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Introduction

What counts as visual evidence in the age of immersive technologies? How are new media environments such as extended reality (XR) reshaping the concept of evidence once rooted in the photographic medium? And how might we redefine the grammars of visual truth today?

This dissertation offers a critical reframing of visual evidence. Beginning with photographic theories as a foundational framework, it reconsiders the evidential image through the lens of extended reality media. The emergence and consolidation of immersive virtual environments has led to their being regarded as “an-icons”, images that negate their own status as pictures: unframed, immediate, and present to the point of defying the very idea of representation. In recent years, attempts have been made to apply these technologies to the field of news production, as if this form of hypermediation could achieve a longstanding promise: to present itself as formidable evidence, believed without the need for interpretation or mediation. Rather than treating XR as a technological novelty, however, this thesis interrogates such assumptions by situating immersive media within a *longue durée* of evidential practices. At the same time, it also draws on contemporary court evidence from the trial concerning the terrorist attacks that took place in Paris of November 13th, 2015 (V13) targeting the Stade de France, the Bataclan and various other locations in central Paris. This fieldwork allows for an investigation into how visual evidence acquires agency in a specific semiotic context, foregrounding their status not only as legal documents but also as cultural objects shaped by the constraints of access, secrecy, and public visibility. Finally, the thesis contains also the account of an art-based research experience, centered on turning the visual evidence of the V13 trial

into an immersive installation, trying to imagine a way to experience visual evidence of the trial as missing pictures.

The thesis pursues its aims by following three main objectives. First, it analyzes how the evidence claims that are made about extended reality media incorporate or negate a more ancient and culturally consolidated authentication strategy, linked to the “older” medium of photography. After reflecting upon the authenticating discourses linked to the photographic images in terms of complex discursive formations, termed here as paradigm, the thesis proposes an alternative conceptual framework – the evidential paradigm – grounded in interpretive analysis and operational measurement, rather than transparency or indexical fidelity. Rooted in Ginzburg’s historical model but reconfigured for contemporary immersive media through the notion of “forensic gaze”, this paradigm challenges traditional assumptions about what makes an image evidentiary. This conceptual shift enables a genealogy of XR media that roots its evidentiary value not in an illusion of transparency, but in a conception of image as an operative tool, aimed at the interpretation of cues through measurement. Finally, the thesis takes into consideration the archival corpus of visual evidence, to examine how the agency of such images contributes – through distinct semiotic strategies – to the construction of collective memory surrounding a “historical” event.

The chapters are structured to follow a double trajectory. The first two develop the conceptual and historical groundwork for rethinking visual evidence beyond photographic paradigms. The following chapters put theoretical insights and shift to the V13 case, to observe how the enunciation of evidence in a contemporary courtroom context influences their agency as probative tools.

Chapter 1 revisits classical theories of visual evidence linked to the photographic medium, examining how photographs have historically been embedded in discourses emphasizing their documentary character, immediacy, and mechanical objectivity. It also considers how the emergence of new visual technologies has reignited debates around the evidential power of images. While VR is often promoted as a hyper-transparent tool for

empathetic witnessing, AI-generated images are typically framed as threats to factual reliability. This chapter suggests that both technologies rely on, and challenge, older evidentiary logics derived from photography, producing what may be termed a “retrospective” paradigm of photographic evidence.

Chapter 2 explores the evidential paradigm as theorized by Carlo Ginzburg and investigates how visual regimes of inquiry have historically been structured through indexical, non-mimetic practices. By analyzing early forensic uses of photography as tools of measurement, classification, and spatial documentation the chapter reframes the image as a site of investigation. It grounds the notion of visual evidence in forensic practice, foregrounding a specifically “forensic” gaze that operates across media boundaries. This suggests that XR-based investigative techniques are not a break from photographic traditions, but a transmedial reconfiguration of their evidentiary functions.

Chapters 3 to 6 shift the focus to the fieldwork research and, finally, to the art-based research. Chapter 3 analyses the corpus of visual evidence produced by the French police, particularly the forensic images displayed *in* the trial. It examines how these images, presented as circumstantial evidence, undergo transformations in meaning due to changes in medium and context: namely, through processes of recontextualisation and remediation.

Chapter 4 offers a close reading of panoramic forensic images used in the investigation. Their evidentiary role departs from assumptions of transparency and instead confirms the evidential paradigm. Deployed as precise measuring tools and spatial records of the crime scene, these images, especially those of the Stade de France and the Bataclan interiors, are critically examined for their dual function: evidentiary and affective. By contrasting their probative application with their immersive potential, the chapter reveals the ambivalence of panoramic imagery within the courtroom setting.

Chapter 5 turns to the visual economy of the trial itself, focusing on the audiovisual recordings of the proceedings: the images *of* the trial. Divided into four thematic sections (Publicity, Filming, Archiving, and Dispositif) the chapter explores how trials are visually constructed, recorded, and memorialised. It considers the legal and ethical constraints of filming court proceedings, the technical apparatuses required for capturing courtroom images, and the archival logic that governs their long-term storage.

Most crucially, it proposes that the trial should be understood as a visual *dispositif*: a regulated space of looking and showing, shaped by specific scopic regimes and institutional forms of spectatorship.

Chapter 6 takes the form of a practice-based investigation, not as an appendix to the theoretical work, but as a method of inquiry in its own right. It presents *Voices of Fragments*, an immersive sound installation developed within the XR²C² Research and Creative Centre as an artistic response to some of the theoretical concerns related to the fieldwork archival research. The installation, composed of spatialised sound and a 3D-scanned archivist's desk, explores how access to “sensitive heritage” can be mediated and experienced critically through immersive technologies. Through a series of interviews to the archivists who worked on the V13 trial, the piece seeks to dramatise the tension between document's accessibility and invisibility, detachment and empathy. Rather than offering a fully immersive simulation, it stages a form of “critical immersion” that makes the act of looking – and listening – part of the evidential question itself.

Chapter One

History and theory of visual evidence: the photographic paradigm

L'idea di prova è fuori moda.

C. Ginzburg, *Il giudice e lo storico*, Quodlibet, Macerata 2020, p. 26

The aim of this chapter is to introduce the theoretical problem at the heart of this thesis: investigating the evidentiary use of images from a media-theoretical and visual culture perspective. The principal object of our inquiry concerns a specific category of images – those which, due to certain characteristics that we will endeavour to identify with precision, appear capable of demonstrating that certain facts and events truly occurred. We will refer to these images as “visual evidence”.

Substantiating this initial, provisional, and operative definition is a complex task. In fact, determining what to accept as true when it comes to images has arguably never been more difficult. The latest developments in image-making technologies are offering entirely new forms of visibility, which challenge long-standing strategies of authentication. As a result, these novel visual forms demand equally novel operational strategies of verification. Let us consider, for example, two emblematic media objects of our present moment: on the one hand, the hyperrealistic and environmental images produced by immersive virtual reality, and on the other, the quasi-photographs generated by artificial intelligence. Even a brief analysis of the discourses surrounding these two technologies reveals that they are often framed in diametrically opposed terms.

In fact, virtual reality is often seen as capable of turning images into environments – that is, transforming it into an enveloping and inhabitable space that induces an apparent absence of mediation.¹ By increasingly narrowing the gap between the perception of an image and the perception of its referent, the promise of immersivity lies in offering a “total” image (reminiscent of the cinema imagined by André Bazin), one capable of saturating the sensorium and creating the impression that the viewer is physically present before the object itself. What distinguishes contemporary, hypermediated forms of immersivity from their historical counterparts – since, as Oliver Grau reminds us in his foundational volume *From Illusion to Immersion* (Grau 2003), immersivity did not originate with VR headsets – is the degree to which the rhetoric surrounding today’s devices, including their commercial promotion, has foregrounded specific forms of image authentication. Often, this emphasis has been deployed crudely, insisting that the very properties which induce an apparent absence of mediation can serve as effective strategies of veridiction. In other words, immersivity and image authenticity have been discursively conflated – sometimes to a dangerous degree. A telling case in which this rhetoric reached its peak is the rise of immersive journalism.

Until 2017, many major international news outlets – BBC, CNN, *The New York Times*, *The Guardian*, Euronews – had inaugurated dedicated sections for immersive journalism. This emerging sector was supported by considerable economic interests and large-scale investments from tech giants like Samsung, Google, Facebook, and YouTube. The high point of this enthusiasm arguably came in 2017, when *The New York Times* distributed over one million Google Cardboards – a low-cost, lightweight device

¹ Immersive images have been described as characterised by unframedness, immediateness, and presentness. In fact, their 360-degree format has been associated with the disappearance of the frame, the traditional element that separates the pictorial image from the real world. These hypertechnological images have also been interpreted as inducing a form of medial transparency (Conte 2020), not unlike what Bolter and Grusin defined as the logic of immediacy in *Remediation* (Jay David Bolter e Grusin 2002). Thus, immersive images are defined as “self-negating images”, that is to say images who self-dissolve in their referent (Pinotti 2017). Since its inception in the late 1960s, virtual reality has been conceived as a closed, synthetic environment capable of seamlessly simulating reality. Ivan Sutherland, a pioneer in VR research, described it as a “the Wonderland into which Alice walked” (Sutherland 1965, 508), to emphasise its reality effect. Moreover, Jaron Lanier would later describe VR as a form of “post-symbolic communication”, a perfect language in which things become concrete without the need for mediation (Lanier 2006).

enabling smartphone-based 360° viewing – to its “Sunday” subscribers (Modena 2022, 74–75). The 360° immersive format was seen as a powerful means of increasing audience engagement: by experiencing the news in first-person perspective, viewers could access content so technologically advanced that the news would not merely enter their domestic environment – as had occurred with the arrival of television – but give them the impression of being “there,” watching events unfold before their very eyes.

Today, less than a decade later, this moment of apparent rapid expansion has already given way to a much-changed scenario. For reasons likely tied to market consolidation and the standardisation of formats, 360° video still struggles to establish its autonomy. Many of the outlets mentioned above have either discontinued their immersive journalism sections or ceased uploading new content altogether. This (apparent) decline may serve as a useful point of departure for rethinking strategies of veridiction in the so-called “reality media” (J. David Bolter, Engberg, e MacIntyre 2021) – virtual, augmented, and mixed reality – as we will attempt to do in the following pages.

The situation surrounding our second initial example – images generated through generative artificial intelligence – seems almost the inverse. These images closely resemble photographs, though they are not, and are frequently associated with manipulation. In contrast to the immersive panoramic image, AI-generated images have been met with alarm, regarded as the final frontier of total falsification – an insidious kind of forgery that fosters uncertainty and radical doubt toward visual representations. These images are often framed as delivering a *coup de grâce* to a certain idea of visual truth that had previously been anchored to a photographic legacy. By betraying the trust that makes us instinctively perceive photographs as “transparent” – as offering a perceptual experience comparable to encountering the object itself (Walton 1984) – the hybridisation of photography and generative AI is seen as negating the image’s supposed truth content.

It is not surprising, then, that much popular discourse has proclaimed the “end” or “death” of visual truth. In 2020, for instance, The New York Times commented on the GAN-generated portraits on the website thispersondoesnotexist.com, a platform that produces lifelike but entirely fictitious human face, with the warning: “It will become increasingly difficult to tell who is real online and who is a figment of a computer’s

imagination”.² The dominant concern is the growing inability to distinguish true from false, generating an epistemic uncertainty that culminates in a pervasive scepticism.

Even the term “deepfake”, used to describe these AI-generated images, connotes falsification. Coined from the grassroots on Reddit between 2017 and 2018, the term fuses “deep”, indicating the use of deep neural networks, with “fake”, suggesting a falsifying intent. It is in this context that terms like “disinformation” and “misinformation”, referring respectively to the intentional and unintentional spread of false information, have become central to debates about the crisis of contemporary journalism, particularly in the wake of sharing platforms and social media. This framing demonises generative images to the point of likening them to weapons (Chesney and Citron 2018). The widespread concern over the collapse of epistemic trust in authoritative sources has contributed to a broader climate of uncertainty, often described as “information disorder” (Filimowicz 2022) or characterised through terms such as “dark epistemologies” (Weizman 2019).

Images have played, and continue to play, a pivotal role in these developments. Consider, for instance, a recent case involving the spread of deepfake videos during the early phases of the war in Ukraine. In spring 2022, two deepfake videos circulated on various social networks: one depicting a fabricated Putin declaring peace, the other showing a fabricated Zelensky announcing the end of the conflict.³ Since both videos were poorly made with rudimentary tools, they were quickly identified as fake and promptly removed. In such a context of armed conflict, the metaphor of deepfakes as weapons becomes literal and explicit.

² Hill, Kashmir, and Jeremy White. 2020. “Designed to Deceive: Do These People Look Real to You?” *The New York Times*, November 21, 2020. <https://www.nytimes.com/interactive/2020/11/21/science/artificial-intelligence-fake-people-faces.html>.

³ Wakefield, Jane. 2022. “Deepfake Presidents Used in Russia-Ukraine War.” *BBC News*, March 18, 2022. <https://www.bbc.com/news/technology-60780142>.

New forms of image generation are often instinctively equated with older practices of photographic retouching, which have historically been associated with falsification and considered antithetical to the supposedly documentary nature of photography (Gunthert 2008). Within this broader framework, AI-generated images are increasingly regarded as dangerous weapons, objects that provoke a visceral sense of fear.

Though frequently linked to opposing axiological domains, both technologies discussed thus far (VR and AI) produce images that challenge long-established visual paradigms. On one side, AI generates images that reproduce photorealism through entirely artificial means, imitating stylistic conventions we have come to associate with mechanical objectivity (Daston and Galison 2007). On the other, immersive experiences offer highly effective illusions that directly influence our sense of bodily presence through intense forms of incorporation.

The novelty of these phenomena might lead us to hypothesise a deep connection between technological innovations in image-making and the dynamics of belief. By introducing new perceptual stimuli, such innovations may generate a kind of “shock” akin to that described by Walter Benjamin in his analysis of cinema (Benjamin 2008). For Benjamin, this perceptual shock – most pronounced in photography, and especially in film and montage – reconfigures a society’s broader sociocultural arrangement, and, in our case, affects what a particular group considers valid evidence. One might even argue that such a shock initiates a kind of revolution, radically displacing the previously “normal” condition. Echoing, in a not entirely dissimilar fashion, what Thomas Kuhn proposed in his analysis of scientific revolutions (Kuhn 2012), we may find ourselves on the threshold of such a revolution, one that compels us to reconsider what qualifies as visual evidence through the lens of a paradigm shift. This very idea of a shift of paradigm linked to contemporary media has been taken up by contemporary photography critics Fred Ritchin, already known to for its contributions in the debate around the truth claims around photography during the digital transition of the medium (Ritchin 2010). In a recent essay, Ritchin comments upon the most recent hybridations of photography with artificial intelligence, defining it as a paradigm shift. Rather than viewing the image as either a window or a mirror – as John Szarkowski famously conceptualized the distinction

between documentary and art photography in his landmark 1978 exhibition (Ritchin 2025) – we might now consider it a door, one that can be opened to investigate what lies beyond (Ritchin 2025, 210).

The concept of the paradigm, then, seems especially pertinent for approaching the problem of visual evidence as framed in this chapter. If image-making innovations are indeed generating a kind of perceptual shock, ushering in a new paradigm, how might we develop conceptual tools adequate to understanding this transformation? Beginning our investigation by interrogating the notion of paradigm thus provides a productive point of departure for assembling our theoretical toolkit.

The most widely known definition of “paradigm” is that offered by the philosopher of science Thomas Kuhn, who argued that a paradigm directly shapes the production of knowledge (in his case, scientific knowledge) within a given historical period. Such periods – what Kuhn calls “normal science” – are punctuated by transitional moments of crisis, leading to “revolutions” that establish new paradigms.

In articulating an expansive epistemological framework, the paradigm – particularly in its ability to capture the interplay between knowledge and practice – has also been compared to Michel Foucault’s archaeological method, and especially to his notion of the *dispositif*. The philosopher Giorgio Agamben explores this kinship in *Signatura Rerum. On Method*. Agamben notes that while both concepts – the paradigm and the *dispositif* – illuminate the entanglement of knowledge forms with their sociopolitical conditions of emergence, Kuhn is curiously absent from Foucault’s references. From this observation, Agamben undertakes a detailed examination that, despite the lack of explicit citations, identifies significant affinities between the two thinkers. Foucault’s method, which proceeds through emblematic case studies that exemplify broader discursive configurations, producing and disciplining particular forms of subjectivity (as illustrated in his analysis of the Panopticon), can itself be described as “paradigmatic,” less in its content than in its methodological logic. According to Agamben’s reconstruction, Foucauldian archaeology, which today remains one of the most influential frameworks for analysing media and *dispositifs*, ultimately operates *through* paradigms. Hence, by uncovering the hidden kinship between two thinkers who were intellectually proximate

yet not in direct dialogue, Agamben pushes the reflection to the point of asserting that “archaeology is [...] always a paradigmatology” (Agamben 2010, 32).

Indeed, while the concept of the *dispositif* remains central in contemporary media theory, the same cannot be said of the paradigm. As Agamben notes, the paradigm departs from Foucault’s approach by placing greater emphasis on epistemological concerns. Yet it proves to be a valuable starting point for reflecting on media precisely in relation to the forms of knowledge they articulate and propose, and fore shifting the reflection on media dispositives towards a more epistemological nuance (Albéra and Tortajada 2015, 21-44).

Following this “paradigmatological” approach, in the pages that follow we will delve into the deep time of media to trace a genealogy of visual evidence and its fundamental paradigms. We will recover, in the present situation, the threads that point directly to the past, illuminating interrupted paths and perspectives that have appeared marginal within certain media historiographies, but which today acquire renewed centrality. By excavating the material mechanisms of technologies that have enabled the transformation of photographic images into data-images – and thus into extended realities in which one can potentially immerse – the aim of our investigation is to retrace a photographic definition of evidence.

1.1. *The “photographic” paradigm*

Curiously enough, one of the first effects of our imagined media-centred “scientific revolution” does not so much concern present or future temporality, but rather a notion of what we would leave behind. It is important to raise this issue at the outset to clarify the purpose of the operation we are about to undertake. As previously stated, we will not trace the history of technology in a chronological, and potentially teleological or deterministic, fashion. Instead, we will move through leaps and anachronistic paths, seeking “against-the-grain” perspectives.

The thesis we wish to maintain in this section is that the image-making technologies mentioned earlier – which, as we have seen, are accompanied by rhetorics directly implicated in our contemporary understanding of evidence – also contribute to constructing a notion of visual evidence for the past. In this way, the way we appropriate “new” technologies in the present appears to redefine “old” ones as well, by opposition, forming an artificial object of thought: a paradigm of visual truth closely tied to photography.

This kind of “retrospective invention” is a crucial concept for our purposes, for two main reasons. First, as we shall see, a philological reading of the literature concerning the relationship between photography and evidence reveals that there has never been a unanimous consensus among those engaged with the problem of photographic visual evidence. On the contrary, while many authors have entertained the idea that photographs constitute a form of evidence, they have often done so with caution, if not outright scepticism. Nonetheless, despite this lack of consensus, the persistence and recurrence of these arguments over time make it possible to identify certain recurring features, which we will examine.

The second reason pertains to the fact that the very idea of refocusing attention on visual evidence is far from new. Indeed, the rhetoric of abandonment and overcoming of visual truth has played a pivotal role in the debates that unfolded during the transition from analogue to digital media, giving rise to what we may now describe as a “worn-out” commonplace (Grespi 2024): namely, the idea that digital media have contributed to the “death” of photography and, with it, of its evidentiary function. Certainly, this rhetoric of “abandonment and overcoming” did not concern photography alone. Film studies had already expressed unease at the arrival of digital technologies, suggesting that they threatened the medium specificity of cinema (Aumont 2012). In the case of photography, however, this debate focused specifically on the notion of visual evidence, which had become tightly intertwined with the photographic image. It is precisely this cyclical

reappearance of uncertainties surrounding the definition of evidence that makes it valuable to return to this epistemic constellation, to observe it in its entirety, and thereby to re-centre it.

From this perspective, both the reinvention of the past in light of the present and the re-emergence of certain problems within a condition of media convergence become central elements in positioning the issue of visual evidence at the heart of the debate on intermediality. These two arguments are, in fact, staples of the authors who have contributed to this debate, particularly those who have focused on the interrelations among various media. Marshall McLuhan is a key reference in this regard: his claim that “one medium always contains another medium” reveals that media can only be fully understood when new ones emerge that, while encompassing their predecessors, are also positioned as their surpassing (McLuhan 1964). Also from McLuhan is the notion that media can be grasped only through a metaphorical “rear-view mirror” – that is, at the moment they are overtaken by subsequent innovations. Richard Grusin and Jay David Bolter, through their theory of remediation, describe the emergence of “new media” as a process whereby each new medium establishes its own identity not only by appropriating the forms and techniques of previous media, but also by competing for the social and cultural space they occupy (Bolter and Grusin 2002). More recently, Marcello Vitali-Rosati and Jean-Marc Larrue have argued that media exist only as dynamically configured conjunctures: “There are no media but rather dynamic convergences that produce forms of mediation, what we call ‘mediating conjunctures’” (Vitali-Rosati and Larrue 2019, 31). In the field of film studies, it is especially Francesco Casetti who insists that “new” technologies reinvent our very idea of what, by contrast, we regard as “old.” For Casetti, new media configurations demand the formulation of new historical trajectories – in other words, the writing of new genealogies: “the past is often a construct that emerges from current needs. It is a source, but also a myth that is shaped retrospectively” (Casetti 2015, 15).

A similar mechanism, considering the present as a reformulation of the present, can be found in Nathalie Heinich’s analysis (Heinich 1983; 1998) of the emergence of authenticity in art. Heinich argues that authenticity becomes a meaningful and valued

notion precisely when the possibility of duplication arises. Without the potential for reproduction, the question of authenticity would not even be posed. This perspective resonates with Walter Benjamin's analysis of the work of art in the age of its technical reproducibility, where he famously describes how reproduction undermines the aura and authenticity of the artwork. As Heinrich points out, however, Benjamin also implicitly suggests that it is the very advent of reproducibility that makes the concept of aura, and thus of authenticity, relevant in the first place.

Indeed, visual evidence as a "classical" paradigm of the photographic only emerges as a solid construct in light of contemporary demands, now that new media forms pose renewed challenges to what we were accustomed to considering as evidence. With these premises in place, we may now ask: what are the characteristics of this "retrospective invention" of photography as a paradigm of visual evidence?

We will therefore attempt to give substance to this notion by drawing on moments and authors that have become classics in the debate on the photographic. The suggestion we wish to elaborate is that photography, as visual evidence, operates as an "imaginary medium": a *dispositif* that, as a technology of truth, has remained a dream without any real practical counterpart. Numerous contributions from diverse disciplinary domains – art and science history, continental and analytic aesthetics, semiology, among others – have examined the theme of photographic visual evidence, affirming and critiquing it, each from their own perspective and with pertinent objections. In short, we will seek to recall photography as a "classical" paradigm of evidence through the discourses that have imagined it at the intersection of different disciplines.

The connection between visual evidence and photography is as old as the medium itself. According to Philippe Dubois, the fact that photography has been likened to a mirror of reality is so foundational that it represents the first (and primary) discourse on photography (Dubois 1996, 27). From the outset, the discourses that shaped the imaginary surrounding the medium identified its specificity and difference from other image-making technologies precisely in terms of its evidentiary function. Some anticipatory positions

even attempted to backdate this association to periods preceding the invention of the medium itself. In a recently published volume programmatically entitled *Photography and Belief*, David Levi Strauss (2020), following in the footsteps of Roland Barthes, traces the foundations of belief in the image to *acheiropoieta* (Barthes 1980, 129), religious icons considered sacred precisely because they were created without human intervention.

The reasons why photography, within the history of technical images, has appeared particularly suited to being received as a form of visual evidence are well known, but worth briefly recalling. Dubois himself, as cited above, historicised this important relationship by identifying three main phases. The first, primarily in the nineteenth century, saw photography understood as a mirror of reality, drawing on the famous metaphor coined by Oliver Wendell Holmes, according to which photography would be as realistic as a “mirror with a memory” because of its capacity to fix images (Wendell Holmes 1859). In this stage, what Dubois calls the “discourse of mimesis” predominates: the photograph is described as an image primarily resembling its referent.

This first phase is followed by a second, known as the “discourse of code and deconstruction,” which coincides with the first semiotic research on photography. The image is now interpreted as a code, and the impression of reality is reduced to a mere effect. In this phase, the evidentiary quality of the image becomes the object of both semiotic deconstruction and ideological critique.

Dubois’s own contribution fits into a “third” phase, that of the (re)discovery of the indexical nature of the photographic image. This dimension, already present in earlier reflections and traceable back to the origins of photography, particularly in Talbot’s experiments (Signorini 2007), allows for a departure from what Dubois calls the “trap” of mimetic analogism (Dubois 1996, 49), in order to rediscover photography first and foremost as a trace. For Dubois, photographic visual truth would ultimately be a matter of pure indexicality. That is, the physical and incontrovertible presence of the subject before the camera, which would take precedence over any form of mimesis or iconism.

Despite all the portions of the world left outside the frame at the moment of capture (which Dubois sees as a cut from a spatiotemporal continuum) or altered afterwards through retouching, there is no doubt: the essential moment of the photograph, the true heart of the “photographic act”, is the instant in which the image, in generating itself, becomes a luminous imprint, an incontrovertible trace of the world.

We will return to the indexical dimension of photography in chapter 2, since it is precisely by reflecting on indexicality, interpreted as the origin of the data-image, that one may rethink visual evidence in an intermedial perspective that moves from photography toward extended reality, thus mending the fictitious divide between old and new evidentiary paradigms. That said, Dubois’s text, which, at least in part, positions itself as a “history of ideas” of the problem of visual evidence in photography, although attributing great importance to the issue of evidence, frames it from a strictly medium-specific point of view, with limited openness to an intermedial perspective. Moreover, the primarily linear structure of his account presents his argument as if it were the final resolution to the problem. However, what Dubois’s work ultimately teaches us is that the definition of the relationship between photography and evidence has been so pervasive in the history of the medium that it has come to be seen as the distinctive trait of photography itself, as the specific feature that sets this type of image apart from others. While we share many of the authors and problems presented in Dubois’s crucial essay, we propose to revisit them from a different angle.

It is true, in fact, that photography was the first entirely mechanical image-making technique,⁴ and this meant that it was immediately perceived as a profoundly different *image-making* technique from the others that were widespread at the time. Much later than its invention, a prominent figure in analytical aesthetics such as Kendall Walton did not hesitate to define photographic realism based on the idea that photographic images are inherently different from pictorial ones. This difference, he argued, lies in their “transparency”: when looking at photographs – and only photographs – we perceive not representations, but the things themselves (Walton 1984). Susan Sontag also draws on

⁴ Photography was not the sole technical means of image reproduction. However, contrary to other techniques that were in existence at the time, such as woodcuts, photography was the inaugural technology with the capacity to reproduce both existing images and to create new ones (Gilardi 1981).

this “argument of difference” to explain the evidentiary use of photographs. In *Regarding the Pain of Others*, which engages with many issues relevant to visual evidence, especially in photojournalism, Sontag writes: “*A photograph is supposed not to evoke but to show. That is why photographs, unlike handmade images, can count as evidence*” (Sontag 2003, p. 42).

The primary grounds for this perceived difference lie, in fact, in the automatic nature of the photographic ontogenesis (Gunthert 2015), which appeared to require no intervention on the part of the author. It was precisely this generative mode of the image that André Bazin identified as enabling a “transfer of reality” between image and object (Bazin 2011), satisfying a fundamentally psychological need for reality.

These early definitions of visual evidence cloaked the photographic image with an aura of objectivity. Indeed, the enduring myth that photographic images are more objective than drawings or paintings can be traced to several foundational moments in the history of the medium. While an exhaustive list would be impossible, a few key voices stand out in shaping this narrative of photographic objectivity.

One of the earliest conceptions of photographic objectivity is grounded in the automation of the image-making process and the corresponding exclusion of the human hand. A foundational figure in this lineage is Henry Fox Talbot, who, when naming the calotype, described it as a technical image through which nature could represent itself – precisely without human mediation. By likening photographic lenses to the eye and photosensitive paper to the retina, Talbot anticipated the myth of the machinic eye: a technological apparatus thought to be more reliable than the human gaze (Talbot 1844). This idea also underpinned the rapid adoption of photography in scientific practice. In France, around the same time, François Arago announced the invention of photography in his now-famous address to the Académie des Sciences, describing it as an ideal aid for scientific inquiry. At the 1859 Salon, Charles Baudelaire invoked the supposed objectivity of photographic images to justify their categorical exclusion from the artistic domain, which he considered the realm of imaginative creation (Baudelaire 1859).

Meanwhile, within scientific circles, photography was increasingly embraced. As historians of science Lorraine Daston and Peter Galison explain (2007, 187), the apparent elimination of human intervention in the image-making process positioned photography as the ideal vehicle for realizing the “epistemic virtue” of mechanical objectivity, defined not so much by realism as by the removal of human agency.

Photographic images soon became central to a broader redefinition of scientific objectivity, supplanting hand-drawn illustrations in major scientific atlases. According to Daston and Galison, it was not technological innovation that birthed the concept of objectivity, but rather a shift in the very criteria by which scientific objectivity was defined that elevated photography to its privileged role. Regardless of the direction of causality, photography long retained its status as the scientific image *par excellence*, with the idea of objectivity remaining a defining characteristic.

A direct consequence of the discourse on scientific objectivity was the construction of a specific conception of the image in the artistic sphere. Here too, the presumption of evidentiary value associated with the photographic image played a decisive role in shaping a paradigmatic understanding of photography as a form of proof. This influence first manifested in the exclusion of photography from the domain of art, as seen for Baudelaire’s invective, and later in its recovery and full consecration in the form of an artistic “style” (Lugon 2008).

Beginning in the early twentieth century, a distinctive stylistic definition of the photographic image began to emerge, grounded in its evidentiary values. This can be observed in a range of aesthetic choices intended to revive the very principles of scientific objectivity as the foundation of an artistic poetics. One may think, for example, of the pursuit of total focus, complete legibility, and the rejection of elaborate development and printing techniques that aimed to make photographs resemble painted canvases – as was common in the Pictorialist movement, which sought to reclaim photography as art precisely by emulating the surface of a painting. These were among the innovations pursued by practitioners of what came to be known as “straight” photography. This approach was championed by a group of photographers affiliated with Alfred Stieglitz’s *Camera Work* and his New York gallery, including the American Paul Strand,

as well as by the F/64 group, formed around Ansel Adams. The name itself of this group referenced an aperture setting that maximized depth of field and thus achieved maximum sharpness across the image.

The apotheosis of this movement came later with the work of Walker Evans, in which the artistic and documentary dimensions of the photographic image became not only complementary but mutually reinforcing.

Taken individually and without proper contextualization, these characteristics, long considered fundamental to the identity of photography, have contributed to shaping a “naïve” notion of photography as visual proof, and conversely, of visual proof as inherently photographic. Everything, from the mechanical procedure to the appearance of the image seemed to steer the discourse toward a conception of visual evidence that fully coincided with photography. While such arguments served the historical urgency of legitimizing the medium in both artistic and scientific domains, their persistence and centrality ultimately crystallized a notion of the document grounded in specific formal features which, today, appear insufficient for defining visual proof in contemporary terms.

Indeed, both postmodernist criticism and photographic historiography have long since sought to dismantle these naïve assumptions. In outlining a history of documentary photography, Olivier Lugon (2008) has emphasized the multiple historical and geographical variations of this monolithic notion of “style,” beginning with the divergent developments in Germany and the United States in the 1920s. Medium shots, close-ups, film stills, or aerial views: between the First and Second World Wars, the photographic document assumed many forms, each often aligned with a specific artistic conception of the image.

In response to this historiography, art criticism, particularly in the American postmodernist context, sought to reframe the documentary through cultural and social lenses. The photographic document came to be understood as instrumental in shaping and reinforcing state governance and capitalist production systems. For example, American art critic John Tagg, working within a Foucauldian framework, interprets the major documentary campaigns of the 1930s as a governmental tool supporting Roosevelt’s

liberal presidency and legitimizing New Deal policies (Tagg 2009; 1988). Abigail Solomon-Godeau, reflecting on the history of the photographic documentary, which she sees as a transposition of John Grierson's documentary film theory, argues that the proliferation of subcategories used to describe the various social functions of visual evidence (such as social documentary or photojournalism) contributes to rendering the very notion of the document an empty concept, likened to a ghost (Solomon-Godeau 2017).

It is above all in the work of Allan Sekula that the discourse on visual evidence is fully reframed as a cultural construct, approaching what we may call a paradigm. In his essay *On the Invention of Photographic Meaning* (1974), the arguments that define photography as a form of evidence converge into what he calls a "photographic discourse" – that is, a Foucauldian discursive formation. Sekula defines such a formation as "an arena of information exchange, that is, a system of relations between parties engaged in communicative activity," one that both raises expectations about what photography promises and imposes specific constraints. As he puts it, "the overall discourse relation could be regarded as a limiting function, one that establishes a bounded arena of shared expectations as to meaning" (Sekula 1984, 3).

For Sekula, the idea that photography constitutes evidence is less a historical fact than a powerful ideological myth: a construction that assigns to the photographic medium a privileged relationship with truth. This presumption of meaning, which relies on the belief in the neutrality, objectivity, and "transparent" nature of the photograph, conceals the fundamentally cultural and thus inherently political nature of photographic images. Sekula famously describes this construction as "an obstinate bit of bourgeois folklore." In a later essay titled *The Traffic in Photographs*, he returns to the notion of visual evidence as a retrospective invention, stating:

Photography is haunted by two chattering ghosts: that of bourgeois science and that of bourgeois art. The first goes on about the truth of appearances, about the world reduced to a positive ensemble of facts, to a constellation of knowable and possessable objects. The second spectre has the historical mission of apologising for and redeeming the atrocities committed by the subservient - and more than spectral - hand of science. [...]. Thus, from 1839 onward, affirmative commentaries on photography have engaged in a comic, shuffling dance between technological determinism and auteurism, between faith

and the objective powers of the machine and the belief in the subjective, imaginative capabilities of the artist. (Sekula 1981, p. 78)

From a folkloric residue of bourgeois culture, visual evidence becomes a discursive construction – a “chattering ghost” that haunts all attempts to define the photographic medium. Sekula argues that these discursive constructions shape constellations of power in both the scientific and artistic fields. On one hand, bourgeois science treats photography as a tool to capture and catalogue objective truths, reducing the world to knowable and ownable objects. On the other, artistic interpretations of evidence have sought to rehabilitate photography from its narrowly functional and scientific role, positioning it instead as a creative and expressive medium – at times precisely by leveraging its documentary character. Since its invention, Sekula contends, photographic discourse has oscillated between these two poles: technological determinism, which extols the machine’s ability to capture reality independently of human intervention, and auteurism, which celebrates the photographer’s unique, subjective vision. By describing this tension as a “comic, shuffling dance,” Sekula highlights the ironic and fallacious nature of this construction.

In short, the very same critical discourse that first excluded photographic documents from the domain of art – only to later readmit them as a stylistic category – has come to recognize the discursive nature of our relationship to visual evidence. In Sekula’s writings, the idea of evidence is thus fully “unmasked” as a discursive construction: a network of knowledge and practices that also reveals distinct configurations and asymmetries of power. Framing the photographic paradigm of visual evidence primarily as a discursive construction, without necessarily endorsing one side of the historical debate, opens the possibility of incorporating within this paradigm even those voices that have been sceptical of the image’s evidentiary power.

Indeed, as previously noted, the “photographic” paradigm of visual evidence has undergone cyclical crises, particularly with the advent of digital imaging. The shift from analog to digital formats, from photosensitive film to editable digital files, has prompted many to declare a definitive “divorce” between photography and evidentiary authority. Figures such as William J. Mitchell (1992) and Fred Ritchin (2010) voiced concerns over the reliability of the photographic image in the digital era, with Ritchin even suggesting that each photograph could be accompanied by a certificate of authenticity to confirm its evidentiary value.

The digitization of photographic images has split theorists between two camps: those who argued that the shift in medium – and thus in the image’s semiotic status, no longer strictly indexical – marked a decisive rupture in the photographic paradigm of evidence, and those who took a more continuity-based approach, seeking to reconcile the disruptions between analogue and digital technologies (W. J. T. Mitchell 2018; Marra 2006). Ultimately, as André Gunthert has convincingly observed, the theoretical debate on the transformation of visual evidence in the digital age has been overshadowed by the practical continuity in the social function of images: digital photographs are still used as evidence, despite their increasing ease of manipulation (Gunthert 2015).

Yet, while the documentary function of photographic images remains widely intact, the theoretical question of how to define visual evidence persists. Providing a positive definition – that is, one that does not treat the notion of evidence as a retrospective discursive construction – continues to pose a significant challenge.

This difficulty is particularly evident in classical reflections on photojournalism. Susan Sontag, in *Regarding the Pain of Others*, repeatedly stresses how the practice of photo reportage has, from its very inception, “betrayed” the strong paradigm of photographic visibility – for instance, by staging scenes explicitly. From Roger Fenton’s Crimean War photographs – Fenton being an “embedded” photojournalist before the term even existed – who, in 1855, repositioned cannonballs, the debris of battle, to enhance the drama of his shots, to some of the most iconic images of contemporary conflicts, Sontag questions how the journalistic precept of authenticity proves difficult to uphold in visual terms.

In particular, when commenting on Joe Rosenthal's famous photograph of the American flag being raised on Iwo Jima on 23 February 1945 – a reenactment of the ceremony that had taken place that morning after the capture of Mount Suribachi—Sontag argues that, in photojournalistic practice, the concept of visual evidence has been applied in a rather unorthodox manner: “If we were to accept as authentic only those war photographs that resulted from the presence on the scene of the photographer, who triggered the shutter at the right moment, few photographic records of a victory would qualify” (Sontag 2003, 56). To suits the demands of spectators, press photograph can amplify or tone down the news storytelling, that sometimes become more important than the pursuit of truth: “new demands are made on reality in the era of cameras. The real thing may not be fearsome enough, and therefore needs to be enhanced; or reenacted more convincingly” (63).

Perhaps the most emblematic case is that of Robert Capa's iconic *Falling Soldier*, taken during the Spanish Civil War on September 5, 1936. First published in *Life* magazine in July 1937 with the caption, “Robert Capa's camera catches a Spanish soldier in the instant he is dropped by a bullet through the head in front of Cordoba” (Lavoie 2017, 15), the image was initially celebrated as the first-ever photograph to capture death in real time (Zoja 2018). By the 1970s, however, its authenticity had already begun to be questioned. In recent years, visual forensic analyses, based on geolocation and the examination of the soldier's posture, have cast serious doubts on the veracity of the image, despite the absence of any digital manipulation (Lavoie 2017).

A more contemporary example is the 2007 World Press Photo winner by Spencer Platt, which depicts young Lebanese women driving through Beirut in a convertible to inspect their homes after Israeli bombings. Italian journalist and author Michele Smargiassi noted that while the image was authentic and endorsed by the institutional authority of the award, it could easily be mistaken for a staged scene. Reflecting on such ambiguity, Smargiassi questioned the binary logic that underlies conventional understandings of photographic evidence. He argued that, in situations like this, and indeed in most photographs, a strict opposition between true and false is overly rigid and ultimately counterproductive (Smargiassi 2009, 22).

It is the prerogative of semiotic analysis to interrogate photojournalism for the way images construct a specific reality effect. A particularly insightful example is Frédéric Lambert's doctoral thesis, which, while acknowledging the evidentiary function of photojournalism, ultimately interprets its objectivity as a generator of broader social and collective narratives, or *mythographies*, in dialogue with Roland Barthes. Within this framework, photography is understood less as an objective record and more as raw material for discourse and storytelling. Within this broader framework, which foregrounds the photograph's potential to generate discourse and even narrative structures, one genre stands out as particularly significant: news photography. Among the various subcategories of photojournalism, news images aim most explicitly to bear witness to events. Far from embracing a naïve faith in the image, Lambert describes this effect as a kind of collective *trompe l'œil* (Lambert 1986, 141): photographs, while feigning neutrality, in fact fuel discourses that help structure the social fabric by weaving shared narratives around them.

Faced with the inherent ambiguity of visual evidence, artist and theorist Joan Fontcuberta, who has long explored the notion of photographic proof both in his theoretical writings and in his art-based practice, has described the relationship between photography and truthfulness as a form of betrayal. Drawing a provocative comparison, he likens this betrayal to the kiss Judas gave to Jesus: an act of apparent affection that conceals a deeper deception. While we are instinctively inclined to trust photographic images as visual evidence, this illusionistic effect systematically collapses into a form of treachery:

Todavía hoy, tanto en los dominios de la cotidianidad como en el contexto estricto de la creación artística, la fotografía aparece como una tecnología al servicio de la verdad. La cámara testimonia aquello que ha sucedido; la película fotosensible está destinada a ser un soporte de evidencias. Pero esto es solo apariencia; es una convención que a fuerza de ser aceptada sin paliativos termina por fijarse en nuestra conciencia. La fotografía actúa como el beso de Judas: el falso afecto vendido por treinta monedas. Un acto hipócrita y desleal que esconde una terrible traición: la delación de quien dice precisamente personificar la Verdad y la Vida (Fontcuberta 2015).

Thus, the myth of visual evidence – once the founding idea of the photographic medium – has also become the centrepiece of its critical undoing. An alternative to this binary lies in rethinking the very notion of “evidence” itself.

1.2. *What do we mean when we speak of evidence?*

The attempt to trace a notion of visual evidence through the history of photographic discourse reveals the difficulty of offering a unified definition, despite its centrality in how human cultures domesticate and integrate new technologies. On the one hand, visual evidence has been conceptualized through key notions such as objectivity, automatism, or the absence of mediation, depending on the disciplinary field. On the other hand, these very discourses have been challenged from the outset by equal and opposite arguments, aimed at destabilizing any fixed definition of photographic truth. A paradigmatic example of this dialectic is the debate around documentary uses of photography – from photojournalism to artistic documentary practices – as well as the complex discussions surrounding digital media and their implications for regimes of belief. Having established the constitutive instability of the concept of visual evidence and the difficulty of defining this object, we must now ask: what accounts for this condition? How can we rethink visual evidence in light of these conceptual and material oscillations?

