

# THE SEARCH FOR THE MISSING

When people think of mass graves, they think of death, not disappearance. The mass graves contain more than the dead — the hopes of the living that their missing relatives will return lay out of reach, so long as the dead are anonymous. In the memories of the survivors, tragedy lingers long after shooting has silenced, the earth stops shaking, or the waves calm.

The story of the missing is about the living, not the dead.

*David Gross is a photographer and writer based in Istanbul, Turkey.*

# THE SEARCH FOR THE MISSING



# DAVID GROSS



*Our Lady of Perpetual Sorrow (Al-Mahawil, Iraq, May 2003) She was one of many women wandering around the mass grave site. When she saw the camera she began to wail, and after a few seconds of loud mourning, she walked away. Without fail, the women at the graves would stop their searching to cry and scream when they saw a camera. I did not doubt their sincerity.*

*Overleaf: The Brothers (Al-Mahawil, Iraq, May 2003) He screamed and writhed as his brother's bones were placed in the back of the truck. He began to strike himself, to throw himself against the dusty steel, and his family reached to restrain and hold him fast in comforting arms.*







Relatives point to their missing family in street display of faces of those taken away by Saddam Hussein's regime in the 1980's and 1990's. Baghdad, May 2003.

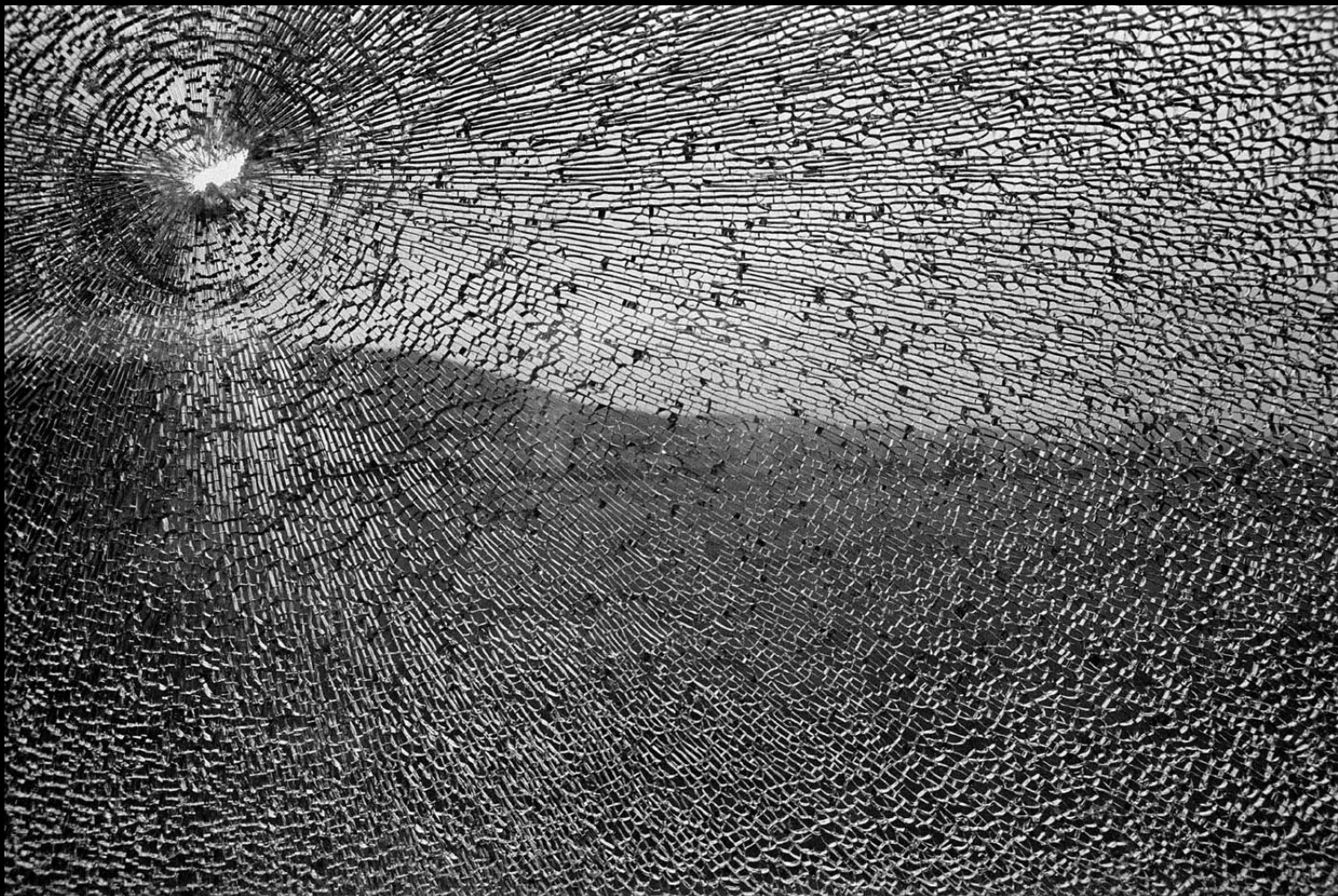
## FLYERS

With the fall of Saddam, the posters appeared. On city walls and mosques faces and names looked out from the past, the anachronistic fashions (poofy blown-dry hair, extra-long lapels) dating the year the person disappeared. They were black-and-white, simple photocopies, stating the person's name, age, occupation, and the date of disappearance. Most were in Arabic, but a very few were written in English, an obvious plea to the Americans for help.

Many people had been taken away and all were presumed dead (although the rumors of underground prisons persisted for a few weeks after the regime's fall). Under Saddam, even attempting to find them was dangerous, and always futile. The police threatened the family members who came to ask, saying "Do not ask, do not try to find out, or you, too, might disappear."

The faces in the flyers disappeared at various times over the last 30 years. The regime killed many people. On this one corner, there were hundreds of flyers.

Why do the faces reappear like this? Such notices appear when people die, usually with a black border. Perhaps this is an intermediate step toward recognizing death? It is common for these flyers to appear when people go missing, and from New York to Thailand to Baghdad, the survivors posted the faces of the dead. The universal query on these flyers is, "Have you seen me?", as though the person was simply lost, waiting to be found and sent back home for dinner.



#### SHATTERED BALKAN LANDSCAPE

I was riding the Serb Train from Prishtina to Mitrovica, walking from car to car, looking to see who rides this train. There are Serbs, Gypsies, and NATO soldiers. There are no Albanians to be seen inside, although we can often see them outside, watching the train pass with more than passing interest.

There were a few rock-shattered windows on the train. Sometimes the Albanian Kosovars throw rocks at the train in anger, although I suspect the kids do it from boredom.

The picture is of the shattered landscape of Kosovo.

*Shattered Kosovo (Kosovo, June 2002) A rock shattered the window on the Serb Train.*



Members of Inforce set up their gear in the Iraqi desert, near al-Musayib. They have been told there is a mass grave beneath them, and running four tests with geological tools to see if any remains can be seen without digging. The tests did not find anything. Neither did a test trench.

#### LOOKING FOR A MASS GRAVE Al-Musayib, Iraq, May 24, 2003

From the open desert beyond the grave two men came running. As they neared us they waved their arms for attention and stabbed their fingers toward the expanse behind them, yelling loudly that they had found another grave.

We were in the middle of the desert, a few kilometers off the highway that runs from the town of al-Musayib north, to Baghdad. The road is straight and narrow, a black line drawn in the tan dust. Occasional lost missiles stick out of the sand, white cylinders like a giant's cigarettes. There are no other features for miles. Al-Musayib name means "the edge of the rock," and this is the desert beyond the town, a flat, dusty, hot plain. Former soldiers in Saddam's army had led the townspeople to this place. From afar, they said, they had seen bulldozers burying thousands of bodies.

We set out for the new site, walking quickly through the heat toward the new site.

Across the ghost of a concrete road, on a flat football field-sized patch perhaps one kilometer distant from the first grave, the group stopped. There was no sign of the grave: no depression in the soil, scattered shoes, nor tire ruts. The men insisted there was something there.

Ian Hanson was the leader of a U.K. forensic team, Inforce, and he had been asking for something to do. Inforce had come to do good, and it was tired of sitting around. Hanson's team was given the task of examining the site.

The team set up the total station for surveying, then opened a series of cases with their geological gear. They were using the opportunity



An Inforce team member strides back and forth across the desert, testing for underground soil disturbances, which might indicate a mass grave, with a magnetometer

to test a quartet of remote sensing tools, geological equipment used to look for oil and minerals. Given the vast number of bodies supposed to be under the deserts of Iraq and the vast spaces involved, they hoped that the tools would be an improvement in the techniques for discovering the sites, establishing their boundaries, and investigating what lay in them. This area was perfect for the test.

They searched for three days. The site was empty.

#### MAN VS. MACHINE

There is disagreement, to put it politely, about the new trend in grave-hunting toward high-tech geological tools.

