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The Information Revolution and New Opportunities for Multitrack Diplomacy in High Violence Situations: The Increasing Importance of Data Organization and Local Input for Policy Shaping

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Executive Summary

As data have been created at unprecedented speeds over the past decade, new foreign policy ideas to harness this emerging technology have also appeared. Large data (also known as "Big Data") and predictive analytic technologies have fostered novel ways for government analysts to track warfare in order to plan violence prevention interventions. Importantly for this topic, these trends have also occurred in tandem with shifts by NGO mediators to extend Multitrack Diplomacy objectives beyond generating conflict resolution recommendations to feed into governmental efforts to end the conflict, and into more pronounced efforts to directly link the civilian protection advocacy efforts of some Multitrack Diplomacy actors into Track One processes.

This Policy Brief argues that the information revolution and emerging technologies have heightened the importance of engagement between governments and two sets of Multitrack actors in situations of mass violence against civilians: 1) *scholar-practitioners* with the academic training to devise analytic models that organize the most salient patterns in the raw data for policy decision-making, and 2) *local experts*, who are best equipped to understand the implications of certain patterns and data points in their own context. To explore these new opportunities, the case study of violence prevention in Myanmar (Burma) is presented in this Brief, which underscores:

1) How new quantities of raw data did not solve policymakers' prevention problems,

2) How innovative social science findings now enable scholar-practitioners to create empirically-grounded analytic frameworks that organize information in urgent, chaotic contexts, and

3) How local actors, with the best access to ground-level data, can increasingly influence not only policy response to violence but analysis of the fundamental conflict dynamics in the first place.

Policy Recommendations

As data have been created at unprecedented speeds over the past decade, new ideas to harness these technologies for violence prevention and civilian protection have appeared. These opportunities require innovative approaches to information politics and data usage, thus expanding Multitrack collaboration possibilities. This Brief details the associated resources and constraints of three groups of actors—policymakers, scholar-practitioners, and local advocacy experts—and argues that these Multitrack partnerships should be predicated on the following shared understandings:

⇒ Data surpluses are resulting in collaborations centered around *information organization*, alongside traditional information gathering.

⇒ New collaboration opportunities are expanding the window of time in which non-governmental actors can influence high-level policy processes, moving beyond mitigation recommendations to influence *prevention-oriented analysis*.

⇒ Uncharted territory can also lead to new *ethical and safety challenges*, compounded by power and resource access differentials.

Given these emerging collaboration opportunities for Multitrack actors to engage in complex emergencies, this Brief notes the evolution in the types of conflicts in which Multitrack efforts could become more relevant.

Given these emerging opportunities for innovative approaches to information politics and data usage, alongside new opportunities for Multitrack actors to engage complex humanitarian emergencies, this Brief notes the evolution of the types of conflicts in which certain Multitrack efforts could become more relevant. These new opportunities are also expanding the window of time in which non-governmental actors can influence high-level policy processes, going beyond brainstorming violence *mitigation* responses but also violence *prevention* analytic design. This Brief concludes by addressing ethical and other issues to watch out for and offers practical guidance to policymakers, scholar-practitioners, and local experts in order to maximize the effectiveness of new information collaboration potentialities in the Information Age, while being mindful of potential problems.

Introduction

In 2015, the multinational technology company IBM estimated that 90 percent of the world's data had been produced and stored in the previous two years alone, with 2.5 quintillion bytes of data generated each day. By 2019, the company had updated its prediction to a tenfold expansion of 44 zettabytes (i.e., 44 trillion gigabytes) of data per day—numbers so large as to be nearly unfathomable. While terminology is contested and applied in different ways, the fact remains that the Industrial Revolution has now been supplanted by the Information Age—in which information itself has become a productive force.[1] This has significant implications for Multitrack diplomacy.

As data have been created at unprecedented speeds over the past decade, new foreign policy ideas to harness this emerging technology also appeared. Large data (also known as "Big Data") predictive analytic technologies have fostered novel ways for government analysts to track warfare. Well-known examples include the Senturion modeling developed in partnership with the U.S. National Defense University and the Integrated Crisis Early Warning System (ICEWS) and later Next Generation Social Science (NGS2) programs supported by the U.S. Defense Advanced Research Projects Agency (DARPA). These applications of big data technologies contribute to an overall trend of policy-oriented global horizon scanning aimed at using scarce resources effectively by identifying growing signs of risks before they erupt. Importantly for this topic, these trends were also occurring in tandem with shifts by some NGO leaders to extend Multitrack Diplomacy objectives "beyond the practice of generating ideas" to feed into governmental conflict resolution efforts and into more pronounced efforts to link "Track Two and Track Three participants directly to Track One," as Julia Palmiano Federer[2] has argued in the first Brief in this Ottawa Dialogue series.[3]

Before going further, it is necessary to spend a moment on the question of the "level" of Multitrack Diplomacy which is primarily being discussed in this Policy Brief. In advocating closer relations between Multitrack efforts and international policymakers seeking to prevent escalating violence intentionally directed against civilians in conflict situations, I am speaking primarily about what is known in scholarly literature as "Track Three," and particularly the actions of NGOs devoted to such fields as human rights and violence prevention advocacy. The kind of collaboration between NGOs and international governments which is suggested in this Brief may not be appropriate to efforts at the Track 1.5 level, which are usually centered on bringing together decision-makers from within the conflict, and even

some efforts at the Track Two level to do the same with influential citizens for discussions about how to address the political and other causes of the conflict in a manner meant to lead to an "agreement." Such dialogues require discretion and a high level of trust between the parties in conflict and the Track 1.5 or Track Two facilitators that these efforts are not a cover for gathering information which may be used "against" those involved in the conflict. By contrast, Track Three NGOs, and particularly those involved in advocacy of certain norms surrounding the protection of civilians in conflict zones, are quite different; they often deliberately seek to acquire and make use of information which will call attention to what is happening.

