

Innocenti Working Paper

**GENETIC TRACING,
DISAPPEARED CHILDREN
AND JUSTICE**

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Children and Transitional Justice Working Paper Series

The Children and Transitional Justice Working Paper Series is intended to generate dialogue and consensus, and to better inform children's protection and participation in ongoing or planned transitional justice processes in diverse country situations. Based on experience, the papers document and identify challenges, dilemmas and questions for further debate and formulate recommendations to better protect the rights of children involved in transitional justice processes.

The research conducted has created broad interest and visibility, helping establish a child rights-based approach to transitional justice that addresses advocacy, policy and programme concerns within UNICEF and among partners. Key areas of focus include:

- International legal framework and child rights
- Children and truth commissions
- Local processes of accountability and reconciliation
- Transitional justice and institutional reform.

The identification of topics and authors in this Working Paper Series was undertaken in the context of strategic partnerships with the Human Rights Program at Harvard Law School, and the International Center for Transitional Justice (ICTJ). The review of the Series was guided by a peer review oversight panel, chaired by Jaap Doek. A network of practitioners, academics, legal experts and child rights advocates participated in the peer review. The Series was initiated and overseen by Saudamini Siegrist, with the support of Ann Linnarsson.

An Expert Discussion on Children and Transitional Justice was convened by UNICEF Innocenti Research Centre (IRC) in June 2008 to provide comments to individual authors and to assess the range and coverage of the Series. A subsequent conference on Children and Transitional Justice was jointly convened by the Human Rights Program at Harvard Law School and IRC in April 2009 in Cambridge, MA USA.

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Titles in this series, with authors' affiliations, are:

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- No. 8: Children and Reparation: Past Lessons and New Directions. Khristopher Carlson and Dyan Mazurana, Feinstein International Center, Tufts University.
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- No. 12: Genetic Tracing, Disappeared Children and Justice. Michele Harvey-Blankenship, Department of Pediatrics, University of Alberta; Phuong N. Pham, Human Rights Center, University of California at Berkeley; Rachel Shigekane, Human Rights Center, University of California at Berkeley.
- No. 13: Prosecuting International Crimes against Children: The Legal Framework. Christine Bakker, European University Institute, Florence.
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- No. 17: Transitional Justice and Youth Formerly Associated with Armed Forces and Armed Groups. Theresa Betancourt and A'Nova Ettien, François-Xavier Bagnoud Center for Health and Human Rights.

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- Chapter 1: *Child Rights and Transitional Justice*. Saudamini Siegrist, UNICEF IRC.
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- Chapter 4: Children and the South African Truth and Reconciliation Commission. Piers Pigou, South African Archives.
- Chapter 5: Child Participation in the Sierra Leonean Truth and Reconciliation Commission. Philip Cook and Cheryl Heykoop, International Institute for Child Rights and Development, University of Victoria.
- Chapter 6: Children and the Liberian Truth and Reconciliation Commission. Theo Sowa, Independent Consultant.
- Chapter 7: Accountability and Reconciliation in Northern Uganda.
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- Chapter 10: Realizing Economic Justice for Children: The Role of Transitional Justice in Post-Conflict Societies. Sharanjeet Parmar, Access to Justice Program, Global Rights.

Genetic Tracing, Disappeared Children and Justice

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Summary: The last several decades have witnessed a dramatic change in the methods of warfare. Civilians are now increasingly targets of violence, not just mere victims of collateral damage. Among civilians targeted, children and youth are subject to acts of violence, including enforced disappearances and enforced conscription. Children have been forcibly disappeared and forcibly conscripted in many countries including Argentina, El Salvador and northern Uganda. This paper focuses on the use or potential use of deoxyribonucleic acid (DNA) or genetic testing to identify disappeared children (otherwise referred to as genetic tracing) in Argentina, El Salvador and northern Uganda and on how this evidence may be used to achieve justice. Identification of the disappeared, family reunification, support for the disappeared and redress for families of the disappeared have been identified as crucial to achieving justice in the wake of mass atrocities.¹ Genetic tracing has proved to be an exceptionally powerful tool to identify disappeared children, facilitate family reunification and seek accountability in countries such as Argentina and El Salvador. It could likewise play a crucial role in regions such as northern Uganda that are on the verge of emerging from armed conflict and will face similar post-conflict challenges.

Keywords: child rights, transitional justice, genetic tracing, disappeared children

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¹ See Eric Stover and Harvey M. Weinstein (eds.), *My Neighbor, My Enemy: Justice and Community in the Aftermath of Mass Atrocity* (Cambridge University Press, 2004).

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1. INTRODUCTION

When I found my family, my life changed 180 degrees: It was the incentive I needed to try to give meaning to my existence . . . I had a history, a reason for being.

– *Armando, disappeared as a child in El Salvador, reunited with his biological family in 2002*

I was sure he was alive. I knew I would always look for him and never give up.

– *Maria Magdalena Ramos, upon being reunited with her son who had been disappeared 13 years earlier in El Salvador*

The last several decades have witnessed a dramatic change in the methods of warfare. Civilians are now increasingly targets of violence, not just simply victims of collateral damage. Among civilians targeted, children and youth are subject to acts of violence, including enforced disappearances and enforced conscription. Children have been forcibly disappeared and forcibly conscripted in many countries including Argentina, El Salvador and northern Uganda.

The International Convention for the Protection of All Persons from Enforced Disappearance defines an enforced disappearance as: “[T]he arrest, detention, abduction or any other form of deprivation of liberty by agents of the State or by persons or groups of persons acting with the authorization, support or acquiescence of the State, followed by a refusal to acknowledge the deprivation of liberty or by concealment of the fate or whereabouts of the disappeared person, which place such a person outside the protection of the law.”² Enforced disappearances are considered illegal and criminal under international law. This Convention seeks to protect civilians from disappearances and to ensure full prosecution of those responsible. Enforced disappearances are considered crimes against humanity under the Rome Statute of the International Criminal Court (ICC) when conducted in a systematic manner or on a widespread basis.³ When occurring in the context of international armed conflict, enforced disappearances may be prosecuted as war crimes.

Likewise, children are protected from voluntary and involuntary conscription. Under the Convention on the Rights of the Child (CRC), children under the age of 15 are prohibited from taking part in direct hostilities, including recruitment into the armed forces.⁴ The Optional Protocol to the CRC on the involvement of children in armed conflict prohibits youth under 18 from taking direct part in hostilities and from being recruited by the state military or by militia groups. The CRC also affords protection to all war-affected children (not just those conscripted), entitling them to assistance designed to encourage their physical and psychological recovery and social reintegration.⁵

² International Convention for the Protection of All Persons from Enforced Disappearance, art. 2 (adopted by the UN General Assembly on December 20, 2006 and opened for signature 6 February 2007.) As of June 2010, 83 states have signed and 18 have ratified. The Convention will become law when ratified by 20 states.

³ Rome Statute of the International Criminal Court, article 7.

⁴ Convention of the Rights of the Child, article 38.

⁵ Convention on the Rights of the Child, article 39.

Enforced disappearances result in severe secondary harm to children, such as the loss of identity including nationality, name and family relations, enshrined in article 8 of the CRC.⁶ Enforced conscription also results in harm to children. During conscription children may be compelled to engage in active fighting, mine sweeping and carrying of heavy loads, resulting in death or severe bodily injury; denied proper nourishment; and subjected to torture, sexual assault and to cruel, inhumane and degrading treatment.

Remedying enforced disappearances of children remains extremely challenging. Tracing and identifying disappeared children are especially difficult when significant time has elapsed since the disappearance. Tracing often requires the cooperation of various state institutions including the military and police, who may be loath to cooperate, especially in states where impunity reigns. The process of family reunification also poses challenges, particularly where the disappeared child remains a minor and custody of the child must be established.

This paper focuses on the use or potential use of deoxyribonucleic acid (DNA) or genetic testing to identify disappeared children (otherwise referred to as genetic tracing) in Argentina, El Salvador and northern Uganda and on how this genetic evidence may be used to achieve justice. Identification of and support for the disappeared, family reunification, and redress for families of the disappeared have been identified as crucial to achieving justice in the wake of mass atrocities.⁷ Genetic tracing has proved to be an exceptionally powerful tool to identify disappeared children, facilitate family reunification and seek accountability in countries such as Argentina and El Salvador. It could likewise play a crucial role in regions such as northern Uganda that are on the verge of emerging from armed conflict and will face similar post-conflict challenges.

