

# Using forensic science to care for the dead and search for the missing: In conversation with Dr Morris Tidball-Binz

Forensic Manager of the Missing Persons Project, ICRC\*

Dr Morris Tidball-Binz is a forensic doctor who joined the International Committee of the Red Cross (ICRC) in 2004 and has since worked for the organization in numerous contexts, helping to develop its novel forensic capacity. Having begun his career with forensic and human rights organizations, he helped pioneer in his native South America the application of forensic science to human rights investigations, particularly the search for the disappeared. He helped create the ICRC's Forensic Unit, of which he was the first Director until early 2017; he then headed the forensic operation for the Humanitarian Project Plan. He is currently the Forensic Manager for the ICRC's new Missing Persons Project. He spoke with the Review to share his insights on the development of humanitarian forensic action and its role in protecting the dead and clarifying the fate of missing persons.

Keywords: missing, Falkland/Malvinas Islands,\*\* forensics, the dead, management of the dead, HPP.

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<sup>\*</sup> Dr Morris Tidball-Binz dedicates this interview to the memory of María Isabel Chorobik de Mariani, founder and first president of the Grandmothers of Plaza de Mayo, who passed away on 20 August 2018 aged 94. She was a true visionary, who saw the value of forensic science for the search for the missing and promoted the first investigations of this kind in the world.

This interview was conducted in Geneva on 16 January 2018 by Ellen Policinski, Managing Editor, and Jovana Kuzmanovic, Thematic Editor at the *Review*.

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"Humanitarian forensic action", a concept developed by the International Committee of the Red Cross (ICRC), refers to the use of forensic science to address the needs of victims of armed conflicts and other catastrophes for humanitarian, rather than criminal, purposes. The ICRC's forensic services provide advice, support and training to local authorities and forensic practitioners in searching for, recovering, analyzing, identifying and managing the bodies of those who have died as a result of armed conflicts, catastrophes and migration, and in building local forensic capacity. They may also carry out forensic activities in certain contexts, such as recovery and identification operations, when no other forensic actors are available. The objective is to ensure the proper and dignified management of the dead, to prevent and resolve disappearances, and to bring answers to grief-stricken families, helping fulfil their right to know the fate and whereabouts of their loved ones.

When people die in contexts of armed conflict or disaster, or while migrating, the remains of the deceased must be handled respectfully and with dignity. Their bodies must be searched for, recovered and identified. Forensic sciences such as anthropology, archaeology, pathology, fingerprint analysis, dentistry and genetics, including forensic DNA analysis, can help ensure the professional and dignified management and documentation of the dead and provide objective answers about the identity and fate of missing persons, whether they are dead or alive.

Over the years, the ICRC's expertise and influence in the field of forensics has grown considerably. Indeed, the ICRC is the only organization offering forensic assistance exclusively for humanitarian purposes. Despite this, the use of forensic sciences for humanitarian purposes, including for clarifying the fate of missing persons, is relatively new, and still faces several challenges. During and immediately after a conflict, searching for missing persons is often one of many pressing needs, but is rarely carried out as a priority. Conducting forensic investigations requires financial and human resources that are not always readily available in the aftermath of conflicts or other disasters. Additionally, forensic investigations in humanitarian contexts can be risky for practitioners – such as health professionals – who may be targets of threats and attacks or face other dangers while carrying out their work, such as exposure to explosive remnants of war. This requires adapting and developing the forensic knowledge, skills, procedures and tools required to overcome the exceptional challenges posed by humanitarian action.

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<sup>\*\*</sup> The term "Falkland/Malvinas Islands" does not imply official endorsement or the expression of any opinion whatsoever concerning the legal status of that territory, or concerning the delimitation of its frontiers or boundaries. Both names are used together, and are presented in alphabetical order.

See Stephen Cordner and Morris Tidball-Binz, "Humanitarian Forensic Action – Its Origins and Future", Forensic Science International, Vol. 279, 2017.



### Tell us a little bit about your background. How did you come to work in forensics?

It happened quite by chance back in 1984 when I was a medical student. At the time, I was studying and living in La Plata, Argentina, where I met a foreign delegation of forensic scientists that were visiting the country that year with the aim of helping to provide some answers for the families of the missing. These families were asking two main questions to the scientists. The first one was about the possibility of identifying a child who had been abducted as a baby and whose parents were disappeared. The second question was about the possibility of recovering and identifying the skeletonized remains of a large number of people who were disappeared and believed to have been killed and buried in clandestine graves. In the wake of the newly elected democratic government coming to power in December 1983, the delegation of forensic scientists had come to Argentina upon request of the families to help provide answers to these questions. In other words, it was the families of the missing who had the vision and initiative which led to the development of pioneering forensic science.

The invitation of foreign forensic experts ensued due to the mistrust on the part of the families of the missing towards the existing medico-legal structures in the country. Indeed, many members of the forensic community in Argentina were suspected, and later some of them were proven to have been involved somehow in the State machinery for disappearing people - for instance, by signing false death certificates of people who had been executed, stating that they had died in an accident or due to unspecified causes. Understandably, the relatives had very little trust in the Argentine forensic officials, but trusted instead the foreign specialists who they had called for help. I was invited to assist the visiting delegation of foreign forensic experts in my capacity as a medical student, because I was trusted by the families, had knowledge of medical terminology and possessed the necessary medical skills. I also spoke English, which proved to be useful for translation purposes. I was tasked with convening a team of trustworthy anthropology and archaeology students who were willing to assist in what turned out to be the first independent forensic investigation into human rights violations in Argentina. Even though I was studying medicine and had other jobs, I accepted, as I also had a commitment to human rights. I had been involved for a few years in the nascent human rights movement, including helping the families of the disappeared in their quest for answers.