This is an important distinction. The kind of "impartiality" or "neutrality" required of the Track 1.5 or Track Two conflict resolution actor is quite different to that of the Track Three or other actors working to protect civilians by galvanizing international attention and shaping the specifics of international intervention policymaking and programming. Furthermore, I intend this Brief to be focused on the narrow goal of immediate-term civilian protection—saving lives and preventing violence against targeted victims—rather than other associated activities (e.g., justice accountability, reparations, etc.) or to the promotion of certain formal norms surrounding this topic such as the Responsibility to Protect or growing international activity clusters under the umbrella of "atrocity prevention." Still, in complex contexts, a narrow focus on preventing and halting violence against civilians, particularly when involving international bilateral or multilateral actors, can become blurred with other related goals. In acknowledgement of this murky reality, I utilize the term "civilian protection advocacy" in recognition that these activities are increasingly being debated as a component of broader conversations on "norm advocacy."[4] The field is beginning to debate the proper extent to which mediation, as understood in the classic conflict resolution sense, and norm advocacy should be conflated. Some are leery of this conflation, while others believe strongly that it is necessary.[5] Even when discussing Track Three and civilian protection advocacy only, however (as this Policy Brief seeks to do), the kind of collaboration between such Track Three actors and international policymakers which is explored in this Policy Brief is not without serious potential dangers. These will be discussed towards the end of this Brief.

With more such Track Three "civilian protection advocacy" actors now directly engaging in high-level policy processes, this Policy

Brief argues that the information revolution and emerging technologies have heightened the importance of engagement by two sets of Track Three actors: 1) *scholar-practitioners* with the academic training to devise analytic models that organize the most important patterns in the raw data for policy decision-making, and 2) *local experts*, who are best equipped to understand the implications of certain patterns and data points in their own context. To explore these new opportunities, the case study of violence prevention in Myanmar (Burma) from 2012-2018 is presented which underscores 1) how new quantities of raw data did not solve policymakers' prevention problems, 2) how innovative social science findings now allow for empirically-grounded analytic frameworks to organize information in this urgent, chaotic context, and 3) how local actors, with the best access to ground-level data, can increasingly influence not only policy response to violence but analysis of the fundamental conflict dynamics in the first place.

Informational Overload: New Opportunities for Track Three Organizing Expertise

In 2013, representatives of the U.S. Department of State's Bureau of Conflict and Stabilization Operations[6] expressed hope that cutting-edge data science could lead to new successes in predicting crises, preventing conflict, protecting civilians, and reducing the fiscal taxpayer-funded costs of warfare by allowing policymakers a larger window for policy and program design. Given more decision-making time, a smaller and lighter intervention footprint might effectively shield at-risk civilians without deploying military or peacekeeping forces. In an interview with CNN, one senior analyst suggested "mixing new technologies [like big data predictive analytics] with conventional methods of developing policy strategies [can create] pockets of hope that allow advanced planning around the patterns of violence for the future."

Yet within both technological companies like IBM and circles of foreign policy applications of these data tools, diverse voices have expressed common concerns. At IBM, financial experts have flagged that human-driven analytic innovation was also needed, saying "without new capabilities, the paradox of having too much data and too little insight would continue." Similarly, in the same year, a cyber strategist and former U.S. Department of Defense policy advisor argued that data technology alone would not generate such insight: "If you could apply human judgements, it's wonderful, otherwise substituting human judgement and talent with computing analytics does not work."

Ironically, these debates over our world's most cutting-edge technologies ultimately circle back to much older challenges within policy decision-making, namely, the process by which raw data points are transformed into usable, action-oriented, and evidence-based theories of change. However, for Track Three practitioners now seeking to directly influence governmental and multilateral initiatives around atrocity prevention and mitigation, new opportunities to engage and influence these processes are appearing. As I have argued elsewhere,[7] new data technologies

and recent global political events are underscoring internal policymaker awareness of the limitations of overly technocratic approaches that generate raw data devoid of its local context. Meanwhile, the influx, accumulation, and sheer amounts of data now available to many policymakers have created new opportunities for scholar-practitioners and local experts able to assist with organizing information and identifying patterns around key topics that can help to guide responsive decision-making.

Especially for violence prevention policymakers, collaborative partnerships with external conflict experts are now not simply important but indispensable. With so many discrete data points available, new human-generated analytic tools that correctly channel data into knowledge production are needed. Discussing the modern influx of potential sources of information for decision-making, IBM experts referred to this conundrum as "control your data or drown trying," implying that informational influx is a double-edged sword that may result in greater insight *or* a greater likelihood of getting lost in the weeds. Diverse professional and geographic areas of expertise are needed to harness the potential of these data sources, leading some researchers to develop the interconnected strategic peacebuilding paradigm. For the purpose of immediate violence prevention and peacemaking, scholar-practitioners and local experts can greatly improve the efficacy of committed Track One civilian protection actors through their efforts to organize the ground-level chaos of violent conflagrations in real-time in such a way that speaks to the granularities of policy planning and monitoring potential outcomes.

As the IBM financial specialist suggested above, effective crisis decision-making requires both *data* (now available in excess to comparatively well-funded governmental officials) and *insight* (now increasingly generated through sophisticated social scientific modeling and locally-generated expertise). Accordingly, new doors for trusted outside partners are opening—including for non-Western experts as telecommunications and pandemic-induced professional norms are transitioning the corridors of decision-making from physical spaces into the virtual world. A variety of non-governmental figures now have much-needed capabilities for harnessing the potential of big data technologies to help prevent violence, or identify rapidly when it starts, ranging from academics who can create empirically-grounded organizing frameworks to international NGOs to local peacebuilding experts with expertise in both their country of residence and—often neglected—the thematic areas in which they specialize (e.g., violent extremism; working with youth; disarmament, demobilization, and reintegration; negotiating ceasefires, etc.). These new opportunities are also expanding the window of time in which non-governmental actors can influence high-level policy processes, thereby potentially going beyond brainstorming violence *mitigation* responses but also violence *prevention* analytic design.