For over 30 years, genetic analysis has assisted in the identification of victims of human rights abuses, first in Argentina. Genetic analysis has been used to identify and return human remains and to trace the disappeared living, which is the focus of this paper. The working paper examines case studies of children who were forcibly disappeared and/or conscripted, in Argentina, El Salvador and northern Uganda. It also describes the practice and history of disappearances of children, the use of genetic analysis to trace and identify disappeared children, and the role of genetic tracing in the search for justice.

⁶ Article 8(1) of the CRC states, “State Parties undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference.” Article 8(2) states, “Where a child is deprived of some or all of the elements of his or her identity, State Parties shall provide appropriate assistance and protection, with a view to speedily re-establishing his or her identity.”

⁷ See Eric Stover & Harvey M. Weinstein (eds.), *My Neighbor, My Enemy: Justice and community in the aftermath of mass atrocity*, Cambridge University Press, 2004.

2. ARGENTINA

2.1 The Disappearance of Children during the “Dirty War”

Between 1976 and 1983, up to an estimated thirty thousand⁸ Argentines disappeared during the rule of the military junta as part of a systematic purge of perceived political subversives. The military’s intentions in this campaign were clear:

“First we will kill the subversives; then we will kill their collaborators; then... their sympathizers; then... those who remain indifferent; and finally we will kill the timid.”

– General Ibérico Saint Jean, Governor of Buenos Aires, May 1976⁹

Men, women and children from all walks of life were systematically abducted, imprisoned in hundreds of detention centres, tortured and murdered. Estimates suggest that hundreds of pregnant women and young children were among those who disappeared.¹⁰

Very early on, as disappearances increased and fear permeated the country, a small group of grandmothers banded together. In April 1977, at the peak of the disappearances, they marched publicly; wearing white head scarves embroidered with the names of their missing relatives, to the Plaza de Mayo in Buenos Aires, the centre of federal government offices. There they asked for an audience with President Jorge Rapheal Videla.¹¹ They were refused. From that day, the grandmothers – Las Abuelas de la Plaza de Mayo – have been a public presence. They march in the plaza every Thursday, along with other relatives of the disappeared, demanding to know the whereabouts of their disappeared grandchildren. They still march today.

Las Abuelas organized themselves and began a tireless search to document their missing. As investigations began, it became clear that transparency would be impossible without the involvement of the international community, due to the secretive political climate created by the military dictatorship and the many false documents and testimonies.¹² Despite the pervasive fear in the country, people approached the grandmothers with snippets of information. During their weekly marches, notes were slipped into their hands. By telephone, in meeting places or on the street, people told them of children appearing in the houses of women who had never been pregnant, or who were unable to bear children. Schoolworkers

⁸ The official report of the National Commission on the Disappearance of Persons (CONADEP) reported a conservative estimate of nine thousand persons disappeared. Other accounts by Rita Arditti (1999) and Marguerite Guzman (1994) estimate thirty thousand and forty-five thousand disappeared, respectively. The most-often quoted estimate is thirty thousand, but this has not been supported by forensic evidence. It is more likely that the number of disappeared is closer to the number reported in the CONADEP report.

⁹ As quoted in John Simpson and Jana Bennett, *The Disappeared: Story of Argentina’s Secret War of Oppression* (London: Sphere, 1986), at 66.

¹⁰ *Nunca Más*, report of CONADEP, 1984, Part 1, Repression, Section Detention Centres. General Considerations.

¹¹ Arditti Rita, *Searching for Life: The Grandmothers of the Plaza de Mayo and the Disappeared Children of Argentina* (Berkeley, California: University of California Press, 1999).

¹² See, for example, Viviana Alonso, “Rights – Argentina: Abduction Trials Revive Prospects for Justice”, InterPress Service, 1998; Marcela Valente, “Rights – Argentina: Six Officers Arrested in Adoption Scandal”, InterPress Service, 2000.

notified them of falsified birth certificates of newly registered children. Neighbours told them of conversations overheard regarding the sudden appearance of a child.¹³ All of the information was documented and investigated.

Estella Carlotto, a member of Las Abuelas, described one such investigation. A child had suddenly appeared in the home of a woman known to have had a hysterectomy. Ms. Carlotto, disguised as a vacuum cleaner saleswoman, approached the house and offered to demonstrate the apparatus. Although her offer was declined, she was able to get a glimpse of a child through the doorway and to estimate the child's age and stature.¹⁴ These types of clever techniques were the hallmark of Las Abuelas.

Detailed records, each dedicated to a particular grandchild, were kept in binders that lined their office walls. Traditional investigative techniques such as matching estimated birth dates, locations and testimonies successfully proved identity in many of their early cases,¹⁵ but Las Abuelas realized that more scientific proof would be required.¹⁶ Many children, especially those abducted at a young age, had no recollection of the event, and birth certificates were notoriously falsified.

2.2 Actions Taken to Trace Disappearances: *Nunca Más*

The disappearances continued until 1983. Then, with a worsening economy, growing attention to human rights abuses, and a failed attempt to gain control of the Falkland Islands from the United Kingdom, the Argentine military junta lost national and international support. Democratic elections were held in 1983, and Raúl Alfonsín won the presidency, partly through his focus on human rights. Soon after his election, President Alfonsín appointed the Commission on the Disappearance of Persons (CONADEP) to investigate and document the human rights abuses of the military government. Its report, *Nunca Más* ("Never Again"), was based on testimony from thousands of witnesses and visits to hundreds of secret detention centres. The widely published report documented the military's systematic approach to the abduction, kidnapping, captivity, torture and murder of many thousands of victims. The report specifically addressed the issue of children who had disappeared:

When a child is forcibly removed from its legitimate family to be put in another, according to some ideological precept of what's "best for the child's welfare," then this constitutes a perfidious usurpation of duty. The repressors who took the disappeared children from their homes, or who seized mothers on the point of giving birth, were making decisions about people's lives in the same cold-blooded way that booty is distributed in war. Deprived of their identity and taken away from their parents, the disappeared children constitute, and will continue to constitute, a deep blemish on our society. In their case, the blows were aimed at the defenceless, the vulnerable and the innocent, and a new type of torment was conceived. – *Nunca Más*

¹³ Ibid.

¹⁴ Estella Carlotto, personal communication, September 1997.

¹⁵ Traditional investigative techniques would rely more on subjective information such as personal experiences and memories gleaned from interviews.

¹⁶ Many cases have involved claims by the "imposed" (adoptive) parents that the child is their biological child.

With CONADEP's findings, the Alfonsín government began charging and prosecuting top military officials for their crimes. Although the trials were high-profile and set the stage for declaring the military responsible for the disappearances, expectations fell short. President Alfonsín was pressured into passing two partial impunity laws, Ley de Punto Final (the Full Stop Law) and Ley de Obediencia Debida (the Law of Due Obedience).¹⁷ In 1986, the Full Stop Impunity law (Law 23,492) set a sixty-day deadline for initiating new prosecutions. Then, because it was not enough to stop prosecutions (although they became less far-reaching), the 1987 Due Obedience Law (Law 23,521) was passed. It stated that subordinate officers were the least criminally culpable when following orders issued by superiors. However, neither law exempted kidnapping and concealing children, or the substitution or misrepresentation of a child's identity. Unfortunately, application of these exemptions was hampered by the early termination of Alfonsín's presidency in 1989. It was not until 2005, when the Supreme Court of Argentina repealed the two amnesty laws, that a more concerted effort could be made to charge former military officers under criminal law.

Despite the adverse political and judicial context throughout the regime of the junta and afterward, Las Abuelas de la Plaza de Mayo worked continuously to document and search for their missing grandchildren. Initially, identification of the children relied on more traditional techniques such as photos of children prior to their captivity, original birth certificates and personal testimonies from neighbours and friends of the disappeared. These techniques worked well for children not born in detention centres. But the secretive nature of the centres precluded photographs, legitimate birth records and personal accounts, which underscored the need for more objective techniques.

