

DATE: July 25, 2017

SUBJECT: Amassing Evidence: Applying Information Technology and Forensic Science in

Human Rights Documentation

MAIN POINTS:

• (around five key takeaways given in complete sentences)

The event can be viewed at

https://www.facebook.com/transitionaljusticewg/posts/1551543954885212:0, accessed 08/04/2017. https://www.facebook.com/transitionaljusticewg/posts/1551548841551390:0, accessed 08/04/2017. https://www.facebook.com/transitionaljusticewg/posts/1551553454884262:0, accessed 08/04/2017.

EVENT OVERVIEW

Date: July 25, 2017

Time: (e.g. 9:30 a.m. - 1:00 p.m.)

Location: International Conference by Transitional Justice Working Group (TJWG)

Attendees:

- **Hubert Young-Hwan Lee,** Executive Director, TJWG
- O-Gon Kwon, Former Vice President, Int'l Criminal Tribunal for the former Yugoslavia
- Ahmed Motala, Human Rights Officer, Methodology, Education & Training, UN
- Ethan Hee-Seok Shin, Moderator, Research Fellow, TJWG
- **Dr. Nevenka Tromp,** Panelist, Executive Director, Geoffrey Nice Foundation
- Dr. Patrick Ball, Panelist, Director of Research, Human Rights Data Analysis Group
- **Dr. Clifton Emery,** Moderator, Associate Professor, School of Social Welfare at Yonsei University

- Youk Chhang, Executive Director, Documentation Center of Cambodia/DC-Cam
- **Stefan Schmitt,** Former Director of the International Forensic Program, Physicians for Human Rights
- Scott Stevens, Communications Director, TJWG

EVENT SUMMARY

Welcoming Remarks (Full Text)

Hubert Young-Hwan Lee (Executive Director, TJWG)

Esteemed guests and friends, thank you all for coming to this conference, organized by Transitional Justice Working Group, TJWG.

I would first like to thank the National Endowment for Democracy for its whole-hearted support and Amnesty International South Korea for its generous assistance. I also extend my gratitude to the Asan Institute for Policy Studies for providing this wonderful venue for today's conference and to the Korea University Human Rights Center for hosting the Workshop for Practitioners scheduled on Wednesday and Thursday. Last, but not least, I thank the Office of the High Commissioner for Human Rights for sharing and supporting our vision of fostering cooperation between different continents and professional fields and strengthening the capacity of civil society organizations.

We have with us here today human-rights activists and practitioners who are at the vanguard of defending democracy and human rights in all corners of the world. They have travelled great distances from Cambodia, Indonesia, the Philippines, Sri Lanka and Thailand in Asia, Croatia, the Netherlands, Switzerland and the United Kingdom in Europe, Canada and the United States in North America, and Colombia in South America—12 countries in all.

Looking back to the first day when my colleagues and I met three years ago, I can clearly remember the obstacles we faced. We had the idea to identify the location of human rights violations in North Korea using satellite imagery, and to present a systematic record to the world. The remains of the dead will one day be excavated to be returned to their loved ones.

However, it did not take us long to realize our lack of knowledge, technology and experience. We were out of our depth about the feasibility of our vision and where and how to begin. We searched for human-rights groups, institutes and experts who have conducted relevant studies and e-mailed folks around the world for advice. At first, we received few replies to our requests for help. It was understandable that they had no time to respond to unfamiliar e-mail given their work at hand. We didn't lose heart, because we knew our project was possible. The pioneering work of the Documentation Center of Cambodia (DC-Cam) gave us the courage to march

forward despite the dearth of our own capacity. I would like to take this opportunity to express my respect to Youk Chhang, the Executive Director of DC-Cam, who is with us here today.

Six months into the "Mapping Crimes Against Humanity in North Korea" project, I felt like I was still standing in the mist. At the time, I was wandering the streets of San Francisco with my colleague Dan Bielefeld. We were on our way to meet Dr. Patrick Ball of Human Rights Data Analysis Group (HRDAG) who is also with us today. Dr. Ball spoke with clarity about the nature of dealing with testimonies and precautions as well as the things that we must do and things we need not worry about in advance for the Mapping Project. He and his colleague Dr. Megan Price kindly introduced us to the experts and institutions in the various fields that we should visit while we were in the US. Recommendations led to more recommendations, meetings led to more meetings and the network we built provided the crucial intellectual, technical background to our challenging survey.

