

Humanity

Forensic Truth? Scientific evidence in international criminal justice

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Truth and justice are distinct concepts. Yet, recent years have witnessed the emergence and gradual recognition of the right to the truth. If it first was invoked in connection with the crime of enforced disappearances, this right is progressively becoming generic and self-standing. It has been defined by the United Nations Human Rights Council as:

the right of victims of gross violations of human rights and serious violations of international humanitarian law, and their families and society as a whole, to know the truth regarding such violations, to the fullest extent practicable, in particular the identity of the perpetrators, the causes and facts of such violations and the circumstances under which they occurred.¹

This understanding of truth as a right necessarily prompts the question of the place of truth in the legal and judicial frameworks. Is truth supposed to be the outcome of such proceedings? Can truth be achieved by courts of law? This paper proposes to address these issues in the context of international criminal justice by reflecting on the necessity and practicality of resorting to scientific/forensic evidence to establish a truthful recollection of atrocities.

The very concept of truth is not absent from the text of international criminal law. For instance, Article 69 (1) of the Rome Statute of the International Criminal Court (ICC) on evidence states that “before testifying, each witness shall, in accordance with the Rules of Procedure and Evidence, give an undertaking as to the *truthfulness of the evidence* to be given by that witness.”² Similarly, Rule 90 (A) of the ICTY’s Rules of Procedure and Evidence requests that “every witness shall, before giving evidence, make the following solemn declaration: ‘I solemnly declare that I will speak the truth, the whole truth and nothing but the truth.’”³ This undertaking as to the truthfulness of the evidence has to be given by each witness testifying, including expert witnesses, and thus including forensic experts.

Resort to forensic evidence in international criminal justice has been particularly visible in the context of the trials at the International Criminal Tribunal for the Former Yugoslavia (ICTY). This may probably be explained by two factors. First, the crimes perpetrated in Bosnia-Herzegovina constitute a very rare—if not unique—instance in which perpetrators have used primary, secondary and even tertiary mass graves to bury their victims. Second, in the aftermath of the war that devastated the Former Yugoslavia, one of the reactions of the international community was to launch an unprecedented scientific search for, and subsequent identification of, the dead victims. For instance, as of 30 June 2016, with the work of the Bosnian Missing Persons Institute and that of the International Commission on Missing Persons (ICMP), 6,959 out of the 8,372⁴ Srebrenica victims had been found and identified.⁵ Such statistics admittedly

make of Bosnia-Herzegovina as a scientific experiment the only case with such a high rate of resolution of cases.

The pioneering forensic work conducted in Bosnia-Herzegovina does not serve a purely humanitarian role and, as several ICTY judgments show, it has also been pivotal in establishing criminal intent, including genocidal intent, in proving the crimes perpetrated and in attempting to truthfully recount the sequence of events, although of course as far as it was possible to do so.

Scientifically uncovering the genocidal truth: the Krstić case

To prove the crime of genocide in the case against General Krstić, the ICTY Trial Chamber reported in detail the medico-legal analyses resulting from mass graves' exhumations. It relied on scientific evidence to find that the great majority of the victims was male; a decisive element in this case for the qualification of genocide, the men of Srebrenica having been targeted to ensure the extinction of the group as a whole:

The forensic evidence supports the Prosecution's claim that, following the take-over of Srebrenica, thousands of Bosnian Muslim men were summarily executed and consigned to mass graves. Although forensic experts were not able to conclude with certainty how many bodies were in the mass-graves, due to the level of decomposition that had occurred and the fact that many bodies were mutilated in the process of being moved from primary to secondary graves by mechanical equipment, the experts were able to conservatively estimate that a minimum of 2,028 separate bodies were exhumed from the mass-graves. ...The forensic examinations of the gravesites associated with Srebrenica reveal that only one of the 1,843 bodies for which sex could be determined was female.⁶

The Chamber was thus able to conclude that:

the forensic evidence presented by the Prosecution provides corroboration of survivor testimony that, following the take-over of Srebrenica in July 1995, thousands of Bosnian Muslim men from Srebrenica were killed in careful and methodical mass executions.⁷

The medico-legal analyses carried out on the bodies of the victims found in the mass graves also enabled the determination of the sex of the victims as well as their characterisation as civilian members of a group destined for destruction—another requirement of the crime of genocide:

