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MENGELE'S SKULL

"In this absorbing study, Thomas Keenan and Eyal Weizman show how the politics of human rights was transformed by scientists who treated human remains as a form of photography and photography as a form of human remains. Exposed to all the details of a person's life like a very sensitive negative, bones were made to speak. Victims and victimizers could now reappear in the lab and take their place in court. The arrival of forensic aesthetics is the arrival of the articulate object. This object that speaks occupies the position of the witness, and in so doing inaugurates a whole new chapter in justice. This fascinating book asks us to reconsider how facts are constructed and opens a new and expanded landscape for thinking."

Beatriz Colomina, Professor of Architecture and Founding Director of the Program in Media and Modernity, Princeton University

"In what ways, Keenan and Weizman ask, can the physical remains of the dead be made to speak? In this lucidly focused text on the exhumation of the historical past, the authors identify a crucial shift in the ongoing work of justice for the victims of state violence and accountability for perpetrators. While avoiding any reductive conclusions, they persuasively insist on the importance of a critical evaluation of how forensic science, with its presumed expertise and 'objectivity,' is transforming the nature of evidence."

Jonathan Crary, Meyer Schapiro Professor of Modern Art and Theory, Columbia University



Mengele's Skull *The Advent of Forensic Aesthetics*

Thomas Keenan and Eyal Weizman

PORTIKUS



Mengele's Skull

The Advent of a Forensic Aesthetics

Thomas Keenan and Eyal Weizman

ON THE MARGINS OF
AESTHETICS, SCIENCE, AND LAW
Anselm Franke

Forensic aesthetics brings into view the way in which boundaries are currently drawn and stabilized, transgressed and shuttered. In practice, forensics is called upon after the fact: in the aftermath of conflict, crime, and violence, when limits have already been breached, fractured, violated, and are put to the test by ongoing crises that call for resolution. But forensics is not primarily concerned with justice; it is both before justice, as that which establishes the conditions for judgment, and that which happens in place of justice, when agents are no longer accountable. The borderland investigated by forensic aesthetics is one in which the categories of living and dead, subjects and objects, past and present are put into question. It is concerned with the technologies and protocols governing this borderland: its biopolitical containment and expansion, the representation of violence, the (re)construction of historical narrative, or the politics of proof manifest in entertainment and mass media. It is at this frontier that objects are brought to speak. In this sense, forensics is also a projective practice that constructs languages and spaces of agency. Forensic aesthetics accounts for this blurring of borders—a blurring registered by aesthetics—and also testifies to new sensibilities, describes new territories of action and agency, and critically reflects on the technologies of assessing, calculating, restoring, and redrawing those very boundaries.

This book was commissioned to instigate, rather than represent, an exhibition. In this curatorial experiment, Thomas Keenan and Eyal Weizman were asked to produce a book and Hito Steyerl was asked to respond to their text by creating a series of works. This process constructed a form of research within the margins of science, aesthetics, and law—an entangled set of circumstances from which we can examine these fields anew.

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Mengele's Skull

Mengele's Skull

The Advent of a Forensic Aesthetics

Thomas Keenan and Eyal Weizman

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For Cornelia Vismann



Skull believed to be that of Josef Mengele, as mounted for Richard Helmer's face-skull superimposition demonstration, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Detail from still from the film *Josef Mengele: The Final Account* (1998), directed by Dan Setton.

Mengele's Skull

The Advent of Forensic Aesthetics

It was an unusual coincidence, one which presented a difficult choice. Mossad agent Rafi Eitan described the missed opportunity to an interviewer from *Der Spiegel* almost fifty years after the fact:

In the spring of 1960, as we were planning the arrest of Adolf Eichmann, we learned that [Josef] Mengele was also in Buenos Aires. Our people checked out the address and it proved to be correct. [...] There were just 11 of us and we had our hands full dealing with Eichmann. After we had brought Eichmann to the house where we kept him until we flew him out, my boss at the Mossad, Isser Harel, called. He wanted us to arrest Mengele as well, but Mengele had left his home in the meantime. Harel said we should wait until he returned and then bring both him and Eichmann to Israel in the same plane. I refused because I didn't want to endanger the success of the Eichmann operation. [...] When our agents returned to Argentina, Mengele had moved out of his apartment and gone underground.¹



The empty plot of Mengele's grave in the Nossa Senhora do Rosario Cemetery in Embu das Artes, Brazil. Photo: Paulo Tavares and Eduardo Costa.

So Eichmann went to Jerusalem and Mengele remained in South America. The former was hanged in 1962 in a prison in Ramla after a celebrated and much-discussed trial, his ashes scattered in the Mediterranean.² The latter drowned in Brazil in 1979, having eluded all those who sought to bring him to trial. His remains, discovered six years after his death, faced a lesser-known process—a forensic analysis, undertaken by the world's leading pathologists. One faced a legal forum; the other a scientific one. But their cases share something important. Each one exemplifies, and in a certain sense *inaugurates*, a fundamental concept and practice within the politics and epistemology of war crimes investigations. Out of that missed opportunity two very different discursive operations were born, ones which went on to structure the work of humanitarian and human rights organizations for years to come.

As scholars including Shoshana Felman, Annette Wieviorka, and Geoffrey Hartman argue, and as becomes clear in the film *A Specialist* by Eyal Sivan and Rony Brauman, the Eichmann trial revolved essentially around the testimony of survivors.³ They claim it inaugurated nothing less than a cultural turn towards testimony—the speech of the witness, the first-person narrative of suffering or trauma—which came to be called the “age” or “era of the witness.”⁴ “Now for the first time,” writes Felman, “victims were legitimized and validated, and their newborn discourse was empowered by their new roles, not as victims, but as prosecution witnesses within the trial.”⁵

While Nuremberg prosecutor Robert Jackson had worried about the bias and faulty memories of survivors, and thus conducted the trials there primarily on the basis of the thousands of Third Reich documents that had fallen into the possession of the victorious Allied forces, Gideon Hausner, the prosecutor in the Eichmann trial, called upon the survivors of the

Holocaust as witnesses because the dramatic and emotional force of their testimony suited his conception of the trial as a form of historical and political pedagogy. In seeking, as he put it, not merely to convict the accused but to “reach the hearts of men,” he chose to create “a living record of a gigantic human and national disaster.”⁶

But the testimonies of survivors are not just transcripts to be read and interpreted, nor are they simply matters of positive truth, records of events as observed by those who were present. In their book *Testimony*, Felman and Dori Laub argue that it was often in silence, distortion, confusion, or outright error that trauma—and hence the catastrophic character of certain events—was inscribed.⁷ In her account of the proceedings in Jerusalem, Felman radicalizes this notion: the trial, she says, “gives legal space to the potential legal failings and shortcomings Jackson fears. It consciously *embraces* the vulnerability, the legal fallibility, and the fragility of the human witness. It is precisely the witness’s fragility that paradoxically is called upon to testify and to bear witness.”⁸

In short, this new political agency of survivors as witnesses was acquired not *in spite of* the fact that the stories they told were hard to tell, to hear, or sometimes even to believe, not in spite of the fact that they were unreliable, but *because* of those flaws. As Felman argues in her fierce critique of Hannah Arendt’s interpretation of the appearance of a particularly controversial witness on the Jerusalem witness stand, “The legal default of a witness constitutes a legal testimony in its own right.”⁹

* * *

The Mengele investigation opened up what can now be seen as a third narrative in war crime investigations—not that of the *document* or the *witness* but rather the birth of a *forensic*

approach to understanding war crimes and crimes against humanity. In the period coinciding with the discovery of Mengele’s skeleton, scientists began to appear in human rights cases as expert witnesses, called to interpret and speak on behalf of things—often bones and human remains.

But the aesthetic, political, and ethical complications that emerge with the introduction of the object in war crimes trials indicate that this innovation is not simply one in which the solid object provides a stable and fixed alternative to human uncertainties, ambiguities, and anxieties. Rather, as we will show, the complexities associated with testimony—that of the subject—are echoed in the presentation of the object. Human remains are the kind of objects from which the trace of the subject cannot be fully removed. Their appearance and presentation in the courts of law and public opinion has in fact blurred something of the distinction between objects and subjects, evidence and testimony.

If the Eichmann trial marked, as Wieviorka claims, “the advent of the witness,”¹⁰ then we will suggest here that the Mengele case constituted a parallel emergence of the “thing.” But each of these processes did more than introduce new forms of evidence—they did nothing less than shift the conditions by which that evidence became audible and visible, the way juridical facts were constructed and understood. So their respective innovations did more than affirm the forums in which they were presented, but altogether transformed them. The result of each of these processes went beyond the verdict—“guilty” in the case of Eichmann, “Mengele” in the case of Mengele. They inaugurated a new cultural sensibility, an ethics and a political aesthetics whose implications and influences quickly overflowed the boundaries of their initial forums and made their way from the juridical field to structure

the way we understand and represent political conflicts, whether in media, in political debates, in literature, film, or the arts.

* * *

The mid-1980s saw what amounted to a last ditch effort by various governments, as well as a range of private organizations like the Simon Wiesenthal Center, to track down and capture those former Nazi leaders who still remained alive. Concerning Mengele, everything seemed to come to a head in 1985. Early in February of that year, a special three-day international hearing was held at Yad Vashem in Jerusalem, led by Gideon Hausner and Nuremberg prosecutor Telford Taylor. They heard testimonies from about one hundred survivors of Mengele's experiments in Auschwitz, and concluded that "there exists a body of evidence justifying the committal for trial [of Mengele]."¹¹ The witnesses were readied as a legal case was built. At the same time, the US Attorney General announced that the Justice Department would begin an investigation to "compile all credible evidence on the current whereabouts of Mengele as well as information concerning his movements in occupied Germany and his suspected flight to South America."¹² But the accused could not be found. In May, anticipating the fortieth anniversary of Germany's defeat, the US, West Germany, and Israel unveiled a joint effort to find Mengele and bring him to trial for crimes against humanity.¹³ Obviously, time was running out for both witnesses and the perpetrator, who was widely believed to be living under military protection in Paraguay.