2.3 The Use of DNA to Determine Identity¹⁸

In June 1984, Las Abuelas de la Plaza de Mayo took documentation of the disappearance of seventy-seven of their grandchildren to the international community. They requested assistance from the American Association for the Advancement of Science to establish scientific, objective procedures for forensic investigations. One such technique is genetic identification. A fundamental premise in establishing genetic identity is that significant genetic differences exist between unrelated individuals, and insignificant differences exist between related individuals. A genetic match indicates that two individuals are related biologically. The accuracy of genetic testing is unprecedented; virtually all cases have a greater than 99.9 per cent certainty of biological match. This means that otherwise subjective evidence can be enhanced using genetic techniques, leading to more conclusive identification.

In 1984, the most reliable method for establishing genetic relationships was human leukocyte antigen (HLA) typing, the kind used for testing compatibility for organ transplantation.

¹⁷ "Full Stop Law" (*Ley de Punto Final*), Law No. 23,492, 1986, available at www.nuncamas.org/document/nacional/ley23492.htm; Law of Due Obedience (*Ley de Obediencia Debida*). Law No. 23,521, 1987, available at www.nuncamas.org/document/nacional/ley23521.htm.

¹⁸ This section summarizes the basic techniques used in forensic identification. For more detailed information, please refer to: US Department of Energy, Office of Science, 'Human Genome Project Information – DNA Forensics', available at: http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml.

However, this method has significant limitations, including limited population variability and the requirement for live cells and multiple close family members.

Two genetic methods are used today for genetic identification: mitochondrial DNA (mtDNA) sequencing and short tandem repeats (STRs). Two characteristics make mtDNA particularly useful in Argentina: its maternal inheritance (that is, men and women inherit mtDNA, but only women transmit it), and the fact that it rarely changes from generation to generation. Therefore, distant maternal relatives can be used for identification (for example, a maternal uncle or great-aunt).¹⁹ As a result of this inheritance pattern, even very distant maternal relatives may share the same sequence. However, if multiple relatives of the same maternal lineage are missing, it will not be possible to differentiate them by mitochondrial sequence alone.

STRs, areas of the human genome that have repetitive sequences that are three to five nucleotides long, are located throughout the human nuclear genome. These are highly variable between unrelated individuals but much less variable between related individuals. Nuclear DNA is inherited from both parents, resulting in an almost unique combination. STR analysis, which works by comparing multiple STRs, is useful when there are living, direct biological relatives of the missing person. Currently, STR analysis is the primary genetic technique used for DNA databases internationally.

2.4 The Case of Paula Logares

In May 1978, Paula Logares, then twenty-three months-old, was abducted in Uruguay where she had been taken by her parents, who had fled from Argentina for safety. It is assumed her parents were murdered; their bodies were never recovered. After five years of searching for Paula with the help of Las Abuelas, her grandmother, Elsa Pavon, found her living with Ruben Lavallen, a police officer, and his wife. Paula had been registered in kindergarten using a false birth certificate.

Establishing Paula's identity was challenging. Court-ordered X-rays determined that she had the bones of a six-year-old – the age claimed by the Lavallens – while Pavon claimed Paula was seven years old. The Lavallens refused to take a blood test for DNA testing, but ultimately the court required them to be tested. HLA typing, the only genetic identification technique available at the time, established that the child registered as Paula Lavallen was in fact Paula Logares.

Once biological identity was determined, Pavon had to fight a legal battle. A lower court refused to grant her custody of Paula, who was left in the care of the Lavellens. Pavon appealed the federal lower court's decision, and eventually the federal court determined that Paula should be returned to her biological family. Prior to Paula's meeting with her grandmother, the judge told Paula what happened during the war, explaining how her grandmother had searched for her and how her biological identity had been established. The

¹⁹ See, for example, K. N. Owens et al., "Genomic Sequencing in the Service of Human Rights," *International Journal of Epidemiology*, 31(1) 2002:53-58; C. Ginther, "Identifying Individuals by Sequencing Mitochondrial DNA from Teeth," *Nature Genetics*, 2(2):135-138.

initial meeting between Paula and her grandmother was difficult. Gradually, she was able to accept her identity, assisted by photographs from her early childhood showing her biological parents, and by the return journey to her grandmother's home, where she immediately went to the bedroom where she had slept as a baby and looked for her toys.

The federal court custody decision galvanized other court cases on disappeared children, particularly cases regarding biological identity and legal custody. The case of Paula Logares set the legal precedent for genetic testing to identify a child who had been disappeared. The court noted the value of objective, highly accurate identifying information in the face of falsified documents, conflicting interests of various parties and the morphological changes of children over time. Additionally, the genetic testing established the basis of both exclusion – Paula *was not* the biological offspring of the Lavallens – and inclusion – Paula *was* biologically related to Elsa Pavon, the grandmother who had searched for more than seven years to find her. The judges' decision that Paula should learn the truth about her origins resulted from consultation with psychologists, who felt that her transition would be less difficult if she were to learn about her origins early and warned of a later psychological crisis should Paula find out as a young adult. Her case set a precedent for revealing and restoring the biological identity of a disappeared child without delay.

2.5 National Genetic Database

With the legal precedent established for the use of DNA in establishing biological identity, Las Abuelas lobbied nationally and internationally, eventually pressuring the Government to support the development of a national genetic database that would allow all relatives of missing children to submit a blood sample for genetic testing and that could also be used for comparison when disappeared children are found. Established in 1989, Argentina's database continues to be instrumental in the investigation of disappeared children, as well as in other investigations regarding affiliation,²⁰ such as testing for paternity, rape and incest. The precision and objectivity the database provides to cases of disappeared children was an unprecedented breakthrough.

Las Abuelas have been extremely successful in informing the public about the availability and accuracy of the genetic database. They have undertaken several extensive advocacy campaigns leading to notable increases in the submission of blood samples. Las Abuelas demanded that all children who suspected they may have been abducted should be able to search for their biological identity at any time during their lives, which underscores the need to maintain the database for decades. Personal testimonies fade and disappear with death, documents can be falsified, personal effects can be lost – but genetic evidence can be retained in perpetuity.

The Argentine genetic database set an important precedent and enabled the expansion of genetic tracing as an important tool in accounting for the disappeared and providing a remedy for victims. So far, about one hundred Argentinian grandchildren have been identified using

²⁰ In most cases of disappeared children, the "imposed" (adoptive) parents claimed a biological relationship to the child.

the database established by Las Abuelas.²¹ The programme is expanding to Guatemala and Peru, two countries that also experienced many disappearances.

With the passage of time since the “Dirty War,” the children of the disappeared have become adults.²² They are now initiating their own investigations, approaching Las Abuelas with questions about their origins, and they can submit blood samples to the genetic database as part of the investigation of their identities. Although in some cases family members have died before finding their disappeared children, it is a consolation that their genetic information may help young adults determine their biological identity. National and international funding for the database has been budgeted until the year 2050, covering both the generation of parents and grandparents who are searching for missing family members and the children (now reaching adulthood) who may want to determine whether they were disappeared.

2.6 Progress and Challenges

In May 2003, Nestor Kirchner became President of Argentina. Demonstrating his commitment to fully prosecute human rights abuses committed during the war, his government ratified the Convention on the Non-Applicability of Statutory Limitations to War Crimes and Crimes Against Humanity.²³ This set the stage for the Supreme Court’s repeal of the two impunity laws in 2005. A number of prominent military officials and civilians have since been tried for their involvement in violating the human rights of children during the Dirty War. The trials related to children have focused primarily on two areas: the kidnapping and concealment of children, and the misrepresentation of a child’s identity. The news headlines are striking: “Former Argentine policeman handed 25-year prison sentence for human rights abuses”;²⁴ “Argentine ex-leader faces kidnapping trial”;²⁵ and “Dirty War adoption couple jailed.”²⁶ Significant figures who have been arrested include General Jorge Rafael Videla, Admiral Emilio Massera and General Reynaldo Bignone, three of the military’s top-ranking officials. Their arrests prompted further arrests and the prosecution of subordinates previously protected under the amnesty laws. It is noteworthy that all of these trials have relied heavily on DNA-based identification of children who had been disappeared.

One recent case highlights the role of DNA in resolving cases of identity many years later. In December 1977, Leonardo Ruben Sampallo and his wife Mirta Mabel Barragán (who was six months pregnant), both union delegates and Communist party members, were arrested and taken to a clandestine torture and detention centre. They have not been seen since and are

²¹ Abuelas de Plaza de Mayo, available at www.abuelas.org.ar. The number of grandchildren identified continues to increase as new cases are solved.