Case Study: Violence Prevention in Myanmar, 2012-2018

The ongoing violence directed against the Rohingya people in Myanmar (Burma) highlights one of our world's most urgent humanitarian crises. A short Policy Brief like this one cannot do justice to either the complexity of these conflict dynamics, nor to the level of human suffering described in ground-level reporting (see reports by International Crisis Group, Human Rights Watch, the U.S. Holocaust Memorial Museum, Office of the United Nations High Commissioner for Human Rights (OHCHR), and others for more detail). In briefest terms, the conflict in Rakhine state involves sectarian violence between the majority Buddhist communities and the Rohingya Muslim minority, militant attacks by groups claiming to represent various factions, and a military crackdown on Rohingya civilians that escalated their long-term extreme and exclusionary discrimination. The escalation in violence against the Rohingya is roughly dated to the 2012 Rakhine state riots. By 2017, the OHCHR responded to ensuing military crackdowns by detailing the Burmese government's "systematic process" of expelling the Rohingya from Myanmar "through repeated acts of humiliation and violence." The OHCHR also referred in 2017 to this case as a "textbook example of ethnic cleansing." By January 2020, the United Nation's top court released an order that the Rohingya should receive immediate governmental protection to halt escalating genocide risks. Recent events including the COVID-19 pandemic and 2021 military coup continue to intensify these dynamics, although they fall outside of the scope of research analysis results I present in this Brief.

In the midst of such urgency, this case study of 2012-2018 violence prevention efforts and the roles played by policymakers, scholar-practitioners, and local experts reveals new possibilities for how innovation informational collaboration may make future initiatives more effective. The context of 2012-2018 Myanmar demonstrates how harnessing the potential of new conflict-focused data-crunching technology tools was not complete without the resources possessed by three sets of actors: policymakers, scholar-practitioners, and civil society experts on the ground. While this case study is focused on countries at-risk of genocides or other mass killings, similar resource breakdowns across policy, research, and local expertise exist for a variety of armed conflict settings, making this case study relevant beyond an immediate mass atrocity[8] context.

Policymaker Needs for Information Organization

First, in any context, dedicated violence prevention policymakers face intense obstacles for tackling some of the world's most severe forms of violence. External constraints vary from lack of political will to engage in complex crises with unknown outcomes, geopolitical ramifications of any possible intervening step, national sovereignty laws, coalition-building failures, and more. In addition, internal hurdles including sluggish institutional mechanisms, bureaucratic red tape (paradoxically often slowed by procedures intended to prevent graft and maintain checks-and-balances), time constraints, limited resources for international human rights issues, rapidly shifting world events, secondary (vicarious) trauma,[9] and more.

Technological advancements have sped-up some aspects of international diplomacy as cables transitioned to email and social media. Yet the constraints surveyed above can hobble internal analysis keeping pace with information system reforms. Former U.S. Secretary of State Colin Powell (2001-2005)—himself earning an MBA in Information Science in the 1970s—drove email and technological updates within the U.S. Department of State while lamenting that personnel "brainware" updates were more important than hardware and software yet most resistant to change. Even the most dedicated policymakers struggle to carve out regular, intensive reflection times, especially those working to stop urgent crises. A prevailing sense of "we don't know what we don't know" challenges the ability of policymakers to capitalize on their limited time to interview local and international experts or draw interpretative recommendations from data points. Especially in today's information age, governmental decision-makers require organizing frameworks that help them understand rapidly evolving, chaotic environments in real-time. Their key challenge is not *information-gathering* but *information-organizing.*

Policy-relevant information organizing must occur on two fronts. The first is most frequently analyzed, namely, how Track Three representatives channel recommendations on how to *respond* to violence such as that in Myanmar. In the context of Track 1.5[10] efforts—where non-state and state actors engage in discreet dialogue intended to resolve conflicts—policymakers often solicit recommendations from intermediaries on a range of prescriptive steps. In Myanmar, these requests quietly included topics like best practices for protecting human rights dissidents, guidance on leveraging legal entities, or successful programmatic interventions in similar at-risks contexts. However, as noted, Track 1.5 facilitators must be cautious about being seen to be too close to the kinds of international actors who may be interested in international advocacy actions to address atrocity prevention or response. A primary duty of Track 1.5 actors, and the factor which gives them the close access to those engaged in conflicts required for their work, is discretion.

Beyond Track 1.5 actors, the glut of raw data now available for policymakers through big data predictive analytic technologies is increasingly pushing these decision-makers to include non-state experts in *analyzing* the conflict itself. In 2017, the Myanmar government excluded fact-finding missions from a variety of international organizations including the United Nations, Human Rights Watch, and Amnesty International. While these groups continued to interview and document reports of atrocities from Rohingya refugees in Bangladesh, international Track Three and other civilian protection advocacy groups also were able to maintain quiet contact within Myanmar via new technologies in ways that stand in stark contrast to other historical mass killings within the Soviet Union where informational blockades *did* succeed in tamping down international awareness of genocidal massacres. Moreover, although usually internal, governmental horizon-scanning models track conflict dynamics from a variety of angles, ranging from social media to game theory to predictive simulations and computer-based forecasting. Still, complex internal debates within policy circles, such as whether the Rohingya targeting constituted a genocide as well as how to

monitor the impacts of attempted violence prevention efforts, contributed to internal concerns that increased data did not translate into high degrees of confidence regarding theories of change and action plans.