The break in the investigation came quickly. On the last day of May 1985, based on tips gathered as part of their own investigations, West German police raided a house in Mengele's

home town in Günzberg, Bavaria, and uncovered a trove of documents, including letters with coded return addresses, which pointed them to Brazil and to an Austrian couple named Wolfram and Liselotte Bossert. The Bosserts, who lived in São Paulo, told the Brazilian police that they had indeed sheltered Mengele and helped him assume a false identity. They also pointed investigators to what they said was his grave, located in the cemetery of a small town outside São Paulo, Embu das Artes. He had, they said, drowned at the beach resort of Bertioiga in 1979, and they had buried him under a false name, Wolfgang Gerhard.¹⁴



On June 6, the Brazilian police exhumed the body.¹⁵ The skeleton that emerged became the center of a major media event, with journalists invited to accompany the policemen who conducted the exhumation. Romeu Tuma, the chief of the federal police in São Paulo, standing over the grave site as the skull and bones were exhibited to the cameras, told the reporters there that Mengele "was well and truly dead."¹⁶ But, obviously, this statement was immediately contested. Not everyone was convinced that the bones were Mengele's. Israeli officials

Assistant coroner José Antonio de Mello displays bones to press photographers at the exhumation site in the Nossa Senhora do Rosario Cemetery, Embu das Artes, Brazil, June 6, 1985. Photo: Robert Nickelsberg/Time Life Pictures and Getty Images.

in particular, including Issar Harel, the retired head of Mossad who had overseen the Eichmann kidnapping and the aborted attempts to catch Mengele, were said to believe that “Mengele and friends who may be harboring him had acted after becoming alarmed by the coordinated campaign by the United States, West German, and Israeli governments to bring him to trial.”¹⁷

“We are not going to allow ourselves to be influenced by political or ideological feelings,” said Tuma the next day. “There are some who would like us to say he is still alive, and some who would like us to say he is dead.” José Antonio de Mello, the deputy coroner who had shown the reporters the skull, tried to lower expectations about the outcome: “It will be very, very hard to make a positive identification of the body as being that of Mengele.”¹⁸

Because of the difficulty and high stakes of this identification—Mengele was the last remaining Nazi war criminal of any significance still at large, and his death would effectively put an end to the era of Holocaust trials—leading forensic analysts from several countries came to the Medico-Legal Institute labs in São Paulo. Besides the Brazilian investigators, led by de Mello and forensic anthropologist Daniel Romero Muñoz, an official American team was dispatched, as well as a West German group. Israel’s senior Nazi war crimes investigator, Menachem Russek, was also present, although he did not participate in the exhumation or the examination, but rather acted as a skeptical observer. The Simon Wiesenthal Center sent its own group, including the legendary Texas-born, Oklahoma-based forensic anthropologist Clyde Snow.

The wide array of potential forensic evidence called for an equally diverse collection of professionals: analysts of handwriting, fingerprints, dental records and X-rays, photographs, documents, and clothing were all involved in the investi-

gation.¹⁹ The police chief told the assembled experts: “The Brazilian scientists will sign the final report, but we need your endorsement. [...] It’s up to you, as scientists, to make the final determination.”²⁰

* * *

At the center of the case were bones and the scientists competent to read them. Christopher Joyce and Eric Stover tell the story of the skeleton in three central chapters of *Witnesses from the Grave*, their account of the career of Clyde Snow and the emergence of forensic anthropology in human rights advocacy. Stover, then chairman of the American Association for the Advancement of Science’s Committee on Scientific Freedom and Responsibility, was a member of the Simon Wiesenthal Center team along with Snow, radiologist John Fitzpatrick, and medical examiner Leslie Lukash.²¹



In most forensic examinations of human remains, the primary questions asked of the bones are, “What happened? How did you die?” These questions set the traditional course of police investigations: the victim’s identity is known, and it is the cause of death that must be established in order to

ascertain whether a crime has been committed, and who might have done it. In São Paulo, however, the cause of death was not particularly pertinent; it was simply another event in a life full of events that were to be matched with the bone tissue on which they were registered. What mattered was to whom the bones belonged. The question asked of the bones was rather, “Who are you?”



To answer this question, investigators needed to reconstruct the events and effects of a life as it had been recorded or fossilized into the bones. The scientists who converged on São Paulo had before them what was known of Mengele’s biography—a timeline constructed out of documents, photographs, and medical records. Clyde Snow called his process of work on identifying human remains *osteobiography*, or the biography of bones. The bones, no longer the living human but not simply an object, bear the imprint of a lived life. Snow explained that the skeleton contains “a brief but very useful

Forensic pathologist Leslie Lukash examines photographs of Josef Mengele, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Photo: Eric Stover.

and informative biography of an individual [...] if you know how to read it.”²² The word “biography” tells us that what is of concern is not just the moment of death but the entire history of a life—a sequence of illnesses, incidents, and accidents, along with conditions of nutrition, labor, and habit—that is fossilized into the morphology and texture of bones. Snow described the process in a recent interview:

When we see bones on the table they are dead. But in the living body, the bone is a very dynamic tissue, and it is very responsive to stresses, occupational stress for example, sports, injury, other activities. We take that osteobiography, we compare it with our missing person. In that way we can gradually come down to eliminate more and more deceased until we identify the person we wanted to find.²³



This is, in fact, the process typically used to identify a missing person. And the Mengele investigation was conducted in much the same way as a missing persons investigation would be. In this sense, Mengele was just one more missing person in South America at a time when the whereabouts of all too many *desaparecidos* were being sought. And, ironically, it was

Forensic experts (from left to right) Clyde Snow, John Fitzpatrick, Daniel Romero Muñoz, and Leslie Lukash examine bones, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Photo: Eric Stover.

the Mengele investigation that helped consolidate the interdisciplinary process for the identification of missing people, a set of techniques and operations which has since restored the names and identities of thousands of bodies.

* * *

To the untrained eye, bones look similar—skulls are devoid of the expression and the gestures of a human face.²⁴ But the bones of a skeleton are exposed to life in a similar way that photographic film is exposed to light. A life, understood as an extended set of exposures to a myriad of forces (labor, location, nutrition, violence, and so on), is projected onto a mutating, growing, and contracting negative, which is the body in life. Like a palimpsest or a photograph with multiple exposures, bones can be quite complicated to interpret. But the analytic methods and scientific techniques that came to prominence in Brazil in 1985 allowed for what is inscribed in the bones to come, little by little, into focus.

The process of verifying the identification of Mengele was a patient and systematic reading of the bones, their tissue composition, their form, and their texture, against the background of the events of his life as it was on record. As the investigation unfolded, the reading moved closer and closer, bone by bone, to an identification: gender (male), handedness (right), height (174 cm), build (medium), “race” (“Caucasoid”), fillings and gaps in the teeth, fractures and accidents as reported in his wartime file and now visible on X-rays (of the hip, thumb, shoulder blade, and collarbone), and age at death (64–74 years).²⁵

As the investigation progressed, and the corroboration of the known facts and events of Mengele’s life with the traces left behind in the bones continued, hopes grew that, as one



Photographic comparison between known images of Josef Mengele and images of “Wolfgang Gerhard” found in the Bosserts’ Brazil home, annotated to find twenty-four matching physical traits. Photos: “Behördengutachten i.S. von § 256 StPO, Lichtbildgutachten MENGELE, Josef, geb. 16.03.11 in Günzburg,” Bundeskriminalamt, Wiesbaden (June 14, 1985); courtesy of Maja Helmer.

reporter covering the story from São Paulo put it, “the chances of making a certain identification” had “vastly improved.”²⁶

But absolute certainty was beyond the capacity of these scientists, and, moreover, of their field itself. Forensic anthropology, like every other empirical science, is a matter of probability. Every scientific article includes a note as to the balance of probability or the margin of error of its findings. The different questions asked of, and experiments conducted on, the skeleton were akin to a process of peer review in which each interpretation increases or decreases the balance of probabilities. (There could, of course, have been more than one European male of Mengele’s constitution, handedness, with similar injuries and diseases buried in Brazil at this time.)

Today, probability is generally understood as the measure of likelihood that an event will occur or has occurred. But, as philosopher Ian Hacking has pointed out, the term has both subjective and objective meanings. These meanings register something of the difference and the tension between human testimony and material evidence. “Subjective probability” has to do, Hacking explains, with evaluating the authority of witnesses—traditionally by social status, nobility, or wealth. In this sense, the term “probable” meant something like credible or approvable, appealing to authority or consensus; thus, as the eighteenth century was about to close, Hacking notes that Edward Gibbon could still write in his *History of the Decline and Fall of the Roman Empire* that “such a fact is probable but undoubtedly false” without feeling any contradiction. “Objective probability,” on the other hand, relates to the properties of the object or of a phenomenon under analysis. Starting in the middle of the seventeenth century, according to Hacking, the second meaning of the term started to displace the first.²⁷

In forensic matters, though, the two are continuously

intertwined and entangled, since no object appears in court without an expert to present it. The evidentiary value of the thing depends, at least in part, on the authority (probability) of the expert who publicly deciphers it, which is to say that the probability of a fact or an event is also a function of the probability of the expert. Could it be that subjective probability still haunts the object, that through probability the object escapes its full submission to determination? In the movement of the concept of probability from subject to object, the predicament that characterizes the witness, for better or worse (faulty memory and ambiguity, for example) now appears as the state of the material object as well.²⁸

For scientists and equally for lawyers, truth is measured as a position on a scale of probability. Terms such as the “balance of probability” or “beyond reasonable doubt” refer to decisions that relate to this calculus. Whereas science can simply note the measure of probability or its margin of error, law must render its judgment on the basis of relative uncertainty or fuzziness. Decision in law and in politics, if it is worthy of its name, cannot but be undertaken in excess of calculation; otherwise, judgment is simply a mechanical operation. Decision is necessary precisely because calculation cannot (and should not) provide a definite answer.²⁹

Decision relies on aesthetic operations—that is, on the way and order by which things and events appear to us. As Lorraine Daston suggests,

facts are often faint and flickering. They are the achievements of subtle investigations that must painstakingly stabilize evanescent effects or ingeniously combine several strands of evidence into a strong, weight-bearing cord. Above all, as their etymology suggests, [...] the most

interesting and useful facts are not given but made, artifacts in the best sense of the word.³⁰

The making of facts, then, depends on a delicate aesthetic balance, on new images made possible by new technologies, not only changing in front of our very eyes, but changing our very eyes—affecting the way that we can see and comprehend things. Aesthetics, as the *judgment* of the senses, is what rearranges the field of options and their perceived likelihood and cuts through probability's economy of calculations. The word *conviction* thus articulates the legal verdict with the subjective sensation of confirmed belief, of being convinced.

In Brazil, the decision—"Mengele" or "not Mengele," implying "dead" or "alive," "open" or "closed investigation"—revolved indistinguishably around a careful calculation of probability, and an aesthetic judgment: the one was not possible without the other. As Sheila Jasanoff explains in *Science at the Bar*—her survey of the relation between law, science, and technology—both science and law involve complex and controversy-ridden rules and regulations applied by judges, juries, or peer groups in the process of "constructing" and evaluating facts and evidence. In that sense, the scientific process is similar to a legal one. She shows how courts are often called upon in areas where empirical findings are inconclusive, claims are uncertain, contested, and fluid.³¹ Of course, science and law each have their own distinct procedures, elasticities, and rigidities in constructing their facts. Bruno Latour, on whom Jasanoff bases some of her observations, underlines that "the facts, contrary to the old age adage, obviously do not 'speak for themselves': to claim that they do would be to overlook scientists, their controversies, their laboratories, their instruments, their articles,

and their hesitant speech, interrupted occasionally by deictic gestures."³²

It was in such a lab, surrounded by all sorts of instruments of presentation and representation, machinery for reading and producing appearances, that the investigation of the skeleton from Embu unfolded.