²² The children of the disappeared have formed an organization, HIJOS (*Hijos por la Identidad y la Justicia contra el Olvido y el Silencio*, in English: Sons and Daughters for Identity and Justice Against Forgetting and Silence). Part of their mandate is to encourage and support children who suspect or who have been identified as being children of disappeared parents.

²³ Convention on the Non-Applicability of Statutory Limitations to War Crimes and Crimes Against Humanity, adopted by the UN General Assembly 26 November 1968. Argentina ratified the Convention on 26 August 2003.

²⁴ “Policeman Gets 25 Years for Human Rights Abuses during Dictatorship,” *Americas News*, 4 August 2006, available at: www.monstersandcritics.com/news/americas/news/article_1187181.php.

²⁵ *Los Angeles Times*, 24 April 2007, available at <http://articles.latimes.com/2007/apr/24/world/fg-argentina24>.

²⁶ BBC World News Friday, 4 April 2008, available at <http://news.bbc.co.uk/2/hi/americas/7331857.stm>.

presumed to have been murdered. Las Abuelas had evidence that Mirta had given birth to a girl, named Maria Eugenia. At age seven, the girl was told that she had been adopted and that her biological parents had been killed in a car accident. She initiated her own search, eventually going to Las Abuelas as an adult. Twenty-four years after Maria Eugenia Sampallo's birth, Las Abuelas de Plaza de Mayo used genetic testing to confirm that she was not the daughter of the adults who had raised her – Osvaldo Rivas, a member of the military, and María Cristina Gómez Pinto – but the child of Ruben Sampallo and Mirta Barragán.²⁷ She has since formed strong ties with her extended biological family.

Armed with the genetic evidence, Ms. Sampallo brought to trial the couple who raised her, along with army captain Enrique Berthier, who had provided her to them. In April 2008, captain Berthier was sentenced to ten years in prison for kidnapping Ms. Sampallo. Osvaldo Rivas received an eight-year sentence for the “illegal retention and hiding of a minor under the age of 10” and for forging public documents to conceal the girl's true identity. María Cristina Gómez Pinto received a seven-year sentence for illegal retention.

These trials highlight the role genetic evidence can play even decades after a disappearance by providing victims with undeniable proof of biological identity and objective physical evidence against the perpetrators.²⁸ Not only is genetic evidence objective, it also provides documentation of the occurrence of a specific event, such as a disappearance, murder or rape. Additionally, it gives the individual a proven legal identity and a sense of justice.

3. EL SALVADOR: FROM MADNESS TO HOPE²⁹

The Salvadoran military engaged in systematic disappearances during the country's armed conflict from 1980 through 1992. At least 2,598 people were disappeared, including children living in areas believed to be rebel strongholds.³⁰ The abductions resulted from efforts to quell a growing leftist rebellion.

On 24 March 1980, government agents assassinated the Archbishop of San Salvador, Oscar Arnulfo Romero, a champion of the poor, while he was saying mass. Days before, he had publicly denounced the ongoing state violence and abuse of human rights. Beloved by many, particularly the *campesinos*, for his compassion and outspoken nature, the Archbishop's public slaying proved to be a lightning rod for organized armed resistance. His assassination helped coalesce leftist forces under the National Liberation Front (FMLN), which mounted an armed attack against the military and the civilian president, José Napoleón Duarte.

By 1984, the insurgents exercised control over the northern third of the departments of Morazán, La Unión, Chalatenango and Cabañas, as well as along the southeastern coast and

²⁷ M. Elkin, “Maria Barragán Succeeds in Getting Adoptive Parents Jailed,” *The Times Online*, 2008.

²⁸ Recent trials of many members of the junta have been complicated by the kidnappings and murders of key witnesses. Julio Lopez was disappeared after testifying against the former Buenos Aires Police Chief Miguel Etchecolatz. Juan Puthod was kidnapped prior to testifying in several high profile trials; he was released after the swift involvement of the president and police.

²⁹ This heading echoes the title of the 1993 report of the UN Commission on the Truth for El Salvador.

³⁰ Amnesty International, “El Salvador: Where are the “disappeared” children?” July 2003, available at www.amnesty.org/en/library/info/AMR29/004/2003.

around the Guazapa volcano near San Salvador.³¹ The military's murder of six Jesuit priests, their housekeeper and her daughter on 16 November 1989 on the grounds of the University of Central America, brought heavy international criticism against the government and hastened the peace process.

Under pressure from the United Nations and other persuasive international players, the government and the FMLN entered into peace talks, resulting in the United Nations-brokered Chapultepec Peace Agreement, signed on 16 January 1992. The agreement called for the establishment of the Commission on Truth to "investigate serious acts of violence that have occurred since 1980 and whose impact on society urgently demands that the public should know the truth."³²

On 15 March 1993, the Commission published its report, *From Madness to Hope: The 12-year war in El Salvador*. Three days later, President Alfredo Cristiani signed the General Amnesty Law for the Consolidation of Peace, providing a blanket amnesty to all those who had engaged in political crimes between 1980 and 1992. The law remains in effect today, preventing the criminal investigation and prosecution of almost all civilian and military leaders for crimes that may have been committed during the armed conflict.

3.1 The Search for Disappeared Children

Guarjila, in the northeast sector of Chaletanango, witnessed heavy fighting during the conflict. Shortly after the signing of the peace agreement, Father Jon Cortina, a Jesuit priest in Guarjila, began to hear from parishioners who had suffered abuses at the hands of the military during the war. Father Cortina was particularly struck by hearing from mothers and other family members about government soldiers snatching their children, sometimes from their very arms. Others recounted seeing their abducted children boarded onto military helicopters and flown away.

In August 1994, Father Cortina, together with families of the disappeared, founded Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos (Organization for the Search of the Disappeared Children). Its mission is to locate children who were forcibly disappeared as a result of the armed conflict, and to seek both accountability for perpetrators and justice for families of the missing.³³ To help find the disappeared, Father Cortina contacted human rights activist Eric Stover, who had been instrumental in bringing forensic scientists to Argentina to identify disappeared children. In response, Stover and a team of forensic scientists went to El Salvador to meet with Father Cortina and families of the disappeared.³⁴

³¹ Ibid., at 11.

³² The Chapultepec Peace Accords, article 2, signed 16 January 1992 at Castillo de Chapultepec, Mexico.

³³ Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos [hereafter Pro-Búsqueda], available at www.probusqueda.org.sv.

³⁴ With the help of the UN Observer Mission in El Salvador, Father Cortina communicated with Eric Stover, then the head of Physicians for Human Rights, requesting forensic assistance in finding the disappeared children. He invited Stover, together with a forensic team, to El Salvador to meet with him and families of the disappeared.

Through this collaboration, DNA testing was used for the first time in El Salvador in 1995, reuniting Juan Carlos (originally known as Nelson) with his biological mother thirteen years after his disappearance at the age of six months. According to his mother, Maria Magdalena Ramos, the boy had been wrested away by government troops during a counterinsurgency sweep in May 1982 in San Antonio Los Ranchos, in the department of Chalatenango. The boy had been brought to an orphanage in San Salvador where he was being raised. Upon being reunited with his mother, Nelson expressed an interest in remaining at the orphanage to pursue his studies.³⁵

Through an active outreach and education campaign, including public talks, community meetings, radio programmes, coordination with local and international organizations and a website which was developed later, by July 2007 Pro-Búsqueda had received 790 requests for assistance. Of those, 331 cases have been resolved, resulting in 182 family reunions. A total of 459 cases remain under investigation.³⁶ Pro-Búsqueda receives requests both from families seeking their disappeared children and from adoptees seeking information on their biological families. Children who had been abducted by the military or otherwise separated from their families under duress have been found not only in Salvadoran orphanages but also in Salvadoran military households, as well as in Honduras, Guatemala, the United States, France, Italy, Spain, the United Kingdom, Belgium and the Netherlands.

Pro-Búsqueda estimates that government troops and their allied security forces were responsible for the disappearances of children in 52 per cent of their documented cases while the FMLN was responsible for 8 per cent.³⁷ The group further estimates that over 65 per cent of the children who disappeared were under the age of seven.³⁸ Their young ages underscore the need for genetic tracing since they may remember very little about their families.

