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FOREWORD

Dear Readers,

I am beyond proud to present you the fourth issue of <<The CoESPU Magazine – Advanced Studies>>.
Once again, this scientific publication stands as a platform for dialogue and reflection, for it brings together diverse perspectives from academia, practitioners, and international experts on topics at the intersection of security, culture, ethics, and innovation.
In these pages you will find a wide range of articles that capture both the challenges and opportunities facing today's Peacekeeping and the Stability Policing's community. Among them, one contribution by Lt. Carmine Barrano, a Carabinieri psychologist, explores the fascinating and sensitive field of lie detection in law enforcement interrogations; outlining strategies that, while not foolproof, may help officers had better navigate the complexities of human behavior. Another article, by Lt. Col. Stefano Bortone, takes us back to the roots of ancient Roman values and the "Mos Maiorum" (i.e., the custom of the ancestors), reflecting on how these timeless principles still inform ethical leadership and cohesion within today's Armed Forces.
Equally significant is the insightful analysis of the European Union's emerging role in Cultural Heritage Protection during crises and conflicts by Professor Paolo Foradori. The piece highlights the Union's potential to grow into a stronger global actor in this domain, so important within the Human Security's remit. On a more technical yet crucial front,

a comparative study by Lt. Col. Fabiano Gentile and CWO Paolo Martini sheds light on the similarities and divergences between battlefield evidence collection and traditional crime scene investigation, underlining the importance of a harmonized approach to ensure both operational effectiveness and the chain of custody as well as judicial accountability.

Finally, a forward-looking article by Dr. Isabella Marchese examines the transformative role of Artificial Intelligence (AI) in cultural heritage protection. It discusses both AI's promise as a preservation tool and its risks when weaponized, reminding us of the urgent need for responsible governance in this rapidly evolving field.

Together, these contributions underscore CoESPU's mission to serve as a hub where ideas, research, and operational experience converge, strengthening the global community committed to peace, stability, and the rule of law.

I invite you to read this issue with curiosity and engagement, confident it will provide not only knowledge but also inspiration for the challenges we face together.

Before letting you enjoy your reading, I would like to bid farewell to this vivid community for I am due to relinquish my duties to take over a new position as Adjutant Director to the President of the Italian Armed Forces' Centre for Highest Studies, Rome.

I trust CoESPU's dream team will confirm their passionate loyalty, their dedicated high professionalism and their steadfast commitment I have enjoyed during my 27-month long journey as their Commandant in our relentless pursuit of excellence.

Keep up the good work and Godspeed!

Giuseppe De Magistris
Brigadier General
CoESPU Commandant

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Is it possible detecting lies? Maybe yes

LT Carmine Barrano

Abstract

This article will outline several techniques that may assist law enforcement personn el in detecting potential lies, particularly during interrogations. While current scientific consensus holds that no method (polygraph included) can reliably detect deception, certain strategies may help identify information that appears inconsistent or artificial. These indicators, while not definitive, could suggest with a reasonable degree of probability.

Although more than 150 articles are published each year by scientists on the topic of lie detection, the aim of this paper is not, at least for the time being, to establish a scientifically validated protocol for detecting deception. Rather, it seeks to provide an overview of the phenomenon and explore which practical strategies may be employed in day-to-day police work to reduce the likelihood of believing lies during an interrogation.

Introduction

Many people believe that lying is inherently undesirable, while others argue that, on rare occasions and for a justifiable reason, it may be acceptable to lie[1]. Although dishonesty is generally seen in a negative light, many individuals are confident in their ability to detect deception[2], and the motivations for lying are manifold.

We may lie for various reasons, but what captures our interest most is the concept of lie detection.

Many people consider themselves to be skilled detectives and are well

1 In all the article I will use the terms lying and deception interchangeably;

2 Elaad, E. (2003). Effects of feedback on the overestimated capacity to detect lies and the underestimated ability to tell lies. Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition, 17(3), 349-363;

aware that experience sharpens their ability to spot deception. From this perspective, lying becomes something of a training ground: it is commonly believed that liars avoid eye contact or display nervous behavior. We might even pride ourselves on our abilities when we detect dishonesty in our children or partners, and the satisfaction we feel reassures us that our intuition, or "sixth sense", has proven to be a reliable ally.
As Vrij[3] stated in one of his books, *'Fortunately, we are well protected against them, because professional lie catchers are good at spotting such liars.'* But is this truly the case? In light of scientific evidence, the answer is "no". There are no infallible lie detectors, nor are there inherently poor liars. Rather, what we find are skilled deceivers and ineffective lie detectors. Deception can be undermined by a lack of motivation to lie, as well as by errors rooted in misguided beliefs about our own ability to deceive and to detect deception. In what follows, we will briefly outline some of the most persistent myths, still widespread today, that continue to create confusion and lie at the heart of many cognitive biases.
In a renowned short story by Edgar Allan Poe[4] (2009), the author recounts the confession of a man who has murdered an old man. The narrative's pivotal moment unfolds during an intense interrogation with three police officers. The protagonist, initially composed, does his best to maintain his innocence, but the situation becomes increasingly strained as the officers remain seated directly above the hidden corpse. As the psychological pressure mounts, the murderer grows anxious and visibly distressed. The officers begin to suspect his guilt, and the tension culminates when the killer starts to hear what he believes is the victim's heart beating beneath the floorboards. Convinced that the sound—actually the frantic beating of his own heart—can also be heard by the officers, he succumbs to guilt and ultimately confesses.
This phenomenon, more commonly known as the *illusion of transparency*[5] (Gilovich, 1998), tends to lead individuals to underestimate their ability to deceive. This powerful cognitive bias renders people unable to fully grasp that their thoughts, emotions, and internal states are, in fact, concealed from an external observer. As a result, they mistakenly believe that their lies are easily detectable.
Self-perception is often shaped by a positively biased illusion, where-

3 Vrij, A. (2008). Detecting lies and deceit: Pitfalls and opportunities. John Wiley & Sons.
4 Poe, E. A. (2009). Tell-tale heart. ABDO Publishing Company;
5 Gilovich, T., Savitsky, K., & Medvec, V. H. (1998). The illusion of transparency: biased assessments of others' ability to read one's emotional states. Journal of personality and social psychology, 75(2), 332;

by individuals tend to view themselves as more moral than others. Naturally, those who openly acknowledge being skilled liars deviate from this bias[6].

Another important issue concerns individuals' tendency to overestimate their ability to detect deception. Are we truly that efficient and effective at identifying lies and uncovering deceit? Robust empirical evidence suggests otherwise[7] (Verigin et. al 2019; Gray, 2011)[8]. Some scientist[9] (Vrij, 2007) have identified three major reasons that help explain why people tend to overrate their lie detection capabilities: limited motivation, inherent difficulties associated with detecting deception, and common errors frequently made by lie detectors.

Franz Kafka enthusiasts will recall that in his short story *The Metamorphosis* (2009)[10], Gregor Samsa, after undergoing his transformation, continues to behave as though nothing has changed, disregarding his new condition and the challenges it entails leading to both comical and tragic situations. As Kahan[11] (2015) puts it, the *ostrich effect* is responsible for Gregor's lack of motivation to confront the truth. In this case, the truth is avoided because it may be uncomfortable, because its consequences are feared, or simply because Gregor would not know how to respond if he were to fully acknowledge it.

As we move closer to the core of our discussion, the difficulties associated with lie detection emerge as a highly complex phenomenon. As previously noted, many people believe that the ability to detect lies is rooted in verbal or nonverbal cues; however, some researchers have demonstrated that nothing could be further from the truth (Mann et al., 2004)[12]. There is no certainty when it comes to detecting deception. In fact, some studies show that the success rate of lie detection among law enforcement officers is only slightly above chance—around 50%[13]. In other words, the equivalent of Pinocchio's growing nose simply does not exist.

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6 Elaad, E. (2003). Effects of feedback on the overestimated capacity to detect lies and the underestimated ability to tell lies. Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition, 17(3), 349-363;

7 Verigin, B. L., Meijer, E. H., Bogaard, G., & Vrij, A. (2019). Lie prevalence, lie characteristics and strategies of self-reported good liars. PloS one, 14(12), e0225566;

8 Gray, R. (2011). Lies, liars, and lie detection. Fed. Probation, 75, 31;

9 Vrij, A. (2011). Deception: A social lubricant and a seltish act. In Social communication (pp. 309-342). Psychology Press.

10 Bloom, H. (Ed.). (2009). Franz Kafka's The Metamorphosis. Infobase Publishing.

11 Kahn, W. (2015). The ostrich effect: Solving destructive patterns at work. Routledge.

12 Mann, S., Vrij, A., & Bull, R. (2004). Detecting true lies: police officers' ability to detect suspects' lies. Journal of applied psychology, 89(1), 137;

13 Ibid, pag. 99;

This is due to several fundamental reasons. First, this area of research remains relatively underexplored (Semrad et al., 2020)[14]. Second, widespread misconceptions about deception actually serve to strengthen it: experienced liars are well aware that, in order to avoid suspicion, they must maintain eye contact while speaking, and suppress nervous movements—strategies commonly employed by those intent on deceiving. Third, detecting lies is inherently difficult, and individuals frequently fail in this endeavor. Some author have identified at least eighteen different factors (Vrij et al., 2010)[15]that contribute to making someone a proficient liar, an observation that underscores just how many precautions are needed to reduce the likelihood of being deceived (Woody, 2020)[16].
A final category concerns the persistent errors made by lie detectors.
As previously mentioned, many individuals devote considerable effort to identifying so-called "diagnostic" cues that they believe reliably indicate deception (e.g., the widespread belief that liars avoid eye contact). These false beliefs persist solely within the realm of folk psychology and are commonly held by laypeople. In a recent study (Melis et al. 2024)[17], several techniques were identified that may assist lie detectors in:

- Avoiding the use of myths and misconceptions about deceptive behavior;
- Developing a protocol capable of translating theoretical insights into empirically testable models;
- Objectively assessing the effectiveness of lie detection techniques, thereby standardizing both method and practice;
- Enhancing lie detectors' awareness of their own skills and limitations;
- Reducing susceptibility to misjudgments, such as those caused by "fake good" or "fake bad" presentations.