Last Wednesday July 19th, TJWG released its first report on our two years of research. The report was covered around the world by news outlets in over 20 languages. None of this would have been possible without the generous advice and assistance from various experts. I also cannot fail to mention Dr. Lynn Lee and her colleagues at the National Endowment for Democracy who backed our work with trust and patience. I have invited them here today. Now, we have prepared this conference and workshop to share the help and network that we enjoyed with other human-rights groups that work under more difficult and dangerous environments, and to create a mutually cooperative, cross-border platform.

We, documenters of human-right violations, are encountering and anticipating countless obstacles in legal, technical, financial and socio-political contexts all around the world. We all know from history and experience the challenges for the civil society in collecting evidence that meets international standards and the rigorous requirements of the court of law. We are further aware of the challenges of using such evidence to serve accountability for the perpetrators, fact-finding and victim reparation as well as social integration and establishment of sustainable democracy.

Today's speakers and practitioners from various nations are already connected with each other through mutual respect, trust and boundless opportunities for further cooperation. This is because we all pursue better methods for recording human-rights violations in their respective fields of work. I hope that this conference and workshop will allow us all to share experience, technology, knowledge, insights and vision. We hope that the human rights defenders, record-keepers and practitioners gathered here will form a new international front with new inspiration. TJWG too will strive to realize the dream of "global connection for human rights and justice" through strong and sustainable international and multidisciplinary cooperation.

Congratulatory Remarks (Full Text)

O-Gon Kwon (Former Vice President, Int'l Criminal Tribunal for the former Yugoslavia)

It is my great pleasure to speak to you today, and I thank the organizers of this event, the Transitional Justice Working Group in Korea and the United Nations Human Rights Office in Seoul, for hosting such a vital conference on human rights documentation, information technology and forensic science, and for offering me an opportunity to meet the many dedicated people from the various fields involved in this important mission.

I had the privilege of serving as a Judge at the International Criminal Tribunal for the Former Yugoslavia (ICTY) for 15 years, from 2001 to 2016. During those years, I served as a Judge on a number of notable trials involving genocide, crimes against humanity and war crimes, where I observed first-hand the challenges of evidence collection and human rights documentation. These cases included:

- □ The trial against Slobodan Milošević, the former President of Serbia and the Federal Republic of Yugoslavia;
- ☐ The trial against Vujadin Popović and six other Accuseds, in relation to crimes that took place after the fall of the Srebrenica enclave in 1995; and
- □ The trial against Radovan Karadžić, the former President of the Republika Srpska, the Judgement of which was delivered last year on 24 March 2016.

As compared to earlier war crimes trials in the Nuremberg Tribunal, where the Nazi High Command and its bureaucracy left behind a vast paper trail documenting their actions and decision-making processes, the victim-witness testimonies in these ICTY cases were, to borrow the words of my colleague Judge Patricia Wald from the U.S., the soul of war crimes trial at the ICTY. Even in the most monstrous mass atrocities involving executions of thousands, no written orders to execute, bury, or rebury the victims existed, nor any documentation to identify the senior commanders who planned, approved, or ordered such massacres. The Prosecution relied on a combination of personal testimonies of victim-witnesses who survived the killing fields, and expert testimonies that pieced together the victim-witness testimonies into a coherent narrative. Today, I am very pleased to meet again Mr. Patrick Ball and Ms. Nena Tromp, who were involved in these proceedings respectively as an expert witness and a member of the investigating team, who will share their experience with you during this conference.

The development of the information technology and forensic science assisted the fact-finding process to a great extent during the ICTY case proceedings. For example, the DNA analysis helped the parties and the judges ascertain the total number of the killed persons more easily and reach a more scientifically-based conclusion, as compared to the method that relied only on pathological, anthropological and archaeological methods.

Justice Robert Jackson of the U.S. Supreme Court, who worked as the Chief Prosecutor at the Nuremberg Tribunal said this during his Opening Statement,

"We must never forget that the record on which we judge these defendants is the record on which history will judge us tomorrow." In this context, he went on and emphasized, "Unless we write the record of this movement with clarity and precision, we cannot blame the future if in days of peace it finds incredible the accusatory generalities uttered during the war. We must establish incredible events by credible evidence."

I commend those human rights workers at various organs and institutions who devote themselves in a sacrificing manner to the mission of collecting evidence. Without the dedication and commitment of those individuals, even risking their own lives, it would not be possible to accomplish the noble mission of ending impunity and bringing justice.

As regards the human rights situation in North Korea, the UN's Commission of Inquiry on Human Rights in the DPRK Report has become an epoch-making corner stone. Released in 2014, the Report brought together documentation work from civil society to describe in-depth the ongoing crimes against humanity in North Korea. The COI Report concluded that:

- (1) Systematic, widespread and gross human rights violations have been and are being committed by the Democratic People's Republic of Korea, its institutions and officials;
- (2) In many instances, the violations of human rights found by the commission constitute crimes against humanity in light of their gravity, scale and nature of these violations; and
- (3) The United Nations must ensure that those most responsible for the crimes against humanity committed in the Democratic People's Republic of Korea are held accountable. Options to achieve this end include a Security Council referral of the situation to the International Criminal Court or the establishment of an ad hoc tribunal by the United Nations.