To better understand this instability, we can begin with an analysis of the terms that shape the problem itself. The word *evidence* is first and foremost associated with clarity and obviousness, semantic fields that imply a relationship with truth. According to the Oxford Dictionary, *evidence* carries four primary definitions: first, as clarity or self-evidence; second, as a sign or indication of a quality or fact that supports a conclusion; third, as a legal term denoting information presented through testimony or documentation to establish facts; and fourth, as a verb, referring to the act of attesting or indicating.

Etymologically, the roots of the term evidence lie in notions of clarity, self-evidence, and certainty. In Italian, the word *evidente* has carried this meaning since the Middle Ages. The Florentine chronicler Ricordano Malispini, one of the first authors to shape vernacular historiography, described something evident as that which is clearly seen, and cannot be contested. The term derives from Latin *evidens*, from the verb *vidēre* (“to see”), and the prefix *ex-* (“out of”). According to this etymology, *evidence* as *evidenza* refers to that which is clearly seen – what appears openly and thus becomes visible, knowable, and obvious. According to this lineage, *evidence* as *evidenza* refers to what can be seen, what is clear, visible, and therefore obvious.

A more attentive examination of the meanings of evidence, however, reveals a very different – indeed, almost opposite – interpretation. The legal and semiotic dimensions of the term, as reported in the Oxford Dictionary, suggest that when evidence is understood as proof and used to attest, it is always also demonstrative in nature: it represents a point of departure rather than a conclusion, a clue rather than the instantiation of a singular truth. This second definition reveals a rhetorical function not immediately implied in the notion of clarity. If, to be considered probative, evidence must always be justified and demonstrated, how can it simultaneously be considered immediately evident?

This brief etymological analysis reveals a tension that closely mirrors what has emerged from our inquiry into images. In other words, if defining visual evidence has proven difficult from a media-theoretical perspective, this fluctuation is at least partly due to a constitutive instability within the very concept of evidence itself. Far from being self-evident, the term evidence occupies an uneasy position between two poles: on one side, the idea of (self-)evidence and obviousness; on the other, that of rhetorical demonstration – an approach that opens the concept to forms of sophistry and potential relativism.

This semantic ambiguity is hardly new, but it is interesting to observe how, across various scientific domains, it has given rise to specific clusters of knowledge. It is worth noting that different languages accentuate this ambivalence to varying degrees. Italian and French, for example, translate *evidence* not only as *evidenza* or *évidence*, which evoke clarity, but also as *prova* and *preuve*, terms that imply both exactitude and testing,

demonstration, or trial. In certain professional fields, this difference becomes crucial. In Anglo-American law, for instance, there is a marked distinction between *evidence*, as an indication or clue, and *proof*, which denotes a stronger form of verification or attestation.

In epistemology, the ambiguity surrounding the concept of evidence, and particularly its relationship to truth, has made it a central object of inquiry since early modernity, from Descartes onwards.⁵

Among the fields that have most insightfully problematized the constitutive ambivalence of the term evidence, historiography stands out for its sustained reflection on the role of proof, and thus of documents and sources, in the construction of knowledge. One of the most prominent thinkers to have addressed this issue is the Italian historian Carlo Ginzburg, widely recognized as the founder of microhistory.

In Ginzburg's thought, the concept of evidence plays a central role, arguably a red thread that runs through many of his most influential works. His engagement with the question of proof emerges both in his archival and document-based writings (such as those on the witches' sabbath, or his analyses of Inquisition and witch trial records), and in his more theoretical and methodological essays on historiography. Ginzburg is

⁵ Indeed, from Descartes onwards, evidence has been regarded as the criterion of scientific and cognitive truth. In the *Meditationes*, Descartes sought an absolute foundation for knowledge, identifying it in the evidence of clear and distinct ideas. As early as the *Discourse on Method*, he defined as "evident" those objects that are presented to knowledge in a certain, unmistakable manner, grounding his methodological principles on this very axiom. For Descartes, the evaluation of all truths depends on their evidentiary support. The notions of clarity, understood as the absence of ambiguity, and distinctness, as the separation from other ideas, were thus identified as the defining attributes of truth.

This relationship between evidence and truth undergoes a profound transformation with the development of modern scientific thought, according to which evidence may serve as justification but can never be a direct, sensible manifestation of the concrete truth that scientific demonstration seeks to establish. From Popper onwards, truth is conceived as an "asymptote": science never attains ultimate truth but instead draws closer to it through a process of eliminating errors. Popper's critique of the inductive method emphasizes that no quantity of evidence can ever definitively verify a scientific theory. Rather, the edifice of knowledge is built precisely upon its capacity to be falsified.

interested in how we think about evidence and, based on that thinking, how we construct specific forms of knowledge, which he, in his essay on evidential paradigms (to be discussed in more detail later), explicitly defines as “paradigm.”

Some aspects of Ginzburg’s reflection explicitly account for the ambivalence of the concept of evidence we have examined so far. For Ginzburg, failing to grasp the polysemic nature of the concept entails two major epistemological risks: on the one hand, a naïve positivism, and on the other, a hyperbolic and relativistic scepticism. These positions reflect two broader trends in the epistemology of history: positivist historicism and neoscepticism, which he identifies with postmodernism. Ginzburg critiques by developing a sustained epistemological analysis of evidence.

In *Il filo e le tracce*, Ginzburg presents a first definition of the positivist attitude, which he does not hesitate to describe as “naïve.” It consists in the belief that reality is directly accessible, without mediation, on the basis of evidence alone, without mediation (Ginzburg 2023, p. 15). In this view, evidence, which for the historian coincides with sources, provides an exact and direct vision of reality. For Ginzburg, positivism entails an uncritical faith in facts as monolithic entities and an unconditional trust in certain sources deemed authentic and reliable without being subjected to scrutiny or contextualization.

This aspect of the problem is also captured clearly by Bruno Latour in the publication accompanying the 2005 exhibition *Making Things Public: Atmospheres of Democracy*, curated with Peter Weibel at the *Zentrum für Kunst und Medientechnologie* in Karlsruhe. In the introduction to the exhibition catalogue, a collective volume exploring how politics and contemporary democracies relate to the public sphere, Latour recalls a paradigmatic case of uncritical positivism: the presentation delivered by U.S. Secretary of State Colin Powell to the United Nations in 2003, announcing the beginning of the Iraq War. Powell justified the military intervention by invoking incontrovertible evidence: the existence of weapons of mass destruction, which supposedly necessitated a military response. Although such weapons were never found, Powell insisted on the importance of grounding action in solid proof: “My colleagues, every statement I make today is backed

up by sources, solid sources. These are not assertions. What we are giving you are facts and conclusions based on solid intelligence” (Latour and Weibel 2005, 18). Latour comments on Powell’s speech as an example of appealing to facts as a strategy for silencing dissent: “Mr. Powell tried to distinguish the rhetoric of assertions from the undisputable power of facts. He failed miserably. Having no truth, he had no eloquence either”(19). Powell’s unconditional faith in hard facts collapses into its opposite, a rhetorical form that relies precisely on what it claims to deny. His insistence on the solidity of facts becomes, in Latour’s reading, a hollow performance of cultural relativism.

The second position described by Ginzburg, opposed to positivism, is scepticism. By disregarding direct engagement with evidence, sceptical approaches reduce history to rhetorical exercise and base their theories not on proofs but on argumentation. Since evidence is deemed insufficient to establish any form of truth, sceptics develop interpretations that are “figurative, incomparable, and irrefutable” (Ginzburg 2012, 178). Within this framework, any interpretation, so long as it is rhetorically well-constructed, can be considered valid. To illustrate this view, Ginzburg turns to the Holocaust denial debate, and in particular to one of the main polemical targets of his career: Hayden White. For Ginzburg, the danger posed by neosceptical positions in the humanities lies in their rejection of the very notion of proof, which renders it impossible to definitively refute false, and morally reprehensible, claims, such as Holocaust denial.

In his essay *Just one witness*, published in *Threads and traces*, Ginzburg starts from the thought of the French historian Robert Faurisson, today considered to be one of the leading voices of denialism. Faurisson attempted to undermine the credibility of historical evidence, particularly that concerning the mechanisms of extermination in Nazi camps.⁶ One of his most notorious arguments revolved around the alleged absence of visible openings in the roof of Crematorium II at Auschwitz-Birkenau, through which Zyklon B

⁶ Faurisson analyzed the testimonies of both survivors and Nazi perpetrators, focusing on their internal contradictions. He exploited the inevitable gaps in the accounts of trauma-afflicted survivors to argue that all testimonies were inherently biased and therefore unreliable.

gas was introduced into the gas chambers. According to Faurisson, this absence constituted proof that the crematoria were not designed or used for mass extermination.⁷

The presence or absence of these roof vents became central in the libel trial brought by British Holocaust denier David Irving against historian Deborah Lipstadt and her publisher, whom he accused of defamation for labeling him a falsifier of history. To prove the actual function of the gas chambers, visual evidence played a decisive role. Particularly relevant were a series of aerial photographs taken on August 25, 1944, by an American reconnaissance plane photographing a nearby petrochemical plant. By chance, the area captured on the 35mm negative included the roof of Crematorium II, although near the image's edge, in the lens's barrel distortion zone. In 1978, after seeing these images referenced in the television series *Holocaust*, two CIA analysts enlarged the photographs and identified four blurred marks on the roof of the crematorium, which they annotated as "vents", the small chimneys used to insert the gas.⁸

These aerial views were later central to Harun Farocki's 1989 video essay *Images of the World and the Inscription of War*, which offers a compelling reflection on the visual logic of evidence. In the video, the aerial photographs are juxtaposed with a famous quotation from Günther Anders, "Reality would have to begin", written in protest against the nuclear armament of West Germany. Anders denounced the Allies' inaction during the Second World War, particularly their failure to bomb the railway infrastructure leading to Auschwitz and halt the ongoing genocide. The lack of faith in the demonstrative power

⁷ On this basis, Faurisson developed the "No holes, no Holocaust" argument (Pelt 2002, 2–3), claiming that in the absence of direct material evidence confirming the function of the gas chambers, there was no proof of the genocide perpetrated by the Nazis. This argument constituted a direct attack not only on the historical record and survivor testimony but also on the entire conceptual framework of the Holocaust as a systematic policy of extermination. Without Auschwitz-Birkenau as the principal symbol and operational center of the so-called "Final Solution," the Holocaust itself was cast as a questionable reality. Although Faurisson's claims have long since been thoroughly discredited by the scientific and historical community, they continued to provoke controversy. Following the passage of the Gayssot Law against hate speech in France in 1990, Faurisson was tried, convicted, and in 1991, dismissed from his university position.

⁸ The entire investigation surrounding the Irving–Lipstadt trial, including the analysis of aerial photographs, is thoroughly recounted by Eyal Weizman (Weizman 2017, pp. 13–12).

of evidence, suggested by sceptical positions, becomes in Farocki's film a powerful form of social critique and a political meditation on the status of visual proof.⁹

As Ginzburg reminds, the most extreme consequence of scepticism – arising from the absence of direct engagement with evidence, whether material or testimonial – is a form of relativism that threatens to undermine any knowledge system grounded in verifiable sources, reducing historical inquiry to a rhetorical exercise incapable of producing valid knowledge. It is in this context that, as Ginzburg himself observes, “words such as truth and reality have become impossible to utter unless they are set off by quotation mark” (Ginzburg 2012, 7). The situation is exacerbated, he argues, by the absence of a true philosophy of proof, which leaves a gap between positivism and scepticism.

To re-centre the notion of evidence within the theoretical debate is, therefore, to distance oneself both from naïve positivism and from sceptical relativism. If, as Ginzburg observes, positivism ultimately amounts to a problem of “naïveté” – the belief that sources, evidence, and even images are transparent – the issue raised by relativism is a moral one. Ginzburg argues that the real danger of relativism lies in its tendency to blur or eliminate the distinction between factual judgments and value judgments, oscillating between the two in ways that compromise the ability to draw meaningful ethical or epistemological boundaries (Ginzburg 2022, 45). Abandoning the notion of proof simply because it never achieves full self-evidence risks legitimising an indiscriminate use of rhetoric. Rather than becoming a vehicle for eloquence capable of voicing contemporary concerns, rhetoric instead becomes what Ginzburg calls a “rhetoric of innocence” (43): a discursive strategy that enables one to absolve oneself of responsibility.

Rethinking the notion of evidence is, therefore, not only a philosophical or historiographical concern, but a political urgency, especially in a time when proof is often dismissed as “out of fashion” (Ginzburg 2020, 26). In *Checking the evidence*, Ginzburg characterises evidence in precisely these terms, in the context of his defence of Adriano

⁹ For further analysis of Farocki's film and his interpretation of these images in relation to the thought of Günther Anders, see (Farocki et al. 2017)

Sofri, a prominent intellectual of the Italian left who was convicted for (supposedly) ordering the 1972 assassination of police commissioner Luigi Calabresi. The killing was considered the final act in a chain of retaliations linked to the Piazza Fontana bombing in Milan.

Here, Ginzburg insists that the notion of evidence is also one of the cornerstones of sociopolitical equilibrium. After all, it is only through proof that we can issue verdicts, formulate legitimate theories, or pronounce legal sentences. To move beyond the dangers of naïve positivism and hyperbolic scepticism is, then, not only a disciplinary imperative, but a political mission tied to social justice, and, crucially, to the realm of visual studies, too. It is essential, then, to learn to think about evidence in its ambiguity, in its median dimension: straddling, but not reducible to, either of the two poles. Returning to Latour's thought, one could describe this epistemological stance as a kind of deliberate weakening of evidence: no longer something capable of telling the whole truth and nothing but the truth, but rather a necessarily partial account of (some) things:

For those like Mr. Powell, who have long been accustomed to getting rid of all opposition by claiming the superior power of facts, such a sea change might be met with cries of derision: 'relativism,' 'subjectivism,' 'irrationalism,' 'mere rhetoric,' 'sophistry'! They might see the new life of facts as so much subtraction. Quite right! It subtracts a lot of their power because it makes their lives more difficult. Think of that: They might have to enter into the new arenas for good and finally make their point to the bitter end (Latour and Weibel 2005, p. 21).

This "weakening" of the notion of evidence, as opposed to its positivist omnipotence, allows us not to abandon the concept altogether in favour of relativism. In reconsidering this middle-ground position, Latour proposes a shift from "matters of fact" to what he calls "matters of concern" (19). Acknowledging that every fact is entangled in complex networks of mediation, Latour sees matters of concern not as incontrovertible data but as objects of shared interest involving multiple historical, material, local, social, epistemological and political dimensions. They must be examined through a plurality of perspectives in a process of negotiation and debate.

Latour critiques the reductive simplicity of matters of fact, which claim to exhaust complexity by reducing it to objective data. Instead, he calls for a reassessment of the

epistemic weight of matters of concern, which highlight the dense mesh of mediations that underpins every so-called “fact.” This approach calls for a “new eloquence” in both science and politics, an eloquence grounded not in presumed immediacy, but in collectively elaborated and negotiated forms of evidence. Matters of concern invite us to explore the complexity of things, recognising that objectivity is not given but constructed within heterogeneous assemblages.

This way of reconceiving evidence as a matter of non-neutral, albeit partial, knowledge is akin to the idea of situated knowledge expressed by the scholar Donna Haraway and her feminist formulation of objectivity in scientific knowledge. Haraway argues that the objectivity is possible only within a communitarian, embodied framework: “*Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular*” (Haraway 1988, p. 590). Ginzburg himself refers to Donna Haraway in *History, Rhetorics and truth*, to claim the necessity of starting from a partial, localised (indeed, situated) knowledge to construct a usable, but not innocent, idea of objectivity (Ginzburg 2022, 45).

Although Ginzburg’s epistemology of evidence does not emerge from within the field of visual studies, it nonetheless provides compelling conceptual tools for thinking about visual forms of evidence. Later in the same work, Ginzburg encapsulates his epistemology of evidence with a powerful, and significantly visual, metaphor. He argues that sources should not be regarded either as fully transparent openings, offering unmediated access to truth (as in the positivist view) or as absolute barriers that prevent any form of understanding, as sceptics might claim. Instead, he suggests, sources are more akin to distorting panes of glass: they offer a view, but one that is refracted and shaped by their own material and historical conditions (51). From this metaphor, a key idea emerges: the study of sources is not a matter of direct observation but of interpretation and reconstruction. Every distortion tells us something about the context, the intentions, and the limitations of the source’s author, and to analyse it is already an act of critical construction.

The wall and the window are not only metaphors for naïve positivism and relativistic scepticism; they are also powerful metaphors of vision. The wall, as an architectural element, represents a perceptual discontinuity – it blocks and interrupts the

gaze, making observation impossible. The window, by contrast, evokes the Renaissance model of linear perspective theorised by Alberti, in which the painting becomes a transparent surface through which the world can be seen, as though framed by a window.

This notion of evidence as a window, which Ginzburg already warns us to abandon, resonates with what we previously defined as the paradigm of photographic evidence. The window implies a transparent surface in which the medium, whether canvas or photographic support, must disappear, concealed from view. Only then can the image be identified with the window: an ideal threshold “through which” the viewer gains access to the external world. The difficulty of defining visual evidence, which we encountered at the beginning of this chapter, thus finds a striking echo in recent debates on historical epistemology.

As we have seen, to understand evidence means to consider it from a median perspective: neither entirely sceptical nor naively positivist. Seeking this “proper distance” entails both a hermeneutic positioning – concerning the interpretation of documents and the constructive labour this implies – and a rhetorical one: how these interpretations are communicated and brought into the public sphere. In this context, the need for new mediating structures becomes crucial. It is not only a matter of refining analytical tools, but also of developing a “new eloquence,” as Bruno Latour suggests, capable of making evidence effective. The legacy of Ginzburg’s epistemology teaches us that only through this dual attention, situated but not innocent, can we develop a critical and operative approach to visual evidence, one that responds to the epistemological challenges posed by contemporary visuality.

1.3. *Cheshire Cat's smile*

Concluding this initial reflection on the transformation of visual evidence requires a shift in perspective from classical paradigms of proof. As we have seen, in contemporary contexts, the concept of visual evidence appears increasingly unstable, shaken by ongoing technological and cultural upheavals. Yet, as in the case of photography, this instability may stem not so much from the intrinsic nature of technologies, but rather from how we have discursively framed them – embedding them in narratives that render them seemingly neutral and transparent tools. The recurring debate over the truth-value of photographic images – once loudly celebrated, then repeatedly “killed” by successive technological innovations – reveals the stakes of this dynamic.

More than any other visual form, photographic images have been cloaked in an aura of objectivity and imagined as faithful records of reality, unmediated and unfiltered. In Latour's terms, they have been treated as “matters of fact”, that is, hard facts capable of conveying immediate, incontrovertible truth. The shift from this claim to objectivity toward an understanding of images as “matters of concern” implies a major epistemological transformation: it is no longer a question of assuming transparent access to the real, but of acknowledging that evidence is not with a window onto the world, but rather, echoing the epistemological debates discussed earlier, particularly Ginzburg's, a pane of glass that distort, amplify, and reinterpret what it shows.

One particularly emblematic case of this shift can be found in Errol Morris's investigation into a photograph of U.S. Army Specialist Sabrina Harman, pictured beside the body of Manadel al-Jamadi, an Iraqi civilian killed during a CIA interrogation in Abu Ghraib prison on 4 November 2003. Morris's inquiry emerged while producing the documentary *Standard Operating Procedure*, and portions of his investigation were later published in *Believing Is Seeing: Observations on the Mysteries of Photography*.

The images taken at Abu Ghraib between 2003 and 2004 documented the systemic violence of American soldiers against detainees during the Iraq War. Within photographic theory, these have often been considered the first digital images to be elevated to the status of visual evidence (Gunthert 2015; Grespi and Malavasi 2022). Despite their digital nature, they were immediately regarded as admissible evidence, confirming a substantive continuity between analog and digital truth-claims. When the photographs were released – even though Abu Ghraib was considered a stronghold of U.S. intelligence in Iraq – they launched a chain of investigations that exposed numerous human rights violations.¹⁰

What shocked public opinion most, however, were not simply the abuses depicted but the smiling soldiers posing beside bruised, unconscious, or dead bodies. Among these, the most widely circulated image shows Sabrina Harman beside al-Jamadi's corpse. "There are many photographs of al-Jamadi's body," Morris notes, "but it is the photograph of Sabrina with his body that stands out among them: the photograph of a pretty American girl who is alive and a battered Iraqi man who is dead" (Morris 2014, 118). Harman's smile, her youthful appearance, and voluminous blonde hair drew immediate attention. She was quickly vilified in the media as "the ghoul next door".¹¹ In 2005, she was arrested and convicted of war crimes related to her role in the torture. The self-portraits she had taken that night at Abu Ghraib were used as evidence against her, interpreted as proof of her complicity.

Yet, as Morris reveals, Harman's private letters to her partner Kelly suggest a more complex picture. In one of them, she expresses disapproval of the abuse she witnessed, explaining that she took photographs precisely to document what was happening, because otherwise, no one would believe it: "Yes, they do beat the prisoners up and I've written this to you before. I just don't think it's right and never have. That's why I take the pictures – to prove the story I tell people. No one would ever believe the shit that goes on" (117).

¹⁰ "There was not one investigation into the abuses at Abu Grhaib, but muptiple investigations blending one into the other - all assigned a little piece of the puzzle. There were investigations by the Confress, by the military, and the Department of Defense. [...] Thirteen government reports in al" 109-110).

¹¹ As reported in the New York Post cover reported by Morris (112).

On that smile, deemed chilling by Western audiences, Sabrina goes on to reveal its constructed nature: “if I want to take pictures of those events - I even have short films - I have to fake a smile every time” (117) What had been read as evidence of complicity was, in her words, a conventional gesture. As André Gunthert (2023) argues, smiling in photographs is a coded act: a communicative convention. Harman explained to Morris that she had picked up the thumbs-up gesture from children in Baghdad – another conventional sign she used to avoid drawing attention while taking photos that might later be used as testimony. In other words, her pose was not celebratory but strategic: a shield to protect herself while documenting acts she disapproved of. To validate this interpretation, Morris consulted psychologist Paul Ekman, who confirmed that Harman’s smile lacked the muscular activation around the eyes that typically accompanies genuine expressions of joy.

Should we therefore consider Sabrina Harman innocent? The final verdict, although still open, is ultimately not what matters most. What is interesting to note is that, despite the authenticity of the images, the discourse constructed around them produced a false interpretation. In fact, while she was undeniably part of the abusive system at Abu Ghraib, her act of resistance – taking photographs – was a gesture aimed at exposing what others sought to conceal: the systemic violence that remained outside the frame.

As Morris observes, the individuals responsible for Manadel al-Jamadi’s death are conspicuously absent from the images. Thus, Harman’s photographs both reveal and obscure at the same time:

We see Al-Jamadi’s body, but we don’t see the homicidal act that turned him into a corpse. We don’t understand what the photograph means, nor what it is about. Instead of asking: ‘Who is this man?’ ‘Who killed him?’ the question becomes: ‘Why us this woman smiling?’. At first I believed that Sabrina was complicit in al-Jamadi’s death. I was wrong. I, too, was fooled by the smile (Morris 2014, p. 118).

By uncovering the mechanisms behind images initially considered self-evident, Morris ultimately aligns with the epistemology of evidence outlined earlier. His inquiry gives back to Harman, and to her images, a voice and a body. By contextualising what the photographs appeared to show, he dismantles the paradigm of photographic proof

as matter of fact and reveals its situated, partial, and incomplete nature, though not, for that reason, any less powerful. In this process, the photographs – and the evidentiary paradigm we often associate with them – are only one possible path toward truth. They are not the only one, and certainly not the last: “The photographs are the start of a trail of evidence, but not the end” (117). In Latour’s terminology, they are matter of concern.

In light of Morris’s inquiry, Sabrina Harman’s smile still stares back at us from those images: enigmatic, unsettling. Morris compares it to the smile of the Cheshire Cat in *Alice in Wonderland*. Perhaps the real truth of these images will always remain an unsolvable problem that gazes back at us from a distance, smiling slyly like the Cheshire Cat in *Wonderland*. However, what Morris’s investigation ultimately reveals is a different dimension of evidence – one that points toward a different paradigm, in which images are not treated as evidence because they are (self-)evident, but because they function as instruments through which and upon which investigation must be carried out. It is not that images testify on their own, but rather that they make investigation possible: they are media through which the inquiry unfolds.

Chapter Two

The evidential paradigm: genealogies of virtual investigations

La preistoria della fotografia criminale non trasmette fossili.

A. Gilardi, *Wanted! Storia, tecnica ed estetica della fotografia criminale*, Mazzotta, p. 45.

In the previous chapter, we observed how the difficulties in defining an accurate and nuanced idea of visual evidence stem primarily from a paradigm constructed around certain qualities considered intrinsic to the photographic medium. We traced the characteristics of this paradigm, identifying its foundational traits in objectivity and lack of mediation, qualities that were perceived as essential to photographic practice compared to other image-making techniques. This paradigm has inevitably influenced the relationship between image and evidence and has become embedded in a set of discursive constructions that now demand to be challenged to allow new perspectives to emerge.

To move beyond this paradigm, which effectively equates photography with evidence, and evidence with photography, we must firstly reconsider the role of photorealism. Within visual media studies, perceptual resemblance between the image and its referent is accorded diminishing importance, particularly when the image is considered as a document. This deconstruction of photography's realistic appearance, long a subject of semiotic debate around indexicality,¹² appears to be gaining new traction today.

¹² In opposition to the notion of photographic iconicity – understood as a legacy of the nineteenth century – numerous theorists and art critics have instead approached the photographic image in terms of its

In film studies, for example, scholar Nea Ehrlich notes that the emergence of animated documentaries made with 3D models, entirely synthetic and without any use of photographic or cinematic footage, signals the end of the "privilege of veracity" (Ehrlich 2022, 237) traditionally conferred upon photographic images. Photorealism can also be understood as a derivative of anthropomorphism: lenses function by channelling light rays onto the medium in a way that conforms to our own way of perceiving the world. Following Harun Farocki and his reading of operational images, photorealism is interpreted as an accessory and almost "courtesy" feature, unnecessary to the functioning of the machinic apparatus, which instead operates through a set of processes that are not inherently aimed at iconic or mimetic representation (Grespi 2024). This view is also echoed in artistic practices. Artist and theorist Grégory Chatonsky, who has worked with generative images, paraphrasing Stiegler, interprets photorealism as a matter of repetition. Realism, in this view, stems not only from photosensitive indexicality or coherence with the physical world, but from the sensation of *déjà vu*: the balance between the familiar and the unexpected, between repetition and possibility (Chatonsky 2021). This more recent definition of photorealism is particularly compelling because it allows for a reading that associates this characteristic not with irrefutable evidence of a unique presence, occurring at specific spatiotemporal coordinates before a camera – that *noeme* of photography described by Roland Barthes in *Camera Lucida* – but rather with a form of stereotypy that renders images increasingly generic. According to Chatonsky, generative images once again expose the conventional nature of photorealism, revealing it as the result of a quantitative accumulation of hundreds or thousands of similar images, and thus linked to a form of statistical repetition that generates a sense of verisimilitude.

Within this debate and building on the arguments explored in the previous chapter, it becomes increasingly urgent to identify an alternative paradigm to positively define the notion of evidence – one that does not emerge, as we have seen so far, only through negation or through the reconstruction of certain medial features we now retroactively project onto the past. A particularly useful starting point for this endeavour can once again

constitutively indexical status. That is, they have emphasized the necessary physical and causal connection between image and reality, a connection that exists independently of any relationship of resemblance between subject and image (Burgin 1982; Krauss 1977; Schaeffer 1987).

be found in the work of Carlo Ginzburg, whom we have already cited in the previous chapter for his theories of the evidence. This time, however, we will focus on another aspect of his work: his idea of the “evidential paradigm.”

In fact, the aim of this chapter is to explore how this historical paradigm contains, *in nuce*, a key for reinterpreting the notion of evidence also within visual studies. Moving once again away from the idea of photography as a mirror, and drawing, like many before us, on the metaphors of the trace and the imprint, we will seek a new paradigm of the image that, beginning with this status of imprint, also conceives of it as a clue. For Ginzburg, in fact, clue and evidence are two sides of the same coin; thus, studying the clue is heuristically relevant to understanding evidence. One of the challenges of this chapter will therefore be to explore a possible interdisciplinary "expansion" of Ginzburg's evidential paradigm, from the field of historical studies to that of visual culture. Indeed, although Ginzburg's name appears frequently in texts focusing on the theme of the image, a systematic approach that connects the visual references in his essay to a coherent theory of the image is still lacking.

To attempt this undertaking without distorting the specificity and richness of Ginzburg's thought, we will also draw on a notion that already circulates in the field of visual culture: the so-called “forensic gaze” (Rugoff 1997; Huston Jones 2022). As an operational category, this gaze will serve to “put into practice” the theoretical idea of the paradigm, highlighting points of contact with the visual pragmatics at work in contemporary investigations.

2.1. *Towards a “nonpromotional” history of visual evidence*

In 1997, the San Francisco Museum of Modern Art presented an exhibition focused on the history of so-called "police pictures," namely images that aspire to embody the evidential paradigm, particularly forensic photographs. Among the works on display

were those by leading pioneers of European police schools who, from the second half of the nineteenth century, revolutionised forensic science by proposing the inclusion of photographic images within their investigative toolkit. In the catalogue accompanying the exhibition, an essay by Mark Haworth-Booth noted a curious chronological coincidence: the invention of photography and the literary invention of investigation are coeval (Phillips, Haworth-Booth, and Squiers 1997). Especially in the Anglophone world, both developments are situated around 1840. In England, in 1839, William Henry Fox Talbot announced the invention of the calotype; two years later, in 1841, Edgar Allan Poe inaugurated the detective genre with the publication of the first stories featuring what is now considered the first fictional detective, C. Auguste Dupin. This coincidence is underscored by the fact that, just as the American author described grisly crimes solved by an eccentric and brilliant Parisian investigator, Talbot too, in his own way, imagined photographic investigations. In *The Pencil of Nature*, while commenting on a calotype depicting some *Articles of China*, Talbot reflected on how photographic images might be used as evidence in the event of theft. At the time of writing this groundbreaking work, which was both the first book illustrated with photographs and one of the earliest reflections on the medium, the use of images as evidence in legal contexts was still a matter for the future, as photography would not be systematically adopted for forensic or judicial use until some twenty years later (Mnookin 1998). Yet Talbot already perceived that photographs might serve as a “new kind of evidence” (Talbot 1844). If a thief were to steal the porcelain items depicted in the calotype, the “mute testimony” of the images would help in identifying the culprits. Anticipating by two decades the actual adoption of photographs in police work and courtrooms, Talbot seems to intuit a form of “legalistic truth” (Sekula 1986, 6), whereby the image is conceived as an investigative tool in its own right.¹³

¹³ It is also noteworthy that Talbot develops his reflections starting from a calotype depicting a series of porcelain objects, arranged as if for a catalogue or an exhibition. The porcelains are displayed on shelving that creates a uniform and taxonomic effect. By placing the objects at fixed distances from one another and from the camera, this image already seems to anticipate the idea that the evidentiary condition of the image, as suggested by Talbot, implies a gaze that measures, that disciplines space and what it contains.



Figure 1 William Henry Fox Talbot. Articles of China, *The Pencil of Nature*, 1844

This chronological coincidence between photography and literature suggests that investigation and the mechanical vision inaugurated by photography are closely intertwined. Ando Gilardi – photographer, historian of photography, and founder of the pioneering *Fototeca Storica Nazionale* – described the history of the investigative uses of photographs as a “nonpromotional” history of the medium (Gilardi 2009, 8).

Despite clear evidence that photography was recognised early on as a potential investigative tool, this history, according to Gilardi, has remained less well known than those narratives which celebrated the transparency of the image. More specifically, the reason this so-called “criminal” history of photography has attracted limited attention is, for Gilardi, that it was considered less attractive and seductive. Yet it is precisely in this nonpromotional history, rooted in investigative practices, that Gilardi locates the material origins of visual evidence. Within police institutions, photographic practices emerged that differed significantly to the rhetoric of evidence as self-evidence, which we have examined thus far. Excavating the history of these images therefore offers a productive starting point for rethinking visual evidence on new foundations.

One of the most significant examples cited by Gilardi concerns one of the earliest public addresses about photography, in which a plea was made for the state to purchase the patent

for the daguerreotype – then, little more than a recent invention. It was precisely thanks to state subsidies that the daguerreotype became widely disseminated in France. In the official historiography of the medium, this event marks the beginning of a narrative that frames photography as a popular technology, capable of democratising access to portraiture and figurative representation for a wide section of the bourgeois public (Freund 1974). Nevertheless, among the so-called inaugural speeches of the medium, historiography tends to highlight above all the announcement of the invention by François Arago, delivered on 5 January 1839 at the Académie des Sciences, which already emphasised the scientific utility of photographic evidence. Yet only a few months later, on 15 June 1839, it was not Arago but the reactionary Minister of the Interior and head of the police, Charles Maire Tanneguy Duchâtel, who advocated the state subsidy of the photographic medium. Unlike Arago’s speech or other early interventions celebrating the medium’s potential, Duchâtel’s *exposé des motifs* is far less often remembered. Indeed, the subsidisation of photography by the state is one of those moments that history textbooks tend to gloss over. To shed light on this lesser-known episode in the historiography of photography, Gilardi reproduces and translates Duchâtel’s *exposé des motifs* in full (Gilardi 2009, 8–10). Re-reading it critically in light of the question of evidence proves to be both insightful and productive. Duchâtel’s argument unfolds in three main stages. First, he describes the daguerreotype as a technology that improves both the efficiency and quality of image production. Second, he points to its applications in scientific travel, enabling fieldwork for archaeologists and naturalists. Most importantly, Duchâtel insists that photographed objects retain their form “mathematically”:

Daguerre succeeded in fixing the images of the camera obscura and creating in this way, in four or five minutes, by means of the force of light, drawings in which the objects mathematically conserve their form, down to the most minute details, and which show a linear perspective and a modelling by the tones of aerial perspective, of a hitherto unknown delicacy” (9).¹⁴

¹⁴ Translation from Italian to English by the author.

Duchâtel's words are paradigmatic in that they anticipate a conception of the photographic image based not only on iconic or mimetic resemblance – that is, an identity between image and object based on visual similarity – but also on a kind of mathematical proportionality, and therefore quantifiability. Gilardi's rediscovery of this speech highlights one of the first programmatic claims to describe the photographic image as numerical and measurable data. As Gilardi comments: “the ‘drawing’ obtained ‘by means of the force of light’ is thus also, and for the first time in the history of images, an objective measure, a datum, a figure, a plate: these are the terms that have been used from the very beginning” (25)¹⁵. Moreover, it is especially Allan Sekula, in his seminal essay *The Body and the Archive*, who details the concrete ways in which this new type of photographic evidence is linked to a function of mathematical measurement, in which optics and statistics are brought together for the first time (Sekula 1986, 18). For Sekula, the study of early police practices reveals the emergence of a truth-producing apparatus that cannot be reduced to the appearances reproduced by the photographic device:

If we examine the manner in which photography was made useful by late-nineteenth-century police, we find plentiful evidence of a crisis of faith in optical empiricism. In short, we need to describe the emergence of a truth-apparatus that cannot be adequately reduced to the optical model provided by the camera (16).

Sekula observes that many of the police and forensic practices adopted in Europe and the United States from the 1880s onwards were oriented toward a use of the image that, although still analogue, already treated representation as a repository of quantifiable data, ready to be extracted and correlated. The systematic integration of photography into European police prefectures was in fact aimed at creating what Sekula defines as a “repository of interchangeable data” (17). He analyses the equipment and methods of capture and archiving employed in police contexts: the importance of classification systems, the techniques of photographic capture, and how they translated a mathematised conception of evidence. We will return to these measurement practices later in this

¹⁵ “Il ‘disegno’ ottenuto ‘per mezzo della forza della luce’ è dunque anche, e per la prima volta nella storia delle immagini, una misura oggettiva, un dato, una cifra, una targa: sono i termini che vengono usati fin dal principio”. Translation of the author.

chapter, to examine how they were shaped by the specific object of measurement, whether the criminal body or the crime scene space. For now, however, it is useful to situate this specific approach to evidence once again in relation to theories of the photographic image.

2.2. *From indexicality to image-data*

To consider the analogue, yet already data-oriented uses of the image is, first of all, to acknowledge a debt to Charles Sanders Peirce's theory of the sign and, consequently, to his influence on the theory of photography.¹⁶ It is well known that it was the rediscovery of Peirce's writings that consecrated photography as a theoretical object, generating around it a set of specifically aesthetic questions, such as reflections on the aesthetics of the trace and the imprint (Bazin 1960; Didi-Huberman 2008; Krauss 1991). In photographic theory, Peirce's notion of indexicality, understood as implying a causal relationship with the referent, has often (and at times erroneously) been treated as the foundation for photography's evidentiary power, taken as a guarantee of authenticity. What appears before the lens is understood to result from a continuous, physical presence, making the photograph a formidable piece of evidence, according to a line of reasoning that we could summarise as a kind of common-sense axiom: "this event happened because something stood in front of the lens and was photographed." Yet this position, which equates photography's indexical value with its evidentiary function, fails to account for the fact that, in Peirce's thought, the index implies a relation of physical and causal

¹⁶ The debate on the indexical nature of photography lies at the core of the semiotic studies devoted to this medium. This debate, rich and complex, is too extensive to be fully addressed here. However, for an initial overview, one may refer to the discussion on photography by Pierluigi Basso Fossali and Maria Giulia Dondero in *Semiotica della fotografia* (Basso Fossali and Dondero 2008), the edited volume by Claudio Marra *Le idee della fotografia* (Marra 2005), and Luisa Scalabroni's summary article *Per una semiotica della fotografia* (Scalabroni).

continuity, but not one of resemblance, a point which makes the common-sense assumption far more difficult to uphold.

Furthermore, Peirce's biography may suggest another possible interpretation of indexicality, one more closely tied to the notion of measured data, and ultimately to investigative cues. During his scientific work at the Harvard Observatory, Peirce used Zollner's photometer to measure the magnitude of stars, thereby personally testing the potential of photographic instruments for scientific measurement (Brunet 2011; Hoel 2016). In his leisure time, he was also a passionate and attentive reader of detective stories, as evidenced by the numerous references to Edgar Allan Poe scattered throughout his vast body of work. Yet Peirce was not merely a passive admirer of the genre. He was introduced to the methods of criminal investigation as early as 1867, thanks to his father Benjamin, an eminent mathematician, in the context of a legal case in which the Peirce family gave testimony (Zanirato 2003, 142).

In a short essay titled *Guessing* (Peirce 1929), in which he reflects on why people so often resort to guessing in daily life, Peirce recounts a personal anecdote in which he quite literally improvises as a detective. A steward aboard the steamer that Peirce had boarded in Boston, travelling to New York, had the unfortunate idea of stealing the watch and overcoat Peirce had absent-mindedly left in his cabin. In a scene worthy of the best detective fiction, the father of semiotics manages to identify the thief and recover the stolen items. From this small autobiographical episode, we may deduce that the indexical nature of the photographic sign, in addition to containing a dimension of measurement, also conceals an investigative potential, one that meaningfully links the index to the clue. that the indexical nature of the photographic sign, in addition to containing a dimension of measurement, also conceals an investigative potential, one that meaningfully links the index to the clue.

Restoring full legitimacy to this dimension of indexicality leads us to question the paradigm of evidence grounded in the notion of photorealistic transparency, and to seek new foundations in the idea of the clue, one ready to be interpreted, measured, and calculated. We may hypothesise, in fact, that it is precisely the indexical dimension of the image that leads us towards a radical and meaningful transformation: from physical trace

to computable data, at the origin of contemporary operationality. Understanding evidence as measurement thus means approaching the image not only as a representation, but as an entity that can be translated into information and, therefore, into code, something that can be extracted, analysed, and capitalised (Geoghegan 2023). This quality is now recognised as one of the main features of algorithmic images, which are, not by chance, defined as a “capital” of information (Eugeni 2021), and it can be glimpsed, in watermark, in the scientific applications of the image, including those developed within policing and forensic science.

By short-circuiting the new with the old, we may locate the roots of today’s data-images, which are now often subsumed under the umbrella notion of the “post-photographic” (Grespi and Villa 2024), in the earliest experiments with the metric uses of photography in policing, applied both to the human body (the criminal's body) and to space (the crime scene). This genealogy of visual evidence, rooted in the use of the image as an investigative tool, brings to light an archaeology of operationality based on measurement.

Retracing this genealogical line of visual evidence, embedded in the use of the image as an investigative tool, brings to light an archaeology of operationality grounded in measurement, as also revealed – and especially so – within the field of media archaeology. In fact, the use of images as measurement tools is today recognised as one of the foundations of operationality and has been widely studied in fields that extend beyond forensic science, including cartography, topology, and geography (Parikka 2023). Recent contributions in media studies have also emphasised the computational nature of the images we now call “visualisations” (Drucker 2020), precisely because they make large quantities of data visible, and have insisted on their roots in mathematical calculation. In scientific contexts, moreover, this process of constructing an iconic object from data is taken to an extreme: here the image is conceived for the first time as an “iconisation,” helping to transform scientific calculation and measurement into visual form (Dondero 2011). Finally, a significant portion of contemporary media studies focuses on reformulating the concept of photography on new foundations, separating the link between image and moment, between present experience and its documentation (Zylinska 2017; Parikka and Dvořák 2021).