* * *

Instead of the trial of a living person, as sought by the survivors and governments that had been looking for him, the process that led to Mengele's identification can be thought of as something akin to a "trial of the bones," undertaken not within a legal but a scientific forum, a laboratory that anticipated many a courtroom to come. In this forum, each scientific claim and process was checked and contested by peers, and finally reviewed by a public that needed to be convinced. Although this process did consider, patiently and sequentially, the events in Mengele's life, the "trial" was not aimed at judging the actions of Josef Mengele, but rather at verifying his identity.

It was as if an inverted version of a Dantean punishment, one that sees the sinners in *Inferno* castigated by being afflicted with the endless repetition of their own crime, was now inflicted on Mengele's remains. The skull of the phrenologist (whose 1935 PhD dissertation investigated "Racial Morphological Research on the Lower Jaw Section of Four Racial Groups")³³ had become the epistemic problem of actual science, and perhaps even the most handled, studied, and contested one of its time.

In framing the Brazilian investigation as a "trial of a thing," we do not mean to say that the scientific work was literally organized like a trial, but we have also not simply invented the idea by some sort of metaphorical extension. Without

suggesting that Mengele's skeleton was somehow subject to a verdict of guilt or innocence—as had been the remains of Pope Formosus, put on trial posthumously in the remarkable Cadaver Synod of 897 in Rome—the process to which it was subjected is not unrelated to the tradition of “trials of things,” which has existed as long as that of the trial itself.³⁴

The attribution of agency, and thus responsibility and liability, to things can be traced, according to Miguel Tamen, to ancient Greek law, where a class of Athenian judges “presided over the *prutaneion*, a special court in charge of cases brought against unknown agents and inanimate objects.” Tamen, who is concerned with the genealogy of the agency and communicative capacity of things, describes an incident in which a statue of Theagenes made after the athlete's death was beaten by one of his rivals by way of revenge, “until the statue, presumably upset, fell on him and crushed him to death. The statue was tried, convicted, and sentenced to be cast into the sea, though the Oracle later advised that it be reinstated to its previous site.”³⁵ In Tamen's scheme, these processes could take place because objects take on agency through their interpretation, speak by virtue of their “friends”—those people who gather around them and construe them. This gathering, a “society of friends” or of advocates, in a legal sense, constitutes a sort of forum for interpretation and debate, precisely because of “the epistemological problem [...] of being able to tell what counts as legitimate ‘communication’ of [an] object's needs” or claims, as Tamen argues.³⁶

Regarding the history of the analytical investigation of things, the practice of forensics was kept alive in the medieval period by people known as “devil's advocates,” experts appointed by the Church to argue against a candidate for canonization by searching for faults or fraud in the accounts of

miracles presented as evidence of sainthood. Although testimony was central, material examination, as Fernando Vidal shows, played an important role in the canonization process.³⁷ Witnesses often reported extraordinary events that they actually believed they experienced. These miracles were understood as divine interventions in the earthly realm; actions that went beyond the order of created nature— healings, visions, levitations—and tended to leave material traces. Their process of verification involved the examination of both living and dead bodies, sometimes even drops of blood, nails, and other carpentry details. It was in the slow evolution of the work of the devil's advocates that the meaning of probability shifted from the probability of witnesses to the probability of material phenomena.³⁸

* * *

Back in Brazil, the team of experts gathering in the little scientific forum around Mengele's skeleton accounted for different areas of expertise. “We had some members with different backgrounds,” Snow recalled. “But we overlapped so strongly in our knowledge that we could survey and conduct a kind of peer review process within our group, double-checking the findings and methodology of the fellow scientists.”³⁹ “After nearly a week's work,” Snow told Stover, “we were somewhere between ‘probable’ and ‘highly probable’ that the remains were those of Mengele.”⁴⁰

As we have suggested, law and science have related but different methods for establishing facts, and they act differently in relation to probability. Public opinion itself has another decision-making calculus. The task of these scientists was to convince not only themselves about the identity of the remains, but also government lawyers and criminal investigators, as well as—and this, they all felt, was the most difficult

of all—the general public, and mainly the survivors and their representatives, who wanted more than anything to see the living Mengele on trial.⁴¹

Forensics is, of course, not simply about science but also about the *presentation* of scientific findings, about science as an art of persuasion. Derived from the Latin *forensis*, the word's root refers to the “forum,” and thus to the practice and skill of making an argument before a professional, political, or legal gathering.⁴²

In classical rhetoric, one such skill involved having objects address the forum. Because they do not speak for themselves, there is a need for a translation, mediation, or interpretation between the “language of things” and that of people. This involves the trope of *prosopopeia*—the figure in which a speaker artificially endows inanimate objects with a voice. In discussing “giving a voice to things to which nature has not given a voice,” the rhetorician Quintilian writes of the power of *prosopopeia*: “to bring down the gods from heaven and raise the dead, while cities also and peoples may find a voice.”⁴³ This trope is at work whether it is a matter of the “speaking face of Nature” in Wordsworth, the US legal rulings that grant corporations the rights of persons (e.g., “freedom of speech”), or the Ecuadorian National Congress's decision to grant rights to ecosystems.⁴⁴ We are not referring to a “mistake” in any of these cases, but rather to an essential maneuver in an argument that, of necessity, passes by way of things.

Forensics involves, then, to a relation between three components: an object, a mediator, and a forum. Each of these categories is elastic or dynamic. Everything in these interactions is essentially contested, and nothing goes without saying. Because the object and its interpreter constitute a single interlinked rhetorical unit, in order to refute a statement attributed

to the thing it is necessary to dismantle the mechanisms of its articulation, which is to say, to show that the object is inauthentic, that its interpreter is biased, or that the communication between them is short-circuited. The object and its “friend” do not speak the same language, one could say, either because the expert misunderstands, or, more radically, because the so-called speech of the object comes entirely from its would-be advocate.

The forum provides the technology with which such claims and counterclaims on behalf of objects can be presented and contested. It includes the arena, the protocols of appearance and evaluation, and the experts. The forum is not a given space, but is produced through a series of entangled performances. Indeed, it does not always exist prior to the presentation of the evidence within it. Forums are gathered precisely *around* disputed things—because they are disputed. The “thing,” Latour says in an influential reflection on what he called *Dingpolitik*, is “the issue that brings people together *because* it divides them. [...] We don't assemble because we agree,” he says, “but because we are brought by divisive matters of concern into some neutral, isolated place in order to come to some sort of provisional makeshift (dis)agreement.”⁴⁵

Forums of international law exemplify this. Here the evidence often comes before—in both senses—the forums in which it is finally to be debated. Special tribunals for particular events are established after the facts of violence, and they assemble (themselves), so to speak, around the evidence. Forensics can thus be understood both as an archaeology of the very recent past, and also as a projective practice engaged in inventing and constructing new forums to come.⁴⁶ And when these forums already exist, the matters or issues that come before them can and sometimes do affect their very constitution, as they

reorganize themselves in order to accommodate new orders of testimony or evidence.

If the Eichmann trial effectively introduced the victim-as-witness to the stage of history, and changed the space of the law in the process, we see a similar transformation underway in the appearance of bones and other objects in the emerging human rights tribunals of the late twentieth century. What might be understood as the expansion of the forum is in fact its transformation. Forums are not fixed, even if they are sometimes consolidated within fixed institutional structures; they are dynamic and contingent, temporary, diffused, and networked by new technology and media. They emerge around found evidence; they flex, transform, sometime combine with other forums, while at other times they contract or simply come apart, burst, unravel before us.

* * *

In São Paulo, while a temporary international forum of scientists gathered around a skeleton on a table, another forum awaited them outside the laboratory, another space of representation and persuasion. In a manner that is not entirely obvious, but in retrospect appears to be absolutely essential for the work of persuasion to be accomplished, an image was necessary. And as it happened, the scientific labor itself concluded with, or was sealed by, the production of the very pictures which would later be required to make the case in public as well. Within, and in excess of, the work of calculation, an image emerged as the most persuasive evidence available.

This image was one whose technological conditions of existence had only recently matured at that time. It was created by a member of the West German team, Richard Helmer. Helmer was also an amateur photographer and had created



German forensic scientist Richard Helmer prepares the skull found at Embu des Arte, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Photo: Eric Stover.

techniques that merged photography (more precisely, a videography of photography) with the science of pathology.

To begin, Helmer rebuilt the skull, which had been badly damaged by the Brazilian police in their hasty exhumation. (Snow had told an interviewer on the ABC television program *Nightline* that “having a policeman dig up a skeleton is a little bit like having a chimpanzee do a heart transplant.”)⁴⁷ Once that had been done, Joyce and Stover report, Helmer could get to work on the images:

Helmer had perfected a video-imaging process called face-skull superimposition, in which a video image of a photograph is placed over a video image of a skull to determine whether the two are the same person. [...] In his laboratory at the University of Kiel, he had studied the topography of hundreds of skulls, much as an engineer might measure the vaults and arches of a cathedral, and reduced them to geometrical formulas. The result was a procedure for positively identifying unknown persons that had become admissible as evidence in West German courts.⁴⁸



Using these tables and formulas, Helmer enhanced the skull to add the thickness and shape of the face which had

Measurement of the dimensions of the skull believed to be that of Josef Mengele, Medico-Legal Institute, São Paulo, Brazil, June 1985. Courtesy of Maja Helmer.

disappeared with death. Using thirty separate pins, each secured with clay to the surface of the skull and tipped with a white marker at the point where the skin would have been, he recreated the missing contours. This allowed him to compare the skull and the photographs “to the closest millimeter.”⁴⁹

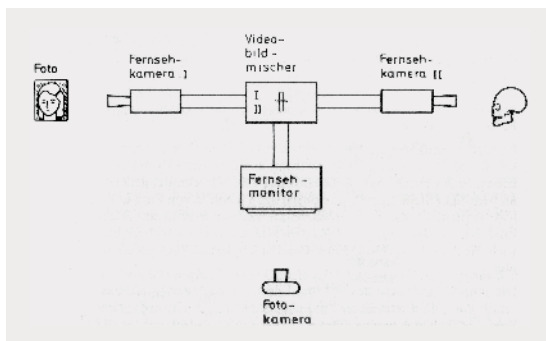
Snow said later that the technique employed by Helmer to mark the distance of the skin from the bone had a long history in Germany, starting with the identification of the remains of Johann Sebastian Bach in Leipzig at the end of the nineteenth century. Snow recalled that in 1894 the Church of St. Thomas in Leipzig wanted to find Bach's remains so that they could be properly memorialized. There were six likely skeletons. The anatomist Wilhelm His used, Snow said,

a technique that he had developed by conducting experiments on some fifty fresh male and female suicide victims. He chose around thirty points on a given head and would push in a simple needle until it touched the bone, marking the distance with a little piece of cork. [...] He then took those pins and applied them to plaster casts of the candidate skulls and then used those to provide contour lines over their surface to get a face in clay. This is how they decided on the one model of the face that most closely resembled a painting of Bach.⁵⁰

The formulas and tables which His constructed, the first to measure the distance between the skin and the bone, are still in use in many pathological institutes. Helmer built on this data and added to it his own measurements.