3.2 Genetic Tracing as a Tool to Find Disappeared Children

Due to the evolution of DNA analysis, blood samples are no longer needed to trace the disappeared; DNA is now easily retrieved from a swab taken from the inner lining of the cheek. The swab samples are sent to the Alliance of Forensic Scientists for Human Rights and Humanitarian Investigations (the Alliance), a volunteer group of forensic scientists and mathematicians with ties to the Jan Bashinski DNA Laboratory of the California Department of Justice, United States of America. The Alliance analyzes the samples to develop genetic profiles, which can then be compared with those of family members to determine kinship.

DNA samples are taken, stored, transferred and analyzed in compliance with strict forensic standards so that they can withstand judicial scrutiny and be used as evidence in future war crimes trials. Pro-Búsqueda is careful to obtain informed consent from each DNA donor, and each donor's information is collected and stored in a secure location. Pro-Búsqueda and the Alliance use a "chain of custody" form that accompanies each sample and records where it

³⁵ Barbara Crossette, "DNA Test Reunites Salvadoran Mother and Child," *New York Times*, 21 January 1995.

³⁶ Pro-Búsqueda Website, "Where Are They?," available at www.probusqueda.org.sv.

³⁷ In 40 per cent of the cases, there was not sufficient evidence for Pro-Búsqueda to determine the party responsible for the disappearance.

³⁸ Pro-Búsqueda, "Forced Disappearances of Children," available at www.probusqueda.org.sv.

has been kept. Strict quality control mechanisms are in place to ensure accurate DNA analysis. When kinship is positively determined, a re-confirmation sample is taken from the adoptee and analyzed independently.

Following the Argentine example, in 1993 the Alliance proposed creating a DNA family reference database for Pro-Búsqueda that would contain genetic profiles of all the Salvadoran family members who are searching for their disappeared children. The database allows storage of genetic information from family members and permits simultaneous comparison of multiple families against a single adoptee's genetic profile, resulting in what is known as a "cold hit" – a kinship determination that is not expected and could not have been discovered but for the database. The main difference between the two countries' genetic databases is that the Salvadoran database is currently administered by Pro-Búsqueda, a nongovernmental organization, whereas the Argentine database is administered by the State.

El Salvador's database, available since 2006, now contains over nine hundred family genetic profiles. With the support of a grant from the US Department of State in 2007, Pro-Búsqueda has hired a geneticist to operate it. The Alliance is working closely with the geneticist to build the organization's forensic capacity so that substantially more of the analysis can take place in the country.

One of the first cases using the family reference databank resulted in a cold hit, further underscoring the importance of using DNA analysis to trace disappeared children. A young man who had grown up in a Salvadoran military household had recently learned that he had been adopted. Without the knowledge of his family, he approached Pro-Búsqueda to learn of his biological origins. Curiously, his genetic profile matched the profiles of family members who had been searching for two girls but no boys. Upon further discussions with the family, Pro-Búsqueda learned that indeed a boy, along with the two girls, had been lost when the military attacked their village, but it had been assumed the male infant had been killed along with his mother, who was holding him at the time of the attack. The young man turned out to be the family's disappeared child. Family members had had no hope of recovering him and had not even mentioned his existence to Pro-Búsqueda. Eventually, a discrete family reunion was held.³⁹

While DNA analysis may be the most accurate tool for identifying the disappeared, Pro-Búsqueda uses a broad range of investigative tools, including adoption, birth and court records, photographs, family histories and witness testimonies. Sometimes weak genetic kinship determination⁴⁰ can be supplemented with other investigative methods to confirm the genetic results. The Alliance writes a report detailing the findings and kinship determination to Pro-Búsqueda, which in turn communicates this information to the adoptee and the family

³⁹ The young man insisted on a very private and discrete family reunion because he did not want his adopted family to discover that he had found his biological family. Pro-Búsqueda suspects that the young man believed that his father, a former military officer, may have been complicit in his disappearance, and did not wish to cause him harm.

⁴⁰ For example, kinship based on DNA results may be weak (i.e., the probability of kinship is low and does not meet the standard threshold) in cases where only a minimum number of remote references are available. In these cases, other evidence may be used to bolster a kinship determination.

of the disappeared. Pro-Búsqueda's psychosocial team then speaks with the adoptee, the biological family and the adopted family to discuss the possibility of a family meeting.

3.3 The Fight to End Impunity: Pro-Búsqueda and the Serrano Cruz Sisters

For nearly two decades, Pro-Búsqueda has tried to engage all three branches of the national government in searching for the disappeared children, with almost no success. However, the historic presidential election of Mauricio Funes of the FMLN party in March 2009 has generated hope that the new government may begin to play a more active role in the search for these children, and to more broadly seek accountability for crimes committed during the armed conflict.⁴¹

Initially, Pro-Búsqueda and the families of the disappeared sought the help of the national courts. Despite the political risks, they persevered and achieved some groundbreaking results. One well-known effort was the case of the Serrano Cruz sisters. The case dates back to 2 June 1982, when a military operation known as the *guinda de mayo* (May stampede) took place. The family of Maria Victoria Cruz Franco was forced to flee from its home. After walking for three days and then hiding in the brush, her daughters Ernestina and Erlinda Serrano Cruz, aged seven and three, were discovered by a military patrol of the Atlacatl Battalion and flown away in a Salvadoran Armed Forces helicopter. Their older sister, who was hiding nearby, confirmed that after returning to the place where she had left the girls, they were no longer there.⁴²

In 1993, their mother filed a criminal complaint in the Chalatenango Trial Court against the Atlacatl Battalion.⁴³ Two years later, in 1995, Ms. Franco asked the Constitutional Chamber of the Supreme Court of Justice to grant a writ of habeas corpus (asking the Court to “produce the body”) in favour of them. Neither of these court actions had any success.

The following year, in 1996, Pro-Búsqueda filed a complaint before the Ombudsman's Office concerning the disappearance of 145 children during the armed conflict, including the two girls. Ms. Franco and Pro-Búsqueda then turned to the National Assembly for redress. In 1999, Pro-Búsqueda submitted draft legislation to create a national commission to trace children who were disappeared as a result of the armed conflict. The proposal failed to garner support.

Later that same year, Pro-Búsqueda filed a petition before the Inter-American Commission for Human Rights on behalf of Ernestina and Erlinda Serrano Cruz. Eventually, the case of the *Serrano-Cruz Sisters v. El Salvador* made its way to the Inter-American Court of Human

⁴¹ National elections held in March 2009 brought sweeping political changes to El Salvador. The ARENA party lost the presidency for the first time since the peace agreements were signed in 1992, and Mauricio Funes of the FMLN party was elected president.

⁴² See *Serrano-Cruz Sisters v. El Salvador*, Inter-American Court of Human Rights, 1 March 2005.

⁴³ The Atlacatl Battalion, created in 1980, was an elite unit of the Salvadoran army trained as a rapid-response and counter-insurgency unit at the US Army's School of the Americas. The Battalion was responsible for carrying out some of the worst atrocities of the armed conflict, including the massacre at El Mozote in December 1981 and the assassination of six Jesuit priests, their housekeeper and her daughter in November 1989. See “From Madness to Hope.”

Rights, becoming the first case ever heard by the court against the Government of El Salvador for alleged human rights violations. Under the doctrine of continuing violation,⁴⁴ the Court ruled in favour of the Serrano Cruz sisters, finding that the State had violated articles 8(1) and 25 of the American Convention on Human Rights, which secure the rights to judicial protection and a fair trial (due process of law). In particular, Article 8 (1) establishes that:

Every person has the right to a hearing, with due guarantees and within a reasonable time, by a competent, independent, and impartial tribunal, previously established by law, in the substantiation of any accusation of a criminal nature made against him or for the determination of his rights and obligations of a civil, labor, fiscal, or any other nature.

Article 25 establishes that:

1. Everyone has the right to simple and prompt recourse, or any other effective recourse, to a competent court or tribunal for protection against acts that violate his fundamental rights recognized by the constitution or laws of the state concerned or by this Convention, even though such violation may have been committed by persons acting in the course of their official duties.

2. The State Parties undertake:

1) to ensure that any persons claiming such remedy shall have his rights determined by the competent authority provided for by the legal system of the state; 2) to develop the possibilities of judicial remedy; and 3) to ensure that the competent authorities shall enforce such remedies when granted.