Bill Haglund of Physicians for Human Rights insists the tools just don't work well enough to justify the costs. They're a distraction, a waste of time and money. However, his real concern is the money, or more specifically, the funders of humanitarian identification projects.

Once the funders have been sold on the high-tech methods, they expect everyone to have offer those methods. This demand pushes up the cost of an expedition, and it limits the participants to those groups with a lot of resources and technical expertise. It even skews the work away from the simpler methods, which Haglund feels work better. He complains that the money will go toward buying and testing new tools, not toward training and hiring people, and he thinks that people are better than machines at finding the dead.

Ian Hanson would beg to differ. Inforce decided to bring some new high-technology tools into Iraq. This was the first time, says Hanson, that this set of tools has been tried in the field. It was an unknown how well they would work, but it was an important experiment.

In the end, Haglund was right, in a way. It wasn't that the machines failed, but people were the deciding factor. The site was empty; the Iraqis had given Inforce a bare patch of desert to play in, probably to get them out of their way.

Ian Hanson, team leader of Inforce at the al-Musayib grave site.



A NATO satellite photograph showing possible mass grave sites in Bosnia.

#### HIGH-TECH TOOLS

##### Total Station with Data Recorder

A total station is an electronic measuring tape. Once set up, with a button click, the archeologists can easily record any finding in the area with a precision of 1 mm (1/25 inch).

##### Satellite Imagery

Satellite photographs can only show the signatures of the creation of a mass grave. Before-and-after pictures can suggest that pits were dug, and where there are changes in the topsoil. These clues can narrow down the search to a few sites.

##### Direct Current Resistivity and Earth Conductivity

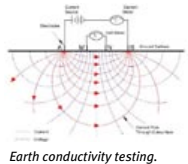
Run some electricity through the ground, and you can test for either resistivity or conductivity. Since different kinds of soil conduct electricity to differing degrees, measuring the resistance or conductivity gives an indication of the amount of water in the soil. Filled-in pits and ditches, such as mass graves, tend to collect moisture and have lower resistance and greater conductivity than nearby undisturbed soil.

##### Magnetometry

Magnetometry measures disturbances in the earth's natural magnetic field. These disturbances are caused by changes to the amount of naturally magnetic material in the soil, as when a pit is refilled with topsoil. The test also shows man made objects containing iron or steel, such as bullets, keys, or handcuffs. Mass graves usually include many metal artifacts.

##### Ground Penetrating Radar

Ground penetrating radar (GPR) sends radio waves through the soil which bounces off buried objects. It's basically the same radar we use to track airplanes in the sky, sent through the earth. GPR shows real-time bumps and wiggles on a laptop computer that indicate objects beneath the surface.



Earth conductivity testing.



## THE MASS GRAVE NEAR AL-MAHAWIL MILITARY BASE Iraq, May 15, 2003

In 1991, farmers working near the al-Mahawil military base surreptitiously watched the murder and burial of thousands of men, women, and children in a dusty plot of land nearby. For years they said nothing, but with the fall of Saddam's regime word spread of a mass grave at the site, and within a few days villagers began to dig.

Despite the scale of the crime, it wasn't one the Americans wanted to investigate, and they had classified the site as "humanitarian," not "criminal," meaning they would not protect it.

"Keep in mind that we see this as an Iraqi process....," explained Marines Captain Romley, the U.S. military spokesman at the site. "We want to respect the wishes of the Iraqi victims and their families."

Arguing with him was Peter Bouckaert, a researcher and activist with Human Rights Watch. Bouckaert complained that the Iraqis were destroying the site and that it was the military's responsible to stop it. They refused, so Bouckaert called in the press. After a week of bad publicity, the site was closed. By then it was too late.

The site was a complete mess. Bones and clothing were lost and commingled, and potentially identifying artifacts, such as ID cards and jewelry, were lost or destroyed. In the end, around 2,600 remains were pulled from the ground. Of these, 15% were claimed by families basing their identifications on ID cards, clothing, and sometimes no more than the brand of cigarettes found with the skeleton. The rest of the bones were individually reburied, with plastic bags of rotting clothes placed above each grave in the hope someone might recognize them.



*Searching : Al-Mahawil Mass Grave (al-Mahawil, Iraq, May 2003) Iraqis search the bags of clothing and bones for their missing relatives at the mass grave on the al-Mahawil military base near Hillah.*

*Previous Page : Al-Mahawil Mass Grave (al-Mahawil, Iraq, May 2003) Iraqi villagers, under the direction of a local medical student, used a backhoe in their chaotic exhumation of thousands of remains from a mass grave on the al-Mahawil military base near Hillah.*

### EXPERT COMMENTARY

Bill Haglund, forensic anthropologist

Haglund was especially struck by this photograph. "It's every forensic investigator's nightmare," he said. "The backhoe digger is the worst machine they could be using to dig these graves. With that machine, they are guaranteed not only to ruin any evidence of the crime but also to ruin any chance of identifying bodies."

Evidence is more than just a physical artifact like a bone. The context in which the thing lies in the ground makes it evidence. In this case, that context, the grave, has been destroyed. How the bodies lay in the grave, what was around them, all that is gone.

What makes this information useful? For example, how the bodies lie in the grave, tangled or neatly arranged, tells about the burial, and possibly the nature of the killings. Mixed men, women, and children are clearly not buried enemy soldiers. If they are tangled together they were probably buried in haste. And, it's a good guess that a child held by a woman is probably hers.

Second, the collection of evidence follows rules to insure the evidence has not been faked or altered. Investigators record who had an item

at any time, maintaining the so-called "chain of custody" to prevent tampering.

Last, the Iraqis were actually destroying artifacts. The backhoe was crushing bones, cutting remains in two, and shredding clothing while the diggers further manhandled and scattered potentially identifying objects. The Iraqis did not realize that clothes hold more clues than just their pattern and cut, or that bones hold clues to their origins. Haglund explains that "if someone could have been identified by a fracture, for example, and those cracked bones are lost, the identification cannot be made. If the digger breaks the bones, of course, that body is forever lost."

Investigators can collect information from the families about a missing person's basic medical history, including broken bones and disease. A match with these records is a good clue to a body's identity. Add information about where and how the person disappeared, and a distinctive piece of clothing or jewelry that the family recognizes, and the chances of identification are good. All that is now lost.

Haglund looked up from the photo. "All we're left with is another missing man," he said, "and a jumble of bones belonging to no one."

## WITNESSES TO THE AL-MAHAWIL MASSACRE Peter Bouckaert, senior researcher for Human Rights Watch

*After the first Gulf War in 1991, the Americans encouraged the Shi'a to rebel against Saddam Hussein's regime but never delivered promised support. Police and soldiers loyal to Saddam crushed the rebellion. In a demonstration of power and displeasure, the regime arrested tens of thousands of Shi'ite men, women and children, and many of whom disappeared completely. Some of them ended up in the graves at al-Mahawil, and of these, at least one survived.*

Nasir Khadi Hazim al-Husseini was twelve years old on March 16, 1991. He piled into the car with mother, his uncle Muhanad `Abud Naji, and his cousin Muhammad Yassin Muhammad (both thirteen years old) for a ride to their grandfather's house in another neighborhood of al-Hillah, a mainly Shi'ite town south of Baghdad.

They ran into a roadblock, where a soldier stopped the car and arrested them all. Nasir's mother told the soldier that they were just going to their grandfather's house, but they were taken to a nearby school.

Nasir remembers that "by the evening the classroom was filled with people." The people in the classroom were taken to the al-Mahawil military base, where the family spent the night in a tiny room. The next morning they were registered, briefly questioned, and then brought to a collection center.

*They took us to a big hall [and] started bringing in people now and then. We stayed there for two days. There were so many people... They were children, women, and men. We were sitting in [family] groups, me with my relatives and the others with their relatives. No one dared to speak to the other groups.*

Toward the end of the second day the people were taken outside and lined up in the yard of the compound. "They brought some blankets which they ripped and they tied our hands and blindfolded us with those," Nasir recalled. "They covered our eyes and put us inside some TATA buses looted from Kuwait. We were between forty-five and fifty people on each bus. It was very crowded, there were two people on each seat."

The buses stopped, the people were unloaded, and the executions began.

*When they started taking us off the bus..., my mother told me, 'Repeat the shahada', because we are about to die.' I heard the shouting of the children. We grabbed each other's hands, me, my mother, my cousin, and my uncle.... They threw us into the dug-out grave. When I fell down, there were so many bodies underneath me.... They started to shoot on us.*

*One of them pulled at my clothes, and said 'That one isn't dead, shoot him.' They shot again, but still I was not shot.*

*So they gave an order to the bulldozer driver to bury the grave. I was at the edge of the grave. When the shovel came, I spontaneously tried to crawl out. It was sundown now. I crawled to the edge of the grave, and got to a place where the bamboo was on my face and I was able to breathe through it. I heard the man who was standing on the hill instruct the shovel driver to bury us more. He had seen that I was not yet buried. But the driver left the place and didn't do it.*

After he heard the noises of the vehicles fade away, Nasir crawled out of the mass grave, leaving his dead relatives behind. He made his way to

the main road nearby, and four sympathetic Shi'a soldiers helped him return home.