It is important to clarify that the notion of *objective assessment* does not refer to the use of polygraphs or biofeedback-based methodologies. Instead, it concerns advanced approaches rooted in cognitive psycholo-

14 Semrad, M., & Scott-Parker, B. (2020). Police, personality and the ability to deceive. International Journal of Police Science & Management, 22(1), 50-61;
15 Vrij, A., Granhag, P. A., & Mann, S. (2010). Good liars. The Journal of Psychiatry & Law, 38(1-2), 77-98;
16 Woody, W. D., & Forrest, K. D. (2020). Understanding police interrogation: Confessions and consequences (Vol. 4). NYU Press.;
17 Melis, G., Ursino, M., Scarpazza, C., Zangrossi, A., & Sartori, G. (2024). Detecting lies in investigative interviews through the analysis of response latencies and error rates to unexpected questions. Scientific Reports, 14(1), 12268.

gy. Empirical findings on the functioning of memory, attention, cognitive flexibility (i.e., the ability to switch between different stimuli), and reasoning processes provide a solid foundation for designing tailored tools capable of counteracting deceptive behaviors. These cognitive mechanisms offer a promising avenue for the development of refined instruments aimed at detecting deception with greater accuracy and reliability (Elliott et al 2016)[18].

Verbal and non verbal cues to deception

A famous quote by Freud states: *"He who has eyes to see and ears to hear may convince himself that no mortal can keep a secret. If his lips are silent, he chatters with his fingertips; betrayal oozes out of him at every pore"* (Freud, 1959)[19]. According to this theory, verbal and nonverbal cues are intertwined, such that one does not betray the other, allowing the truth—though hidden—to emerge with relative ease. A metaphorical corollary of this principle can be found in the character of Pinocchio, whose nose elongates as a behavioral (and thus nonverbal) indicator of deception.

However, there exists a variation known as the *Pinocchio Paradox* (Eldridge-Smith, 2010)[20], which draws on a fascinating reinterpretation of the classical Liar Paradox (Arenhart & Melo, 2022)[21].

The first reference to the consequences of lying appears in Chapter 17 of Collodi's *Pinocchio*, where it is established that if Pinocchio lies, his nose will grow; conversely, if he tells the truth, his nose will shrink. Now, suppose Pinocchio says: *"My nose is growing right now."* If he is telling the truth, then his nose should not grow—implying he is lying. But if he is lying, then his nose should grow, thereby making the statement true. This gives rise to the paradoxical question: is Pinocchio lying or telling the truth? Pinocchio's nose grows if and only if what he is asserting is false.

However, he asserts: *"My nose is growing."* Thus, Pinocchio's nose grows if and only if it is not growing. This is clearly a version of the Liar Paradox, but also an evident variant of the so-called "Truth-teller" paradox. Its distinctive feature lies in the fact that it does not rely on a semantic synonym of "truth" within a false statement. The nose's growth

18 Elliott, E., & Leach, A. M. (2016). You must be lying because I don't understand you: Language proficiency and lie detection. Journal of experimental psychology: applied, 22(4), 488.

19 (Freud, S. (1959). Collected papers.(5 vols.)., p. 94);

20 Eldridge-Smith, P., & Eldridge-Smith, V. (2010). The pinocchio paradox. Analysis, 70(2), 212-215;

21 Arenhart, J. B., & Melo, E. S. (2022). The liar paradox: Between evidence and truth. Logic and Logical Philosophy, 31(2), 289-311;

is a physical (facial) characteristic rather than a semantic one.
Moreover, although the growth of Pinocchio's nose occurs precisely when he is lying, the relationship is not semantic. It may be causal or of another kind, but it is not a semantic dependency. The nose grows *because* he is lying—not as a linguistic synonym of "falsehood." The statement "is growing" is not synonymous with "is false," and the story of Pinocchio remains fully intelligible without presuming that "is growing" holds a special meaning beyond its literal interpretation.
This paradox, while consistent with other paradoxes stemming from the same logical structure[22], reveals a great deal about the nature of lying even prior to the identification of behavioral cues. In this context, paradoxes serve as powerful tools, illustrating how logic itself can at times elude truth.
A first principle can be stated using the words of a leading author in the field of lie detection *"The verbal cues lie tellers spontaneously report during interviews are weak and unreliable."* (A. Vrij, 2023, p. 245)[23]
However, there are strategies that can help reduce the likelihood of accepting a false statement as true, or dismissing a true statement as false. At a micro-level, both verbal and nonverbal cues can provide valuable information

On Nonverbal Cues

At the nonverbal level, the multifactor model proposed by Zuckerman (1981)[24] suggests that several factors contribute to the detection of deception. These include:

1. Emotional arousal;
2. Cognitive load;
3. Behavioral control;

Feelings such as guilt, fear, disappointment, and excitement can influence a liar's behavior in various ways. For example, guilt may result in reduced eye contact, diminished body orientation (i.e., the degree to which the torso and head are oriented toward the interlocutor), and a decrease in illustrative gestures—those that accompany and support

22 Consider, for example, Russell's paradox: in this case, the author argues that the set of all sets that do not contain themselves as members belongs to itself only if it does not belong to itself.;
23 Vrij, A., Leal, S., & Fisher, R. P. (2023). Interviewing to detect lies about opinions: the Devil's Advocate approach. Advances in Social Sciences Research Journal, 10(12), 245-252.
24 Zuckerman, M., Koestner, R., & Driver, R. (1981). Beliefs about cues associated with deception. Journal of Nonverbal Behavior, 6, 105-114;

speech.
Excitement, on the other hand, may lead to behavioral signs of joy, such as increased bodily movement and smiling. Fear can increase physiological arousal, which in turn may produce observable cues such as increased blink rate, self-adaptors (e.g., touching one's clothes, hair, or face), speech hesitations (e.g., "um" and "er"), pronunciation errors (e.g., stuttering, word repetition, word omissions), and changes in vocal pitch (i.e., a higher fundamental frequency of speech).
With regard to cognitive load, a large body of research[25] (Spence et al., 2001; Christ et al., 2009)[26]
has suggested that deception typically requires greater mental effort than truth-telling. This is due in part to the additional cognitive demand involved in crafting a narrative that leaves no room for ambiguity. However, this process warrants a more in-depth discussion.
As early as 1885, the renowned scholar Hermann Ebbinghaus[27] demonstrated that memory traces tend to decay over time. This finding, which has since become a cornerstone in the study of memory (Röhrs, 2022)[28], supports the view that memory is not a linear process, but rather something greater than the simple sum of its recalled elements. This model implies two key principles: a) the number of items that can be recalled is inherently limited and *b)* this limit is more pronounced for newly learned material than for information acquired through natural experience (i.e., we tend to recall autobiographical memories more easily than learned content).
From this, it becomes evident that any additional demand on memory increases cognitive effort. A sustained increase in cognitive load, therefore, becomes difficult to maintain over time—an insight that has practical implications in investigative settings. For example, during certain interrogations, individuals may be asked to perform a secondary task while responding to questions. This dual-task approach imposes a heavy cognitive burden, often leading individuals to revert to truthful responses, which are cognitively less demanding to access and articu-

25 Spence, S. A. et al. Behavioural and functional anatomical correlates of deception in humans. Neuroreport 12, 2849–2853 (2001);
26 Christ, S. E., Van Essen, D. C., Watson, J. M., Brubaker, L. E. & McDermott, K. B. The contributions of prefrontal cortex and executive control to deception: Evidence from activation likelihood estimate meta-analyses. Cerebral Cortex 19, 1557–1566 (2009);
27 Ebbinghaus, H. (1885). Über das gedächtnis: untersuchungen zur experimentellen psychologie. Duncker & Humblot;
28 Röhrs, S. (2024). Memory Studies. Handbuch Kulturwissenschaftliche „Studies ", 379;

late[29] (Gullberg et al 202)[30].
Therefore, unlike truth-tellers, liars cannot assume that their falsehoods will be believed over time and this is true for at least two reasons. The first concerns the motivation to avoid negative consequences: for instance, a drug dealer will attempt to appear honest and will do everything possible to maintain that impression. In other words, liars often try to get away with deception through what has been described as the *illusion of transparency*, the mistaken belief that their honesty is more apparent than it truly is (Granhag, Strömwall, & Hartwig, 2007[31]; Kassin, 2005[32]; Kassin & Gudjonsson[33], 2004).
Second, liars tend to overload their memory, particularly during interrogations, as they attempt to monitor the reactions of their interviewers in real time in order to calibrate the extent and content of their deception (Weikmann et al, 2025)[34].
With regard to behavioral control, the experienced liar will attempt to adjust their behavior based on the perceived meaning of specific actions within a given context, in order to appear credible—even though this is not an easy task (Gurbanli, 2024)[35].
This objective is proportional to the ultimate purpose of lying (Krstić, 2024)[36]: it is evident that when the stakes are high, the lie will be crafted with particular attention to detail. The reverse is also true—when the stakes are low, the principle of avoiding detection still applies.
Finally, behavioral control is understood as an attempt to influence others by leading them to believe one's statements, achieved through the "study" of the victim's personality (Beattie, 2024)[37].
Another theoretical perspective (DePaulo, 2004)[38] argues that both

29 Gullberg, K., Johansson, V., & Johansson, R. (2024). In Scriptura Veritas? Exploring measures for identifying increased cognitive load in speaking and writing. Languages, 9(3), 85.
30 In practice, however, certain cognitive strategies can partially mitigate this effort. One such strategy is subvocal rehearsal—that is, the continuous mental repetition of information related to an event—which can enhance the resilience of memory against cognitive load;
31 Granhag, P. A., Str¨omwall, L. A. & Hartwig, M. (2007). The SUE technique: The way to interview to detect deception. Forensic Update, 88, January, 25–29;
32 Kassin, S. M. (2005). On the psychology of confessions: Does innocence put innocents at risk? American Psychologist, 60, 215–228;
33 Kassin, S. M., & Gudjonsson, G. H. (2004). The psychology of confessions: A review of the literature and issues. Psychological Science in the Public Interest, 5, 33–67;
34 Weikmann, T., Greber, H., & Nikolaou, A. (2025). After deception: how falling for a deepfake affects the way we see, hear, and experience media. The International Journal of Press/Politics, 30(1), 187-210.
35 Gurbanli, J. (2024). Impression management following a major crisis event: structured literature review.
36 Krstić, V. (2024). Lying by Asserting What You Believe is True: a Case of Transparent Delusion. Review of Philosophy and Psychology, 15(4), 1423-1443.
37 Beattie, G. (2024). Lies, Lying and Liars: A Psychological Analysis. Taylor & Francis
38 DePaulo, B. M. (2004). The many faces of lies. The social psychology of good and evil, 303-326.

truth-tellers and liars share a common goal: to be believed. Consequently, individuals who tell the truth, much like those who lie, experience a significant cognitive load and emotional effort in order to appear credible, driven by the conviction that their statements are sincere and that the truth should not be denied.
On the other hand, liars are less likely to take being believed for granted and therefore invest less effort in displaying behaviors aimed at asserting the truth.
Taking credibility less for granted implies that liars, more so than truth-tellers, are inclined to believe that it is important to make a convincing impression on others. As a result, they tend to be more concerned with how they are perceived compared to those who tell the truth.