After pin-studding Mengele's skull, Helmer placed it on a special holding device. On another stand he positioned photographs collected from many periods of Mengele's life. The

photographs from his SS record, in profile and frontal view, were the most useful, but other images from Mengele's later life as a fugitive, including a number provided by intelligence agencies and others by the Bosserts, provided more recent material. The only thing relevant for Helmer, in what would otherwise be documentary or personal images, were what the photographs showed of the contours of his face, the skull under the skin. Helmer called the technique "Schädelidentifizierung durch elektronische Bildmischung," or skull identification by electronic image mixing.⁵¹



It was time to produce an image. Helmer mounted "two high-resolution video cameras [...] on tracks so that they could slide forward and backward," and focused one on the skull and the other on the photograph.⁵² The skull could be turned on its stand to match the angle from which the different photographs had been taken. The two television images were fed to an image processor, which displayed its output on a monitor. The image processor had several functions. It could overlay images coming from the two feeds, and it could generate horizontal and vertical split screens. As Joyce and Stover report:

Schematic diagram of the technical apparatus for skull-face superimposition. From Richard Helmer, *Schädelidentifizierung durch elektronische Bildmischung* (Heidelberg: Kriminalistik Verlag, 1984).



Helmer, now scientist turned cameraman, squinted into the viewfinder of one camera, bringing the skull into focus. He moved to the next camera and did the same for the photograph. He shuttled between the two, sliding them back and forth along their tracks until the two images of skull and face on the monitor were the same size. With the image processor, he superimposed the images over each other, lining up the flesh of the face [in the photograph] at each pinpoint with the white marker.⁵³

In the two dimensions of the television screen, and only there, the face-skull superimposition took place. From two image sources, one image was produced. As Helmer reported later in a medical journal article on the Mengele case:

With the exact positioning of the skull corresponding to the head position on the photograph in the electronic superimposition, complete conformity has been found to exist concerning all recognizable proportions of the head, face, eyes, nose, and mouth. The outline of the soft tissue layer model on the skull was congruent with the facial contours lying in the photographic plane.⁵⁴

Wilhelm His's head reconstruction based on a cast of a skull believed to be that of Johann Sebastian Bach. Photo: Ines Weizman.



Richard Helmer demonstrates the technical apparatus for face-skull superimposition tests. Stills from video tutorial, *Schädelidentifizierung durch elektronische Bildmischung*. Courtesy of Maja Helmer.

Convinced by the accuracy of the superimposition, Helmer presented the work to his colleagues. Joyce and Stover write:

The pin-cushion skull came into focus on the television monitor with the photo superimposed onto it. The sight was unnerving. It took a moment for the eye and brain to process the peculiar image. They were seeing a human as no one in life could, as if the skin was a ghostly film.⁵⁵



On the monitor, Helmer could control the superimpositions, dividing the face in half, wiping the screen of the photographed face to reveal the skull, and vice versa, substituting one photo for another across Mengele's life to demonstrate the permanent fit of the skull. A series of different functions within the image processor, in seems, could show Josef Mengele alternately dead and alive, half dead and half alive—a spectral presence—present and represented at one and the same time. The final illustration in Helmer's article on the case was almost comical: it showed Mengele's face at age sixty-five superimposed on the skull, in a way that made it look as if the skull were wearing a felt hat.⁵⁶ The match was perfect. The

Still from the film *Josef Mengele: The Final Account* (1998), directed by Dan Setton.

video image of the photograph was precisely imposed over the video image of the skull. It was a face wrapped over a skull, subject over object, an image of life over an image of death.

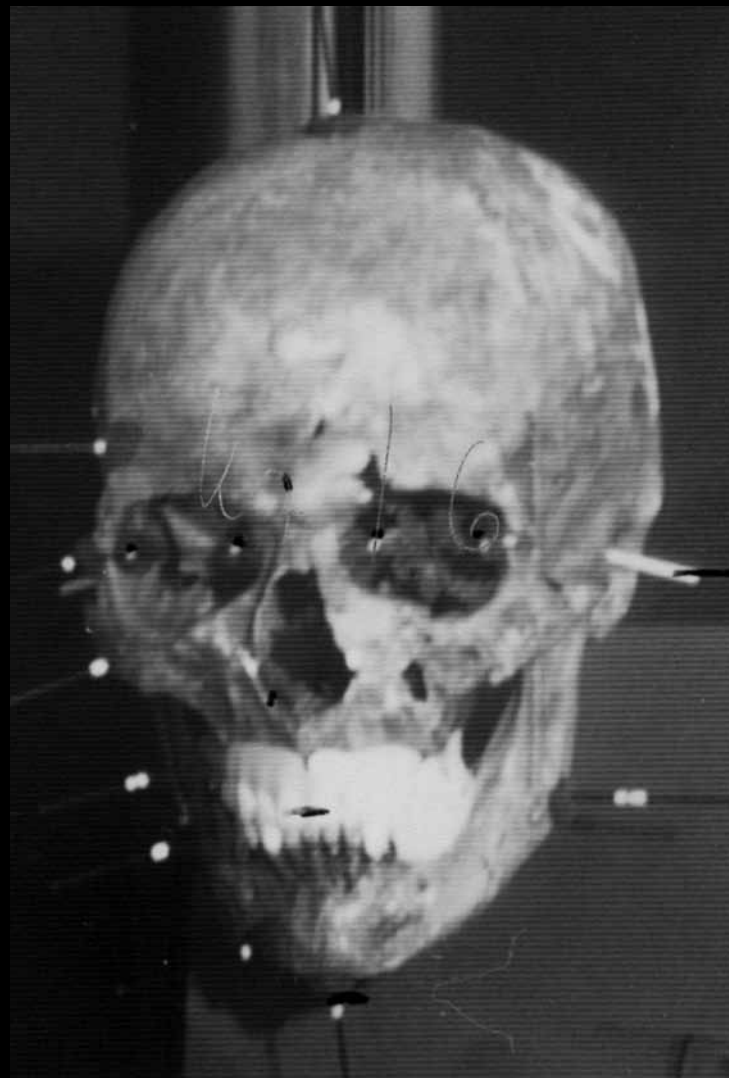


These were the missing images. While the results of Helmer's technique pushed the probability calculation further in the direction of a definitive identification, it also did more.⁵⁷ It was the appearance of a previously unseen image that produced the potential for conviction. At the press conference the following day, the forensic team presented their conclusions—"It is [...] our opinion that this skeleton is that of Josef Mengele"—and showed photographs of their methods, including Helmer's decisive superimpositions.⁵⁸ Ralph Blumenthal of the *New York Times* reported from what he called the "raucous news conference in federal police headquarters" that,

the international experts cited various bits of evidence in support of their conclusion. Most decisive, many agreed, was an innovative West German photographic comparison

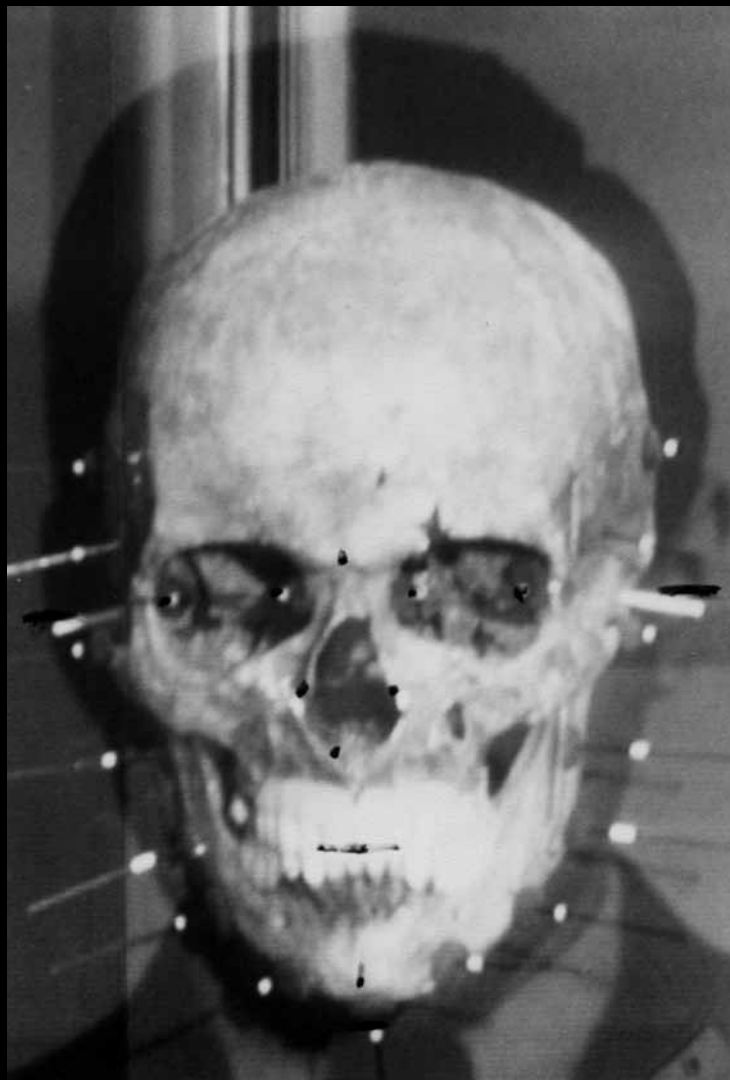
Richard Helmer (right) with Ali Hameli (left) and the skull of Josef Mengele, as prepared for face-skull superimposition demonstration, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Courtesy of Maja Helmer.

Following pages: Images produced using photographs of Mengele and images of his skull in Richard Helmer's face-skull superimposition demonstration, Medico-Legal Institute labs, São Paulo, Brazil, June 1985. Courtesy of Maja Helmer.

















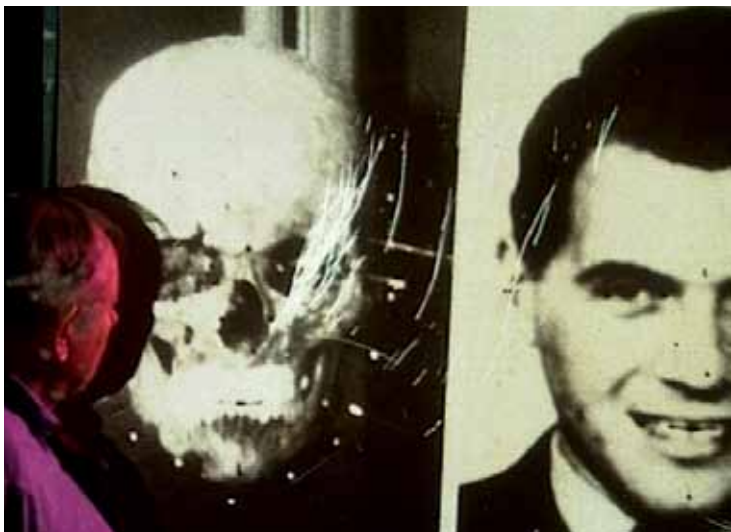
in which pictures of the exhumed skull were matched on a video terminal to known photos of Dr. Mengele from his Nazi SS file in 1938. "It was most convincing," recalled [US team member Ellis] Kerley, the Maryland anthropologist. "As we watched the monitor, we could see the upper half of the picture being replaced by the skull and we could see the contours of the skull in complete agreement with the face. Everything fit."⁵⁹



They also delivered a basic lesson in the status of scientific evidence and truth: asked how sure they were that the skull belonged to Mengele, US team leader Lowell Levine quoted their determination: "within a reasonable scientific certainty." "Realizing the ambiguity of the scientific term," Joyce and Stover say, "he added, 'That represents a very, very, very high degree of probability. Scientists never say anything is one hundred percent.'"⁶⁰

* * *

Above and overleaf: Clyde Snow shows television images from Helmer's face-skull superimposition test, and identifies distinctive features on a slide of Josef Mengele's skull in a presentation about the case, Oklahoma, 1995. Still from the film *Josef Mengele: The Final Account* (1998), directed by Dan Setton.