### Witnesses to the Executions

Iskandar Jawad Witwit, the newly-appointed mayor, was a high-ranking air force officer based at al-Mahawil at the time:

*They arrested everyone they saw [and took them to al-Mahawil military base]. If they found men, women, or children, they took them. People were brought from al-Hilla, al-Najaf, and Karbala for execution. The executions happened every day—they killed thousands of people.*

Salim Murgan Hitban, a soldier on leave, was caught in the mass arrests but recognized and released:

*We were all herded to a hall where we could hardly stand. We were not allowed to use the toilet and we used a corner of the hall for our necessities. It was very dirty, stuffy and smelly there. From time to time three or four Special Republican Guards came in to the hall and began beating us with their rifles, sticks, or iron bars. They picked out people in groups of three or four, blindfolded them, tied up their hands again and took away from the hall. These people would never return.*

The executions carried out near the al-Mahawil military base were witnessed by local farmers in the area. The farmers remained silent about the killings until the overthrow of the government of Saddam Hussein in 2003.

Sayyid Hassan Muhsin al-Ardawi, a farmer who lives close to the mass grave site, described a month of almost daily executions that he witnessed from his home:

*They used to bring people from al-Mahawil military base to this site. Their hands and eyes were bound. They would bring them here in Kuwaiti buses that carried about forty-five passengers and a Toyota Coaster bus that carried about twenty-one passengers. ...*

*They brought a full army division and surrounded the area. Most [non-military at the site] were Ba'ath party members, the others were from pro-government tribes. The military were in uniform, the Ba'ath and the tribal people were in civilian clothes with red kaffiyas....*

*I heard the sound of the shooting and heard the people shout. I would hear this several times each day.*

*I would go to the roof and watch the executions—when they shot them and buried them in the holes. They used to take them from the cars and push them inside the holes. Their hands were tied and their eyes covered, sometimes two people were bound together. They used to hit them, they had no mercy. The victims were unable to do anything—they would just start to shoot at them [if they tried].*

*After they were killed, they buried them using the bulldozer shovels. Every day, they used to dig three holes. Those were the holes they would use for that day.*

Shortly after the executions at al-Mahawil, the authorities took the land of local farmers on which the mass grave was located and gave it to members of the Albu Alwan tribe who were directly involved in the arrest and execution campaign.

The farmers who had witnessed the killings were regularly harassed, threatened, and arrested by Iraqi officials who accused them of trying to leak out information about the mass grave to the international community.

\* Shadada: the Muslim declaration of faith.

**OFFICE OF THE CDHRF**  
Glogovac, Kosovo, May 28, 2000

The village of Glogovac was in the wrong place at the wrong time. Of no particular significance itself, it is in the north-west Kosovo where the Albanian rebellion drew many of its fighters and supporters.

During the war in 1999, Serb paramilitaries and the Yugoslav Army pass through Glogovac, prosecuting a classic anti-guerrilla campaign. Their tactics included killing men of military age and expelling their families to remove local support for the rebellion. Many of the men simply disappeared.

After the war, the Center for the Defense of Human Rights and Freedoms (CDHRF), the main local NGO which works with the of the missing, opened a small office in the village. When Ibrahim Makolli, a director of the CDHRF, comes to visit, he sits behind the desk and listens to complaints.

There is little or no psychosocial support in the small towns, both because villagers aren't able to attract outside assistance and because they're resistant to help. The idea of talking with a therapist is alien to these people; normally, family talk among themselves, but the families were shattered by death and rape. Some people talk with Makolli. Since a common meeting room was built, people have begun, slowly, over coffee, to talk among themselves about their experiences and support each other.

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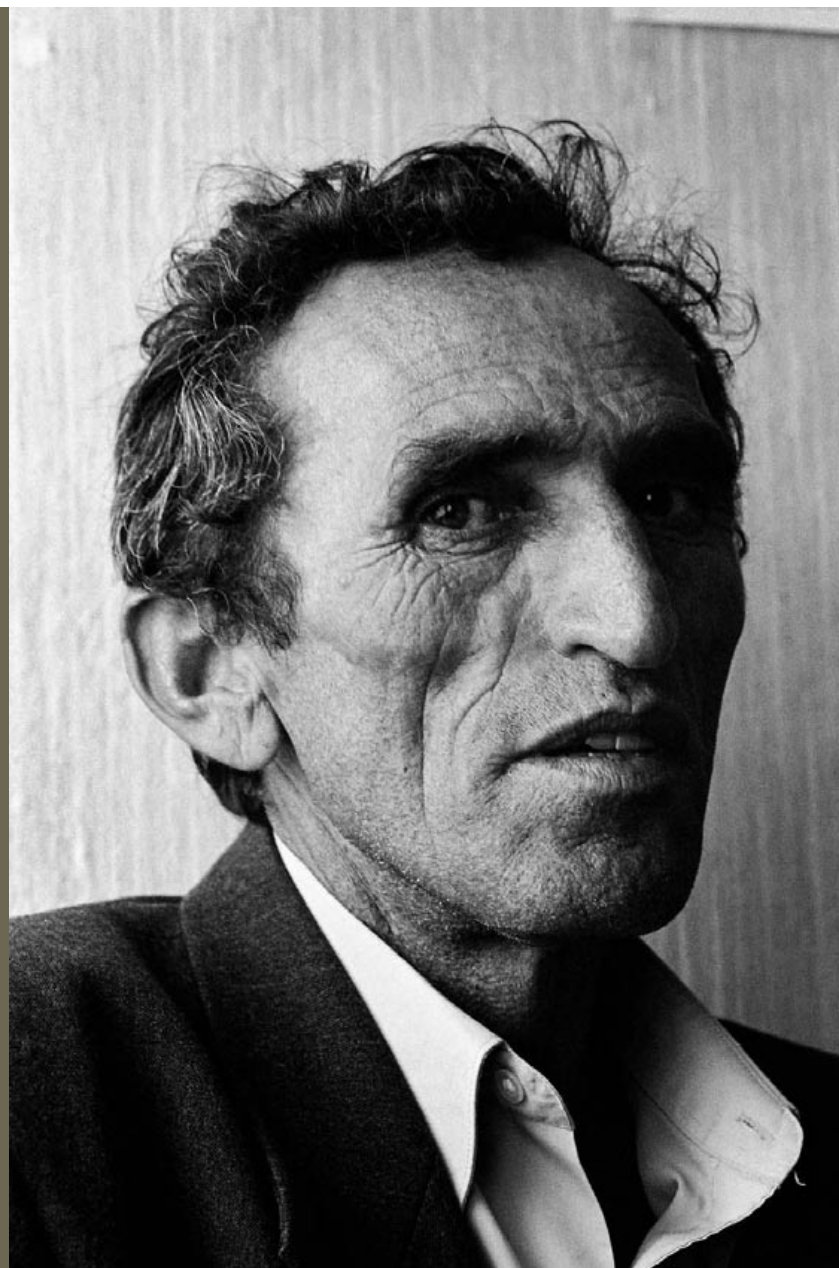
**RIGHTS WATCH FIELD REPORT ON GLOGOVAC**  
Fred Abrahams, senior researcher

"Serbian police and Yugoslav military operations against Glogovac's surrounding villages began almost immediately after March 19, 1999.

"At least five — and as many as nineteen civilians — were reportedly executed by Serbian police and paramilitary forces in the town. Glogovac's residents were repeatedly harassed by Serbian security forces and suffered detentions, beatings, house-to-house searches, robbery, and extortion. Some private homes, shops and businesses were deliberately ransacked, looted, and burned. Finally, the majority of the population was expelled from the town over a five-day period in early May and sent toward the Macedonian border."

*Facing page: This man claims to have survived the massacre of which around 40 men, on a lonely hillside outside of town. He was shot in the side and feigned death. He is about 40 years old in this photograph.*

*Below: Ibrahim Makolli speaks with a distraught father who still asks about his missing daughter at the local office of the Center for the Defense of Human Rights and Freedoms.*





*One Day's Work. (al-Musayib, Iraq, May 2003). Rows of shrouds hold bones and clothes of massacred Shi'ite muslims unearthed from a mass graves in the desert outside town.*

#### THE FAMILIES SEARCH

Saddam Hussein fell, and Iraqis began to look for the hundreds of thousands of family and tribe who disappeared during thirty years of the despotism. The survivors drove from grave to grave, checking each exhumed pile of bones and clothing and scanning the lists of recovered identification cards. Iraqis organized to sort through the millions of looted and scattered documents in police buildings all over the country, reams of paper that occasionally hinted at who was disposed of where, and how.