I was not a born forensic scientist. I was instead a relatively successful medical student, eager to specialize in public health and family medicine and to work in rural areas. The thought of dedicating my professional career to forensic medicine – at that time still an underdog in the medical sciences – was not at all in my mind. However, upon meeting these outstanding forensic scientists and helping them to carry out the first forensic investigations of their kind in the country, I got hooked on this specialty. What happened thereafter was that I and some of the colleagues I had called upon to assist continued doing the work on a

voluntary basis and formed a team exclusively dedicated to these novel forensic activities. Back then, it did not cross anyone's mind that we would ever charge for any of this kind of work, which was done in addition to our normal jobs and studies, and we therefore ended up working on weekends and holidays to meet the huge need for independent forensic expertise.

We were invited early on to carry out this work by one of the first ever truth commissions established, the National Commission on Disappeared Persons in Argentina, in response to requests coming from the relatives of the disappeared anxious to know the whereabouts and fate of their loved ones.

The question of how to locate the missing was already on the table for quite a while. As human rights activists we did not have the answers, but we suspected that some of the disappeared were buried in unmarked graves in public cemeteries. However, it was very difficult, if not impossible, to do anything about it since at the time any such action would have been seriously repressed by the regime.

When the delegation of foreign forensic scientists visited Argentina, scientific knowledge was ripe for carrying out what turned out to be the first use of forensic sciences applied to investigations of this kind. It also happened at a time when some authorities had ordered massive and hasty excavations in cemeteries to try to find the disappeared. This led to the destruction of human remains and evidence, proved to be extremely traumatic for the bereaved, received much attention from the media, and became known at the time as a "horror show". Bulldozers were in fact digging up masses of skeletal remains, with no respect for the dead, and publicly destroying bodies which, as a result, would never be identified. This was an affront to the dead and to their families, as well as to society as a whole. There was therefore an urgent need and calls to put a stop to such practice through professional and scientific methods of investigation. It is important to note that this was a time when forensic anthropology was still a very exclusive domain in science, barely known outside US academic circles and in a handful of other developed countries. The concept of using it or applying it to these massive investigations was not in people's minds. This was well before television shows featured forensic crime scene investigations and forensics took on a trendy profile.

I was also invited at the time by the Grandmothers of Plaza de Mayo, an NGO formed in 1977 with the aim of finding their disappeared grandchildren, to assist in their quest.<sup>3</sup> They were part of the group of families who had invited the foreign forensic scientists, based on the brilliant and truly innovative idea of using grand-paternity testing to help in their search. This required adapting standard forensic paternity testing – used in courts to establish whether a child is biologically related to a putative father or not – to grand-paternity, by comparing instead the blood of the grandparents with that of a child believed to be their relative. At that time, before the advent of forensic DNA testing, this type of

<sup>2</sup> See Cora Gamarnik, "Imágenes de la post-dictadura Argentina", Artelogie, No. 7, 2015, available at: https://journals.openedition.org/artelogie/1072 (all internet references were accessed in May 2018).

<sup>3</sup> For more on the Grandmothers of Plaza de Mayo, see the interview with Estela de Carlotto in this issue of the *Review*. Also see: https://abuelas.org.ar/idiomas/english/history.htm.



analysis had no precedent in forensic practice, and the first scientists to whom the Grandmothers presented this seemingly crazy idea shunned them. However, there were others who saw merit in the idea, carried out the necessary research and slowly started building up this novel procedure.<sup>4</sup> I was invited to be part of their nascent forensic genetic team, which ended up creating the first ever national genetic data bank for the identification of the missing in 1987.<sup>5</sup>

The first successful use in courts of this revolutionary grand-paternity testing was carried out in Argentina in 1984 and, as a result, a missing young girl was identified and returned to her original family, her grandparents, years after her father and mother were disappeared. She had been abducted as a baby, together with her parents, and taken away by a member of a death squad that was responsible for the subsequent disappearance and murder of her parents. The Grandmothers rescued her years later and successfully proved her identity in court. This same girl went on to study biology and became a geneticist working with the Grandmothers to help identify other disappeared children. The Grandmothers were seen and are still regarded as a truly exceptional group of women. I was very fortunate and honoured to work for them. As mentioned earlier, in my opinion they deserve the full credit for the early development of humanitarian forensic action.

While working with the Grandmothers, I continued carrying out forensic anthropology and archaeology investigations into the disappeared, together with the early team of friends and colleagues with whom in May 1987 we formally created the first ever non-governmental organization dedicated exclusively to this kind of work, the Argentine Forensics Anthropology Team [Equipo Argentino de Antropología Forense, EAAF].<sup>6</sup> The team's work was vitally supported by the Grandmothers and also by some of the forensic experts who had visited Argentina in 1984, most notably Clyde Snow, who provided us with continuous training and professional advice. Dr Snow was in fact the "patron saint" of the team, and I believe that its existence is largely owed to him. I was invited to be the team's first director and managed to complete my medical career, now fully geared towards the application of forensic medicine and science to human rights investigations.