It was during the Mengele investigation that a variety of procedures and techniques in the forensic identification of human remains were professionally tested and publicly displayed, later to become available as methodologies in investigating war crimes and human rights violations. Snow credits the Mengele case with nothing less than the definitive crystallization of identificatory forensics: in it, he says, “a certain analytical method [was] effectively developed. [...] This process also set the procedural standards for much of the work that we’ve done since in large-scale investigations of war crimes and crimes against humanity.”⁶¹

Eric Stover thinks that the significance of the investigation was in the public exposure it gave forensic specialists. He reminded us in a recent conversation about the stakes of this investigation, and the sheer volume of exposure it received. It propelled forensic anthropologists, he says, otherwise rather obscure figures, into the global media spotlight: “This investigation was their ticket to stardom, there were cameras everywhere, even cameras trying to shoot into the lab.”⁶² The Mengele case marked their entry into an expanded public

Above (from left to right): Daniel Romero Muñoz, Richard Helmer, and Romeu Tuma, holding prints of the face-skull superimposition for reporters to see, São Paulo, Brazil, June 21, 1985. Video still courtesy of ABC News VideoSource.

domain that was soon to include—and had to find ways to deal with—many more skeletons and human remains: a domain that is not limited to courts and press conferences but today has made its mark in popular culture at large, with complex results.⁶³



Snow's trip to Brazil came immediately following the start of his work with the young Argentine anthropologists who would go on to become the Equipo Argentino de Antropología Forense (EAAF, Argentine Forensic Anthropology Team), the world's first professional war crimes exhumation group.⁶⁴ They were just beginning to investigate the remains of the disappeared from the junta, which had collapsed in the aftermath of Argentina's defeat in the Falklands War. As Snow tells the story, his bags were not yet unpacked from Buenos Aires when he was called to leave for São Paulo.⁶⁵ And from São Paulo he soon returned to Buenos Aires. "I brought some of the scientists who had worked with me on Mengele, including Dr. Fitzpatrick and Eric Stover, down from Brazil to Argentina. We organized courses for the students [...] so that we could develop a well-rounded approach beginning with archaeology and right on through the entire spectrum of forensic science."⁶⁶

Brazilian forensic expert Daniel Romero Muñoz displays the reconstructed skull of Josef Mengele at a press conference, São Paulo, Brazil, June 21, 1985. Photo: Robert Nickelsberg/Liaison.



The Argentine team would go on to conduct the first large-scale and systematic exhumations in the context of war crimes investigations, producing important evidence in the trials of the junta leaders and developing pioneering professional expertise in forensic anthropology. Snow himself famously testified in the first serious legal reckoning with the dictatorship, where the case of a disappeared young woman named Liliana Pereyra was central. As *People* magazine reported, "early in the five-month trial of nine junta members—five of whom were convicted—the prosecution called on Snow to present Liliana's case. His testimony was essential, since the six presiding judges had refused to consider homicide verdicts unless the victims' bodies could be produced and identified."⁶⁷

Later, the Argentine team would help disseminate this competence throughout other Cold War battlefields, especially in Guatemala and Chile, and then in Rwanda and the former Yugoslavia. In 1997, EAAF experts joined Cuban and Bolivian scientists to unearth and identify the skeleton of Ernesto "Che" Guevara, which had been buried in an unmarked mass grave after his capture and execution thirty years earlier;

Clyde Snow (center) holding Josef Mengele's skull, with Daniel Romero Muñoz (left) and a Brazilian colleague, Medico-Legal Institute, São Paulo, Brazil, June 1985. Photo: Eric Stover.

among the techniques used was a computerized-version of face-skull superimposition.⁶⁸ The gravediggers—including archaeologists, anthropologists, pathologists, radiologists, dental experts, bio-data technicians, DNA specialists, and statisticians of all sorts—working in international teams organized by NGOs or sponsored by the United Nations or international tribunals, started unearthing bones and turning burial sites into resources from which the details of war crimes could be reconstructed. Where there was a dispute around a war crime, the graves that had once simply been the space of memory became an epistemic resource.⁶⁹



* * *

This emergence of a forensic discourse within war crimes research—which is different from the traditional police detective work of searching for clues or reading the physical traces of a suspect’s actions—has occurred in parallel across a number of related fields. Today the bones and the flesh of victims

Final page of Richard Helmer’s report, “In dem Ermittlungsverfahren gegen den ehemaligen Lagerarzt des Konzentrationslagers Auschwitz Josef Mengele, geb. am 16.3.1911 wegen vielfachen Mordes,” dated Kiel, July 5, 1985. Courtesy of Maja Helmer.



Left to right: Lowell J. Levine, John J. Fitzpatrick, Ali Hameli (front), Leslie Lukash, Ellis R. Kerley, Clyde Snow, pose with Mengele evidence, São Paulo, Brazil, June 1985. Still from the film *Josef Mengele: The Final Account* (1998), directed by Dan Setton.



The front pages of Brazilian daily newspapers announced the results of the Mengele forensic investigation with photographs from Helmer's face-skull superimposition test, June 22, 1985. Courtesy of Maja Helmer.

and criminals alike have become a common epistemological matrix on which the discourses of the human sciences, law, and even popular entertainment increasingly draw.⁷⁰

In the 1980s, the nature of the type of the violation—forced disappearances—called for the kind of identification that science could provide within national trials and the work of fact-finding missions. In the 1990s, the emergence of a series of ad hoc international tribunals—the International Criminal Tribunals for the former Yugoslavia (1993) and Rwanda (1994)—followed by the permanent International Criminal Court (1998) required physical evidence, the *corpora delicti*, in order to supplement the work of testimony about genocide.

Contemporary war crimes forensics began in Brazil with the perpetrator-fugitive and in Argentina with the victims-disappeared. In a strange but clear sense, the Mengele investigation was structured just like the search for the missing. As we have suggested, Mengele was himself a missing person, if for very different reasons. It was methodological proximity that allowed the techniques developed for the former to suit the latter so well. For the forensic scientists seeking identification, the difference between a perpetrator and a victim is non-material, in the full meaning of the term. The skull of a perpetrator, like that of any of the victims exhumed from unmarked graves across Argentina, is simply made of bone tissue. The investigator always seeks the same answer, that of identity. The exhumation of Mengele thus placed the category of the missing beyond the ethical categories of victim and perpetrator.

When the victims are missing and no witnesses come forward, testimony in the ordinary sense cannot occur. Hence the force of some of Snow's figurative language, as when he told the reporter from *People* about his work in Argentina: "These people were murdered. Their bones are

their only witnesses. And only we,” he says, “can help them to be heard.”⁷¹ A different sort of evidence emerges in the place of the witness-survivor. If the camp has been constituted by contemporary theoretical discourse as the paradigmatic space of testimony, possible or impossible (think not only of Felman’s work but of Lanzmann’s *Sboab* and Giorgio Agamben’s claims in the *Homo Sacer* series: “the camp as nomos of the modern”), then the mass grave, as Adam Rosenblatt has suggested, is the site par excellence of forensics.⁷² This shift in location also marks a change of protagonist: from the survivor, the living but traumatized victim as witness, to the missing person, the disappeared, whose status—dead or alive—is still pending, and must be determined by science.⁷³



In international human rights law, an enforced disappearance occurs when a person is abducted or detained by a state or its agents, “followed by a refusal to acknowledge the deprivation of liberty or by concealment of the fate or whereabouts

The identification of the remains of Ernesto “Che” Guevara was established on the basis of the comparison of physical data, especially dental records, as well as the technique of face-skull superimposition. The Argentine Forensic Anthropology Team, together with Cuban and Bolivian scientists, performed the exhumation and analysis in Bolivia, June–July 1997. Photo: Patricia Bernardi/A. Incháurregui, EAAF.

of the disappeared person, which place such a person outside the protection of the law.”⁷⁴ This was the methodology of the dictatorships and military governments that ruled much of South America throughout the Cold War. As a crime against humanity, enforced disappearances are not subject to any statute of limitations today.⁷⁵ In the late 1990s, in the context of the legal actions against former dictator Augusto Pinochet, Chilean judge Juan Salvador Guzmán Tapia developed the concept of “permanent kidnapping,” whereby disappearances were classified as ongoing crimes in the present, renewed every day. The legal innovation was designed to render powerless amnesty laws which pardoned crimes that had happened between given dates or throughout the duration of the military regime—at least until the bodies could be found and identified, or until a record of their kidnapping and execution could be traced to the period covered by amnesty.⁷⁶ It takes evidence or scientific identification to close the file. But mis- or non-identification is only possible when identification technologies exist. The success or failure of the search for a missing person determines the legal status of the person in question, and thus his or her legal *agency*—either in helping to convict the accused, in the case of success, or in keeping the proceedings open, in the case of a failure to identify. Non-identification, or the inability to find a body, places the missing person in the ambiguous state of probably-dead-but-legally-alive, allowing prosecutors and investigators to keep legal processes open. In this sense, the missing person possesses a sort of ghostly agency, an immateriality that is not simply present but which nonetheless has effects, and even demands responses. Of course, when trials take place and verdicts are demanded, other forensic evidence must be presented by which the dead are identified. The agency of the missing person and the



In January 1988, a group from the Argentine Forensic Anthropology Team began the work of exhuming and analyzing the remains buried as N.N. (no name) in a 12-by-24 meter section annexed to the cemetery of Avellaneda, south of the city of Buenos Aires. This area was used by security forces between 1976 and 1978 to dispose of the bodies of disappeared persons. Photo: Stephen Ferry.

In the Quiché region of Guatemala, relatives gather in front of boxes containing exhumed remains, where indigenous people bore the brunt of the political violence, 1993. Photo: Luis Fondebrider, EAAF.

practice of forensics—in its successes and its limitations—are thus intimately connected.

The spectral image of the face-skull superimposition—in which the person appears as both alive and dead—captures some of the meaning of the figure of the missing person, a figure whose legal definition also bridges life and death.