One young woman returned from 20 years in Switzerland to sort through the lists at the Association of Freed Prisoners in Baghdad. She was looking for her kid brother, gone sixteen years. She stood with a list in her hand. She wondered what he is like now. A man said, "Stop pretending. He's dead, like all of them," and she bent over and dropped into her chair as though punched hard in the gut. Sixteen years of fear and grief released at once in this young woman, and she stumbled from the hall to the street outside, away from what was certainly the truth, that her brother was dead, like all of them.

*Frustration. (al-Musayib, Iraq, May 2003) The tears are of frustration, not discovery, as she searches through the hundreds of bones-filled shrouds for her relatives.*

*The Police Files. (Baghdad, Iraq, May 2003) A volunteer at the Association of Freed Prisoners pores through police files for information about missing persons at a former interior ministry office.*





(Xerxe, Kosovo, June 1999). This unidentified body was one of three corpses found in the bushes beside a vineyard near village of Xerxe. Whoever tipped the journalists about the bodies also said the men were Serbs.

### HUMANITARIAN INVESTIGATORS

Humanitarian investigators look for evidence of identity...

*Perhaps the murdered man I saw in the bushes near Xerxe had a wife, a mother, a father, a child. For them, he is not dead: He is missing. They don't know that he is dead, and they certainly don't know that I've seen his body – hands bound, half-stripped, with multiple gunshot wounds to the chest and face -- in the corner of a field in northern Kosovo. The passersby who found him and told me where to look for him had no idea who he was. There was no identification on his body. His wallet was stolen, as were the wallets of the two men who died with him. One of those men, I thought, would never be identified by his face: Most of his head had been shot off.*

*Even when bodies are mutilated, burnt or in an advanced state of decomposition, forensic investigators can sometimes identify the remains and inform families, conclusively, that their loved one is dead. Humanitarian organizations such as Physicians for Human Rights and the International Commission for Missing Persons employ forensic investigators for just this purpose.*

### CRIMINAL INVESTIGATORS

...while criminal investigators look for evidence of the crime.

But criminal forensic investigators – those employed, for example, by the International Criminal Court in the Hague – do not come to these scenes to help the families of the missing (except in the abstract). They come because this is the scene of a war crime. Their goal is not to determine the identity of the victims; it is to find evidence of genocide.

The criminal investigators are there, above all, to establish the ethnicity of the victim, and the victim's status as a civilian or combatant. Soldiers killed in battle, and even civilians caught in the cross-fire, are casualties of war, not victims of war crimes. But people who cannot be considered a threat -- prisoners, disarmed soldiers who have surrendered, and civilians off the battlefield -- are considered protected.

War crimes investigators are looking for evidence, such as blindfolds and ligatures, that the dead belonged to a protected category. They also look for to see if remains are of women and children (almost always non-combatants), or if there are injuries inconsistent with battlefield wounds, such as shots to the back of the head which suggest execution.



*Evidence of Execution. (al-Musayib, Iraq, May 2003) A body from the mass grave near Al-Musayib, Iraq, laid out in a shroud, awaits investigation by the Iraqi exhumation team. Many of the bodies in this grave were found wearing decayed blindfolds. Identity cards, military and civilian, were found with the victims; the names and addresses on the cards indicated that the dead were Shi'a Moslems. Some of the victims carried the picture or name of Ali, the martyred founder of the Shi'a sect of Islam.*

### THE CONFLICT BETWEEN HUMANITARIAN AND CRIMINAL INVESTIGATORS

War crimes investigators do not have unlimited time or money, and must focus on the kinds of evidence needed to establish their case – evidence such as the general condition of the bodies in al-Musayib. They are not chiefly concerned with individual identifications, unless those are needed to prosecute a specific crime. So the investigators may give low priority to preserving evidence, such as individual identity cards, that could lead to the conclusive identification of a particular body. A criminal investigation does not require that bodies be kept intact, nor that bodies be stored with the items found with them, such as clothing and jewelry.

This is a common problem in war crimes investigations, where the constraints of time and money frequently compel investigators to take shortcuts. The UN Missing Persons Unit in Kosovo often recovers nothing but body parts after the war crimes investigators have finished with them. In one case, they found parts tossed together in a rotting cardboard box marked "Disassociated Body Parts." At the reburial site near Drenica, I discovered scattered finger bones, a tennis shoe, a pair of pants, a belt buckle. Artifacts like the pants or buckle are often recogniz-

able by family members and might have led to an identification. Separated from a body, they are worthless.

Thus the investigation of a war crime may, ironically, cause further suffering to the victim's family, ensuring that they will never conclusively determine their loved one's fate.



## CONTEXT, MYTHS, AND WITNESSES

Bill Haglund, forensic anthropologist

*Forensic anthropologist Bill Haglund, the leading forensic investigator for Physicians for Human Rights, has served as an adviser to the International Criminal Tribunals for Rwanda and the Former Yugoslavia. He has directed forensic missions in Cyprus, East Timor, Guatemala, Honduras, Indonesia, Rwanda, Somaliland and Sri Lanka.*

Haglund stresses the critical importance of the context of remains. Only when that context is properly interpreted, then connected to witness testimony, can an accurate portrait of the circumstances of the victims' death emerge. If a grave is exhumed without experts present, he says, the context is often misunderstood. Rumors and myths circulate, becoming accepted as truth.

Haglund recalls, for example, the confusion of untrained observers when a gravesite at Brcko, Bosnia, was exhumed in 1997. The victims

were found in a jumbled heap, with their arms and legs intertwined. Haglund says this is quite common; often it is impossible to extract one body without removing 10 or 15 more at the same time. But one body was found standing straight up. Seeing this, locals began to speculate that the victims were buried alive.

The standing man wasn't buried alive. Haglund immediately understood that the body was erect because it was dumped in the grave while in rigor mortis. Propped upright by the other bodies, it stayed erect rather than collapsing. Then it was covered with soil, and preserved in that position. Victims who had been shot in the grave, or buried alive, would have been horizontal. Because forensic investigators were at the scene, they were able to dispel these particularly agonizing rumors.

A body in an upright position probably died only hours before burial. In this case, as it happens, the dumping of the bodies was photographed, famously, by a Serb photographer. Haglund knew from the date of the photograph exactly when the bodies were dumped, and knew from wit-

ness testimony who the men dumping the bodies were. The position of the upright man led him to believe that the men dumping the bodies were also the killers, or closely connected to them.

If brought to trial, the accused will probably claim that they simply found the long-dead bodies and decided to bury them. But by establishing that at least one of the men was alive shortly before he was buried, Haglund can demonstrate the unlikelihood of this account. Knowing that the victims died shortly before they were buried also helps to establish their identity: It suggests they were from the area.

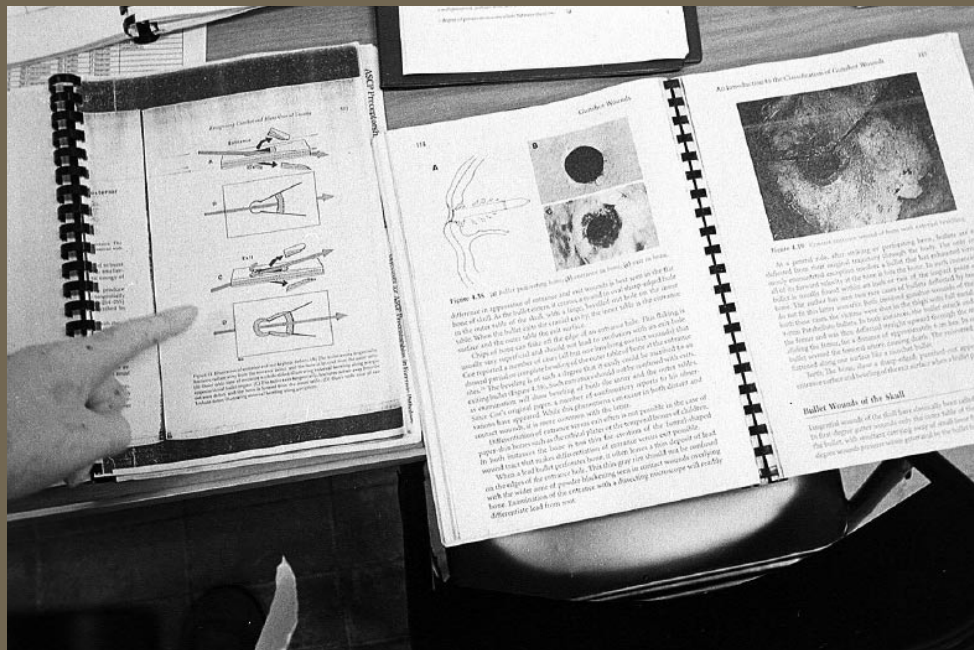
If someone with Haglund's expertise is present at an exhumation, it vastly increases the chances that the victims' identity and fate will become known to their loved ones.