Scholar-Practitioner Modeling Innovations

Even as policymakers struggled to translate new abilities to access raw data into high-confidence suggestions for protecting civilians in Myanmar, innovations were occurring within academia that may help to organize patterns of large-scale violence in Myanmar and elsewhere moving forward. For scholar-practitioners focused on applied research that traces large-scale violence for the purposes of prevention and response, several types of tools have been created and refined since the 1990s. Perhaps most well-known are various watchlists that rank Myanmar and other countries according to different risk-related criteria. Examples of recent Myanmar watchlist rankings by organizations like Genocide Watch (measuring risk of genocide), Early Warning Project (measuring risk of new mass killings), the Global Centre for R2P (measuring populations at risk), ACLED (measuring violence against civilians), Fund for Peace (measuring state fragility), UNHCR (tracking refugees and IDP creation), and Freedom House (measuring political rights and civil liberties) abound. These tools are critical for sounding the alarm regarding accelerating problems and for working to galvanize political will and awareness. Yet policymakers also struggle to know how to apply these results to the policy planning process and the detailed crafting of human rights programming and interventions. A plethora of countries sadly appear on these watchlists, while specific tipping points for crisis escalation and even genocide—the world's most extreme type of violence—are poorly understood [11] even by social science experts, with policy conversations regarding potential interventions even more contested.

Other social scientists have developed additional types of analytic frameworks, monitoring tools, and models that are designed to aid genocide and mass atrocity responses in at-risk countries. In Ernesto Verdeja's thorough summary [12] of the field, these approaches broadly fall within two major categories: *early warning tools* (which identify immediate threats of genocide or

other mass violence) and *risk assessments* (which trace slower accumulations of underlying structural risks). Since the academic field of genocide studies first emerged after World War II and the Holocaust in the 1940s, interpretive questions regarding the 1948 United Nations definition of *genocide* resulted in many competing academic definitions of the neologism and methodological ideas for analyzing this complex sociopolitical phenomenon. [13] Seeking to transcend analytic quagmires, prevention-focused academic research on mass killings has skewed toward quantitative methodologies [14] in the past two decades.

Although critical to flagging important information for tracking mass violence, these tools have not solved policymakers' analytic needs for information organization around key patterns most relevant for their decision-making. A new push within peace and conflict studies focuses on generating *now-casting* tools aimed at the prediction of the present moment's unfolding dynamics, calculating from the very recent past state of events through the very near future. Recently applied to the study of violence and conflict, now-casting approaches originated in meteorology [15] (referring to forecasts of 2 to 6 hours into the future) before being applied to the field of economics, [16] which traditionally relied on measures that required significant time delays. With other predictive models in meteorology and economics targeting longer forecasting periods, now-casting tools were valuable in their ability to collect and flag previously ignored details in near real time. Similarly, in the field of conflict analysis, now-casting models are demonstrating new progress for linking cross-cultural variation to broader comparative theorizing. [17] In the context of violent conflict, these tools are also helpful in their ability to distill the turmoil of mass violence while amplifying the most significant dynamics for policymaking in real-time, despite overall changes in violence dynamics over months or years. [18] These frameworks are built on a shared understanding that in the midst of an unfolding mass killing, violence prevention specialists require an organizing framework that 1) culturally contextualizes the bevy of details that characterize chaotic environments, 2) that draws a policymaker's focus to the most essential dynamics for decision-making, 3) that flags ripe moments for specific interventions, 4) that can be applied and tailored to vastly different cultural contexts, and 5) that can track change over time. [19] These frameworks are also intended to co-exist with current
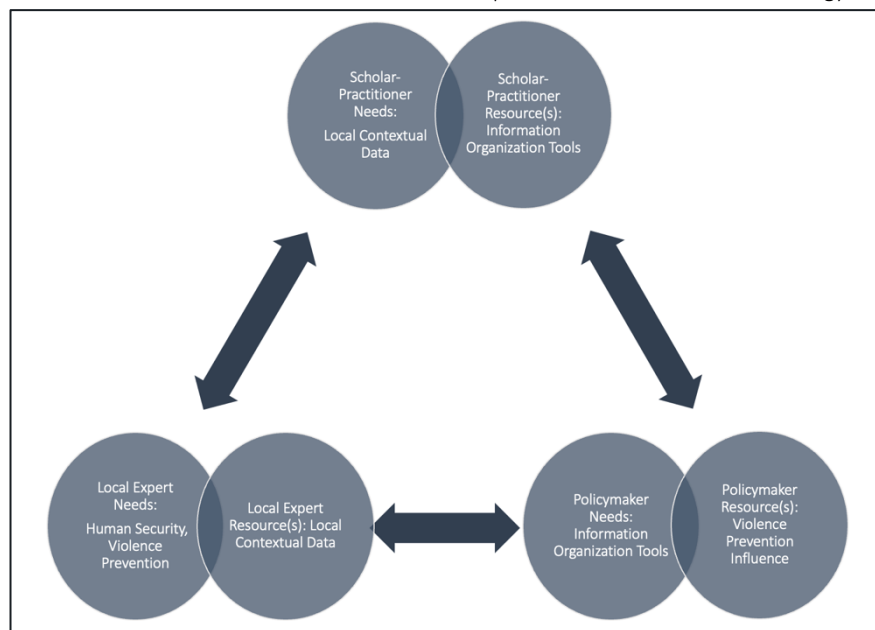

Figure 1: The informational resources and needs of Local Experts, Scholar-Practitioners, and Policymakers exist in inter-locking relationships.

approaches that *forecast* (i.e., prognosticate about future violence trends) or *after-action assessments* (which look at events retrospectively).

In several recent works,[20] I suggested a new framework for methodologically operationalizing now-casting approaches for genocide and mass atrocities by building upon the theorizing contributions of several scholars[21] and other points of field consensus. When applying my approach to Myanmar from June 2012 to November 2018,[22] several implications emerged for the topic of collaborative Track Three partnerships around information and emerging technologies. My modeling and proxy variables indicated that classic genocidal patterns of destruction-oriented targeting directed at the entire Rohingya people group (e.g., men, women, and children) peaked in this case in several discrete periods: 1) beginning around the spring of 2013 to the fall of 2014; 2) a brief trend toward repressive (not destructive) and selective violence in the fall of 2014; 3) genocidal patterns beginning again around the summer of 2015; 4) another violence pattern change to selective, repressive violence around the summer of 2015; 5) a genocidal shift occurring again in November 2016 and roughly lasting until August 2017; and 6) genocidal patterns occurring again by the end of 2017 and lasting until my data stopped tracking in November 2018.