In 1990, I left Argentina to work for Amnesty International as a researcher at its general secretariat in London. While this job did not primarily require using my forensic skills, they proved to be very useful for carrying out evidence-based investigations into allegations of human rights violations, examining torture survivors, carrying out visits to places of detention and guiding investigations into cases of the missing and disappeared. I took the opportunity of living in London to pursue my forensic studies applied to the documentation of human rights

<sup>4</sup> Jorge Luis Berra, Norberto Liwski, Diana Grinspon and Morris Tidball-Binz, "A National Bank for Genetic Data of Disappeared Children in Argentina: Task Up to 2050", Advances in Forensic Haemogenetics series, 1986, available at: https://link.springer.com/chapter/10.1007/978-3-642-73330-7\_

<sup>5</sup> See "Historia del BNDG", available at: www.argentina.gob.ar/ciencia/bndg/historia.

<sup>6</sup> See the official webpage of the EAAF, available at: www.eaaf.org.

violations and help further develop this field.<sup>7</sup> Also during that time, I participated in some of the first forensic investigations carried out into the whereabouts of the missing from the Balkans' wars.<sup>8</sup>

# You were one of the very first forensics experts to work for the ICRC. How did that come about? What is unique about doing forensic work at the ICRC, as opposed to other organizations?

The ICRC hired its first forensic expert in 2003. This was Professor Stephen Cordner from Australia, who was on sabbatical leave from his post as director of the Victoria Institute of Forensic Medicine. He was tasked with following up on the recommendations from the 2003 International Conference on "The Missing and their Families", in particular those related to forensic science, and providing preliminary proposals on the way forward in forensics at the ICRC. To this end, he carried out a couple of missions to the field – to Iraq, and to the Balkans – and prepared a framework for developing additional forensic activities in the ICRC before returning home to his job in Melbourne. At the time, I was working as director of the International Service for Human Rights, an NGO based in Geneva. Although its activities are not related to forensic science, we helped promote its use in United Nations human rights procedures, since this is an NGO dedicated to the development of international human rights standards and mechanisms, and the training of activists for their implementation worldwide. Incidentally, I was invited in 2002 by the ICRC to participate in the preparatory workshops for the 2003 Conference, which I also attended. In autumn of 2003, Professor Cordner and Dr Robin Coupland, an ICRC surgeon who participated actively in the Conference, invited me for lunch at the ICRC, during which – to my utter surprise – they offered me the job of the ICRC's first forensic coordinator. I asked myself at the time, what would the ICRC use my forensic skills for? However, after some hesitation I accepted the kind offer, and I began working for the organization in February 2004. It was, I believe, one of the best decisions I have made in my life, albeit not devoid of challenges.

Many things are strikingly different about working for the ICRC compared to the human rights activities I was engaged with previously. Most of the forensic expertise used in similar work elsewhere is ultimately aimed at providing reliable evidence for criminal investigations and court proceedings. This includes, for example, the determination of cause and manner of death in suspicious cases, or documenting injuries such as those resulting from torture, sexual violence or other forms of physical abuse and collecting evidence on the perpetrators. However, when it comes to the ICRC, forensic science is primarily used for

<sup>7</sup> See, for example, Duncan Forrest, Bernard Knight and Morris Tidball-Binz, "The Documentation of Torture", in A Glimpse of Hell: Reports on Torture Worldwide, Cassell, London, 1996.

<sup>8</sup> Morris Tidball-Binz, "Forensic Investigation of Alleged War Crime near Vukovar", *The Lancet*, Vol. 341, 1993, p. 625.



humanitarian purposes and not for establishing criminal responsibility. This means, for example, using forensic science to prevent and resolve cases of missing persons; to properly search for and recover the dead in very challenging environments and circumstances; to protect their dignity and help in their identification; and to inform the families about the fate and whereabouts of their deceased loved ones. This requires specialized knowledge and expertise, which only forensic science can provide, in order to ensure the professionalism required from the ICRC's humanitarian activities. While self-evident today, this was not clearly understood by many back in 2004. Therefore, one of the big challenges I faced when I started working for the ICRC, and an urgent one at that, was to prove the added value of forensic science for ICRC field activities. The uniqueness of its application in humanitarian work is that it provides a box full of tools and knowledge adaptable to different settings, which can assist in, and is often essential for, strictly humanitarian work, typically but not exclusively in relation to the dead. The dead are part of the ICRC's mandate, and armed conflicts will almost always result in large numbers of dead. The dead and their dignity are clearly protected by the four Geneva Conventions and their Additional Protocols, which require that they are properly recovered, documented, identified and buried. This recognition is by no means new; Henry Dunant was one of the first to realize that the dead have rights, and he campaigned for measures to help ensure the dead would be identified after death. It is today recognized that the fulfilment of the obligations towards the dead can only be professionally ensured with the use of forensic science.

Hence, I set out early on at the ICRC to try and prove the value of forensics in the eyes of colleagues in the field, by going to the Balkans, the Caucasus and other areas and contexts where the ICRC faced many challenges in resolving cases of missing persons. I had many questions about how to improve the management of the dead, and it soon became apparent to colleagues, especially in the field, that forensic expertise was indeed very useful for the organization's activities on behalf of the dead and missing. Nowadays, I believe that most in the ICRC and elsewhere regard forensics as an essential tool for humanitarian action, for both the dead and the living, as it helps bring answers and relief to the bereaved families and their communities. Also, by helping fulfil the obligations towards the dead, we reassert our own humanity. In addition, the forensic capacity developed by the ICRC nowadays provides the organization with a unique and competitive edge for responding to humanitarian emergencies and also for addressing the legacy of past conflicts. Indeed, the ICRC is the world's only humanitarian organization that has forensic capacity and is using it exclusively for humanitarian purposes. As a result, the organization is today regarded as an authority in humanitarian forensic action.

