Using Artificial Intelligence in Peacemaking:
The Libya Experience

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Libya Panel – 'Speaking Truth to Power: Public Opinion in a Time of Crisis'

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When public views inform political processes in conflict contexts, the likelihood of a peace agreement lasting significantly increases. The involvement of different stakeholders provides insights into conflict drivers and broadens the ownership of a peace process. A mediated exchange of personal views and experiences between stakeholders installs trust, which helps build a shared civic identity. This forms the foundation for substantive agreements at the political level.[i] In putting theory into practice, however, mediators are often trapped between pragmatic expediency and the aspiration of enhanced inclusion.[ii]

Artificial Intelligence (AI)-powered tools now enable conflict mediators to dialogue with and poll the public in real time at scale. The COVID-19 pandemic, and the attendant need for virtual solutions, has created new openings for technology to be put to the service of peacemaking.[iii] Giving the public a voice at the negotiating table is no longer an excrescence or a nice-to-have. It is both possible to do and has proven effective.

The United Nations and its partners have started to use natural language processing and machine learning to dialogue with thousands of individuals in local dialects to identify points of agreement in conflict settings such as Libya[iv] and Yemen.[v] The authors of this essay are leading this effort in support of UN mediators and missions. Together, they form an interdisciplinary team that focuses on enhancing the efficacy of the UN Department of Political and Peacebuilding Affairs' (DPPA) peacemaking efforts. The authors include a physicist turned AI-scientist and start-up founder, a 30-year veteran conflict pollster, a human rights lawyer turned technologist, and a technologist turned UN political affairs officer.

Lessons from History – Inclusivity in the Northern Ireland Experience
In 1973, during a meeting in Sunningdale, UK, British negotiators established a power sharing agreement and cross-border Council to bring an end to the civil war in Northern Ireland. While widely praised at first, a year later the agreement collapsed. Some parties to the conflict – notably those associated with paramilitary stakeholders – were not included in the negotiations. Ultimately, this doomed the hard-won agreement.

In 1996, after 28 years of fighting in Northern Ireland, a group of academics (led by Colin Irwin, one of the essay's authors) ran what was arguably the first peace-poll that tested all options for a negotiated settlement.[vi] Topics covered included the right to parade, police reform, amnesty for prisoners of the conflict, sharing in schools, public housing and the work place, and options for a constitutional settlement of the Irish question. The poll identified Catholics' and Protestants' ideal preferences as well as what they could both compromise on.

During the same period, the British Government held elections to determine the parties allowed to join the negotiations. The 110-seat *Northern Ireland Forum for Political Dialogue* was subsequently filled by proportional representation. Smaller parties that received one percent of

the vote were guaranteed to get two seats, while larger parties occupied the remainder on a one seat for each vote-percent gained basis. The British Prime Minister, the Irish Taoiseach, regional EU countries, and the United States of America all supported the negotiations.

Things did not always run smoothly. Spoilers attempted to derail the process with bombings, shootings, and 'walk outs' when different parties claimed they were not getting what they deserved. Throughout, Irwin continued running peace-polls on every constitutional and procedural issue to determine if the Northern Ireland public would assent to the compromises being made. All the parties to the negotiations agreed on all the questions asked in the polls. All the parties' constituencies were surveyed, and all the results were made public. This made it impossible for the negotiating parties to dismiss the results. The people of Northern Ireland were effectively given a voice at the negotiating table[vii].

This effort ultimately provided the momentum needed to achieve the Belfast/Good Friday Agreement and end the war. The parties slowly learned to trust the peace-polls as the polls also accurately tracked the level of support each party had in local and regional elections. When a March 31st, 1998 *Belfast Telegraph* exclusive highlighted a peace-poll that showed that 77% of the public would vote 'Yes' for an agreement, the parties and the public believed it. Ten days later, the Belfast/Good Friday Agreement was finalized. The public then endorsed the agreement in a referendum on May 22nd, 1998.