While international lawyers would be quick to point out that any overlap of motive and means can result in overall criminal liability for genocide,[23] tracking the ebb-and-flow of genocidal dynamics and changing perpetrator logics in this way clarifies what types of interventions may be necessary to halt and deescalate real-time dynamics in a given crisis moment. Building upon academic theoretical consensus,[24] this approach demonstrates that open-source data can be analytically organized around key patterns to simultaneously support civilian protection by modifying interventions in response to evolving violence patterns. Moreover, this organizational framework can assist monitoring-and-evaluation policymakers interested in tracing a discrete intervention's impact as attempts are made to move the context toward a sustainable peace process. While frameworks like this one do not convey every detail of a given context, they fulfill a major policymaking gap of informational organization. The first step in increasing the constructive role of Track Two representatives in policy planning is to understand policymakers' informational needs (what they need to know *right now*—and what they don't) and to channel their efforts into empirically-grounded analytic tools that are relevant to decision-making and real-time dynamics.

Civil Society Expertise with Ground-Level Dynamics

However, certain gaps in my data collection process—conducted virtually using open-source reporting from actors on the ground in Myanmar—existed. These are gaps that are ripe to be filled by local actors. In my methodology, I began with the 2012 Rakhine state riots as transforming the baseline of discriminatory violence that had existed against the Rohingya people group into a new form of escalating violence. To understand the patterns of violence and if they accelerated, slowed, or evolved over time, I utilized MAXQDA mixed methods software to code twenty-two humanitarian reports and news articles (covering June 12, 2012 to November 12, 2018), blending in-depth ground reporting from established international organizations with shorter news articles to triangulate patterns, capture diversified sources, and populate the crisis's timeline. Although I only coded eyewitness accounts, I did not access local news sources due to political sensitivities and concerns of safety and censorship. Notably, my approach can be supplemented by in-house data gathering and verification tools used by policymakers and especially by local sources of data. Without using local sources of information, my analysis can point to major violence evolution trends found in the reporting of international reporters and international experts. However, to expand the utility of this modeling, the input of local actors is needed as their ground-level reporting can flag emerging patterns before crisis points rise to the level of garnering international awareness. Moreover, consistent local input will also more fully populate an ongoing chronology of events.

Track Three, civilian protection advocacy actors are best positioned for discretely maintained contact with local sources of information in the midst of violence and growing atrocity risks. The specifics of maintaining these communication links are frequently discussed by Track Three and civilian protection advocacy proponents. However, the collaborative informational partnerships that I discuss require prevention and protection advocates to not only maintain contact with local actors, but also to work with them to identify and contextualize key patterns in the environments that they know best. Policymakers are correctly pressured to listen to local expertise. In addition, local experts will have the best opportunities to meaningfully influence policy processes from analysis to intervention design if they speak directly to the informational needs of these decision-makers. In order for local experts' input to be incorporated from the very beginning stages, building their own awareness of the type of specific, empirically-informed informational input most applicable for policy decision-making is an increasingly important component of locally-run capacity training for this set of local actors.

The context of Myanmar provides another pragmatic example of one way that this collaboration could play out. With genocide terminology often contested and applied in different ways, I did not directly input the terminology ascribed by other actors into my framework. As diverse reporters may utilize the same words to denote different patterns of closely related violence, I relied on standardized proxy variables that empirically infer difficult-to-measure variables. In these contexts, sharing the details of methodological construction with local interviewees is more important than ever and should push research partnerships between scholar-practitioners and local experts to grow more and more iterative. Due to the increased importance of academic organizing frameworks for the data-overwhelmed policy process, devising concise ways to train local experts and support locally-run training on the types of contextual details that could help populate these frameworks is now a worthwhile time and resource investment for both parties. Local experts remain the best equipped to understand the underlying implications of certain data points and patterns situated within an individual

context, with its unique cultural subtext, potential risks, and specific resiliencies. Many local experts are seeking to get the right information into the right hands to save lives and deescalate violence. New trainings that prioritize informational organizing will help these actors as they seek to systematize their observations of dangerous, overwhelming, chaotic contexts into concise briefings for outsiders. At the same time, it must be a two-way street. Those scholar-practitioners who devise such analytical frameworks must listen closely to the local experts in order to make sure that the frameworks they devise are properly sensitive to the local nuances which may elude them.

As a final note, some early warning programmatic innovations occurring outside the Myanmar context could be tweaked to support information organization frameworks. These initiatives link local expert "focal points" to international Track Three partners typically via SMS (text messaging), with a recent example of this approach in Kenya during elections credited with reducing violence. The focal point model involves requesting input from diversified local sources of information and prioritizes widespread buy-in to achieve participation across varying stakeholder communities. In Nigeria, promoting the addition of SMS-based reporting to existing early warning efforts utilized focal point structures to strategically seek diversified community reporting. Many local data collections have grown in sophistication and quantity of gathered information, with an additional SMS-based reporting system layered against GIS data in the Niger Delta region. Summaries of these locally coordinated efforts (see hyperlinks) reveal grassroot-level experts generating vast quantities of information and demonstrate deep local expertise and commitment to reporting. Scholar-practitioner collaborations with these groups, including trainings focused on informational organizing principals (rather than just information gathering tips) will allow for locally generated knowledge to be seen as immediately transferable to policy relevant analysis and planning as it removes the need for a "middle-man" analyst who can translate this local data for policy purposes in Myanmar and beyond.