I am therefore confident that the new Missing Persons Project, launched in 2018, will help further consolidate the role of forensic practitioners and the

<sup>9</sup> During the Franco-Prussian War of 1870, Henri Dunant visited and comforted the wounded brought to Paris and introduced the wearing of a badge so that the dead could be identified. See ICRC, "Henry Dunant (1828–1910)", available at: www.icrc.org/eng/resources/documents/misc/57jnvq.htm.

contribution of forensic science to preventing and resolving cases of missing persons. Indeed, the Project offers a new and unique opportunity for building on lessons learned since 2003. It aims to mobilize and empower communities of practice worldwide, including forensic professionals and institutions, and to develop new standards and guidance required to meet new challenges, such as those of missing migrants, for effectively resolving the tragedy of the missing everywhere.

There is also, in my opinion, a chapter which still needs to be developed in the ICRC, which concerns forensic science applied directly to the living. I believe this will evolve in line with today's requirements and expectations in humanitarian action. For example, interventions on behalf of detainees believed to have suffered ill-treatment should benefit from having a forensic expert's opinion to substantiate their claims. This is not to say that such claims should not be taken seriously without the opinion of a forensic expert, but often only the latter can provide the necessary evidence-based arguments in favour of the victims. Slowly but surely, awareness is growing that forensics can assist the living, such as in the documentation of torture and sexual violence. Concerning the last point, for example, I have been involved in helping develop some standards which the ICRC has found very useful. One example concerns virginity testing; we have been working to help refute the scientific and ethical validity of such practices, which may amount to cruel, inhuman or degrading treatment.<sup>10</sup>

In summary, humanitarian forensic action is an important ICRC activity today. It started as a technical, scientific tool for the institution, but became growingly regarded as a necessary one, not only for field operations but also for humanitarian dialogue and for positioning the organization as a leader in this field.

Personally, having helped create the ICRC Forensic Unit is as important and significant in my professional career as having helped create the EAAF. Both teams have undoubtedly helped expand the scope of forensic science, to include unprecedented human rights and humanitarian dimensions respectively. I am extremely grateful to all the colleagues with whom I have worked and who have helped make this possible. I cannot fail to mention here as well the immense support I have received from my family throughout these years, as they have allowed and encouraged me to dedicate the necessary time and energy to this shared endeavour.

The development of humanitarian forensic action has undeniably contributed to the humanitarian community's understanding of the value of forensic science to its activities. Remarkably, it has also contributed to the forensic community's understanding of the importance and value of its contribution to humanitarian activities. A good example of this was the creation in 2015 of the Humanitarian and Human Rights Resource Centre, by the American Academy of Forensic Sciences.

<sup>10</sup> Independent Forensic Experts Group, "Statement on Virginity Testing", Journal of Forensic and Legal Medicine, Vol. 33, 2015, available at: www.sciencedirect.com/science/article/pii/S1752928X15000335.



#### Has humanitarian forensics work fundamentally changed over the course of your career? What have been the biggest shifts in terms of the science?

Humanitarian forensic action, defined as the application of forensic science to humanitarian activities, is in fact a new field of forensic science developed by the ICRC. There have been some dramatic changes in the profession over the years, as initially forensic science was regarded as a tool to assist primarily in the determination of cause and manner of death. The concept, knowledge and understanding of the need to ensure primarily the dignity of the dead and their documentation as required for their identification and traceability, regardless of whether they are identified or not, is something which has evolved with time, thanks largely to the ICRC. As a result, the understanding of this field of knowledge and activity has moved from being focused mostly or exclusively on the recovery of the dead in order to find out how they died, to primarily ensuring their dignity, professional documentation and helping to provide answers to the families. The latter not only requires mere reporting, but also being directly engaged in a dialogue and fulfilling the psychosocial needs of families whose loved ones have gone missing or died.<sup>11</sup>

# You have often worked to identify the remains of missing persons. What are the specificities of working to identify the missing?

Unlike standard criminal investigations, those aimed at resolving cases of missing persons, alive or dead, can help people overcome some of the worst suffering that a person can endure: that of not knowing the whereabouts and fate of a missing loved one, or whether that person is alive or dead. If found dead, the certainty of the identity, which the bereaved often require in order to be able to proceed with their mourning, can only be provided by forensic science. Equally important is ensuring that the dignity of the dead is protected throughout, for which forensic science can prove indispensable.

In other words, helping resolve cases of missing persons provides a truly unique humanitarian meaning to forensic work. In addition, the specific challenges posed by these investigations, including complex and large-scale recovery and identification processes, offer an opportunity for further developing forensic science on behalf of humanity.

## How do you keep the deceased and their families at the centre of this type of work?

There are several angles to consider when answering this question. From a purely pragmatic point of view, one cannot identify a dead body or a set of human

11 For more on this, see the article by Pauline Boss in this issue of the Review.

remains without information about the person. In most cases, the best and often the

only source of such information – which we call *ante mortem* data – are the families themselves. For this reason, as forensic professionals investigating the missing and trying to identify the dead, we need to develop good working relations with concerned families, who should be able to trust those helping resolve their cases.