To redress these violations, the Court required the State to do the following:⁴⁵

- Conduct criminal investigations and identify and punish those responsible and conduct a genuine search for the disappeared
- Establish a national commission to trace the children who were disappeared during the armed conflict with the participation of civil society
- Create a website to aid in the tracing of disappeared children
- Create a genetic data system to assist in the tracing of disappeared children

⁴⁴ The doctrine of continuing violation can be employed “in the case of a continuing or permanent violation, which begins before the acceptance of the Court’s jurisdiction and persists even after that acceptance, the Tribunal is competent to examine the actions and omissions occurring subsequent to the recognition of jurisdiction, as well as their respective effects.” *Moiwana Village v. Surname*, Inter-American Court of Human Rights (ser. C) No. 124 at 10 (15 June 2005). The doctrine of continuing violation has been used by the Inter-American Court or Inter-American Commission to exert authority over any failure to investigate a past violation on the grounds that an ongoing failure violates the victims’ convention-protected right to judicial protection. See Pablo A. Ormachea, “Moiwana Village: The Inter-American Court and The ‘Continuing Violation’ Doctrine,” *Harvard Human Rights Journal*, 19 Spring 2006: 283-288.

⁴⁵ See *Serrano-Cruz Sisters v. El Salvador*.

- Engage in a public act to acknowledge responsibility and to make amends to Ernestina and Erlinda Serrano Cruz and their next of kin
- Publish this judgment in a newspaper with national circulation
- Designate a day dedicated to the children who disappeared during the armed conflict
- Provide medical and psychological care to the family of the disappeared sisters, and
- Pay monetary damages and costs and expenses.

However, because El Salvador did not accept jurisdiction of the Court until 6 June 1995, the Court declined to rule on the alleged underlying forced disappearance of the girls, which occurred in 1982.

For families of the disappeared and their advocates, the Serrano Cruz decision constituted a watershed. Previously, the State had refused to even acknowledge that children had been disappeared by the military. Although the case of the Serrano Cruz sisters remains unresolved, the judgment reaffirmed the importance of DNA analysis in tracing disappeared children and required the State to develop a system of genetic tracing similar to that employed by Pro-Búsqueda.

With relative speed, the State declared 29 March as the Day of the Disappeared Child, which Pro-Búsqueda and families of the disappeared commemorate with public events including marches, demonstrations and educational programmes. It also engaged in a public act of acknowledgement;⁴⁶ published the text of the judgment; provided medical treatment to the Serrano Cruz family;⁴⁷ and paid some damages and expenses. However, the State failed to comply with the judgment with respect to creating a national genetic database and a national commission to search for disappeared children, two areas of great importance for families of the disappeared.⁴⁸

In August 2009, the new administration announced that it intended to create a national Commission for the Disappeared to investigate cases of children forcibly disappeared during the armed conflict in accordance with the judgment in the Serrano Cruz case. In his announcement, the Minister of Foreign Affairs noted that the creation of such a commission would serve as payment of a historical debt to the Salvadoran people.⁴⁹

⁴⁶ Pro-Búsqueda does not believe that this public act of acknowledgment fulfills the spirit of the Court's decision because it did not include an apology to the Serrano Cruz family, but the Court has found the state action in compliance with its decision. Interview with Zaira Navas, Pro-Búsqueda staff attorney, 15 January 2009.

⁴⁷ According to Pro-Búsqueda, the State provided medical assistance for two years to the Serrano Cruz family but did not provide any psychological support. Interview with Zaira Navas, Pro-Búsqueda staff attorney, 15 January 2009.

⁴⁸ Since the Executive failed to fully comply with the court judgment, Pro-Búsqueda sought redress in the National Assembly. In November 2008, legislation was introduced calling for the creation of a national tracing commission that meets the criteria articulated by the Court in the Serrano Cruz case, which would require all branches of the government to cooperate with the Commission, and that an invitation be extended to members of civil society to serve on the Commission. The proposed legislation also required that any kinship determinations made by the National Commission be confirmed by genetic testing and that the State must set aside public resources to establish and maintain a national genetic reference database.

⁴⁹ Child Rights Information Network (CRIN), "El Salvador: Probe for Missing Children," 4 September 2009.

The State has also made progress in conducting a criminal inquiry into the disappearances of Ernestina and Erlinda Serrano Cruz by questioning top military officers. In June 2008, General Rafael Flores Lima, former Chief of State of the Armed Forces, was compelled to appear before Judge Morena Lainez of the First Criminal Court of Chalatenango to testify about military operations in and around Chalatenango, where the sisters disappeared.⁵⁰ In October 2008, Colonel Juan Rafael Bustillo, who had commanded the Salvadoran Air Force during the time of the armed conflict, was also compelled to appear.

The court appearances of both men raised the expectations of the public and brought the issue of governmental accountability into the political limelight. Many people were surprised that the courts had the power to summon military officers and expressed a hope of learning the truth. Others felt that this was an exercise in futility and accused leftist elements of reopening old wounds and revisiting the past purely for political gain.⁵¹

More military officers may be questioned. Judge Lainez has expressed interest in seeking the testimony of Colonel Mario A. Reyes Mena, who was in charge of the military brigade in Chalatenango during the armed conflict, and General Jose Guillermo Garcia, the former Minister of Defense.⁵²

The criminal inquiry and the Government's announcement of the Commission for the Disappeared both appear to be direct results of political pressure applied to the State by the Inter-American Court. The judgement in the Serrano Cruz case may well represent a milestone in the use of genetic tracing to identify the disappeared and end impunity.

4. NORTHERN UGANDA

Armed conflict in northern Uganda has been marked by rampant forced disappearances and forced conscription of children and youth by the Lord's Resistance Army (LRA) rebel group. While early estimates put the number of disappeared children at around 20,000, recent research indicates that as many as 25,000 to 38,000 children have been disappeared during the past 20 years of armed conflict.⁵³

⁵⁰ Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos Press Release, "Former Salvadoran Army Chief of State Testified in Court about the Serrano Cruz Case," undated, available at www.probusqueda.org.sv.

⁵¹ Interview with Zaira Navas, Pro-Búsqueda staff attorney, 15 January 2009.

⁵² General Garcia currently resides in the United States. In 2000, Garcia and General Carlos Eugenio Vides Casanova, former director of the Salvadoran National Guard, were sued in US federal court under the Torture Victims Protection Act, for the rape, abduction and murder of three American nuns, Maura Clarke, Ita Ford and Dorothy Kazel, and Jean Donovan, a lay missionary, on 2 December 1980. The two generals were cleared by a jury. In 2002, both generals were sued again in US federal court (the case of *Romagoza Arce et. al. v. Garcia and Vides Casnova*) by Juan Romagoza, Neris Gonzalez and Carlos Mauricio, all of whom had been detained and tortured by the Salvadoran military. The jury found in favor of the plaintiffs and awarded them \$54.6 million. In January 2006, an appellate court upheld the verdict. On 23 February 2009, the US Department of Justice charged General Garcia with two counts of immigration fraud. If convicted, he could face up to ten years in prison for using a passport procured illegally and up to five years for making a materially false statement to a federal officer. He could also be deported. (Center for Justice and Accountability Press Release, "Salvadoran Minister of Defense Indicted on Immigration Fraud Charges," 23 February 2009).

⁵³ Pham, Phuong N., Patrick Vinck and Eric Stover, 'The Lord's Resistance Army and Forced Conscription in Northern Uganda', *Human Rights Quarterly* 30, 2008, pp. 404-411.

The conflict began as a popular rebellion against President Yoweri Museveni's National Resistance Movement (NRM) and its efforts to consolidate control over northern parts of the country. The conflict was transformed by the emergence of Alice Lakwena's Holy Spirit Movement, or the Holy Spirit Mobile Forces, in early 1986. In October 1987, Lakwena left Acholiland with 10,000 followers and led them south in a marauding crusade. They were finally defeated east of Jinja, 80 miles from Kampala. Lakwena herself escaped on a bicycle and later moved to a refugee camp in Kenya, where she lived until her death in January 2007. As the Holy Spirit Movement was declining, Joseph Kony began to build the LRA.⁵⁴ Kony is shrouded in mystery, and there is no clear consensus on his motivations. A former commander in the Uganda People's Democratic Army (UPDA) with little formal education, he initially claimed to have inherited the spirit of Lakwena. He has repeatedly called for Museveni's demise and the overthrow of the Ugandan government.