On verbal cues

In everyday life, the content of discourse is often distorted. A demonstration of this phenomenon is found in the Dunning-Kruger[39] effect, a cognitive bias that leads individuals to overestimate their own abilities and to overlook their limitations, often resulting in the expression of judgments and consequently, the spread of false information. Although this effect is only tangentially related to verbal indicators of deception, it illustrates how difficult it can be to distinguish a deliberate lie from an unintentional falsehood.
As previously mentioned, false statements are defined as knowingly and deliberately untrue assertions made in order to avoid unpleasant consequences. While this distinction may seem obvious, in interrogation contexts these factors are frequently confused, leading to false positives and false negatives. False positives refer to innocent individuals wrongly identified as guilty, whereas false negatives occur when guilty individuals are mistakenly judged to be innocent.
Based on these considerations, verbal cues of deception have a significant impact on determining the truth and the consequences that follow from it.
Some scholars have proposed specific individual verbal cues which, to date, are incorporated into validated tools used by professionals in the field (Vrij, 2019)[40]. These verbal indicators include:

39 Dunning, D. (2011). The Dunning–Kruger effect: On being ignorant of one's own ignorance. In Advances in experimental social psychology (Vol. 44, pp. 247-296). Academic Press
40 Vrij, A. (2019). Deception and truth detection when analyzing nonverbal and verbal cues. Applied Cognitive Psychology, 33(2), 160-167.

1. *Negative States:* These reflect aversive reactions toward something or someone perceived as potentially threatening, often expressed through words conveying disgust or a generally negative mood. As previously discussed in the context of nonverbal cues, negative states can also be communicated behaviorally, giving them a dual significance. Liars may have greater control over the expression of these states, while truth-tellers tend to regulate them less consciously.
2. *Generalizing Terms:* Imprecise expressions such as "often," "never," "always," or "sometimes" do not convey a clearly defined quantity. This vagueness allows for adjustment during the course of an interrogation. Moreover, the ability to strategically use such terms may differ between liars and truth-tellers, with liars potentially being more adept at manipulating these adverbs to fit their narrative.
3. *Self-Referential Language:* Similar to generalizing terms, the use of self-referential pronouns such as "I" and "me" may indicate a tendency to center the narrative on oneself in order to justify one's position. This tendency is associated with the idea that liars may exhibit fewer moral inhibitions about deception, and therefore rely more heavily on their own perspective while paying less attention to the viewpoint of others.
4. *Immedicacy:* This refers to responses that are direct and relevant to the interlocutor, respecting interpersonal distance and avoiding evasiveness or detachment. Immediacy is more difficult to detect reliably, as liars are often highly motivated to appear convincing— sometimes even more so than truth-tellers. Additionally, individuals who are telling the truth may experience anxiety about not being believed, which can lead them to display behaviors that are consistent with immediacy, thereby complicating interpretation.
5. *Response Length:* Liars tend to study the personality of their target and engage in a high degree of self-monitoring, which allows them to assess whether a clear and verbose style is more effective than a disjointed, incoherent one. The latter style—characterized by fragmented or loosely connected words—is more frequently observed in truth-tellers, particularly when they are anxious about their credibility being overshadowed or dismissed in the face of

deception.

6. *Plausible Responses:* These refer to answers that align with what the interviewer commonly expects to hear. Some authors (Masis et al., 2018)[41]investigated the use of plausible responses in a large sample (over 500 participants) and found that liars tend to repeat the same story consistently. This repetition is a strategy to avoid contradictions and to prevent offering inconsistent or confabulatory responses.
7. *Lexical Diversity:* Lexical diversity in liars is defined as the ratio between the number of different words used and the total number of words in a given statement. These measures were introduced by Vrij (2008)[42]as part of efforts to develop tools capable of providing an objective assessment of the linguistic pragmatics employed by liars as compared to truthtellers.
8. *Consistency:* This element has been extensively investigated by researchers (Deck et al., 2020)[43]. Consistency refers to the degree to which identical informational details are provided either by the same person across different accounts or by two independent individuals. This criterion is frequently employed in investigative interviews and police interrogations, particularly when objective evidence is lacking. In such cases, a sufficient number of converging elements are sought to reconstruct the historical truth of the events. Relevant details can be central, pertaining to the core of the event (e.g., whether it occurred during the day or at night) or peripheral (e.g., what kind of shoes the perpetrator wore). These details are closely connected to other indicators, such as: a) Immediacy, since a short, direct, and precise response is more likely to be interpreted as truthful than one that is slow, vague, or tangential, b) Generalizing Terms, as vague spatial or temporal expressions may signal a lack of detail and therefore a narrative that can be more easily modified by the liar, c) Lexical Diversity, because liars often prefer to repeat the same version using the same words in order to avoid altering the meaning of their statement. It is important to stress that these indicators should be applied primarily in

41 Masip, J., Martínez, C., Blandón-Gitlin, I., Sánchez, N., Herrero, C., & Ibabe, I. (2018). Learning to detect deception from evasive answers and inconsistencies across repeated interviews: A study with lay respondents and police officers. Frontiers in psychology, 8, 2207;

42 Vrij, A. (2008). Detecting lies and deceit: Pitfalls and opportunities, second edition. Chichester: John Wiley and Sons;

43 Deck, S. L., & Paterson, H. M. (2020). Liars are perceived as more credible than truth-tellers who recall a repeated event. Applied Cognitive Psychology, 34(3), 643-653;

the absence of objective evidence or when the reconstruction of events relies heavily on witness testimony (Oxburgh, 2011)[44].

9. *Latency:* The latency period refers to the amount of time an individual takes to respond to a question. For example, when asked to state their own name and surname, the response time is typically short. However, if asked about the day associated with their zodiac sign, a truthful person is likely to respond immediately, whereas a deceiver unprepared for such a question will generally require more time to formulate an answer.
10. *Contradictions:* can be defined as a lack of continuity between different elements within a single statement or across multiple statements, such that the semantic units stand in an antagonistic relationship to one another. In contradiction, unlike coherence, a genuine semantic "derailment" occurs among the constituent elements of the statement, leading to a disruption in the logical structure of the narrative that undermines its causal framework. It is important to note that contradiction is not necessarily a pathological indicator, nor should it always be interpreted negatively; it can also be related to the normal functioning of memory. For instance, in a police report, a victim initially states they were robbed of their wallet, which contained identification documents, and that the perpetrator was wearing a blue t-shirt. When asked for further details, the victim claims to have seen nothing else. However, several weeks later, when contacted by the police regarding the recovery of the stolen documents, the victim now reports that the assailant was wearing white Nike shoes and had a scar on his right arm. If the victim had previously stated that they saw nothing more, does this not constitute a contradiction? Science tells us otherwise. The recall of additional details not included in the initial report is not necessarily indicative of deception or cognitive dysfunction, but rather can reflect a normotypical memory process (Kensinger, 2009)[45]. Recall is a physiological function that can be influenced by multiple factors such as attention, emotional engagement, and the organization of information (Petrucci et al 2021)[46]. At the time of the event, excessive arousal may impair the

44 Oxburgh, G. E., & Dando, C. J. (2011). Psychology and interviewing: what direction now in our quest for reliable information?. The British Journal of Forensic Practice, 13(2), 135-144;
45 Kensinger, E. A. (2009). Remembering the details: Effects of emotion. Emotion review, 1(2), 99-113;
46 Petrucci, A. S., & Palombo, D. J. (2021). A matter of time: how does emotion influence temporal aspects of remembering?. Cognition and Emotion, 35(8), 1499-1515;

immediate retrieval of useful information for suspect identification a phenomenon considered entirely normal. However, suspicion may be warranted in cases where, during reports of highly emotionally charged events, an unusually large number of detailed elements are provided all at once at the beginning of the statement. Such accounts may merit further scrutiny, as they deviate from typical patterns of memory processing and retrieval. Based on the available literature, the analysis of a set of verbal cues has enabled researchers to classify, with an accuracy ranging from 67% to 80%, whether an individual is telling the truth or lying[47] (Bond et al., 2005; Loconte et al., 2025)[48], demonstrating promising potential for future research.

Unexpected answers as a possible predictor of the lies

Within the domain of interrogation techniques, various protocols have been developed, each of which should ideally be included in personnel training programs to optimize their application.

However, some authors[49](Vrij et al., 2014; Warmelink et al., 2019)[50]have proposed specific strategies designed to be implemented by law enforcement officers during interrogations even in the absence of prior training, with the aim of assessing whether the interviewee is being truthful.

The technique presented here is based on a nonverbal cue previously discussed: cognitive load. This term refers to a demand placed on memory that exceeds typical cognitive processing capacity. For example, drivers can usually operate their vehicles while conversing with a passenger without any noticeable effort. However, imagine a driver who, while navigating through a city full of intersections, is simultaneously required to solve a complex logic problem. At the very least, the driver is likely to miss a turn and deviate from the intended route. This occurs because their memory is managing a dual-task demand: attending to navigation while simultaneously solving a cognitively de-

47 Bond, G. D., & Lee, A. Y. (2005). Language of lies in prison: Linguistic classification of prisoners' truthful and deceptive natural language. Applied Cognitive Psychology, 19(3), 313-329;

48 Loconte, R., Battaglini, C., Maldera, S., Pietrini, P., Sartori, G., Navarin, N., & Monaro, M. (2025). Detecting Deception Through Linguistic Cues: From Reality Monitoring to Natural Language Processing. Journal of Language and Social Psychology, 0261927X251316883.

49 Vrij, A., Hope, L., & Fisher, R. P. (2014). Eliciting reliable information in investigative interviews. Policy Insights from the Behavioral and Brain Sciences, 1(1), 129-136.