But when examining war crimes—whether in the context of a trial, an advocacy campaign, or a public quest for the truth about what happened—it is not the individual skull that matters, no matter what violence might be registered in it. Although the individual, and justice for the individual, lies at the heart of human rights discourse, those who pursue crimes against humanity need to establish—as a legal or political matter—that the crimes do not simply concern this or that individual, but are in fact widespread and systematic. Thus patterns need to be demonstrated, and this requires a multiplicity of skulls and the gaps between them, as it were. Bones lead investigators to bullets, bullets to guns, guns to the soldiers or policemen who fired them, and the executioners to the officers and politicians who gave the orders.⁷⁷ Behind them, there are the ideologies, interests, fantasies, and organizations that animated the violence in the first place. Forensics is not about the single object in isolation, but rather about the chains of associations that emanate from it and connect it to people, technologies, methods, and ideas—the flexible network between people and things, humans and non-humans, be they documents, images, weapons, skulls, or ruins.

* * *

The blurring between life and death, objects and subjects, manifests itself everywhere within the discourse of and around forensic anthropology. The difference between a

witness and a piece of evidence might seem to be that evidence is merely presented while a witness is interrogated. However, the experience of forensic anthropology in the context of war crimes investigations seems to undo this distinction.

Clyde Snow speaks of bones in a rather flamboyant manner. He is himself a Hamlet-like character, rarely photographed without a skull. In court he sometimes poses questions to them but most often simply speaks on their behalf, or “tells their stories.”

Snow is a good scientist, and he certainly knows the difference between subjects and objects, but he has no fear of personification. “Bones make good witnesses,” he is famous for saying. “Although they speak softly, they never lie and they never forget.”⁷⁸ His prosopopeia is more than the typical gesture of anthropomorphism, though. This act of personification—the one that treats inanimate things as if they were humans—also renders them more than human. Humans, after all, do forget and they do lie. The object of Snow’s interest is not simply subjectified—it becomes something different, a sort of super-subject.

Isn’t it a rather big thing to ask of a bone, first, to speak, and secondly—when and if it does speak—not to lie? In Snow’s reflection on truth and speech, the difference between subjects who testify and the objects he presents—now treated as the super-subjects or haunted objects—is that it is only subjects who are prone to lying. As an expert witness with a point to make, it is of course not surprising that Snow would employ this figure of speech. Snow told *People*: “As forensic scientists, we’re the ombudsmen of death. We’re experts, but we’re not advocates.”⁷⁹ In this conception, the expert says: trust the bones, and me in reading them to you. Lying is quarantined as a human failing, and the truth identified as something self-

evident, lingering fossilized in the object. When it “speaks,” however softly, its discourse is no longer human. When this object is subjectified, it carries with it the objective truth.

The advent of a forensic aesthetics is, however, better understood in rather opposite terms—it is an arduous labor of truth construction, one employing a spectrum of technologies that the forum provides, and all sorts of scientific, rhetorical, theatrical, and visual mechanisms. It is in the gestures, techniques, and turns of demonstration, whether poetic, dramatic, or narrative, that a forensic aesthetics can make things appear in the world. The forums in which facts are debated are the technologies of persuasion, representation, and power—not of *truth*, but of *truth construction*.

* * *

In his *Trauerspiel* book, Walter Benjamin remarked on the almost inevitably allegorical function of the skull. For him it was not simply a material object, but seemed to bear the trace of a face, and hence to open up a sort of passage between life and death. Sometimes it even works in reverse, or in anticipation: the skull is already visible beneath the surface of the face. It was in this sense, which is, to be sure, rather different than ours here, that he could speak of the “incomparable language of the skull: a complete lack of expression (the black of its eye sockets) combined with the wildest expressions (the grinning rows of teeth)”⁸⁰ But if the skull was capable of language, it was only in exactly that impossible juxtaposition between expression and its void. It no longer speaks as a human speaks, but rather as a figure or a ghost, held up on stage, exhibited, spoken to and about; the skull for him was the “pre-eminent emblem” of the theater of mourning, the very route into “the homeland of allegory.”⁸¹

From time to time something new happens. We have looked at, however briefly, the entry of the victim as a witness into the forums of international criminal law, and then the emergence of physical or forensic evidence in the same sorts of venues. When this happens, the forum does not simply expand to include those things that were previously excluded and are now inside. The innovation transforms the forum, its protocols and order of visibility. Legal forums in which the voices of victims could be heard existed in a different space and time than those in which heads of state and military were tried primarily by reference to the documents that they themselves produced, as at Nuremberg. And a court in which bones exhumed from a mass grave are asked to speak, or one in which the absence and non-identification of a missing person is kept open, is not simply a more inclusive one. Something different appears; an altogether different sort of event unfolds, with different actors saying things that could never have been spoken before.

When skulls enter into the pale of the law, a transformation or even an invention has occurred. It was by no means obvious, or evident that bones and their scientific spokespeople should have a role to play in forums like this. For them to count, the forums themselves, their language and protocols, had to change. There was no simple ethic of universal access or transparent representation. Something which was not perceivable, which did not count, made its way into the domain of evidence and judgment, and in doing so had to alter the stage on which it appeared.

What did not constitute language previously then came to be heard and read. The scene bears more than a passing resemblance to what Jacques Rancière has called “disagreement” (*mésentente*): “Certain subjects that do not count create a common polemical scene where they put into contention the

objective status of what is ‘given’ and impose an examination and discussion of those things that were not ‘visible,’ that were not accounted for previously.”⁸² What happened? For Rancière, it is “political activity,” “whatever shifts a body from the place assigned to it or changes a place’s destination. It makes visible what had no business being seen, and makes heard a discourse where once there was only place for noise; it makes understood as discourse what was once only heard as noise.”⁸³

And this has to do with what we could call the *collapse* of the object/subject divide. We must thus briefly return to where we started: to the question of testimony, as Felman describes it in the Eichmann trial. At the heart of her argument is the example of the testimony of the victim-witness who refused to be identified by his given name and had adopted instead a generic name, K-Zetnik (“concentration camper,” or “campnik”). Refusing his individuality, and even his status as a denizen of the Earth, he chose rather to speak on behalf of a collectivity, that of the dead. “I do not stand alone,” he said. But the dead with whom he stood were not present in the courtroom: “thus it falls to me to be their mouthpiece.” This type of testimony posed too strong a demand, both legally and personally. Interrupted by the prosecutor and the judge, he fainted and was carried out of the courtroom. “On the frontier between the living and the dead, between the present and the past,” Felman writes, “he falls as though he were himself a corpse.”⁸⁴ Here, the eyewitness becomes something different in the moment of fainting. No longer able to speak, he is still a witness: “through K-Zetnik’s *legal muteness* [...] the trial inadvertently *gave silence a transmitting power*.”⁸⁵ For Felman, what counted as evidence in this war crimes trial was the fainting itself, the moment he crossed the line between a witness and mute body. Felman says that this crossing of the line was itself a testimony; she calls it “frontier evidence.”⁸⁶

Mengele's skull crossed the frontier as well, but in the other direction, and here too it was the very act of crossing that gave it agency. When the skull acquired a face in São Paulo, another border was breached and another sort of actor emerged.

This is not to say, it should be clear, that the "problems" of the witness—contradictions, memory loss, blackouts—are overcome when the thing appears in court. The object is not simply "objective," in the way that enthusiastic lovers of certainty might have us believe. There are no rocks to kick, as Latour would say, only new arguments to make and new materials in dispute.

That objects and things have begun to appear in the context of war crimes investigations does not simply mean that we have acquired better seeing or listening skills, or that the forums of discussion have been liberally enlarged. The very entry of bones and other things into these forums has changed the meanings and the practices of the process itself.

If what might seem like a mere expansion is in fact a transformation, then the shift also implies a blurring. The shift in focus from the living to the dead, from the witness to the bones or the missing person, from memory and trauma to a forensic aesthetics, also erodes the otherwise clear distinction between subjects and things. Human remains are, as we have seen, the kind of things from which the trace of the living subject cannot be easily erased—it lingers and haunts it. Bones are thus different from other forms of evidence, but Mengele's skull is no different than other bones. When it made its appearance, on the stand and on the screen, as object and as image, it became a hinge, and on it our political aesthetics turned.



Clyde Snow presents evidence gathered by the Argentine Forensic Anthropology Team (here, a slide of the skull of Liliana Pereyra) during the trial of members of the Argentine junta, Buenos Aires, April 24, 1985. Photo: Daniel Muzio/AFP Getty Images.

1. Rafi Eitan interviewed by Christof Schult, “We Could Have Killed Mengele: Interview with Mossad Agent,” *Der Spiegel*, August 9, 2008, accessed August 8, 2011, <http://www.spiegel.de/international/world/0,1518,576973,00.html>. See also Ralph Blumenthal, “Israeli Tells How He Tracked Mengele in ‘62,” *New York Times*, June 12, 1985, A1; and the thorough account in Gerald L. Posner and John Ware, *Mengele: The Complete Story* (London: McGraw-Hill, 1986), 133–47.

2. See Hannah Arendt, *Eichmann in Jerusalem* (London: Penguin Books, 2006 [1963]); and Harry Mulisch, *Criminal Case 40/61, the Trial of Adolf Eichmann: An Eyewitness Account*, trans. Robert Naborn (Philadelphia: University of Pennsylvania Press, 2005).

3. Shoshana Felman, *The Juridical Unconscious: Trials and Traumas in the Twentieth Century* (Cambridge, MA: Harvard University Press, 2002); Annette Wieviorka, *The Era of the Witness*, trans. Jared Stark (Ithaca, NY: Cornell University Press, 2006); Geoffrey Hartman, “Learning from Survivors: The Yale Testimony Project,” in *The Longest Shadow: In the Aftermath of the Holocaust* (Bloomington: Indiana University Press, 1996), 133–50; *The Specialist: Portrait of a Modern Criminal*, directed by Eyal Sivan (Montparnasse: Moment!, 1999), and the book that accompanied it, *Eloge de la désobéissance* (Paris: Le Pommier, 1999).

4. The phrase “era of testimony” comes from Shoshana Felman, “In an Era of Testimony: Claude Lanzmann’s *Sboab*,” *Yale French Studies* 79 (1991): 39–81.

5. Felman, *The Juridical Unconscious*, 126–7. Or as Hartman writes, “In Adolf Eichmann’s trial and, a generation later, in Claude Lanzmann’s film [*Sboab*], the witness of the victim finally occupied center stage.” Geoffrey Hartman, “The Humanities of Testimony,” *Poetics Today* 27, no. 2 (Summer 2006): 253.

6. Gideon Hausner, quoted by Felman, *The Juridical Unconscious*, 133. Likewise, Eyal Sivan argued that, “the staging of the Eichmann trial, like the decision to film and record it in its entirety, aimed to place the viewer in direct and immediate contact with the survivors’ harsh testimony. The origins of this decision lay in the desire to reflect, in the optical sense of the word, the horror experienced by the victims.” Eyal Sivan, “Archive Images: Truth or Memory,” in *Experiments with Truth: Transitional Justice and the Processes of Truth and Reconciliation*, ed. Okwui Enwezor, et al. (Ostfildern: Hatje Cantz Verlag, 2002), 281–2.