All of this being said, I return to points made at the outset of this paper regarding the need for caution, and also for clarity in terms of the kinds of interventions being discussed here. In terms of caution, the idea of local actors and Track Three, civilian protection advocacy intervenors collaborating with Western governments and international organizations, such as the UN, to prevent and address mass human rights violations in situations of deadly conflict is not new. Previous examinations of this imperative have raised concerns that the NGOs and local actors often come out worse-off once the outsiders have packed-up and gone home, if the NGOs are perceived to lost their impartiality in the eyes of local forces. Worse still, if NGOs and local actors are seen as being supportive of external actors in hopes of stimulating an armed intervention to stop the killing, and that intervention then does not come, then the NGOs and locals may be fatally discredited in the eyes of those they will have to deal with.[25] Moreover, any form of creeping views of the relationship between the local actors and the international NGOs as one of subservience should be avoided. Underlying power dynamics and resource access disparities should be routinely, openly discussed.

As a number of those writing on the field of peacebuilding today make clear, there are times when international actors, and their agendas, should be subservient to local leaders and not the other way around.[26]

In terms of the need for conceptual clarity, it must again be reiterated that conflation between actors who are occupying different spaces on the Multitrack Diplomacy spectrum must be avoided. The efforts that are being examined in this Policy Brief involve a collaboration between international civilian protection advocacy NGOs and local civilian protection advocacy actors to gather and contextualize data on atrocities against civilians which can be used to justify programmatic interventions to stop them. Although not the goal of the approach proposed here, this data could also be used in war crimes trials at a later date. This is very different to the kind of discreet and quiet dialogues practiced at the Track 1.5 and Track Two levels, which often necessarily involve many of those doing the fighting. It would be a disservice to the broader field of Multitrack Diplomacy if these very different activities became conflated in the minds of those in conflict zones to the extent that it gave rise to suspicions that Track 1.5 and Track Two actors were gathering data for use against them by foreign governments or international organizations. Great care must be taken to develop and maintain conceptual and policy clarity as to the differences between various Multitrack efforts.

Potential Problems and Things to Watch Out For

- Effectiveness: The usefulness of new technologies is dependent upon the quality of human-driven analytic design driving their creation and processing. The best analytic teams will represent a variety of professional backgrounds, academic disciplines, and diverse lived experiences.

- Access: Governmental policymakers often have the easiest access to raw data—sometimes due to information classification issues and sometimes due to their larger budgets and specifically dedicated analytic staff. Yet, this raw data is often best interpreted by local experts and transformed into pattern-based analytic models by full-time scholar-practitioners who dedicate their entire careers to particularized issue sets. The question of making this data available to those who can make best use of it should be considered.

- Ethics and Safety: Although local experts may be best suited to interpret the potential significance of data points in their context, these individuals may not be able to safely or effectively collaborate directly with foreign governmental representatives or even with international multilateral actors or NGOs. Doing so may compromise their safety and their future effectiveness in their own communities. Moreover, many policymakers also have institutional and political constraints regarding with whom and where they are able to conduct international meetings (e.g., in the U.S., new proposed legislation states that 9/11 terrorist attacks and fatal 2012 attack on the U.S. embassy in Benghazi, Libya are credited with entrenching "bunker mentalities" that make it challenging for government personnel to meet with local non-state actors). A robust ethical framework

established in advance of new forms of collaborative informational partnerships is needed and will take effort to establish. Central Hubs, located in respected international organizations, such as the UN or regional multilateral organizations that can securely, effectively convene across these spaces are essential if local actors are to be seen as not simply gathering information for use by foreign governments with external agendas.

- Need for Trust-Building: As noted above, the Multitrack Diplomacy spectrum contains a wide variety of actors with different mandates and specialized skillsets. They also have theories of change and action plans which lead them to interpret contexts and assign priorities differently. More discussion is required within the broader Track Two community regarding the need for pluralistic respect of these differences. Good-faith positionality should be also extended to trusted policymakers, who are often unable to express their full opinions or describe their actions due to institutional sensitivities and classification procedures. All fields active on the Multitrack Diplomacy spectrum should engage in meaningful relationship-building and trust-building networking whenever and wherever possible, and strive to remain worthy of each other's trust. They must also recognize that their respective mandates and operational priorities will simply not be compatible sometimes.

- Structural Obstacles to Collaboration: Although this Policy Brief strongly supports new collaborative partnerships to successfully harness the potential of emerging technologies, structural issues remain in the way of fully achieving these aims. Changing the incentive structures across both policy and scholar-practitioner divides, especially traditional academic university settings, is needed. For changing policy incentives with foreign affairs ministries in a nation's executive branch, legislators can play a key role through official (e.g., designating new awards and honors for collaboration) and unofficial (e.g., increasing the political capital of human rights personnel by requesting regular legislative briefings) ways. Within academic settings, negative stereotypes around governmental policy collaboration should be tackled. Policy collaboration must be viewed as a viable option for academic career security and advancement (e.g., including writing policy briefs and reports for official actors as a productive research activity for tenure portfolios).

- Different Professional Languages and Informational Needs: Despite willingness of policy, scholar-practitioner, and local peacebuilders to collaborate, each set of actors uses different professional skills and speaks different technical (and actual) languages. Their varying mandates also cause them to have different informational needs that are often not explicitly recognized by their counterparts in different fields. Individuals who have long-term experience across more than one of these fields can play a powerful, needed role in "translating" across these professional language divides and training their peers across these fields to understand (and respond to) these different informational

and institutional needs. Organizations that seek to do so should be supported with tangible resources (e.g., grants and contracts).

Recommendations

For Policymakers

- Recognize that emerging technologies provide potential possibilities *and* challenges specific to the policy process. Your limited time may constrain your ability to fully harness the promise of these tools, without partnering with Track Three and other civilian protection advocacy NGO actors.