*The Evangelist. (Erbil, Northern Iraq, September 2004) Bill Haglund lectures on the importance of identifying the missing, at a meeting in Iraqi Kurdistan.*



*The Morgue. (Orachovac, Kosovo, June 2002) The morgue is a simple set up, with a few zinc tables, an x-ray, and an easy-to-wash floor.*



*The Detectives' Handbook. (Orahovac, Kosovo, May, 2002) A forensic investigator at the morgue in Orahovac, Kosovo, points to an image from a textbook on gunshot wounds. Investigators try to match the injuries they discover to witness accounts of the way victims died. This allows them to corroborate any witness testimony, another clue to identity. It also allows them to provide relatives with more accurate and detailed information about the victim's death.*

#### FROM BONE TO MAN Orahovac Morgue, May 2002

It took all day to assemble the dirty bag of bones the exhumation team brought in.

The body bags are stacked up by the door, and no one can stand near them. The death stink from the bags is a sharp, sweet prickly smell that is clearly sharper the closer you stand. The smell of death causes anxiety in people and animals, so as you get closer, it feels much stronger than it is. The whole room has the smell, and while you can get used to it, you do not cease to notice it.

The simplicity of the examination room always strikes me. I expect a place that deals with such serious matters to have more mystery — at least, more beeping machines and shiny sharp tools. Instead, there are plain zinc tables with drains, scrapers and tweezers, a handheld bone-cutting saw, and a home-made plexiglass contraption for measuring thigh bones. There is a ruler to show scale in the forensic photographs, and there is a thin, candy-cane shaped plastic stick for finding a bullet's trajectory. The fanciest device is an x-ray machine in the next room. The rest is common kitchenware.

It could be a artist's home studio, or a nursery, except for the skulls and the stench. This is CSI Kosovo, but there is no need for microscopes or chemistry kits or spectroscopes.

Marek slices open a bag on a table and pulls out the bones to wash. He scrubs away the last remains of the flesh with a plastic veggie scrubber and sets the bones to dry.

In the pants Marek finds a wallet. This bag had already been examined by war crimes investigators, as criminal evidence, but they hadn't bother to identify the body. Oddly, they either hadn't seen the wallet or didn't care enough to preserve it. In the wallet are a rotted card with numbers and paper with a telephone number. The forensic photographer takes a picture.

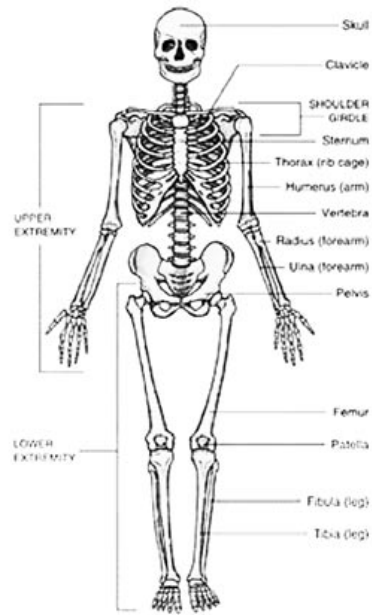
Marek turns back to the bones. He measures some, compares others to illustrations in various charts and records his analysis. Piece by piece, an estimate of the man comes together. A combination of measurements of the skull, clavicals, ribs, vertebrae, pelvis and teeth suggest his age. The long bones — femure, radius, ulna, tibia — give his height. Weight, sex, even any habitual activity (limping, heavy labor) show up in the skeleton.

(continued on page 32)



*Assembling the evidence. (Orahovac, Kosovo, May 2002) Forensic anthropologists Marek Gasior, from Poland, and Michael Warren, from Florida, work together to identify a body at the Orahovac morgue. Top left: They begin by scrubbing any remaining dirt and flesh from the bones. Top right: Gasior and his assistants determine the trajectory of the bullet that pierced the victim's skull. Middle left: A photograph of the jawbone is taken as evidence: Teeth are particularly useful for identification. Middle right: Gasior and Warren discuss the skeleton. Bottom left: Gasior begins the assembly. Bottom right: The ribcage is partially assembled.*





It's hard to say exactly how the man died, but the bullet hole through his head is suggestive. He was shot with a high-powered rifle, but not up close. Strange, says Marek, since he was clearly badly beaten. See the broken shin, the cracked ribs? Why not an execution-style, back-of-the-head shot?

There is some discussion in the room about this, a short break from analyzing the bones. Morgue banter is always about details. It is important to objectify the subject at hand, above all, to dehumanize those human remains. The skeleton is a thing to be analyzed, studied, explained. It is not wise to think of it as a person, or you might start thinking about exactly what happened, then how he felt and feared and cried, and that is simply too horrible to be thought.

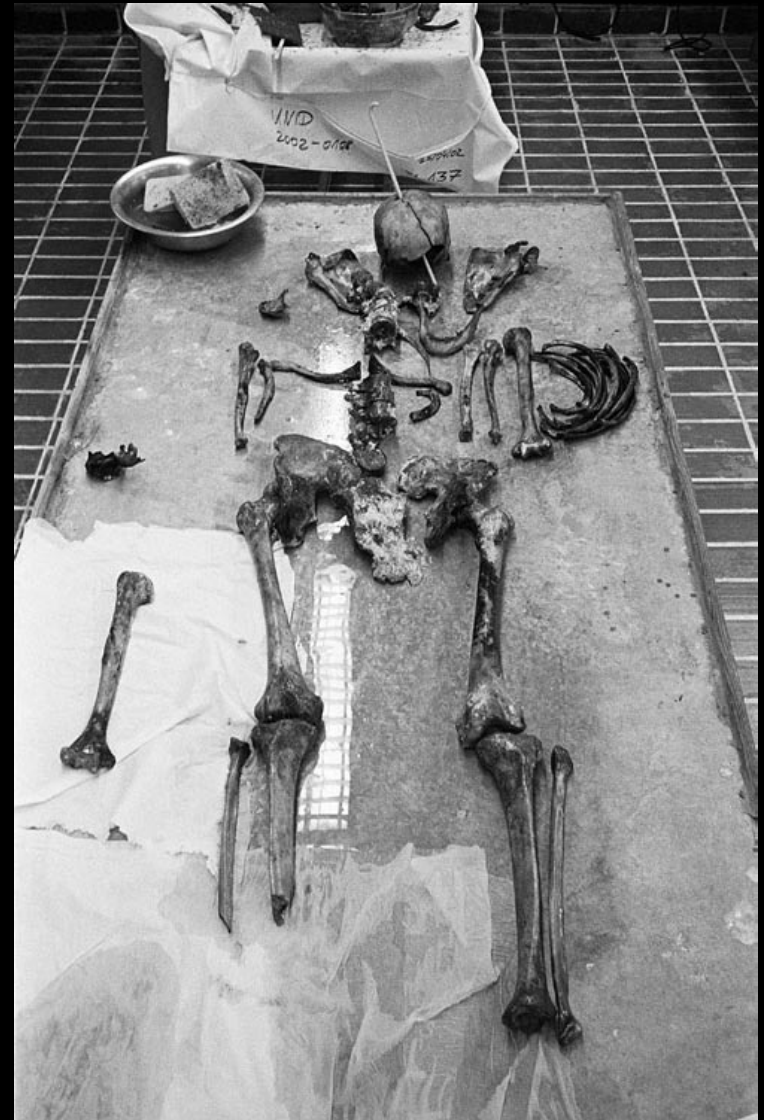
Marek returns to the bones, and when he is finished a man, less a few pieces, lies on the table. He is an older man, perhaps in his sixties, accustomed to manual labor, right-handed with a slight limp. His hip hurt when he walked, and he probably used a cane.

At the end of the day, Marek gathers up the man and puts him in a cardboard box marked UNID-2002-042-3. The box is driven to a portable refrigerated storage unit outside town and set to wait on a shelf with the other unidentified remains.

#### THE BASICS OF SKELETAL ANALYSIS

*Forensic Anthropology Training Manual, Karen R. Burns*

- Age estimate
- Sex differentiation
- Racial identification
- Stature estimate
- Weight estimate
- Handedness, dominant side
- Trauma analysis
- Disease history
- Muscularity
- Evidence of habitual activity





Dental History. (Orahovac, Kosovo, May 2002). A basic dental history is one of the best ways to identify a body, and even one distinctive tooth might be the clue to identify. Often, teeth are lost because the bones are not properly handled. For example, the skull must be picked up upside-down, so the teeth don't fall out.