In the case of North Korea, and in contexts around the world, we can clearly see the importance of rigorous human rights documentation that serves international legal proceedings for crimes against humanity, by meeting international standards and adhering to best practices. This new generation of tools and methods, if used effectively, can help ensure accountability for perpetrators, and appropriate redress for victims. Furthermore, a clear, methodologically sound documentation record is important for creating an accurate historical record for our future generations.

Gathered at this conference are human rights defenders from at least 12 different countries, each facing unique challenges. Some of you are working under dangerous conditions, with limited resources, in conflict zones, or under oppressive governments. Others are working in contexts where access to sites of abuse and victims is not yet possible. Your collective efforts will move toward a future where victims seek redress for the abuses they have suffered, and the perpetrators of these crimes and human rights abuses will be held accountable for their actions.

This conference and workshop will be a fruitful and productive one for you, laying foundation for future collaboration, knowledge-sharing, and solidarity.

Congratulatory Video Message (Full Text)

Ahmed Motala (Human Rights Officer, Methodology, Education & Training Section, UN)

I'm responsible for developing investigation guidance and materials at OHCHR. I've also been involved in human rights investigations in Libya and Sri Lanka more recently. In this technological age information about human rights incidents are presented in different formats. Digital photographs and videos posts on social media such as twitter and Facebook and email communications are some examples. This requires human rights investigators to use different tools to conduct investigations. Technological tools also allow us to seek information from different sources, for example crowdsourcing, and to use different communication means to reach witnesses such as WhatsApp and Skype.

Human rights investigators also have to consider alternative information sources, such as satellite images and google street view. Forensic examinations and analysis have always been an integral part of human rights investigations. For example, when we interview a victim of torture, we are usually accompanied by a forensic medical specialist, who would examine the injuries and confirm that they coincide with the version provided by the victim. Forensic anthropologists are usually involved in exhumation of bodies of individuals allegedly killed unlawfully.

OHCHR has just launched the revised Minnesota protocol on investigation of potential unlawful deaths. This publication includes instructions on forensic examinations and reporting. It is available on our website. In conflict situations, it may be important to engage the services of a military weapons expert, who will examine remnants of munitions, destruction and impact to assess whether it conforms with international humanitarian law.

Forensic expertise has to extend to new technologies. For example, examination of digital images to verify their authenticity, or the tracking of news stories to exclude the possibility of fake news. Civil society organizations have an important role in documenting and reporting human rights issues. They are often first responders, trusted by local communities, and have local knowledge. Civil society organizations take up challenging unpopular issues and provide a voice to the voiceless. Irrespective of what human rights issue you are investigating or which investigative tools you use, the key principles of human rights investigation, should be paramount: do no harm, independence, impartiality, confidentiality, integrity and objectivity. Human rights work requires patience, tenacity and perseverance. I encourage you to continue with your important efforts, protecting human rights, and I wish you success.

Session 1: Human Rights and the Law

Moderator: Ethan Hee-Seok **Shin** (Research Fellow, TJWG)

Panelists:

- Dr. Nevenka **Tromp** (Executive Director, Geoffrey Nice Foundation)
- Dr. Patrick **Ball** (Director of Research, Human Rights Data Analysis Group)

<u>Shin</u>: It is a common saying among lawyers that "it is not what you know, but what you can prove in court." This also applies to human rights law. With this in mind, could you speak briefly about how you became involved in this field?

Tromp: Before beginning my career at the ICTY twenty-five years ago, it was clear to me from my work in academia that Milosevic, without a doubt, bore the most responsibility for the events in the former Yugoslavia after the Cold War. However, demonstrating this in a court of law is not a straightforward task. An individual may bear political responsibility for certain events, but this is not the same as assigning criminal responsibility under the law.

During my time at the ICTY, there was an understandable focus on the internal, domestic dynamics of the conflict in the Balkans. Having had more time to reflect upon those events, I have come to see it in a wider historical context. All three confederations of the Communist bloc—Czechoslovakia, Yugoslavia, and the Soviet Union—did not survive the end of the Cold War. Of these three, only Yugoslavia underwent violent disintegration. Milosevic claimed territory based on ethnic grounds, and we are seeing a similar pattern of behavior with Russia under Putin. As we investigated the conflict in the Balkans, we found that the complexity of territorial claims over a given area was directly proportional to the intensity of the crimes at that location.