In the Italian context, one of the first to highlight this continuity between measurement and evidence was Ando Gilardi. As we have seen, Gilardi identifies the mathematisation and policing appropriation of photography as one of the deepest roots of the documentary uses of the image. Yet his reflection goes further. In a passage from his book on criminal photography, Gilardi explicitly connects measurement to the "classical" theories of photographic evidence discussed in Chapter 1. The issue emerges when photographic mathematisation is understood as a form of equality:

“Every subsequent gratification, and mythologisation, of photography as an 'objective' document, 'indisputable proof' and the like, which has helped so much to deceive the masses, and to falsify first the chronicle, then history, derives from this first equation whose first term is the object (and the face of a man), the second its photographic drawing, and in between is placed, now almost instinctively, the mathematical sign of equality (=) that guarantees the identity between all the possible values that the terms may also subjectively assume” (25).¹⁷

This idea of equality has had a lasting echo in shaping the notion of photographic visual evidence, which photography scholars have debated and criticised since the advent of postmodernism. For example, John Berger, in *Understanding a Photograph*, strikingly summarises this view in an almost aphoristic form, suggesting a kind of equivalence between visibility, fact, and truth: “When something is visible, it is a fact, and facts contain the only truth” (Berger 2013). This conception thus presents evidence as the child of an equivalence between visibility and factuality, an approach which, as we have seen, risks devolving into epistemologies of evidence with problematic implications, prone to an overly positivist view that, paradoxically, leads to a dead end, invalidating any meaningful evidentiary value. Similarly, Roland Barthes’s famous assertion that

¹⁷ “Ogni successiva gratificazione, e mitizzazione, della fotografia in quanto documento ‘oggettivo’, ‘prova indiscutibile’ e simili, che tanto ha aiutato a ingannare le masse, e a falsificare la cronaca prima, la storia poi, deriva da questa prima equazione il cui primo termine è l'oggetto (e il volto di un uomo) il secondo il suo disegno fotografico, e nel mezzo si colloca, oramai quasi istintivamente, il segno matematico di eguale (=) che garantisce l'identità fra tutti i possibili valori che i termini possono anche soggettivamente assumere”. Translation of the author.

photography is “contingency, singularity, adventure” (*contingence, singularité, aventure*) (Barthes 1980, 40), an idea that fuelled theoretical debates on technical images for decades, appears increasingly problematic. This archaeological lineage of the data-image, so firmly rooted in measurement, makes it difficult to sustain the notion of evidence as an image primarily shaped by contingency, the outcome of a fully automated process that produces a “transparent and lightweight” visual shell of events (7). Moreover, this construction of photographic evidence as equivalence between image and represented object has been linked to class ideology. In the nineteenth century, the bourgeois use of photographs and photographic portraits, especially after Eugène Disdéri’s invention of the *carte de visite* (Freund 1980), strengthened a class that needed to present and represent itself with full correspondence between image and subject. Today, the mathematisation made explicit by the most advanced digital techniques is clearly recognised as “a neoliberal force” (Rouillé 2020), and even as a “cultural technique” (Dvořák and Parikka 2021), one that exceeds the narrow domain of science to become the infrastructure of a broader set of social mechanisms: quantification, evaluation, classification, ordering.

What is needed, then, is to return evidence to a dimension of measurement that does not presuppose an idea of equivalence. Paraphrasing Gilardi, we might conclude that it is important to reframe the evidentiary paradigm by replacing the sign of equality with one of inequality. Gabriele D’Autilia, in *L’indizio e la prova*, had already framed the problem of realism as a matter of the relationship “between perception and interpretation,” that is, between aesthetics and semiotics (D’Autilia 2005, 32). In other words, an image functions as visual evidence not only in terms of how it appears, but in terms of what in it can be semioticised, measured, and interpreted.

In the analysis of this “nonpromotional” history of evidence, we will glimpse at an alternative paradigm, one grounded not in equivalence, self-evidence, or transparency, but in the measurement and correlation of seemingly marginal details: the evidential paradigm.

2.3. *The evidential paradigm as an epistemological model*

The idea of the evidential paradigm, a now-celebrated essay by Carlo Ginzburg, offers the conceptual grounding for the intuition outlined above and allows it to be situated within a broader framework, one in which investigation emerges as a concept with its own genealogy and specific implications. A first version of this text appeared in 1980, with the title *Spie. Radici di un paradigma indiziario*, originally published in the collective volume *Crisi della ragione* (Gargani 1980). The essay's editorial history is extensive. Among its many editions is a contribution to the volume *Il segno dei tre*, edited by Umberto Eco and Thomas Sebeok and dedicated to investigative method (Sebeok and Eco 2003). The first English version of the essay appeared not long after its initial publication in the volume *Clues, Myths, and the Historical Method*, the English translation of *Miti, emblemi e spie* (Ginzburg 1989). In French, the essay appeared for the first time in the volume *Mythes, emblèmes, traces. Morphologie et histoire*, published by Flammarion (Ginzburg 1989). The enduring resonance of this article continues to the present: forty years later, it has recently been republished in the latest Italian edition of *Miti, emblemi, spie: morfologia e storia* (Ginzburg 2023).

The enduring success of this essay, which Ginzburg has described years later as a “crypto-intellectual autobiography” (Ginzburg 2007), lies in its originality: it links seemingly unrelated domains and historical moments with remarkable methodological freedom, in order to shed light on a form of knowledge that emerged silently (Ginzburg 1989, 96) within the human sciences. The enduring success of this essay, which Ginzburg has described years later as a “crypto-intellectual autobiography” (Ginzburg 2007), lies in its originality: it links seemingly unrelated domains and historical moments with remarkable methodological freedom, in order to shed light on a form of knowledge that emerged “silently” (Ginzburg 1989, 57) within the human sciences. For Ginzburg, the paradigm is first and foremost a methodological attitude “based on discarded information, on marginal data, considered in some way significant” (101), and can thus be identified and applied across various historical and disciplinary contexts. Following, and explicitly citing, Edmond Kohn, Ginzburg adopts the term *paradigm* to refer to “an epistemological model” (96), a specific way of conceptualising a constellation of knowledge with

common structure.¹⁸ More specifically, the evidential paradigm refers to a model of knowledge that brings into relation apparently marginal elements, based on the awareness that what is residual can be interpreted as a symptom, a revelatory sign, in other words, a clue. This specific mode of knowledge is grounded in the interpretation of seemingly negligible details and signs that can nonetheless reveal broader meanings. Taken in the abstract, the paradigm implies a tension between its general form, the structuring and shaping of a mode of knowledge, and the most singular and individual data, such as traces, clues, or characters. In this framework, “details usually considered of little importance, even, trivial or 'minor', provided the key to for approaching the higher aspects of the human spirit” (160).

Like a “carpet” (117), the paradigm weaves together disciplinary threads that leap from one context to another and whose relations only become visible when they are placed in a system. Just as the design of a carpet only emerges from the interlacing of warp and weft, the paradigm is composed of disciplines that intertwine across historical and disciplinary contexts, revealing their coherence only through a relational perspective.¹⁹ The metaphor of the carpet suggests that retracing the genealogy of the evidential paradigm means uncovering a hierarchical structure of knowledge forms.

To follow the threads of the carpet is also to recover bodies of knowledge that have themselves been marginalised or considered secondary. In addition to this morphological weaving of knowledge, Ginzburg's essay also evokes an archaeological vision, in the Foucauldian sense of the term, linked to archaeology of knowledge. In fact,

¹⁸ That the evidential paradigm is, above all, a form of thought is something we can also infer by examining the positioning of the essay within Ginzburg's bibliography, as well as its most recent republication in an Italian volume specifically focused on the theme of morphology (Ginzburg 2023). Ginzburg himself would describe it as one of the strategies for overcoming the problem of resemblance: “*il s'agissait de réfléchir sur la notion de ressemblance, en dépassant les données de surface pour saisir une donnée profonde*” (Ginzburg 2007). Structurally, the evidential paradigm operates in the same way we have identified for the notion of evidence: discarding obvious resemblances to search instead for deeper ones.

¹⁹ The metaphor of the carpet is interesting on multiple levels and can also be revisited from a more explicitly visual perspective, as it implies an arrangement of various elements in the form of a grid. The grid, which can be discerned as an underlying structure within the interpretive metaphor of the carpet, becomes a central element for synthesizing and relating heterogeneous components, enabling their comparison and revealing connections that might otherwise remain hidden.

adopting Michel Foucault's terminology, Ginzburg defines these evidential forms of knowledge as “local,” and as being “without origin, memory, or history” (115). As Ginzburg notes, knowledge practices associated with the evidential paradigm have often been regarded as less legitimate than other epistemological models, considered dominant because they are more easily systematised into universal laws. For centuries, the ability to recognise a defective horse by its hocks, a coming storm by a sudden change in the wind, or hostility in a face shadowed by suspicion, was not learned from official treatises but from the gestures, glances, and oral exchanges of men and women across all social classes. Ginzburg highlights three major historical-scientific formations, central pillars of Western science, from which evidential knowledge was excluded: Platonic thought, Galilean science, and Enlightenment rationalism as expressed in the *Encyclopédie*.

Compared to Platonic philosophy, the evidential paradigm centres on a form of knowledge that Platonism would have inevitably classified as doxa, that is, opinion rather than true knowledge. Evidential forms of knowledge are in fact grounded in conjecture, approximation, and therefore necessarily in a probabilistic and hypothetical mode of thought, one rooted more in contingency than in metaphysics.²⁰

In relation to Galilean thought, evidential knowledge is seen as insufficiently abstract, while scientific knowledge aims to discover universal laws applicable through repeatable experiments. Modern science, since Galileo, has grounded its method on the prioritisation of reproducible features, to the detriment of individual and singular ones. One of the corollaries of Galileo's famous claim that the world is a book, legible to those who master its mathematical “characters,” is the idea that scientific validity is expressed through universal principles akin to those of geometry.

²⁰ Conjectural forms of knowledge were rooted across a broad spectrum of social classes but were especially associated with gender (Carlo Ginzburg 2003, 165). Knowledge based on conjecture was, in fact, also the domain of women, a fact that grants the evidential paradigm a privileged access to the feminine. It is no coincidence that in ancient Greece, conjectural knowledge found a divine figure in Metis, the first wife of Zeus, who personified divination through water. In Greek cosmogony, Metis, daughter of Uranus and Tethys, aided Zeus in overthrowing Cronos. As a result, she is also considered the patron of intuitive intelligence (Zanirato 2003).

Finally, even one of the emblematic symbols of the Enlightenment, the *Encyclopédie*, while aiming to gather and codify the knowledge of the bourgeoisie, ends up, in practice, launching a major “offensive” against evidential knowledge, functioning as an attempt to subsume and flatten such knowledge into a codified system.

Thanks to its conceptual richness, the evidential paradigm has also been taken up in other fields, such as semiotics and pragmatist philosophy. As is well known, Ginzburg himself, in one passage of the essay, defines the cognitive method of evidential knowledge with the phrase “flexible rigor,” (124) indicating a form of knowledge that, while rooted in experience, resists systematisation.

Some scholars have examined this kind of reasoning more specifically from a semiotic perspective, attempting to determine what distinguishes it from other forms of inference. Among them, Umberto Eco and Thomas Sebeok reread the evidential paradigm through the lens of what they called the “sign of three”, the very title of the collective volume in which Ginzburg’s essay was included.

Paying explicit homage to Peirce’s triadic model of the sign, the volume sought to trace the kinship between two literary detectives, Sherlock Holmes and Auguste Dupin, and the thought of Charles Sanders Peirce. Within this framework, the concept of abduction becomes crucial: a form of inference distinct from both deduction and induction, in that it does not aim to produce universal knowledge, but rather allows for the association of two particular elements. Seen through the trained eye of the researcher, the scientist, or the detective, traces and fragments acquire new potential, opening access to a kind of knowledge that is never generalisable under universal laws, but still reveals that “someone has been here.”²¹

This very intuition lies behind what is perhaps one of the earliest attestations of the paradigm, a story rooted in the sedimentation of hunting knowledge. It is an ancient Oriental tale, found among various Central Asian cultures such as the Kyrgyz, Tatars,

²¹ Drawing on an expression by Thomas Huxley, quoted in turn by Ginzburg, Rossella Fabbrichesi has defined abduction as a “retrospective prophecy” (Fabbrichesi 2004). Like a divinatory operation not aimed at the future but at the past, investigation infers the possible perpetrator of a misdeed. This form of backward-facing divination is, moreover, considered by Ginzburg to mark the origin of jurisprudence.

Jews, and Turks, in which three brothers, skilled hunters, manage to describe in minute detail the appearance of a lost camel to its owner, despite never having seen it. Their formidable interpretive skills earn them an accusation of theft. They are put on trial, but for them, the trial becomes a source of pride, the ultimate recognition of their interpretive abilities. The activity of reading traces, therefore, is a transhistorical one, reaching back to the time of hunting and gathering. One of the “threads” of the carpet leads us to the activity of the hunter, intent on deciphering the signs left by animals in nature. It is Ginzburg who links the story of the three brothers to the evidential paradigm, of which hunting represents one of the earliest and most enduring expressions.

Yet it is not until the end of the nineteenth century that the evidential paradigm resurfaces and becomes identifiable in a series of domains that are central to the emergence of modernity: art criticism, psychoanalysis, and forensic practices, all anticipated, to a degree, by the literary investigations of detective fiction. A triad of figures, two real and one fictional, stands at the heart of this moment: Giovanni Morelli, Sigmund Freud, and Sherlock Holmes. In art criticism, a morphological approach begins to take hold, characterised by a gaze capable of identifying the individuality of an artist through seemingly insignificant details in a painting. Psychoanalysis, likewise, builds its method on the analysis of symptoms and subtle signs, understood as external manifestations of unconscious psychic conflict. Literature, in turn, offers stories whose plots are resolved by the extraordinary intuition of detectives who can read clues and traces that appear trivial to others, yet prove central to uncovering the truth.

The first of these figures is Giovanni Morelli, an influential art critic who, in the 1870s, devised a method of attributing authorship to paintings based on elements usually deemed secondary, such as the shape of an ear. Using this method, Morelli made dozens of high-profile attributions concerning artworks housed in some of Europe’s most important museums, sometimes sensational ones. For example, in a reclining Venus kept in Dresden and thought to be a copy of a lost Titian, he identified one of the few works securely attributed to Giorgione. Morelli regarded these seemingly minor details as revealing because they marked the moments in which the artist’s control, shaped by cultural tradition, gave way to more strictly individual traits, which thus made it possible to identify the authorship of the work.

This mode of image interpretation reveals a specific regime of visibility that Ginzburg himself elaborates later in his essay, particularly through the figure of Giulio Mancini, the personal physician of Pope Urban VIII. Mancini, renowned for his quick and accurate diagnoses, was also regarded as a founder of modern connoisseurship and the predecessor of Morelli's method. In this sense, the gaze of the connoisseur is also that of the clinician, capable of reading the details of a painting as if they were symptoms of disease. In the pairing of clinical eye and connoisseur's eye we find some of the core features of this "evidentiary" or, as we will call it, "forensic gaze". Morelli, like Mancini, searched for "signs that appeared involuntary, as is the case with symptoms (and with most clues)" (118): connoisseur, doctor, and investigator converge around a shared configuration of the gaze.

This affinity is further underscored by the interest that Sigmund Freud expressed in Morelli's method. In *The Moses of Michelangelo*, Freud explicitly compared Morelli's technique to psychoanalysis. According to Ginzburg's reconstruction, Freud encountered Wind's theory while working on slips of the tongue, shortly before writing *The Psychopathology of Everyday Life*. Morelli's writings became known to Freud through the mediation of Edgar Wind, a German art historian and specialist in Renaissance iconology, who famously likened Morelli's books to a criminal museum: "Morelli's books [...] are filled with illustrations of fingers and ears, detailed registers of the minutiae that betray the presence of a given artist, just as a criminal is betrayed by his fingerprints... any art museum studied by Morelli immediately takes on the appearance of a criminal museum..." (Wind 1975). In Wind's metaphor, the art connoisseur is equated with the detective and his work of investigation.

The third member of Ginzburg's triad is Arthur Conan Doyle, who, around the same time as Morelli was writing, created the fictional character of Sherlock Holmes. Holmes is the quintessential detective who identifies the culprit through seemingly imperceptible clues: cigarette ash, muddy footprints, scratches on a lock. In his essay, Ginzburg refers to *The Adventure of the Cardboard Box*, a short story in which Holmes "morellizes" (Ginzburg 1989, 98), solving a case by examining the shape of a suspect's ear.

An archaeology of conjectural knowledge, the search for hidden similarities, and the cult of the clue: these are the pillars of the evidential paradigm, all aimed at defining a mode of visual evidence whose function is that of a clue. Thus, if the evidential paradigm expresses a form of knowledge, investigation too can be interpreted as a mode of vision. To investigate is above all to observe, to interpret, and to connect clues. Already Edgar Allan Poe endowed Auguste Dupin with an extraordinary ability to notice details and solve crimes at first glance, as in *The Murders in the Rue Morgue*, where Dupin identifies the culprit of a complex crime after a lightning-fast visual scan of the crime scene. Many decades after Conan Doyle's stories, the detectives of Raymond Chandler's noir novels would be described as having “eyes like machines” (Haworth-Booth, Phillips, and Squiers 1997, 36).

But how, then, might we characterise this distinctively investigative gaze? From Ginzburg's reading, we may infer that translating the evidential paradigm into a mode of vision entails first and foremost adopting a relational gaze, one capable of perceiving hidden similarities, unnoticed at first sight, and of linking data that are not immediately apparent. At the foundation of this investigatory gaze, which Victor Stoichiță has dubbed the “Sherlock effect” (Stoichiță 2017), lies the desire to reread the image above all as something to be interpreted, a trace that can reveal clues and, cautiously, point toward a new truth. In the field of art criticism, some have sought to adapt this mode not as a key to aesthetic experience, imagining the exhibition as an opportunity for sharing the artist-detective's investigative work (Méaux 2019), but rather as a way of freeing the investigative gaze from its criminalistic context and relocating it within artistic practices not directly linked to forensics (Rugoff 1997). From being a strictly scientific instrument, the forensic image has now regained a certain popularity, to the point that one is tempted to locate it within the broader realm of visual culture (Jones 2022), beginning with the particular gaze it systematically enacts.

2.4. *The forensic gaze(s): measuring the “criminal” body...*

Although Ginzburg is not explicitly an image theorist, parts of his essay on the evidential paradigm retrace photographic practices in the emerging European police schools, in France with Alphonse Bertillon, and in England with the work of Francis Galton.

The emergence of these new investigative schools, which developed a mathematical vision of evidence, was rooted in a specific scientific and cultural climate that sought to reconcile positivist scientism with disciplines like phrenology and physiognomy. Among others, this was noted by Siegfried Kracauer, who regarded the detective as a symbol of a fully civilised and rationalised society (Kracauer 1997; 2011; Bertozzi 2008). For Kracauer, detectives embodied the aesthetic projection of a modern industrial rationality, a stylised reflection of a society conceived as fully rationalised, but through a markedly one-sided lens (Kracauer 2011, 17). Inverting the usual logic of fictional detective stories applied to real investigative practices, the act of investigation became the expression of the techno-economic rationality characteristic of positivist scientific thought.

Christian Phéline, in his book *L'image accusatrice* (1985), has examined the links between these emerging European police schools and both Enlightenment rationalism and Auguste Comte's positivist philosophy, which was then widely regarded as authoritative. Many of the key figures shaping this approach had a background in natural sciences or medicine, which led them to apply quantitative methods to the study of living organisms and to extend this logic to human beings. This gave rise to the idea that society could be interpreted as a form of "social physics" (Quetelet 1835), heavily based on statistical foundations and potentially subject to engineering through systematic observation and classification, the application of calculative methods, and the search for uniform models and outliers. These efforts to engineer the human through mathematical and statistical bases were also driven by historical and social imperatives, especially a particular conception of crime and criminality. In France during the Third Republic, there was a strong perceived need to develop tools for social control and for the identification of repeat offenders, a group that, at the time, made up roughly half of the criminal population.

Many of the police practices of the era used photography to catalogue and measure their subjects of investigation. In France, at the *Préfecture de Police*, Alphonse Bertillon developed a method to reliably identify criminal suspects even if their appearance had changed over time. To achieve this, Bertillon's images had to yield consistent and comparable results. A series of parameters was strictly codified, from the distance between the photographer and the subject to the camera's focal length and aperture settings. The goal was to identify suspects based on their mugshot. Each portrait consisted of two simultaneous shots, one frontal and one in perfect profile, with fixed parameters for each image, including aperture and lens-to-subject distance. Even the seating was chosen to standardise results: designated stools, deliberately uncomfortable, forced the subject into a consistent posture. This taxonomic method quickly produced an archive of criminal bodies, a proto-database that required a corresponding written record system to ensure efficient consultation. Alongside the suspect's portrait, handwritten annotations recorded anthropometric measurements, fingerprints if available, and distinctive features deemed uniquely identifying. This technique, known as the *portrait parlé*, was an attempt to overcome the inadequacies of iconic representation through measurement.

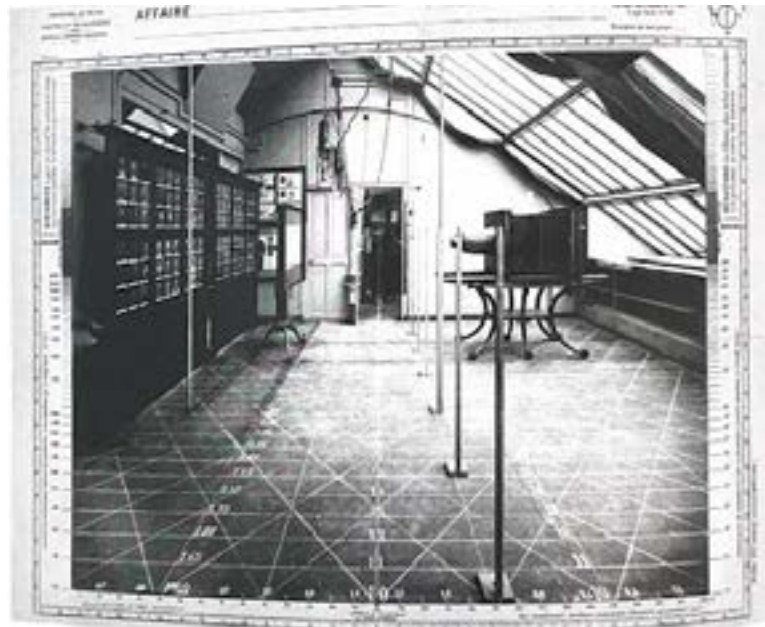


Figure 2 Laboratoire d'identité judiciaire, Alphonse Bertillon – Préfecture de Paris. Even the laboratory space was strictly measured and mapped.

Bertillon's anthropometric methods would become the foundation for a more physiognomic approach to criminality, especially in Italy with the figure of Cesare Lombroso. Unlike Bertillon, for whom the body and its specific traits were indicative of an individual's lived experience, Lombroso worked from anthropological premises that aimed to identify a physiognomic "type" of criminal, recognisable through external appearance. His major work, *L'uomo delinquente*, included an illustrated atlas containing dozens of portraits of criminals, classified by sex and nationality, images of the mentally ill, photographs of skulls, and tattoos (Lombroso 1897). In this system, the image served explicitly as a form of evidence, functioning as an operational tool: "*On peut dès à présent constater, la chose est facile la photographie à la main, que chez les hommes criminels le caractère qui prédomine*" (Lombroso 1888, 249). Lombroso, too, sought a non-obvious resemblance, one based on measurement and comparison: "*une étrange ressemblance qui explique et confirme leur parenté anthropologique*" (12). Bodily signs became clues to a broader typological family. Through this process of generalisation, the photographic image became a heuristic device for identifying physiognomic kinship.

This process of generalisation and progressive abstraction reached its peak in England with Francis Galton, a theorist of natural hierarchy and the "importer" of fingerprinting into Europe for identification purposes. One of the last gentleman scientists of the Victorian age, Galton was the father of eugenics and is best known for his studies on heredity. In Galton, the tension between measurement and visualisation reached its highest point, even foreshadowing forms of algorithmic generation. He developed a unique technique: composite photography, which he considered a "prodigious epistemological tool" (Sekula 1986, 47). Technically, composites were created by superimposing portraits of multiple individuals onto a single photographic plate. Each exposure was assigned a duration proportional to the total number of portraits in the sample: if a composite was based on twelve individuals, each would receive one twelfth of the total exposure time. The result was a synthetic image, entirely detached from any specific referent, as Galton's contemporaries already recognised.

Indeed, Arthur Batut, an amateur photographer of the time, adapted composite photography to produce so-called *portrait-types*, aimed at representing archetypes of a family, a race, or various social groups. Batut described his images as *portraits de*

l'invisible, since all individual features were effectively dissolved into an “impersonal figure that exists nowhere” (Batut 1887, 7–8).²²

2.5. ...to the crime scene as a cartographic (and protoimmersive) space

The representation of space, too, did not escape the ordering principles that governed the forensic gaze. In Bertillon’s images, crime scenes were often configured as scaleable spatial elements. Unlike images of criminal bodies, which applied biometric measurement to generate a generalised statistical knowledge across populations, images of crime scenes functioned more like cartographies (Castro 2011b). They were instrumental representations designed to correlate and hierarchise elements within a space, rendering it legible and therefore controllable. In these forensic depictions, the evidential paradigm emerges through a cartographic impulse: the image is treated as a measuring tool capable of reducing the crime scene to a manageable scale. The space of the crime was not only measured but miniaturised through photography and other visual apparatuses that offered a reduced yet detailed representation.

Perhaps the clearest signal of this intention was Bertillon’s application of photogrammetric techniques – originally developed in France by the astronomer Aimé Laussedat (Wilder 2009) – to the documentation of crime scenes. Adapting this method meant that the scene had to be photographed from multiple angles. However, the resulting

²² This idea, which likely remained an isolated case at the time, seems to find renewed resonance today, for example in the website *thispersondoesnotexist.com*, an algorithmic generator of non-existent faces. Christian Phéline appears to embrace this intuition by referring to composites as visualizations. Other studies, such as that of Wilder (2009, 45), instead trace composites back to the tradition of nineteenth-century scientific drawing. According to this perspective, composites actually reproduced a form of pre-photographic objectivity, based more on an idealized adherence to a concept of nature than on the representation of any specific form of singularity (Daston and Galison 2007). In botany, for instance, scientific drawings often portrayed specimens with both flowers and fruits present on the same plant, a condition that is in fact impossible in nature.

sequence of images was not meant to represent a temporal unfolding of events, but rather to render spatiality visible from as many perspectives as possible. This multiplicity of viewpoints aimed at measuring and mapping the crime scene led to what have been called "stereometric photographs" (Turzio, Villa, and Violi 2005). Although these photographs could not be viewed through a stereoscopic device, they reproduced a similar visual logic: that of seeing the same subject from several simultaneous viewpoints.

Among these perspectives, one was considered essential: the vertical, top-down view of the body. Bertillon photographed corpses from a strictly zenithal angle, mounting the camera on a tripod raised high above the scene. Seen from above, the crime appeared more objective, represented through a view not easily reproducible by the human eye, thereby introducing a purely "instrumental" conception of the image.²³

²³ Allan Sekula, commenting on the first aerial views produced by Edward Steichen during the First World War, referred to them as "instrumental images" (Sekula 1975). This expression, which in many ways anticipates later theories of operationality, describes vertical plans as images in which vision must be accompanied and supported by a legend or key to help the observer recognize what is represented in the image.



Figure 3 Metric photographs of the crime scene: on the left, a perpendicular view of a corpse; on the right, an image of the crime scene showing a grid and a topographic representation of the spatial layout of the crime.

Further support for this interpretation lies in the recurring presence of grid patterns and scale references in photographs of crime scenes. These elements were applied both within and around the photographic frame, helping to produce an accurate spatial representation. The grids were usually added after the photo was taken and often coincided with the image's archival process. Around the image, a perspectometric frame [*encadrement perspectométrique*] would be applied, a trompe-l'œil imitating a wooden border, enclosing the photograph. This framework, composed of a graduated grid in perspective, allowed the measurement and volumetric reconstruction of the body.

To function as effective measuring instruments, the images required precise placement of the camera and meticulous recording of spatial data. The camera's location was always indicated within the photogrammetric map of the crime scene. Even though each image captured only a portion of the space, it nonetheless implied the presence of what lay beyond the frame, as the camera's position was marked outside the photograph itself. In this way, through both the precise marking of the photographic device and the multiple angled shots of the same subject (such as the corpse), crime scene photographs constructed the space of the crime by suggesting, through grids and spatial cartographies,

what remained outside the image. Photographing the crime scene thus became a way of reconstructing the environment, guiding the investigator's gaze through a geometric structure that enabled the relational mapping, via scale reduction, of individual clues found at the scene. This constant reference to what lies outside the frame, embedded in the image's cartographic and spatial logic, reveals that the crime scene was always already reconstructed and imagined as a proto-virtual space, in which each image was merely one instantiation within a broader set of potential viewpoints.

In Bertillon's crime scene photographs, this drive to measure collides with the gruesome, even abject (Krauss 2003), nature of the depicted events. These images render the horror of the crime visible only insofar as it is measured, standardised, and made uniform, and thus, to some extent, bearable. Bertillon's crime scene photographs seek to impose control and rationality upon what presents itself as the manifestation of irrational and uncontrollable forces. This tension between immersion and measurement appears central to forensic photography and endures as a defining feature of crime scene imagery, a visual logic that persists in contemporary panoramic representations of the genre.

It is worth concluding this subsection by highlighting another noteworthy intersection between forensic imagery and immersive techniques, this time through criminal dioramas. It is well known that Cesare Lombroso collected artefacts made by prisoners crafted from unfired clay. These objects, often simple figurines, sometimes took the form of fully realised crime scenes, battle tableaux, or courtroom scenes. Lombroso interpreted these artefacts considering the clinical condition of the maker, believing the criminal to be inherently "primitives" or "mattoids" (Colombo 2000, 104), and treated them as anthropological specimens to be collected and preserved. To a modern eye, however, these artefacts appear as valuable, albeit opaque, dioramas – objects that seem to invite interpretations exceeding what can be historically verified. Even under rigorous historical-artistic analysis (Ciroldi 2015), they remain frustratingly silent. Their dramatically anonymous nature makes it difficult to attribute them to a specific author, leaving unanswered the question of whether they are documentary reconstructions of actual crimes or imaginative fabrications.

More likely, the dioramas were not even intended as faithful reconstructions. Early twentieth-century photographs show that the figures were rearranged over time. In

Scontro tra Briganti, for instance, the characters appear in different positions than they do today. In *Corte Giudicante*, some of the courtroom furnishings seem to have come from other dioramas. Whether factual or fictional, the unfired-clay reconstructions housed in the Lombroso Museum clearly testify to a fascination with the phenomenon of brigandage, which held powerful sway over the Italian public in the early twentieth century. It is even possible that these ceramic figures, infused with the “epic of brigandage” (76) that permeated the Italian peninsula, were not the forensic reconstructions of skilled investigators, but rather the creative outputs of bored inmates dreaming of criminal exploits.

Within this indistinct blend of inaccessible personal documentary and imaginative projection, these ceramic dioramas nonetheless participate in a medial logic that anticipates the virtual reconstruction of past events. Crafted from plastic materials and rendered in three dimensions, they reconstruct a crime scene well before the advent of immersive technologies.



Figure 4 Clash of bandits. Source: Cesare Lombroso' Museum of Criminal Anthropology, Turin.



Figure 5 A judging court. Source: Cesare Lombroso Museum of Criminal Anthropology, Turin.

This genealogical line becomes even more tangible when we consider another example of forensic dioramas, this time created with a distinctly scientific purpose. Just a few decades after Lombroso's ceramics, and across the Atlantic, dioramas began to be recognised as legitimate scientific tools, largely due to the work of Frances Glessner Lee, a pioneer of American forensic science and founder of the first department of legal medicine at Harvard University in 1936 (Goldfarb 2024). Glessner Lee had inherited a substantial fortune, which she used to construct detailed miniature dioramas of unsolved murder cases, which she called the *Nutshell Studies*. These reconstructions, built at a 1:12 scale, recreated the scenes of gruesome crimes, based on police reports, news accounts, or sometimes invented by Glessner Lee herself, using materials typically found in dollhouse construction.

This example of miniaturised crime scenes is particularly relevant not only because it stands at the intersection of forensics and hobbyist craftsmanship, clearly shaped by a female-oriented tradition, but also because it offers one of the rare instances where the investigator's gaze is embodied through a female agent. Today, Glessner Lee's dioramas are recognised as true works of art, but they are still used for educational purposes. "Anyone who wishes to inspect them must imagine themselves to be about six inches tall," she once wrote (Glessner Lee 2004, 47), imagining a hypothetical viewer preparing to "enter" the reconstruction. This hypothetical viewer is, in fact, the

investigator, who by immersing themselves in the diorama becomes capable of carrying out an inquiry.

Unlike Bertillon's photographic crime scenes, which function as crime atlases by precisely locating clues within an abstract and geometrically rationalised space, Glessner Lee's dioramas centre on the physical perspective of the viewer, who must literally step into the scene, or at least imagine themselves as small enough to enter the dollhouse world. This archaeological form of immersivity, implicit in the very concept of the diorama (D'Aloia 2024), is made even more explicit through the photographic work of artist Corinne May Botz, who documented the *Nutshell Studies* in 2004. Botz describes her photographic approach as follows: "Through framing, scale, lighting, colour, and depth of field, I attempt to bring intimacy and emotion to the scene of the crime. I want viewers to feel as if they inhabit the miniatures, to lose their sense of proportion and experience the large in the small" (Botz, n.d.). Botz's physical, tangible camera intriguingly overlaps with today's virtual cameras used to navigate digitally modelled environments, simulating an internal point of view within the virtual space – what is now often described as a "*cinéma sans caméra*" (Bédard 2020). It serves as a visual surrogate for the miniaturised and immersed gaze of an imaginary investigator moving through Glessner Lee's dioramas.



Figure 6 Corinne May Botz, *The Nutshell Studies of Unexplained Deaths*, photographs of dioramas by Francis Glassner Lee, 2004.

Bringing the circle to a close is a more recent, and arguably more interesting in theory than in execution, virtual adaptation developed by the Smithsonian Institution for a monographic exhibition on Glessner Lee, held at the Renwick Gallery in Washington in 2017 and made accessible via computer or smartphone. This attempt at digital translation of Glessner Lee's work, though limited in its execution, underscores the the ongoing fascination with reconstructing crime through immersive and interactive media.

Around the same time, a London-based studio called ScanLab collaborated with *The Guardian* on an immersive experience that seems, perhaps unconsciously, to echo Glessner Lee's dioramas: *Crime Scene*. This experience puts forensic investigation at its centre. The player assumes the role of a novice investigator, called to examine a crime scene at 2 a.m. and gather the evidence needed to solve the case. The scene was meticulously constructed by makeup artists, set designers, and production specialists, then scanned in 3D to create a millimetre-precise digital twin.

Although fictional and designed for narrative purposes, the experience strikingly mirrors real-world forensic practices. On the one hand, the participant actively enacts the evidential paradigm, analysing traces within a simulated environment where details such as fresh bloodstains are rendered with hyperrealistic precision. On the other, the photogrammetric reconstruction of the scene involves a rigorous process of spatial mapping and measurement, closely aligned with actual forensic methodologies. This layered construction of crime and its investigation produces a form of *mise en abyme*, where the act of inquiry within the game reflects and enacts the immersive construction of the investigative environment itself.



Figura 7 a still frame from Crime Scene. Source: ScanLab

2.6. Designing a “grammar” of visual truth: Open-Source Intelligence, Forensic Architecture, and other pragmatics of virtual investigations²⁴

Today, the metric tools once known to Bertillon have become far more technologically advanced. Extended reality media are frequently employed as tools for conducting crime scene investigations (CSI), valued for their capacity to efficiently and rapidly capture data before these environments, rich with organic traces, are compromised or altered (Ebert et al. 2014). For contemporary investigators, three-dimensional data are faster to collect and transmit, facilitating international cooperation. Moreover, just as Gessner Lee had intuitively envisioned, immersive crime scene reconstructions are also proving to be effective training tools and are considered cutting-edge in the education of today’s forensic disciplines.²⁵ In some cases, reconstructions may even be carried out long after the events in question. In Germany, the Bavarian State Criminal Police Office (LKA) in Munich created a virtual reality version of the Auschwitz concentration camp to assist in ongoing investigations and trials of former SS members and camp guards, including Reinhold Hanning, an ex-SS guard at Auschwitz who was sentenced in 2016 to five years in prison for complicity in at least 170,000 murders (BBC News 2016). In Italy, the State Police reconstructed in 3D the crime scene of the Via Fani massacre, which led to the kidnapping of Prime Minister Aldo Moro by the Red Brigades and the killing of his security escort (RaiNews 2015).

²⁴ The concept of “Visual Grammar” of truth is to be attributed to Allan Deneuville and Bérénice Serra.

²⁵ Among these, and by way of example rather than exhaustiveness, two cases can be mentioned. The European Horizon 2020 project *RISEN* (Real-time on-site forensic trace qualification) aims to develop real-time contactless sensors to optimize the detection, visualization, identification, and interpretation of forensic traces directly at the crime scene. One of the innovative aspects of the *RISEN* project is the use of virtual reality (VR) for the training of crime scene investigators. For instance, since 2016, the Swedish *National Forensic Centre* (NFC) has developed methods for 3D modeling of crime scenes and has conducted several studies on the use of VR in CSI applications.

In the United States, the company *VictoryXR*, which specializes in the creation of immersive educational experiences, offers a VR-based platform called *CSI Experience* designed for training in forensic science. This immersive experience simulates a police station and a crime lab, where students can interact with various forensic tools under the guidance of a specialized instructor (VictoryXR n.d.).

These reconstructions raise the issue of investigative methods based on missing or only partially available data, often carried out in the absence of directly observable traces of a crime. Furthermore, by their very nature, they frequently resemble restorations of the crime scene, thus bridging the gap between the evidentiary paradigm and historical or archaeological forms of reconstruction. These “crime archaeologies” seem to legitimise a reference to restoration practices, particularly to *anastylosis*, the technique of reconstructing artefacts using surviving components in order to preserve their authenticity. This concept has already been revisited in the field of immersive media studies as “narrative anastylosis” (Modena 2022, 97), referring to philological and rigorous reconstructions that nonetheless may also be understood as tools of storytelling. There is no shortage of examples in this regard: from the immersive reconstruction *Notre Dame Éternelle*, which virtually “restored” the cathedral’s rear spire collapsed during a 2019 fire, to mixed reality installations such as *Threshold* by Matthew Collishaw, which in 2017 virtually recreated William Henry Fox Talbot’s first photographic exhibition of 1839. In forensic contexts, however, these reconstructions raise a crucial question: how reliable are they as forms of evidence? To what degree do they fill in the gaps left by incomplete documentation, and to what degree are they grounded in the accurate measurement of verifiable data?

In this context, where evidence functions more as an instrument of measurement than as a transparent image, the need arises to construct a shared and accessible visual “grammar” of truth. Still in its early stages and evolving within a largely experimental field, this grammar of authentication has yet to be fully articulated and is characterised by constantly developing practices. In this shifting landscape, however, some emerging approaches come from research and frontier investigative methods, often grouped under the umbrella term OSINT, or Open Source Intelligence (Deneuille, Hernández López e Rasmi 2022). Unlike the forensic reconstructions discussed thus far, OSINT investigations are typically conducted at a great spatial, rather than temporal, distance from the events they aim to examine. In the absence of physical evidence, these “tele-investigations” rely on images as their point of departure, often reworking information found online and published on social media by eyewitnesses and activists operating in areas of institutional violence.

This shift reflects broader transformations in the field of photojournalism, which, with the rise of digital media, has increasingly refrained from deploying correspondents on site, favouring instead “parasitic” images (Gunthert 2017) of citizen journalism extracted from platforms such as Telegram, Instagram, or Flickr. A primary definition of OSINT might thus be understood as the validation of investigations conducted using grassroots material sourced online. Often scarce, fragmented or difficult to access due to its divergence from mainstream media, this material is subjected to a rigorous process of cross-examination aimed precisely at authenticating the sources.

Today, this investigative methodology is recognised as an indispensable tool for documenting and defending human rights, and it is supported by international frameworks such as the Berkeley Protocol. It proposes a methodical and verifiable approach to collecting publicly accessible information via open sources, often shared online. Despite such institutional recognition, the origins of this methodology lie in digital and nerd subcultures, as exemplified by the investigative collective Bellingcat, now a leading OSINT unit, originally born as a hobby blog. Its founder recounts how this community-based mode of inquiry emerged from frustration with the media’s dismissal of numerous videos from Egypt, Syria, and Libya on grounds of questionable reliability (Higgins 2022). OSINT investigations thus come to resemble a “nerd” form of (photo)journalism: contemporary reporters often operate remotely, detached from the conflict zones they analyse. Perhaps most significantly, they do not necessarily produce new images; rather, they assemble investigations through montage, assemblage, and remixing of pre-existing materials.

Investigative open-source journalism has now proliferated to such an extent that many groups across Europe specialise exclusively in this methodology. Among them, Forensic Architecture stands out, not only for the scope of its enquiries but for the theoretical impact of its publications. Based at Goldsmiths, University of London, this investigative group and research centre gained prominence with one of its earliest and

most renowned investigations: a collaboration with Amnesty International on the 2014 bombing of Rafah, one of the deadliest assaults in the Gaza war.



Figure 8 Le ricostruzioni del bombardamento di Rafah del 2014. Fonte: <https://forensic-architecture.org/investigation/the-bombing-of-rafaq>

To reconstruct the exact chronology of the event, as well as the types of weapons used in the bombing – which targeted not only strategic sites but also civilians, causing over a hundred deaths and approximately two hundred injuries – the investigators collected and synchronised a vast amount of footage from journalists, witnesses, and social media, cross-referencing these materials with satellite images. In this investigation, regarded as pioneering even among professionals in the field, a significant portion of the work consisted of geolocating and synchronising the source material based on the distinctive shape of the explosion cloud.

This treatment of the visual form of the cloud as a sign, already intuited by Hubert Damisch in *A Theory of /Cloud/* (2002), offers a valuable example of the shift towards a metric and data-oriented conception of visual evidence. Despite the source images often paradoxically lacking original metadata, the investigation approached these “naked” images primarily as deposits of information, working with the shape of the cloud as if it were data, even when temporal and locational metadata were absent.