50 Warmelink, L., Subramanian, A., Tkacheva, D., & McLatchie, N. (2019). Unexpected questions in deception detection interviews: Does question order matter?. Legal and Criminological Psychology, 24(2), 258-272.

manding task. The key point is that the logic task consumes substantial cognitive resources, thereby reducing the availability of attentional resources (specifically prospective memory) needed to achieve the goal namely, making the correct turn at a specific intersection.
A similar mechanism is observed in the case of unexpected questions (Leppink[51], 2020; Fenn et al., 2020)[52]. This technique centers on the unpredictability of the questions posed. From this perspective, the "unexpected question technique" can be effectively implemented in investigative interviewing to enhance the accuracy of deception detection. When confronted with unanticipated
questions, truth-tellers tend to respond instinctively, whereas deceivers struggle to fabricate plausible answers on the spot without prior rehearsal.
These questions can cover a range of topics—from future behavioral intentions, such as: *"I want you to think back to when you planned your errand. Tell me about your planning process, and be as detailed as possible"* (Sooniste et al 2015)[53]; to spatiotemporal details, for example: *"Relative to the front door, where were you and your friend sitting?"* (Vrij, 2009)[54]; to specific personal information, such as: *"Is Venice the capital of your region of residence?"*. The key advantage of using such questions is that they effectively disrupt the deceiver's narrative.
A recent study by Melis et al. (2024)[55]revealed a notable difference between two groups one instructed to answer truthfully and the other to fabricate responses based on a narrative. Analyzing response latencies[56], deceptive participants exhibited significantly longer delays compared to truthful ones, even when responding to control questions.
This approach suggests that unexpected questions are particularly effective at eliciting cues to deception, as they reduce the deceiver's ability to prepare misleading responses in advance. In other words, honest participants consistently demonstrated shorter reaction times and few-

51 Leppink, J. (2020). Revisiting cognitive load theory: Second thoughts and unaddressed questions. Scientia Medica, 30(1).
52 Fenn, E., McGuire, M., Langleben, S., & Bland_on-Gitlin, I. (2015). A reverse order interview does not aid deception detection regarding intentions. Frontiers in Psychology, 6, 1298.
53 Sooniste, T., Granhag, P. A., Strömwall, L. A., & Vrij, A. (2016). Discriminating between true and false intent among small cells of suspects. Legal and Criminological Psychology, 21(2), 344-357.
54 Vrij, A., Leal, S., Granhag, P. A., Mann, S., Fisher, R. P., Hillman, J., & Sperry, K. (2009). Outsmarting the liars: The benefit of asking unanticipated questions. Law and human behavior, 33, 159-166.
55 Melis, G., Ursino, M., Scarpazza, C., Zangrossi, A., & Sartori, G. (2024). Detecting lies in investigative interviews through the analysis of response latencies and error rates to unexpected questions. Scientific Reports, 14(1), 12268.
56 See point 9 on the verbal cues

er errors, likely because their answers were based on actual memories rather than fabricated accounts.
The strategy of reducing cognitive load by preparing for an interview—anticipating potential questions and formulating answers in advance—is only effective if the deceiver can accurately predict the questions that will be asked. The effectiveness of this technique is well supported (Leins et al 2011)[57], with studies demonstrating a 71% success rate in distinguishing truth from deception—a significant improvement over the 56% success rate observed with traditional methods (Vrij et al 2017)[58].

Conclusion

In the preceding sections, we briefly discussed common myths about deception, the reasons why lies are difficult to detect, and the measures that can be adopted to i prove their identification.
It is evident that these measures grounded in a broad body of scientific literature not only provide valuable insights for professionals in the field but also offer the opportunity to:

- Adopt evidence-based strategies for lie detection;
- Conduct more accurate and effective interrogations;
- Revise existing manuals to incorporate standardized techniques such as those previously discussed;
- Establish training programs aimed at increasing personnel's knowledge and awareness of the psychology of deception;
- Provide the criminal court with a richer set of details through procedures that ensure a significantly higher degree of reliability compared to traditional methods;
- More broadly, promote the development of a professional identity characterized by attention to detail and methodological rigor.

In order to temper the wave of enthusiasm, it is important to reiterate that these techniques do not constitute a panacea for lie detection. While the probability of success is considerable, much remains to be done to enhance our understanding and refine the available tools—potentially including the integration of artificial intelligence.

57 Leins, D., Fisher, R. P., Vrij, A., Leal, S., & Mann, S. (2011). Using sketch drawing to induce inconsistency in liars. Legal and Criminological Psychology, 16(2), 253-265.
58 Vrij, A., Fisher, R. P., & Blank, H. (2017). A cognitive approach to lie detection: A meta-analysis. Legal and Criminological Psychology, 22(1), 1-21.

THE STRENGTH OF ORIGINS

The Mos Maiorum between History, Ethics, and Military Doctrine.

The modern relevance of an ancient model

LTC Stefano Bortone

Abstract:

This article provides an in-depth examination of the concept of *Mos Maiorum*, the complex system of values, unwritten norms, and customs which founded and shaped the social, juridical, and military identity of ancient Rome. The analysis combines a historical perspective with an ethical-doctrinal interpretation, tracing the roots of the *Mos Maiorum* from its archaic origins, its evolution through the institutional changes of Roman civilization, and the transmission of its essential values—*Virtus, Pietas, Fides, Maiestas, and Gravitas*—up to the process of Hellenization and the emergence of *Humanitas*.

The article highlights the central difference between *mos* and *consuetudo*, the process of the normativization of the *mores*, and the related sanctions, emphasizing the role of these values as both the glue and regulatory principle of civic and military community. The central part of the article investigates the relationship between the crisis of values in contemporary society and the rediscovery or critical revision of the *mores*, offering a reflection on the defense of tradition, the risk of anachronism, and the possibility of updating classical virtues in a modern key.

A dedicated focus is given to the impact of the *Mos Maiorum* on the military sphere: ethical tradition as an unwritten code within the Armed Forces, the educational and symbolic value of the Italian Oath, and the ways in which the *mores* inform both ethical leadership and military command practices.

This article, addressed to scholars, educators, and defense professionals, argues that the persistence and reworking of *Mos Maiorum* values can still today provide a robust model for the formation of responsible citizenship, institutional cohesion, and the growth of ethical leadership, capable of facing the challenges of the contemporary world with deep roots—especially in the fields of doctrine and military identity.

Introduction

By the term *Mos Maiorum*, the Romans meant the set of values and unwritten norms that constituted their national identity. At the base of Latin civilization, there was no sacred book as among the Hebrews, nor an epic text as in Greece[1]; instead, there was a series of customs and behavioral models to be imitated, transmitted directly by the *maiores*—the ancestors considered "greater" both in moral and ethical terms. The term *mos*, although often simplistically translated as "custom," actually has a much broader and deeper meaning, rich in ideal and pragmatic value. Suffice it to say that the Italian word "morale[2]" comes from the plural *mores*.

A fundamental principle of the *Mos Maiorum* was the absolute preeminence of the State over the individual citizen, who always had to put the collective interest above their own. The figure of the *bonus*, the virtuous person or man of honor, was distinguished not so much by personal qualities but because, through these, he contributed extraordinarily to the defense of the State, the well-being of the citizens, and the prestige of Rome.

1. ROOTS OF THE *MOS MAIORUM* AND HISTORICAL DEVELOPMENT

1.1 Historical Background

Originally, already from the 10th century BC, the sources of the *mores* were nothing other than the behaviors of the *patres*, considered founders of what would later become the *familiae*[3], the *gentes*[4]. These

1 One might think of Homer's Odyssey or Virgil's Aeneid

2 In English: Morality. A set of principles or values that distinguish between right and wrong or good and bad behaviour, guiding how individuals or societies ought to act

3 Familiae (singular: familia) in ancient Rome referred to the extended family unit, including not only the nuclear family (parents and children), but also slaves, freedmen, and other dependents under the authority of the paterfamilias

4 Gens (plural: gentes) indicated a wider kinship group or clan, encompassing several familiae who claimed descent from a common ancestor and shared the same nomen (family name). The gens represented a social

unwritten laws regulated society and the life of the Roman citizen even before the drafting of the Twelve Tables[5], based on orality and memory, deriving their *auctoritas* from repeated application over time. During this phase, the *mores* were guarded, administered, and interpreted by the priests.

Sextus Pomponius, in his *De origine iuris*[6], hypothesized that during the regal era most of the *mores* would have converged into the body of norms called *leges regiae*: "At the beginning of our city, the people, without a stable law and without certain rights, decided to act; everything was governed by the kings with their power."

In that era, therefore, not only the priests but also the rex and the *pontifices maximi* were custodians of the *mores*, with the duty of interpreting and revealing them. Only in the Republican era[7], under strong pressure from the plebeians, was the law of the Twelve Tables enacted in 450 BC, a compilation of the *mores* in force up until then. The interpretation of these rules remained, however, in the hands of the pontiffs.

With the Imperial era[8], as Roman law became stronger and more codified, the role of the *mores* was progressively diminished, so much so that, according to the jurist Julian, the *mores* had to be followed only in the absence of contrary laws, and were thus reduced to prevailing almost exclusively in pagan religious rites, losing nearly all their legal relevance.

1.2 Difference between Mos and Consuetudo

Before examining and describing the values of *Romanitas*, it is essential to underline a crucial distinction to understand the civil and ethical importance of the *mores*: the substantial difference between *mos* and *consuetudo*. Until recently, Roman law studies tended to consider the two terms as

and legal unit that played an important role in Roman political, religious, and social life

5 The Law of the Twelve Tables: the earliest codification of Roman law, compiled in the mid-5th century BCE. These twelve bronze tablets set out the basic rights, duties, and legal procedures for Roman citizens, forming the foundation of Roman legal tradition.

6 A significant legal treatise from ancient Rome, preserved as part of Justinian's Digest. In this work, Pomponius outlines the origins and historical development of Roman law, describing how legal norms (leges, mores, consuetudines) were established and evolved over time—from the earliest customs and royal laws (leges regiae), through the Republic and into the Empire. Pomponius' text is a foundational source for understanding the structure, sources, and historical stratification of Roman legal tradition

7 Refers to the period in Roman history between the end of the monarchy and the beginning of the Empire, traditionally dated from 509 BC to 27 BC

8 Refers to the period in Roman history that began with the establishment of the Principate under Augustus in 27 BC and ended with the fall of the Western Roman Empire in 476 AD

synonyms. However, in recent years—and thanks to a more in-depth examination of the sources—some significant differences have been recognized.

The *mores* can be defined as customs and practices revealed and promoted through the intervention of the priests, with the aim of pursuing the good of the entire community. Precisely for this reason, the *mores* were attributed a juridical and religious character of sanctity.

On the other hand, the *consuetudo* (or *consuetudines* in plural) consists of habits and customs followed by the people out of routine. These customs do not have a sacred character and are not sanctioned or revealed by any authority: they are simply behaviors lacking the ancestral factor, without authoritative components and, above all, without the purpose of collective good.