Over the past 22 years, the LRA engaged in large-scale killings, mutilations, sexual violence and abduction of children. The violence and the Government's response to the rebellion forced the majority of the population into temporary camps for internally displaced persons (IDPs), where conditions have been extremely poor. Camp residents had also been subjected to abuses by the Ugandan People's Defense Force (UPDF), the very force intended to protect them.⁵⁵

Early on, the LRA was soundly rejected by Acholi leaders, and its first operations failed largely due to lack of popular support.⁵⁶ As a result, Kony turned increasingly against the local population, accusing the people of aiding the Government in seeking his defeat. In 1991, for example, the LRA attacked the towns of Kitgum and Gulu in retaliation against its residents for the formation of a government-sponsored civil defence force, the 'Bow and Arrow' militia.

The LRA's method of warfare had a profound psychological impact on the population.⁵⁷ Not accepted as a liberation movement representing all Acholi, the LRA used extreme violence, especially against civilians, to instil terror in the community. The violence has ranged from low-intensity attacks to major massacres killing hundreds of people. Civilians have been the main targets. The LRA have mutilated their victims, including cutting off lips, ears and noses, and have abducted children and youth of both sexes, forcing them to serve as soldiers, porters and (the females) sexual slaves.⁵⁸ Many attacks were conducted at night, including raids on villages or IDP camps for food and other supplies. Young people were often forced to commit atrocities as soon as they were abducted to make it more difficult for them to

⁵⁴ The LRA was originally called the Holy Spirit Movement II, but was later renamed, first as the Lord's Salvation Army, then as the United Christian Democratic Army, and finally to its present name in 1992. Ruddy Doom and Koen Vlassenroot, 'Kony's message: A new Koine? The Lord's Resistance Army in Northern Uganda', *African Affairs* 98, 1999, p. 22.

⁵⁵ See the Report of the Secretary-General on internally displaced persons, Francis M. Deng, Addendum, Profiles in Displacement: Mission to Uganda, UN Doc E/CN.4/2004/77/Add.1, 3 March 2004.

⁵⁶ Doom and Vlassenroot, 23.

⁵⁷ See Vinck, Patrick, Phuong N. Pham, Eric Stover and Harvey M. Weinstein, 'Exposure to War Crimes and Implications for Peace Building in Northern Uganda', *Journal of the American Medical Association* 298/5, 1 August 2007, pp. 543-554.

⁵⁸ Refugee Law Project, 'Behind the Violence: Causes, consequences and the search for solutions to the war in northern Uganda', Working Paper No. 11, Kampala, Faculty of Law, Makerere University, 2004, p. 23.

contemplate returning to their communities. The LRA's strategy combines extreme punishment for unacceptable behaviour with incentives for good behaviour. Discipline is high, and senior commanders are rewarded with power, resources and 'wives'.

On 14 October 2005 the International Criminal Court unsealed arrest warrants against Joseph Kony and four of his top commanders for crimes against humanity and war crimes.⁵⁹ At the same time, the LRA withdrew its forces to the southern Sudan state of Eastern Equatoria and then crossed the Nile, assembling in Garamba National Park in the Democratic Republic of the Congo (DRC). Eight months later, peace talks between the Government of Uganda and the LRA commenced in Juba, Southern Sudan, under the mediation of the President of South Sudan, Riek Machar. In the summer of 2006, peace talks between the Government of Uganda and the LRA re-commenced in Juba, and the first Cessation of Hostilities Agreement was signed on 26 August. Several key participants walked out, and the peace talks collapsed 18 months later when Kony refused to sign a final peace agreement.

Yet with the LRA now concentrated in eastern DRC, northern Uganda enjoys relative physical peace – the absence of violence. This has permitted nearly 1.1 million internally displaced persons in the Acholi districts alone to return home. Unfortunately, the LRA's move to eastern DRC has brought increased violence to that area due to skirmishes with joint Ugandan-Congolese troops. Given this 'physical' peace, northern Uganda has moved into a new phase, and plans for reconstruction and development have begun to take shape. As families return home and recreate their communities, some are seeking to learn the whereabouts of their missing children.

4.1 Abducted and Missing Children

The plight of child abductees first received attention from community-based reception centres designed to facilitate their return and reintegration. When children managed to escape from the LRA or were captured by Ugandan soldiers, they were often paraded in the streets of towns in the hope that someone would identify them. This treatment prompted a group of parents of disappeared children to establish a reception centre in Gulu in 1994. More than 20,000 children and youth have since passed through it and other reception centres in towns throughout northern Uganda. However, this number does not include the thousands of children and youth who have gone straight home rather than pass through a reception centre.⁶⁰

When children and youth are captured in gun battles or escape from the LRA, a special Child Protection Unit of the UPDF routinely delivers them to the reception centres, where the children receive a medical exam and treatment. Those suffering from war wounds are sent to hospitals in Gulu and Kampala, and a few children have been sent to the United States and Europe for specialized surgery. Housed in separate units, boys and girls usually spend the day together undergoing counselling and taking part in recreational activities (song and dance), sports and vocational training.

⁵⁹ ICC press release, 'Warrant of arrest unsealed against LRA commanders', The Hague, 14 October 2005.

⁶⁰ Nor does it include adults who have left the LRA and returned to civilian life.

Most children stay at the centres for two to six weeks. Mothers with children generally stay longer, often up to six months or more. During this time, staff members attempt to trace the child's parents or relatives. Some centres maintain a 'meeting room' where parents or relatives can meet with a child, often accompanied by a social worker to prepare the family and child for their eventual reintegration. Children eventually receive a resettlement package and are sent back to live with their families. However, little is known about the long-term effects on those who have survived LRA abduction.

The Human Rights Centre at the University of California at Berkeley launched the Database Project in December 2005 to collect information on the children's experiences. Begun at the request of UNICEF and the reception centres, it works in eight reception centres, in the districts of Gulu, Kitgum, Pader, Apac and Lira. In the spring of 2008, the authors published an analysis covering 25,231 formerly abducted children and youth. The study found that the number of abducted civilians had been under-estimated; it estimates that 54,000 to 75,000 people had been abducted, about half of them 18 years old or younger at the time of abduction.⁶¹ However, others believe the number is even higher.⁶²

It also difficult to know exactly how many children remain unaccounted for. According to the database assembled through the community canvassing project of the Concerned Parents Association, roughly 37 per cent of the disappeared children and 27 per cent of the disappeared adults are unaccounted for over the 1986-2001 period. Our random sample survey of 2,875 adults (18 years of age or older) residing in eight districts of northern Uganda found similar results: 1,106 (38.6 per cent) of the respondents reported having at least one household member who was disappeared, and among these respondents, 45.9 per cent had at least one household member who had not returned. Even conservative estimates indicated unknown whereabouts of 9,000 to 22,000 disappeared children who did not register at reception centres. Some may have returned home without passing through a reception centre or were not recorded at the centre or their records were lost. Possibly 1,000 to 3,000 children are still with the LRA; many may be dead, given the numerous accounts of children being killed for attempting to escape or other reasons. Even fewer adults are accounted for; less than 9,000 registered at reception centres. Most are likely to have come home without passing through a reception centre, but the destiny of many is unknown.

4.2 The Potential Use of DNA Analysis

Drawing on the experience of Argentina and El Salvador, DNA analysis could be useful in Uganda to: 1) trace children who have been abducted or separated and not reunited with their families, 2) identify the biological father of rape victims' children and 3) identify victim remains. However, there are notable differences among these countries. First, in northern Uganda, children have been abducted and forcibly conscripted whereas in Argentina and El Salvador they were abducted and put up for adoption. Thus Ugandan children who are released, rescued or escaped are more likely to return to their families, and issues arising

⁶¹ Pham, Phuong N., Patrick Vinck, and Eric Stover, 'The Lord's Resistance Army and Forced Conscriptation in Northern Uganda', *Human Rights Quarterly* 30, 2008, pp. 404-411.

⁶² Pham, Phuong et al., *Forgotten Voices*, 2009; Jeannie Annan, Christopher Blattman and Roger Horton, 'The State of Youth and Youth Protection in Northern Uganda', 2006.

from adoption may not apply. However, children who are forcibly conscripted may suffer stigma upon return home, and females who conceived babies during captivity face unique challenges.