7. Shoshana Felman and Dori Laub, *Testimony: Crises of Witnessing in Literature, Psychoanalysis, and History* (London: Routledge, 1992).
8. Felman, *The Juridical Unconscious*, 134.
9. *Ibid.*, 131 and 143. The discussion of Arendt's text comes at 223. On the question of testimony as an ethical rather than an epistemic category, see especially the work of Michal Givoni, "Beyond the Humanitarian/Political Divide: Witnessing and the Making of Humanitarian Ethics," *Journal of Human Rights* 10, no. 1 (2011): 55–75; "Witnessing/Testimony," *Mafte'akh* 2 (Winter 2011), available at <http://mafteakh.tau.ac.il/en/issue-2e-winter-2011/witnessingtestimony>.
10. Annette Wieviorka, "The Witness in History," trans. Jared Stark, *Poetics Today* 27, no. 2 (Summer 2006): 389.
11. Thomas Friedman, "Jerusalem Listens to the Victims of Mengele," *New York Times*, February 7, 1985, A1.
12. Leslie Maitland Werner, "U.S. Launches Investigation of Mengele Case," *New York Times*, February 7, 1985, A13.
13. Ralph Blumenthal, "3 Nations Joining to Hunt Mengele," *New York Times*, May 11, 1985, A1; Leslie Maitland Werner, "The Mengele File: U.S. Marshals Join The Hunt," *New York Times*, May 28, 1985, B6.
14. Ralph Blumenthal, "Search in Bavaria Led to Exhumation," *New York Times*, June 8, 1985, A5; Alan Riding, [No Headline], *New York Times*, June 9, 1985, A1. See also the account in Posner and Ware, *Mengele*, 303–25.
15. Alan Riding, "Exhumed Body in Brazil Said to be Mengele's," *New York Times*, June 7, 1985, A1.
16. Alan Riding, "Man in the News; Key Man in Mengele Case: Romeo Tuma," *New York Times*, June 16, 1985, A1.
17. Moshe Brilliant, "Mengele's Death Doubted in Israel," *New York Times*, June 10, 1985, A5. Just months earlier, the *New York Times* had reported that "the principal Israeli police official assigned to the search for Dr. Mengele says that Israel has fingerprints, handwriting specimens, and photographs tending to prove he is living in South America." Henry Kamm, "Believed in South America," *New York Times*, May 8, 1985, A3.
18. Vincent J. Schodolski, "Old Bones Add a New Chapter To 'Angel Of Death' Mystery," *Chicago Tribune*, June 9, 1985, 1.
19. Ralph Blumenthal, "Evidence is Said to Point to Mengele Identification," *New York Times*, June 20, 1985, A8.
20. Christopher Joyce and Eric Stover, *Witnesses from the Grave: The*

- Stories Bones Tell* (Boston: Little, Brown and Company, 1991), 169.
21. The US team members are identified in William R. Long, "Brazil Photos Support Identification of Mengele," *Los Angeles Times*, June 21, 1985.
 22. Don Stewart, "Witness After Death," *Sooner Magazine* 6, no. 1 (Fall/Winter 1985): 4.
 23. Eyal Weizman, "Osteobiography: An Interview with Clyde Snow," *Cabinet* 43 (Winter 2011): 68.
 24. Snow, though, suggests that it is in fact possible to see the face even in the skull: "The skull underlies the architecture of the face. [...] Faces of people are different and one of the basic configurations of the person's face is provided by bones that make the skull. Skulls are just as individual and unique as the person's face itself." Clyde Snow, in a filmed interview with Dan Setton (for *Joseph Mengele: The Final Account*), Oklahoma, 1995. We are grateful to Dan Setton for sharing this tape with us.
 25. Joyce and Stover, *Witnesses from the Grave*, 176–80. Snow, Eric Stover recently told us, "was even trying to see if he could find enough information in Mengele's SS file to see if he could match the size of his hat with the circumference of the skull," and some other scientists thought that they might be able to find salt water traces in the bones to confirm the drowning, but these attempts were abandoned. Eric Stover in conversation with the authors, June 25, 2011.
 26. Harry Nelson, "Scientific Detectives At Work: Mengele Identity Search: How Clues Are Assembled," *Los Angeles Times*, June 14, 1985, 1.
 27. Ian Hacking, "Comment: In Praise of the Diversity of Probabilities," *Statistical Science* 5, no. 4 (November 1990): 450–4. See also Ian Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas about Probability, Induction and Statistical Inference* (Cambridge: Cambridge University Press, 1975).
 28. See Lorraine Daston, "Hard Facts," in *Making Things Public: Atmospheres of Democracy*, eds. Bruno Latour and Peter Weibel (Cambridge, MA: MIT Press, 2005), 680–5.
 29. See Jacques Derrida, "Force of Law," in *Deconstruction and the Impossibility of Justice*, ed. Drucilla Cornell et al., trans. Mary Quaintance (London: Routledge, 1992), 3–67, esp. 23.
 30. Daston, "Hard Facts," 680.
 31. Sheila Jasanoff, *Science at the Bar: Law, Science, and Technology in America* (Cambridge, MA: Harvard University Press, 1995). Stanley

Fish, in his elegant readings of the parole evidence rule in US law, has pointed out, for instance, that “‘June–Aug.’ can, in certain persuasively established circumstances, be understood to exclude August, and ‘thirty-six’ can be understood as meaning thirty-seven.” Stanley Fish, “The Law Wishes to Have a Formal Existence,” in *There’s No Such Thing as Free Speech ... and It’s a Good Thing Too* (Oxford: Oxford University Press, 1994), 148.

32. Bruno Latour, *The Making of Law: An Ethnography of the Conseil D’etat*, trans. Alain Pottage and Marina Brilman (Cambridge: Polity Press, 2009), 208.

33. See Posner and Ware, *Mengele*, 10.

34. On the trials of animals as things, see Jeffrey Kastner, “Animals on Trial,” *Cabinet* 4 (Fall 2001). On the Cadaver Synod, see Johann Peter Kirsch, “Pope Formosus,” *The Catholic Encyclopedia* 6 (New York: Robert Appleton Company, 1909), available at <http://www.newadvent.org/cathen/06139b.htm>; and Donald E. Wilkes, Jr., “The Cadaver Synod: Strangest Trial in History” *Flagpole* (2001): 8–9, available at http://digitalcommons.law.uga.edu/fac_pm/42. We are grateful to Amy Zion and Danh Vo for the reference to Formosus.

35. Miguel Tamen, *Friends of Interpretable Objects* (Cambridge, MA: Harvard University Press, 2004), 79–80. We are grateful to Anselm Franke for pointing us to this text.

36. *Ibid.*, 98.

37. Fernando Vidal, “Miracles, Science, and Testimony in Post-Tridentine Saint-Making,” *Science in Context* 20, no. 3 (2007): 481–508.

38. See Cornelia Vismann, “The Love of Ruins,” trans. Dominic Bonfiglio, *Perspectives on Science* 9, no. 2 (2001): 196–209.

39. Weizman, “Osteobiography,” 68.

40. Eric Stover, “Reconstructing Mengele,” *Science* 86 230, no. 4728 (1986): 75; also published as “Mengele Id’d by Video Process,” *Chicago Tribune*, January 12, 1986, 3.

41. Robert J. Lifton wrote in “What Made This Man? Mengele,” *New York Times Magazine*, July 21, 1985: “His bones do not satisfy.” As Snow put it in his interview with Dan Setton: “So many people were looking for this man [...] to bring him to justice for so many years [...] we were all a little ticked off. The thing that everybody wanted was to bring him to trial, to justice.” Clyde Snow, in a filmed interview with Dan Setton (for *Joseph Mengele: The Final Account*).

42. In the *Rhetoric*, Aristotle distinguishes between three types of rhetoric: judicial or forensics, deliberative or legislative, and epideictic or ceremonial. For a helpful analysis, see Amélie Oksenberg Rorty, “Structuring Rhetoric,” in *Essays on Aristotle’s Rhetoric*, ed. Amélie Oksenberg Rorty (Berkeley: University of California Press, 1996): 1–33.

43. Quintilian, *Institutio Oratoria* 9.2, available at http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Quintilian/Institutio_Oratoria/9B*.html#2.

44. On prosopopeia, see Paul de Man, “Autobiography as De-Facement,” in *The Rhetoric of Romanticism* (New York: Columbia University Press, 1984), 67–81, esp. 78; see also Barbara Johnson, *Persons and Things* (Cambridge, MA: Harvard University Press, 2008). On corporate and forensic personification, see Joseph R. Slaughter, *Human Rights, Inc.: The World Novel, Narrative Form, and International Law* (New York: Fordham University Press, 2007), esp. 20–21 and 187–91. On the Ecuadorian case, see Paulo Tavares, “Murky Evidence,” in *Cabinet* 43 (Winter 2011): 101–105.

45. Bruno Latour, “From Realpolitik to Dingpolitik or How to Make Things Public,” in *Making Things Public*, 14–41.

46. For instance, forensic architecture, as Weizman understands the term, is not only the handling and interpretation of architectural remnants but rather the constant conception and construction of new forums—forms of assembly in the political, juridical, and professional domain around these matters of concern. See Eyal Weizman, *Forensic Architecture: Notes from Fields and Forums* (Ostfildern: Hatje Cantz Verlag, 2011).

47. Interview with Charles Gibson, ABC News, *Nightline*, June, 7 1985. A similar quip appears in the film *Joseph Mengele: The Final Account*, directed by Dan Setton (Santa Monica: Direct Cinema Limited, 1998).

48. Joyce and Stover, *Witnesses from the Grave*, 193–4.

49. *Ibid.*, 194.

50. Weizman, “Osteobiography,” 71. Similar techniques—in which transparencies were overlaid on a skull—were used in the case of Isabella Ruxton in 1935; this investigation played a major role in the US National Institutes of Health exhibition “Visible Proofs: Forensic Views of the Body” (2006). See <http://www.nlm.nih.gov/visibleproofs>.

51. Richard P. Helmer, *Schädeldentifizierung durch elektronische Bildmischung* (Heidelberg: Kriminalistik Verlag, 1984). Further refinements

of these techniques are presented in Mehmet Yasar Iscan and Richard P. Helmer, eds., *Forensic Analysis of the Skull: Craniofacial Analysis, Reconstruction, and Identification* (New York: Wiley-Liss, 1993). A basic introduction to the technique can be found in G. J. R. Maat, “The Positioning and Magnification of Faces and Skulls for Photographic Superimposition,” *Forensic Science International* 41, no. 3 (1989): 225–35. An appreciative account of Helmer’s work can be found in Jeannette Otto, “Das letzte Make-Up,” *Die Zeit* 47, December 27, 2007.