In humanitarian action, however, this goes beyond this purely pragmatic perspective. Carrying out humanitarian forensic work means not only that the families are instrumental in assisting in the identification, but also that they are satisfied that their loved one is who we inform them he or she is. This requires a dislocate hailding trust wherehay the forensic equipative cannot work in a data shed dialogue, building trust, whereby the forensic scientist cannot work in a detached manner from the family. Being close to the families at all times is essential for forensic identification, but even more so for humanitarian forensic action. This requires a highly professional and empathic approach for communicating and relating with the bereaved families. An empathic approach means literally putting oneself in the other person's shoes in order to better understand their views and feelings. As a medical doctor, I would say that this requires developing a quasi-therapeutic relationship, which should be established with the bereaved to both empower them in their capacity as active participants in the investigation process and ensure their trust in the results of the investigation, whatever those might be. I hope that the ICRC's new Missing Persons Project will help further develop guidance and standards to help practitioners in their dialogue with the bereaved, and will help ensure that such dialogue is most useful for fulfilling the humanitarian goal of resolving cases of missing persons.

#### What have been the most challenging contexts you have worked in over your career?

In terms of challenging contexts, it would have to be the early work I was involved in, in Argentina, at a time when there were still people who did not want cases to be investigated. This was in the immediate post-military regime context, when among some sectors of society there was a great discomfort about investigations into crimes that had happened. This involved a certain amount of danger and threats that were pretty serious at times. Early on there were often discussions with colleagues and friends about whether we should continue working or not, because I had a family and the threats were serious enough to question it. We were only students and did not have a network or an institution behind us that could protect us. Working for the Grandmothers later on helped. They were an extraordinary solace, because they had been the subject of threats themselves and had endured years of hard repression. This was quite reassuring, because if they had managed to endure and overcome challenges, we could as well.

Apart from the difficult general context in the early stages of my career, I would say there are a number of specific challenges that all forensic practitioners face while carrying out humanitarian forensic work in the field. They range from having to manage unprecedented operations to facing genuinely life-threatening



situations during armed conflict or other situations of violence. On such occasions, questions may arise as to whether working for the dead is worth risking your life for. My recollections of this last point are very much related to some of the fieldwork I carried out with the ICRC.

In 2011, for instance, we were tasked with helping to recover and identify the bodies of thirty-five men who had been abducted and killed in Libya, in the context of the civil war which was raging at the time. 12 This operation was carried out by the ICRC on site during Ramadan, at a critical time of the civil war, with the full support of the local community. Interestingly, the community told the ICRC that the recovery of their dead was more important and urgent than any other assistance they were receiving from the ICRC, including medical care for those wounded in battle. There was in fact a lot of shooting around. One day in particular, we had to flee the site because there were reports that a large armed contingent was coming full force to take over the area and wipe out all of those around. We left everything behind, and only came back when it turned out that the reports were not true. This can prove very challenging, because you are trying to be as professional as possible in carrying out the forensic work, which requires a certain methodology, standards and time frame. On the other hand, risk related to the operation needs to be reduced to the minimum possible. Hence, you have to strike a balance while respecting procedures and standards as much as possible, thinking always about the families and, ultimately, the humanitarian objective of the work under way. We managed to complete the work in five working days, from dawn to dusk. This was a forensic job that would typically require at least triple that time and a double-sized team. To my satisfaction, we identified twenty-seven out of thirty-five bodies, with the means and procedures that we followed, which conformed to our own standards and the general requirements set by the Geneva Conventions regarding the management, documentation and identification of war dead. This satisfied the community's main concerns and request to bring the bodies of the lost men back and identify them. Contexts like these illustrate how one has to adapt forensic procedures and skills to very challenging circumstances, which is something we often encounter in the ICRC.

Further, there are other types of challenging contexts, where you feel the brunt of extreme political pressure. A good example is the case when the ICRC was called to assist in the exchange of prisoners and human remains between Israel and Hezbollah in Lebanon in July 2008.<sup>13</sup> War had flared up two years earlier after two Israeli soldiers were taken away across the border by a Hezbollah unit, and Israel retaliated. It took two years until an agreement was made with a chief negotiator from a neutral country, with the ICRC acting as a neutral

<sup>12</sup> See ICRC, "Libya: Helping Identify the Dead", News Release, 14 September 2011, available at: www.icrc. org/eng/resources/documents/news-release/2011/libya-news-2011-09-14.htm.

<sup>13</sup> See Ayat Basma and Avida Landau, "Hezbollah Delivers Remains of Two Israeli Soldiers", Reuters, 16 July 2008, available at: www.reuters.com/article/us-israel-lebanon-prisoners-idUSL141960220080716. See also Anna Petrig, "The War Dead and Their Gravesites", International Review of the Red Cross, Vol. 91, No. 874, 2009.

intermediary, for the exchange of detainees and human remains. The Israeli soldiers would be returned by Hezbollah in exchange for the return from Israel of Lebanese and Palestinian prisoners, along with the remains of dead Palestinians. However, it remained unclear whether the two Israeli soldiers were alive or dead. This became an important issue, not only for the families and the two countries, but for the international community as well. I happened to be in Lebanon at the time carrying out an unrelated ICRC forensic assessment on the missing in the country. The head of the ICRC delegation there asked me if I would make myself available as a medical doctor to examine the Israeli soldiers. In case they were alive, I was to examine their health conditions, document any injuries they might have, and so on. In case they were dead, I was to do the required examination of their human remains. What appeared to be a simple job in the beginning turned out to be an extremely sensitive and difficult one when two coffins appeared on the scene, allegedly holding the bodies of the two Israeli soldiers. I received a request from the chief negotiator, who informed me that the Israeli side would not move unless the ICRC provided proof of the identity of the remains.