<u>Ball</u>: During the late 1980s, when I was in graduate school, I became interested in the conflicts in Central America. I spent time in Guatemala and El Salvador as a member of a group called the Peace Brigades. Given my background in computer programming, an ad hoc commission in El Salvador asked me to help construct an electronic database that could be used to identify the worst human rights offenders in the Salvadorian military and force them into retirement. This database matched the career progress (biography) of individual military officers to victim testimony, thereby creating "dossiers of violence" for each officer. In the end, around 100 officers were forced to retire, and there is good reason to believe that they were indeed the most egregious violators of human rights in the Salvadorian military.

Since then, I have focused on the use of data to amplify the voice of those who have suffered human rights violations. Those of us involved in human rights must speak truth to power, with an

emphasis on *truth*. In documenting crimes, we must be rigorous, meticulous, and careful. To do any less is disrespectful to the victims who have trusted us with their stories.

*The organizers then showed a video clip about the trial of Slobodan Milosevic at the ICTY. It emphasized the immense time pressure the prosecution team was under, as well as the difficulty of demonstrating the systematic and widespread nature of human rights violations under such constraints. The clip also showed Dr. Patrick Ball providing testimony about a statistical estimate of the number of victims and Milosevic questioning Ball about the validity of this estimate.

Shin: What did you learn during your time not only at the ICTY, but also from your work at other human rights trials?

Tromp: As the trials at the ICTY gained momentum in the late 1990s, I began to question the purpose of having an international court that was both physically and psychologically detached from the victims. I can now see that only a court with the backing of the United Nations has the political legitimacy to compel member states to submit official records as evidence. The ICTY was established under Chapter VII authority, and this was crucial in compelling the Serbian government to permit access to its state archives. The official documentation found at the archives played an important role during the trials at the ICTY. Despite the well-justified criticism about UN failure in the face of atrocities in Serbia, the fact that the court had the backing of the UN allowed us to access key evidence during the trials.

<u>Ball</u>: I have been involved to varying degrees in a total of six trials: three in Guatemala, two at the ICTY, and the trial of Hissene Habre at the Extraordinary African Chambers. From these experiences, I have found that judges vary in how much they care about whether the answer—as estimated through statistical methods—is correct. For the trials to yield results that are satisfactory in the victims' eyes, the judges need to be comfortable questioning experts in other fields about the details of the scientific reasoning behind the findings.

Tromp: At the ICTY, it was difficult for experts without formal training in law to convince the lawyers on the prosecution team about the importance of non-legal findings. Nevertheless, it was important to work with the lawyers so that they could effectively "translate" these expert findings for the judges.

<u>Ball</u>: From my experience at the ICTY, there was very close coordination between experts and the lawyers on the prosecution team. That said, this is not always the case at human rights trials. In my view, the expert's job is to "present the science," so that the lawyers and the judges become comfortable with the scientific model and understand how the findings were derived from that model. Nevertheless, we should be mindful that different types of courts have different rules and procedures about the role that outside experts can play.

Shin: In trials involving crimes against humanity, it is important to demonstrate the systematic and widespread nature of the alleged crimes. Did you have this explicit standard in mind as you documented human rights violations and worked on the trials?

Tromp: I joined the ICTY without any legal knowledge or awareness whatsoever, so I had to learn the very basics from my colleagues there.

As you mentioned, it is important to show the systematic *and* widespread nature of human rights violations in charging crimes against humanity. This is different from trials involving genocide, as was the case at the ICTY, where one needs to show *intent*.

Depending on what crime the prosecution team seeks to prove, it is important to keep in mind what type of evidence to look for. As an example, I recall attending a workshop at the ICTY with Patrick, where he mentioned the estimated dates of mass population movement in Kosovo in 1999. This information became very useful as we looked for evidence to corroborate accounts of Serbian activity in the area.

<u>Ball</u>: Statisticians often work with experts in other substantive areas, and the questions that statisticians ask are often very different from those examined by subject matter experts. As an example, in analyzing an alleged genocide, a statistician would seek to demonstrate a statistically significant difference in the rate of killing between distinct groups in a given geographic area.

Most importantly, *statistical reasoning is not "proof."* Any conclusions obtained from statistical analyses are all circumstantial, and these conclusions are most helpful when they are consistent with the arguments and narrative put forth by the prosecution team.

In addition, statistics is useful for *disproving* hypotheses, not proving them. As an example, when we analyzed the conflict in Kosovo, we could reject the hypotheses that NATO bombing or KLA activity had caused the mass population movements.