- As raw data influxes must be transformed into evidence-based theories of change, seek out new forms of collaboration with Track Three actors like scholar-practitioners, conflict social scientists, NGO civilian protection advocates, and local experts.

- Request that these Track Three actors assist with identifying key conflict patterns based on local sources and knowledge, while respecting that some of them will need to maintain distance from foreign governments.

- In order to fully appreciate the context, consult a diversified pool of Track 1.5 and Track Two actors (or mediators who have access to diversified networks) and recognize local experts as thematic authorities in addition to understanding their own geographic context. At the same time, recognize that such actors may not always be willing or able to collaborate without placing themselves, or their mandates, in jeopardy.

- When security constraints prohibit direct engagement with local actors, consult with NGO civilian protection advocates and support their valuable role through funding and specialized grant opportunities. Regularly consult with Track Three and other involved actors regarding safety and ethical issues.

- Invite Track Three actors and other civilian protection advocates to not only suggest violence prevention recommendations but also to contribute to conflict dynamics analysis and modeling using open-source data.

For Scholar-Practitioners at the Track Three and civilian protection advocacy level

- Invest time in understanding the analytic constraints and informational needs of policymakers and work to provide information that is actionable, not just interesting or enlightening.

- Ask Track I colleagues to explain the diversity of roles and specializations within different policy institutions (e.g., *policy planning advisors* versus *programmatic operations teams* versus *monitoring-and-evaluation specialists* versus *diplomatic negotiators*).

- Routinely ask yourself (and policy colleagues) if you are getting the right types of information to the right policy decision-maker (e.g., is the analysis you want to share more relevant to a multilateral/bilateral operations team, or to a headquarters-based policy planning team?).

- Ask specific questions in advance about the bureaucratic structures and organizational culture of the policy institution you are engaging in order to cultivate the necessary relationships before a crisis sparks.

- Understand and support the need for and value of social science modeling that *organizes information* rather than simply *gathers new information*, although the latter is often viewed as more innovative (and therefore valuable) within academia.

- For more senior academics with institutional power within universities, support reforms that incentivize early-career or pre-tenure scholars to engage in policy relevant work that may not generate traditional academic insights, but that is more useful to policy decision-making as it flags patterns and organizes chaos.

For Local Experts focused on civilian protection in atrocity contexts

- Invest time in understanding scholar-practitioner approaches to mass violence modeling so that your local knowledge can refine the pattern identification variables they use.

- Request, support, and attend capacity trainings that prioritize information organizing as well as best practices for information gathering. Solicit grants to adapt these trainings to your local areas of influence.

- Develop local networks and hubs of training in principals of information organization, spreading this knowledge throughout diversified communities within a given at-risk context.

- Work with scholar-practitioners to adapt "now-casting" and other organizational frameworks to your local context by filling in important context knowledge and a chronology of events.

- Request that the growing cadre of multilateral and humanitarian Information Officer positions present in your context (and often hiring local actors) engage in community trainings centered around best practices for information organizing and incorporating your expertise.

- And finally, never lose sight of the fact that, after the foreign governments and NGOs have packed up and gone home, you will remain on the ground. Your interactions with these foreign actors could place you at risk of reprisal.

About the Author

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About Ottawa Dialogue

Established in 2009, Ottawa Dialogue is a university-based organization that brings together research and action in the field of dialogue and mediation. Guided by the needs of the parties in conflict, Ottawa Dialogue develops and carries out quiet and long-term, dialogue-driven initiatives around the world.

Endnotes

[1] Presciently argued first by Bernal, J.D. (1939). The Social Function of Science. London: Routledge & Sons Ltd. and now updated by experts like Krishnapuram, R. "Global Trends in Information Technology and Their Implication," *In Emerging Trends and Applications in Computer Science (ICETACS), 2013 International Conference. Shillong, India: IEEE, 2013.*

[2] See, Palmiano Federer, J. (2021) "Is There a New Track Two? Taking Stock of Unofficial Diplomacy and Peacemaking," *Ottawa Dialogue Policy Brief 1*: 2.
See also, Nan, S.A., D. Druckman, and J.E. Horr (2009). "Unofficial International Conflict Resolution: Is There a Track 1½? Are There Best Practices?" *Conflict Resolution Quarterly* 27(1): 65-82.

[3] In this brief, I also adhere to the distinctions and vocabulary suggested by Palmiano Federer, J. (2021) "Is There a New Track Two? Taking Stock of Unofficial Diplomacy and Peacemaking," *Ottawa Dialogue Policy Brief 1*: 1-8. Accordingly, I utilize "Track One" to describe official talks exclusively between government officials, "Track Two" to indicate unofficial conflict resolution initiatives led by scholar-practitioners (often NGO mediators), and "Track Three" in reference to community-situated initiatives intended to enact change at the grassroots level.
See also, Lederach, J.P. (1997). "Building Peace: Sustainable Reconciliation in Divided Societies," *United States Institute for Peace*.
Jones, P. (2015). Track Two Diplomacy. Stanford, CA: *Stanford University Press.*
For more on the contested nature of "track language," see, Palmiano Federer, J., J. Pickhardt, P. Lustenberger, C. Altpeter and K. Abatis (2020). "Beyond the Tracks? Reflections on Multitrack Approaches to Peace Processes." *Centre for Humanitarian Dialogue, Centre for Security Studies ETH Zürich, swisspeace, Folke Bernadotte Academy.*

[4] For more on the topic of "norm advocacy", see Hellmüller, Sara, Jamie Pring, and Oliver Richmond. (2020). "How Norms Matter in Mediation: An Introduction." *Swiss Political Science Review* 26(4): 345-363.
Pring, Jamie and Julia Palmiano Federer. (2020). "The Normative Agency of Regional Organizations and Non-Governmental Organizations in International Peace Mediation." *Swiss Political Science Review* 26(4): 429-448.
Jones, Peter. (2019). "Middle Power Liberal Internationalism and Mediation in Messy Places: The Canadian Dilemma." *International Journal* 74(1): 119-134.