Coming to the Present – AI-Assisted Large Scale Digital Dialogues in Conflict Settings

Establishing inclusivity in conflict negotiations is no small task. On the one hand, dominant parties insist that negotiations be run to their agenda and advantage. On the other, governments like to maintain full control. But *the people* are also parties to all conflicts. Like most Catholics and Protestants in Northern Ireland who wanted their children to attend the same schools – a view erstwhile elites eschewed – the people have a right to be heard. This is especially important when elites claim to speak for the majority and prefer that the latter stay silent. How can we listen to the voices of this 'silenced majority'?

Dialoguing with 'hard-to-reach' populations in war zones presents significant political, logistical and security difficulties – not to mention language barriers. Artificial intelligence can be deployed to quickly gather and analyse data from large samples in real time. In December 2019, the UN and Remesh AI, a start-up with an AI-powered dialogue platform, presented a paper[viii] at the 'AI for Social Good workshop', as part of the Neural Information Processing Systems (NeurIPS) Conference held that year in Vancouver, Canada. They described machine learning processes for identifying agreement on various propositions in a diverse population. They also highlighted potential difficulties when applying this method to conflict resolution: bias in the questions asked, bias in the sample population, and a failure to situate the views expressed in context. With all these points in mind, UN envoys and missions in Yemen and Libya sought the support of the UN Innovation Cell in DPPA to experimentally deploy the Remesh AI platform as a dialogue tool between 2020 and 2021.

On a simple mobile-accessible web interface, the AI platform enables up to 1000 participants to anonymously engage in a Large Scale Digital Dialogue. Participants are invited to select their responses to multiple-choice polling questions. The system also allows open-ended questions that invite participants to freely express their opinions to a particular issue under examination. These responses are shared with the other participants in the Dialogue to assess their level of agreement with the proposal. The AI algorithms then processes thousands of data points to produce rank orders of preferred proposals[ix].

By identifying and combining actors' identities and their respective voices, the AI application offers a fine-grained picture regarding the topics, themes and narratives that are important to the different identity groups. In other words, by applying different filters to all the responses, the

Dialogue moderator sees in real time, for instances how many women, or members of an ethnic minority group express a certain view. That the entire Dialogue takes place in locally spoken dialects (e.g. Yemeni Arabic or Libyan Arabic) is a feat of computational linguistics, and one that enables greater inclusivity at that.

Deploying Large Scale Digital Dialogues in Libya

After nearly ten years of fighting in Libya, in January 2020, the international community convened the Berlin conference of States and IGOs with a view to bring an end to the conflict. Following this, the United Nations Support Mission in Libya (UNSMIL) implemented[x] a plan of action that led to a cease-fire on October 23rd, 2020 and to the establishment of the *Libyan Political Dialogue Forum* (LPDF). In the process, it worked with the support of a number of actors, including the Geneva-based Centre for Humanitarian Dialogue, which facilitated a meeting among key Libyan political actors in Montreux in September to restart the peace process.

The Forum's first meeting took place in Tunis on November, 9th 2020. Tasked with taking the Libyan peace process forward, the 75-member LPDF was designed to be inclusive of all elements of Libyan society. Unlike its Northern Ireland counterpart, however, it lacked the legitimacy of elected members. Given the ongoing activity of Libyan militias, free and fair elections would not have been possible, so the UN was obliged to take responsibility for the Forum's composition, which invited criticism from third parties[xi].

In this context, UNSMIL, with the support of the UN DPPA Innovation cell and Remesh AI conducted five Digital Dialogues between October 2020 and January 2021. Diwan, a local polling company, advised the team on the segmentation of the sample. While Libya was historically divided into the East, West and South, the focus of the civil war was on the East and West divide. By asking participants where they were from, it was possible to crosscheck the quality of the Dialogue sample with the known demographics from Diwan's prior research.

The Libyan Digital Dialogues addressed the impact of the civil war and ceasefire, domestic militias and foreign fighters, economic issues – including a fair distribution of oil revenues – as well as concerns around human rights and future elections. UNSMIL was able to test and validate many of its assumptions (e.g. widespread public support for the unified currency that ended discrepancies between exchange rates used in the East and West, a development elites grumbled about because it ran against their interests).