To borrow a phrase by Michael Ignatieff, statistics can only "narrow the range of permissible lies" by perpetrators in human rights trials. In my mind, statistics should only be a footnote in the prosecution's argument, but that footnote needs to be correct, robust, and accurate. Statisticians must enable, when appropriate, the prosecutor to cross-examine the defendant and call out blatant lies by the defense team.

Tromp: I would add that trials where the defendants are represented by professional lawyers present a challenge for the prosecution team compared to trials where the defendant does not rely on legal counsel. Milosevic's trial is an example of the latter. He made remarks and questions that were irrelevant and inappropriate for a court of law.

Moreover, scientific findings—such as those obtained by statistical analyses—should always be presented in the appropriate historical context to judges, victims, and the public at large. The immense human capital accumulated during the trials at the ICTY, especially through the work of demographers and statisticians, should also be widely shared as an example for future trials.

Shin: In human rights trials, who exactly is the main audience of interest? How does public opinion tie in to the way that these trials are run?

<u>Tromp</u>: While working on the Milosevic case, I was initially too busy to reflect on the relationship between my work and the role of public opinion. Later, I realized that the public had unrealistic expectations about what international criminal justice mechanisms could achieve. There was a general lack of legal awareness, and this needs to be addressed. The victims expected swift retribution, but that is not the way that international courts typically operate.

That said, we should keep in mind that justice delayed may not be justice at all in the eyes of the victims. There is a need for greater outreach to transparently convey the discussion between the prosecution team, the defense lawyers, and the judges to the public. To the extent that it is legally permissible and appropriate, the public has a right to know.

Shin: When you were presenting evidence in court, did you have a wider audience (outside of the court) in mind?

Tromp: There was an instance where one piece of evidence that the prosecution team entered in court triggered an unexpected and unintentional public reaction. The team obtained the so-called "Scorpion" video from a source in Serbia during the Milosevic trial after the period for the prosecution's argument had already passed. Nevertheless, Geoffrey Nice entered the video as evidence to undermine the credibility of the defendants. Nice took this action purely for internal, legal purposes only related to the trial proceedings.

However, the video was shown on Serbian public television soon after, and this set off an important public discussion in Serbia about who was responsible for the conflict in Bosnia and the atrocities committed in that conflict.

Shin: Do you have any guidelines or suggestions for civil society organizations and NGOs with respect to preserving evidence for trials?

Tromp: During the conflict in Bosnia, Human Rights Watch began to record evidence and collect interviews in a secure and confidential manner well before the ICTY began its trials. The information collected by Human Rights Watch played an important role in the trials.

Moreover, human rights NGOs played an important role by putting politicians on notice. They did so by sending their reports and findings to relevant officials and government ministries. Because of this, the prosecution team could argue that the perpetrators knew about ongoing crimes but did nothing to stop them.

<u>Ball</u>: With respect to scientific analyses, the defense team will likely question the methodology behind how the evidence was collected and analyzed. For instance, in statistical analyses, there is a procedure called *sensitivity analysis*. In short, it formally tests how many of the collected

testimonies must be false for a given result to "go away." If a result still holds even when a large proportion of testimonies are false, then we can be more confident about our conclusions.

Regarding the appropriate audience, I would say that each project is intended for a different primary audience. Some are aimed at providing information to judges, while others serve to convey information to the public or to scientists and other experts.

Shin: How should NGOs record human rights violations?

<u>Ball</u>: It is important to create a written record of injuries and deaths as accurately as possible. This includes writing down the victim's name, age, sex, occupation, and residence, as well as the date and location of the incident. Also collect photographic evidence if possible.

Moreover, do not feel compelled to create a unified, centralized effort to collect evidence. This creates a tendency for the largest groups to dominate evidence collection, which is not ideal. At least for statistical analyses, the findings are more robust if they are based on multiple *independent* sources that were not coordinated with each other.

<u>Audience</u> <u>Question</u>: How can human rights NGOs defend against attacks on sensitive electronic data?

<u>Ball</u>: I would strongly recommend http://martus.org, a project that I was involved in until a few years ago. The free software available on that website enables users to create a database that is fully self-encrypted, which means that the data is secure even if your hardware is compromised. The software also automatically saves the encrypted data on a network of servers, so that you can access the data independently.

<u>Audience</u> <u>Question</u>: Could you speak more about the Humanitarian Law Center (HLC) Kosovo project?

<u>Ball</u>: As far as I am aware, their project is the only one where there is a virtually complete, accurate record of deaths resulting from mass atrocities. This was possible because there was good pre-existing information on civil registries, and because the crime sites were easily accessible to human rights investigators. The data we collect in human rights work is almost never complete or representative.