All I had brought with me on that day were some surgical gloves and the basics for carrying out an external medical examination, but I was suddenly expected instead to do a full forensic identification of human remains, for whom I had no *ante mortem* data. The pressure was on; further tensions would likely ensue if these turned out not to be the Israeli soldiers. Firstly, I said that I would do my best to carry out the job, because there was simply no alternative. Secondly, I had certain conditions: there was to be no media present, as the examination needed to be done in privacy for the sake of the dignity of the dead. I requested that I be left alone with the negotiator and the ICRC colleagues who assisted me. After some discussion, I finally had a little shed organized where I could open the two coffins in full privacy. The clock was ticking: the prisoners were waiting on the other side to be transferred, as well as trucks with human remains to be transferred, and the armed forces waiting for an order.

One thing I had requested was *ante mortem* data – I needed physical information, including some dental information, in order to say whether these remains were or were not the individuals in question. I got teeth X-rays at the last minute. I opened the coffins and, with the understanding of the religious imperatives for not disrupting the bodies, I was limited in how much forensic analysis I could do in order to respect the dignity of the dead. The findings that were quickly made on examining the remains confirmed their identities, because the dental traits that I saw in the bodies were fully consistent with those of the dental charts that the Israeli side had sent. I was able to write succinct reports on site confirming that the remains were those of the individuals in question. It was a big relief on all sides. I received my greatest professional credit ever when, about four hours later, the chief negotiator expressed his satisfaction with the fact that the ICRC forensic expert managed to do in forty-five minutes what the full forensic team required four and a half hours to confirm. As you can imagine, this operation and its challenges proved quite daunting. This did not entail physical threats, but if something went wrong it would have had major negative consequences.



Other challenges involved the environment. In 2007, I was asked by the ICRC delegation in Bogotá to help in the recovery of the bodies of eleven legislators who had been abducted by the main guerrilla force in 2002, and had died a few months earlier in contested circumstances.<sup>14</sup> The guerrillas said they died in a botched rescue operation by government forces, while the government straightforwardly accused the guerrillas of executing the eleven legislators. The families wanted the bodies of their loved ones back. Both sides agreed on a ceasefire for a handful of days for the ICRC to collect the bodies. This was the result of a lengthy negotiation with both parties, and a very complex one at that. It required that we fly out in a helicopter to the middle of the jungle, with the condition that the coordinates of where the bodies were would be provided to us during the flight. We ended up landing in the middle of a coca field, where we had to fend for ourselves for nearly a week, even though it was initially believed this operation would last a day or two only. Unexpectedly, the precise GPS coordinates provided by the guerrillas did not match our own GPS readings. Sometimes this happens. Different systems were used, and this required that we walk through the jungle for days, dozens of miles across very difficult mined terrain, under mounting pressure, to try and locate the site of burials. The government started accusing the guerrillas of having lied; this was contested by the guerrillas, who assured us that the bodies were there. At night, there were a couple of occasions when we heard explosions around, which indicated the fragility of the ceasefire. Most of all, this mission was physically extremely exhausting and challenging because we had to blindly move through deep tropical rainforest to locate the site of the burials. We finally managed to find the bodies using forensic techniques borrowed from forensic archaeology. Once the burial site was found, the bodies had to be properly exhumed, documented and safely transported out of the site. Once exhumed, getting the bodies out of the site proved extremely challenging indeed. We could not physically carry the bodies back to the first landing site through the thick jungle and deep ravines that we had come in through. We ended up having to build an improvised helicopter landing field in the middle of the jungle, chopping down trees that were more than fifty feet high. While I was exhuming the bodies, the other colleagues in the team prepared this landing site, which was slightly larger than the size of a basketball court. The flight out of that place proved to be interesting.

More recently, the implementation of the Humanitarian Project Plan [HPP] for the Falkland/Malvinas Islands was extremely challenging in many ways, including the fact that there was no precedent in the ICRC of a similar operation. At the ICRC, we usually support forensic activities and assist structures which already exist, so planning and implementing such a large, complex and challenging humanitarian forensic operation in full substitution mode was totally unprecedented. However, despite the remoteness and extreme weather conditions prevailing in the Islands, we managed to successfully set up

<sup>14 &</sup>quot;11 bodies handed over in Colombia probe", *Reuters*, 9 September 2007, available at: https://tinyurl.com/yabda5py.

and operate on site - meaning at the cemetery - a high-tech mortuary, to ensure that the necessary IT and communications support systems were functioning, and to follow our protocols as planned. This included ensuring that every exhumed body was analyzed, sampled, reported and reburied on the same day of recovery, and treated with the utmost respect, including reburial in new coffins - and we also made sure that the cemetery was restored to its original shape after the operation. For me personally, managing a sizeable team of highly skilled forensic experts and making sure throughout that everything ran smoothly, harmoniously and up to the required standards was a very challenging but also a very rewarding experience. Mind you, we all worked all day long and into the respective nights, nearly seven days a week for nearly three months, in those conditions. Fortunately, I worked with an exceptional team of highly committed, hard-working and very experienced forensic scientists, who share my love for this kind of work. By the end we felt like a very happy family indeed. The forensic operation, which benefited from the support of the local population (without which it would have been impossible), also required a lot of very hard work and long-lasting commitment from many colleagues at the ICRC's headquarters in Geneva and the ICRC delegations in London and Brasilia, where the adrenaline flow was also ever-present during the entire operation. I believe that we were very fortunate to accomplish that project as planned, given the seemingly insurmountable challenges which we faced. In the end, everything worked out fantastically well and, most importantly of all, we were able to name the dead, inform their families accordingly and thus fulfil a humanitarian goal which would have made Henry Dunant very proud.