More broadly, the work on images conceived as visual evidence of facts is central to OSINT investigations, and it exemplifies an investigative pragmatics operating within an entirely expanded media environment. Here, images frequently migrate across formats and media, freely and radically combining photographic and virtual imagery. The limits of the frame are often betrayed or expanded to reveal what lies beyond its borders, or to expose what is hidden beneath the resolution threshold of the image, or its “threshold of detectability” (Weizman 2017). Per rendere intelligibile del materiale spesso grezzo, realizzato in condizioni talvolta pericolose e quindi anche scarsamente leggibile, le ricostruzioni di Forensic Architecture giocano a espandere tecnologicamente, spesso alterando o espandendo la trama fotografica del materiale di partenza, ciò che nell’immagine è *riconoscibile*, andando alla ricerca di ciò che si nasconde dentro “l’inconscio ottico” (Benjamin 1936) della trama dei pixel digitali.²⁶ Still photographic images are often integrated into sophisticated three-dimensional reconstructions and seamlessly embedded within these models. Weizman refers to these organic assemblages of images and data as “image-data complexes”:²⁷ the gathering of individual sources with the aim of locating them in space and time (Grespi, Previtali, and Cinelli 2024).

To be realised, these reconstructions require a sophisticated technique known as “frame match”. This method involves the precise alignment of photographic material onto a three-dimensional model, ensuring that the two representations match perfectly. The process demands an advanced system of calibration known as camera calibration, a key part of which involves correcting the inevitable optical distortions produced using a specific photographic lens. These corrections, primarily perspectival, bring the photographic shot back to a mathematically perfect geometric perspective, achieved through algorithms based on a meticulous correspondence between points within the image and real-world measurements.

²⁶ Perhaps, both Benjamin, who developed the concept of the optical unconscious, and Freud, who compared Morelli’s evidential method to psychoanalysis, would have found the experimental work of Weizman and his team on images, as well as their valuable methodologies for expanding them to reveal hidden details, particularly interesting.

²⁷ Forensic Architecture. “Image Data Complex.” *Forensic Architecture*. Accessed March 28, 2025. <https://forensic-architecture.org/methodology/image-data-complex>

The technique of frame match draws renewed attention to the perspectival origins of photography and foregrounds the idea that this “sensitive sharing” of perspective (Alloa 2020) might create a perfect correspondence between image and reality. In its contemporary reformulation, this process of aligning photographic images within a three-dimensional environment, and of fully hybridising lens-based and computer-based material (Eugeni 2021), seems to echo Brunelleschi’s experiment, perhaps the earliest perspectival alignment between a pictorial representation of the Baptistery of San Giovanni in Florence and its real-world architecture.

Brunelleschi’s experiment (circa 1425) involved a painted panel depicting the Baptistery in linear perspective. To verify its correctness, the observer would look through a small hole in the panel while a mirror reflected the real image of the Baptistery. As Damisch has observed in *L'origine de la perspective* (2012), this experiment entrusted the observer with the task of assessing the validity of the alignment, effectively positioning them as a

judge capable of evaluating the correspondence's accuracy and, in so doing, introducing a visual mode of authentication that we can now recognise as evidentiary in nature.²⁸

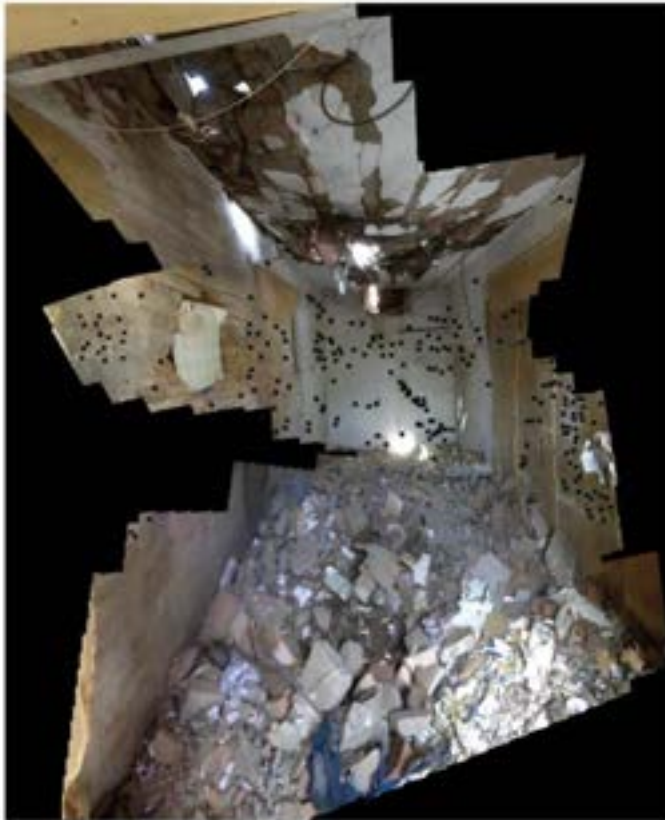


Figure 9 A panoramic collage assembled from video frames depicting the interior of a civilian building targeted by drone strikes in the city of Miranshah, Pakistan, with the traces of the explosion explicitly highlighted. (Forensic Architecture).

Fonte: <https://www.forensicarchitecture.org/investigation/drone-strike-in-miranshah>

As previously discussed, the embedding of images onto three-dimensional models often aims to “unframe” the image, expanding it beyond the borders of the original frame to investigate what lies outside it, thereby transforming the image into an environment. This

²⁸ For further reflections based on the frame match technique, reference can be made to the conference presented by Matthieu Vitse and Galdric Fleury at the *Visual Grammar of Designed Truth in OSINT* symposium, held at the University of Applied Arts and Design in Basel from January 22 to 24, 2025. Recordings of the presentations are available on the official event website: <http://berenice-serra.com/symposium/>. The specific conference on frame match is available at the following URL: <https://vimeo.com/1049630078>.

process is particularly evident in the localisation and spatialisation of still and moving images alike. A case in point is the investigation of the drone strike in Miranshah, north-western Pakistan (figure 10). This episode is linked to War on Terror conducted by the United States against militant groups such as Al-Qaeda and the Taliban in Pakistan's tribal areas. Here, video camera movements were stabilised and transformed into trajectories, outlining a panoramic image built from individual video frames arranged within a virtual space as still images. This tension – from video image to environmental image – was recognised by the investigative collective and leveraged as an exhibitionary display of the inquiry, as seen, for example, at the 2016 Venice Architecture Biennale. There, the exploded frames, arranged into a panoramic composite, were rendered into an environmental dimension into which the visitor could physically enter and immerse themselves. Within this panorama of practices, images and objects organically coexist and integrate into the investigative process. The environment – conceived both as an installation display and as a virtual and environmental image – often represents the moment when the inquiry's results manifest themselves.

A striking example of this dynamic can be found in Forensic Architecture's investigation of the killing of Mark Duggan in Tottenham in 2011. Duggan's death, a case of police violence against a marginalised and racialised subject that the authorities long sought to deny, sparked widespread protests. To document this case of police violence, Forensic Architecture meticulously reconstructed the dynamics of a shooting that lasted no more than a split second, indeed, in their publications, the investigations into Duggan's death often bear the title "the long duration of a split second" (Weizman 2017). To reconstruct the minutest movements of every actor present at the scene, every possible source was organically integrated into a *continuum* of images and material traces.

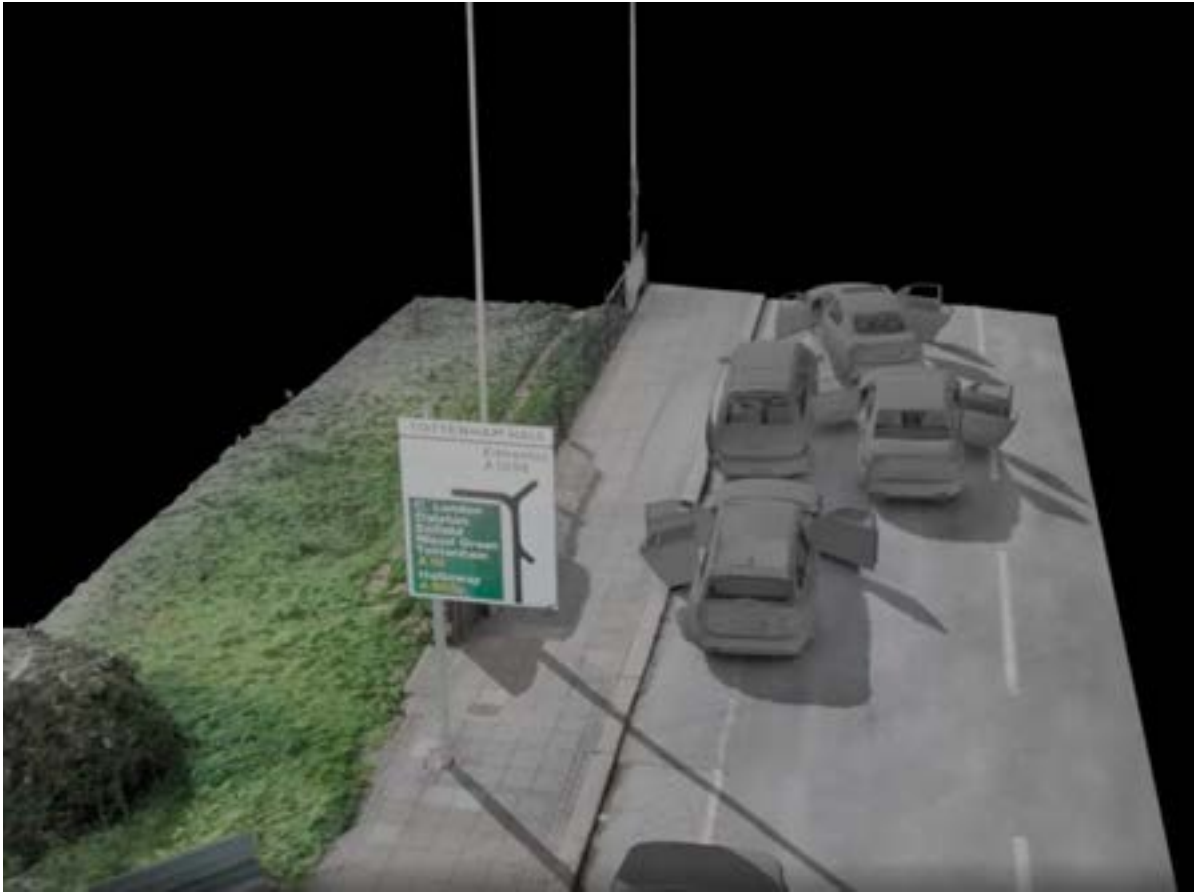


Figure 10 The photogrammetric reconstruction of the crime scene. Source: <https://forensic-architecture.org/investigation/the-killing-of-mark-duggan>.



Figure 11 The analysis of the material traces found on Duggan's jacket. Source: <https://forensic-architecture.org/investigation/the-killing-of-mark-duggan>



Figure 12 The immersive display of the investigation's findings, which identified the perpetrator through a virtual reconstruction.. Source: <https://forensic-architecture.org/investigation/the-killing-of-mark-duggan>

The street where the shooting occurred was entirely reconstructed using photogrammetry – a modelling technique based on spatial measurement (figure 10). Within the resulting three-dimensional model, both eyewitness video footage and photographic material were embedded, creating a virtual environment that situated the camera's point of view while also revealing what lies outside the photographic frame.

Objects, too, played a crucial role: the bullet holes found in Duggan's jacket became the starting point for reconstructing not only the ballistic trajectory of the fatal shots but also his final bodily movements in space, rendered through an animation of his body transformed into an avatar (figure 11).

Crowning the process, and rigidly sealing the demonstrative procedure, was the visualisation of part of the investigation via a virtual reality headset (figure 12). It is significant to note that, in this case, the role of virtual reality was not to create an illusion of total transparency. Rather, VR operated as a device for visualising the data of the investigation. In effect, its function was to make visible the perspective of each agent involved at the crime scene.

By embodying, in turn, one of the agents in first person, the spectator was not invited to identify with the killer, but simply to verify, much like the participant in Brunelleschi's experiment, the perfect interlocking of the clues and thus to judge for themselves the efficacy of the investigation.

Far from the illusion of a total image, we might regard this investigative reconstruction as a "crime autopsy". Following Andrea Pinotti's analysis, which retrieves the etymological meaning of autopsy as the desire "to see with one's own eyes" promised by immersive media (Pinotti 2019), we could argue that a fundamentally "autoptic" drive is at play here. Although Duggan's body had long since grown cold when Forensic Architecture began investigating the case to reconsider the allocation of responsibility, the forensic reconstruction examined every fragment to reconstruct its anatomy. Thus, the virtual reconstruction functioned as a visualisation device – a display (Modena 2024) – that brought together many of the aspects highlighted throughout this chapter: the notion of evidence that does not prove through mere resemblance or mirroring of events; the cartographic impulse to measure and map the crime scene (the photogrammetric archaeology of Bertillon); and the desire to "enter" the miniaturised crime scene (the dioramas of Frances Glessner Lee) to verify, firsthand, the evidentiary work.

Crucially, once again, what matters is not so much the medium's transparency but its indexical nature, which here becomes an authentic clue coexisting equally with the physical traces found at the scene. Thus, the construction of the image serves an operational function: to deliver the inquiry, which can be composed (and, if necessary, decomposed according to a principle of reversibility) as an architecture. Thus, it is no coincidence that Eyal Weizman recalls how Harun Farocki compared Forensic Architecture's operations to the nests built by urban birds, which assemble heterogeneous and available elements from the environment to construct a nest (Fuller and Weizman 2021). This architectural, and therefore also environmental, metaphor seems particularly apt to describe this process of expansion and unframing of the technical image, which, from its materialisation, opens the frame's boundaries to construct a medial environment capable of ensuring effective data authentication.

The effectiveness of the investigative process does not guarantee the authenticity of the image; rather, it ensures its authentication: it is precisely through the cross-

referencing of sources that elements verify one another, in a process of agglomerating authentic sources and excluding false ones, a method known as open verification (Weizman 2019). In this process, “montage junctions” (Grespi and Malavasi 2022, 93) become crucial:²⁹ true structural elements of the “nested” architecture that these investigations invite us to inhabit. These junctions constitute an authentic scaffolding that never conceals its points of assembly but instead renders them clearly visible.

Indeed, it is precisely here – where photographic images fuse with virtual models into an amalgam of traces and material objects – that the evidentiary labour of the paradigm becomes visible. It is here that we glimpse the paradigm shift that this chapter has sought to highlight, and a visual correspondence with the evidential paradigm theorised by Ginzburg begins to emerge.

2.7. *The “muted testimony” of the evidence*

Comparing the virtual investigations described in the latter part of this chapter with the examples discussed at its outset evokes a sense of chronological and technological vertigo. If we were to transport the sophisticated OSINT reconstructions we have examined back a few decades, it is likely that they would have been denounced as manipulations and dismissed as belonging to a category that, since the early days of photography, has been relegated to the margins of the photographic medium, namely, retouching. Indeed, despite the high degree of manipulation to which photographic images are subjected, OSINT virtual investigations do not seek to alter images in order to falsify them. Compared to classical theories of the photographic, this use of manipulation appears non-falsifying. On the one hand, it renders unavoidable what was long considered a “practice without a history,” thereby definitively dispelling the myth of

²⁹ The distinction between authenticity and authentication is attributed to the philosopher Pietro Montani (Montani 2014).

the authentic image simply because it is "sans retouche" (André Gunthert 2008). On the other hand, the manipulated – yet not falsified – images produced by this pioneering approach to investigative journalism seem, at last, to lay to rest the longstanding fears of retouching that have accompanied us since the advent of Photoshop and the associated anxieties about an "era of falsification" (Smargiassi 2009, 17) ushered in by digital media.

It is precisely within investigative practices involving extended reality that we witness an active attempt to construct a visual grammar of truth that is both practicable and valid for the contemporary moment. Moreover, this endeavour is imbued with a heroic spirit of activism, presenting itself as a potentially virtuous media practice, capable of producing strong authenticating narratives and countering the state of disinformation and misinformation often invoked in discussions about public information media. The investigator-activists of Forensic Architecture are fully aware of this activist thrust, embracing their practice as “counter-forensics” in radical opposition to state violence and crimes against human rights. Bellingcat also reflects a similar ethos, with its very name encapsulating the idea of citizens, likened to mice, placing bells on their natural predators – cats – thus enabling bottom-up surveillance (Higgins 2022). Even this reversal of a predatory metaphor ultimately reaffirms a reference to the evidential paradigm, rooted in hunting.

Furthermore, the virtual space reconstructions typical of Open Source Intelligence involve working with images as objects that, despite their digital nature, maintain a material existence, nearly comparable to physical traces. According to Weizman, this marks the distinctive turn in their approach to visual evidence. This new conceptualisation, he argues, reformulates visual evidence into a true “forensic evidence” (Keenan, Weizman, and Franke 2012), indicating a new way of semantising the image through its evidentiary function.

After the Nuremberg Trials, where facts were proven primarily through images understood as mechanical reproductions of events, and the Eichmann Trial in Jerusalem, where facts were attested mainly through verbal testimony, a substantial shift can be identified, according to Keenan and Weizman, in the investigative process that led to the identification of Mengele. Mengele had died while still a fugitive, and his remains were

found in Brazil in 1985. In order to verify that the remains truly belonged to Mengele, investigators used images almost as objects, literally superimposing photographs of Mengele's face onto his skull. A mathematical calculation of the distance between the skin and the underlying bone structure ultimately confirmed the identification. This superimposition between a flat image and a three-dimensional object, in addition to once again breaking the boundaries of the photographic medium (this time in terms of three-dimensionality), constitutes a striking example of the use of the image not for what it represents, but for its strict objectual dimension. More recently, this line of inquiry has been carried forward by Susan Schuppli, who indeed compares images to "material witnesses" (Schuppli 2020). This expression, which in American criminal law refers to a key and indispensable witness, is reappropriated by the researcher as a media concept used to indicate precisely this objectual dimension of images. Images serve as proof because relevant information is deposited onto their very material composition, even when this occurs due to a dysfunction inherent to the technical nature of the image itself. Schuppli specifically considers this latter case, analyzing cathode ray tube televisions in which the images displayed – closed-circuit surveillance footage – had been shown for so long that they became permanently imprinted on the screen.

This condition, in which the image functions as a "material witness", seems to fulfill, through the pragmatics of virtual investigation, the early "prophecy" we had already encountered in Henry Fox Talbot's *The Pencil of Nature*, where he described the image as a "mute testimony," a formidable form of evidence precisely because of its difference from all others.

Chapter Three

Trials, Documents, and the Archive: Visual Evidence *in* the Trials of the Paris Terrorist Attacks on November 13th, 2015 (V13)

This chapter introduces a specific corpus of forensic images: those produced during the investigation into the terrorist attacks that took place in Paris on November 13th, 2015, carried out by ISIS. These images will be analysed within a clearly defined communicative context: the international trial addressing the attacks, which lasted nine months, from September 2021 to July 2022. Following the theoretical framework outlined in Chapter 2, the focus will remain on forensic images – yet shifting now to a contemporary case study. This transition will allow us to observe how images are generated during a modern investigation and, crucially, how they circulate within a legal context where they function as genuine pieces of juridical evidence. Before turning to the analysis of the images themselves, however, it is necessary to briefly revisit the broader investigative framework in which they were produced.

The terrorist attacks of Friday [*vendredi*] November 13th, 2015 – from which the acronym V13, commonly used to refer to the trial, is derived – are deemed among the deadliest in France and among the most violent in Europe. In fact, they consisted of a series of suicide bombings that took place almost simultaneously at several key locations in the city of Paris, including the Stade de France, the Bataclan concert hall, and several *bistros* in the 11th and 18th arrondissements (the Comptoir Voltaire, La Belle Équipe, and La Bonne Bière). The investigation, officially entrusted to Paris prosecutor François Molins, began on the very evening of the attacks. At the time the forensic work was conducted, many questions remained unanswered, including the identity of the perpetrators, the exact

number of victims and the methods for their identification, the organizational mechanisms that had enabled an attack of such magnitude, and the precise sequence of events. For the prosecution, the primary objectives at that stage of the investigation were to identify the attackers, to retrace the terrorists' movements in search of clues and vehicles they may have used, and finally, to determine whether any accomplices or co-conspirators were still at large.³⁰ This investigation, described as “colossal”³¹ by the mainstream press, soon began to yield results: the perpetrators of the attacks were identified. Bilal Hadfi, a 20-year-old French citizen residing in Brussels, was recognized as one of the attackers at the Stade de France, while Brahim Abdeslam, Chakib Akrouh, and Abdelhamid Abaaoud were identified as the three shooters on the terraces of the 11th arrondissement. Ismaël Omar Mostefaï, Samy Amimour, and Foued Mohamed-Aggad were identified as the attackers at the Bataclan. Abdelhamid Abaaoud was identified as one of the principal orchestrators and, due to the risk that he might organize further attacks, became the subject of an immediate manhunt. He was killed, along with two accomplices, on November 18th, 2015, during a police raid in Saint-Denis. A few days later, ISIS claimed responsibility through a series of statements. Their communication served to dispel any remaining doubts: the explosions had been orchestrated by Daesh and were thus to be considered part of the Jihad, the “Holy War” that the Islamic State wages against Western infidels.

Many years later, at the opening of the trial, the situation appears to be very different than at the beginning of the investigation, namely because the identity of the criminals is already well known. To explain this situation in which, at the opening of such

³⁰ These were the objectives publicly stated by Prosecutor François Molins during a press conference without questions, held the day after the attacks. See Pétillat, Chantal, "Attentats à Paris : un long travail d'enquête," *La Nouvelle République*, November 14, 2015. <https://www.lanouvellerepublique.fr/france-monde/attentats-a-paris-un-long-travail-d-enquete>.

³¹ This is how journalist Sarah Ghibaudo, author of *13 Novembre, l'enquête*, a podcast dedicated to the investigations and published in 2019 on France Inter, one of France's major public radio broadcasters – would describe it. See P. Paccard, “Sara Ghibaudo: 'L'enquête sur le 13-Novembre est colossale, à la mesure de l'événement',” *France 24*, November 13, 2019, <https://www.france24.com/fr/20191113-invite-jour-sara-ghibaudo-13-novembre-enquete-france-inter-podcast>.

a large trial, the criminals have already been identified beforehand, legal scholars Sharon Weil and Sandrine Lefranc (2023), defined this trial as a “judicial experiment” situated between criminal justice and transformative justice. In fact, the trial was conceived as a kind of forum, a space of communication and exchange where victims and their families could begin to repair and heal a damaged community. In fact, the purpose of the judicial trial was not solely to determine who had physically carried out the massacres, its historical dimension being much larger than the mere investigation.

Despite this apparent clarity, some fundamental questions remains unanswered: for instance, to assess whether some defendants were aware of their participation in a terrorist association, or to investigate the circumstances surrounding the paradoxical survival of one of the would-be suicide bombers, Salah Abdeslam. For this reason, a meticulous reconstruction of the facts remained necessary.

Thus, first experts called to testify, even before the witnesses, were representatives of the Police. At the outset of the trial, it was essential to precisely testify what had happened at the beginning of the investigation. For this reason, the investigators’ testimonies occupied the first two weeks of the hearings and were intended to rigorously reestablish the sequence of events. The sober and modern courtroom of the Palais de Justice, built specifically for this trial, was transformed into a sort of time machine: a dispositive, also a visual one, dedicated to the re-evocation of the crime scenes, animated by a continuous flow of words, and by a few significant images.

Today, these forensic have become documents, having been transferred to the *Archives Nationales* as an integral part of the audiovisual recordings of a trial considered as historical. Their transfer to the archives officially confirms their status as cultural heritage through a process that Roger Pédaque would call “*mise en document*” (2006, 50-51).³² The images presented as evidence by the police are accessible and retrievable within the specific framework of the *Archives Audiovisuelles de la Justice*, which, as we shall see extensively in Chapter 5, play an important role in regulating but also

³² In other words, trial recordings become documents through a process of indexing – which is what happens when documents are named and accompanied by a system of metadata and classification – which allows them to be retrieved according to a precise formal logic which, however, according to Pédaque, also has the effect of influencing the understanding of a given document within society.

guaranteeing their accessibility, preserving the documents in such a way as to ensure their perennity.

In contrast to what we have analysed in chapter Two, this time the forensic images are placed into a specific operative context, whose role and impact on the images' sense is to be clarified. To fully account for these images in all their complexity, we need to ask: What is the function of forensic images when situated within a courtroom? In what ways and under what conditions do they serve as evidence *of* something?

To answer these questions, the focus will be on the enunciative strategies related to the forensic images as they were presented during the hearings. Attention will be paid to both conscious and unconscious strategies. This includes small errors and oversights, malfunctions of the courtroom's audiovisual system.

During this analysis, we shall maintain that forensic images – which, as we shall see, aim to objectively document and reconstruct events – mistakes and things that are left unsaid contribute, more than in other types of images, to the consolidation of collective memory related to the attacks. As will be repeatedly observe throughout this chapter (and even more in the next one, fully dedicated to panoramic images), the forensic images presented at trial were very seldom commented upon and often taken for granted by the investigators. The analysis will therefore seek to interrogate the corpus of images not only for what is shown but also for what is problematically absent or not commented upon, based on the conviction that the gaps and incompleteness of the documents are as meaningful as what is visibly present.

As for the scope of investigation, the research will focus primarily on the early days of the trial, specifically the hearings that took place between September 15 and September 28, 2021. Out of the total 700 hours of recorded proceedings, the selected perimeter corresponds to a more limited corpus – amounting to 19 hours and 20 minutes. This perimeter includes the reports from the three police services that conducted the investigations into the attacks, coordinated through a special defense plan specifically

designed to address terrorist threats: the *Direction Centrale de la Police Judiciaire* (DCPJ), which served as the coordinating body; the *Direction Générale de la Sécurité Intérieure* (DGSI); and the *Direction Régionale de la Police Judiciaire* (DRPJ), responsible for crime scene inspections and for tracking the terrorists' movements.³³

The observations in this chapter, as well as those in chapter four, will apply to the entirety of the selected perimeter, though the final part of the chapter will examine in greater depth a few particularly important and significant testimonies: the hearing of investigator Xavier Vo Dinh regarding the Stade de France;³⁴ the hearing of Patrick Bourbotte from the Brigade de Recherche et d'Intervention (BRI)³⁵; the statements by anonymized investigators identified as SDAT RIO 1039672 regarding the explosions at the bistro La Belle Équipe;³⁶ the testimony of investigator RIO 1206362 regarding the Comptoir Voltaire.³⁷

A final lexical note before proceeding: it is important from the outset to distinguish between the images projected during the trial and the images related to the documentation of the trial itself. In the first case, we will refer to images *in* the trial, while in the second case, to images *of* the trial. The main objective of this chapter is to analyze the forensic images *in* the trial.

³³ The simultaneity of multiple attacks within such a limited space and time frame made it necessary to activate a special defence plan. See CNews, “Attentats de Paris: que signifie le plan rouge alpha?,” *CNews*, November 14, 2015. <https://www.cnews.fr/france/2015-11-14/attentats-de-paris-que-signifie-le-plan-rouge-alpha-715770>.

³⁴ Archives Nationales, hearings of September 16, 2021. File: 20210916_1531800001_attentats_V13_01.

³⁵ Archives Nationales, hearings of September 18, 2021. File: 20210917_1531800001_attentats_V13_01.

⁷ Archives Nationales, hearings of September 20, 2021. File: 20210920_1531800001_attentats_V13_01 ; 20210920_1531800001_attentats_V13_02; 20210920_1531800001_attentats_V13_01.

³⁷ Archives Nationales, hearings of September 20, 2021. 20210920_1531800001_attentats_V13_02.

3.1. *Images “in” the trial*

In this section, we'll focus on the images *in* the trial. By that, we mean the images that were shown when the forensic police gave their statements. What exactly were these images, and how does the context of the trial influence their meaning?

To answer these questions, a typology will first be established, distinguishing the images according to the chronology of events and their media formats within the selected scope of research. In order to analyze the operational functions of the images, we will focus on their enunciative strategies and, in particular, on the shifts in semiotic contexts that the images undergo. Special attention will be paid to how their recontextualization within the trial – that is, their being *in* the trial – influences and shapes their operative effectiveness.

The first aspect to consider about the context of the trial is that here forensic images seem to be called to reconstruct an event whose logistics already appears clear. As mentioned above, at the beginning of the trial the attacks have already been claimed by Daesh, and the locations, timing and even the perpetrators are already well known. For this reason, according to historian Sylvie Lindeperg, the police images are not strictly speaking *images-preuves*, because the guilt of the attackers had already been "proven" upstream (Lindeperg 2022).

Despite this, the forensic images *in* the trial are not simply decorative embellishments. Rather, they serve a precise and essential function within the hearings: that of reconstructing with maximum specificity the spatial, temporal, and agentic dimensions of the events under discussion. To begin untangling these issues, it will be useful to start precisely from the evidentiary function of the images and reflect on how, despite all aiming to show and document the events, not all do so in the same way or through the same technologies. Establishing a typology will thus serve an important heuristic function.

3.1.1. Chronologies

A first useful element in constructing a typology of the images concerns their relation to the temporality of the events. The police depositions aimed to document and illustrate the crimes across their entire temporal arc. The audiovisual materials presented by the investigators sought to represent not only the attacks in progress but also their preambles. Thus, the police statements also focused on situating the attackers in the moments preceding the attacks, for instance, by reconstructing the car journeys that brought them to the locations of the explosions. However, not the entire timeline of the attacks was documented equally, and certain moments appeared scarcely represented, to the extent that investigators sometimes had to justify before the Court the absence of adequate footage.

An extreme case is the testimony of September 15th, concerning the terrorists' movement from Saint-Denis to Paris, for which no images exist – a sign that the suicide bombers reached the crime scenes entirely unnoticed. The investigator responsible for this testimony based his account on data from the mobile phones in the possession of the attackers, which were "visualized" during the testimony through a screenshot from Google Maps.³⁸ It is certainly interesting to note that the first image encountered within our research scope is a screenshot of a digital map. That is, an image that does not maintain any iconic resemblance to the events but rather conveys, through a diagrammatic form, the spatial dimension of the crime scene. Later, during the same testimony, investigator BC025 from the Anti-Terrorism Section (ST) of the Brigade Anti-Criminalité showed CCTV footage depicting one of the orchestrators of the attacks, Abdelhamid Abaaoud, jumping the turnstiles at *Croix de Chavaux* metro station. In this case, the image was crucial to the investigation, as it localized a particular suspect at a specific place and time, thanks to the timestamp metadata of the surveillance cameras.

Unlike the images taken during crime scene investigations – and thus after the attacks – the images preceding the explosions appear mostly as “found” images, not intentionally

³⁸ Archives nationales, hearing of September 15, 2021. File 20210915_1531800001_attentats_V13_02.

produced. Often, their resolution is so low that it becomes necessary to add legends or markers to help identify subjects within the digital grain, an operation that effectively inscribes an additional interpretative layer onto the images.

The status of these images – never sought, never intentionally produced, never staged, but always “retrieved” from photographic (or non-photographic) sensors dispersed throughout the urban space – makes them akin to digital *ephemera*: part of the vast mass of data generated by surveillance and telecommunication devices.³⁹ Due to the scarcity of available data, these aspects of the investigation can be compared to the remote sensing methodologies often employed in open-source (OSINT) investigations conducted by agencies such as Forensic Architecture or Bellingcat. Faced with events that are scarcely represented, the role of the investigation is not only to connect clues but also to amplify weak and fragmentary signals, thereby raising the issue of the reliability and the cross-authentication of data. In fact, as Matthew Fuller and Eyal Weizman (2021) note, one of the problems related to the amplification of weak signals is precisely how to distinguish between valid information and artifacts – that is, noise (a phenomenon commonly encountered in everyday experience when considering digital photographs taken in low-light conditions, where figures sometimes risk becoming indistinguishable from the background). This set of problems also underlies the debate that unfolded within the courtroom itself regarding how to determine which data were or were not reliable.

For example, to reconstruct the movements that preceded the attacks, investigators made extensive use of data retrieved from the attackers' smartphones. In particular, three types of data were discussed in court to support the reconstructions: data necessary for the basic functioning of the device; data related to internet connectivity, including the use of instant messaging applications such as WhatsApp (also known as VOIP, Voice Over Internet Protocol); and finally, data flows resulting from browser searches.

Again, the investigator highlighted the challenges of interpreting the data. In court, he explained how outgoing data can appear even when a device is only receiving messages. A particularly telling example concerns one of the mobile phones used by the attackers, which was found destroyed among the human remains near the Stade de France. This

³⁹ On surveillance cameras as a sociotechnical dispositif, see Doyle, Lippert, and Lyon (2012).

phone emitted signals eight minutes after the time of the explosion. In order to verify that these signals were not the result of active use of the device, the investigator explained that it was necessary to compare this initial source with detailed billing records.⁴⁰

A second category in the temporal typology concerns the images presented at trial that show the attacks as they unfolded. Live footage of the attacks is rare, and its presence in the trial corpus is extremely limited. Primarily, these images were not produced by professional image-makers but by witnesses who happened to be at or near the sites of the attacks, using consumer mobile devices. On September 20th, for instance, investigator SDAT RIO 1039672, tasked with testifying about the *La Belle Équipe* Bistrot, presented in court a video recorded by an eyewitness from the window of his first-floor apartment on a street adjacent to the bistro. The video captured only the end of the attack: two terrorists and a car can be glimpsed, but not the terrace of the bistro itself. Sent to law enforcement on the night of the attacks, this footage contributed to mobilizing emergency services.⁴¹

Perhaps the most significant testimony concerning live temporal documentation of the events, presented during the trial by investigator Patrick Bourbotte, is an audio recording that captured the entirety of the Bataclan attacks. A venue devoted to listening par excellence, the Bataclan was hosting a concert by the band Eagles of Death Metal on the night of the attacks. One of the attendees, while recording the concert, inadvertently recorded the entire entrance of the terrorists, thus producing an audio document of the shootings – a sonic record that provides a precise, if visually incomplete, timeline of the unfolding events.⁴²

In this phase of the attacks, the audiovisual recordings can be understood, in Frédéric Lambert's terms, as “anonymous” images (Lambert 2001). The absence of an identifiable author reinforces their authority, following the principle that *l'image anonyme*

⁴⁰ Archives nationales, hearing of September 15, 2021. File: 20210915_15318000001_attentats_V13_02.

⁴¹ Archives nationales, hearing of September 20, 2021. File_20210920_15318000001_attentats_V13_01.

⁴² Archives nationales, hearings of September 17, 2021. File 20210917_15318000001_attentats_V13_01.

fait autorité. The amateur – and thus anonymous – nature of these images enhances their perceived authenticity, strengthening the impression of confronting raw evidence. This anonymous footage, captured by first-hand witnesses, is not a “mythographie” (Lambert 1986), but rather an image unfiltered by artistic mediation or the conventions of professional photojournalism. As with the images documenting the phase immediately preceding the attacks, a significant feature of this iconography is once again its scarcity and partiality – a fact that testifies to the emergency conditions under which these images were produced. These images capture the attacks “despite” their incompleteness, or perhaps precisely because of it: a characteristic that assimilates them to the four photographs taken inside the Auschwitz concentration camp and discussed by Georges Didi-Huberman in *Images in Spite of All* (2005). The images capturing the attacks, made by eyewitnesses (whether from within an apartment or directly from inside the concert hall), bear witness through – and perhaps even more forcefully because of – their fragmentariness. This group of images might be described as “autoptic,” referring to the etymology of autopsy: seeing with one's own eyes (Pinotti 2017).

A third group comprises the images produced in the aftermath of the explosions, intentionally created by the forensic police. These images primarily depict residual traces, focusing on what “remains” of the terrorist attacks as it appeared to investigators upon their arrival at the crime scenes. From a semiotic perspective, they strongly embody the Peircean notion of the index, also in its conception of the clue.

As discussed in Chapter 2, photographing traces and clues occupies a central role within forensic investigations, where recording media are often used primarily as tools to freeze the crime scene in order to enable its later reenactment. In this sense, the crime scene images belong to a historical lineage that links them to the earliest uses of police photography from the Nineteenth century onward. Then as now, photographing crime scenes starting from material traces was considered fundamental to the investigation, serving not only the technical function of preserving fragile organic evidence that might quickly degrade, but also, from a semiotic perspective, of transforming traces into signs, and thus into clues. In the context of investigations, images perform the precise function of mapping traces to relate them to one another, thus constituting a cartography of the

crime scene, where the validity of investigative work depends not solely on the iconic aspect of the image – that is, its visual resemblance to its referent – but also on its ability to render the relations among different pieces of evidence. In this sense, forensic images produced at the crime scene do not prove the facts simply by showing them as they unfolded, but rather by enabling their reconstruction through the traces they left behind.

From this initial chronological survey, it is possible to observe that the iconography of the November 13th attacks, as presented during the trial, is heavily weighted toward images documenting the aftermath. This imbalance in the chronological representation of events also results in a corresponding uneven distribution of media formats.

3.1.2. Media formats

The first observation to be made is that, although concentrated over a relatively small number of hearing days, the findings presented by the police forces cover a wide variety of media formats. We will now detail a second typology, following the chronological survey just outlined but focusing on the differences in the media formats of the images.

A substantial portion of the documentation consists of “poor images” (Steyerl 2009). In these extremely low-resolution images, the digital grain often acts as a threshold of visibility, making the referent difficult to identify (Casetti and Somaini 2021). Among these are the surveillance camera recordings, previously described as ephemera, and the “autoptic” images produced by eyewitnesses, mostly relating to the moments immediately preceding the attacks or attempting to capture them live. This cluster includes both moving images (such as surveillance camera videos) and still images (often

screenshots or still frames extracted from videos), as well as hybrid forms (such as videos with very low frame rates, resembling flipbooks).

Conversely, resolution-rich images predominantly document the aftermath of the attacks and primarily focus on traces left behind by the explosions. This cluster includes most of the photographs produced by the forensic police. These are typically high-definition images depicting traces found at the crime scenes, systematically cataloged using numerical and scale markers placed next to the material evidence.

Significantly, this corpus also includes 360-degree panoramic images, projected onto the courtroom screen and manipulated live by a courtroom technician. These are interactive panoramas in which many elements are clickable and in which it is sometimes even possible to navigate spatially within the crime scenes. As we shall see more in depth in Chapter 4, these images were not experienced through a virtual reality headset but rather through their distanced projection onto a screen.

Another cluster is represented by maps, floor plans, and diagrams of the crime scenes, which often substitute for photographic documentation by representing the facts through purely conventional means. Sometimes these maps are accompanied by symbols or stock photographs. A particularly emblematic case concerns once again the Bataclan declarations, where the crime scene was represented by maps indicating the locations where the victims' bodies were found with generic icons (and by very few photographs), or by the previously mentioned Google Maps screenshot presented on September 15th by the investigator reconstructing the attackers' movements.

We may hypothesise that the presence of stock images serves two functions: on the one hand, it visualizes missing images – as in the case of the attackers' movements on Google Maps – while on the other, it provides a valuable means of distancing viewers from scenes that might be too difficult to confront directly for reasons of decorum or respect for the victims. It is no coincidence that many of these “stock” images appeared precisely in relation to the Bataclan interior, the site of the attacks with the highest number of casualties, where images taken at the crime scene were only shown much later in the trial, in April, long after the investigators' initial depositions. Although stock images were

never explicitly discussed during the investigators' testimonies, the inevitable presence of such material eventually sparked a broader debate on the importance of seeing and showing the crime scene images during the hearings – grounded in the belief that confrontation with the crime scenes was essential for reconstructing the truth of the events. We will see this debate more in details in Chapter 4.

3.1.3. *A trial without emblems?*

From this short survey of the chronology and media formats of forensic images, a general partiality and fragmentariness in the documentation of the terrorist attacks clearly emerges. In the courtroom, there is no single grand image that summarizes and encapsulates the events.

A comparison with the September 11 attacks arises spontaneously. In that case, the attacks were almost conceived in function of their spectacular dimension – as if the destructive power of terror had deliberately calculated its own visual mediation. One need only think of iconic images like the photograph by Steve McCurry, which vividly captured the burning Twin Towers, or the clear and stark composition of Richard Drew's *The Falling Man*. In part, the images captured by bystanders at street level even overlapped with cinematic representations of war, as in Michael Bay's *Pearl Harbor*, released in 2001. Twenty years after 9/11, it is sufficient to evoke the essential form of a parallelepiped and an airplane, as in Maurizio Cattelan's sculpture *Blind*, exhibited at Hangar Bicocca in Milan in 2022, to conjure the collective memory of the attacks, demonstrating how the visual evidence of the crime crystallized into a highly synthesized image.

By contrast, the iconography of the November 13th attacks, at least insofar as it was brought into the trial as evidence, seems to fall under the sign of an aesthetic of the fragment rather than that of a series of grand spectacular emblems.

3.2. *Being “in” the trial: visual evidence, recontextualized*

We will now focus on the display of forensic images during the trial. What does this operation consist of? How are they shown in courtroom? What does it mean to say that the images are “in” the trial?

To some extent, the forensic images presented at trial can be understood as an “archive within the archive.” They exhibit a strong content-based coherence: each image, in its own way, seeks to document the events by capturing their locations, moments, and actors. This internal consistency, combined with their placement at a specific stage of the trial, endows the images *in* the trial with the character of a unified collection – one that stands out within the broader visual landscape of the proceedings. Viewing these forensic images as an archive within the archive enables us to interpret their courtroom presence as a form of recontextualization, approached from the perspective of a semiology of the archive. In this light, their display during the trial represents a shift in their original semiotic context – a transformation that can be examined through the lens of enunciation theory.