The results of the forensic investigations suggest that the majority of bodies exhumed were not killed in combat; they were killed in mass executions. Investigators discovered at least 448 blindfolds on or with the bodies uncovered during the exhumations at ten separate sites. At least 423 ligatures were located during exhumations at 13 separate sites. Some of the ligatures were made of cloth and string, but predominately they were made of wire. These ligatures and blindfolds are inconsistent with combat casualties. The Prosecution also relied on forensic evidence that the overwhelming majority of victims located in the graves,

for whom a cause of death could be determined, were killed by gunshot wounds. The exhumations also revealed that some of the victims were severely handicapped and, for that reason, unlikely to have been combatants.⁸

Later in the judgment the Chamber reiterated the non-combatant character of the victims exhumed from the mass graves:

One hundred and fifty bodies were recovered from the mass grave and the cause of death for 149 was determined to be gunshot wounds. All were male, with a mean age from 14 to 50 and 147 were wearing civilian clothes. Forty-eight wire ligatures were recovered from the grave, about half of which were still in place binding the victims' hands behind their backs. Experts were able to positively identify nine of the exhumed bodies as persons listed as missing following the take-over of Srebrenica. All were Bosnian Muslim men.⁹

Not only did the Trial Chamber rely on the medico-legal analyses made on the bodies of the victims exhumed from the mass graves, it also commented on the use of (secondary) mass graves and the concealment of the bodies therein both as a confirmation of the civilian character of the victims and as an indication of the genocidal intent of the perpetrators:

Most significantly, the forensic evidence presented by the Prosecution also demonstrates that, during a period of several weeks in September and early October 1995, Bosnian Serb forces dug up many of the primary mass gravesites and reburied the bodies in still more remote locations. ...The reburial evidence demonstrates a concerted campaign to conceal the bodies of the men in these primary gravesites, which was undoubtedly prompted by increasing international scrutiny of the events following the take-over of Srebrenica. Such extreme measures would not have been necessary had the majority of the bodies in these primary graves been combat victims...¹⁰

Finally, *there is a strong indication of the intent to destroy the group as such in the concealment of the bodies in mass graves*, which were later dug up, the bodies mutilated and reburied in other mass graves located in even more remote areas, thereby preventing any decent burial in accord with religious and ethnic customs and causing terrible distress to the mourning survivors, many of whom have been unable to come to a closure until the death of their men is finally verified.¹¹

The *Krstić* case is not the only one in which forensic evidence was relied upon to demonstrate and confirm genocidal intent.¹² More recently, Trial Chamber I in the case against Ratko Mladić also heard the testimonies of forensic experts. One will of course have to wait for the judgment to be issued to fully estimate the weight the judges will give to such forensic evidence, but the transcripts of the case already offer a strong indicator of its potential import in obtaining, *as far as it is possible to do so*, a truthful recollection of events.

Managing expectations: strengths and limits of forensic evidence

On October 23, 2014, the *Mladić* case took a new turn with the decision of the Trial Chamber to grant the Prosecution the re-opening of its case-in-chief due to the discovery of a mass grave at Tomašica in September 2013.¹³ This re-opening thus allowed the presentation of new evidence based on the mass grave's excavation, which took 79 days, lasting from September 4 to December 20, 2013, and revealed the presence of three separate graves.

On July 1, 2015, expert witness John Clark testified, based on the autopsies conducted on the human remains recovered in the Tomašica mass grave. He notably commented on the preservation of the bodies:

I think we were all struck—pathologists and anthropologists and others—by how well preserved many of these bodies were. These were bodies which had reportedly been in the ground for up to 21 years. We would have expected most of these bodies to be reduced to a skeleton, but, in fact, a large number of them had not—a lot of soft tissue on the bones, in sometimes a great amount so that the complete shape of the body was still there. You could recognise facial features. One person we could even see a tattoo on their arm. And this was quite remarkable. I'd never seen or none of us had come across this degree of preservation of bodies before. It's a process in the—normally the body after death starts to decompose, and essentially the tissues will break up and liquify and you'll be reduced to a skeleton.¹⁴

He was also able to testify of the civilian character of the victims, based on their clothing:

All the clothing that we found—most people did have clothing on. All the clothing was just ordinary clothing that people would wear—shirts, sweatshirts, short-sleeve shirts, trousers, et cetera. Some people had suit jackets, some people had work jackets or dungarees, but it was mostly sort of casual clothes with footwear as well. Some people did have a few—a few people did have what to me was an excessive amount of clothing, so perhaps two or more jackets, two or more pairs of trousers. One of the three women had an enormous number of clothes on, but generally this was fairly light clothing. Specifically, no military clothing whatsoever. And I include amongst that the footwear which was all of a light—generally of a light nature and not boots or anything like that.¹⁵