This distinction allows us to understand how the *mores*, in the Roman world, were not only simple social habits, but real regulatory principles of coexistence that deeply shaped the moral and civic structure of the community.

1.3 The Main Values

The *Mos Maiorum* was based on five essential values:

- *Virtus*
- *Pietas*
- *Fides*
- *Maiestas*
- *Gravitas*

With Hellenization[9], *Humanitas* was later included among these.

Virtus referred to personal courage, both physical and moral strength, the ability to stand out in battle, confidence in one's own abilities, and the fate of the Roman State, combined with reverent fear toward the gods and respect for the laws. *Virtus* was to be exercised not for perso-

9 In the context of Roman history, Hellenization describes the gradual integration and adaptation of Greek elements—such as art, education, philosophy, religion, and literature—into Roman society, especially from the 3rd to the 1st Century BC. This process profoundly influenced Roman cultural, intellectual, and social life, shaping the development of Roman values and institutions

nal gain, but for the good of the community.

The concept of *Pietas* is more difficult to define: it included duty, religious devotion, justice, filial love, affection, and faithfulness. The meaning of "compassion" acquired in modern language is secondary compared to the original Roman value.

Fides was the oldest and most honored virtue in Rome, whose cult was established by Numa Pompilius and later restored by the emperors as *fides militum*, or "the loyalty of the soldiers." Its core meaning is loyalty and fidelity to one's word.

Maiestas represented the State as a direct expression of the people: first through republican institutions, later via the figure of the Emperor. It conveyed the sense of greatness, belonging, pride in being Roman, and superiority over conquered peoples.

Gravitas referred to all those qualities considered essential for the ideal Roman citizen: seriousness, composure, dignity, and self-control.

Humanitas, a concept and word introduced through contact with Greek culture—according to Terence[10]—meant the willingness to understand the reasons of others, to feel the pain of others as one's own, to regard a man not as an enemy but as another human being to comprehend and help.

As Renato Oniga[11] emphasized: "The essence of Roman *humanitas* precisely lies in being the other face of a precisely ordered and strict set of values, integral to the code of conduct of the Roman citizen from the origins. The idea of *humanitas* encapsulated them all, but at the same time softened them, making them less rigid and more universal."

1.4 Secondary Values

In addition to the main values already outlined, over time the authorities—emperors, priests—established further values to be pursued, ai-

10 In Latin, Publius Terentius; ca. 195/185–159 BC, a Roman playwright. He is known for his refined comedies, which adapted Greek theatrical models for Roman audiences and became classics of Latin literature. Terence's works are noteworthy for their sophisticated character development, exploration of human nature, and promotion of the value of humanitas: a concept that had a lasting impact on Roman ethical thought
11 A distinguished Italian classicist and scholar of Latin language and literature. He is especially known for his research on Roman thought, culture, and the concept of humanitas. His works—such as "L'idea latina di humanitas"—are widely referenced in the field of classical philology and provide authoritative insight for modern academic discussion on ancient Roman values

med at making the homeland better. These values were selected both in reference to previous tradition and in response to contemporary needs, adapting and modeling them according to the reality of the *civitas*[12].

Among the main secondary values are:

- *Amicitia*: not simply in the modern sense of "friendship," but also as an alliance or bond of respect toward other peoples.
- *Ambitiosa morte:* the value attributed to suicide, considered preferable to a life without dignity.
- *Abstinentia:* especially in relation to public administration, denotes honesty and moral integrity.
- *Auctoritas:* expresses credibility, charisma, and personal responsibility.
- *Clementia:* the ability, for those in power, not to be dominated by anger or vengeance.
- *Constantia:* firmness, tenacity, mental strength, consistency.
- *Decorum:* decorum, decency.
- *Disciplina:* discipline, education and training, both civic and military, of the citizen.
- *Exemplum:* the duty to imitate and multiply a glorious action accomplished by an ancestor; the importance of example.
- *Honor:* the centrality of honor itself as a guiding value.
- *Magnitudo animi:* greatness of spirit, magnanimity.
- *Nobilitas:* in an abstract sense, representing the aspiration to be worthy of the greatness and virtues of one's ancestors.

Ancient scholars and jurists would often draw up genuine lists of such values, to be possessed in order to be considered *bonus civis*—the model citizen—so as to provide concrete examples to fellow citizens.

12 A Latin term referring to the collective body of citizens in a state, as well as the legal status and rights associated with Roman citizenship

1.5 Sanctions for Non-Observance

As seen, at least until the full maturation of Roman law, the *mores* were considered true principles of enforceable law within the *civitas*. To violate these "norms," which derived their *auctoritas* from patriarchal lineage, meant at the same time to break the civil order and to commit a religious crime.

Violations of the *mores* could produce different effects, depending on the gravity of the transgression. Consequences ranged from measures similar to infamy or ignominy up to the death penalty and even *damnatio memoriae*, i.e., the deliberate erasure of all public memory (portraits, inscriptions, historical remembrance) of the condemned.

It is worth noting that every decision concerning the violation of the *mores* constituted a genuine judicial precedent, capable of influencing future evaluations of similar cases.

2. THE *MOS MAIORUM* "IN" AND "OF" MODERN SOCIETY

The first crisis that led to the fall of the Roman Empire was principally a crisis of morals, already evident after the conquest of Carthage: the so-called "price of the Empire[13]". Similarly, today we are experiencing a crisis of values which, at least since the end of World War II, has led to a progressive depreciation of the foundational principles of society. The other crises—political, religious, even the current economic one—are all connected to this original crisis of values, customs, and practices: Rousseau[14] warned of this centuries ago, describing them as "the most sacred laws of a people."

Polish sociologist Zygmunt Bauman[15] has described contemporary so-

13 The price of empire: refers to the moral and ethical decline experienced in Roman society following the expansion of the empire, marked by growing materialism, loss of traditional virtues, increased corruption, and the erosion of civic responsibility

14 Jean-Jacques Rousseau (1712–1778) was a Swiss-born philosopher, writer, and influential figure of the Enlightenment. Rousseau argued for the inherent goodness of humanity, the social origins of inequality, and the importance of direct participation and civic virtue in public life. He frequently emphasized the foundational role of customs, traditions, and "the most sacred laws of a people" (les plus sacrées des lois d'un peuple) for social cohesion and moral development. Rousseau's ideas have had a lasting impact on political philosophy, the notion of citizenship, and debates about tradition and modernity

15 Zygmunt Bauman (1925–2017) was a Polish sociologist, philosopher, and one of the preeminent social theorists of the late 20th and early 21st centuries. He is best known for developing the concept of "liquid modernity," which describes the contemporary condition of rapid change, uncertainty, and the weakening

ciety as "liquid," a term that has now become common usage. But what, exactly, is a liquid society?

With the disappearance of the idea of community, rampant individualism emerges: no one is a fellow traveler anymore, but an adversary. This subjectivism undermines the foundations of modernity and renders it fragile. In the absence of true points of reference, everything dissolves in a sort of liquidity. Certainty of law is lost, leaving only the need to appear at all costs, and consumerism. This consumerism is no longer even aimed at acquiring lasting objects, but instead makes each object of desire quickly obsolete, causing the individual to move from one consumption to the next in a kind of "aimless bulimia."

Liquid modernity, as Bauman observes, is "the belief that change is the only permanent feature and that uncertainty is the only certainty." As a result, we are witnessing a rapid—and not so slow—erosion of values, even those until a few decades ago considered the foundation of a just society. This phenomenon is transversal and affects all institutions, creating a true *vacatio*[16], a lack of strong references.

This state is felt, but is often also exploited, especially by younger generations who have replaced the examples of the *Patres* with the pursuit of ephemeral values, convinced that these can lead to self-realization and a sense of belonging. Social networks further reinforce this trend, presenting misleading role models and a reality far removed from the ideals of the Latin *Mores* and even from the postmodern concept of society, thus opening the chapter of the "society of excess".

In this new society, "too much" has become the norm and the sense of measure something archaic. Quantity replaces quality. Traditional values, emptied of their content, leave space for sheer accumulation and consumption.

On these grounds, two opposing lines of thought emerge:

- on one side, those who hope for a return to the *Mores* as an ethical backbone for a lost society;
- on the other, those who see these values solely as relics of the

of traditional social ties and structures

16 Vacatio is a Latin term meaning "a period of exemption," "absence," or "vacancy." In modern academic and sociological usage, vacatio can denote a state of absence, emptiness, or lack—such as a lack of clear values, rules, or leadership—within a society or institution

past, inadequate for the speed and requirements of the modern world, wishing to cut all ties with tradition.

2.1 In Defense of the *Mores*

As already mentioned, one vision of the *Mos Maiorum* holds that an ethical return to the origins can restore society and the State to their former glory. In this view, the people represent the main component of the State: they can support their leaders, aid their projects, acclaim them, but also protest and strip them of credibility or power. However, the community needs to be governed and guided by those capable of conveying security and stability.

The primary duty of the government, through its institutions, is not only to defend borders or protect the population who entrusted them with authority: authorities must safeguard the culture, customs, and traditions of the nation, so that these may be passed on to future generations. An aware citizen ought to know, appreciate, and defend the culture from which their Homeland originated, recognizing and admiring the accomplishments that rendered the Country a protagonist in the political, cultural, and artistic spheres.

Most Latin historiography defends the traditional values embodied by the *Mos Maiorum*, opposing change and renewal, and highlighting the need not to forget the roots of identity. At a time when the principles of culture, art, and foundational national values are often sidelined, it is even more essential to know, study, and conserve that doctrinal heritage which brought Rome to the center of the European stage.

According to this view, without the continual knowledge and transmission of memory, the testimonies of a civilization risk being buried in darkness. It is thus the duty of every *bonus civis* - the good citizen - to revive these values, remembering and transmitting them, not as relics but as examples to be contemplated, studied, and imitated.

Although the goal is noble, this vision may appear too idealistic or difficult to achieve, especially given the political and social complexity of the modern world. Nevertheless, for many, the defense and valorization of the *mores* remains an ethical bulwark in contemporary society.

2.2 The Anachronism of Tradition

The vision opposed to the one just described, instead, pushes for a definitive severing of the umbilical cord with the past, considered too anachronistic and "old" for today's needs. According to this viewpoint, modern man's actions are weighed down by values, uses, and customs belonging to distant times, which still persist in the collective memory.