# Tell us more about the work in the Falkland/Malvinas Islands. How did the ICRC get its mandate to work in this context?

The general mandate for the ICRC to carry out that operation arose from a request by the Argentine government to the ICRC back in 2012. We were asked to help in the identification of Argentine soldiers buried without a name in the Islands because they could not be identified at the time. They died there during the 1982 armed conflict between Argentina and the United Kingdom and were buried soon after in a military cemetery in Darwin. Despite efforts by the British forces at the time to identify all the dead, many remained unidentified. There were two bases for this mandate to the ICRC. One came from the families, who wished to have their loved ones identified and to know exactly in which graves they were buried. The other stemmed from the obligations under the Geneva Conventions, which require the parties to do their best to identify the war dead.<sup>15</sup>

<sup>15</sup> Editor's note: These obligations can be found in Geneva Convention I (GC I), Arts 15–17; Additional Protocol I (AP I), Arts 32, 34; Additional Protocol Additional II, Art. 8 (regarding search for and collection of bodies).



Importantly, the request and the mandate came to the ICRC as a recognition of its humanitarian forensic capacity, without which such a mandate would not have been possible. This was in fact one of the first clear acknowledgements of the ICRC's novel forensic capacity, coming directly from governments. When we speak of a "mandate" in this situation, it is in the form of a legally binding document. It takes two to tango, so to speak, and in this case it concerned two countries: Argentina and the United Kingdom. It took five years of negotiations between them and the ICRC to come up with the formal mandate, the HPP, which was signed by both countries and the ICRC in December 2016. That mandate called specifically for this job to be done with a strictly humanitarian purpose, and with a plan of action developed by the ICRC, to be completed before the end of 2017. I was tasked with developing this plan of action for the forensic recovery and identification of the dead. Hence, you can say that the mandate sprang from the request of the families, from international humanitarian law [IHL] obligations, from the agreement between the countries, and from the acknowledgement and recognition by all concerned that only the ICRC could do the job. In fact, no other organization had this capacity, including the required neutrality, independence and impartiality. Even though the armed conflict was long over and both countries are now at peace with each other and enjoy full diplomatic relations, this is still a very sensitive file; it required absolute neutrality throughout the operation, which only the ICRC can provide.

# What were the outcomes of the HPP? Did families get the answers they were hoping for? What will this mean for them?

We found, recovered and carefully analyzed the bodies of 122 Argentine soldiers buried without a name in Darwin, within the time frame of the HPP, which was January to December 2017. The 122 bodies were part of 148 Argentine soldiers missing in action, meaning that some of those missing in action were never found and are therefore not buried in that cemetery. We managed to document all the remains as required in our own protocols, and to bury them back as planned and mandated in the HPP – meaning on the same day of their exhumation and protecting their dignity throughout – and we obtained full DNA profiles for each and every one of the remains analyzed. This means that every one of the bodies that we examined is identifiable, if the necessary *ante mortem* data and reference DNA samples can be obtained from the corresponding family. This is an important caveat, because not all the families had come forward in time to provide the necessary information and samples required for the identification of all the bodies.

By the end of the HPP, 107 families came forward, providing the necessary *ante mortem* data and biological reference samples for DNA testing. We were able to fully identify eighty-eight bodies and provide the corresponding reports for their families, within the time frame of the HPP. In addition, ten families were informed that their loved ones were not among the 122 bodies analyzed, meaning

that they are not buried in the cemetery. The ICRC also issued reports, including the corresponding DNA profiles, for all the bodies which remained unidentified, so that they may be identified in the future by the Argentine authorities once the corresponding families come forward with the necessary information and reference samples. This included families who had donated insufficient DNA samples for concluding an identification above the threshold set for the HPP: 99.95% certainty of identity.

After the reports were handed over to the countries and to the families, some families felt further reassured that this process was both serious and professional and were convinced that it was worthwhile coming forward. Currently, there are new families coming forward and new identifications have been made since the beginning of 2018 with the information and samples that they have provided. In the future, I expect and hope that most if not all of the bodies which we analyzed will be identified.

Also, we found a small number of personal belongings during the forensic examination of the bodies. This came as a surprise and I had to make a decision on the site regarding what to do with these items, because the HPP did not include a clause on keeping any belongings from the dead. We found items that we were not expecting to find, such as ID cards and highly personal items like a wedding ring. We were previously reassured by the British who had collected the dead that all personal belongings had been handed over to Argentina. Unavoidably, however, they missed some of the belongings concealed within the heavy winter clothing worn by the soldiers. Our thorough forensic examination, including the use of last-generation imaging equipment, allowed us to find all such objects. There was simply no time for lengthy consultations with ICRC headquarters about what to do with such objects, as the dead had to be buried back in their original graves on the same day. I therefore took the decision, based on the Geneva Conventions (which are very clear on this matter), that we would keep the items and hand them to the parties. Our lawyers were later fully in agreement with this decision. There is an obligation under IHL for these objects to go back to the corresponding families.

I am glad to say that all the families were extremely satisfied with the results handed out by the ICRC, including those that did not get an identification report but were very grateful for the effort made on behalf of their loved ones. I was initially a bit doubtful that all families would be satisfied with the results – I was expecting that some families would contest the findings – but I was fortunately proved wrong.