To explore the feasibility of genetic tracing in northern Uganda, the first step is a systematic assessment of how many children are missing, the names of the missing children and their parents, and what may have happened to them. Although the country has no national tracing system, UNICEF believes that four out of five children who have been abducted and returned have reunited with their families, due largely to efforts made by the reception centres. Thus, DNA analysis may not be needed in all cases. Nonetheless, the whereabouts of children who have been abducted and have not yet returned remains unknown. Genetic tracing should therefore not be ruled out until more systematic consultations are made with parents of missing children. In addition, if national or international criminal proceedings take place, genetic evidences help provide credible evidences for prosecution (this will be discussed below).

No real estimate has been made of the number of children and youth who were killed during captivity. Many children and youth who were abducted and are still with the LRA have now become adults, and UNICEF believes their rights to child protection may no longer be applicable; these cases may need to be transferred to another agency with the mandate to trace adult missing persons. Nonetheless, the two databases – that of the Human Rights Centre of UC Berkeley, covering 25,231 children and youth, and that of the Concerned Parents Association – could prove invaluable if a DNA project is initiated.

It is important to identify how genetic analysis could help families rebuild their lives and whether it would be cost-effective. As the cases in Argentina and El Salvador reveal, developing a system of genetic tracing requires time, political capital and financial and human resources. Thus, it needs support from the families of the disappeared, local government and key agencies such as the Amnesty Commission,⁶³ UNICEF, Save the Children, International Rescue Committee and the reception centres. These key stakeholders should meet to determine whether such a project is desired, what would be the main objective, who would be the main implementing partners locally and internationally, the quantity and quality of resources needed, and how the project would link with existing programmes. In addition, cost and resource analyses should be undertaken to determine if sufficient funding can be secured and whether sufficient trained personnel and infrastructure are available.

The DNA project can be integrated into ongoing transitional justice processes such as trials, truth commissions and reconciliation initiatives. DNA analysis, for example, can be used to identify or confirm the biological father of children who were conceived through forced sexual violence. This information could be used as evidence in court proceedings or reparation programmes. DNA analysis could also be used to identify and return the remains of victims to their families for proper burial as part of restitution.

⁶³ People who cease to engage in armed opposition against the State can qualify for a pardon from criminal prosecution. This process is overseen by the Amnesty Commission.

5. RECOMMENDATIONS

1. **Conduct a systematic assessment to determine the needs and priorities of people affected by war and the potential contribution of identification of disappeared or missing children and family reunification.**

This systematic consultation provides a means to gauge people's priorities and serves as a platform for respondents and affected communities to contribute to the transitional and rebuilding processes. For example: What do they want? What kind of support do they need, if any? Is it important for them to find the remains of their missing children? How can justice be achieved? Can genetic tracing help contribute to criminal proceeding? Does genetic tracing help families rebuild their lives, and if so, how?

2. **If there is an identified need to use genetic tracing, the effort should be led by a local organization(s) that is well respected and committed to working with families of the disappeared.**

The experiences in Argentina and El Salvador reveal that local organizations representing and working closely with families of the disappeared should spearhead the effort to find disappeared children. The families of the disappeared or missing should participate in decision-making and in the search for their disappeared children, since they are best situated to understand the needs and desires of families of the missing and to communicate with them. Their participation is necessary at every step.

3. **If a decision is reached to employ genetic tracing, an internationally recognized forensic programme should be consulted and encouraged to work with local groups.**

Internationally recognized forensic programmes have the expertise and experience in applying forensics to resolve human rights abuses. In addition, due to the prohibitive cost and time required to establish a forensic laboratory, using an established programme could be invaluable. In both Argentina and El Salvador, local groups consulted with internationally recognized forensic programmes to plan their genetic tracing initiatives. (In Argentina, Las Abuelas consulted with the American Association for the Advancement of Science and in El Salvador, Pro-Búsqueda consulted with Physicians for Human Rights and the Alliance for Forensic Investigations for Human Rights and Humanitarian Investigations). Similar organizations include:

- American Association for the Advancement of Science
- Alliance of Forensic Scientists for Human Rights and Humanitarian Investigations
- Argentine Forensic Anthropology Team
- International Commission on Missing Persons
- International Commission of the Red Cross
- Physicians for Human Rights.

4. Genetic tracing must be accompanied by comprehensive outreach and education initiatives, which are best organized by a local group working closely with families of the disappeared.

Outreach and education are important components of the work of Las Abuelas and Pro-Búsqueda. Pro-Búsqueda conducts outreach with families in war-affected areas of El Salvador, organizes radio and educational programmes to discuss the disappearance of children during the war, and runs support groups for families of the disappeared and adoptees who have been reunited with their families. It is important for information to reach everyone involved in investigations, including lawyers, judges, police officials, medical professionals, psychologists and families.

5. Genetic testing must meet the highest forensic standards so it can survive judicial scrutiny in the event of future war crimes trials.

In Argentina, genetic analysis has already been introduced as evidence in both civil and criminal matters. In the case of Paula Logares, genetic analysis was used to determine not only kinship but also custody. In the recent case involving Maria Eugenia Sampallo, genetic analysis has been introduced as evidence in the prosecution of her adoptive parents and a military officer.

6. When using genetic tracing, confidentiality and security of the genetic information must be ensured.

Pro-Búsqueda and the Alliance ensure that individual informed consent is obtained before a DNA sample is donated and that all information and the DNA sample itself are stored in secure locations. All communications involving confidential information must take place in secure settings. The genetic information should be available for identification of the disappeared only, not for other research or non-research initiatives.

7. Careful consideration of long-term resources is necessary before a genetic testing programme is initiated.

Genetic identification requires considerable financial, technological, political and human resources. Careful planning and commitment from all stakeholders for long-term use of the genetic information should be ensured before the project is initiated. For national genetic databases, sufficient commitment is needed to cover a minimum of two generations – the first generation is the adults searching for their missing, while the second generation is the children who, as adults, will search for their identity.

ANNEX – GENETIC TERMINOLOGY

Bases (or nucleotide bases): These are the parts of DNA and RNA that may be involved in pairing (see also base pairs). The main ones are cytosine, guanine, adenine (DNA and RNA), thymine (DNA) and uracil (RNA), abbreviated as C, G, A, T, and U, respectively. They are usually simply called bases in genetics. Because A, G, C, and T appear in the DNA, these molecules are called DNA-bases; A, G, C, and U are called RNA-bases.

Base pair: In molecular biology, two nucleotides on opposite, complementary DNA or RNA strands that are connected via hydrogen bonds.

DNA: A molecule that contains the genetic instructions used in the development and functioning of all known living organisms and some viruses.

Forensic DNA technology: Identification of individuals on the basis of their respective DNA profiles.

Genetics: The heredity of traits.

Genetic sequence: A succession of letters representing the primary structure of a real or hypothetical DNA molecule or strand.

Genetic sequencing: Methods for determining the order of the nucleotide bases adenine, guanine, cytosine, and thymine in a molecule of DNA.

Genetic variability: A measure of the tendency of individual genotypes in a population to vary from one another. Variability is different from genetic diversity, which is the amount of variation seen in a particular population.

Human genome: The genome of homo sapiens, which is stored on 23 chromosome pairs. Twenty-two of these are autosomal chromosome pairs, while the remaining pair is sex-determining.

Hypervariable region (HVR): A location within nuclear DNA or the D-loop of mitochondrial DNA in which base pairs of nucleotides repeat (in the case of nuclear DNA) or have substitutions (in the case of mitochondrial DNA). Changes or repeats in the hypervariable region are highly polymorphic.

Locus/loci: A fixed position on a chromosome, such as the position of a biomarker that may be occupied by one or more genes.

Mitochondrial DNA: The DNA located in organelles called mitochondria. In humans, 100 to 10,000 separate copies of mtDNA are usually present per cell.

Nuclear DNA: DNA contained within a nucleus of eukaryotic organisms. In most cases it encodes more of the genome than the mitochondrial DNA and is passed sexually rather than matrilineally. Nuclear DNA is the most common DNA used in forensic examinations.

Nucleotide molecules: Molecules that, when joined together, make up the structural units of

RNA and DNA.

Polymerase chain reaction: A technique to amplify a single or a few copies of a piece of DNA across several orders of magnitude, generating millions or more copies of a particular DNA sequence. The method relies on thermal cycling, consisting of cycles of repeated heating and cooling of the reaction for DNA melting and enzymatic replication of the DNA.

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