52. Joyce and Stover, *Witnesses from the Grave*, 195.

53. *Ibid.*

54. Richard P. Helmer, “Identification of the Cadaver Remains of Josef Mengele,” *Journal of Forensic Sciences* 32, no. 5 (November 1987): 1629–30. See also William G. Eckert and Wilmes R. G. Teixeira, “The Identification of Josef Mengele: A Triumph of International Cooperation,” *American Journal of Forensic Medicine and Pathology* 6, no. 3 (September 1985): 188–91, which reprints the text of the preliminary report submitted by the experts to police supervisor Tuma. And see, for a medico-legal assessment of the success of the investigation, William J. Curran, “The Forensic Investigation of the Death of Josef Mengele,” *New England Journal of Medicine* 315, no. 17 (October 1986): 1071–3.

55. Joyce and Stover, *Witnesses from the Grave*, 195.

56. Helmer, “Identification of the Cadaver Remains of Josef Mengele” (fig. 18), 1643.

57. In an interview with filmmaker Dan Setton, Snow later underlined that he considered face-skull superimposition valuable but not definitive: “When you do get a match it really strengthens the case of this being the person [...] but by itself I would not accept a skull-face superimposition as being evidence for positive identification. [...] It is a tremendously useful tool for both excluding and then narrowing things down.” Clyde Snow, in a filmed interview with Dan Setton (for *Joseph Mengele: The Final Account*).

58. Joyce and Stover, *Witnesses from the Grave*, 200.

59. Ralph Blumenthal, “Scientists Decide Brazil Skeleton is Josef Mengele,” *New York Times*, June 22, 1985, A1.

60. Joyce and Stover, *Witnesses from the Grave*, 202. In a sound bite from the press conference, aired that evening on *ABC World News Tonight*, Levine offered another probabilistic metaphor: “The odds are astronomical that another person would be on this earth yet that has all

the characteristics that we have examined. And in fact that person probably has not been born.” “The 40 Year Search to Find the Nazi Criminal Josef Mengele Alive is Over,” *ABC World News Tonight*, June 21, 1985. Not everyone was convinced, though. For the story of Eva Kor, “the loudest doubter,” see John Conroy, “On the Trail of Josef Mengele,” *Chicago Reader*, November 25, 1993. Pico Iyer concludes his version of the Mengele story (“Searches the Mengele Mystery,” *Time*, June 24, 1985), this way:

Few were ready to close the lid on the case of the Angel of Death forever. “When you imagine how Mengele himself would organize his own death,” suggested West German Mengele-Hunter Katz, “this is the way he would do it. I can imagine him, a lone wolf sitting in his den and laughing at how the whole world believes it.” However fanciful, the point was well taken. Even a positive identification of the Embu bones and a categorical verification of Mengele’s presence in Brazil would not resolve all the uncertainties. Nor would the laying to rest of the body bury memories of the deaths Mengele had caused or the evil he embodied.

61. Weizman, “Osteobiography,” 65.

62. Eric Stover in conversation with the authors, June 25, 2011.

63. See, for instance, Jeffrey Toobin, “The CSI Effect: The Truth About Forensic Science,” *New Yorker*, May 7, 2007, 30–35; Simon A. Cole and Rachel Dioso-Villa, “Investigating the ‘CSI Effect’: Media and Litigation Crisis in Criminal Law,” *Stanford Law Review* 61 (April 2009): 1335. See also Renata Salecl, “Perversion and Forensic Science: Fraudulent Testimonies,” *Social Research* 78, no. 3 (Fall 2011): 887–906.

64. For Snow’s report on this first mission to Argentina, see Clyde C. Snow, et al., “The Investigation of the Human Remains of the ‘Disappeared’ in Argentina,” *American Journal of Forensic Medicine and Pathology* 5, no. 4 (December 1984): 297–9. “It is our conclusion that the identification and determination of the cause of death of even a small portion of the ‘disappeared’ could provide the courts with objective and scientific evidence critical to the conviction of those responsible for these deaths” (298). See also “History of EAAF,” accessed November 16, 2011, http://www.eaaf.org/founding_of_eaaf/; and Christina Bellelli and Jeffrey Tobin, “Archaeology of the Desaparecidos,” *SAA Bulletin* 14, no. 2 (March/April 1996).

65. Joyce and Stover, *Witnesses from the Grave*, 60.

66. Weizman, “Osteobiography,” 72.

67. Michelle Green, “Dr. Clyde Snow Helps Victims of Argentina’s ‘Dirty War’ Bear Witness from Beyond the Grave,” *People* 26, no. 3 (December 8, 1986). The story of the iconic photograph—Snow testifying with the image of the skull of Liliana Pereyra on screen before the judges—is told in “La historia íntima de la foto más famosa,” an interview with photographer Daniel Muzio, *Clarín* online, December 8, 2010, http://www.clarin.com/juicio-a-las-juntas/Muzio-foto_0_386361584.html.

68. Joshua Hammer, “Bones or Not, Vallegrande’s a Must Stop on the ‘Che Route,’” *Newsweek*, July 21, 1997, 20; Argentine Forensic Anthropology Team, “Bolivia: The Search For and Discovery of the Remains of Ernesto ‘Che’ Guevara and Other Guerillas in Vallegrande, Bolivia, 1995–97,” *1996–97 Biannual Report*, 31–41.

69. Although mass graves continue to be exhumed around the world, and bones are presented in court or handed over to families with increasing regularity, the use of “osteobiographical” techniques for the identification of unknown bodies has largely been replaced by DNA analysis.

70. If television and fiction are any indicator of cultural trends, then it is significant that from *CSI: Crime Scene Investigation* to the novels of Patricia Cornwell and the former forensics expert Kathy Reichs, the scientist-detective has gradually taken the place of the psychologist/psychoanalyst-detective popular in TV drama throughout the 1980s and 1990s. The indicative pop-culture example of this shift is the actor William Petersen. The first role for which he became famous was as the FBI agent Will Graham in Michael Mann’s film *Manhunter* (1986), the first movie version of one of Thomas Harris’s Hannibal Lecter novels, in which he played an extreme case of the detective-as-psychologist—driven mad by his empathic capacity to put himself in the mind of a killer. His second role, however, was as Dr. Gil Grissom, the main character in the initial version of *CSI* (begun in 2000), where he was a borderline autistic science geek, who hated dealing with people rather than objects.

71. Green, “Dr. Clyde Snow.”

72. Adam Rosenblatt, “International Forensic Investigations and the Human Rights of the Dead,” *Human Rights Quarterly* 32, no. 4 (November 2010): 921–50.

73. World War Two graves were not opened, and today, by and large, they are still not considered epistemic resources, in spite of the advent

of forensic practices. There is no one to save and no longer anyone to try. They are left as sites of national or religious commemoration. As Thomas Lacquer has pointed out, though, there was one notable exception, during the war: the 1943 exhumation by a German-sponsored team from a dozen occupied nations of the graves of the Polish officer corps in the Katyn Forest. However, this investigation of war crimes was used as a propaganda tool by the Germans, and was conducted while much larger massacres were taking place. See Thomas W. Laqueur, “Mourning, Pity, and the Work of Narrative,” in *Humanitarianism and Suffering*, eds. Richard Ashby Wilson and Richard D. Brown (Cambridge: Cambridge University Press, 2009), 54.

74. “International Convention for the Protection of All Persons from Enforced Disappearance,” December 20, 2006, entered into force December 23, 2010, http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-16&chapter=4&lang=en; “Inter-American Convention on Forced Disappearance of Persons,” adopted June 9, 1984, at Belem do Para, Brazil, <http://www.oas.org/juridico/english/treaties/a-60.html>; Corinne Dufka, “Disappearances,” in *Crimes of War 2.0*, ed. Roy Gutman et al., (New York: W. W. Norton, 2007), 165–6; “Best-Known Definitions,” Enforced Disappearances Information Exchange Center, <http://www.ediec.org/areas/description/definition/>.

75. “No Impunity for Enforced Disappearances” (London: Amnesty International, 2011), 24. When states do allow for statutes of limitations, Amnesty International points out, “taking into account the continuous nature of the crime, as recognized in the Inter-American Convention, the statute of limitation period may not start until the fate or whereabouts of the victim has been determined.”

76. See Steve J. Stern, *Reckoning with Pinochet: The Memory Question in Democratic Chile, 1989–2006* (Durham, NC: Duke University Press, 2010), 221 and 275–88. In 2000, Guzmán proposed to charge Pinochet with the kidnapping of seventy-five people who were officially “disappeared,” even though they were all most likely dead. The Chilean Supreme Court affirmed the charge in August 2000, and Pinochet was indicted on December 1, 2000, for the kidnapping. A similar strategy has recently been advanced by the Spanish judge, Baltasar Garzón, in connection with missing persons from the Spanish Civil War, a topic explored in a forthcoming film by Hito Steyerl.

77. For a startling example of the way “forensic archivists” can play a role in tracing these links, see Kate Doyle, “The Atrocity Files: Deciphering the Archives of Guatemala’s Dirty War,” *Harper’s Magazine* (December 2007): 52–64.

78. Joyce and Stover, *Witnesses from the Grave*, 144

79. Green, “Dr. Clyde Snow.”

80. Walter Benjamin, “One-Way Street,” in *One-Way Street and Other Writings*, trans. J. A. Underwood (London: Penguin Books, 2008), 76.

81. Walter Benjamin, *The Origin of German Tragic Drama*, trans. John Osborne (London: New Left Books, 1977), 217–8.

82. Davide Panagia, “Dissenting Words: A Conversation with Jacques Rancière,” *Diacritics* 30, no. 2 (Summer 2000): 125.

83. Jacques Rancière, *Disagreement*, trans. Julie Rose (Minneapolis: University of Minnesota Press, 1999), 30.

84. Felman, *The Juridical Unconscious*, 149. About K-Zetnik, see Tom Segev, “Author and Auschwitz Survivor Yehiel Dinur Dies of Cancer at 84,” *Ha’aretz*, July 23, 2001.

85. Felman, *The Juridical Unconscious*, 154.

86. *Ibid.*, 147.

This essay is one result of a lengthy period of common research and teaching, and an ongoing collaboration between the Human Rights Project at Bard College and the Centre for Research Architecture at Goldsmiths College, University of London. It has included a workshop at Bard College on the theme of “Forensic Evidence” (February 2011), organized jointly with the Center for Curatorial Studies there; a workshop held in conjunction with *Cabinet* and the Vera List Center at the New School University on “Forensic Aesthetics” (November 2011); and most importantly, a seminar series that we taught together with, and at the invitation of, Nikolaus Hirsch at the Städelschule in 2010/11 on the question of “Forensic Aesthetics.” We are very grateful to the Kulturfonds Frankfurt RheinMain for their support, students in that seminar, and to the guests who joined us there (Boris Buden, Anselm Franke, Gilles Peress, and Hito Steyerl), for providing so many opportunities and provocations to think through our argument here. This book is being published on the occasion of an exhibition at Portikus, Frankfurt am Main, curated by Anselm Franke with the help of Sophie von Olfers.

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