#### COMMENTARY

Bill Haglund, forensic anthropologist

In the countries where you don't have dental records the only thing of the skull that family see is a smile. The skulls seem to smile, the curve of the mandible mimicking the rise of drawn lips. They don't see a skull, they see the smile of that person, their memory of that person's smile. Maybe he had a chipped tooth. A missing tooth. A diastema, a space between the front teeth, or a tooth is missing, or a tooth is rotated, or a tooth chipped, or a tooth that's miscolored, or a tooth that is out of alignment in some sort of way. People notice those kinds of things.

If they can explain these things to you, independent of looking at the skull, then these are the kind of things you can look for.

For instance, in Cyprus, when we ask our ante-mortem questions, we have drawings of teeth, and the drawings of teeth depict these kinds of things. I just happened this cranium that was there, and the sister was there, and she doubted it was [her brother's] cranium. She had this smile. I saw she had this retained, deciduous baby tooth, and her brother had the same thing, and I said See, look at that tooth, you know that tooth you have, that's the same. And she starting thinking, and that's what turned her around.

Tools of the trade. (Orahovac, Kosovo, May 2002). A bone drill in the Orahovac morgue is used to take samples from thigh bones for DNA extraction. In Kosovo, as in Bosnia, investigators are building a DNA database to help identify the missing.



A device for measuring bones in the morgue at Orachovac, in Kosovo.

#### FEMORAL ANTHROPOMETRY

A sack of bones is not, by itself, evidence. The evidence must be extracted from the bones. From them, one can make a good guess of age, race, height, and even the health of the human whose bones they were.

Height can be guessed from the length of the femur, the thigh bone. One equation, Americans of northern European extraction, is

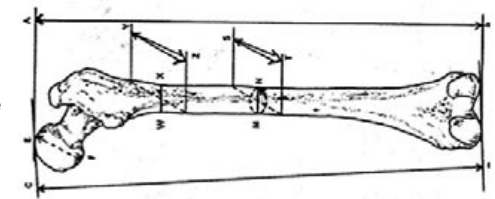
$$\text{Height (cm)} = 65.53 + (2.32 \times \text{length of femur}) \pm 3.94$$

The problem is, each population has different measurements. For example, Chinese-Americans stand somewhat like this:

$$\text{Height (cm)} = 72.57 + (2.15 \times \text{length of femur}) \pm 3.80$$

The more data there is on a population, the more accurately are the results. It's worth noting that when it comes to the kinds of people who tend to be murdered *en masse*, there isn't much data.

They are usually poor and rural, not prolific contributors to the studies that generate the necessary statistics for anthropometry.



A chart for determining height from various bones. These calculations change for different populations.

Bone	Male	Female
Femur	$81.305 + 1.880 \times \text{length of femur}$	$72.845 + 1.945 \times \text{length of femur}$
Humerus	$70.640 + 2.894 \times \text{length of humerus}$	$71.476 + 2.754 \times \text{length of humerus}$
Radius	$85.925 + 3.271 \times \text{length of radius}$	$81.224 + 3.343 \times \text{length of radius}$
Tibia	$78.663 + 2.376 \times \text{length of tibia}$	$74.775 + 2.352 \times \text{length of tibia}$

All lengths are in centimetres





*Bagging DNA Samples, January 13, 2005. Volunteers at Wat Yan Yao in Thailand bag and label bone samples taken from bodies for DNA testing.*

#### COLLECTING DNA IN THAILAND Wat Yan Yao, Thailand

From the beginning, it was clear that traditional forensic analysis would not identify most of the Thai tsunami victims. The dead were so decomposed — swollen and necrotized, the faces like rotten apple dolls — that visual identification was impossible, and with few hospital or dental records available for comparison there was little besides DNA matching that could identify them.

Initially, Dr. Porntip's team hoped to get the fragile nuclear DNA, the best for identification. They suited up in white bio-suits and worked their way through the rows of bodies which lay in the temple yard, kept cool in the sun by misty blocks of dry ice. The team sliced samples from the thigh, a thick, meaty muscle they hoped would not have been completely decomposed. It took three people to process one body: a sampler, a tagger, and a bagger, working in the sun and stench. They sent samples to Sorenson Genomics in Utah (the boxes were marked "documents" — "body parts" tends to attract attention at customs).

Nuclear DNA is easier to match with relatives' than mitochondrial DNA (mtDNA), but it is more fragile. The tropical heat caused accelerated

decomposition, and the cell nuclei were dissolved and contaminated. The samples were useless.

Starting over, the team decided to try for bone samples. The body carriers brought the bodies from the refrigerated containers and laid them in temple yard. Panda team found some garden shears and box cutters. From each body they snipped out a rib. Working quickly the teams could collect over 300 samples in a day.

Again, they found the nuclear DNA had decayed. Worse, no lab could extract the mitochondrial DNA until, six months after the tsunami, the International Commission on Missing Persons in Bosnia was engaged. With years of experience with the mass graves of Bosnia and Kosovo, they are experts at working with old bones.

The work has only begun. DNA from relatives must be found, sampled, and analyzed to begin matching.

**Opposite:** Tagging, Wat Yan Yao, January 13, 2005. A Thai volunteer tags a body with colored rope to indicate a DNA sample has been taken from it.

**Overleaf:** Bodies Awaiting DNA Sampling, Wat Yan Yao, January 12, 2005. Bodies of tsunami victims laid out in the temple yard await a DNA sampling team to snip a rib.

**Overleaf:** Hammering Tags, Wat Yan Yao, January 12, 2005. Thai soldiers hammer metal ID tags for the bodies to replace dissolving paper tags.



**NOTES ON FACIAL RECONSTRUCTION**  
**Dr. Luba Matic, David Gross, Patrick Noinoum**

**Physical Reshaping :**

1. Wash face with water and soap.
2. Massage the skin of the skull from the back of the skull toward the face, over the top, to undo the retraction of the skin.
3. Fill out cheeks, lips, eye sockets with cotton.
4. Shape the eyes. The eyelid retains its shape; gently pull the top eyelid to find the shape of the closed eye.
5. Replace any teeth that have fallen out, and straighten any that have moved.
6. Shape the lips so mouth is open from incisor to incisor. Leave the mouth open to show the teeth.

**Computer Retouch :**

1. Crop the face to a passport photo cropping, more or less. Leave the ID number.
2. Reduce size of image to 1600 pixels high.
3. New Technique To Remove Necrotization :
  - a. Open "Skin.jpg" or "Skin 2.jpg"...one is rougher
  - b. Use the 'healing' tool (J). Option-click in the middle of the skin picture
  - c. Switch to the face again. Duplicate the face in a new layer.
  - d. Now you can 'paint' with the healing tool, everywhere on the face.
  - e. Set opacity of new "cleaned layer" to about 70%, so some of the old layer shows through.
4. Fix shape of head, if loose skin or broken jaw
5. Remove scars, cuts, especially detached jaw
  - a. Use the 'healing' tool (J) to copy from clear skin over the cuts.

6. Eyes:
  - a. Best is to draw them closed, using the lower lid as a guideline. Add just a little over the lid since the tissue shrinks.
  - b. Patrick marks where they eyes are, judging by the inner and out join points, and the lower edge of the eyelid, then erases the eye ('healing tool'), then shades it to match skull contour and best guess
  - c. Draw by shading with the Dodging tool, to make it approximate, not too sharp.
7. Nose:
  - a. Dodge tool (O) in a thin line down the nose to bring it out
  - b. Lower the nose to match the skull if you can. This is usually one front incisor length above the front incisor.
  - c. Un-stretch nose, to reduce the angle it has been raised by nasal retraction.
  - d. Draw the shape of the nose based on what you have. Use a mask, and burn/dodge tools to draw the nasal-labial groove and wings of the nostrils.
8. Erase glove/hand, if it is holding the head
9. To colorize the skin:
  - a. Copy a flesh tone from a person
  - b. Make new layer
  - c. Paint a solid shape that covers the flesh with flesh color, then set mixing on layers to "Overlay"
  - d. LIPS: Get lip color from sample, color lips on color layer
  - e. GUMS: Use lip color.
10. Color method #2
  - a. Overlay a real person's face as a new layer
  - b. Erase the eyes.
  - c. Reshape to fit the subject's face
  - d. Set blending of layers to "overlay". Reduce opacity to about 80%.
11. Fix number:
  - a. If upside-down, make right. If dirty or hard to read, clean.



*Top: After washing and restoring the basic shape of the face, the team took a digital photograph.*

*Middle: The retoucher pasted on borrowed eyes (from a photo of a volunteer), and began to smooth the skin.*

*Bottom: Borrowed hair, restored lips, and some color make the face more realistic. The closed eyes are less distracting than open ones.*

*Far Right: The final face with open eyes. The long nose and large teeth are the most obvious features, and they match photos of the woman.*

*Dr. Porntip, the head of the Thai identification team at Wat Yan Yao, requested that Dr. Matic's team reconstruct of the face on the right. She was sure of the identity of the body, and she wanted to test the method. The trial was a success, the first. One of the volunteers saw the face on a retoucher's computer screen and said, "I know that woman!" She is Pawinee (Hnong) Pongchum, the editor of the newspaper, Bangkok Today.*



1.