A preliminary observation is that, when displayed in the courtroom, the evidence displayed by police forces has already had a few preliminary “lives”, each one identifiable with a specific semiotic context. In fact, the semiotic contexts of enunciation of the evidence are nested within one another in a process of *emboîtement* that unfolds across multiple levels: from the evidentiary status of the images (within the investigative context) to their internal circulation within the courtroom. Finally, their final and archivistic context, linked to their transformation into documents at the Archives nationales, also plays a role. These levels interact with each other, adding layers of hermeneutic complexity to the images. To some extent, in the liveness of the trial, these levels are somehow co-present: it is commonly understood that the images *in* the trial are police evidence, taken at the time of the terrorist attacks, and – as we will further clarify in Chapter 5 – that they will ultimately become historical documents.

To disentangle how this stratification influences the construction of meaning in the images in the moment in which they are displayed *in* the courtroom, it will be useful

to focus on the crucial one: that which concerns the enunciated presentation of forensic images within the physical space of the trial itself.

From a semio-pragmatic perspective, reflecting on the context of enunciation requires attending to the “constraints” that govern the communication process and the production of meaning. As Roger Odin points out, every reception context imposes a series of limitations that both predetermine and enable the construction of meaning.⁴³

Thus, analyzing the presence of images *in* the trial provides a crucial entry point for reflecting on the specific constraints the courtroom context imposes on the reception of visual evidence – and, conversely, on their specific agency.

One initial approach for thinking about the presence of images *in* the trial is through the concept of relocation, which refers to a shift in the spatial context of an image’s reception. Relocation, as defined by Francesco Casetti, concerns the transference of a given media experience from one place to another.⁴⁴ According to Casetti, the change of spatial context entails both continuity and transformation in spectatorial regimes: when an event or a situation is re-presented in a new space, that shift allows for new functions to emerge. This process is particularly evident when the change in context is drastic or discontinuous: Casetti, in fact, discusses the relocation of film into heterogeneous exhibition contexts, such as video art or cinema presented within museum frameworks (Casetti 2009). Nonetheless, in its most essential form, relocation refers to the spatial, and thus primarily physical, transposition of an experience, and as such it is a concept adaptable to the presence of images *in* the trial. While it may not be surprising to find forensic images in a courtroom – indeed, they are often produced for precisely that

⁴³ “In the end, communication can take place because the actants who are producers of meaning, (S) and (R), are not free. Specifically, it is these constraints, and they alone, that allow us to get the impression that the process of communication work” (Odin 2021, 51).

⁴⁴ “By relocation I mean to designate the process through which an experience, whatever it may be, ‘transmigrates’ from one place to another. We are dealing with a displacement aimed at conquering a whole new sphere – physical, existential or technological – in which we may relive, ‘almost’ in the same manner what we could have lived elsewhere, and where we may find new possibilities and new dimensions. This relocation, then, implies, in equal measure, both permanence and transformation: an event or a situation is re-proposed and different functions emerge” (Casetti 2008, 8).

purpose – these images are nonetheless *physically* transported into the spatial context of the hearings. This spatial transposition requires that the images undergo changes in both medium and format in order to adapt to the technological infrastructure of the courtroom. It therefore calls for close attention to the modalities of remediation, as well as to the visibility or occlusion of interfaces. As will be further explored, beyond spatial relocation, reflecting on the presence of images *in* the trial also entails a critical examination of how the documents are remediated. Moreover, the presence of the images *in* the trial can also be understood as a form of publication, insofar as the police’s “private” archive is made visible within the framework of juridical proceedings – which are, by definition, public. This transition into the public domain enables participants in the trial to reframe past images within a present context, thereby generating new discourses around the documents.

Because of these characteristics – relocation, remediation, publication – the presence of images *in* the trial can be understood as a recontextualization and, therefore, as an opportunity to produce a new social discourse through a dispositif of semiotic transformation. One concept sums up these three modalities: the semiotic concept of recontextualization. This semiotic dispositif makes it possible to explore the relationship between document and reception in pragmatic terms.⁴⁵ As a shift in the exhibition context, recontextualization enables an investigation of how documents are relocated, but also how they are rendered intelligible to the audience through precise rhetorical strategies aimed at constructing a new discourse around the images. By focusing on the relationship between documents and changes in their supports, recontextualization also sheds light on the remediation of documents. Moreover, it also entails several components: first and foremost, a diachronic gap between the time of production and the time of reception, giving rise to a historical and distance interpretive distance, known as the “gap of intelligibility.” This historical distance has been interpreted as an insurmountable and not entirely bridgeable parameter: the past speaks a different language from the present, and

⁴⁵ “Ogni pubblicazione di un documento d’archivio è in sé una ricontestualizzazione e dunque l’occasione per produrre un nuovo discorso” (Lucatti and Treleani 2013, 136).

this temporal distance, never fully overcome, creates a threshold or gulf – the gap of intelligibility.⁴⁶ Thus, when visual evidence is displayed *in* the courtroom, it must be diffusely commented and almost explained by the investigators, whose rhetorics and eloquence becomes crucial. On the one hand, because the scientific nature of these images makes them difficult to fully understand to non-specialists; but also, on a deeper conceptual level, because their “gap” between their original evidentiary context, and the judicial one, must be somehow bridged by the words of the witnesses who are testifying in court. It is also important to note that this operation is not trivial or simple. Often, the forensic images in the trial are very sensitive and emotionally charged for the people in the audience. Their violent nature requires the police officers to be particularly delicate, and their declarations take up an emotional tonality of decorum.

The temporal dimension of the intelligibility gap also plays a role. In fact, the forensic images accompanying police statements refer to a temporality antecedent to their publication during the trial. Yet the historical distance involved here is not atavistic, as it refers to events that most of the present people had directly and collectively experienced: a distance closely tied to the traumatic memory of the terrorist attacks. Thus, the images' being *in* the trial constitutes a diachronic recontextualization that serves to make scenes of terror visible once again to the victims and their families, powerfully reactivating the memory of violent events. We will return to this point later in this chapter, when we will discuss the effect of the images *in* the trial: we will maintain that the proximity of the temporal gap in the images' recontextualization allows for the activation of a multiple temporality and a specific memorial function tied, especially, to forensic images.

⁴⁶ Bruno Bachimont translates this idea of incommensurability between past and present by referring explicitly to a gap or a “ditch” of intelligibility in archival documents, evoking a past that can never be fully translated into the present. See Bachimont 2010 and 2009.

3.2.1. *Filling the “intelligibility gap”: evidence editorialization*

Every recontextualization, whether it involves publication, relocation, remediation, or a combination of these elements, may be thought of as a “reinvention of images,” (Treleani 2014) insofar as it can generate new effects of meaning that were not inherent in the document’s original purpose. To a certain extent, in the following pages we will point out how the recontextualization of the images *in* the trial contributes to this process, inscribing onto the visual evidence, presented by the investigators, subtle dimensions of meaning that were not previously present in the images. Since we are treating the forensic images *in* the trial as a sort of “archive within the archive”, once again we will mobilize a concept that pertains to the semiology of the archive and, more specifically, the concept of editorialization, or “the process of mobilizing resources to integrate them into a new publication” (Bachimont 2007). Strictly speaking, editorialization consists of rhetorical strategies aimed at making a given audiovisual document more comprehensible within a new context distinct from its original one. In fact, editorialised archival contents are often accompanied by a series of paratexts that facilitate their interpretation – for instance, a caption accompanying an image or a title accompanying an audiovisual document published online. Selection can also be considered a subcategory of editorialization: the choice to display a specific document or image within a precise context, much like a photo editor selects images for a newspaper.

When recontextualised *in* the trial, the forensic visual evidence from the terrorist attacks undergoes a process of editorialisation, which involves specific moments and actants.

First, before being displayed *in* the trial, the forensic images are carefully selected and chosen beforehand by the President of the Special Court, Jean-Louis Périès. The President selects materials, favoring those most coherent with the objectives of the trial and discarding others, thus producing what François Rastier would describe as phenomena of dissimulation (the neutralization of incoherent semes in an interpretation)

or afférence (the activation of coherent *semes*) to construct a coherent interpretive path (Rastier 1987, 2000).

A full reconstruction of the editorial logics of this trial would require an extensive fieldwork and, probably several interviews, either to the police forces who produced the investigation and to President Périès. However, it is reasonable to assume that the forensic images that ended up being displayed *in* the trial were not selected by chance or by ornamental proposes. Rather, they all seem to obey to a utilitarian logic, linked to their relevance for judicial debate and to their efficacy in reconstructing the criminal events that are being discussed. Only the images who, somehow, document and reconstruct the events end up being selected. The reconstructive endeavour of the forensic images – never decorative, never spectacular, can be presumed also from their chronological placement, at the very beginning of the trial. It is as if the editorial process of the forensic images was trying to state the known, to bring back the crude facts, before the hearings become fully consecrated to the witnesses and survival of the attacks. This utilitarian logic has some repercussion on the aesthetic regimes of the images, who are always very scarce and, overall, very synthetic. Not a single image is superfluous *in* the trial, and those who manage to trespass the thick walls of the Palais de Justice, are certainly there to be commented, explained, and to serve a purpose.

It would be interesting, though ultimately unfeasible, to imagine alternative interpretative paths based on the images that were not selected as judicial evidence. Notably, the only occasion when such alternative paths become partially visible is linked to the Bataclan investigations. As we will see in the following chapter, some forensic photographs that were not shown during an initial deposition concerning the Bataclan crime scene were later displayed at trial, following a public request from civil parties and witnesses. Beyond this episode, the selection of forensic images accepted into the trial is never openly discussed in the courtroom, and the President's editorial decisions are rarely contested.

For this reason, the President's role can also be understood as that of a gatekeeper, given that he is responsible for excluding certain images from being shown during the trial. A routine expression, repeatedly pronounced before each testimony along with the formal introduction of the witness, confirms this dynamic. Every witness, even those recognized

as experts in their field, such as chief police officers, must request the President's permission before displaying any image. President Jean-Louis Périès formally authorizes the presentation of specific images that have been previously agreed upon. Although this may appear to be a mere formality or procedural routine, it plays a crucial role in establishing a hierarchical structure, with the President firmly positioned at its apex.

Moreover, a critical examination of the Court President's gatekeeping role reveals certain underlying tensions in these choices. On the one hand, as we have mentioned, there is a demand for rigor, an effort to ensure that the images reconstruct and clarify the facts being scrutinized. On the other hand, there is a degree of restraint aimed at limiting the exposure of witnesses and civil parties to the most violent scenes presented in the courtroom. The selection of images thus seems guided by a principle of the morality of the gaze and of decorum: violent or potentially disturbing images are always preceded by a warning from the President and by a sufficiently long pause, to allow those present to leave the courtroom if necessary. This editorial line, consistently maintained throughout the trial, constitutes one of V13's distinctive characteristics compared to other French terrorism trials. A notable comparison here is with the trial for the January 2015 attacks against the editorial staff of the satirical newspaper *Charlie Hebdo*: direct testimonies, such as that of historian Sylvie Lindeperg (2022), who attended both trials, recount that in that case, images were shown without any precaution on the part of the Court.

A second, fundamental, actant of the editorialization process of images during the trial concerns the role of the investigators, who presented their work at the witness stand.

The words of the police officers is a necessary premises for the forensic images to be present *in* the trial. In fact, in the words of President Périès, the images used during their depositions were referred to merely as "visual aids" to their very words. This affirmation clearly implies and defines a hierarchical subordination of images to oral testimony, in which words are considered as more probative than images. According to the trial's purposes, then, the words of the expert are supposed to give substance to the pictures, which otherwise would be mute, lost in the "intelligibility gap". In this regard,

it is the investigators' words that bring the images *in* the trial into collective understanding. This dimension of "muted testimony" of the evidence, an expression coined by Talbot And already recalled at the end of Chapter 2, stands in contrast to the rhetorical skill of the investigators, who speak *about* and *through* the visual evidence they're commenting upon. This (hierarchical) tension between evidence and rhetoric, which is activated each time President Périès formally "authorizes" the use of a piece of evidence, can also be interpreted as a reactivation of the ancient rhetorical strategy of *prosopopoeia*. This Roman rhetorical device, dating back to Quintilian and rediscovered by Eyal Weizman and Thomas Keenan (2012), consisted in the rhetorical animation of the inanimate. In fact, through the speaker's eloquence, the material dimension of visual evidence is brought to life.

The verbal component that surrounds the image *in* the trial is, therefore, a fundamental tool. Moreover, the investigators' professionalism is also to consider. Their presence in the courtroom is not simply that of a lawyer (that is, an expert in rhetorical eloquence), but rather, that of an expert: an expert in forensic sciences.

In fact, in explaining the images, the investigators highlight details that might otherwise have remained invisible or insignificant to the untrained eye. In this regard, their testimony sometimes resembles a scientific demonstration or lecture. The presence of investigators is essential for rendering technical images intelligible - images that require a form of "trained judgment" (Daston and Galison 2007) to be properly deciphered. In this regard, we can briefly recall the testimony given on September 23, 2021, which was entirely focused on a detailed analysis of the treatment of the bodies recovered following the Bataclan investigation.⁴⁷ On this occasion, Bertrand Ludee, professor of forensic medicine, head of the Paris Institute of Forensic Medicine, and director of the autopsies performed on the Bataclan victims, explained that the primary cause of death among the concert attendees was not the attackers' suicidal explosions, but gunshot wounds. To substantiate this conclusion, he relied on a post-mortem scanner, the results of which were fully projected in the courtroom. To bridge the "intelligibility gap," Ludes clarified the dual purpose of this type of post-mortem imaging: it serves both identification and investigative functions. Moreover, he emphasized that post-mortem

⁴⁷ Archives nationales, hearing of September 23, 2021. File: 20210923_1531800001_attentats_v13-01.

scans can be preserved, allowing magistrates to request expert analyses and counter-analyses over time

Thus, the investigators' depositions had the effect of making the documents more intelligible, softening (though never fully bridging) the gap created by the recontextualization of documents. Speaking *about* and *through* the images, the investigators effectively explain them, rendering them more accessible to those present in the courtroom. In other words, they engaged in the transmission of scientific knowledge: an act of scientific dissemination and cultural translation at once. Indeed, it is no coincidence that one of the most noble definitions associated with editorialization is linked to the concept of translation – that is, the act of establishing a relation between two different systems, whether linguistic or cultural.

In its broadest sense, the problem of editorialization can be reframed as a problem of cultural semiotics. Cultural semiotic approaches focus on the relationships between systems, networks of objects, and intertexts – or, as Claudio Paolucci puts it, the modalities through which “local commensurability between heterogeneous systems” is constructed (Paolucci 2010, 230).

Despite the highly hierarchical and normative framework of the trial, from the standpoint of a visual semiopragmatics of forensic images, the roles of the President and the investigators create an illuminating dialectic, structured around opposing dynamics of control and animation of the images. The former, acting as a gatekeeper, normalizes the images by selecting those deemed most appropriate for the courtroom. The latter, adopting a mode closer to scientific dissemination, explains the images and almost animates them through their commentary. This opposition between conflicting forces leads to a partial inversion of the power dynamics inherent to the trial. Although the images are formally admitted only upon legal authorization, which subordinates them to the spoken words of the investigators, the actual act of commentary can at times reverse this order, with the experts extensively commenting on and elucidating the images. This

dialectic remains entirely silent, never surfacing consciously or explicitly within the trial proceedings. However, legal historians have noted that this tension is a central topic in the semiotics of legal evidence in court, where visual materials are often admitted as subordinate entities in relation to spoken testimony, yet ultimately are explained and commented upon in their own right (Mnookin 1998; Verenich 2017).

Regardless of this dialectic, we can draw some conclusions regarding the importance of the reception context and its authenticating effects on the images *in* the trial. Thanks to the highly normative framework of the proceedings, the integrity of the documents is never called into question. This is because the internal rules of the courtroom establish a tightly regulated context in which each actor performs a clearly defined role. Archival studies have long emphasised how the digitisation of archives poses concrete challenges to the technical status of documents: changes in the medium of images necessitate a reconsideration of their integrity, as well as the authenticity and reliability traditionally associated with them. Yet, despite our consideration of forensic images as an archive “within the archive”, neither the investigators nor President Périès are, strictly speaking, archivists, and their use of the image archive never explicitly questions the documentary status of the images *in* the trial. The courtroom context thus imposes a strong authority that acts as a guarantor of the audiovisual documents shown, whose integrity is never explicitly debated.

There is another aspect that we have not yet addressed. The recontextualisation of images in the trial inevitably entails changes in media supports and interfaces, thereby raising the question of the remediation of documents.

3.3. *Recontextualisation and remediation*

As we have seen in our second typology, forensic images *in* the trial are found across a variety of media and recording or dissemination devices, including mobile phones, surveillance cameras, and 360° cameras. This wide variety is inherently linked to their evidential nature and to specific moments of the attacks, their often-fragmentary quality reflecting the circumstances under which the images were produced or collected.

However, their recontextualisation within the trial entails a necessary standardisation of their display. Regardless of the original interface – once closely tied to the "raw" dimension of the evidence – vertical smartphone footage and 360° panoramas, which should belong to ergonomically distinct modes of display, are all "flattened" into the same format. In practice, all images *in* the trial are viewed and presented exclusively through the computer system of the Palais de Justice courtroom. This shift in medium invites a reconsideration of the images' recontextualisation as a form of remediation.

Thus, an analysis of the medium through which audiovisual content is presented constitutes a necessary preliminary step for any reflection on remediation, specifically in those who imply a nuance linked to the idea of medium as support. Etymologically, "support" is defined as a word denoting an element "placed beneath" another element, shaping and sustaining it. However central to some traditions, like Husserlian phenomenology, the notion of support has been the subject of substantial critique within the domain of media studies. Research exploring intermediality and postmediality has demonstrated that the separation of medium from content carries inherent risks, particularly with respect to an essentialist perspective on media (Vitali-Rosati, Larrue 2019). Despite this risk, the shift in medium experienced by the images in the trial thus becomes an interesting point of departure for questioning the display of the images *in* the trial, and to frame its visual regime.



Figure 13 The courtroom projection screen in a juridical sketch. A central screen, in the background, is echoed on more screens situated public's bench. Source: <https://www.politika.io/fr/article/collecte-archives-direct-au-proces-v13-lattendu-a-limprevisible>



Figure 14 A photograph of the courtroom. The projectoin screen, located at the background, is switched off. Source: <https://www.leparisien.fr/faits-divers/en-quoi-les-temoignages-des-victimes-du-13-novembre-participent-ils-a-la-verite-des-faits-25-10-2021-RKB2RNZ2VJGN5I4AYSVLK2NEEM.php>

In moving from their original devices to the courtroom projection screens, all categories of images previously discussed undergo a homogenization, that affects every type mentioned in our typology.

Thus, “ephemeral images” captured before the attacks are extracted from surveillance software. In this case, the projection screen in the courtroom is much larger than their original location, causing a blow-up effect that lowers even more the – already scarce – image resolution.

“Anonymous” and “autoptic” images captured by eyewitness during the attacks are extracted from smartphones: in this case, the vertical format linked to their smartphone is still present and maintained in the courtroom screens.

Finally, as we will also see more in detail in chapter 5, the police pictures, among which there are 360 panoramic images, are “flattened” on the courtroom computer screen.

The remediation of the images in the courtroom screens can be thought of not only as a uniforming device, but also as an operation that, on occasion, still maintains the original interfaces of the previous medial formats. In fact, when played back on the courtroom computer, the interface often remains visible: police archive files are opened, zoomed, and manipulated live by an operator present in the courtroom. Interfaces and cursors remain visible, producing what Bolter and Grusin would call a “hypermediacy illusion” (Bolter and Grusin 2002, 45). Rather than aiming for seamless remediation through interface invisibility, the images *in* the trial exhibit their interfaces conspicuously.

A crucial example in this is linked to the footage shown on September 20, linked to the investigations that took place in the *Comptoir Voltaire* bistro.⁴⁸ In this specific crime scene, marked by a single kamikaze explosion, there were no fatalities, although many people were injured. During his testimony, the investigator presented the CCTV footage recorded by the restaurant’s surveillance system. Unlike other surveillance recordings, this video is notable for its unusually high frame rate and relatively high resolution, which ensure a clear level of detail and smooth motion. The footage projected

⁴⁸ Archives nationales, hearing of September 20, 2021. File: 20210920_1531800001_attentats_V13_02.

in the courtroom displays the full moment of the suicide bombing in its entirety – without cuts or censorship. However, a closer look reveals that the video evidence shown *in* the trial is not the original CCTV file, but rather a recording of the surveillance interface itself, captured by police officers. The image disseminated by the investigators is therefore not a direct recording of the event, but rather the reproduction of a reproduction. This is clearly visible in the version shown *in* court, which includes a watermark overlay displaying metadata added by the investigators on November 14, 2015. Yet this second, “imperfect” reproduction introduces additional elements absent from the original footage, such as details related to the interface used by the manager of the establishment on Boulevard Voltaire. Although not a deliberate strategy on the part of the investigators, this visibility acts as a membrane between images and viewers, maintaining a crucial distance. particularly given the traumatic content of the corpus.

This hypermediated remediation, which not only preserves but actively displays cursors, pointers, and program interfaces, forces us to reconsider the operability of audiovisual documents, beginning with a reflection on the functional use of images within the trial. To start detangling this insight, it is important to interrogate the role of the trial interfaces. Here, we will keep in mind Galloway’s definition of the interface (2012), understood as a procedural element (precisely defined as an ‘effect’) that is meant to merge two worlds into one. In the context of the trial, the interface functions precisely as a membrane, enabling the images to be seen by the audience. At the same time, considering the uniformization of the media formats, we could also maintain that this membrane is only partially permeable: it lets evidence pass through, but without keeping their original format. Whilst recontextualising the forensic images, the procedural element of the interface also produces an effect on the images *in* the trial.

3.3.1. *Recontextualisation and effect. From the evidential to the illustrative function.*

In examining the functional use of images and how it is influenced by their recontextualization during the trial, it is crucial to recall that, before being transferred into the courtroom, the images were primarily regarded by the police as evidentiary material. Despite their occasional fragmentariness, low resolution, amateur nature, or even status as "missing" or "stock" images, what unites these diverse formats and languages is their investigative role, whether in locating suspects or situating clues within crime scenes.

Once inside the courtroom, however, the evidentiary nature of the images becomes layered through a shift in their semiotic context. H el ene Berrang ere, Martine Sin-Blima Barru, Virginie Sansico, and Romane Gorce (2023) classified the images based on their functional use, they notably omitted the evidentiary function. For these scholars, the images presented during the trial fulfill three primary functions: evidential (proving an accused's presence within ISIS ranks, for example), memorial (projected at the request of civil parties to honor victims), and illustrative (supporting or clarifying testimony). While useful for a preliminary analysis, this classification does not fully account for the recontextualization of the forensic images, for whom their investigative role remains prominent.

As previously noted, the recontextualization of images within the trial sustains a rhetorical framework shaped by two main agents: the President, as gatekeeper and image selector, and the investigators, as scientist-communicators. Images *in* the trial are never left to stand on their own; they are only admitted into the courtroom with the President's authorization and in conjunction with the investigators' spoken testimony. According to this logistic, the image *in* the trial occupy a secondary position relative to expert speech. Forensic images, in this context, serve ostensibly as simple visual aids, subordinate to verbal testimony. The rhetorical framework imposed by the juridical setting enforces a strictly illustrative logic, relegating images to a subordinate discursive role.

Although integral to depositions, the presence of the forensic images *in* the trial primarily serving to support verbal narrative. In other terms, the images *in* the trial are convocated mainly to serve a specific effect, mainly an illustrative one.

This illustrative effect translates in a lack of critical analysis concerning the recontextualisation that evidence undergoes, before being displayed *in* the trial. This fact has also been noted by Sylvie Lindeperg (2022), who interprets it as a marker of the immaturity of the French Assize Court, who fails to understand and analyse the images *in* the trial in their subtlety.

Surely, it is not the first time in history that evidence is summoned in courtroom only on illustrative terms. Jennifer Mnookin defines this effect as a paradoxical “legal fiction” (1998, 50): in her historical reconstruction of the reception of photographic evidence, she argues that jurists knowingly maintained the fiction that images merely illustrated testimony, even as they recognized that visual evidence introduced new, complementary information distinct from verbal accounts.

This tension between the (declared) illustrative purpose and the (actual) reception of images persists today and is observable in the handling of forensic images during the V13 trial. Although the juridical apparatus attempts to control and regulate images by relegating them to secondary, descriptive functions, their reception activates additional layers of meaning. While, at a formal level, they are admitted into the courtroom to illustrate verbal testimony, their effect extends far beyond this intended function, activating agentive dimensions that, we may surmise, were not originally foreseen within the normative framework of the courtroom.

Specifically, we shall maintain that their being *in* the courtroom transforms visual evidence into memorial artifacts.

3.3.2. *From the illustrative to the memorial function*

As we have seen, the recontextualization of images in the trial entails a variety of strategies and affects the images on multiple levels, ranging from remediation to a transformation of their effect. Within the discursive rhetoric of the trial, forensic images are called upon to illustrate investigators' verbal depositions. However, their agency extends beyond this merely illustrative function, encroaching upon a memorial one. The core principle of this memorial function lies in the diachronic dimension inherent to recontextualization. The forensic images in the trial depict events that, by the time of the proceedings, already belong to a past several years distant. Their relocation thus reactivates this past temporality, bringing the time of the terrorist attacks into the present temporality of the trial.

Curiously, this memorial function precedes the the “re-documentarisation”⁴⁹ of the images *in* the trial, that is, the new documentary status through their deposit in the *Archives Nationales*, that will be extensively discussed in chapter 5. Rather, the mere recontextualization within the courtroom already reactivates the memory of the events.

The effect of the diachronic recontextualization within the courtroom context is the activation of a “multiple” temporality. The images *in* the trial make the temporality of the attacks coexist with the one of the courtroom depositions. Thus, it is precisely this diachronic shift operated by the juridical dispositif to confer a new operativity to the documents.

As an “archive within the archive” and as representations of traces, the forensic images presented in the trial are assimilable to what Jussi Parikka would call “remains.”⁵⁰ By gathering traces and residual remains, the act of showing these images during the trial

⁴⁹ We draw on the term proposed by Roger T. Pédauque, who described the operation of redocumentarisation as the rewriting of new metadata onto documents when they are republished within a new context (Pédauque 2007).

⁵⁰ As Ioana Jucan and Jussi Parikka observe, “The remains of media are not the most interesting thing as an antiquarian appreciation of old things in corners of a museum but as operations that demonstrate in which ways they are media” (Jucan and Parikka 2018, 23).

reactivates them, bringing the temporality of the investigations into that of the hearings. In the words of Eyal Weizman, this activation can be compared to an animation of the inanimate, as the material traces are brought back to life through the investigators' commentary.

The recontextualization of forensic images reactivates the “remains” of the crime scenes, transforming the investigative photographs into a dispositif capable of recalling the original temporality of the events. Well before becoming cultural heritage and entering collective memory through institutional means, the viewing of forensic images confronts victims and the public with the primal scene of the events, conferring upon these images an important symbolic value, intimately tied to their violence.

Their diachronic recontextualization reverts the temporality of the trial back to the evening of the attacks, once again confronting spectators with the rawness of the crime scenes. Their sheer violence is striking enough to affect even seasoned professionals. This becomes evident, for instance, in the testimony of Patrick Bourbotte, the investigator responsible for the Bataclan report, who compares the devastation to a “war scene.” This comparison, that we will re-evoked more thoroughly in the next chapter, was also evoked by Jean Baudrillard (2001), who defined terrorism as a “fractal war”, one in which every cell rises within the body like antibodies.

The forensic images shown during the trial are undoubtedly among the most difficult to endure for those present, including victims and the civil parties. As is often the case with crime scene photographs, they unflinchingly display debris, shrapnel, and bolts, often placed beside measuring scales to faithfully document size, beside “bodies” of victims and attackers. Even though they occupy only a brief segment of the trial's overall timeline, these images hold significant weight within the trial's symbolic economy of the trial.

The diachronic recontextualization also helps explain why these images are so difficult to watch: to see them is, in effect, to re-witness the crime scenes themselves – not as distant records, but as affectively charged reactivations of past violence. At the same time, their relocation within the trial, although necessarily subjected to editorial

strategies that temper their violent nature, also contributes to the shaping of collective and traumatic memory. Within the courtroom dispositif, these images are not only reactivated but also reframed, allowing a form of public elaboration that oscillates between evidentiary function and memorial work.

To sum up, the presence of images *in* the trial entails a set of discursive strategies that shape their meaning, also through various constraints and limitations. It is only through their encounter with the specific enunciative context of the trial that the operativity of the evidence can take form as a concatenation of evidentiary, illustrative, and memorial functions.

Chapter Four

The desire of not 'being there': forensic panoramic photographs in the trial

Among the images *in the* trial, some forensic images are particularly relevant for our analysis: the panoramic photographs of crime scenes, shown in the courtroom during the investigators' statements. Each of the crime scenes examined by the investigators is accompanied by one or more 360° panoramic photographs. as an unfailing iconographic accompaniment. In fact, the panoramic view seems to be a fundamental element in providing a unified and synoptic view of the crime scene, enabling the correct location of each clue. Often, panoramic images re-present the same clues that were already present in individual photographic images, thus placing them within a broader environmental picture.

Compared to the other 'framed' images presented in the study, panoramic images are the most interesting element to analyse in light of what was observed in Chapter 2 regarding the evidential paradigm. In fact, in the enunciative context of the trial, their role is to highlight the relationship between the clues found at the crime scene by placing them in space. By recalling the traces inherent in the crime scene, the investigators reactivate their own investigative work, as if they were illustrating the whole process.

It should also be noted that, when they are shown in the room, the panoramic images are not enjoyed through a *display screen* that emphasises their spherical and environmental nature. Instead, these images are literally 'unfolded' through a computer screen, which is manoeuvred not by the investigator who is giving evidence, but rather by an assistant, seated not far from the speaker. The operator's actions of orienting the

portion of space “framed” and selected by the computer screen in the courtroom accompany the words of the investigator - once again, images *in the* trial are only allowed as illustrations of oral testimonies. The computer mouse cursor remains visible on the screen and, later, on the audiovisual recordings that form the documentary background of the trial. This display device, while undoubtedly functional to the collective vision required for the exhibition of these photographs in the trial, nonetheless becomes the site of a series of continuous stumbles – concerning both the relationship between spoken testimony and images, and the relationship among the images themselves. These minor “stumbles”, lasting no more than a few fleeting moments and almost resembling slips of the tongue, become more clearly perceptible when watching the archival recordings. Captured and preserved within a digital file – one that can be paused, rewound, and scrutinized – these small errors, shifts, and hesitations, likely unnoticed in the live flow of the hearings, appear to the researcher with a clarity that is perhaps unique. Curiously, they tend to cluster around certain iconic, “expanded” objects, such as panoramic images.

These images warrant closer examination, and this chapter will undertake a focused analysis of them. We will begin by considering how the images are presented and reflect on how their contextualisation shapes their interpretation. We will then turn to the individual panoramic photographs, seeking to identify the distinctive elements of each depicted crime scene. The structure of the chapter will follow the sequence of the crime scenes in which these panoramas appear, respecting the chronological order in which they are introduced in the trial. Finally, we will conclude by situating the panoramic images within the broader discourse on immersiveness.

4.1. *Stade de France*

The first crime scene to be documented was that of the explosions that occurred in the vicinity of the Stade de France. Situated in the northern suburbs of Paris, it is the largest stadium in France, with a capacity of around 80,000 spectators. On the evening of

the attacks, 13 November 2015, a friendly match between the national teams of France and Germany was being played in the presence of President François Hollande.

Three explosions were perpetrated at this venue: two along Avenue Jules Rimet, in proximity to the entrances, and one near a McDonald's that had already been evacuated. The attack resulted in four fatalities – three suicide bombers and a civilian victim near the D-gate of the stadium – as well as 18 injured. The attack on the Stade de France can be regarded as a partial “failure” in that the terrorists were unable to gain entry to the stadium due to the delay and the presence of security controls, thus preventing a strike during the peak of the crowd.

The statements concerning this crime scene took place on 16 September, in the afternoon session.⁵¹ The investigator in charge of detailing this report did not request to be anonymised, as other investigators would do later in the trial: he was Xavier Vo Dinh, 48 years old, at the time group leader in the Anti-Terrorism section of the *Brigade Criminelle*. He will be the one to “unroll” the panoramic images to those present in the room, but only after setting out the essential elements of the investigative process.

His statement starts with a description of the logistics of the crime scene. The inspector first mentions the access points of the stadium: The Stade de France is surrounded by a security area and has 18 entrances, with access facilitated by public transport, such as RER B and D, metro line 13 and five bus lines. The inspector gives the exact times of the explosions, which occurred minutes apart, at 21:16, 21:20 and 21:53. The police forces did not arrive at the crime scene until a few hours later, at 23:20. By the time police units were activated to intervene at the Stade de France, shootings in the city centre had already taken place, but the Bataclan attacks were still ongoing.

The officer's statement will focus specifically on the analysis of the crime scenes of the explosions, which will be described and illustrated in detail.

⁵¹ Hearing of, 16 September 2021 ; Archives nationales, 20210916_1531800001_attentats_V13_01.



Figure 13 An illustration published in *Charlie Hebdo* depicts Commissioner Xavier Vo Dinh. Source: Xavier Odine 48 ans Commissaire Stagiaire en formation à l'École nationale supérieure de Police. Source: <https://charliehebdo.fr/2021/09/societe/justice/jour-7-trois-enqueteurs-trois-scenes-de-crime/>.

One of the primary objectives of this statement will be to precisely locate each piece of evidence found at the crime scene, relating it to other elements. This cartographic intention is signalled by the very first image shown at the beginning of the testimony: a topographic map of the Stade de France indicating the main sites of the explosions. The map serves as a reference for the inspector to delineate the perimeter within which the investigation unfolded. Curiously, the first image presented in this testimony is not photographic evidence of the events, but rather a map. The inspector's priority, therefore, was not to provide an iconic representation of the events, but rather a diagrammatic vision of it. That is to say, one aimed not at offering a precise depiction of the elements, but at establishing their interrelations.

This cartographic overture is merely the prelude to a long series of images, which move with great freedom between extended reality and classical photography. We will

therefore retrace this inspector's statement, focusing mainly on the portions of the statement that are based on the panoramic images.

4.1.1. First panoramic image, Gate D: the unrepresentable, seen by mistake

The first scene illustrated relates to the explosion that occurred near Gate D of the stadium. In the early stages of the investigation, the authorities prioritised the collection of elements deemed essential by the Paris Police Prefecture. Particular attention was paid to the recovery of volatile substances and traces of explosives, preserved in hermetically sealed containers to allow their analysis.

The first images in this statement relate to this crime scene, and specifically to the spot where the first explosion occurred, in front of a restaurant adjacent to the entrance. The first exhibits shown by the inspector are, in fact, photographic images, showing the surroundings outside the stadium and in particular the adjacent restaurant and its terrace. Amongst these, some images are shown of the restaurant's sign, with obvious signs of damage. Later, details of the interior are also shown: for example, the broken glass of a refrigerator door is glimpsed, with cans ready to be consumed, punctured by a bullet hole. Each crime scene photograph is always accompanied by metric scale references, confirming that the crime space is always also a measured space, ready to be controlled, and ordered.

Among this series of photographs, one offers a general view of the crime scene. On the right-hand side, the façade of the Events restaurant is visible, visibly marked by the blast, allowing the presumed epicentre of the explosion to be located. The entrance to the restaurant can be seen in the corner of the image. In the lower right-hand section, the remnants of the suicide bomber's body appear censored – covered by a few white squares – thus preventing the courtroom audience from directly viewing the corpse of the slain enemy. This gesture represents one of the clearest manifestations of the ethics of the gaze adopted by Judge Périès, as discussed in the previous chapter. The deliberate obscuring

of the ‘body of the enemy killed’ – a figure that has been described as a document onto which the history of contemporaneity may be inscribed (De Luna 2006) – stands in sharp contrast to the inspector’s words at that moment, which dwell in vivid detail on the forensic process that led to the terrorist’s identification.

The body of the suicide bomber, torn apart by the explosion, made the recognition process particularly complex. The inspector’s technical precision is notable, as he even draws a distinction between ‘bodies’ and ‘body fragments’, based on the location of the recovered head. The blast dispersed the bomber’s remains both inside and outside the restaurant, yielding a disarticulated body whose limbs were scattered across different points in the surrounding area. The identification was ultimately made possible by a passport, found next to a ‘body fragment’, issued by the Syrian Arab Republic in the name of Ahmad Almohamad, aged 25 in 2015. The photograph in the document matched the face of the suicide bomber.

In addition to the human remains, the investigators documented all elements potentially linked to the explosive device used by the suicide bomber. These include wires presumed to have carried the explosive charge, along with various samples destined for forensic analysis. Among the findings were three battery components connected by an electric wire, featuring red and black cables with exposed ends, likely part of the power supply circuit. Battery components were recovered at the site of the explosion, near the entrances to the Stade de France, while red and green wires bound with black tape were found inside the restaurant premises. The investigators also recovered a black, button-shaped switch, which may have functioned as a detonator.

Yet it is only a few minutes later – when the commissioner introduces the first panoramic image of the crime scene – that the most striking divergence between the verbal content of the testimony and the visual content of the iconographic record emerges. This overview reprises the same details previously examined in the individual digital photographs. While introducing a degree of redundancy with the earlier images, the panoramic view also reveals what had remained outside the frame in the single shots, making it possible to spatially locate the various viewpoints within a broader spatial configuration. While entering into a degree of redundancy with the earlier images, the

panoramic view also reveals what had remained outside the frame in the single shots, enabling the spatial localisation of the various camera positions within a broader environmental context.

In stark contrast to the digital photographs, however, the panoramic image does not censor the remains of the suicide bomber's body: some fragments are momentarily visible. This is most likely an unintentional oversight – perhaps a result of general inattention on the part of the officers, or a lack of editorial control over the panoramic material. This impression seems to be reinforced by observing the cursor movements of the operator navigating the image: upon realising the presence of the body, the cursor abruptly shifts the framing, redirecting the view elsewhere. From the perspective of the archival recordings, however, this brief 'oversight' is significantly amplified. The audiovisual documents of the trial function, in this regard, as a kind of magnifying lens, allowing for a degree of visual scrutiny that would not have been possible in the live, theatrical temporality of the courtroom.

And so, in scanning the panoramic image, it becomes impossible not to notice, in one corner of the screen, a horrifying vision: the shredded corpse of one of the suicide bombers. The absence of censorship in the panoramic view offers, in a sudden flash of rawness, what the trial as a whole had, until that point, systematically sought to keep off-screen: the brutal materiality of the crime scenes. One might observe that this removal of the enemy's corpse from sight functions as a mechanism to prevent excessive affective reactions – responses that could easily be triggered were such images to be shown, even inadvertently. In seeking to keep the body of the enemy at a regulated distance, the trial's audiovisual apparatus ends up transforming it into a figure of horror: an image rendered, in effect, unrepresentable. Paradoxically, the accidental glimpse of the corpse produces a moment of sideration, perhaps generating more fear than if the body had been made visible all along. In this way, the panoramas, by allowing the enemy to appear by mistake, expose a strategy already operative elsewhere in the trial: the construction of a perpetrator who is terrifying precisely because he is kept out of sight, invisible.

This problematic tension between decorum and anaesthesia runs through both the images *in* the trial and the images *of* the trial. It comes most sharply into focus precisely at the

moment of its transgression: in the panoramic images that, inadvertently, show the body of the dead enemy.

4.1.2. Second panoramic image, in front of Gate H: opening up the image

To spatially situate the second crime scene, located at Gate H of the Stade de France, Inspector Dinh begins by once again displaying the stadium map previously used at the beginning of his testimony. This serves to precisely position the new area in relation to the overall structure and to what had already been presented. In fact, the epicentre of the second explosion is positioned in the middle of the roadway, at Gate H. The inspector explains that it was identified based on the density of metal fragments recovered at the site. Once again, the process of reassembling the suicide bomber's body and its fragments begins. Parts of the body are found up to 50 metres from the epicentre, embedded in the gratings of Gates G and H. He then proceeds to show a second panoramic image, taken just a few metres from the first. Then, a second panoramic photograph is displayed.

This 360° panorama captures the avenue outside the stadium, with Gate G visible in the background at a distance of 40 metres, and Gate H approximately 25 metres from the building's opposite – just like Gate D. The image conveys the sense of an interstitial and transitory space, a kind of pure non-place of circulation, until only recently occupied by fans making their way into the stadium.

As in previous instances, the analysis of the scene unfolds via a screen-sharing interface, with the mouse guiding the process of observation. Once again, moments of hesitation occur during panning: the inspector must constantly issue verbal instructions to his assistant, directing the frame and thus orienting the gaze of the judges and the public through continuous micro-adjustments of point of view. These repeated exchanges transform the spatial navigation into a hetero-directed process, in which the virtualised space of the crime scene is explored solely through the inspector's voice.

The inspector's testimony at this stage focuses on listing the clues found at the scene, which are positioned spatially via a series of yellow numbered markers delimiting the perimeter of the explosion. As each item is mentioned, the camera operator clicks on the corresponding markers, triggering the appearance of photographs of individual clues in overlay windows. Among the objects referenced by Dinh are a Swiss army knife found close to the epicentre – belonging neither to the perpetrators nor to any identified witnesses – and a fragment of brown plastic, later identified as the strap of a wristwatch, possibly worn by the suicide bomber. While some of these elements may be of limited relevance to the investigation, their fleeting appearance provides insight into forensic photographic techniques employed in documenting the scene: the systematic use of flash to eliminate shadow, the planimetric view of each item, and the consistent inclusion of metric scales that establish the actual size and precise location of the evidence within a space that is always measured.

Interestingly, none of these clues contributed to the actual identification of the suicide bomber who triggered the second explosion. Following the display of these photographs, the inspector explains that the terrorist's identity was once again established through the discovery of a passport – this time not by a witness, but by a passer-by the day after the attacks.

It is, however, precisely the focus on these seemingly marginal clues that brings into view the interactive nature of the panoramic images in the trial. The photographs of individual clues emerge directly from within the panoramas, appearing as small pop-up windows and triggering a dynamic of visual emergence that “augments” the single panoramic image. One possible interpretive approach to these photographic insertions is to read them in relation to augmented reality, which has often been likened to pop-up books, where three-dimensional images unfold from the page (Modena 2022), becoming a way of acting upon the world at a distance (Dalmasso e Pirandello 2024).