For many, tradition is a pleasant memory, a ritual repetition of gestures and values not to be lost, or a last-ditch attempt to maintain habits that, in present society, may no longer be genuinely valid. Tradition is thus seen as a meta-historical phenomenon: a projection of the past perpetuated in the present through faithful and unvaried observance.

Yet, this approach can be limiting. In many cases, traditions—religious, cultural, or civic—are now outdated compared to new scientific and moral knowledge developed by society. Still, they are maintained almost exclusively by habit, even when they are remote from contemporary reality.

Why, then, should modern man still be interested in these ancient traditions? The knowledge and practice of what is familiar can bring security, as what is known can be controlled and predicted—what is performed correctly is believed not to fail. From here arises the comforting value of tradition: it guarantees stability in a world continuously changing and full of uncertainties.

To know that certain values have been seen as "immortal" for centuries can bring comfort, but not all that has long been followed is still relevant: often, these traditional garments become too tight, no longer fit for a society that is continually growing and changing. Hence, today we stand at a crossroads: either forcefully tear off the garments of tradition as we grow, facing all the ethical and social consequences, or more rationally build and wear new ones fitting for the adopted way of life.

In this vision, break with the past is clear. Tradition gives way to building an ethic and a society more coherent with current needs and values. However, a fundamental question remains: can a society in the midst of a value crisis generate others—different, but equally virtuous? And are we really aware of the kind of lifestyle we lead?

Are we ready to answer such questions?

2.3 The Third Way

To return to the glories of the *Mos Maiorum*, or risk no future.

To abandon old, anachronistic traditions, or again, risk no future.

Which way should we go?

It does not have to be an exclusive choice. There can be a third path: to find a way that reconciles tradition with the needs of modern life, while at the same time autonomously forging forward.

As the Romans themselves summarized: *in medio stat virtus*—virtue lies in the middle.

How can values from more than two thousand years ago be adapted to modern society? It may seem a tough challenge, but, perhaps, it is not so impossible. If suitably revised, many—if not all—of the Latin *mores* can still be found in everyday life. Values such as respect for laws, the sense of duty, filial love, loyalty, pride, are all principles permeating society in its various aspects. The same goes for the so-called "secondary" values: honor, friendship, honesty, consistency, the importance of example, and the ambition to be better. All of these can still be found in social interactions and even in both public and private legal models.

Given this, rather than hoping to return to the past or wholly abandoning our heritage, it would be advisable for the State, its representatives, and institutions—and also for each citizen—to focus their energies on keeping the *mores* alive, adapting them to modern times. Although present society can never be equated or compared to the Latin *civitas*, it is undeniable that both civilizations are still sustained by the same "old" pillars that endured through centuries.

The primary task lies with the State and its Institutions, but each citizen, in their own small way, can and must cultivate and transmit these values to future generations, like a modern pontifex, thus contributing to the common good. Therefore, there is an alternative—a solution that, while recognizing diverse lifestyles, habits, customs, modes, and parameters, can still provide a sure reference, a beacon, a guide, a goal that stands unshaken over time.

Probably, even the ancient *maiores* would appreciate such a capacity

for mediation and adaptation.

3. *MOS MAIORUM* AND THE MILITARY CONDITION

We have seen how the *mores* still represent the ethical foundation of any just society. It is the duty of every citizen, as well as the Institutions, to preserve their meaning, importance, and pass down their legacy to future generations.

In the military context, these values take on a particular weight and significance. They can be considered the backbone of the Military Institution and the Armed Forces.

What distinguishes the Armed Forces from other areas of public service is, first and foremost, tradition. Brigades, fleets, and air wings are custodians of myths, symbols, and customs that outlast political changes, reforms, and historical shifts. The myths of heroes, martyrs, collective or individual feats, military ceremonies, and the sacredness of symbols such as the Flag and uniform go far beyond written rules, drawing strength from a collective and shared ethical heritage.

Conforming to the tradition of a Service, Corps, or Unit is not simply a psychological conditioning but a conscious act that preserves the ethical principles on which military life is based. Thus, tradition itself becomes an authentic ethical principle, an internal code of conduct that guides choices and actions, often more binding than any written regulation.

Before examining in detail the various forms of ethics in the military domain, it is necessary to pause on a crucial concept: military ethics. In addition to technical-operational and juridical-administrative aspects, ethics is an indispensable pillar of military governance and life. The importance of ethics grows given that this is an organization where the stakes are often life itself, sacrificed for a greater good.

Military ethics has several dimensions, among which:

- Political ethics: concerning the safeguarding of the Republic's fundamental institutions, the defense of the homeland, loyalty to the Republic, and democratic spirit—central to the military Oath as well.

- Organizational ethics: here, the identity and values of the Corps or Branch are foundational to the Institution. Command is not mere hierarchical imposition but an opportunity for growth for all personnel, emphasizing mature subordination and obedience.
- Service ethics: this involves total dedication, the spirit of sacrifice, loyalty, and sense of duty, all qualities necessary in the bonus miles, the model soldier.
- Individual ethics: referring to values relevant to the individual as a person, both during service and private life. The soldier does not only represent themselves but also the Institution they belong to.

A more detailed analysis of the forms that military ethics has assumed in the history and life of the Armed Forces reveals the continued centrality of the *Mos Maiorum* values. Many of these have remained largely unchanged for over two millennia, continuing to provide a reference point and backbone to one of the most important institutions of the State.

3.1 Military Ethics in History

As in every society, military ethics has formed through layers of culture, tradition, and society, consolidated over the centuries. Military ethics is reflected not only in written regulations and institutional goals, but also in command relations, service dynamics, and interpersonal relationships.

Throughout history, military ethics has often represented a moral brake on the violence of war, distinguishing the value of human conduct even under extreme conditions. In Europe, four major models of military ethics can be identified, each corresponding to different eras and societies:

- Greco-Roman culture: within this extensive period, three ethical models can be distinguished. Heroic ethics revolved around the figure of the hero, who distinguished himself by his qualities and deeds, celebrated in epic poems and serving as an eternal model of behavior. Then, in political ethics, the focus was on the hoplite: the armed citizen, an active participant in the life of the polis. Individualism was set aside for cohesion, the collective good prevailing over the personal. Finally, the ethics of discipline fully manifested in the figure of the Roman legionary, where discipline

became the soul and strategic strength of the entire army, regulating daily life, combat, and organization.

- Medieval culture: the medieval world also saw the alternation of different military ethics. The ethics of individual virtues, accentuated by Christian influence, centered on the knight, who fused heroism and nobility of spirit with the defense of the weak and acts of charity. Alongside this model, utilitarian ethics developed, embodied by the mercenary, whose loyalty was more tied to payment than to any oath to a lord or state. With the emergence of national armies, the ethics of loyalty was established, where soldiers swore allegiance to their king—a bond considered sacred, the violation of which often resulted in severe punishment.
- Ethics in the modern era: with the birth of nation-states and the progressive secularization of roles, the ethics of love for the homeland emerged. The king was progressively replaced by the homeland: the loyalty and sacrifice of the soldier now directed at a superior national and collective ideal, fueling the drive for national unity and defense of the common good, even to the extreme sacrifice.
- Contemporary ethics: today, military ethics is characterized by strong technological specialization, adaptability, and significant socio-political importance. The ethics of responsibility becomes central, embodied in the professional soldier. The security and freedom of the homeland now extend to the international sphere, constantly interacting with principles such as continuous training, the social impact of missions, and awareness of the moral and civilian consequences of one's actions.

In summary, the concept of military ethics has traversed the centuries, evolving alongside society, adapting and reinterpreting the founding values of the *Mos Maiorum*, which remain the basis for the sense of duty, discipline, and sacrifice required of those serving in the Armed Forces.

3.2 The Italian Formula of the Oath

The Oath is a personal and solemn bond that commits anyone who en-

ters State service; in the case of military personnel, it assumes a crucial role in the acquisition of military status. This obligation is also enshrined in the Military Code, recognized as a fundamental condition for formal acquisition of military status.

The oath is not just a formality: it is an ethical act, binding the future soldier to the Italian Republic, committing them, publicly and with discipline, to obeying the law and defending the State. The formula is as follows:

"I swear to be faithful to the Italian Republic, to observe its Constitution and laws, and to fulfill with discipline and honor all the duties of my position for the defense of the Homeland and the safeguarding of the free Institutions."

A close analysis of the oath formula reveals many of the founding values of the *Mos Maiorum*:

- The word "swear" contains *fides* (loyalty and keeping one's word).
- "To be faithful" refers to *pietas* towards the homeland and the community.
- Commitment to "observe the Constitution and the laws" embodies *virtus*, respect for laws and civic duties.
- "To fulfill with discipline and honor" encompasses *gravitas* (seriousness, dignity, civil and military discipline), *honor* (public and personal honor), *nobilitas* (aspiration to dignity), and *abstinentia* (honesty and moral integrity).
- Finally, "defense of the Homeland and safeguarding of the free Institutions" contains *maiestas* (sense of national belonging and pride), not limited to geographical boundaries but also as the domain of moral, social, and emotional experience.

All these values, already central in the *Mos Maiorum*, still endure within military and state systems, surviving through ritual and the strong bond between the one who promises and the community to whom the promi-

se is directed. In the Oath alone, almost all the primary and secondary values of Roman culture can be found, demonstrating their relevance and ethical strength even after centuries.

3.3 The *Mores* in the Concept of Ethical Leadership

Ethical leadership can be defined as "the ability to demonstrate, through behaviors and interpersonal relationships, conduct in keeping with high moral principles, promoting these standards within the organization through communication, continuous reinforcement, and coherent decisions[17]".

This materializes in the attention to enacted behaviors, honesty, trust between leader and collaborators, and correctness in relationships. Unlike traditional leadership models based on command and control, the ethical leader takes responsibility for upholding high moral standards, acting for the benefit of the Institution and its members.

Ethical leaders are people-oriented and conscious of the impact their decisions have on others. They use their authority to serve the common good, avoiding self-interest. In this way, they help create a positive organizational culture—a true "win-win[18]" model between individual and institution.

Ethical leadership is, in essence, the set of principles that guide a person's behavior at work and in decision-making: it simply means "doing the right thing." Honesty, justice, respect, a sense of community, and integrity are the pillars that guide the ethical leader in both daily decision-making and actions. A good ethical leader does not simply lead their unit or command toward set objectives, but strives to create a virtuous environment through example, consistency, and steady commitment—inside and outside the workplace.

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17 Brown et al. - "Ethical Leadership: A Social Learning Perspective for Construct Development and Testing" (Organizational Behavior and Human Decision Processes, 2005). Brown et al.'s research provided key theoretical and empirical foundations for understanding how ethical leaders influence organizational culture, follower behavior, and the development of trust and integrity within institutions.