<u>Audience Question</u>: Do you have suggestions about what to do if too many witnesses want to contribute to evidence collection? How much evidence is enough?

Tromp: I would say that there needs to be sufficient evidence to demonstrate the alleged criminal act. For the case of political leaders who are often not physically present when the crimes are committed, collecting evidence is more challenging, since the prosecution team needs to demonstrate criminal *intent*.

Also, I would add that retributive justice is not enough to restore the dignity of victims and heal broken societies. Trials are surely an important part of the process, but it is important to keep the larger picture in mind.

<u>Ball</u>: The question of whether to focus on *justice* or on finding the *truth* is a difficult one. A narrow focus on achieving justice may come at the expense of fully understanding past events, re-traumatizing victims, and even acquitting officials based on legal standards. All mechanisms that aim to achieve justice can only yield incremental results. We must have moderate, realistic hopes about transitional justice mechanisms, even if they are all motivated by powerful ideals.

<u>Tromp</u>: As we embark on human rights trials, we need to reflect on whether the victims feel safe and dignified, whether justice has been achieved, and whether we have made progress in finding the truth. Lastly, I think we need to think more about the role of *mercy* in these trials. There are cases where victims or their relatives choose to forgive the perpetrators. We need to think more about the role of criminal trials in this context.

Session 2: Human Rights Documentation Methods

Moderator: Dr. Clifton **Emery** (Associate Professor, School of Social Welfare at Yonsei Univ.)

Presenters:

- Dr. Patrick **Ball**
- Youk **Chhang** (Executive Director, Documentation Center of Cambodia / DC-Cam)

<u>Ball</u>: Everyone working in human rights cares about finding the truth. We need our arguments to be solid, because there are tangible consequences to making weak arguments. We need to protect and respect the victims' voices. In addition, we may misunderstand what happened and point to the wrong perpetrators if we are not meticulous and careful in our work.

The perpetrators of human rights violations often put out grotesque lies to defend themselves. Statistics can be useful in exposing such lies. The conclusions of statistical analyses should only be a footnote in the findings of human rights investigators, but that footnote needs to be correct and accurate. Everything that we do should be in the service of the victims.

In human rights work, we usually don't know what we don't know. We rarely know everything about what has happened. Victims are not inclined to immediately trust investigators, which means that they may not be inclined to provide testimony and other evidence. The evidence we manage to collect are almost certainly systematic underestimates of the truth.

To demonstrate the example of bias, consider the reports of casualties in Iraq from 2007 to 2010. Violent incidents resulting in more than 15 casualties were widely reported by multiple sources, while those resulting in one or two deaths were rarely visible in the media. That the latter was systematically underreported has important implications about how we understand the situation in Iraq. Whereas events resulting in many casualties were often the result of Al-Qaeda attacks or collateral damage from military operations by coalition forces, those resulting in few casualties were frequently the result of Shi'a militias murdering adult men with the goal of ethnic cleansing.

Unless we are careful in approaching and analyzing our data, we may reinforce existing biases and get the story entirely wrong.

Let me illustrate one method of how statistics can help us estimate the "unknown unknowns." Suppose there exists a "universe" of events that consists of all the incidents of interest. Within this universe, source A and source B each provide a partial account of these events. If we can identify the number of events that are reported in both A and B, we can estimate the number of events in the entire universe of interest.

To gain some intuition, suppose that we try to estimate the size of a dark room by randomly throwing lots of balls into it. If the balls collide often with each other, then we can reasonably guess that the room is small. If they collide less often, then we can guess that the room is large. This collision corresponds to the overlap between different sources.

Even this method is not perfect, by any means. The basic model I've outlined here assumes that the sources are independent, uncorrelated samples of the data. Different sources are almost always correlated in the events they report, and statistical methods attempt to model this correlation in obtaining estimates.

Another way of applying statistics to human rights work is to reject alternative hypotheses based on the data. As I mentioned earlier, we were able to construct time-series data about the magnitude of population movements and casualties in Kosovo in 1999. Based on this data, we could convincingly rule out, beyond reasonable doubt, the possibility that NATO bombings or KLA activity had caused the observed pattern. This is not the same as proving that the Serbian government was responsible, but this exercise can help narrow the range of plausible explanations.

Despite the recent excitement about "big data," raw data—however plentiful it may be—does not provide a reliable basis for understanding patterns. It is always necessary to construct a model of how the data is generated. There are, in my view, only three ways of rigorously applying statistics to data modeling. The first is to construct a perfect census of everything that has happened. This is extremely rare. The second is to rely on a random sample of the population. This is very difficult, and there are many technical challenges in the process. The third is to rely on a statistical modeling of the sampling process, and this is the most common approach.