Far from serving merely as illustrative supplements to the inspector's testimony, these panoramic images constitute the very framework within which much of the investigative work is anchored, and the medium through which the inquiry itself can be retraced. They operate as a form of connective tissue, articulating discrete clues and the relationships between them into a coherent spatial configuration. The pop-up emergence

of the clue photographs renders this operative function explicit, revealing the panoramic overviews not simply as documentary artefacts, but as investigative tools in their own right.

To better grasp this operative dimension, one might recall the metaphor of the carpet proposed by Ginzburg in his discussion of the circumstantial paradigm: a weave of warp and weft that enables a diagrammatic reading of the crime scene, wherein the arrangement of clues allows for the emergence of otherwise hidden relationships and patterns.

4.2. *The Bataclan*

The following day, the afternoon session was devoted to the attacks at the Bataclan. Once again, the inspector chose not to remain anonymous and declared his personal details openly: his name is Patrick Bourbotte. Although this, too, is a crime scene inspection – as in the Stade de France case – Bourbotte’s testimony differs markedly from that of his colleague who spoke the day before. From the outset, Bourbotte admits that he will not be able to remain impassive in recounting the facts. Unlike Inspector Dinh’s statement, Bourbotte’s deposition would prove to be far more personal and affectively charged.

The first consists in evoking and documenting the findings made on site, strictly limited to objective and investigative aspects. In fact, Bourbotte’s statement covers only a portion of the operations carried out at the Bataclan crime scene, and omits others – such as the intervention of the special forces, who entered the building to capture the terrorists barricaded inside. With the aim of reconstructing the investigative strategy adopted in the team’s first encounter with the crime scene, the inspector also seeks to convey to the courtroom the tangible impact of managing such a site.

The Bataclan attacks are considered kamikaze operations of unprecedented scale and devastation. Their management required the application of a specific methodology

that involved, in addition to the officers tasked with carrying out the forensic surveys, other law enforcement units, hospitals, and emergency services. The *brigade criminelle* mobilised around one hundred investigators, although not all were directly involved in the *constatations* – the technical term used by the officers to refer to the on-site surveys. In fact, before Bourbotte’s team was able to intervene, the field had already been marked by a series of decisive moments: the discovery of victims – some taken to medical posts for treatment, others, tragically, to be pronounced dead; the retrieval of personal belongings scattered throughout the venue; the gathering of uninjured survivors outside the concert hall; an alert concerning possible armed terrorists hiding on the Bataclan rooftop; the intervention of the special forces, who secured the area; the evacuation of wounded individuals trapped inside venue; and, finally, a sweep for unexploded devices, including a suicide vest. The weapons used by the attackers were collected and recorded.

The forensic operations were able to begin at 5 a.m., although the investigators had arrived at the scene at around 11 p.m. It was only at this point, with the night nearly over, that they were able to cross the threshold of the Bataclan and begin their work. According to Bourbotte, the approach adopted for conducting the findings was, from an investigative standpoint, comparable to that used in the aftermath of an air disaster. Due to the large size of the crime scene, the investigation was divided into spatial subsections, each assigned to a specialised unit. Bourbotte’s testimony, in turn, follows these spatial divisions, which thus become a key interpretive framework for reconstructing the crime scene.

As in the case of the Stade de France depositions, the first image presented in Bourbotte’s testimony is not a photograph, but a diagram illustrating the spatial segmentation of the scene. It is a schematic reconstruction of the Bataclan’s interior architecture, distinguishing the stage area from the so-called “*fosse*”, identified with the dance floor. In addition to marking all the entrance doors to the venue, the diagram also highlights the upper-level spaces, such as the balcony. Unlike other maps shown during the trial – including those presented in the Stade de France deposition – this diagram does not contain any scale references. In other words, there is no guarantee that the illustration corresponds to a metrically accurate survey. Additional floor plans offer more detailed

zoning information: the interior of the Bataclan was divided into eleven sectors, each marked by a letter from A to K.



Figure 14 Commissioner Bourbotte in a cartoon published in Charlie Hebdo. Source: <https://charliehebdo.fr/2021/09/societe/justice/jour-7-trois-enqueteurs-trois-scenes-de-crime/>.

At this point in the deposition, no panoramic images have yet been shown, but Bourbotte's verbal description of the Bataclan's interior already evokes a scene of horror. The venue's high ceilings gave the impression of being inside a blood-soaked cathedral, bathed in cold, ghostly white light. It was a scenario unlike anything previously encountered: shreds of bodies strewn across the space, phones ringing and vibrating incessantly. Bourbotte lingers on this description:

Les corps sont enchevêtrés souvent les uns contre les autres, là y en a nombre dont on peut pas même saisir la portée quand on rentre et qu'on balaie la salle du regard... on n'avait jamais vu ça, on n'avait jamais vu ça. Nous marchions dans... du sang coagulé au milieu de morceaux de dents, d'esquisse d'os, des téléphones qui vibrent, qui sonnent,

appelés par les familles, a milieu de sacs, de sacs à mains, sac à dos. Nous voyons des corps, et des corps, et des corps...

His words are so urgent and unfiltered that, a few minutes later, Bourbotte goes on to describe the Bataclan crime scene [*scène de crime*] as a war zone [*scène de guerre*]. His use of the first-person plural throughout this passage introduces a strong affective tone that contrasts sharply with the professional posture of the forensic expert. This tension between expertise and personal testimony is one of the key interpretive threads in analysing this deposition, which, more than previous ones, leaves ample room for the investigator's emotional involvement. The superimposition of expertise and witness testimony generates a line of tension between, on the one hand, the personal experience of the investigator, and on the other, the objectivity typically required of forensic discourse. Testimony, in fact, is considered valuable precisely thanks to its subjective nature. Keenan and Weizman have insistently highlighted the partial and situated dimension of testimonial practice (Keenan, Weizman, and Franke 2012). Moreover, the debate on the epistemological status of testimony – even in its partiality – goes back further, to the post-World War II period, when the accounts of Holocaust survivors first began to be collected and analysed. In their seminal book *Testimony*, Felman and Laub argue that it is often in silences, distortions, confusion, or even factual error that trauma – and thus the catastrophic nature of certain historical events – finds its most enduring inscription (Felman and Laub 1991). Indeed, the nature of testimony itself appears to stand in tension with the professional expectations typically associated with forensic depositions. These two lines of force, insisting the one on the complete subjectivity of individual experience, and the other on its complete elision, would seem to be incompatible; yet, the interplay between these two planes charges Inspector Bourbotte's testimony with great magnetism, which is all the more exacerbated by the paucity of violent images shown during his statement, culminating - as we shall see - in the eventual showing of panoramic images entirely purged of bodies.

There is, however, one brief exception to this iconophobic stance regarding the display of bodies. During the transition between the first two schematic images showing the zoning of the crime scene, a fleeting glimpse of a collage of (real) crime scene

photographs appear on the screen. In the audiovisual recordings of the trial (in that layer we have referred to as images *of* the trial) this photograph is only partially visible, as it is never shown in full-screen mode. It is significant that, even in this instance, the appearance of the bodies is treated almost as an error: Bourbotte does not linger on the images and even asks the technician in the courtroom to quickly skip to the next slides, which are not photographic and are therefore perceived as less violent. As with the Stade de France, in the case of the Bataclan too, the concealment of the most graphic elements of the crime scene becomes a central feature of the deposition, or, rather, a point of tension that will find its culmination in the use of panoramic images.

In the first phase of his deposition, Bourbotte focuses on the information gathered in the early stages of the investigation. Conducting the findings in such a case presented an unprecedented challenge for his team. His account does not follow the chronological order of events but departs from it to focus on the spatial zones deemed most significant for the investigation. For this reason, the first section of the deposition centres on the zones where the final episodes of the attack took place – when the terrorists had retreated to the rear of the concert hall, ready to fire at the incoming police. In addition to the recovery of a Kalashnikov rifle, the bodies of two terrorists, and several spent magazines, Bourbotte reports the discovery of an audio recorder which, although originally intended to document the concert by the band Eagles of Death Metal, had in fact captured the entire soundscape of the attack. Like the photographs, who are displayed for a very fleeting moment, only a fraction of the audio file played, but Bourbotte describes its contents: overlapping noises, screams, the voices of three men speaking French as they take hostages.

Returning to the spatial survey of the Bataclan, Bourbotte's testimony continues to trace the internal configuration of the crime scene through the findings and traces left behind. On the stage, the epicentre of one of the explosions was identified by a small crater in the floor, its contours matching the shape of the fragments recovered from the explosive jackets. It was there that the head of Samy Amimour was found severed from his body and immediately photographed. One of his legs was not found at the scene and did not reappear until fourteen days later. Bourbotte recounts this detail as emblematic of the extreme disarray in which the scene had been left.

The inspector's deposition lasted over two hours, retracing the internal spaces of the Bataclan and, through the traces left at the scene, also reconstructing the main events of the evening of the attacks, including the moment when around fifty people sought refuge in the attic, awaiting rescue.

Only after completing the account of the investigative subsections did the moment finally arrive to present the panoramic image to the courtroom.

4.2.1. Panoramic views of a sanitised scene

'Pour terminer mon propos, j aimerais que nous entrions tous ensemble dans le Bataclan...'. With these words, and after more than two hours of painstaking, almost image-free forensic testimony, Bourbotte introduces the panoramic images he is about to show to the judges, lawyers, and civil parties present in the courtroom. He takes care to alert the audience that what they are about to see are images purged of any visible bodies or remains. Unlike the surveys carried out at the Stade de France, the interior of the Bataclan was only documented once the investigation had concluded and the damage had been repaired. The architecture of the building had been slightly altered since the attacks: for example, several of the pillars that had previously stood on the balconies were no longer present, having been damaged during the assaults. According to Bourbotte, the purpose of showing these overviews was to provide greater clarity for what had until that point been explained only through maps and diagrams. However, the scene revealed to those present, being entirely cleansed of bloodstains and all traces of violence, acquired a very different meaning from the panoramas shown the previous day. The interiors of the Bataclan projected in the courtroom were no longer the crime scenes themselves, but rather a sanitised, cleaned-up version: anaesthetised. In an attempt to spare the audience the pain of reliving the horror of the attacks, the Bataclan panoramas presented a version of the scene now stripped of all evidence of the crime itself.

Over the course of the following twenty minutes, which also marked the conclusion of the inspector's testimony, Bourbotte retraced the interior of the Bataclan with the help of the camera operator, beginning from the entrance of the venue. At the outset, he briefly explained how the panoramic shots had been created: taken from a range of different vantage points, the images were then digitally stitched together to simulate movement. The panoramic recordings of the Bataclan shown in court covered the entirety of the venue's interior, giving the clear impression of a virtual tour through its spaces.

The only elements that still hinted at the original investigative function of these images were a series of round, clickable buttons scattered throughout the digital environment. Much like the "pop-up" clue photographs used in the Stade de France presentation, these buttons revealed the names of victims (in blue) or perpetrators (in red) when selected. Their spatial placement corresponded to the precise locations where bodies had been found, following the same internal zoning schema used in the investigation. As the overview unfolded, revealing the Bataclan's somewhat kitsch interior furnishings, Judge Périès explicitly requested that Bourbotte read the names of the victims aloud, a gesture even more significant given that the proceedings were being streamed via webradio, thus enabling victims' families who could not be present to follow the hearings. While scrolling through the overviews of the Bataclan, with its furnishings described as kitsch, Judge Périès explicitly asks Bourbotte to read aloud the names of the victims: after all, the trial was streamed to a webradio, also to give those victims who could not travel to the venue the opportunity to hear the hearings.

Accordingly, Bourbotte once again walked through the spatial subdivision of the Bataclan, as he had during his deposition. This time, however, his attention was not focused on forensic traces, weapons, or clues, but solely on the names of the victims. Given the scale of the tragedy – ninety people were killed at the Bataclan, eighty-five at the scene and five later in hospital – the reading of the names became a long and repetitive operation. Bourbotte's voice, animated and at times theatrical throughout his earlier statements, grew monotone, and the recital of names took on the solemn tone of a funerary ritual. We can only imagine the atmosphere in the courtroom and the emotional tenor with which those present received this litany, so evocative of commemorative ceremonies. What appears clear, however, is that the primary function of this exercise was no longer to reconstruct the investigation, but to honour the wishes of the civil parties, many of

whom were deeply invested in knowing precisely where and how their loved ones had died.

This transition from evidentiary document to ceremonial gesture seems to suspend the investigative nature of the panoramas, transforming what was initially a criminological reconstruction – paradoxically, now without a crime – into a monument. This parallel is reinforced by the architectural emphasis of the reconstruction, which methodically retraces and restores the venue’s spatial layout. The reference to architecture recalls one of the most ancient meanings of the term "monument," traditionally associated with built structures, especially funerary ones (Le Goff 1978, 38). During the defence argument, much later in the trial, the Bataclan will be referred to as “*un lieu de symbols*”⁵² and the origins of its name recalled – drawn from Jacques Offenbach’s comic operetta *Bataclan*, first performed in 1855. The operetta tells the story of two French expatriates caught in a plot to overthrow a king, with a comic narrative that revolves around communication failures and culminates in revolutionary songs and dances.

Emerging from this sanitisation of the crime scene is thus a commemorative – and perhaps even monumental – function for the digitally reconstructed Bataclan interior, founded on the removal – and arguably the denial – of the sight of corpses.

This tension around the concealment of bodies becomes all the more problematic when placed in relation to the highly personal tone of Bourbotte’s deposition – an affective register that intensifies markedly in its closing moments. In concluding his testimony, Bourbotte draws attention to the incommunicable nature of the horrors he witnessed, asserting that only those who had been physically present could truly grasp the reality of the Bataclan crime scenes – scenes which, notably, he chooses not to reproduce in court. We quote here in full the exact words with which he concludes this statement:

N'écoutez surtout pas ces diseurs des vérités patentés, ces gens salariés sur les chaînes d'info continu, qui vous distillent surtout à l'occasion de ce procès, des vérités qu'ils n'ont jamais côtoyé. Ils n'ont pas mis le plus petit doigt des pieds dans cette scène du Bataclan, mais ils ont déjà conditionné le débat sur le Bataclan, sur la stratégie, sur le renseignement, sur les constatations qu'on y a fait. J'ai entendu parler de mutilations: non. Oui, il y avait des mutilations, non il n'y a pas eu des mutilations, couteaux ou à la

⁵² Archives Nationales, hearing of 24 May 2022, 20220524_1531800001_attentats_V13_03.

frère ou à la chignole, il y a eu des plais balistiques horribles; et je crois qu'on est déjà suffisamment en haut dans la barbarie pour pas en rajouter. Je déplore aussi le fait que parmi les gens qui s'expriment de mon point de vue à tort et à travers, on trouve certains policiers, certains magistrates, qui n'étant pas intervenus ce soir-là se permettent quand même d'avoir un avis très tranché sur ce qu'ils auraient fait s'ils auraient été en responsabilité. Je voudrais terminer en disant que je m'associe de tout cœur aux parties civiles et que je leur souhaite énormément de courage pour la suite de ce procès.

This kind of mediated testimony, offered not through direct representation but through the voice and presence of the witness, recalls the opening lines of *Camera Lucida*, in which Barthes, reflecting on a portrait of Napoleon's brother, contemplates a mediated form of visual evidence: "*Je vois les yeux qui ont vu l'Empereur!*" (Barthes 1980, 13). Even without reproducing the gruesome scenes of the Bataclan interior, Bourbotte's deeply personal account brings the audience face to face with that reality – through his own eyes, the eyes that saw, and that in turn are seen in the images of the trial.

4.2.2. *Postscriptum: images that scare us*

Despite Bourbotte's rhetorical skill, the removal of bloodied bodies from view – whether for the benefit of civil parties, witnesses, or the accused – did not go unnoticed. As the trial unfolded, a growing desire emerged to confront the raw evidentiary materials directly. Some six months after Bourbotte's testimony, a debate unfolded in court among the civil parties, calling for the images taken at the scene to be shown, along with the full release of the audio recording recovered from the tape recorder found in the Bataclan.⁵³

At issue was the emotional impact of the images and recordings, and the need felt by many to face the brutality of the crime scenes – in order to resist the risk of the trial becoming anaesthetised. The word that recurred in the courtroom was precisely *aseptisé*.

⁵³ Archives nationales, hearing of 31 March 2022, 20220331_1531800001_attentats_V13_02 and 20220331_1531800001_attentats_V13_03.

During the debate, lawyer Catherine Szwarc cited Denis Salas and his article *La Justice du XXème siècle: Le défi de l'image* (Salas 2019) arguing that the trial should be understood as an unceasing flow of reality pouring into the courtroom. But, she noted, crime scene images do not simply speak for themselves – and if left unseen, they risk rendering the trial sterile, robbing it of its evidentiary power. In order to uphold the fairness of the proceedings, she continued, victims must have access to the original documents. Just as defendants are protected throughout the legal process, victims have the right to truth – a painful, unfiltered truth that they must be able to see and hear: “*le droit à la vérité, la vérité crue, la vérité qui saigne, la vérité qu'ils ont le droit de regarder*”. The dissemination of these materials was presented, in fact, as a therapeutic gesture. As Szwarc put it: “*Pour que derrière un bruit de balle, qu'il y a un blessé à mort ou à vie, ne soit pas blessant à nouveau*”. Many survivors had arrived in court carrying invisible wounds. The release of the crime scene images, and audio recordings was therefore seen as a potential means of healing – a way of rendering visible that which is typically kept hidden.

Amid great apprehension, six months after Bourbotte’s testimony, the photographs and sound recordings that investigators had taken care to shield from view at the start of the trial were finally circulated in court. Judge Périès presented a series of photographs, compiled in a PDF document, and scrolled through them rapidly. Paradoxically, one image appeared to remain censored or otherwise withheld: a black square was visible on the courtroom screen. Overall, however, the corpus of images shown in court neither fulfilled its anticipated function nor elicited the feared emotional reactions. Deprived of contextual explanation, these images remained largely mute.

4.3. Conclusion. Immersed in crime? the desire of not “being there”

One of the most common arguments regarding ambient image forms – including the panoramic forms analysed in this study – is that the ambientisation of the image fulfills an implicit promise expressed by the viewer: that of “being there”. The most incisive formulation of this axiom is owed to filmmaker Chris Milk, who in 2015 defined virtual reality as “the ultimate empathy machine”: a device capable of generating a powerful sense of presence and giving the impression of being “there,” within the depicted events.⁵⁴ This association between the virtuality of the image and the sense of presence would, in Milk’s view, elicit a strong emotional response and empathy for what is represented. As the images break out of the frame, they also seem to fulfil the desire to become real. Mihai Stoichiță has called this mechanism the “Pygmalion effect” (Stoichiță 2006), referring to the myth of Pygmalion, in which the statuesque representation of Galatea comes to life, becoming a lover in the flesh.

This reflection suggests that a link can be drawn between immersivity and the reality effect. According to this view, being surrounded by a spherical image allows for a concealment of the medium, generating an illusion of transparency that – through a perhaps overly hasty association – results in a high degree of trust and credibility on the part of the viewer. This is, for instance, how one of its pioneers, Nonny de la Peña, wrote about immersive journalism. Drawing on Mel Slater’s framework of cognitive psychology, she considered immersivity capable of eliciting a response comparable to that which would occur in a real-life situation – a “Response as if real” – and therefore a standard for journalistic excellence.

This enlivening, but also truth-producing effect seems to characterise the panorama since its earliest proto-cinematic forms. Indeed, the spheroidal structure of the

⁵⁴ Chris Milk, “How virtual reality can create the ultimate empathy machine,” *TED Talks*, March 2015, [https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_mac](https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine) hine, accessed April 12, 2025. In this talk, Milk introduces VR as a storytelling tool that collapses spatial distance and constructs emotional proximity. While he frames virtual reality as a morally transformative interface, critics have questioned the ethics and politics of such claims. Scholars such as Lisa Nakamura (2020) have discussed how immersive technologies can automate affect and reproduce racial hierarchies; Rainoldi (2022) argues that VR induces emotional contagion rather than moral understanding; and Paul Bloom (2017) warns that such mediated experiences may be emotionally manipulative rather than ethically clarifying.

panorama has, since early modernity, lent itself to the representation of war scenes, using scale and sphericity as tools to heighten the spectacular. One might recall, for example, the pages that Oliver Grau devotes to the panorama of the Battle of Sedan (Grau 2003, 90–122): the scholar recounts how contemporary sources emphasised the powerful sensation of being “right there,” directly on the scene of the events.

Despite their spherical format, however, the forensic images presented in the trial are only partially in continuity with this analytical lineage. The architecture of the courtroom makes total immersion impossible. Although the panoramas are spherical, they are always displayed on a flat screen. The presence and function of this screen deserves closer scrutiny. Far from aiming to “teleport” lawyers and witnesses to the crime scene, the panoramas are shown through a display that keeps them at a physical distance from trial participants.

Furthermore, the screen frames the presence of the images in the courtroom as a form of remediation that entails no transparency. Rather than disappearing, the interfaces through which the panoramas are accessed proliferate, creating what Jay David Bolter and Richard Grusin would call the illusion of hypermediacy – an illusion in which the medium, by multiplying, remains perfectly visible (Bolter and Grusin 2002). In the courtroom, the image projected on the main screen is mirrored across a series of secondary displays placed along the public benches and in adjacent spaces. This *mise en abîme* fragments the spatial field, introducing an additional layer of medial opacity that seems to run counter to the immediacy associated with immersive technologies. The presence of the screen flattens the spherical panoramas and assimilates them to “regular” digital photographs, raising questions about the coexistence of different media.

Beyond mere contingency – or perhaps precisely because of it – the flat screen becomes a telling clue for understanding the social uses of panoramic images from an intermedial perspective. Drawing on the analyses of Jean-Marc Larrue and Marcello Vitali-Rosati, who conceptualise media relationships as culturally determined “conjunctures,” we might describe this specific configuration as a case of “media resistance”: a non-peaceful coexistence between an “old” and a “new” medium, in which the supposedly “new” medium not only fails to fully subsume the old one but even struggles to assert itself (Vitali-Rosati and Larrue 2019).

In this specific context, immersivity remains a latent possibility, subordinate to a still-framed mode of viewing. Why this choice? At first glance, the adoption of this display format might seem banal and entirely dictated by logistical constraints. It would have been impractical to imagine each member of the jury donning a VR headset or moving into an immersive cave built for this purpose. According to this genealogy, the Bataclan panoramas, shown on a screen that literally holds them at a safe distance and in which the only simulacrum of bodily incorporation – that “moving cast” of the spectator’s body, as Anna Caterina Dalmaso has defined it (2022) – is the mouse pointer operated by a technician, would appear to be a complete failure.

Yet the mode of presentation is more accurately linked to the sphere of expanded cinema. In the courtroom, the images are in fact “performed” live by an operator, who navigates the interface under the gaze of the judges and audience. This display format strongly recalls the aesthetics of desktop cinema – a visual practice based on screen recordings, which involves navigating an interface and opening selected files and folders. The courtroom display thus acts as a screen in the full etymological sense of the Old High German term *skirm*: a surface that both projects and protects.

Beyond logistical contingencies, the decision to project the images on a screen reflects the need to establish a protective mechanism – a device that shields viewers from the terror of the attacks and prevents the risk that these images might once again escape their frame and materialise (Casetti 2023). Given the violence of the events discussed, it seems reasonable to assume that no one in the courtroom wished to experience the vertigo of “being there” again. Setting aside the necessary practical constraints of such a complex trial, the lack of desire to cross the threshold of the image to come closer to the catastrophe appears to be a crucial element in understanding these panoramas. Regardless of their 360° nature, the possibility of immersing oneself in the crime scene – as in a dark tourism experience – remains purely potential and is cautiously exorcised by the courtroom dispositif. In other words, no one in the courtroom would ever want to “be there” again.

Chapter Five

Images *of* the trial: forensic images as documents

Now that the trial is officially over, the forensic evidence, that we have named images *in* the trial is still accessible and collected in the form of archival audiovisual recordings of the trial. We will refer to this dimension of visual evidence as images *of* the trial.

In fact, had the trial not been filmed and archived – or, as we will see, filmed expressly to be archived – it would not have been possible to use them as a visual reservoir from which to retrieve forensic evidence, or the images *in* the trial. The very operation we have outlined in chapters 3 and 4 would not, in other words, be possible without a set of factual conditions that enabled these images to be made accessible and preserved within a specific institutional framework.

Once the trial was definitively concluded (that is, with no further appeals), the recordings were transferred to the collections of the *Archives audiovisuelles de la Justice* and are now preserved at the *Archives Nationales* in Paris. Having fully become “historical” and “heritage” documents, the images are preserved in a manner that ensures their longevity for historians, scholars, and citizens who may wish to consult them in the future.

In the following pages, we will shift our attention away from the enunciative strategies of visual evidence as presented in the courtroom – that is, from what we have so far referred to as images *in* the trial – to tackle the audiovisual recordings of the trial

itself. Moving from images *in* the trial to images *of* the trial thus requires asking new and different questions. In fact,, we must first consider the spaces these images occupy in the world – both within society and the collective cultural sphere, but also, more concretely, in terms of their physical location. We will examine the material conditions of these images, considering them as tangible objects produced, preserved, and made accessible according to specific conditions and restrictions.

Since the images *of* the trial are now part of a major archive within the French institutional framework, the shift from images *in* the trial to images *of* the trial also entails questioning their archival status and the institutional framework that preserves them. The moment forensic images are shown in court marks a significant event in the life of these images, as their incorporation into the trial recordings also grants them a new institutional framework. In fact, the forensic evidence also becomes part of the filmed recordings of the hearings. Consequently, if the trial constitutes a first context for this collection of “investigative” images (that is, as we have seen in chapter 3, a space of circulation governed by its own rules and constraints) the archives in turn serve as a second context, a kind of container of the container.

One crucial aspect of the images *of* the trial, as we will see in detail, is their highly regulated nature. Without claiming to fully delve into the legal texts that govern this audiovisual corpus, this chapter will sketch out the legal framework regulating these images to fully understand the issues and specific characteristics of this corpus.

The chapter will be structured into four parts. We will first consider the publicity of the debates and the conditions of accessibility for the images (publicity); next, we will focus on the specific challenges of filming the trial (filming); we will then examine the images *of* the trial considering their archival, patrimonial, and memorial dimensions (archiving). From this analysis, it will emerge that the visual evidence of the November 13, 2015 attacks constitutes a complex and layered epistemic object, weaving together visibility and institutional power in ways that are almost indistinguishable, thereby shaping a specific form of spectatorship (spectatorship).

5.1. *Publicity*

A first consideration concerning the images *of* the trial relates to their availability and, consequently, to their spatial placement.

To access the images, it was necessary to travel to Paris to consult an archive that is not accessible remotely. While this might seem self-evident – it is hardly unusual for researchers to travel to access archival materials – it nonetheless provides a useful point of entry if we consider that the images *of* the trial belong to a "born-digital" archival collection and could therefore, at least in principle, be easily accessible remotely. Across a range of disciplines, from archival science to semiotics and image theory, digitization is often associated with the notion of full and remote accessibility. Digital images are typically thought of as infinitely shareable and readily available. Yet, in a media context increasingly defined by immediate remote access the images *of* the trial remain digital images that must be viewed in a specific location, one that coincides with the public institution that houses them.

Behind this seemingly anecdotal detail lies a much deeper issue that intersects semiotics, archival studies, and jurisprudence. For the sake of clarity, we will refer to this issue as the problem of *publicity*, the central object of this subsection.

The *Dictionnaire de la justice*, under the entry *publicité*, defines the term as “The set of means designed to make the public aware of the existence, course, and outcome of a judicial proceeding” (D’Ambra 2004, 1111).⁵⁵ Already from this strictly legal definition, it is already evident that the problem of publicity can be understood as a question of communication. For this reason, we will now examine the images *of* the trial considering their mechanisms of production and circulation. In both respects, the images *of* the trial are subject to strict control. Although they are not protected by state secrecy, they are nonetheless bound by specific access restrictions.

⁵⁵ “L’ensemble des moyens destinés à permettre d’informer le public de l’existence, du déroulement, de l’issue d’une instance juridictionnelle” Translation by the author.

This limited accessibility affects the images *of* the trial from a dual perspective: first, their production (who is allowed to photograph or film the trial?) and second, their reproduction (who may view or share the trial recordings?).

We will begin by examining the question of production, noting that the very existence of trial recordings is, in itself, a relatively exceptional occurrence.

In France, most judicial proceedings are not recorded. A legal framework common to many countries – including, for instance, Italy and parts of the United States – considers the production of images inside the courtroom a criminal offense. In France, filming a trial is punishable by a heavy fine: according to the Ministry of the Interior, anyone caught filming a trial may be fined up to €18,000 (Bellangère, Gorce, Sanisco, Sin-Blima Barru 2023). The courtroom is therefore a space where image-making is prohibited for both citizens and journalists, and recording may occur only under highly specific rules – rules that vary by country and help shape a particular understanding of what a trial is and how it may be communicated. One constant remains: trials cannot be photographed by just *anyone*. While it is both possible and even desirable for citizens and journalists to attend hearings, and indeed to report on them “honestly and in good faith” (Bellangère, Gorce, Sanisco, Sin-Blima Barru 2023), they may not record them in any way. During the trial for the November 13 attacks, historian Sylvie Lindeperg commented upon this seemingly *iconophobic* condition. According to her, the fear that “unofficial” images of the trial might circulate led to particularly “draconian” control measures (Lindeperg 2022). Not coincidentally, this intensification of pressure not to film the trial coincided with the days when the most violent images (namely, the crime scene images discussed earlier as images *in* the trial) were presented.

So, who produces the images *of* the trial? Certainly not a director, filmmaker, or a smartphone-wielding citizen. In the courtroom, the only image-making equipment permitted is that of a third-party company contracted by the State. The images have a single “commissioner,” which we can ultimately identify as the State (and more precisely, as the judge, as we will see). The camera operators, considered technicians rather than authors, are authorized to film only according to a precise list of shots and framing instructions laid out in a strictly codified *cahier de charges*. We will return to this point

in the next subsection (filming), where the challenges of recording the trial will be examined in detail.

The circulation of the images *of* the trial is also tightly controlled. Of the vast amount of footage recorded for the *Archives Nationales*, not a single frame has ever been published outside the archival context specifically intended for these images. The images *of* the trial have never appeared in newspapers, never illustrated a television segment, and have never been repurposed in a video essay as found footage.

In the words of Martine Sin-Blima Barru, the heritage curator who oversaw the trial for November 13, “*aucune image ne sort de l’enceinte du palais de Justice*” (Scopsi, Sin-Blima Barru, and Juvenelle 2024). The courtroom walls can thus be seen as a kind of protected space, one that may admit images but that rarely allows them to leave. This already reveals a first key contrast between the images *in* the trial and the images *of* the trial: although the former are abundant and heterogeneous in media format and production mode, the latter are governed by a constrained economy of production and circulation.

This is, in fact, a specifically French condition that does not fully align with those of other countries, even within Europe. In Spain, for example, filmed trials may be broadcast on media outlets, and some international proceedings are streamed on a YouTube channel. In Italy, the now cult TV program *Un giorno in pretura* featured full broadcasts of ordinary court sessions to a general audience.⁵⁶ In France, by contrast, images of legal proceedings are considered strictly documentary, and are produced and circulated in a tightly controlled manner, and most importantly, kept away from the media. As President Périès reminded the court during one of the opening days of the hearings, the images *of* the trial are above all “for History,” and for this reason their final destination will be the *Archives audiovisuelles de la Justice*.⁵⁷ This point will be the section object of the section on archiving.

⁵⁶ To explore the Italian context in greater depth, see Triggiani (2022); on the television program *Un giorno in Pretura*, see Bruti Liberati (2022, especially chap. 3).

⁵⁷ This issue was explicitly addressed in court by Judge Périès. Archives nationales, hearings of 28 September 2021. File: 20210928_1531800001_attentats_V13_01.

This strict control over the production and circulation of the images means that they can only be understood as *official* images, ones that – at least in intent – seek to depict a vision of the state in the full exercise of its judicial powers. For this reason, uncontrolled representations of the trial are neither possible nor desirable. At the same time, it is important to emphasize that the images *of* the trial are not secret. This brings us back to the central issue of this subsection: the problem of publicity. Although they cannot be broadcast in the media (that is, they are not *mediatized*), the images *of* the trial are *public* images. Even if they cannot be freely reproduced, their existence serves a specific function. As legal theory teaches, filming – and even more so, communicating – the image of a trial opens a particularly significant opportunity for democratic societies to present an image of the state in the full exercise of its coercive power, often in the act of administering punishment. At the same time, however, filming a trial also raises difficult issues around the risks of a media-driven distortion of justice. Ensuring the “proper” visibility of court proceedings is a delicate matter, applied differently depending on geographic and legal context.

To better understand the implications of the problem of publicity in courtroom settings, it is helpful to return to the term itself. Unlike in English, the Italian and French terms *pubblicità/publicité* have a double meaning: they refer both to publicness or openness (i.e., the condition of being public) and to advertising or media exposure. This overlap – first terminological, then conceptual – is crucial for describing the access regimes of the images *of* the trial and their complex political and media role. The first sense of the term, *publicness*, has a Habermasian lineage: the inclusion of court proceedings within the “public sphere” ensures transparency and the democratic functioning of state power. From a strictly legal perspective, the publicity of court hearings is considered a fundamental right designed to prevent justice from being administered in secret, behind closed doors, in isolation from the public. This is recognized as a fundamental right in the European Convention on Human Rights.⁵⁸

⁵⁸ The principle of the publicity of hearings is understood as a safeguard for individuals against a secret justice that escapes public oversight, as recalled by the European Convention on Human Rights. “The principle of the publicity of hearings is explicitly formulated in international sources for the protection of

Despite the control regimes surrounding both their production and reproduction, the images *of* the trial are public, just like the hearings themselves, and the right to look at them – though subject to specific conditions – must be guaranteed to citizens (Archives nationales 2010).

Despite this formal declaration, any request to reuse or disseminate the images must be submitted through an official application to the President of the Paris Court. This involves a rather cumbersome procedure that can, at times, create a subtle barrier, complicating the effective implementation of the principle of publicity. This request can only be submitted by a lawyer and must include a detailed description of the applicant's project. The president is empowered to ensure that the privacy rights of the parties involved are respected. The decision takes the form of a judicial ordinance, which may suspend the request pending further information, authorize it in full or in part, or reject it altogether. Conditions of access are, however, eased for those consulting the images for historical or scientific purposes: in such cases, it is possible to view – but not reproduce – the images without needing formal authorization. The present scholarly work falls into this latter category (which explains why this chapter includes no reproductions of the trial images).

The problem of publicity also carries a second, highly problematic meaning for the images *of* the trial: the meaning related to media exposure. In this sense, publicity, understood as promotion or spectacle, is seen as a danger, and even a threat, to the very integrity of justice. Excessive media exposure raises the risk that press coverage might override and distort the work of the judiciary. This is a real risk, one that directly affects the visibility of trial evidence. The clearest expression of this dynamic, in its worst

human rights – namely, in Article 6 § 1 ECHR, Article 14 § 1 ICCPR, and Article 47 § 2 of the EU Charter of Fundamental Rights (the so-called 'Charter of Nice') – as one of the essential prerequisites of a 'fair trial.' [...] The European Court of Human Rights has consistently affirmed that the publicity of judicial proceedings 'protects persons subject to trial against a secret justice that escapes public scrutiny' and 'by the transparency it confers on the administration of justice, it helps to achieve the aim of Article 6 § 1 ECHR: a fair trial, the guarantee of which is among the fundamental principles of any democratic society under the Convention.'" (Triggiani 2022, 3).

outcome, is the mediatized trial. A paradigmatic example is the media narrative around the American football player O. J. Simpson, who was put on trial in the mid-1990s for the murder of his ex-wife and a 25-year-old man. The case, immediately sensationalized, exposed the court itself, suspected of racial bias, as the primary subject of political debate. The situation escalated when Simpson was tried both in criminal and civil courts, with contradictory outcomes. Though ordered to pay damages, Simpson served no prison time. The press went wild, and the trial became one of the most talked-about legal cases of the decade. One of the most emblematic moments occurred at the very start of the case: when blood traces matching Simpson's DNA were found at the crime scene, he was charged with double homicide and ordered to surrender. Instead, possibly in a suicidal or depressive state, Simpson led police on a high-speed chase in his white Bronco. Helicopters captured the pursuit from above, and the entire event was broadcast live on CNN. The visual overlap of police pursuit (by land) and media coverage (by air) created a perfect image of a dual siege, physical and visual, against a figure whose presumption of innocence was already compromised (Il Post 2024, CNN 2022). Days later, Simpson was arrested. His *mugshot* – again a form of forensic imagery leaked into media – appeared on the covers of *Time* and *Newsweek*. Though based on the same photo, *Time* darkened the image, prompting widespread criticism. The racial coding of a “darker” Simpson became an emblem of biased visual manipulation. This cover controversy, often analyzed in visual studies (Gunthert 2015, Smargiassi 2009), illustrates how judicial image-making, once subject to media circulation, can produce specific configurations of power that are not always controllable.

More recently, the issue of media exposure reemerged forcefully in the 2022 defamation trial between actor Johnny Depp and his ex-wife Amber Heard. Broadcast in full via live stream – allegedly at Depp's request – the trial became a viral phenomenon (Harper, Gibbons, and Bates 2023). Controversy erupted over the openly judgmental tone of public commentary and the vast scale of the online debate: Twitch live streams, memes, and fan communities aligned overwhelmingly with Depp. The trial has already become the subject of a docuseries, freely incorporating trial footage at various narrative junctures (Cooper 2023).

These two examples show that the risk of mediatizing the trial lies in collapsing the operations of justice into those of the media, granting the latter the role of rendering judgment even before the court does. In both the O. J. Simpson and Depp–Heard trials, public discourse surrounding the proceedings threatened to overshadow the debate occurring within the courtroom itself. This problem, which today manifests in an extreme, hypermediated form, has much older roots. At its core lies one of the fundamental questions of photojournalism, particularly the genre of reportage.

In part, the issue stems from the persistent belief in the objectivity of the photographic image, which is often regarded as testimonial images capable of capturing neutral, reliable fragments of the world. Frédéric Lambert (1986) linked the presumed objectivity of photokournalism to the production of broad social narratives or “mythographies.” Within this framework, the press photograph becomes a vector of narrative potential, particularly in the genre of news photography. Far from an “innocent” belief in the image, Lambert describes this impression as a “collective trompe-l’œil” (141): images that masquerade as neutral but in fact serve as raw material for discourse and narration, which, in turn, stabilize the social fabric. What presents itself as a direct duplicate of events is, in truth, never entirely neutral. On the contrary, its function lies in generating narrative forms that verge on the mythical.

In cases of extreme media saturation such as those mentioned above, this discursive and mythographic aspect is especially visible. The instrumental use of courtroom images as photojournalistic material contributes to a particular framing of judicial events, one that risks also producing premature forms of judgment. The *Time* magazine cover featuring O. J. Simpson, darkened to emphasize racial tropes, effectively recasts him as the archetypal “Black criminal.” Similarly, the fragmented, endlessly remixed image of Amber Heard circulates as a symbol of the manipulative and hysterical woman, constructed from a torrent of user-generated digital media.

The problem of the non-neutrality of media in shaping perceptions of legal processes has been noted by Joan Fontcuberta, too, in the realm of crime photography. In *Contre Barthes* (2023), he argues that the tabloid press (the so-called *nota roja*) renders judgment directly through the journalist's lens. Fontcuberta draws a stark comparison between the camera shutter and the guillotine, both devices of execution.

Returning to the context of the V13 trial, the strict control over the production and circulation of courtroom images has, fortunately, mitigated the risks of such distorting publicity. Unlike the highly mediatized American cases, the French system proposes a model of publicity that intentionally excludes media dissemination. The trial is filmed but not broadcast. In the French model, judicial debates are recorded but never transmitted by news outlets. The distinction to be made is between “filmed trial” and “media trial”. Despite semantic similarities, these two expressions differ diametrically on an axiological level. To understand this, we could refer to the distinction between mediation and mediatization: the proceedings are *mediated*, that is, captured through technical means that inscribe data onto specific supports, but they are not *mediatized*, in the sense of being inserted into the broader cultural-industrial network of media platforms. Faced with this fundamentally visual issue of public access to judicial debates, one might be tempted to critique the American model as overly exhibitionist, or to see the French approach as excessively cautious. Yet, on a closer look, even in the French case, one cannot entirely separate the trial from its media dimension.

The V13 trial, widely discussed and closely followed by (textual) news articles, was deemed as extraordinary or *hors norme*, not only because of the gravity of the events, the number of witnesses and lawyers, or the custom-built courtroom architecture, but also due to moments of heightened media appeal, among which we can surely recall the testimony of former President François Hollande or the drama of the verdict announcement.⁵⁹

⁵⁹ Former president François Hollande, who was in office in 2013, appeared as a witness during the trial on 21 October 2021. In his testimony, Hollande recounted the explosions, his growing awareness of the scale of the attacks, and the various decisions taken up to the convening of the Council of Ministers. Archives nationales, Hearings of October 11, 2021. File *20211110_1531800001_attentats_V13_02*. As for the reading of the verdict, it took place on 29 June 2022, in the summer. Numerous eyewitness accounts describe the courtroom as filled to capacity. Archives nationales, hearings of June 29, 2022, and June 29, 2022. Files: *20220629_1531800001_attentats_V13_01*; *20220629_1531800001_attentats_V13_02*.

Although the images of the trial were never disseminated by the media, the trial itself undoubtedly possessed a media dimension. A glance at the architectural layout of the courtroom confirms this. The space was deliberately designed to accommodate media resonance, including entire rooms designated for the press (namely, the *Salle des Criées*). These press rooms, located adjacent to the main courtroom, were used to manage the large influx of journalists, as well as to ensure social distancing during the COVID-19 pandemic.