The Digital Dialogues were broadcast on both social media and live TV. In this way, the participation of 1000 Libyans in each Dialogue was amplified to the wider population. Everyone across Libya could see what suggestions were made and which proposals were identified as points of common ground. The Acting Special Representative of the Secretary General (ASRSG) and the senior most UN Official in Libya, Stephanie Williams, started to moderate the Digital Dialogues. This further increased their legitimacy, as members of the public saw that they could speak directly to a key actor in the political process.

In a January 31st, 2020 Dialogue, the ASRSG asked Libyan participants what questions they would like to pose to candidates for the Government of National Unity (GNU) during the LPDF elections later that week. The questions collected through the Dialogue were later put to the GNU candidates who answered them on live television. These events achieved social media audiences of 1.7 million, a third of the Libyan population[xii]. Much to the surprise of the sceptics, the LPDF chose an interim government for Libya on February 5th, 2021. Via the Digital Dialogues and media outreach, the election of the GNU by the LPDF achieved the legitimacy it had lacked just a few months earlier[xiii]. Subsequently, this new government was given the constitutional authority it needed to take the Libyan peace process forward by a vote in the Libyan House of Representatives (HoR) on March 15th, 2021.

What We Learned and Where We Are Going

Peace processes are rarely able to draw on inherent authority based on law or tradition. For mediators, finding acceptance from relevant stakeholders is thus often a struggle. To secure the acknowledgment of such stakeholders and to establish meaningful outcomes, a peace process must generate a perception of authenticity and procedural fairness. An authority grounded not in power but in conviction. When public voices are strongly represented in a process, this "creates a pro-agreement atmosphere" through wider public buy-in. This also increases how responsive the process is to local needs.

In the 1990s, public opinion peace-polls were used to identify consensus in Northern Ireland as a prelude to the signing of the Belfast/Good Friday Agreement. This effort was given political legitimacy through its collaboration with the elected members of the *Northern Ireland Forum for Political Dialogue* and publication of all the results in the most widely read regional newspaper, the *Belfast Telegraph*. Similarly, in the 2020s, AI-powered Digital Dialogues held in Libyan Arabic were used to identify consensus in Libya as a prelude to the establishment of a Government of National Unity. This effort was given political legitimacy through its collaboration with UNSMIL and the *Libyan Political Dialogue Forum* which, in turn, gained legitimacy via the dialogues with the Libyan people.

In the future, more work will be needed to amplify the voices of underrepresented groups. The Libyan Dialogues replicated the gender breakdown we often see in the Libyan cybersphere, with no more than 15% self-identified females participating in any of the 5 Dialogues. To generate disaggregated insights on the views of female Libyans and of ethnic minorities, the project team had to pull out and intensively analyse the smaller set of responses from each of those groups (women, youth, the South, ethnic minorities etc.). This underlines the reality that AI is not a panacea that can make longstanding societal issues disappear. Still, as we improve the AI platform, its computational capacity will increase. We expect that the upper limit for participants in each dialogue will increase from 1000 to 10,000 individuals by the year-end. We look forward to being able to create real time quota samples that will greatly increase the efficacy of the platform and its performance outcomes.

In the end, in our experience, it was possible to run Digital Dialogues with up to 1000 participants each time in Libya and around the World through the Remesh AI system based in New York. This demonstrated the technical success of this approach. AI was effectively used as an outreach tool to increase the engagement of the Libyan population in their peace process. Post-pandemic, we hope to achieve greater public engagement in more conflict contexts with the degree of trust the research team has won through this experience. With that in mind, we hope to apply AI-powered dialogues, with new refinements, wherever peacemakers are willing to reach peace by pursuing multiple paths to inclusivity.

We feel we are still just at the beginning of harvesting the opportunities of new technologies for peacemaking.[xiv] And of course, there are limits too. Technology is a means not an end. At the center of all our efforts is a commitment to do all within our power to reduce conflict, while engendering greater dialogue and participation. May we thus enter a future where greater inclusivity becomes the norm.

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