Let me close with an example of what we can achieve in human rights work if we get the statistics right. In Guatemala, we were given access to 80 million pages of police records stored across three warehouses. By applying random sampling and other statistical methods to this data, we successfully demonstrated that police attacks against critics were part of a systematic, government-led campaign to suppress political opposition. This finding helped contribute to a court ruling in which the accused were sentenced to 40 years in prison.

<u>Chhang</u>: Cambodian society has been shattered not only by the atrocities under the Khmer Rouge, but also by nearly a century of violence. My work has been motivated by a desire to achieve reconciliation and help put this society back together.

Before addressing the main subject of my presentation, I would like to explain how I came to be involved in this work. When the Khmer Rouge were in power, there were severe food shortages. My brother-in-law was arrested for stealing a rotten cucumber to feed his wife, and he was killed in a public beating. His wife—my sister—was pregnant at the time, and she was killed after

being accused of eating the stolen food. I also experienced torture at the hands of Khmer Rouge officials, and my mother lost her husband, parents, and parents-in-law. In other words, I came to this work for deeply personal reasons.

My mother says that she has forgiven the perpetrators, and she is simply happy that I am safe and have enough food to eat. My niece, who lives in the United States, strongly disagrees with my work in support of the tribunal in Cambodia. The three of us disagree on the meaning of justice, how to achieve it, and how Cambodia should move forward.

I believe that legal prosecution can serve as a foundation for rebuilding Cambodian society. To pursue justice, I have carried out an information collection effort to document what happened under the Khmer Rouge. Nevertheless, I fully recognize that a tribunal cannot, by itself, heal the wounds among the Cambodian people or prevent similar crimes in the future. Along with pursuing justice, we must also strive to preserve the collective memory of what happened and pass it down to younger generations.

In my work, I have come across three main challenges. The first is operating in a difficult political environment. Documenting human rights violations is, in and of itself, a political act. Not everyone will be supportive, and not every country will be supportive of your efforts. To try and persuade other actors, one must draw links between the current political situation and past crimes. The second is building a network of partners, both domestic and international. One must be careful and selective in this process. The last one is obtaining sufficient material and financial resources. The technology that is necessary for documenting violations in a secure, appropriate manner is often expensive.

<u>Audience Question</u>: Could you speak more about your project in Guatemala? You mentioned that there were 80 million pages of documents. Wasn't that a massive logistical challenge?

<u>Ball</u>: Obtaining the necessary resources is always a challenge, but outside governments and organizations were very supportive in that project. In terms of logistics, I always think that "weird, difficult data" presents a fascinating statistical and logistical puzzle. Coming up with a solution to these puzzles is what makes this work so interesting.

I also want to briefly address the concern about verification in documenting human rights violations. While it is important, an excessive focus on verification comes at the expense of victims who are already marginalized in society. We should be meticulous in our analysis, but we should be careful not to turn a blind eye to those who are suffering in ways that are not widely reported by outside sources.

Chhang: When it comes to documentation projects, there are typically foreign governments or universities that provide financial or logistical support for these efforts.

<u>Audience</u> <u>Question</u>: With respect to the issue of Korean "comfort women" under Japanese colonial rule, there is no consensus on the estimated number of victims. There are several lists of victims' names. Could they be used to compute an estimate?

<u>Ball</u>: Absolutely. If there are more than three or four lists, and if each of these lists contains sufficient pieces of information per individual, then it is possible to obtain a robust statistical estimate of the number of victims. I would be happy to talk to you further about looking into this subject.

<u>Audience</u> <u>Question</u>: With respect to Cambodia, you mentioned that you place an emphasis on storytelling in your work. But isn't storytelling of limited purpose in achieving justice?

<u>Chhang</u>: Tribunals cannot prosecute every single perpetrator, especially those who were at the lower levels of the government apparatus. There is an ongoing discussion in Cambodia about transferring low-level violation to purely domestic courts, but such initiatives have run into substantial logistical challenges and political barriers.

Tribunals are necessary, but they take time. Storytelling and preserving the collective memory of what happened must continue in the meantime. We must also educate students in school so that future generations know about what happened in the past.

<u>Audience</u> <u>Question</u>: Can statistical analysis be used to prevent future human rights atrocities? Are there any precedents?

<u>Ball</u>: I am involved in a project in Mexico that uses machine learning methods to predict the locations of graves, but its main purpose is to assist search efforts. I am not sure that current methods could be used for prediction or prevention.