Ian Hanson, forensic archaeologist, deputy director of forensic science at the ICMP and main forensic in charge of the case, also testified of the victims remains in civilian clothing:¹⁶

The intact bodies were clothed. They had personal effects. There were documents with bodies, jewellery, money, everyday items normally carried on a person ... As observed during excavation, normal civilian attire seemed to be what bodies were wearing. ... No military uniforms or other items associated with military activity were observed during this excavation.¹⁷

If such scientific account is crucial in contributing to qualify the crimes perpetrated as crimes committed against civilians and not combatants, to present forensic science as infallible would be misleading. Forensic search itself is dependent on a series of factors, such as weather conditions, staff training, financial resources, not to mention finding the corpses of the victims. And even in optimal conditions (if such conditions are ever met), determining the exact number of victims or the place of death might be problematic, notably when secondary and tertiary burial sites have been used by perpetrators and bodies are co-mingled, damaged and/or fragmented; establishing the exact date of death¹⁸ or its cause might be difficult, if not impossible, depending on the degree of decomposition and a level of errors undoubtedly exists.

In his testimony, Hanson interestingly pointed to the limits of forensic evidence and notably to the difficulties in cases of co-mingled, damaged and/or fragmented human remains:

It's very difficult to identify people in secondary graves where the remains are co-mingled. It's more straightforward to identify people if they're graves that are undisturbed, the bodies are whole. It does depend on the circumstances. So from our experience, and this is an ongoing process, the error rate varies very much between location and between event.¹⁹

In fact, these understandable limits of forensic science have been used by the Defence to notably question the number of victims and contest the date, cause and manner of death. If forensic evidence is a reliable and grounded way to corroborate victim and witness testimonies, to determine an accurate number of victims as well as the cause and time of their death and their sex (and possibly their identity) and to establish links with the accused at trial,²⁰ this is only as far as it is possible to do so.

Scientific knowledge is limited and one can thus not expect forensic science to explain everything. Scientific knowledge may also be seen as a type of discourse,²¹ thus vulnerable to some form of bias or at least vulnerable to allegations of bias. In *Mladić*, the Defence Counsel asked Ian Hanson what seemed to be for him a rhetorical question: "Mr. Hanson, however, you always see yourselves in the role of someone working for the prosecution; correct?"²² Hanson's answer was very clear:

No. No, we do not work for the prosecution. We provide assistance to prosecutors, among other authorities. In Bosnia, we are assisting the Bosnian government and, through one of their vehicles, the prosecutor's office whom we have much interaction with, but we not working for them. We are assisting the Bosnian government.²³

In instances of mass violence, the fact that forensic experts necessarily have knowledge of the events even before starting their work has also been pointed out as an indicator of bias and unreliability. Such allegations have however been refuted by the *Karadžić* Trial Chamber in unequivocal terms:

the fact the experts were provided with limited background information about the bodies in the gravesites and, more generally, about the fall of Srebrenica, does not, in and of itself, taint their reports with bias or make them less reliable.²⁴

Perhaps more generally, there are two inherent limitations to the use of forensic evidence in the judicial context. First, legal fact-finding and scientific fact-finding cover different realities and, in a courtroom, forensic evidence is not used to unveil the entire truth about a particular event or to identify the victims: it is there to assist the court in assessing the responsibility of the individual facing criminal charges. This limited function is in line with the ICC's finding that "*in case of mass crimes, it may be impractical to insist on a high degree of specificity*". In this respect, it is not necessary for the Prosecutor to demonstrate, for each individual killing, the identity of the victim and the direct perpetrator. Nor is it necessary that the precise number of victims be known.²⁵ Specific and precise forensic identification of victims is thus not necessary for trials to occur and for individuals to be convicted; an admittedly reasonable position which allows for trials to take place in a context where victims may have been disappeared and their corpses concealed, mutilated or destroyed.

Second, the lawyers involved in the case also need to know how to approach such evidence while the judges need to be able to assess its reliability, based on the professionalism, knowledge and methodology of the experts called to testify. This is a crucial point as gathering reliable evidence in international criminal trials remains a challenge and the reliance on witness testimonies or NGO reports might prove insufficient to convict an individual beyond all reasonable doubt.