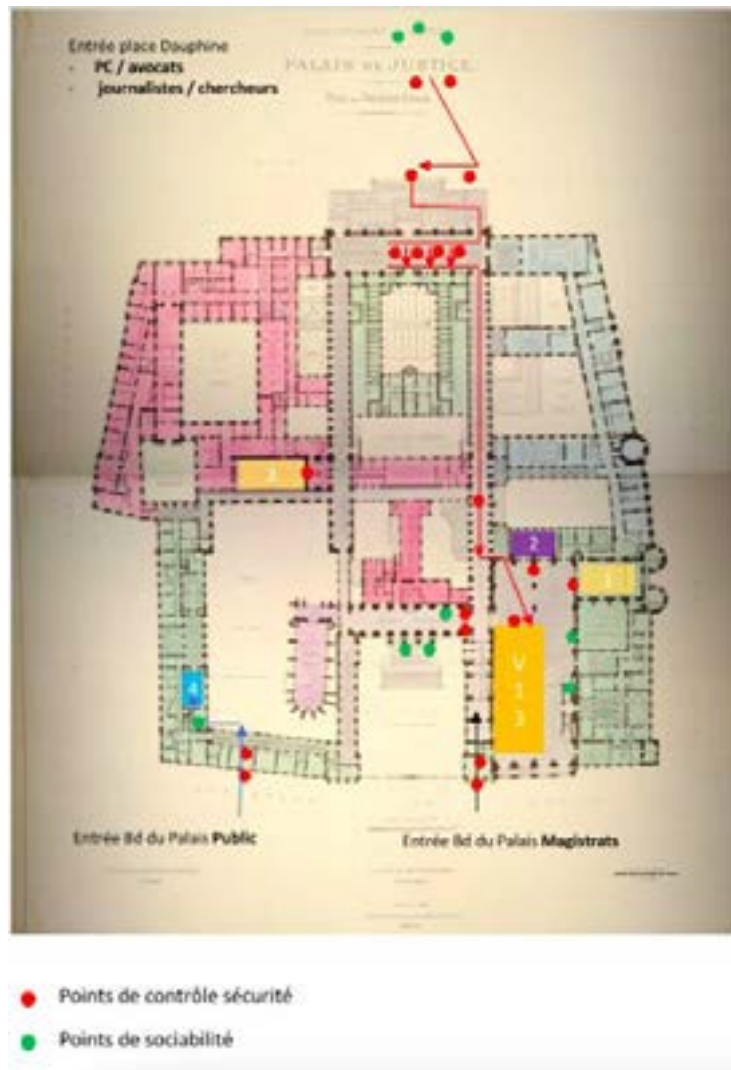


Figure 17 Map of the Palais de Justice and allocation of public or accreditation-restricted areas. Source: <https://www.politika.io/fr/article/collecte-archives-direct-au-proces-v13-lattendu-a-limprevisible>.

This raises a crucial question: what is the relationship between the trial's mediatic nature and its images? While a comprehensive answer lies beyond the scope of this discussion, it is worth noting that, to allow journalists to follow the proceedings from an adjacent room, the courtroom images were relayed to them through internal monitors, establishing a closed-circuit system of image circulation internal to the trial itself. Thus, even in the absence of formal mediatization, the images *of* the trial had their own mediatic life: not in the sense of global broadcast, but through internal image circulation and indirect testimonies. Journalists in the courtroom saw the images and reported on them, transmitting fragments of visual information to the public through their written accounts (Gorce 2024).

How, then, can we rethink the problem of publicity considering these observations? Can there be a "right" way to represent a trial visually, one that preserves its complexity without compromising the fairness of legal judgment? Behind the fear of harmful publicity lie questions that intersect legal theory and semiotics, ultimately tied to the need to protect an inherently fragile event. Efforts to shield the trial from such publicity by restricting access to images do not prevent the event from gaining public resonance. On the contrary, limiting the circulation of courtroom images produces a side effect: the trial becomes largely invisible to the public, the only images widely disseminated being those produced by courtroom sketch artists. While media blackout can reduce the risk of public shaming, it also distances the trial from everyday civic life. It could be argued that the fewer images of trials we are exposed to, the less accustomed we become to observing, and, ultimately, to understanding them.

A final point worth considering concerns the relationship between the publicity of legal proceedings and the notion of a visual "promise" of objectivity. The reluctance to broadcast trial footage is rooted in the assumption that the media are inherently subjective and susceptible to manipulation. In this respect, the French and American models represent opposing stances: the former seeks to protect the integrity of the legal event through strict control, while the latter embraces mediatization.

To navigate these extremes, it is worth exploring the underlying assumptions that sustain this divide and considering alternative frameworks. One particularly illuminating concept is François Jost's idea of the "promise" embedded in media genres (Jost, 1997). According to Jost, television programs establish specific viewer expectations through their genre conventions. The promise of genre shapes how audiences receive media content and determines its perceived cultural function. Among these genre-based promises, the documentary form holds particular importance: Jost contends that media do not merely convey narratives but also promise a certain kind of relationship to the world – potentially, a relationship anchored in truth. For Jost, this mechanism depends less on the image's technical genesis (as André Bazin might also claim) than on the interplay of resemblance and difference among programs within a shared broadcasting framework.

Yet how can we define a genre around media events that lack counterparts within a comparable programming schedule? When courtroom images are withheld from public dissemination and relegated solely to archival contexts, they are excluded from participating in genre formation. As a result, they become complex, opaque objects, difficult to interpret for general audiences.

5.2. *Filming*

In her book *Nuremberg: La Bataille des Images* (2021) historian Sylvie Lindeperg traces the historical roots of the relationship between justice and visual representation, focusing on the techniques used to film trials. Through richly detailed case studies spanning diverse temporal and geographical contexts, she demonstrates how postwar tensions surrounding the image of justice culminated in the 1954 French law that still prohibits the filming or photographing of courtroom proceedings. Lindeperg's analysis reveals that this legal rupture was preceded by pivotal episodes. Retracing her argument, we see how the concerns around publicity outlined above are grounded in specific practices of trial filming.

Filming and photographing judicial proceedings was not always legally restricted. On the contrary, during the interwar years, public opinion generally regarded courtroom recordings as pedagogical tools – a form of deterrence and civic reeducation. Until the Nuremberg trials, capturing courtroom imagery for journalistic purposes was relatively routine and seldom challenged by judges. However, by the 1920s, certain trials had already ignited controversy. Reporters were increasingly seen as producers of biased representations – driven more by sensationalism than by a commitment to impartial reporting. The presence of photographers in court became a growing concern, culminating in several emblematic cases.

One such case was the 1921 trial of Henri Désiré Landru, held before the Cour d'Assises. A serial killer and swindler, Landru posed as a widower seeking companionship through personal ads. Wealthy women who responded were courted and lured to a villa outside Paris. There, he persuaded them to sign over control of their bank accounts, murdered them, dismembered their bodies, and incinerated the remains in his kitchen oven. Between 1915 and 1919, Landru claimed eleven victims. He was ultimately convicted, sentenced to death, and executed by guillotine in 1922. Landru's trial became one of the most mediatized legal proceedings in early twentieth-century France. The national press portrayed him as a charismatic yet deadly seducer. Photographer behavior in the courtroom was so intrusive that even fellow journalists took notice. Lindeperg cites a *Le Figaro* reporter who described how one photographer mounted a lamp above the defendant's box to capture Landru's final smirk (Lindeperg 2021, 125) in optimal lighting, an act of voyeurism driven by a scopophilic impulse to decode his supposed charm.

By the 1930s, with the rise of silent newsreels, similar critiques were directed at cinematographers. Lindeperg emphasizes that much of the debate centered on the camera's chosen point of view, particularly in how it framed the defendant. The image of the accused became a focal point around which these tensions converged. Historically, producing visual representations of the courtroom has always entailed addressing the question of how best to depict the defendant. While a comprehensive account of twentieth-century courtroom media is beyond our scope, we might briefly recall the cases of Gaston Dominici – a rural farmer accused of triple homicide – and Marie Besnard, the so-called “Poisoner of Loudun.” In both cases, photographers and camera operators

enjoyed broad freedom of movement within the courtroom. This latitude often translated into expressive framing choices, which in turn led to dramatized, theatrical representations of the accused.



Figure 18 Marie Besnard in the dock during her trial for poisoning, on 21 February 1952 in Bordeaux. Source: <https://www.afp.com>.



Figure 19 Marshall Pétain under trial.

An example in this sense is the series of photographs of Marie Besnard taken in the defendant's dock. The photographer's vantage point, positioned below the accused's eye

level, contributes to giving her body a towering, imposing, and ultimately sinister appearance.

The peak of this dynamic occurred a few years later, during the trial of Philippe Pétain, the collaborationist marshal appointed as head of the Vichy government.⁶⁰ In this highly publicized case of undeniable historical importance, the intensity with which reporters targeted the figure of the accused arguably reached its apex. In describing this case, Lindeperg compares the presence of reporters in the courtroom to that of *picadors*, the horse-mounted figures in bullfighting who wear down the bull by piercing it with lances before the matador delivers the final blow.

The *picador* metaphor proves particularly apt in capturing the dynamics of this early phase of filmed trials. No expression of the accused Pétain could escape the reporters' relentless gaze: in photographing the defendant's body, the photographers effectively assaulted it – a body confined within the dock, where it was to be judged. Far from offering a neutral, respectful, or dignified visual record of the hearings, these images of the accused, produced by press photographers, align with a conception of the image-maker fully inscribed within the logic of reportage. Not long after the Pétain trial, this figure of the reporter would be firmly established in France through the publication of a now-famous article by Henri Cartier-Bresson, significantly titled *L'instant décisif* (1952). In this manifesto-like text, Cartier-Bresson described his documentary work as stealthy and instantaneous – often secretive – aimed at capturing the most meaningful instant of unfolding events. Bresson stands as the most striking and emblematic figure of the golden age of photojournalism, representing the expressive and chronological apex of an idea of informational photography that would rapidly decline in the following decades with the rise of television. The trial images discussed so far, produced by reporters, belong to this *lignée* and inadvertently reflect the metaphors used by photographers themselves to describe their work. Indeed, in his article on the decisive moment, Bresson likens his activity as a reporter to that of certain animals known for their swift and lethal strikes,

⁶⁰ Images from the Pétain trial circulated immediately in news media, as evidenced by the newsreel of the time. See *Les Actualités Françaises*. 1945. "Ouverture du Procès Pétain." *Institut National de l'Audiovisuel (INA)*, July 27, 1945. Video, 3:47. <https://www.ina.fr/ina-eclair-actu/video/afe86003186/ouverture-du-proces-petain>. See also Lindeperg 2021, 127.

such as the fox, the cat, or the weasel: silent, cunning, and deadly creatures. Like a predator, the reporter approaches quickly and furtively, ready to strike at the most opportune moment: “*passer doucement, inaperçu, et flairer, puis, hop! Piquer*” wrote Cartier-Bresson (1952, 9). The analogy with the figure of the *picador* is evident even on a linguistic level.

In order to counter the expressive and voyeuristic tendencies of the photographer-reporter, the figure of the image-maker in court has undergone a gradual process of regulation. Over time, this has led to increasing state control over the production of trial images. Today, trial images are no longer captured by reporters flitting about like bees (or Bressonian foxes), but by technicians securely stationed inside a control booth, with no freedom of movement within the courtroom space.

Trial images have thus become images of power, not only in terms of their content (as official representations of justice in action), but also in the conditions of their production, now fully in the hands of the State. This transformation finds its justification, once again, at the legislative level.

“An examination of the law reveals that trial images are deliberately constructed to impose and embody a particular point of view – specifically, that of the judge. Filming court proceedings has been prohibited under the 1954 law, which amended the 1881 Freedom of the Press Act. As a result, trial images only exist under exceptional circumstances, made possible by a subsequent law passed in 1985 by then-Minister of Justice Robert Badinter.⁶¹ This law authorizes courtroom recording under certain strict conditions. The first condition (already discussed) is that trial images must not be

⁶¹ “La loi du 6 décembre 1954 ajoute un alinéa à l’article 39 de la loi sur la liberté de la presse du 29 juillet 1881 interdisant ‘l’emploi de tout appareil d’enregistrement sonore, caméra de télévision ou de cinéma’ au sein des tribunaux administratifs et judiciaires, remplacé en 1981 par l’article 38 ter prohibant ‘dès l’ouverture de l’audience des juridictions administratives ou judiciaires, l’emploi de tout appareil permettant d’enregistrer, de fixer ou de transmettre la parole ou l’image.’ La loi Badinter de 1985 constitue donc une rupture dans l’histoire de la justice en ouvrant pour la première fois la possibilité d’enregistrer des procès pour constituer des archives audiovisuelles” (Bellangère, Gorce, Sanisco, Sin-Blima Barru 2023).

journalistic in nature. The second (to be discussed shortly) is that they must immediately become part of the cultural heritage, to be preserved and archived under strict protocols. According to Badinter, trials should not be filmed for the sake of public information, but to constitute a historical and memorial archive – a position reflected in the legal placement of the law itself: not as an exception to the 1954 Press Act, but as a provision within the *Code du Patrimoine*. The fact that trial images today are archived and considered historical documents is a direct consequence of this legal framework.

The third consequence, which is crucial for understanding the perspective embedded in trial images, is established in Article 6 of the legal text, which outlines that recordings must be carried out in a manner that does not disrupt the orderly conduct of the proceedings or infringe upon the rights of the defense, and that they must be made from fixed positions. This article contains, in embryonic form, specific aesthetic and stylistic choices that have a significant impact on the nature of trial images. The first part of the article emphasizes that the act of filming must not disrupt judicial activity and particularly the work of the defense (once again, a clear effort to protect the accused from excessive voyeurism). The article then explicitly states that hearings must be filmed from fixed cameras. This detail is far from incidental: it implies a fixed framing and shot.

The perspective embedded in trial images is thus intended to be as neutral, equitable, and impartial as possible. And what figure better embodies this type of gaze than the judge? This parallel between the point of view of trial images and that of the judge was explicitly stated by Badinter himself during a speech at the *Assemblée Nationale* on June 4th, 1985. In the production of trial images, then, a key principle is that the courtroom should be filmed from the judge's point of view rather than the camera operators'. By denying the image-maker any form of authorship, the law governing the filming of trials imposes an aesthetic of juridical and legislative impartiality, which ultimately enshrines the hegemonic gaze of the judge.

While this position is rooted in historically and legally grounded motivations, it also entails that images *of* the trial must be produced according to rigid protocols and predefined constraints. In an article examining the evolution of trial recording practices from the enactment of the Badinter law to the present day, scholars H  l  ne Bellang  re, Romane Gorce, Martine Sin-Blima Barru, and Virginie Sanisco analyze how this legal

framework has been applied in practice. They conclude that the reference to fixed cameras, though seemingly generic, has given rise to a very specific visual aesthetic, one symptomatic of what they call a “variable-geometry historicity” (Bellangère, Gorce, Sin Blima-Barru, Salisco 2022).

According to their analysis, the practical implementation of the Badinter law has shaped a visual regime characterized by increasingly meticulous control. Curiously, one of the defining features of this regime is precisely the use of fixed cameras. To explore this further, we must now examine in greater detail the actual filming protocol used to record trial images. In current legal practice, cameras are installed in the courtroom prior to the opening session. Once positioned at strategic, unobtrusive locations within the space, they remain fixed in place until the final verdict is delivered.

Both camera placement and framing are determined by the presiding judge. As such, trial images are effectively “authorless.” In practice, recordings are carried out by technical operators, whose expertise is never interpreted as creative authorship. The dominant role in the visual representation of the trial is thus played by the judge, who, while not directing each shot as a filmmaker would, nonetheless defines the fundamental parameters of courtroom visualization.

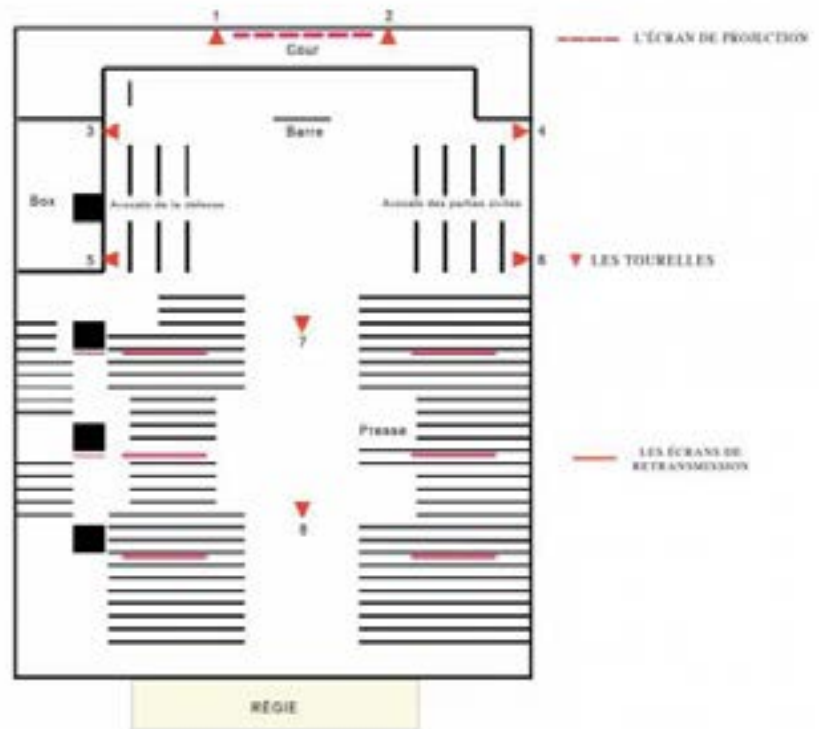


Figure 20 Map of the camera placement for the images of the trial. Source: <https://www.politika.io/fr/article/publicite-debats-a-lepreuve-du-dispositif-audiovisuel>.

This has led to a specific visual economy of the images of the trial, marked by the fragmentation of the courtroom scene. Seen through the lens of the trial recordings, the courtroom appears broken up into tightly framed, spatially segmented shots. More significantly, the distribution of these shots follows a very specific principle, set out in the technical operators' *cahier de charges*, that determines which participants are shown and when.

In the case of the V13 trial, Judge Périès implemented a sophisticated visual dispositif consisting of eight cameras, arranged in pairs to cover key areas: two behind the court, two above the defendants' box, two focused on the civil party lawyers, and two located along the central aisles. The film composed of these trial images was edited live from a control booth at the back of the courtroom. Significantly, the courtroom computer also became a legitimate point of view within the visual architecture of the trial. It is, in

fact, in the form of computer screenshots that the visual evidence presented during the trial appears in the official images. This complex visual economy demonstrates just how rigorously controlled the images *of* the trial really are. The meticulous enforcement of this strict filming protocol aims to establish a juridical ideal of neutrality through the normalization of the image. But we might ask whether such neutrality is truly achieved, particularly in light of the “right to speak” rule and its problematic relation to the visual construction of the accused. According to this principle, only the person speaking is permitted to appear in the frame; those present but silent are categorically excluded from the image. In order to appear on screen, a person must speak; however, speech in the courtroom is strictly regulated and structured by rigid hierarchies. The normative visual regime of trial images results in a disproportionate allocation of screen time in favor of those granted the right to speak. Consequently, the trial image is shaped by a significant off-screen dimension, often occupied by the accused, who may speak only when explicitly permitted. And tellingly, it is the accused who often occupy this off-screen space. The establishment of such a visually regulated regime leads, in effect, to a radical erasure of the image of the person being judged. Through its strict filming rules, the courtroom recording protocol ends up imposing radical choices that result in a clear asymmetry in the visibility of the various parties involved.

The main consequence of this dense network of codified practices is that trial images are rich with information that may not be immediately apparent. To address this opacity, a crucial tool is found in the paratexts accompanying the images: they are systematically indexed and described with detailed metadata. The next chapter will examine these questions more closely, focusing on the relationship between trial images and their archival logic.

5.3. Archiving

As previously noted, the images of the trial are not mediatized images. The very legislative act that authorizes their creation defines their purpose as strictly documentary. From the outset, trial images are considered documents and, specifically, “historical” documents.

To a certain extent, every archive can be considered as historical. Archiving documents, whether visual or textual, involves careful handling to ensure their long-term preservation. Through a network of paratexts, such as metadata or case files, archivists take care of documents to make them accessible to future researchers. Yet a defining characteristic of archival practice is its relation to the past: archivists typically work with documents that are traces of completed events. This notion is embedded in many definitions of documents shared across semiotics, historiography, and archival science, all of which view the trace as foundational (Treleani 2014, Pédaque, Salaün, and Melot, 2006). This temporal orientation also influences how documents are managed after being placed in an archive. A useful concept from archival glossaries is the distinction among “current,” “intermediate,” and “permanent” records. Current records are actively used,⁶² intermediate records are no longer in daily use but not yet ready for permanent storage,⁶³ and permanent archives contain documents selected for long-term preservation.⁶⁴ Although this framework has been debated – both in terms of its operational validity and

⁶² “Sont considérés comme archives courantes les documents qui sont d’utilisation habituelle pour l’activité des services, établissements et organismes qui les ont produits ou reçus”, Code du Patrimoine, Article R212-10.

⁶³ “Sont considérés comme archives intermédiaires les documents qui : 1° Ont cessé d’être considérés comme archives courantes ; 2° Ne peuvent encore, en raison de leur intérêt administratif, faire l’objet de sélection et d’élimination conformément aux dispositions de l’article R. 212-14 ». Code du Patrimoine, Article R212-11.

⁶⁴ « Sont considérés comme archives définitives les documents qui ont subi les sélections et éliminations définies aux articles R. 212-13 et R. 212-14 et qui sont à conserver sans limitation de durée » Code du Patrimoine, Article R212-12.

its philological rigor – it illustrates how documents are managed differently based on their temporal proximity to the events they record.⁶⁵

However, the images *of* the trial do not follow strictly this management strategy. Once submitted to the archive (a process that occurred daily at the end of each hearing) the images *of* the trial enter a repository designated as “historical”. These two dimensions – the relationship between an image and its documentation, and between the document and its consecration as historical and memorial heritage – are thus foundational to the images *of* the trial and constitute the focus of this subsection.

As previously discussed, the production of trial images is permitted under the Badinter Law of 1985, which introduced exceptions to the general prohibition on filming court proceedings as established by the freedom of press law. To justify this exception, trial images derive their legitimacy from the “historical” nature of the proceedings they document and from their archival function. Underlying both purposes is the desire to establish a public memory: the trial is filmed because it is deemed historic, and it is archived because it is deemed worth remembering. It is important to examine this legal detail in order to understand how the “historic” nature of the event is justified, and why it is transformed into an archivable document. This is particularly significant because, just like framing decisions, the determination of an event’s historical status, and thus the authorization to record it, lies with the judge, who formalizes this decision even before the trial begins.

The images *of* the trial are thus born out of a temporal paradox: their very creation constitutes a verdict on the historical value of an event that has yet to unfold. However, how can an event be defined as historic before it even takes place? These questions, better suited to the epistemology of history, fall squarely under the judge’s authority. It is

⁶⁵ This is precisely the aim of an article by Marie-Anne Chabin, which seeks to reformulate the “traditional” understanding of archival ages, not based on temporal distance but rather on the social function of documents (Chabin 2022).

essential to understand how this legal decision influences the images' handling, management, and archival treatment.

Far from being a minor legal detail, the top-down decision to define an event as “historic” and thus worthy of preservation has far-reaching consequences for the archival and documentary status of the trial images. From their inception, these images are institutional documents, created with the explicit intention of forming a “historical” archive. This institutional framing precludes us from considering them as found artifacts. Their official designation means they are not retrospectively assembled for their historical value but are rather instituted, that is, created with the same programmatic intent with which a monument is erected in public space. Their creation is therefore a constitutive act, one that takes place in the present and, in some sense, as a wager on the future.

This view is echoed by those who contributed to the creation of the trial archive: *“Même si l'on filme pour archiver, on filme au présent. Enregistrer un procès plutôt qu'un autre est une décision politique qu'il faut analyser dans toute sa complexité,”* argue Martine Sin Blima-Barru, Virginie Sanisco, Hélène Bellangère, and Romane Gorce (2023). The political, semiotic, archival, and even philosophical dimensions of this event become evident when examining the images. Filming and archiving the trial means, consciously and deliberately, creating the “future traces of the past.” This non-linear temporality becomes strikingly tangible when considered from the perspective of archival practice. The professionals who worked on the November 13 trial archive describe their approach as “recherche-action” (Scopsi, Sin-Blima Barru, Juvenelle 2024), indicating that the way they handled the archival process departed significantly from standard archival procedures and fostered an innovative method grounded in a new relationship with documentary temporality. The archival work for the V13 trial images, however, deviates sharply from these standard definitions. This is true both in terms of archival status and in how metadata was created in real time, a unique case now studied in the sociology of labor and technical practices (Sergent 2024).

By defining these images as historical from the outset, the judge's decision removes them from the conventional document lifecycle and assigns them the status of permanent historical records. As cultural heritage, the corpus must be preserved in its entirety to guarantee its long-term durability. From an archival standpoint, the judge's

ruling has concrete material implications: it determines not only the legal status of these images but also the physical space they occupy, as well as the conditions under which they are stored and maintained.

Despite their limited accessibility and non-mediatized status, the memorial dimension of the trial images places them at the heart of a broader national identity-building project. Reflecting on how these images are stored and preserved brings us directly to this issue: the images of the trial are raw material from which the history of the future will be written. However, since this mode of interpreting trial images is imposed by their institutional context as cultural heritage, it is worth examining further. Images become documents when they are legitimized within a context that assigns them a new meaning. Just as a museum can elevate a mundane object to the status of art, so too the Archives audiovisuelles de la Justice confer upon the images of the trial the status of historical, memorial documents. In Kristoff Pomian's terms, they become *semiofores*, bearers of meaning (Pomian 2015, 15).

The institutional context also constitutes the archive in a material sense. For trial images, it is the very act of archiving that creates the archive. These images become documents only when they are catalogued, indexed, and stored. This distinction recalls Marie-Anne Chabin's formulation of *archives au sens strict* – documents produced and preserved for legal or administrative purposes – versus *archives au sens large*, which acquire archival status retrospectively, through a shift in function and meaning. A birth certificate, for example, is created with administrative intent (*sens strict*) but may later be valued as historical evidence (*sens large*). Similarly, trial images, though not originally produced with archival intent, become archives once they are framed and preserved as part of an institutional dispositif. In this perspective, it is the archival gesture itself – the act of selecting and conserving – that transforms them into meaningful documents, not their material specificity (Chabin 2021). Because they are materially identical to everyday video files, trial images illustrate the shift from understanding a document as an object (*objet-archive*) to understanding it as an archival gesture (*geste d'archiver*). According to Marie-Anne Chabin, this shift is emblematic of the digital age: traditional paperwork (*la paperasse*) has been replaced by vast quantities of digital files (*electronasse*), making archives appear to dissolve into a sea of data. Digital media's promise of total archiving

is inherently illusory. Since everything could potentially be archived, the central question becomes: what is worth preserving?

Considering the archival dimension of trial images offers a distinctive lens through which to interpret their social function. As Louise Merzeau suggests, it is the relationship between a specific context and a given regime of traces (Merzeau 1999) that defines a document, distinguishing it – or at times aligning it – with its close relative: the monument.

Although a full discussion of the relationship between document and monument lies beyond the scope of this chapter, it is worth noting that the institutional framing of trial images often mirrors the logic of monumentalization. From the sheer volume of footage to their preservation within an institution dedicated to memory, these images are established with a deliberateness akin to that of public monuments.

Like monuments, at least in their traditional conception, images *of* the trial are preserved with an intent toward permanence, forming a singular corpus housed within a designated institution: the archive. To archive trial images is thus to engage with their relationship to collective memory, and by extension, to history itself. While a comprehensive assessment of the long-term historical legacy of the November 13 attacks lies beyond the scope of this study, the corpus of trial images undoubtedly provides a fertile ground for future visual history research.

Having examined the relationship between trial images and their designation as “historical,” it is now fitting to return to our point of departure: the legal “birth certificate” of the archive. As previously discussed, trial images are defined as historical by a judicial decision that inscribes them into a site of memory – the *Archives audiovisuelles de la Justice*. The complex institutional and archival apparatus surrounding these images confirms their status as audiovisual evidence of a historical event.

This framework accounts for many of the images’ defining features: their restricted accessibility, the intent to film with neutrality, and their programmatic classification as “historical”, all unilaterally determined by the judge. This convergence between the gaze of the judge and that of the historian – enacted in professional practice but rarely theorized – echoes a longstanding epistemological concern in the philosophy

of history. Carlo Ginzburg addresses this issue in his essay *The Judge and the Historian* (Ginzburg 2020).

At the outset of the essay, Ginzburg traces the genealogy of comparisons between these two figures, highlighting how they have often been conflated in problematic ways. One of the most striking formulations comes from Hegel, who described his philosophy of history as a *Weltgericht* – a term that means both “world tribunal” and “Last Judgment” (22). For Hegel, who interpreted the dialectical unfolding of history as a secularized form of Christianity, the term encapsulated the essence of his systematic vision. Yet as Ginzburg notes, equating History with a tribunal presupposes a particular conception of historical documents (23). To look at history through the eyes of a judge is to seek closure, rather than to confront the unresolved questions posed by the gaps of the past. The judicial gaze, in other words, is predisposed to render verdicts – to treat traces of the past as conclusive evidence, rather than as openings for critical inquiry. How, then, should we look at trial images? Although they may bear the imprint of the judge’s perspective, they also preserve a spectrum of absences and silences – elements that resist closure and must always be critically contextualized.

5.4. *Images of the trial and legal spectatorship*

The ways in which *images of the trial* are regulated, prescribed, and disseminated shape a particular understanding of the legal trial as a complex, multilayered event. Far from serving merely as a venue for the exhibition of visual evidence gathered during the investigative phase, the trial emerges as a political event, in which multiple forces converge to construct a specific historical memory.

At first glance, the dynamics at stake may appear paradoxical: the trial is a visual event, yet not a spectacular one; it is preserved as part of the nation’s cultural heritage yet not meant for reproduction; it is filmed because it is deemed historic, and yet this designation is made before the event itself unfolds. To look at *images of the trial* (and by

extension, at *images in the trial*, which they encompass) is an inherently complex act, not solely due to the limited accessibility of such documents.

As this chapter draws to a close, having shifted the axis of inquiry from *images in the trial* to their broader position in the world, we are now confronted with the task of considering this visual and epistemic object in its entirety. What forms of spectatorship do these images require, considering the stratified – and at times contradictory – meanings, functions, and uses they accrue?

To explore this question, it is instructive to return to the notion of “legal spectatorship” as articulated by legal and media scholar Kelli Moore (2022). Moore proposes an approach that conceptualizes the trial as a complex assemblage of technologies, gestural rhetorics, visual forms, and affective registers. This ensemble encompasses not only how images are enunciated within the courtroom but also how they are received.

Throughout this chapter and the one preceding it, I have argued that the trial may be understood as a context of reception in a semiopragmatic sense. In examining *images in the trial* and their modalities of enunciation, I have shown how visual evidence operates through strategic functions shaped by the constraints and expectations of the juridical setting. One such function is the evocative, and thus inherently memorial, role that images acquire when “explained” by police experts. I have also addressed the limitations imposed on *images of the trial*: they constitute the only authorized recordings of this juridical event, yet they may not be reproduced in the media (see subsection on publicity).

These analyses have considered the trial both as a container of images and as a space endowed with its own visual logic. This dual perspective authorizes a conception of the trial as a media dispositif governed by specific rules of production and reception. Such a framework resonates with Moore’s call to reconceptualize legal image studies through the lens of spectatorship.

As Moore observes, this perspective constitutes a significant intervention within legal studies, which have traditionally focused on the evidentiary status of images in relation to their technical reliability. These approaches often rest on a deterministic understanding of technology, asking whether a given medium can serve as trustworthy

proof. Yet such questions risk overlooking how visual evidence functions within its enunciative context. Moore calls instead for a shift in emphasis: rather than asking what images are, we should investigate how they are shown and how they shape the act of looking.

In her monograph *Legal Spectatorship*, Moore examines domestic violence trials in the United States, cases often considered “minor” due to their limited media visibility. In these proceedings, visual evidence circulates in both analog and digital formats, whether projected on courtroom screens or passed from hand to hand. This material multiplicity, Moore argues, transforms the courtroom into a “vestibular” space, in which visual evidence – often images of injuries – extends the embodied experience of the victim into the spatial and sensory domain of the court. The courtroom thus becomes a site of somatic resonance: a vestibule. Moreover, the legal prohibition against photographing or filming trials, which also applies in the United States, produces a mode of “legal looking” in which the state remains the sole authorized image-maker of the event.

Building on Moore’s insights, one might go further and conceptualize the trial as a media dispositif that produces specific forms of governmentality. This is, in a sense, self-evident from a juridical standpoint: the trial exists to apply laws, impose penalties, and administer justice. Yet from a media-theoretical perspective, the trial also governs by regulating the production, circulation, and visibility of images.

This claim is supported by the analyses conducted thus far. In examining images *in* the trial, it has been shown how technical apparatuses generate specific environmental conditions when embedded in experiential settings. In addressing images *of* the trial, the analysis has focused on the political and social infrastructures that not only manage but also actively produce these images. In both instances, attention has been given to how images encounter their environments – how they are displayed within the courtroom, and how they circulate, once archived, as images *of the* trial.

The trial as media dispositif governs distinct forms of sensory perception. It orchestrates modes of visibility and controls the discursive frameworks, and therefore the epistemologies, that form around images. Moreover, following Agamben’s formulation,

the trial qualifies as a *dispositif* in that it defines and configures legal subjectivities: the criminal, the perpetrator, the victim, the witness, the terrorist (Agamben 2006).

Within this intricate landscape, the images *of* the trial constitute the terrain upon which all these operations unfold.

Chapter six.

Voices of Fragments immersive installation: turning the images of the trial into art-based research

In this chapter, we will focus on the exhibition of an art-based project inspired by the images of *the* trial. It is an immersive installation, entitled *Voices of Fragments*, curated and co-created with Maxence Mercier, a doctoral student in *recherche-cr ation* at the Universit  C te d'Azur. The first version of this work, a prototype also designed to be re-installed and extended in the future, was presented on 4 July 2024 during the restitution day at the Grand Plateau of the Georges M li s university campus on the Cannes campus of the Universit  C te d'Azur.⁶⁶

The installation aims to reconstruct the investigative path of a hypothetical researcher analyzing visual materials from the trial. At its core is a sound composition comprising curated excerpts from interviews with French archivists responsible for classifying the filmed sequences of the trial. The generative, spatialized soundscape dynamically interacts with visitors' movements within the exhibition space, facilitating a collective engagement with the immersive content. Through variations in auditory exposure, the installation establishes an emotional gradient, modulating the intensity of interaction with the archival documents. A key interactive element is a 3D-scanned representation of an archivist's desk, strewn with partially legible documents. The audio content responds to the proximity of spectators to this visual component, allowing them

⁶⁶ This project was supported by the PhD Lab of the Extended Reality Research and Creative Lab XR²C² centre of the Universit  C te d'Azur, Maxence Mercier and the undersigned collaborated as a duo, discussing together all the design and production phases of the project. However, Maxence Mercier carried out the programming and technical implementation parts more specifically, while the writer concentrated more on the research and selection of audiovisual content.

to explore the composite work through movement and interaction with generative narrative sequences. Designed as a non-linear experience, the installation invites multiple interpretive possibilities, with narrative content adapting in real time based on each spectator's position and trajectory within the space.

In terms of the issues analysed so far, this installation project can be framed according to three possible perspectives. On the one hand, its relevance to the images *of* the trial makes the immersive installation project an innovative tool for the dissemination of science and valorisation of archival heritage. On the other hand, and most importantly, from a thematic point of view, the construction of an installation display centred on a non-disclosable material represented an opportunity to reflect on the images *of* the trial from a new point of view compared to the previous chapter. Finally, the opportunity to engage in the design of an installation project was an important opportunity to live an immersive experience, not only under the banner of media transparency and immediacy, but also as a mediation, even a cultural mediation, of a complex subject with great emotional impact.

6.1. *Experiencing the "taste" of the archive. The documents as missing images*

The first problem that had to be addressed, upstream of the project design, was once again, that of the accessibility of the images *of* the trial. For visual studies research, this limitation may at first appear to be an insurmountable obstacle: how can a text account for images that cannot be shown, but only described? Certainly, no matter how ekphrastic a verbal exposition may be, words and images are never equivalent, as Michel Foucault, among many others, also observed from a work by René Magritte in a small text entitled *Ceci n'est pas une pipe* (Foucault 1988). The ban on reproduction has also presented a major research challenge: taking into account the regimes of visibility of images that are difficult to access has become a real object of study, as we have tried to illustrate in the previous chapter. In other words, from an obstacle, the limitation of the

accessibility of images has become a precious opportunity, a void to be studied with as many methodologies as possible, not least that of an original creation. In any case, how can this “lack” be translated into original expressive research? In order to explain the peculiarities and the reasons that led to this project, it is necessary to start from the beginning, that is, from the research in the archive and the phenomenological experience of consulting the images.

As we have seen, unlike other “digital native” documents, which are sometimes made accessible and disseminated at a distance and in an immediate manner, the constraints of the images *of* the trial imposed a consultation experience limited to specific segments of the population (i.e., those who had applied to the court or those who wished to consult the archives for research purposes) and, above all, based on physical presence. This tied the viewing of images to a specific here and now: the location of the archive. The experience of consulting the documents had thus regained a dimension linked to a strong sense of physical presence, in which the daily experience of going to and from the Archives Nationales was the most important one. Allow us this brief digression, as it was from this experience that the research questions emerged which gave rise to this project.

From a purely human point of view, going to the Archives Nationales is an impressive experience: the Archives represent one of the most important historical and documentary heritages of European modernity, founded at the dawn of the French Revolution out of a desire to hand down a memory functional to the formation and maintenance of a Democratic State. The historical location of the Archives nationales is located in the heart of the Marais district, in the Hôtel de Subise, an aristocratic palace expropriated during the French Revolution, enlarged in the 20th century by a more modern addition, CARAN (*Centre d'Accueil des Recherches des Archives Nationales*),

designed and conceived precisely as a Centre for study and research.⁶⁷ Everything about the archive is imbued with a symbolic atmosphere, which oozes from the frame onto the documents stored inside.

In one of the studio spaces – more precisely, in a small office located just outside the area freely accessible to the public – the images *of* the trial were made available for consultation. This office was typically reserved for insiders, given the sensitive and confidential nature of the material. Far from being a superfluous detail, this fortunate location enabled and facilitated exchanges with the team that had been actively involved in the archiving process. In fact, the daily visits to the National Archives have enriched the research in a decisive way, precisely through these daily encounters with the people for whom the images of the trial were primarily an object of work. In the daily activity of consultation, the constant exchange with these people led to the discovery of a series of clues and aspects of the images that enriched the research with hitherto unexplored perspectives. As a result, the dialogues with the archivists became a key element in understanding the documents. These interactions formed an informal process of knowledge production that, through dialogue, significantly deepened the theoretical engagement with the material.

One detail that emerged from the discussions with the archivists was that the consultation of the documents required for this thesis was the first research carried out solely based on the documents, without the author ever having been present at the trial. In other words, the people who 'managed', edited and catalogued the images of the trial had experienced the events in their entirety and in the first person: they played the role of eyewitnesses. The confrontation with their direct experience proved to be an invaluable tool, capable not only of dispelling doubts that arose during the daily deliberations, but also, sometimes, of adding details and clarifications to the actual course of the hearings that would not have been comprehensible simply by looking at the images. Finally, due to the staggering volume of the materials – over 700 hours of trial footage – the task of

⁶⁷ The history of the Archives Nationales is closely linked to the construction of a democratic state since the French Revolution, an implication that is also deeply inscribed with the physical locations of the institutions themselves. For more, see Favier, Lucie, and René Rémond. *La mémoire de l'état: histoire des Archives nationales*. Paris: Fayard, 2004.

navigating the archive was anything but straightforward. Without the careful and methodical work of the archivists, identifying and accessing the most relevant content would have been extremely difficult.

In particular, two people from the Archives Nationales were important in this moment of discovery: Martine Sin Blima-Barru and Aurore Juvenelle, who had been immersed in the “micro-community” constituted by the trial for nine months.⁶⁸ The two archivists were thus bearers of a unique direct testimony, inaccessible to those who were only consulting the documents, but different from that of all the parties involved in the trial. In a spontaneous manner, the research carried out in the presence of the Archives Nationales had taken on the feel of ethnographic research, and the experience of consultation came to represent, in fact, an unexpected field investigation. Far from being a simple storage place in which to find precious documents, the archive had thus revealed itself to be a reservoir of stories and testimonies that, although placed *alongside* the documents themselves, proved to be central to understanding them. Not a repository, but a living and dynamic site, a network of valuable information.

The experience of going to the archives had thus taken on a specific connotation, which we can now read under the interpretative prism of one of the key concepts of reflection on archives: the idea of the “taste” of the Archive. In her essay *Le Gout de l'Archive*, Arlette Farge, a historian by training, talks about archival research from an intimist point of view, exquisitely close to the first person singular and akin to an unintentionally phenomenological slant. For the scholar, who has long dealt with 18th century judicial archives, going into an archive daily, confronting documents, was an exciting experience with a specific affective tone that one does not encounter anywhere

⁶⁸ The idea of the trial as a micro-community is a recurring theme in the speeches of the direct witnesses of the trial, partly motivated by the specific characteristics of the places where the hearings took place: the court is located on the Île de la Cité, literally an island in the heart of the city. During the nine months of the trial, access to the Palais de Justice and its surroundings was strictly controlled by the police. Daily life at the hearings was organised based on social interactions that took place during the breaks in the hearings. These impressions are confirmed both by the direct testimony of the archivists encountered during the consultation, but also by literary sources focusing on the trial, such as the novel *V13* by Emmanuel Carrère (Carrère 2022). Moreover, as we have seen, the metadata system indexing the images provided for a real-time annotation system, for which presence at all hearings was a prerequisite.

else. A purely experiential dimension is central to this “taste”. Consultation of the archive, for Farge as for other scholars (first and foremost Michel Foucault in his *Archaeology of Knowledge*) who have grappled with the epistemological dimension of documentary research, implies going back to the lines of discontinuity in the construction of historical knowledge: only by looking at documents can one conceive and ask epistemologically new and foundational questions. For Farge, however, the determining and characterising element of this process is rooted in a concrete and direct dimension of frequenting the archive and in the confrontation with the materiality of documents themselves.