As I've said several times, statistics should be a footnote in the report of the human rights investigator. Nevertheless, we need to take statistics just as seriously as other aspects of documenting human rights violations. We must always remember that human beings—victims—are the most important aspect of human rights work, and that everything we do is to help restore their dignity and achieve justice.

<u>Audience Question</u>: Could you speak more about truth commissions, and working with students in schools and universities?

Chhang: All current and past truth commissions, as far as I am aware, took place in Christian societies. Cambodia, which is rooted in Buddhist values, warrants a different approach.

As for my work with educational institutions, I worked for the past seven years to develop a high school and university-level curriculum about genocide in Cambodia. I have convinced schools to integrate this curriculum into their education, and it is now compulsory for Cambodian students in years 7 through 12 to learn about the atrocities under the Khmer Rouge and about genocide in other countries.

<u>Ball</u>: To add to his remarks about Christian societies, the South African truth and reconciliation commission was built on Christian values. This did not sit well with Hindu, Muslim, and atheists in South Africa.

Session 3: Human Rights Crime Investigation – Evidence & Forensic Science

Presenters:

- Stefan **Schmitt** (former Director of the International Forensic Program, Physicians for Human Rights)
- Scott **Stevens** (Communications Director, TJWG)

Schmitt: Justice is not the same as establishing the truth of an event. Lawyers and judges address the question of whether someone is guilty of a crime as it is defined in a specific written law. Justice can only be a small part of the overall process of truth-seeking.

We must always be wary of the issue of jurisdiction in documenting evidence. Courts determine what constitutes evidence that is legally admissible in a trial. In collecting evidence, there must be a verifiable, credible chain of custody for every piece of evidence that is submitted before the judges. The judges must be able to call every individual who was directly involved in evidence collection as a witness, and these individuals must be able to demonstrate the expertise and capacity to identify and collect this evidence.

I will discuss a few cases to illustrate these issues in depth. The first is a project to document the so-called "Black River" massacre of March 13, 1982 in Guatemala, which I was directly involved in. We had to rely on the permission of a local medical official to obtain jurisdiction to exhume the remains of victims. We invited local police officers to observe the process, to be as transparent as possible. In exhuming the remains, we took care to *capture the evidence in place* as much as possible to preserve the context. When multiple pieces of evidence are stored separately as individual items, we lose the context of how those items are related to each other. We also took care to record who took the photographs, who took notes, and exactly when each "act" took place. Lastly, we created a physical space for victims' relatives to observe the entire process. This was important, given that the locals did not trust the police.

The second is the case of the Rwandan genocide. Evidence was collected under the jurisdiction of the International Criminal Tribunal for Rwanda (ICTR), and there was high outside interest in evidence collection and the trial proceedings. Many resources were available to document the atrocities. However, since the victims' bodies were often stacked in piles by the perpetrators, so it was difficult to identify the victims or place evidence in context.

For Afghanistan, it was difficult to obtain individual witness testimony about what happened. Each village has an established oral tradition about its own history, and there is a representative who is tasked with conveying this account to outsiders. Since this oral tradition was crafted in a highly political context, its value as witness testimony is limited.

In the case of Libya, I took part in an investigation of a massacre of detainees at a warehouse in Tripoli in 2011. As in other investigations, I drew diagrams of the crime scene and documented evidence as precisely as possible. This evidence was later corroborated with witness testimony to create a coherent narrative about what happened at the warehouse.

Stevens: I will speak about what motivated TJWG's work and briefly present our preliminary findings, which are also shown in our recent report.

In 2014, the UN Commission of Inquiry (COI) found that "the gravity, scale and nature of these [human rights] violations" in North Korea "reveal a State that does not have any parallel in the contemporary world." Furthermore, it concluded that "crimes against humanity are ongoing in the [DPRK] because the policies, institutions and patterns of impunity that lie at their heart remain in place."

With the COI report as our starting point, we began to think about what steps should be taken next. We eventually agreed that we should improve on existing documentation of human rights violations in North Korea, and thereby contribute to advocacy and future transitional justice efforts.

Under this goal, we studied previous examples of human rights documentation. Efforts to map the "killing fields" of Cambodia identified 20,000 mass grave sites and contributed to truth-finding and memorialization. In the case of Darfur, activists used a combination of Google Earth satellite imagery and survivor testimony to document crimes, since it was impossible to obtain physical access to the crime scenes.

From looking at these cases and other examples, we arrived at three conclusions. The first was that we should prepare as much as possible for the transitional period. Second, past and ongoing violations must be rigorously documented, to support accountability and enable relatives to learn what happened to their family members. Third, the process of documenting these violations must be centered on and inclusive of victims and their relatives.