2.



3.



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5.



6.



7.



8.



9.



10.



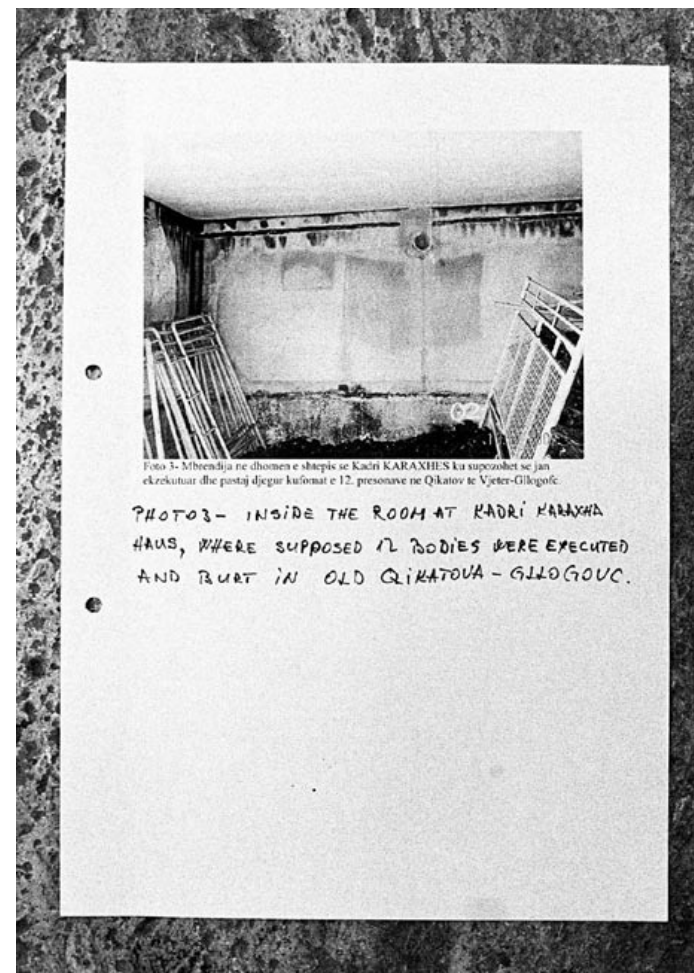
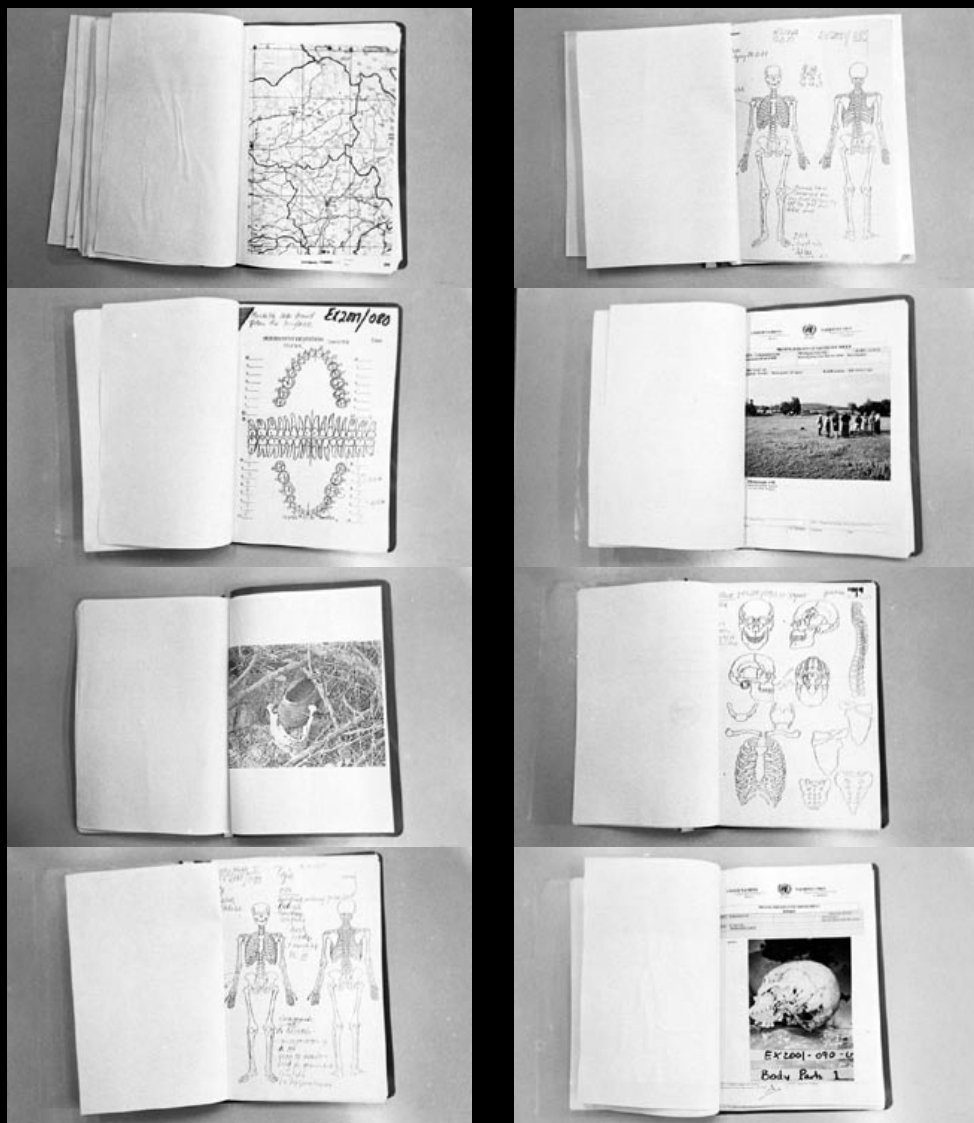
11.



12.

*Facial Reconstruction by Dr. Luba Matic, at Wat Yan Yao, Thailand, January 26, 2005.* 1. The body was stored in a body bag in cold storage for three weeks. However, decomposition has already destroyed most of the support structure of the face, and rough handling in the bag has further distorted the features. 2. After washing the face with soapy water and gently smoothing the skin, Dr. Matic starts to restore shape to the lips. He stuffs cotton into the cheeks and pushes the tongue in place. 3. Dr. Matic begins to separate the tissue to expose the Apertura piriformis, to discover the size, shape and position of the nose. 4. Lifting the nose, Dr. Matic points to the anterior nasal spine (Spina nasalis anterior), a small point of bone of the Apertura piriformis which indicates the base of the nose. 5. Pulling with forceps, he tries to lower the nose into place. 6. The skin has shrunk like wet leather (which it is, actually), so Dr. Matic has to massage and stretch the skin back down from the forehead, restoring the entire upper face.

7. Dr. Matic stretches the nose further, restoring the shape of the bridge. 8. He tugs the nostrils back into shape. 9. The most delicate operation is shaping the eyelids. There's almost no shrinkage, so Dr. Matic tries to bring the crushed upper lid back down to find where it lies when the eye is closed. He will do only the right eye, trusting the computer retouchers to rebuild the left one. 10. Dr. Matic works on the shape of the lips and cheeks. The corner of the mouth will be reworked by the computer retouchers. 11. The cheeks have lost the tissue which plumped them out, so he stuffs them with gauze. 12. Dr. Matic holds the finished face for the photographer, with the mouth only partially closed. The teeth are crucial clues to identity. The computer retouchers will work the face from this photograph.



(Pristina, Kosovo, August 2002) A photo in the files of the UN Missing Persons Unit (MPU) shows the basement of a home in Qikatova-Gillogovic where 12 men were executed and their bodies burnt. The MPU, established in Kosovo in 1999, locates mortal remains, identifies them, and returns them to the affected families.

OPPOSITE: (Pristina, Kosovo, August 2002) Pages from a file of the UN Missing Persons Unit (MPU).



(Peja, Kosovo, March 2002) Diggers working for the UN Missing Persons Unit in Kosovo remove a tombstone from a grave before exhuming the remains inside. The occupant is unknown, but not the one mentioned on the tombstone.

## SPECTATORS

Bill Haglund, forensic anthropologist

Grave sites are messy, and inexperienced observers may be upset by how casual investigators are with remains. In Honduras, Bill Haglund had to work with the community watching and found that part of his task, for both his sake and theirs, was to educate them about what he was doing.

There was a rustling in the crowd by the grave, a hint of rumor: the *Gringo* diggers were cutting up the bodies. Haglund and his crew worked on, unaware of the mounting anger and disgust until someone jostled him and said, they think you're cutting up the bodies. They're angry. Haglund looked behind him, and at the tree roots he was clipping away from side of the pit. Quickly, he took a few and approached the crowd. Here, he said, and showed them that the "fingers" were only roots. After that, he decided to show the families what his team was doing.