18 Win-win is a term used to describe agreements, situations, or strategies in which all parties involved benefit or achieve positive outcomes. In organizational and leadership contexts, a "win-win" approach emphasizes collaboration, mutual respect, and solutions that satisfy the interests and needs of everyone, rather than creating winners and losers. This philosophy promotes sustainable relationships, trust, and long-term value within teams, organizations, and negotiations

Among the benefits of ethical leadership are:

- Creating a positive culture: ethical leaders inspire staff by example, strengthening the sense of belonging.
- Preventing scandals: transparency and respect for legality avoid the risk of misconduct damaging the institution's reputation.
- Increasing reputation and trust: an environment grounded in ethical principles attracts public approval and boosts collaborator motivation.
- Reinforcing internal loyalty: those who feel guided with integrity and respect tend to offer maximum contribution for the common good.
- General well-being: ethical leadership reduces stress and conflict, fostering clear communication and a healthier workplace.

Authoritative studies[19] have shown that trust between leader and collaborators is explained over 60% by the perceived level of ethical leadership. This reflects how the values promoted by the *Mos Maiorum*—honesty, trust, loyalty, humanity, the importance of example and of the common good—are still essential for the smooth functioning of any organization, particularly the military.

In conclusion, leadership inspired by the *mores* provides benefits beyond the institution itself, creating an environment of personal and professional growth for all involved.

3.4 The *Mores* in the Concept of Command

We have seen how ethics, in the military environment, takes on unique and significant characteristics. Alongside regulations and formal rules, these systems of conduct have long characterized the Armed Forces and Police Forces, becoming a true heritage of identity.

Command ethics is based on values such as example, humility, personal motivation, and silent work, as opposed to all forms of showmanship or individualism. The Commander must "lead by example," showing coherence and a spirit of service.

19 S. B. Craig & S. B. Gustafson, "Perceived Leader Integrity Scale: An Instrument for Assessing Employee Perceptions of Integrity in Leaders," The Leadership Quarterly 9, n. 2 (1998): 127–145

Military leadership today requires, more than ever, Commanders capable of involving their collaborators and obtaining the best results from each, focusing on professional training and—above all—attention to personal and emotional aspects. Managing resources is not enough: the key to success lies in empathy, listening, and understanding the specific needs of each individual.

Being able to listen is essential in two ways:

- on the one hand, to improve decision quality by accepting diverse perspectives and useful information.
- on the other, to really know one's collaborators: without dialogue, trust cannot be built, nor a truly cohesive and motivated group.

Such attentiveness helps make units more harmonious, inclusive, and efficient. The ultimate goal of command is precisely this: to create the conditions for serene and productive collaboration, fostering ethically correct and aware behaviors, knowing that, to obtain respect and dedication, one must first "give" through example and care for the other's needs.

Today, we do not need "notary" Commanders, concerned only with registering and judging, but leaders who know how to inspire, involve, and foster the growth of every soldier, both professionally and personally.

Again, the values of the *Mos Maiorum* are central:

- *Humanitas,* as the will to understand and support others;
- *Fides militum,* or loyalty among peers and towards superiors;
- *Gravitas,* seriousness and dignity in leadership;
- *Abstinentia,* moral integrity and honesty;
- *Auctoritas,* charisma and credibility gained by acting consistently;
- *Constantia,* consistency and tenacity in decisions;
- *Exemplum,* the importance of providing a behavioral model.

In conclusion, the mission of the Commander is not mere bureaucratic

management nor the pursuit of personal advantage, but the pursuit of the human and professional growth of collaborators and the collective well-being of the Institution and the Homeland. Only thus can command, ethics, and *mores* still meet, today as in the past.

Conclusions

In a society ever more divided between "being" and "appearing," where the illusion of appearance and the pursuit of ephemeral well-being dominate, a profound "hunger for ethics" emerges. It is a genuine human need, prompting a rediscovery and reevaluation of those values often underestimated or forgotten.

And yet, on closer inspection, it is precisely those once-despised ancient values that continue to form the backbone of our contemporary society. The modern person may have neglected them for more fleeting ideals, but such values still persist, often in ordinary and subtle ways, in all facets of everyday life.

This prompts a fundamental question: can values so ancient and apparently distant in time still inspire, guide, and shape today's society and that of the future? The purpose of this article has been to show, even if only as a point of reflection, that the answer may indeed be "yes."

"Ne quid vir bonus sit disputando consumis. Fit unus ex illis"

"Do not waste time arguing about what a good man should be. Be one."

– Marcus Aurelius Antoninus Augustus –

Protecting the Past, Shaping Peace: The EU's Emerging Role in Cultural Heritage Protection during Conflicts and Crisis

Dr. Paolo Foradori

Abstract

The protection of cultural heritage has gained prominence as a key aspect of international security and peacebuilding, with the European Union increasingly active in this domain. Applying the concept of EU actorness and operationalising it through specific indicators, this article investigates the Union's role in cultural heritage protection within the framework of its Common Security and Defence Policy (CSDP). The findings indicate that while the EU's engagement is emerging, it remains limited and confined to a niche sector. However, with enhanced capabilities and sustained political commitment, the EU holds strong potential to become a leading actor in this field.

Introduction

The deliberate targeting and destruction of cultural heritage during armed conflict has emerged as a salient issue in international security and crisis response strategies. Conflicts in Afghanistan, Syria, Iraq, Mali, Ukraine, and Gaza have witnessed the systematic destruction of ancient sites, religious monuments, museums, and intangible cultural heritage—acts that carry profound symbolic, social, political, and economic consequences for affected communities. The protection of cultural heritage (PCH) has consequently been elevated to a priority in international peace and security agendas, culminating in the adoption of UN Security Council Resolution 2347 in 2017. This resolution underscores the vital role of cultural heritage in conflict prevention and reconciliation

and explicitly links its protection to international peace and security (Foradori and Rosa 2017).

Within this context, the European Union (EU) has emerged as a potential actor. Through its Common Security and Defence Policy (CSDP), the EU has deployed over 40 missions and operations abroad since 2003, and in recent years, it has begun incorporating cultural heritage concerns into its strategic framework. This article provides an in-depth assessment of the EU's evolving role in PCH in conflict and crisis contexts. It applies the theory of EU actorness—a conceptual framework developed in European studies—to evaluate the extent to which the EU can be considered an actor in this field.[1]

Theoretical Framework

The concept of 'actorness' is a foundational construct in the analysis of the European Union's role in global governance. First introduced by Sjöstedt in the 1970s and further refined in the 1990s, actorness refers to the capacity of an entity to behave actively and deliberately on the international stage. In the context of the EU, actorness is not a given; rather, it is something that must be demonstrated and assessed through empirical criteria. As a unique supranational entity, the EU lacks many of the traditional features of a nation-state, such as a centralized foreign ministry or standing army, and must therefore prove its effectiveness and coherence in each policy domain in which it operates.

Building on this literature, this article adopts Cornelius Adebahr's (2017) framework, which conceptualizes actorness as comprising three primary components: purpose, resources, and relationships. These are further operationalized into six specific criteria: mandate and policy (relating to purpose), apparatus and instruments (relating to resources), and self-presentation and recognition (relating to relationships). The six criteria ensure that both internal coherence (mandates, structures, and policies) and external legitimacy (recognition by other actors and host states) are accounted for in the assessment. This article uses this framework to assess the EU's role in the protection of cultural heritage during conflicts and crises, drawing on policy documents, field mission activities, interviews with EU officials, and case evidence from the Eu-

1 This article is based on Paolo Foradori and Paolo Rosa (2025). "Guardian of culture: the European Union's quest for actorness in the protection of cultural heritage in conflicts and crises". European Security, DOI: 10.1080/09662839.2025.2479470.

ropean Union Advisory Mission in Iraq (EUAM Iraq)—to date, the only mission with an explicit cultural heritage mandate.

Mandate

Measured against this first indicator, the EU's actorness in PCH in terms of mandate can be considered partially developed, with significant constraints. Although the EU's powers and competencies in cultural matters are largely determined by its Member States, [2] the Union has progressively incorporated culture and cultural heritage considerations into a range of policies, including its external actions and the CSDP (Jakubowski 2023). This gradual integration has granted the EU a certain degree of mandate to operate in this policy area, though the scope and depth of its authority are still limited.

The 2016 Joint Communication 'Towards an EU Strategy for International Cultural Relations' signaled a growing willingness to integrate culture into the Union's external relations. This was followed by the 2021 'Concept on Cultural Heritage in Conflicts and Crises: A Component for Peace and Security in European Union External Action'' (EEAS 2021), which formally positioned cultural heritage as a component of the EU's foreign policy toolbox. Notably, this Concept was developed by the European External Action Service (EEAS) and endorsed by the Council, lending it significant political weight.

The incorporation of cultural heritage into the mandates of CSDP missions remains limited. Of the over 40 missions deployed since 2003, only EUAM Iraq has been granted an explicit cultural heritage mandate. Even this mandate is framed within broader objectives such as combating organized crime and terrorism financing. Military missions have shown considerable reluctance to include cultural components, citing operational overload and the prioritization of immediate security concerns. As a result, cultural heritage often occupies a marginal position in mission planning and execution. Nevertheless, informal mandates are emerging in several civilian missions, where staff are increasingly encouraged to consider heritage-related concerns as part of their engagement efforts. Interviews with EEAS officials suggest that further institutionalization of the mandate depends on continued political ad-

2 Article 6 of the Treaty on the Functioning of the European Union (TFEU) recognises that in the cultural field the EU can only "carry out actions to support, coordinate or supplement the actions of the Member States" (European Union 2012).

vocacy, as well as the demonstration of added value through successful mission outcomes. In this sense, EUAM Iraq plays a critical pilot role, and its performance could influence future decisions about integrating PCH into other mission mandates. Overall, the EU's mandate in this field remains partial and contingent, but it is increasingly grounded in political consensus and strategic documents that support a more expansive role in the future.

Policy

Policy development is arguably the most advanced component of the EU's actorness in cultural heritage protection. The above-mentioned 2021 'Concept on Cultural Heritage in Conflicts and Crises' (EEAS 2021) represents the first comprehensive framework integrating cultural heritage into the EU's external action, including the CSDP. The Concept defines cultural heritage as both a driver of conflict and a vector of peace, noting its potential for promoting reconciliation, fostering dialogue, and enabling socio-economic recovery. This represents a paradigm shift from a preservationist to a strategic perspective, where cultural heritage is no longer viewed solely as a cultural asset but also as a peacebuilding tool. It sets out principles such as local ownership, gender sensitivity, resilience-building, and the integration of cultural aspects across the conflict cycle—from prevention and early warning to post-conflict recovery.