In the daily practice of research, in fact, it is precisely the material aspects of the documents that interest the scholar: the tangible dimension of the documents contributes to creating a specific atmosphere (and thus an emotional tone), which radiates from the documents also towards the architecture of the Archives. This "atmospheric" dimension of the research, which clearly emerges on a more phenomenological reading of Farge's text, involves a multisensory contact with the documents. In describing a tactile memory of the documents, Farge mentions the flaps of a parchment partially deteriorated by time and weather and rippled by humidity, while the necessity of having to read aloud the transcripts of a spoken word from bygone days calls into question a fundamentally auditory dimension document comprehension (Farge 1997, 71-82). To these modes of direct confrontation with the documents, Farge then adds considerations on the environmental context of the archives, citing - for example - the cool, controlled climate of the consultation room. Although completely implicit in Farge's vocabulary, these multisensory and environmental components of the archival experience authorise us to read the consultation experience as an almost proto-immersive experience. Indeed, in Farge's terms, the daily work of going to and coming back from the archive creates an experience from which "*on revient*", a term that, in French, has the double meaning of "returning", but also of "coming back" as if from a state of mind of great concentration: precisely, qualifying as a state of absorption, not unlike one of immersion. In the protected context of the archives, the reading and viewing of documents are embedded in an environmental complex that contributes to forming a specific space-time protecting bubble, in which atmospheric parameters are fundamental for understanding and

decoding the documents themselves.⁶⁹ As Farge herself notes, these aspects of archival research, so mundane and yet so heuristic, are often ignored because they are considered trivial and rarely reflected upon. Yet, these same aspects constitute an entirely new reading of documents: “*Cela commence tout doucement par des manipulations presque banales sur lesquelles il est finalement rare de réfléchir. Pourtant, en les accomplissant, se fabrique un objet nouveau, se constitue une autre forme de savoir, s’écrit une nouvelle ‘archive’*” (79). Thanks to this experience that we may qualify as (proto-)immersive, it becomes possible to dispel the reality effect that direct confrontation with historical sources may generate. This effect, already mentioned in Farge’s essay, is further amplified by the emphasis placed by archival deontology on defining documents as authentic, intact, and reliable.⁷⁰

The experiential dimension of the archive allowed us to uncover the inherently fragmentary nature of the images *of* the trial: they are never sources of absolute truth, but documents that must be critically questioned. This same awareness emerges in Farge’s work, where the fragmentary nature of documents becomes fully apparent through her practice and repeated engagement with the archive. Similarly, in our research, frequenting the Archives nationales, the taste of the archive appeared to be increasingly linked to the environment of the archive and to direct contact with the documents, alongside with the people who worked with and on them.

⁶⁹ This idea of the media environment as a bubbled, comfort spaces, separated from and protected by the external context originates with Francesco Casetti (Casetti 2023)

⁷⁰ In many sections of her essay, Farge repeatedly points out that consulting the archives produces the impression of being confronted with reality itself. As the archive is a collection of enunciations, its consultation produces a sense of vertigo, as if one were apprehending the world laid bare (Farge 1997, 14). Moreover, archival deontology defines records as being characterised by authenticity, integrity and reliability. These three key concepts were formalised in the mid-1990s by the International Council of Archives (ICA) and have been included in the *Code de déontologie des archivistes* since 1996. The concept of integrity refers to a document that has not been altered in terms of its material support; authenticity defines a document that is what it purports to be (and not, for example, a forgery or an identical copy of it); the reliability of the document is the result of these characteristics, and defines in some way one of the missions of the archivist, which will be precisely that of preserving the authenticity and integrity of documents in order to guarantee their reliability (Treleani 2017, 26-28).

One of the premises from which *Voices of Fragments* emerged was, therefore, the intention to restore the experiential dimension to archival research. Within this framework, the constraints surrounding the images *of* the trial were no longer conceived as limitations, but rather as expressive opportunities – a point of departure for visualising a highly affective and often overlooked dimension of archival experience. Through this shift in perspective, the processual image-documents, initially characterised by their non-reproducibility, were reconfigured as missing images – absent, elusive, yet evocative (Cecchi 2016, 101).⁷¹

The non-reproducibility images *of* the trial in the media gave the documents a great expressive potential, leaving a void that could be filled creatively. Through the artistic register, it was therefore possible to recount the experience (working, emotional, even tiring or painful) of the images *of* the trial without showing the documents themselves. *Voices of Fragments* is therefore an attempt to visualise the images *of* the trial as “missing” images, by focusing on those aspects of documentary research that often go unnoticed, such as the sometimes “invisible” work of those who operate behind the scenes of the archival infrastructure to make documents accessible and usable.

Reconstructing the missing images *of* the trial required returning to the phenomenological dimension of the archive – an experience that is proto-immersive in nature and carries with it the distinctive flavour of archival research.

⁷¹ According to Dario Cecchi, the reflection on missing images is an inspiring motif of an intermedial documentary aesthetic with a profound heuristic potential. One of the paradigmatic examples is certainly the famous feature film by director Rithi Pahn, emblematically entitled *The Missing Picture*. In this documentary, the director reflected on the Khmer Rouge genocide in Cambodia, starting from the media narrative, which he did not agree with. With the aim of reconstructing the missing but supposedly authentic image of the events, the director resorted to a series of dioramas, reconstructing the historical memory of his people in a plastic way.

6.2. *The production phase. Meeting with the archivists*

Once the objectives of the project had been clearly articulated, it became necessary to initiate the production phase, which involved the systematic collection of materials through both direct engagement and preparatory exchanges. The audio and visual materials that compose the installation were produced during a one-day meeting with the archivists in the *Salle d'Albâtre* at the Archives nationales on 6 May 2024, as well as through a series of preliminary videoconference sessions.

The meeting was structured around a series of semi-structured interviews conducted across several sessions, including an initial group discussion and several individual conversations for a total of 10 hours. The interviews, which formed the basis of the audio component of the installation, were subsequently edited and fragmented, initiating a compositional process shaped by both thematic concerns and the spatial and affective dynamics of the installation. These were followed by a session dedicated to 3D scans of specific archival work objects, which constituted the visual component of the project.



Figure 21 The interview setup. Copyright of the author.

Although the aim of the study day was to capture the archivists' testimonies as spontaneously as possible, the discussions were partially oriented through a set of proposed thematic prompts. These prompts were deliberately open-ended and designed to allow for flexibility, giving participants the freedom to engage with certain topics in depth or to move past them according to their own inclinations and professional sensibilities. Among the topics addressed were the status of documents and the conditions under which they may be considered "historical" (beyond the status conferred by judicial authority); the visibility regimes surrounding trial images (particularly what remains 'out of sight' in relation to the images themselves); and the role of archivists as professionals who serve as crucial intermediaries between facts, documents, and the public.

At the beginning of each session, each interlocutor was required to introduce themselves in front of the microphones that had been installed for the purpose. Martine Sin Blima-Barru, main heritage curator, was responsible for the management of the audiovisual archives of the French justice system, with a particular focus on the metadata necessary for the indexing of the numerous images *of* the trial. In her testimony, she provided a detailed account of the workflow. Aurore Juvenelle, a historian and science populariser with a background in radio, was also involved in the work, given the large amount of data that needed to be managed. As the individual primarily responsible for the direct fabrication of the metadata, Aurore's presence at the hearing site was of paramount importance. In her introduction, Aurore described her work as both a transcription and a synthesised understanding of the court hearings: a "*cheville ouvrière de la transmission du sens*", meaning a supporting lever, without which the infrastructural scaffolding of the archive could not have been completed. The composition of the group of expertise was also enriched by the contribution of two young researchers. The first, Mathilde Sergent, a doctoral student in sociology at the Université Paris 1 Panthéon-Sorbonne, was responsible for studying the evolution of archival practice. With the aim of studying archival work from a sociological point of view and with a particular interest in the new materiality of documents, Mathilde attended the trial as a case study to be included in her research, even though the exceptional nature of the archiving procedure of the trial's images in comparison to other ordinary archival practices was evident. The fourth and final participant was Romane Gorce (who participated remotely via a video

conference). A doctoral student in film history, Gorce's research interests include the history of filmed trials. She observed the trial from a more specifically visual perspective, focusing on the production and dissemination of violent images in the enunciative dimension of the trial.

During both group and individual interviews, the discussion gravitated mostly toward the relationship between filmed documents and the reality of the trials: what remains out of the picture's frames, "excluded" from the documents and thus from history?

The scholars reflected on the relationship between images (documentary evidence of events) and spectatorship of the trial, starting from their direct expertise. Focusing on personal experiences that were not represented in the images, the archivists concurred on the partial and fragmentary nature of the documents. They explained that the images *of* the trial appeared neutral, yet in fact revealed numerous asymmetries and imbalances of vision that undermined their neutrality. A salient issue that emerged pertained to the depiction of the accused. It was observed that the accused appeared infrequently in the images *of* the trial, the editing principles of which always prioritised the individual speaking at the time. In recounting these facts, it was inevitable that the voice of the archivists would reflect the full complexity of their experience. In response to a query regarding the absence of certain elements in the images *of* the trial, the voice of Aurore Juvenelle unmistakably conveyed a sense of frustration when recounting that, during the rare instances when the accused were visible, their faces were obscured by masks – a necessity imposed by the prevailing circumstances of the trial, which occurred during the period of the Covid-19 pandemic. Additionally, their eyes were obscured within the confines of the bulletproof glass structure, known as the "box", from which they observed the hearings. This phenomenon can be defined as a form of involuntary, purely visual mutilation of the accused's faces, who were not clearly visible in the shot.

The focus of the interviews that constituted *Voices of Fragments* project was to consider the emotional dimension, which inevitably emerged from direct encounters with those who participated in the trial from close quarters. Indeed, the archivists were privileged witnesses of the images *in* the trial, but also protagonists *of* the images of the

trial. Consequently, their accounts occasionally evoke their memory of specific days during the hearing. Mathilde Sergent, for instance, recounted her arrival at the Court of Justice on the day of the verdict in a dreamlike tone. She described the weather as fine, the steps of the Palais de Justice as crowded, and the atmosphere as one of great excitement and anticipation just before the reading of the verdict. Conversely, the atmosphere on the day the visual photographic evidence and sound recordings of the Bataclan attacks were released was markedly different: “*Ce jour-là, il negeait...*” Aurore Juvenelle recounts, almost sighing. The muted ambience of the snow, imperceptible in the visuals *of* the trial but articulated in the discourse of the interview, stands in stark juxtaposition to the cacophony of gunshots and the gruesome nature of the crime scene imagery disseminated within the confines of the trial, constituting the focal point of the images *of* the trial for that specific hearing.

The impact of the archivists’ involvement is also emphasised, on the other hand, in the words of Mathilde Sergent, whose “mission” within the process was simply to observe the work of the archivists. In recounting her experience, Mathilde very often emphasises the difficulty of placing herself at the right distance from her research object and how the work on the trial ended up involving her more than she would have initially wished. In Mathilde’s testimony, important considerations about the nature of the archivists’ data management work also emerge. In fact, Mathilde associated it with the operation of embroidery, mentioning lace in particular. In her words, the manufacture of image metadata is compared to the art of embroidery: metadata thus constitutes a “*dentelle des donnés*”. This is semi-invisible, painstaking and very hard work, both in terms of the load and the demand for concentration.⁷² This aspect was also confirmed by the testimony of Aurore, who recounted how the need to maintain a high level of concentration constituted the greatest difficulty of the work, precisely in the face of the reiteration of the testimonies and evidence exposed during the trial. Despite great professional training, the continuous exposure to sometimes violent witness and evidence

⁷² In this respect, the demanding and often underappreciated labour of the female archivists recalls the work of the Harvard Computers – women astronomers whose meticulous photometric annotation is now recognised as one of the foundations of algorithmic imaging (Grespi 2024).

material had been a particularly trying challenge for Aurore, which she compared to the erosion of a cliff.

Gathering the testimony of these – coincidentally only female – archivists allowed us to discover the dimension of manual labour behind the structural materiality of documents, a dimension that is often hidden or barely visible. In other words, it allowed us to bring out the work of their “invisible hands”⁷³ and, consequently, to consider the images *of* the trial in all their complexity: not only, as we have seen in other chapters, as the fruit of a negotiation of complex political interests, but also as the result of a dense network of manual actions and specific affections.

6.3. *From the interviews to the installation device*

From a structural point of view, *Voices of Fragments* consists of two media dimensions, both related to immersivity. The first is that of sound, realised using spatialised sound technique. The second, visual, consists of the creation of a *moving panorama* of images projected onto four tulle walls, arranged to form an environment into which it was possible to enter to be enveloped by the projections. Both planes, the sound and the visual, were treated and discussed in a synergetic manner, according to the same formal and expressive principles. At both the aural and visual levels, an attempt was made to translate and reproduce the “taste” experienced during research in the archive:

⁷³ This theme resonates with much contemporary reflection in media studies. One relevant example is the research of Nele Wynants, who – within the field of media archaeology – investigates the material traces left by those who handled and operated the glass plates used in magic lantern performances. Through this inquiry, Wynants uncovers a previously overlooked dimension of the plates, which she locates within the archival collections of media libraries and specialised museums. She reinterprets the magic lantern not only as a pre-cinematic apparatus, but as a performative medium, intimately connected to theatrical practice (Wynants 2020).

that of a direct, and sometimes difficult, experience of a complex event, made up of hard daily work, meticulous but left in the background.

From a logistical point of view, the main challenge was to deal with material that was sufficiently close to the images *of* the trial but freely releasable. At the sound level, therefore, work was done on the constitution of the *corpus* of interviews with the archivists who were responsible for indexing and thus archiving the images of the hearings and two doctoral students. On a visual level, we were concerned with collecting the functional tools for archiving the images *of* the trial: notebooks, notes, badges that allowed access to the court. During the months of work on the installation, we referred to these materialities with the operative term “non-archives”, meaning objects not officially recognised as documents but fundamental to the fabrication of the data accompanying the images.

Both the sound and visual materials were from the outset characterised by fragmentation, which operates here as a deliberate aesthetic signature rather than a mere technical constraint. Within the installation, the personal testimonies of the archivists remain vivid and present; at the same time, their voices appear completely entangled and inseparable. This is the result of a specific stylistic choice: the linearity of spoken discourse has been intentionally disrupted and broken apart. Rather than being presented in full or in chronological sequence, the interviews are interwoven into a sonic cloud composed of isolated words and sentence fragments, in which the voices alternate in a non-linear, non-hierarchical manner.

In parallel with the audio composition, the visual material was also fragmented and reassembled, resulting in a collage of images generated through photographic-based 3D modelling techniques such as LiDAR scanning (which calculates distances through metric sensors) and photogrammetry (which constructs three-dimensional models by overlapping multiple photographic shots). Embracing error and imperfection as a deliberate expressive strategy – in the spirit of Clément Chéroux’s essay *Photographic Error*, which explores the aesthetic potential of what traditional photography would classify as mistakes (Chéroux 2003) – the scans were produced with an intentionally experimental approach. The aim was to accept, and even amplify, the presence of artefacts in the final 3D renderings.

As a result, some objects in the visual collage appear completely flat; others are partially merged or lack clear contours, while text inscribed on notebooks is often only partially legible. By leaving space for the visual languages of low poly rendering or data mooshing, we deliberately pushed the rendering algorithms into a playful and exploratory dynamic – a process of “playing with the device” that opened possibilities for experimental uses of digital imaging technologies.⁷⁴



Figure 22 3D scanning tests carried out during the consultation of the documents. From left: photographic image, photogrammetry, Lidar scanner, taken using the Polycam app, and smartphone. Paris, Archives nationales, June 2023. Copyright of the author.

⁷⁴ The reference to “playing” with apparatuses is a metaphor originally proposed by philosopher Vilém Flusser and later adopted within the field of contemporary photography studies by Marc Lenot in his recent book *Jouer contre les appareils*, which offers a comprehensive survey of experimental analogue photography (Lenot 2017). While there are still no systematic studies on the experimental use of extended reality media, our hands-on approach draws upon the key insights of Lenot’s work. From a terminological perspective, data mooshing refers to the deliberate alteration of a digital file’s data to generate visual or sonic distortions when the file is decoded. The expression low poly, by contrast, designates the reduced number of polygons used to model a 3D object. In this context, polygons function as a unit of resolution, much like pixels in a two-dimensional image: the higher the polygon count, the more detailed and refined the object appears.



Figure 15 examples of modelling used in the installation. Paris, Archives nationales, May 2024. Copyright of the author.

As mentioned above, four medium-grey tulle screens were suspended from the ceiling to serve as projection surfaces. In a dark or semi-dark environment, the tulle not directly struck by the projector's light remained much less visible than a traditional white screen. As a result, the images appeared on a semi-transparent surface, creating an effect reminiscent of phantasmagoria. This optical illusion recalls the effects of late 18th-century phantasmagoria shows, such as those developed by Étienne-Gaspard Robertson, which employed translucent screens and concealed projections to conjure ghostly, floating images. In a similar way, the installation's projections seemed to hover in space, detached from any visible support.

The tulle screens were arranged to form a rectangular configuration with openings on the sides, creating a space that was only partially enclosed. Visitors could thus walk freely through the installation, choosing their position in relation to the screens – either remaining outside and perceiving them almost as sculptural columns, or entering the structure and allowing themselves to be enveloped by the ambient, 360-degree imagery. On the tulle screens, the collage of working documents formed a single large image, yet divided across the four screens. Collectively, the panoramic composition created by this

interplay of semi-transparent projections evoked the image of an imaginary researcher's worktable.

On the auditory level, the sound fragments were organized into thematic clusters, corresponding to the topics that emerged organically during the conversations with the archivists. These sound fragments were spatially distributed through a specialized audio diffusion system consisting of 16 speakers and 4 Kinect sensors, which were interconnected and designed to detect visitors' real-time positions. The sound was thus dynamically dispersed throughout the space, responding to the movements and positioning of the visitors within the installation.



Figure 24-25 Installation views: rendering of on-screen scans and installation view. Cannes, 4 July 2024. Copyright of the author and Maxence Mercier.

The installation's interactivity was precisely governed by visitors' physical movements as tracked by the Kinect system. This tracking triggered specific sound fragments, creating a system where each visitor's spontaneous choices generated unique interactions that mirrored their individual path through the space. On a compositional level, *Voices of Fragments* functioned as a generative, modular score - a nonlinear work of variable duration that adapted to each visitor's unprescribed journey through the installation.

Rather than recreating an actual archival space, the installation constructed an idealized environment where visitors could freely position themselves without imposed sightlines or privileged perspectives. However, different spatial positions yielded distinct experiences. The placement of sound fragments followed a deliberate logic: thematically related excerpts from different points in the original interviews were positioned near each other in physical space, creating clusters where visitors could perceive conceptual connections through their bodily positioning.

The spatial organization followed a scheme of four concentric zones. The outermost "anecdotal" zone contained ambient noises, faint utterances, and social greetings. The adjacent "structural" zone featured longer statements about legal frameworks and archival procedures governing the trial recordings. Moving inward, the "sensation" zone (near the tulle screens) presented researchers' experiential observations, while the innermost "emotion" zone contained personal reflections and affective memories from their prolonged engagement with the trial materials. This spatial stratification enabled visitors to navigate between different modes of engagement - from detached observation to personal connection - through their physical movement.

Experientially, this resulted in the perception of a diffuse sound cloud from which fragments would gradually emerge. In fact, the system comprised 411 audio fragments with an average duration of 13 seconds, with longer fragments predominantly located within the tulle circumference. This distribution meant visitors in peripheral areas heard

only broken phrases, while comprehension required movement through the space. This design necessitated an adaptation period where visitors learned the system's logic through physical exploration. The resulting gradual immersion created a self-regulated experience, allowing each visitor to control their exposure to sensitive content through deliberate spatial engagement.

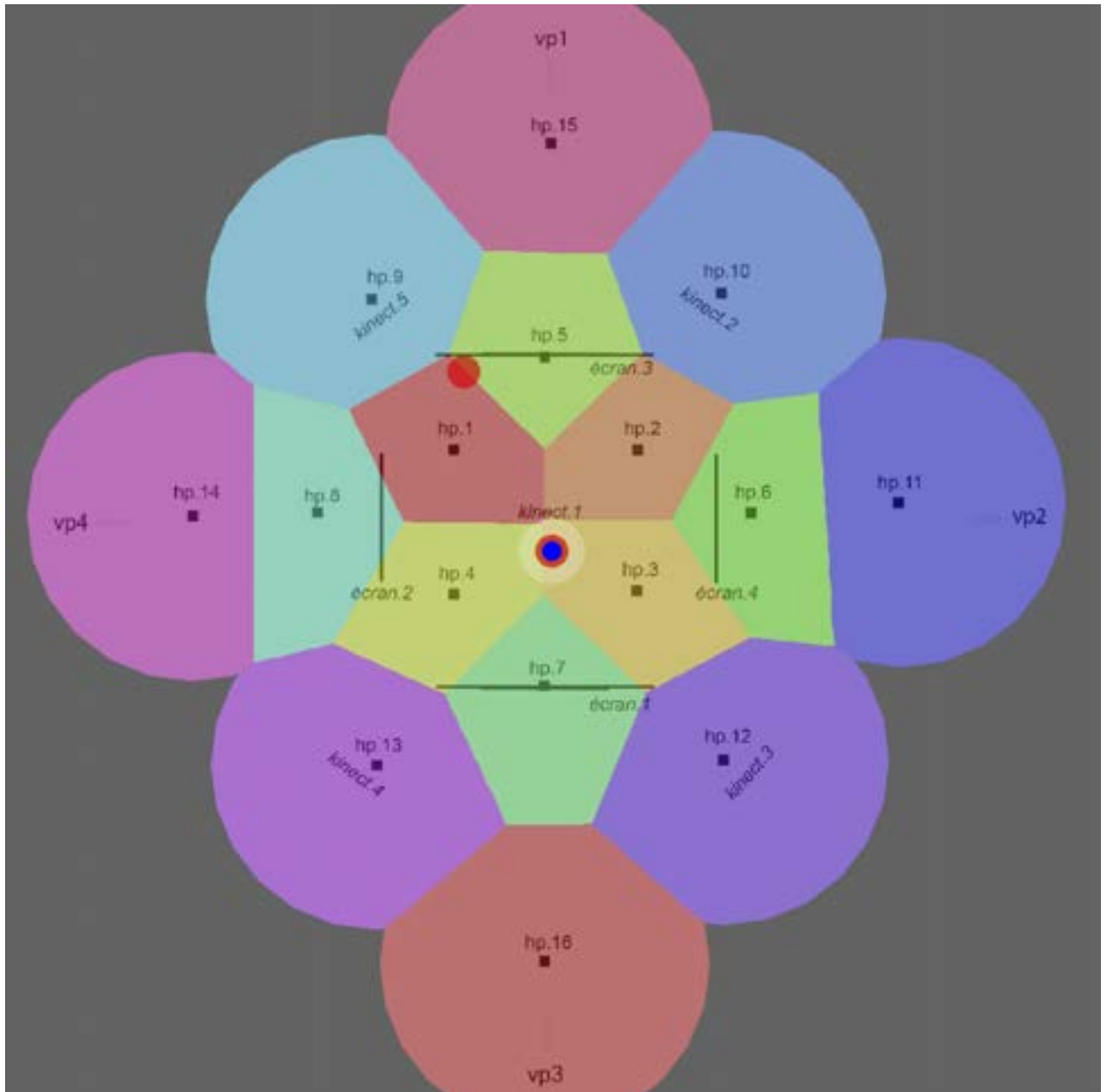


Figure 26 Schematic diagram of the installation device. Copyright of the author. and Maxence Mercier.

6.4. *Aesthetics of the fragment*

As previously outlined, a conscious effort was made to adhere to an aesthetic of the fragment for both the sound and visual dimensions of the installation. This approach emerged from the theoretical premises that initially informed the research. Each element incorporated into the installation reflects the fragmentary nature of the images of the trial encountered during our archival research. At the level of exhibition design, it was essential to convey this aspect, which had been fully revealed through the “taste” of the archival experience.

Given the unavailability of direct images *of* the trial (and even more so those displayed *in* the trial), it became imperative to formulate expressive strategies that could effectively convey their fragmented nature. This entailed two distinct approaches: the fragmentation of the linearity of speech in the interviews, and the assembly of a collage of scans. The title of the installation encapsulates this expressive strategy: the "voices of fragments" refer both to the archivists and to the documents themselves – partial and fragmentary by definition.

Through the integration of audio and visual elements, the installation gradually unfurls a series of narratives that, though intangible, are evocative of documents that will never be viewed. Despite the inability to showcase these images, they are meticulously described, evoked, and narrated in exhaustive detail. The entire installation can therefore be understood as a kind of mediating framework, an interface for engaging with an entire corpus of “missing” images.

Through the act of narrating the images *of* the trial, the installation offers a space for understanding and for raising awareness of a process of significant historical relevance, as well as the documentary images that bear witness to its memory. By treating archival material as a collection of absent images to be reimagined through fragmented attempts, *Voices of Fragments* contributes to preserving the oral memory surrounding this visual

corpus in a way that transcends the strictly institutional dimension.⁷⁵ The act of observing, viewing, and traversing the environment of fragments that constitute the installation has the effect of breaching, without transgressing, the barrier of access to the documents, fostering an intimate dimension of memory conveyed by the images themselves.

In one of the individual interviews, the question was posed to Martine Sin-Blima Barru for her thoughts on the challenge of approaching the historical afterlife of the trial for the terrorist attacks of 13 November.

What will we think of these events once enough historical distance has passed? Will we consider the legacy of the images *of* the trial as a “difficult heritage”, like other difficult events in contemporary history, such as the Holocaust, migration crises, genocides? Martine’s answer is an “archivist’s answer,” and it seems to us a fitting way to conclude this chapter: there is no such thing as a difficult heritage. The archivist’s task is precisely to preserve even the most painful memories.

⁷⁵ To elucidate this concept, it is possible to refer to the contrastive reading between history and memory as analysed by Pierre Nora in the introduction to the first volume of *Lieux de mémoire*. Nora asserts that “*il y a des lieux de mémoire parce qu’il n’y a plus de milieux de mémoire*” (Pierre Nora 2002, XVII). That is, there are sites of memory because there are no longer environments of memory. In this perspective, the institutionalisation of memory, manifesting in places such as the archive, can, at times, act against a more vibrant, embodied dimension of memory, which instead unfolds through gestures and practices.

6.5. Appendix. Textual Verbatim

To deepen comprehension of the installation's content, this section presents a transcription of selected audio fragments, focusing on the longest and most narratively cohesive samples.

On what stays off-screen in the images of the trial:

« Qu'est-ce qu'on voit à l'image, qu'est-ce qu'on ne voit pas ? Qu'est-ce qu'on ne voit pas, ça a été le grand sujet. Dans ces procès, ce qu'on ne voit pas, ce sont les accusés Nous, on les a vus, en tout cas en salle de retransmission. C'était juste filmé en flux continu. Qu'est-ce qu'on filme au titre des archives audiovisuelles de la justice ? Qu'est-ce qu'on ne filme pas, justement, avec tout ce qui est hors-champ ? Et c'étaient des caméras fixes qui filmaient sans enregistrer en flux continu et avec une seule focale ».

Aurore Juvenelle.

Making the documents:

« Ces archives sont à la fois très ouvertes et très fermées, parce que pour tout autre usage il faudrait attendre 50 ans, sauf à apprendre à un avocat, déposer une requête au tribunal et attendre l'ordonnance peut être favorable ».

Martine Sin-Blima Barru

« Au bout d'un moment, je suis allée en salle d'audience, parce que j'avais l'impression de totalement me dématérialiser, et mon travail étant de recevoir cette espèce de choses

immatérielles et complètement abstraites, avec que des chiffres, avec des faux gens qui n'avaient pas de visage, qui n'avaient pas de nom, et sauf que mon corps, mon cerveau luttait contre, [...]. Moi, ce qui m'a fait le plus de mal dans ce procès-là, c'est l'usure. On te prévient, on te prépare, tu vas entendre des choses horribles, c'est terrible ce que je vais dire, mais en fait, ça tu es préparée, tu le sais que tu vas entendre des choses horribles. Par contre, ce à quoi tu n'es pas préparée, c'est que tu vas l'entendre 300, 400 fois, chacun ayant sa petite histoire différente, mais en même temps, c'est toujours la même histoire, avec les mêmes mots, qui finalement finissent par creuser des sillons dans toi. C'est-à-dire qu'au début, c'est une petite rivière, et puis en fait, après, t'en peux plus, parce que c'est comme si ça creusait des falaises, parce qu'il y a même des mots qui t'écorchent, t'en peux plus ».

Aurore Juvenelle

« Je vis ces procès-là, et c'était mon premier gros terrain d'enquête, où il y avait la question du dispositif archivistique qui a été déployé dans ces procès, qui est un dispositif exceptionnel, et ma grosse problématique c'est d'inscrire ce terrain d'exception, d'un procès hors normes, avec un archivage hors normes, dans un ensemble plus vaste des archives, où c'est des archivages qui retranscrivent aussi différents degrés d'implication du politique dans l'enregistrement des actes d'État, parce qu'au final, les archives audiovisuelles de la justice, c'est un acte de pouvoir, et pour faire mémoire ».

Mathilde Sergent

« Le public lui-même, celui pour qui on va dire que le délai de protection maximum court, lui ne demande jamais accès à ces archives par ailleurs, et je pense que si elles essayaient d'accéder à ces archives dans l'état où elles sont actuellement, elles seraient bien désemparées d'en faire quoi que ce soit ».

Martine Sin-Blima Barru

« Moi, ce que j'appellerais des chercheurs professionnels, donc les historiens, les étudiants, des experts de toutes sortes, mais le public très peu, le public qui vient dans les archives pour faire de la généalogie, pour s'intéresser à l'histoire de sa commune, mais pour sortir un peu de ces archives de l'ombre dans lesquelles elles sont, sinon parce qu'elles sont dans l'ombre par rapport au délai, mais elles sont dans l'ombre aussi parce qu'elles sont dans un service d'archives ».

Martine Sin-Blima Barru

« Ce à quoi ça me renvoie ce que je disais beaucoup, c'est que je me vivais quand je faisais ça comme... comment je disais ça ? Comme une cheville ouvrière de transmission du sens. Je me vivais comme une cheville ouvrière de la transmission et en fait, j'en éprouvais une certaine fierté. Bah oui, j'étais cheville ouvrière, ouvrière, c'est-à-dire que moi, je me tapais le gros œuvre [...]. Enfin, mon travail a été de bien tout ranger dans des cases de tableurs Excel qu'évidemment, c'est impossible. Voilà, quand on parle de sentiments de... de se détacher du sentiment de... C'est quoi que j'ai dit tout à l'heure ? De surpuissance ? De toute puissance ? Tu ne pourras jamais rien mettre entièrement dans des cases de tableurs Excel quelle que soit la chose. Et c'était Boris Vian, c'est connu ça, qui expliquait dans un de ses... dans un de ses disques là qu'il avait toujours dans son bureau un tiroir classé « choses inclassables » qui évidemment c'était le tiroir qui était le plus rempli. Voilà. »

Aurore Juvenelle

« Parce que finalement, nous aussi on est acteur du procès. On n'apparaît pas à l'écran, on n'est pas les magistrats, on n'est pas les avocats, on n'est pas les témoins, mais on est quand même acteur du procès. Parce que finalement, cet enregistrement, il ne peut pas avoir lieu sans nous. Non seulement ça, mais en plus, la recherche, ou les moyens, les conditions de rendre ces archives pérennisées avant le temps bon, ne peut pas se faire sans nous, c'est-à-dire sans nos métadonnées. Donc c'est vrai que notre responsabilité, elle est énorme, mais elle est très exotique par rapport à ce qu'est notre travail d'archiviste ».

Martine Sin-Blima Barru

« Donc moi j'avais ça, j'avais cette double observation à la fois du dispositif global et vraiment des microscopiques prises de notes et du travail que j'appelle les petites mains des données. On ne se rend pas compte, mais derrière les écrans il y a plein de gens qui prennent en note des petites choses et qui fabriquent quand même la mémoire collective, en tout cas la mémoire pour les chercheurs ».

Mathilde Sergent

Filming the images of the trial:

« Il y a des fois, il y a des accidents, il y a des choses qui ne sont pas prévues exactement comme ça l'était, tout est trop prévu à l'avance.[...] Toute personne qui filme un procès ne va pas faire n'importe quoi, c'est évident ».

Martine Sin-Blima Barru

« Parfois ils font des archives historiques parce que ce ne sont pas des archives journalistiques [...] La caméra elle est fixe parce que justement il est hors de question qu'on ne va pas prendre la caméra sur l'épaule et on ne va pas se balader [...]. C'est-à-dire que l'accident crée plus d'archives, crée plus d'informations et donc crée des archives qui sont réellement intéressantes pour l'historien [...]. En fait, il ne faut pas, mais oui, mais si on filme le Président alors qu'il est en train de s'avachir sur sa chaise, ah oui... mais si on filme le Procureur alors qu'il est en train de regarder ailleurs... voilà, il y a cette idée de la belle image, de l'image sérieuse, qu'il ne faut pas qu'il y ait des aspérités, des questions de propriété sur quoi que ce soit [...]. Et on ne connaît pas les noms des personnes qui filment. Dans la loi, on explique que l'enregistrement doit être neutre parce qu'on a toujours l'arrière-contexte et donc il s'agit de rendre compte de la partialité de la justice, que ce sera au spectateur, celui qui considérera les archives, de se faire sa propre opinion. Donc on est vraiment dans l'idée de l'objectivité de la neutralité. La neutralité, ça veut dire que seules les personnes qui parlent doivent être filmées. Donc ça devait suivre le fil droit de la parole pour avoir une meilleure objectivité

du filmage, comme si la parole, c'était cette objectivité-là qu'on cherchait. On a rencontré ces opérateurs audiovisuels avec Romane, on a fait plusieurs entretiens avec eux, et ils témoignaient aussi de cette séparation dont ils pouvaient plus ou moins souffrir, mais en tout cas, ils sont restés en vase clos entre eux. ».

Martine Sin-Blima Barru

« Ces morceaux, tu disais des clayettes, c'était pas mal, faisaient qu'il y avait un bout de clayettes, le bas de la clayette, qui généralement arrivait au milieu des yeux des accusés. Ce qui fait que quand ils sont filmés, quand ils parlent, les rares fois où on les voit, on ne voit pas leurs yeux. Parfois ils ont le masque, ils ont rejoué du masque, ils l'ont gardé plus longtemps que le reste ».

Aurore Juvenelle

« Ce qui compte, c'est comment on restitue le débat judiciaire. Donc tout ce qui dit le débat, dit l'oralité, dit la parole qui prend voix, et donc on ne filme que les personnes qui parlent. Les 15, les accusés, ils disparaissent. Et ils disparaissent à tel point que même quand on va parler d'eux, par exemple dans les enquêtes de personnalité, par exemple, même quand ce sont les parties civiles, les victimes, dont les témoignages durent des jours et des jours et des semaines, régulièrement elles s'adressent aussi aux accusés, même à ces moments-là on ne les voit pas. Parce qu'effectivement l'accusé n'a pas besoin de répondre [...]. Les archivistes ont très peu la possibilité, en tout cas ce n'est pas leur positionnement, d'être en direct de la création d'archives parce qu'ils reçoivent à postériori ces traces-là et qu'ils essayent de mettre en contexte, de classer, d'archiver et de donner du sens à l'ensemble ».

Martine Sin-Blima Barru

Listening to the audio recording of the Bataclan attacks:

« En tout cas, ce jour-là, il neigeait. Et j'étais en salle de retransmission, et donc on ne voyait rien sur l'écran, mais j'étais en salle de retransmission, et donc le son a commencé à retentir, et donc j'étais là à prendre des notes. C'est très étrange de prendre des notes, puisque je dois faire des phrases : 'Là, on entend ci, là, on entend ça'. Et c'était même complètement incommunicable en termes de mots, sauf à dire 'là, ça tire, ça tire beaucoup, on entend des cris'. Je me souviens qu'il y avait à côté de moi une journaliste qu'on voyait de temps à autre, dont la pertinence et l'intelligence ne m'avaient pas frappée, et qui était en train de discuter, en plus je crois qu'elle ne discutait pas fort, mais qui était en train de chuchoter pendant le truc, et moi j'ai fini par leur dire '...vos gueules' ».

Aurore Juvenelle

The verdict :

« C'est une journée où il fait très chaud, on est sur la place Dauphine, on fait la queue, il y a de l'attente parce que le procès s'ouvre à 15h, au final c'est 17h, enfin bref, donc là il y a une effervescence sur cette place Dauphine et on rentre, il n'y a pas assez de places dans la salle pour faire rentrer quasiment toutes les parties civiles, la salle de presse, enfin la salle des Criées est bondée, dans les archives nationales on arrive à avoir ces deux places là, moi je ne suis pas en place au niveau du verdict, c'est Aurore et je crois qu'il y a Martine, je ne sais plus, il y a Aurore, et moi je suis un peu à côté en train de faire de la prise de notes dans mes carnets. [...] Donc le verdict commence et en fait à 8 minutes de la fin l'enregistrement se coupe et il y a une panne généralisée d'électricité et du coup dans toutes les salles il n'y a plus quasiment. Je ne me souviens même plus si la lumière se coupe quand même ».

Mathilde Sergent

On the relationship between memory and forgetting:

« On est toujours dans cette histoire d'histoire collective, de ce qui réunit une collectivité, une population, un pays, etc., des citoyens. Après, j'ai tendance à penser qu'il ne faut pas trop se raconter non plus, se monter le bourrichon sur notre propre sensibilité, parce qu'on aurait pu... C'était un sujet intéressant parmi les parties civiles ou d'autres, les gens qui disent 'Ah, mais tu te rends compte, moi j'ai failli prendre le bus pour aller à tel endroit', les touristes sont passés par là, qu'est-ce que tu vas dire de ça ? Qu'est-ce que tu vas dire de ça, des parties civiles qui se sont fait démonter, qui ont vu la mort ? Ce n'est jamais parfait, ce n'est jamais du tout parfait. Et là je pense à un individu dont j'ai oublié le prénom, qui se trouvait passé devant le Bataclan dans une camionnette et qui bossait sur un chantier. Son frère qui parlait avait un fort accent, de sorte que je n'ai pas bien compris. Et le type il s'est pris une balle ou quelque chose comme ça, sa mère est devenue folle. En fait je n'arrive même pas à vous restituer très bien la parole. Sauf que le type n'avait rien à voir avec le public visé. Il passait, c'était un ouvrier, et il est mort. Je ne me souviens pas de son nom. Je me souviens de lui, je vous parle. Mais lui il ne faisait pas du tout partie du public classique des attentats ».

Aurore Juvenelle.

« Il y a quand même une sélection de certains procès où on a envie que ce soit mémorable pour l'histoire, et c'est quand l'État juge la justice. Donc en gros, on a quand même un lien entre comment la justice veut se regarder et se raconter quand elle juge des actes de terrorisme. »

Mathilde Sergent

Conclusion

This dissertation has explored the evolving paradigms of visual evidence considering the transformations introduced by extended reality media, with a particular focus on forensic images and the visual culture of the V13 trial. Through an interdisciplinary approach at the intersection of aesthetics, photographic theories, and semiology, it has argued that visual evidence is not rooted in transparency but rather in measurement: a cue to interpret, analyze, and interrogate within complex media ecologies.

Beginning with the photographic paradigm of evidence, the thesis has shown how the evidentiary status of the image has historically rested on a rhetoric of objectivity and immediacy, tied to the medium-specific properties of photography, like its mechanical objectivity. This paradigm, once dominant, is now increasingly destabilized by the emergence of XR technologies that promise not just to represent reality, but to simulate presence itself.

In response to this shift, the dissertation has elaborated the concept of an “evidential paradigm”: a theoretical framework that reconfigures evidence as an inferential and interpretive construct, grounded not in visual immediacy but in an ontology of the photographic image that foregrounds its dimension of measuring tool. Drawing on Carlo Ginzburg and the history of forensic imaging, the thesis has shown how the evidential paradigm takes shape through the application of a specific gaze that conceives images as an indexical repository of data. From this foundation, it has outlined a genealogy of XR media that does not break with the photographic past but reconfigures its evidentiary logics within virtual environments.

These theoretical claims have been put to the test through an analysis of the archival visual corpus produced for the trial of the November 13, 2015, Paris attacks. By focusing on forensic and courtroom images (the images *in* the trial) the research has examined how visual evidence is rearticulated within the semiotic context of the courtroom, shaped by institutional protocols, discursive framings, and technical infrastructures. Panoramic crime scene images, in particular, have emerged as emblematic objects that embody these tensions: at once immersive and instrumental, emotionally resonant and legally codified. It has also examined the audiovisual recordings of the proceedings (the images *of* the trial) highlighting their function as institutional records and their archival and institutional status. Finally, the immersive installation *Voices of Fragments* has translated the analytical concerns raised by the images of the trial into an art-based research practice. By simulating the presence of a researcher navigating the opaque boundaries of archival secrecy, the work has conceptualised the documents as “missing pictures”, and questioned how access to the visual evidence of the V13 trial can be critically reimagined through its very absence. Rather than reconstructing the trial or reproducing its images, the installation engages the visitors through a generative, modular sound score composed of the voices of the archivists who worked on the trial, inviting a form of critical and gradual immersion of the spectators.

The implications of this work extend beyond the V13 trial. As XR media become increasingly integrated into courts, archives, museums, and journalistic practices, interrogating their evidentiary function is both a methodological and political necessity. In an age marked by post-truth discourse, this dissertation has proposed an alternative way of thinking about visual evidence: not as a neutral mirror of the world, but as a historically situated, materially mediated, and culturally contested cue. One that, within its own limits, has the potential to spark ever-new inquiry.

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