[5] For more on this debate see Palmiano Federer, J. (2021). "Cowboys or Mavericks? The Normative Agency of NGO Mediators," in: Rethinking Peace Mediation, Catherine Turner and Martin Wählisch (eds.), Bristol: Bristol University Press.
For the views of someone who believes that conflation between the two is necessary and that traditional "conflict resolution" should be more and more at the service of advocating norms

see Gamaghelyan, P. (2021). "Towards an Inclusive Conception of Best Practices in Peace and Conflict Initiatives: The Case of the South Caucasus," *International Negotiation* 26(1): 125-150

[6] Prior to my time in academia, I served as a foreign affairs officer at this bureau of the U.S. Department of State.

[7] Hook, K. (2018). "Forecasting Policy Trends." *Anthropology News* 4(59): 1-4. https://doi.org/10.1111/AN.907

[8] I utilize the terminology of "mass atrocities" as delineated in the 2014 *United Nations Framework for Analysis of Atrocity Crimes: A Tool for Prevention,* which includes war crimes, crimes against humanity and genocide. See, United Nations (2014). *Framework for Analysis of Atrocity Crimes: A Tool for Prevention*. Available:
http://www.un.org/en/genocideprevention/documents/about-us/Doc.3_Framework%20of%20Analysis%20for%20Atrocity%20Crimes_EN.pdf

[9] Hook, K. (2020). "Holistic Healing: A Case for Integrating Trauma Recovery and Peacebuilding," in Healing and Peacebuilding after War: Transforming Trauma in Bosnia and Herzegovina, eds. Julianne Funk, Nancy Good, and Marie Berry (Abington, UK: Routledge): 36-50.

[10] Nan, Susan Allen and Druckman, Daniel and Horr, Jana El. (2009). "Unofficial international conflict resolution: is there a track one and a half? Are there best practices?" *Conflict Resolution Quarterly*, 27(1): 65-82.

[11] See, Harff B (2003). "No Lessons Learned from the Holocaust? Assessing Risks of Genocide and Political Mass Murder since 1955." *American Political Science Review* 97(1): 57-73.

[12] Verdeja, E. (2016). "Predicting Genocide and Mass Atrocities." *Genocide Studies and Prevention* 9 (3): 12-32.

[13] The genocide scholar Adam Jones has collected 25 different definitions of genocide in his book: Jones, A (2017). Genocide: A Comprehensive Introduction, 3rd ed. London and New York: *Routledge/Taylor and Francis Publishers*, 311-313.
For further details on this debate and its ontological and methodological ramifications, see,
Hook, K. (2020). "'When the Ukrainian World Was Destroyed': Genocidal Narrative Convergence and Stakeholder Interactions during National Crises" PhD diss., (South Bend, IN: University of Notre Dame): 108-138.

[14] See Krain M. (1997). "State-Sponsored Mass Murder: The Onset and Severity of Genocides and Politicides." *The Journal of Conflict Resolution* 41(3): 331-360.
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Valentino, B. (2004). Final Solutions: Mass Killing and Genocide in the 20th Century (Ithaca, NY: Cornell University Press).

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[15] Casati, B., G. Ross, and D.B. Stephenson. (2004) "A New Intensity-Scale Approach for the Verification of Spatial Perception Forecasts." *Meteorological Applications* 11 (2): 141-154.

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[16] See, Giannone, Domenico, Lucrezia Reichlin, and David Small. (2008). "Now-Casting: The Real-Time Informational Content of Macroeconomic Data." *Journal of Monetary Economics* 55 (4): 665-676.
Banbura, Marta, Domenico Giannone, Michele Modugno, and Lucrezia Reichlin. (2013). *Handbook of Economic Forecasting* 2: 195-237.
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[17] Hook, Kristina. (*Forthcoming*, August 2021). "Pinpointing Patterns of Violence: A Comparative Genocide Studies Approach to Violence Escalation in the Ukrainian Holodomor." *Genocide Studies and Prevention* 15 (2): 1-34.

[18] Heldt, B. (2019). "Atrocity Crimes as a Disease: A Statistical Approach to Early Detection," in Preventing Mass Atrocities: Politics and Practices, eds. Barbara Harff and Ted Gurr (New York: Routledge): 53-59.
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[19] Hook, K. (2018). "Forecasting Policy Trends." *Anthropology News* 49(2).

[20] Hook, K. (2019). *"When the Ukrainian World Was Destroyed."* Notre Dame: University of Notre Dame: 108-138.
Hook, K. (2020). "Pinpointing Patterns of Violence." *Better Evidence Project.*

[21] Verdeja, E. (2012). "The Political Science of Genocide: Outlines of an Emerging Research Agenda." *Perspectives on Politics*, 10 (2): 307–21.
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Hiebert, M. (2013). "Questioning Boundaries: What's Old and What's New in Comparative Genocide Theory." In Genocide Matters: Ongoing Issues and Emerging Perspectives, eds. Joyce Apsel and Ernesto Verdeja (New York: Routledge, 2013): 34-36.

[22] More details on my approach can be read in the academic versions of this work:
Hook, K (2021). "Diagnosing Mass Murder."

[23] In legal terms, i.e., *mens rea* and *actus reus*, see Schabas, W. (2012) Unimaginable Atrocities: Justice, Politics, and Rights at the War Crimes Tribunals (Oxford: Oxford University Press).

[24] Straus, S. (2012). "Destroy Them to Save Us." *Terrorism and Political Violence* 24(4).

[25] These issues are discussed in Byman, D.L. (2001). "Uncertain Partners: NGOs (Non-Governmental Organizations) and the Military," *Survival*, 43(2).

[26] See, for example, Autesserre, S. (2017). "International Peacebuilding and Local Success: Assumptions and Effectiveness," *International Studies Review*, 19.