*The families sat all along the corner of the grave, and I explained just what they had seen all day. I pointed out where the head was on this one, and a hand was here we but we didn't know who it belonged to yet. [I explained] just why it was taking so long.*



(Peja, Kosovo, March 2002) Men gather to watch an exhumation near Peje while an Italian soldier guards the entrance to the site. In general, the United Nations police do not allow spectators, including relatives or neighbors.



(Drenica, Kosovo, June 2002) The exhumation team of the UN Missing Persons Unit (MPU) carries bags of remains to the vans for transport to the Orahovac morgue. The site, a graveyard, was used by an ICTY criminal investigation team after the war, in 1999. The bodies they examined were reburied here for future identification.

Normally, dead people are buried. Digging them up is a mystery that goes against the ordinary, and strange rumors can fly about when onlookers don't understand what they're seeing.

In general, Haglund's recommendation is that if civilians (including the media) are to be given access to a site, it should be tidied before letting them in.

*If you show them a grave that has nice even sides, right corners, the dirt is stacked neatly there, the impression that they leave with is, God! those people are really doing a good job, What I've learned through all these years is that you can do the most perfect job, but the impression...in that moment, that's the impression they're going to leave with.*

**NEXT PAGE:** (Orahovac, Kosovo, June 2002) Metal plates on rebar posts each carry a case number for the unidentified remains buried beneath i, in the reburial site near Orahovac, Kosovo. Hundreds of these posts dot the ground. Inside the graves the war crimes investigators have left bags of remains and rotting cardboard boxes with miscellaneous body parts.





## THE CAST OF WAR

Carolyn Nordstrom, anthropologist of war

Who comes to wars? The headlines scream rebel attacks and government offensives. Governments and the media simplify matters by talking about two sides, as if a war is a bigger version of a playground brawl. Perhaps that's useful for the casual morning newspaper reader, but to confuse the "two-player" description with reality is to completely misunderstand the nature of war.

Consider "the Serbs," a recently vilified people. Does the term refer to the citizenry of Belgrade, the Bosnian Serbs, the government of Serbia, the Yugoslav military, the Serbian interior ministry police, ex-criminal paramilitary thugs surreptitiously hired by the secret police, or Kosovar Serb farmers? All were involved in different ways, at different times and places. Some were merely witnesses, others violent actors. On the "Albanian" side, there are even more parties to the fight: Albanians of many different tribes, Bosnians, Arab *mujahadeen*,

the three main separatist factions of the Kosovo Liberation Army, Albanian gangsters, smugglers, and NATO, to name a few.

Even governments are heterogeneous, not homogeneous. There are divisions and factions, powerful parties and weaker ones. The boundaries of what is part of a government are not even clearly defined, since commercial, religious, criminal, and social interests may play roles, both officially and unofficially.

Carolyn Nordstrom, an anthropologist who studies war, sorts through the confusion by first looking for the *human behaviors* that one finds in wars. Instead of distinguishing historical forces, she asks: who are the participants, what are they doing, and what are their intentions? Her approach shows just how complicated wars are. The following are some common participants:

Different factions of the military • Splinter groups within military factions • Militias (true citizen paramilitary organizations) • Communist cells • *Al Qaeda* and other terrorist networks • Paramilitaries • Mercenaries. *Jihadi* and other ideological fighters and supporters • Civilians of various political factions, social and economic backgrounds • Women (as non-combatants) and children • Orphans • Child soldiers • Humanitarian aid organizations, foreign and internal, such as the UN, OSCE, USAID, International Rescue Committee, Human Rights Watch, Physicians for Human Rights • Religious groups, foreign and internal • Outside organized participants, such as foreign governments and ex-patriot communities • International arms merchants • Smugglers • Journalists • Diplomats • Military advisors • Human rights investigators • Anthropologists of war.

From top to bottom, by column:

Man who lost his family, Kosovo; Children in schoolyard, Kosovo; "Giggles" and KLA soldier, Kosovo

Iraqi Civil Defense Corps training; Ex-mercenary Marco van Eekeren, Kosovo; Photo-journalist Geert van Kesteren, Iraq;

Man in abandoned village, Macedonia; Mass grave, Iraq; "Ljuba Pas," Kosovo.





*Sue Black in Krushe e Madhe, Kosovo, at the site of a war crimes investigation.*

**SUE BLACK, O.B.E. B.S.C. PH.D. D.S.C.**  
**Professor of Anatomy and Forensic Anthropology**

Sue Black has been working with corpses since she was a teenage student of human anatomy at the University of Aberdeen in Scotland. A rodentophobe and unable to cope with the rat-based research required to studying anything but skeletons, she finished by specializing in the identification of human bones.

While lecturing in London, she began to work with the Metropolitan Police when they brought her a bag of bones to identify. She quickly identified it as a sheep skeleton, and this initial success brought her more cases. She started working with pathologists around London. Her job was to give the police identifying details about the deceased, such as race, sex, and age at death – the basics of forensic anthropology.

Black was fascinated by the mixture of crime and science. While most of her research at the time involved generic sex and age determination, a more macabre interest is suggested by the 1992 article, "An investigation into the cut marks produced by various saw types on human bone."

That same year, Black stopped teaching, unhappy with academia's emphasis on research over teaching. She went to work as a full-time forensic anthropologist. Her new occupation included assignments from the

Foreign Office, taking her to Grenada with the American FBI, to Sierra Leone and Kosovo with the UN, and to Iraq with the British Ministry of Defense.

Ten years later, Black was fed up with the war circuit, upset by what she saw as unethical and unprofessional behavior, including UN pressure to sign fake death certificates, bone samples taken without permission for someone's PhD thesis, and fights over funding and territory.

"The desperation and disillusionment caused by so many of our so-called professionals gets a bit hard to bear sometimes," she wrote, "and I find it easier just to try and not take part. Unfortunately, being a redhead and not afraid to speak my mind, some find that difficult to take. Ho hum!"

She has since returned to academia and is eager to teach again. She brags of creating the first training course in forensic anthropology in the UK at the University of Dundee in Scotland, where she is currently head of the department of Anatomy and Forensic Anthropology.

Nationality: British, born 7th May 1961 in Inverness, Scotland.

*Education: Inverness Royal Academy 1975-1978; Aberdeen University 1978-1987. Degrees: BSc (Hons) Human Anatomy, University of Aberdeen 1982; PhD Human Anatomy, University of Aberdeen 1987.*



*Bill Haglund visited Iraqi Kurdistan to help the Iraqis figure out a master plan for the many mass graves around Iraq. (September 2004)*

**WILLIAM HAGLUND, PH.D.**  
**Director, International Forensic Program, Physicians for Human Rights**

It is hard not to draw a connection between the fact that his mother's murderer was never brought to justice, and the fact that Bill Haglund is now one of the world's best-known death investigators and forensic anthropologists, a man who talks about "giving the dead a voice" and holding murderers accountable.

After a year living in a mortuary, the young midwesterner left for California where he earned his embalmer's license and put himself through college. By 1970, Haglund was married and living near Seattle, Washington, working as a death investigator in the King County medical examiner's office.

By 1982, Haglund was the chief medical investigator when the victims of the the Green River serial killer began to appear. His work on the case made him famous in his field, and the methods he pioneered prefigured his later work in mass graves around the world. In particular, the case required examining and identifying skeletal remains which had been exposed to animals and the elements.

Excited by his work with the bones, Haglund went back to school to get his PhD in physical anthropology. In 1993, he was sent to work the biggest criminal investigation of unidentified victims of mass murder

in the world: the graves of Bosnia in the former Yugoslavia. Haglund was a good match for the job. He had the scientific, technical, and managerial skills, and he had experience. It was the first of many.

By December, 1995, he had become a United Nations' Senior Forensic Advisor for the International Criminal Tribunals for Rwanda and the Former Yugoslavia, and since then he has organized and directed forensic missions in Guatemala, Honduras, Rwanda, Somaliland, Georgia/Abkhazia, the former Yugoslavia, Cyprus, Sri Lanka, Indonesia and East Timor.

The contributions that earned Haglund his professional accolades were in the catch-all field of forensic taphonomy, the name for discovering the complete history of a dead body. The problem was, given a skeleton found in the woods, scavenged and weathered — as in Green River cases — how does one go about examining it to figure out how and when she died, and who she is? Haglund tied together the many disciplines involved into a proper scientific techniques.

Having faced so many horrors, Haglund says "I don't think I'm callous, but I realize if that you don't maintain a distance, you can't do your job. I'm armored in some ways by my duties." But not completely. "I only talk about what I feel with my wife. Never with a therapist or anyone else. It's private," he says. "It's no one else's business."