends in large measure upon the eyewitness accounts of children as young as 15, eight, seven and even five years of age. Many of the details of the death of the afore-noted "Mamana Bibi" derive from the testimony of Zubair

Rehman, one of her teenaged grandsons. While the report details the ages of her other grandchildren cited in the report, nowhere does it state Zubair's age. (He is depicted in a photo with his father in which it appears to be a teenager.) Subsequent news coverage revealed that in October 2013, Zubair was 13. This means that when the drone strike occurred in October 2012, he was 12 years old. Despite his youth, the report relies very heavily upon things that he claims to have seen. The reliance upon Zubair's testimony is very problematic not because of his young age but also because he reports seeing things that suggest that the aircraft that killed his grandmother could not have been a drone. Unfortunately Amnesty International's team was inadequately familiar with drones and failed to consult experts to understand the possible explanations for what this 12 year old claims to have observed.

The dependence upon young children as witnesses, coupled with the inadequate efforts to independently confirm their accounts, is troubling. There is a solid literature that demonstrates that children are deeply vulnerable to manipulation, suggestability, and, depending upon the way in which they are questioned, children will confabulate details. Research has also shown that it is very difficult to reverse the damage once children are subjected to suggestions. Concerns about the suitability of children witnesses in these studies are further exacerbated when groups such as Repreive/FFR are involved in selecting interlocutors and overseeing their interviews. These practices verge on being unethical.

Can We Do Better?

To the credit of the organizations discussed here, they have spent time and resources trying to understand a complex issue when the primary actors involved in the program (the Pakistani and American governments) refuse to be transparent. It is highly unlikely either government will be more forthcoming, and it is unlikely that FATA will become an easier place to conduct research. It is also unlikely that interest in this program will disappear. Despite the challenges, persons and organizations who wish to understand the use of drones in Pakistan — or elsewhere for that matter — need to be as rigorous as possible. Below I suggest a number of important improvements that organizations can and should implement.

First, it is possible to interview persons in the vicinity of drone blasts. Admittedly, making such efforts adds costs but it also adds accuracy.

Second, authors should be aware of the problematic ways in which they draw their samples. Advocacy organizations want to focus upon the most salacious and outrageous of outcomes rather than typical outcomes. This is irresponsible. Consumers of their reports are entitled to know how typical or atypical a particular event is.

Third, these reports should not rely upon the testimony of children.

Fourth, researchers need to treat all interlocutors' accounts with skepticism for the various reasons discussed here.

Fifth, simple photographs of injuries and scrap metal are not evidence, and they should be not treated as such.

Sixth, analysts need to be more conversant with the legal, social and political dynamics of the countries they wish to understand. In the case of Pakistan, they must understand the special legal status of FATA and how it influences what analysts can observe and, just as important, cannot observe.

Seventh, they must engage with the enormous body of avionics, munitions, forensics, and even satellite imagery experts interrogate or substantiate witness accounts. Similarly, they should work collaboratively with social scientists to improve their study methods. Current approaches are extremely misleading and raise serious ethical questions about the intent of the studies in the first place.

In short, if analysts and scholars do not want to adhere to the best standards of social science research possible, they should simply concede that they are trafficking in public outrage and stop referring to their efforts as research and analysis. The public should treat these efforts accordingly.

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