For example, the head of one of the family commissions had been initially very critical about the operation, and had challenged the ICRC from the beginning. However, her mother wanted to be part of the process; she requested for the identification of her son, believed to be buried in Darwin, and provided the necessary information and reference samples. Her son was identified among the cases which we analyzed, and the family was informed accordingly; they also

<sup>16</sup> Editor's note: See GC I, Art. 16; Geneva Convention II, Art. 19; Geneva Convention III, Art. 122; Geneva Convention IV, Art. 139; AP I, Art. 34(2)(c).



received some personal belongings which we found with the body. This was highly appreciated by the family. In fact, the daughter apologized publicly for her earlier remarks and urged all remaining families to come forward to provide information and donate reference samples to help identify their loved ones buried in Darwin.

In the end and without exception, we received extremely positive feedback from all the families concerned. There was a ceremony held at Darwin cemetery on 26 March 2018, where they were able to honour their dead and lay a wreath on the individual graves. In my opinion, the sheer intensity and magnanimity of that ceremony was a testimony to the importance and humanitarian necessity of honouring the dead, on the one hand, and to the need of families to know exactly where they are laid to rest, on the other. They had waited and campaigned for thirty-five years for that moment.

## What would you say were the important lessons that can be taken away from this case for the future?

Firstly, this operation confirmed the ICRC's capacity to carry out highly complex forensic recovery and identification operations in challenging contexts. Initially, there were many doubts as to whether we could or should do this exceptional job in what we call "full substitution mode" in terms of forensic work, meaning taking full responsibility for the entire process, including issuing the identification reports. This operation confirmed that the ICRC has the know-how, the standards, the protocols and forms, and the network of experts who we can hire as ICRC staff if required for these very challenging operations. As importantly, the case proved that forensic science today offers an indispensable toolbox for resolving complex humanitarian endeavours.

In addition, the case provided us with lessons in terms of forensics, including on how to approach identifications, particularly the value of what we call an "integrated approach" to identification, meaning combining all available information – including the place of death, available *ante mortem* data and the DNA results – into the forensic identification process. This concept was developed by the ICRC's forensic services and its Forensic Advisory Board.<sup>17</sup> For example, some could not understand why I requested information on where these soldiers had died to assist in their identification. They believed that we should be satisfied with DNA identifications only. However, the information on the places of soldiers' deaths was very useful, because the British had documented precisely where the bodies had been found. Thus, when this information matched with the site where someone was supposed to have died, it proved extremely helpful to

<sup>17</sup> The ICRC's Forensic Advisory Board was established in 2010 to offer advice to the organization on complex forensic matters which might arise in relation to humanitarian activities. It is composed of nearly thirty renowned forensic scientists from around the world who represent several disciplines and offer their advice on a voluntary basis.

narrow down the hypothesis of identity of that individual. The fact is that from a forensic point of view, DNA does not provide a definite answer in every case and additional information is often required to conclude an identification with a sufficient degree of certainty. We had the benefit of having ante mortem data provided by the families, which in some cases helped in confirming an identification, but often proved insufficient to conclude an identity. The integrated approach to identification proved to be indispensable in this case. We also learned important lessons for developing the ICRC's new and next-generation ante mortem—post mortem database, including with regards to recording and managing information in real time and by many forensic users working together. This has already helped inspire some of the thinking behind the development of the new database, which is under way at the moment.

From an ICRC operational point of view, this operation turned the standard model for field activities, usually implemented by delegations with advice from headquarters, upside down. It was instead implemented directly by a headquarters team deployed to the field, with support from the concerned delegations, in a truly participatory effort of all those involved.

For me personally, this case has confirmed once again and above all the importance of the dead for the families, their communities and their countries. As mentioned before, these two countries are at peace with each other, with full diplomatic relations, but this issue is still contentious. While it might not be the aim, putting the dead to rest is providing a fundamental step in building up the trust among nations.

The missing are one of the core concerns of the ICRC and a guiding one for me. Arguably, however, in this case the unnamed soldiers were not "missing" in the full sense of the term, since most of their families knew that their loved ones lay buried in a proper resting place in the Islands. Yet, they needed to know more; they needed to know precisely where they were buried, and especially, they pleaded for their dead loved ones to be given their names back. The case proved, once again, that the families' need to know about their dead, to be able to lay a wreath on the exact place, is fundamental for human beings. It is not by accident that these are requirements under IHL.

By the way, the case also proved the lasting value and need for the Geneva Conventions and their Additional Protocols, without which the dead would not have been collected and properly buried in the first place and the HPP would not have taken place. The precise requirements under IHL regarding the dead also proved essential for guiding our forensic work in this case, as exemplified by the recovery of personal objects.

# To conclude, what should the average person understand about the role forensics work plays in humanitarian action?

There is a line from the poet Wyston Hugh Auden, which reads as follows: "Through art, we are able to break bread with the dead, and without communion



with the dead, a fully human life is impossible." If you change "art" to "science" and "human life" with "humanitarian action", you get "Through science, we are able to break bread with the dead, and without communion with the dead, a fully humanitarian action is impossible", which gets you closer to what forensic science can do for humanitarian work. Again, it is not only about the dead, it is about the living, because we are part and parcel with the dead, and when we work for the dead, we work for the living as well. The relatives are a very immediate example, but it goes well beyond that: it touches the core of humanity itself.

I therefore hope that the new Missing Persons Project, which the ICRC has launched in 2018 to help develop new guidelines and standards for preventing and resolving cases of missing persons, will help further build on the many lessons learned from its humanitarian forensic activities, including last year's HPP, to ascertain the rights of the dead, shed light on the whereabouts of the missing and fulfil the rights of their families.