This is not to say that the use of forensic evidence will prove an infallible evidentiary and truth-telling tool. In fact, some might claim that it is not necessary at all. Notwithstanding the archaeological work being conducted in several Nazi death camps, in relation to Nazi crimes, forensic anthropology was used to prove the medical experimentations, not the genocide as such. More recently, very little forensic science was used to assess individual criminal responsibility in the Rwanda genocide and to prove that genocide had indeed happened. Exhumations were conducted but were short-lived due to poor weather conditions and time pressure put on the investigators. Yet, this has not stopped the International Military Tribunal at Nuremberg or the ICTR from establishing individual responsibility and genocidal intent and one could thus convincingly argue that forensic expertise is not needed to prove international crimes or to establish a reliable recollection of events, let alone the truth.

Yet, the ICTY experience shows another side to the issue. Even if these were not their primary goals in the eyes of the tribunal, the exhumations and analyses of the human remains have led to an unprecedented effort to find and identify all the victims. Not only has forensic work assisted in proving the crimes, in countering defendants' claims and in linking the deaths of the victims to the accused perpetrators, it has also allowed for the victims to be searched, found, identified and decently buried, thereby helping survivors to know what had happened to their loved ones.

Forensic work has allowed the ICTY to establish the intent of the perpetrators to conceal their crimes in primary and secondary mass graves, thereby disturbing and destroying the evidence, in an attempt to pretend that their victims were combatants who had died in the course of combat

and to ultimately re-write history. Forensic evidence has allowed the ICTY to refute such claims and to retrace the fate of the victims from the moment they fell into the hands of their murderers. In this sense, it has undoubtedly contributed to tell the story as it really happened or, in other words, to tell the truth.

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Notes

¹ UN General Assembly, *Report of the Human Rights Council (A/67/53/Add.1)*, 28, paras 26-29.

² Emphasis added.

³ See also Rule 90 (B) of the Rules of Procedure and Evidence of the International Criminal Tribunal for Rwanda (ICTR).

⁴ This is the number engraved on the Memorial stone in Potočari. By July 2016, 6,576 victims had been buried in Potočari. See https://www.icmp.int/wp-content/uploads/2016/07/srebrenica_2016.pdf (accessed June 6, 2017).

⁵ Statistics available at *ibid.*

⁶ ICTY, *Prosecutor v. Krstić* (Case No. IT-98-33), Judgment, Trial Chamber I, August 2, 2001, paras 73-74.

⁷ *Ibid.*, para. 79.

⁸ *Ibid.*, para. 75.

⁹ *Ibid.*, para. 202. See also paras. 208-24; 222-3; 229-30; 237-8; 250.

¹⁰ *Ibid.*, para. 78.

¹¹ *Ibid.*, para. 596, emphasis added.

¹² See for example ICTY, *Prosecutor v. Karadžić* (Case No. IT-95-5/18-T), Judgment, Trial Chamber, March 24, 2016. See Melanie Klinkner, “Karadžić’s guilty verdict and forensic evidence from Bosnia’s mass graves,” *Science and Justice* 56, no. 6 (December 2016): 498-504.

¹³ ICTY, *Prosecutor v. Mladić* (Case No. IT-09-92-T), Decision on Prosecution Motion to re-open its case-in chief, Trial Chamber I, October 23, 2014. In *Karadžić*, this evidence was deemed to come too late in the procedure and it was considered that its admission would have breached the right to a fair trial of the accused.

¹⁴ ICTY, *Prosecutor v. Mladić* (Case No. IT-09-92), Transcripts, July 1, 2015, 36586, lines 1-12.

¹⁵ *Ibid.*, p. 36589, lines 13-23.

¹⁶ Ibid., June 24, 2015, 36251, lines 10-14. He also explained that twelve years earlier, at least 298 bodies were exhumed at the nearby location of Jakarina Kosa and that the bodies in Jakarina Kosa [thus a secondary grave] had been transferred there from Tomašica.

¹⁷ Ibid., 36287, lines 9-18.

¹⁸ For example, in Tomašica, the analysis of insects found in the graves indicate that the bodies were buried between April and September but it is impossible to determine the year.

¹⁹ *Mladić*, Transcripts, June 25, 2015, 36347, lines 4-10.

²⁰ See Klinkner, “Karadžić’s guilty verdict.”

²¹ See Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Manchester: Manchester University Press, 1984).

²² *Mladić*, Transcripts, June 25, 2015, 36336, lines 12-13.

²³ Ibid., lines 14-18.

²⁴ *Karadžić Judgment*, para. 5530.

²⁵ ICC, *Prosecutor v. Bemba Gombo* (Case no. ICC-01/05-01/08), Decision pursuant to article 61(7)(a) and (b) of the Rome Statute on the charges of the prosecutor against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, June 15, 2009, para. 133, emphasis added.