Importantly, the Concept is complemented by Council Conclusions that call on all EU institutions and Member States to operationalize cultural heritage considerations across external action, including within the CSDP. These documents emphasize coherence between cultural diplomacy, development cooperation, and crisis response, aligning PCH with the EU's Integrated Approach. This alignment is reinforced in other key policy texts, such as the Strategic Compass for Security and Defence (2022), which reiterates the commitment to include cultural heritage in relevant missions and operations. As a result, PCH is no longer treated as a niche concern but is positioned as a transversal objective that intersects with human rights, security, development, and diplomacy.

Despite these advances, implementation remains inconsistent. Several missions still treat PCH as an optional or secondary task. There is a gap between the ambitious policy narrative and the available resources and

expertise to bring it to life. Moreover, while the Concept references climate change and sustainable development, concrete mechanisms for mainstreaming these intersections are underdeveloped (Hausler 2021). Field actors report a need for clearer operational guidance and stronger links between headquarters policy and mission-level strategy. Nonetheless, the progress made in policy formulation represents a critical step in establishing the EU as a serious actor in the domain of cultural heritage protection, and it lays the groundwork for deeper institutionalization in future years.

Apparatus

Apparatus refers to the internal structures, personnel, and resources that enable the EU to function as an actor in cultural heritage protection. In this area, the EU has made some progress but continues to face significant limitations. At the institutional level, the EEAS has designated a Cultural Heritage Policy Officer within the Peace, Partnerships, and Crisis Management Directorate (PCM). A thematic Task Force was also established to coordinate between different directorates, the European Commission, and external partners. These structures aim to support implementation of the 2021 Concept, promote cross-sectoral coordination, and monitor progress. Nevertheless, they operate with limited staff and depend heavily on secondments from Member States.

Within CSDP missions, staffing dedicated to cultural heritage remains scarce. An important institutional development within the CSDP was the appointment in 2023 of a Policy Officer on Cultural Heritage within the Civilian Planning and Conduct Capability (CPCC), the Brussels-based headquarters overseeing all civilian CSDP missions. EUAM Iraq is the only mission with a full-time expert in cultural heritage protection, though this role is typically filled by one person at a time. In other missions, PCH-related tasks are handled by 'Focal Points' who also cover broader responsibilities from law enforcement to human rights protection. Pre-deployment training for CSDP staff now includes cultural heritage modules, and workshops have been held for missions operating in culturally sensitive regions such as the Caucasus and the Balkans. However, these efforts are still ad hoc and lack standardization.

The availability of qualified personnel continues to be a major challenge. The specialized expertise required for these roles necessitates

professionals with highly specific competencies that are difficult to find. Currently, only eight Member States possess military and law enforcement units specifically trained and equipped for cultural heritage protection. This scarcity significantly hampers recruitment efforts and the adequate staffing of CSPD missions and operations.

A significant step forward was the 2024 creation of the "Working Party (WP) of Foreign Relations Counsellors (RELEX), Horizontal Questions – International Cultural Relations", which aims to elevate culture and heritage protection on the EU's foreign policy agenda. If this group succeeds in institutionalizing cultural policy discussions and generating consensus among Member States, it could help create a stronger apparatus to sustain long-term engagement. Still, without a corresponding increase in human and financial resources, and the creation of a centralized expert pool, the apparatus will likely remain fragmented and underpowered. Strengthening the apparatus is vital for transitioning from policy rhetoric to tangible results in the field.

Instruments

Instruments refer to the tools and mechanisms the EU deploys to implement its objectives. Progress in actorness-building can be observed in the application of this criterion. Since the adoption of the 2021 Concept, the EEAS has published three reports assessing its implementation, drawing on data from the EEAS, European Commission Services, EU Delegations and CSDP missions and operations. These reports highlight the broad range of instruments and policy resources the EU can mobilise in conflict and crisis areas

EUAM Iraq stands out as the EU's most advanced case of operational engagement in cultural heritage protection, deploying a range of instruments to support national stakeholders. These include strategic advising to institutions such as Iraqi Ministry of Culture and State Board of Antiquities and Heritage, targeted training for law enforcement on illicit trafficking, and legislative support to improve heritage-related legal frameworks. The mission promotes public awareness campaigns, collaborates with local communities and NGOs, and facilitates inter-agency coordination. A national IT system for cultural heritage crime investigation is also under development. Moreover, EUAM Iraq enables international cooperation through expert-led workshops invol-

ving UNESCO, INTERPOL, ICOM, and the Italian Carabinieri (Cultural Heritage Protection Unit).

Other missions, such as EUMM Georgia and EUAM Ukraine, have integrated cultural heritage into confidence-building and law enforcement training, though without a formal mandate. These tools are often embedded within broader rule-of-law and governance programs, reflecting the integrated nature of the EU's crisis response.

In addition to field-level tools, the EU also supports cultural heritage through funding and multilateral cooperation. It contributes to the ALIPH Foundation and UNESCO-led initiatives, particularly in crisis zones like Ukraine and Syria. EU Delegations coordinate with local stakeholders, and EU-funded programs often include components related to tangible and intangible heritage preservation. These instruments, however, are rarely coordinated systematically with CSDP missions, leading to fragmentation. According to EEAS internal reports and interviews, there remains a disconnect between policy frameworks and mission-level execution, and between civilian and military planning units.

Moreover, the absence of a dedicated budget line for cultural heritage activities within most missions significantly limits the scope of EU action. Field officers often rely on discretionary funding or align PCH activities with existing human rights or law enforcement programs. This financial ambiguity inhibits long-term planning, scalability, and impact measurement. Despite these limitations, the tools deployed show promise. When applied with strategic intent and adequate support, they can foster institutional change in partner countries and serve as a model for integrated peacebuilding approaches. For this potential to be realized, greater coordination and resource allocation are required.

Self-Presentation

The EU's self-presentation as a significant, non-predatory, and benevolent cultural actor constitutes a crucial component of its soft power strategy. Cultural heritage plays a central role in the Union's narrative of promoting peace, cooperation, and shared values. The EEAS and European Commission regularly describe the EU as a 'guardian of culture,' emphasizing its historical responsibility and moral authority in protecting global heritage. This narrative is supported by strategic communications, such as those in the 2016 Joint Communication and 2021

Concept, which frame culture as a tool for mutual understanding and social cohesion. These documents highlight the EU's distinct approach to international relations, emphasizing dialogue, inclusion, and long-term partnership rather than hegemonic influence.

In field missions, this self-image is often projected through collaboration with international organizations and civil society. For example, EUAM Iraq has worked closely with UNESCO, INTERPOL, and local NGOs, reinforcing its role as a facilitator and knowledge broker. The Union also capitalizes on its Member States' reputations, notably Italy's Carabinieri Cultural Heritage Protection Unit, whose personnel often serve in advisory roles. The EU's narrative of being a neutral, cooperative, and values-driven actor contrasts positively with more securitized or extractive approaches taken by other international players. However, some analysts argue that this narrative risks becoming performative if not matched with operational depth. While self-presentation is strong, there is a growing need for alignment between rhetoric and results, particularly in high-visibility missions.

Recognition

Recognition is the most externally contingent element of actorness and one where the EU continues to face difficulties. Within the Union, Member States remain reluctant to cede cultural sovereignty. Even when agreeing on common goals, they often prefer bilateral cultural engagements, particularly in post-colonial contexts (MacDonald and Vlaeminck 2020). This limits the visibility and coherence of EU-level interventions. Externally, recognition varies depending on context and clarity of communication. In Iraq, local stakeholders acknowledge the EU's technical and financial support but often attribute cultural protection achievements to individual Member States or international organizations like UNESCO. The complex institutional set-up of EU foreign policy—with overlapping roles among EEAS, Commission, and national actors—creates confusion for local partners, reducing the EU's recognition as a unified cultural actor (de Vries 2020).

Moreover, many host countries are unfamiliar with the EU's competencies in cultural matters. This leads to situations where EU visibility is low despite active engagement. Without a strong local communication strategy and recognizable presence, the EU struggles to establish a clear identity in cultural heritage protection. Recognition also suffers

from inconsistency: while some missions effectively embed PCH into their mandates and messaging, others treat it as a background activity. Improving recognition will require more robust branding, unified messaging from EU actors on the ground, and a demonstration of tangible, high-impact results.

Conclusion

In conclusion, the EU has taken significant steps toward becoming a credible actor in the protection of cultural heritage during conflicts and crises. Its efforts are most developed in the areas of policy formulation and self-presentation, where the Union has articulated a clear and coherent strategic vision grounded in normative values and multilateral cooperation. The 2021 Concept represents a milestone, offering a holistic framework for integrating cultural heritage into external action. However, gaps persist in mandate, apparatus, and recognition—highlighting the disconnect between rhetoric and implementation. The EU's limited personnel, fragmented funding, and internal competition among institutions and Member States hinder effective deployment and long-term planning.

If the EU is to realize its full potential as a guardian of culture, it must invest in institutional capacity, increase coordination among missions and delegations, and cultivate recognition both within and beyond its borders. The experience of EUAM Iraq demonstrates that cultural heritage protection can be operationalized even in complex and insecure environments. Building on such cases, the EU should seek to mainstream PCH across all relevant CSDP missions and operations. Doing so will not only safeguard irreplaceable cultural assets but also reinforce the EU's credibility as a global peace and security actor grounded in cultural and humanitarian principles.

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Considerations on Battlefield Evidence Collection and Crime Scene Investigation

LTC. Fabiano Gentile - W.O. Paolo Martini

Abstract

The collection of evidence in the battlefield, represent an intersection of military operations and judicial systems, which has created new challenges to be faced.

With the aims to share the authors' perspectives on this topic, this manuscript examines through a comparative analysis of existing protocols and best practices, the similarities and differences between

Battlefield Evidence Collection and Crime Scene Investigation, viewed through the lens of utilizing collected evidence in criminal proceedings,.

Key findings are convergences between the two disciplines that include documentation procedures, chain of custody requirements and evidence handling protocols, and divergences that involve time constraints and security measures.

Rather than claiming to be exhaustive, this manuscript seeks to foster dialogue among stakeholders involved in battlefield evidence collection, motivated by the significant benefits that would result from the development of additional regulatory frameworks, the dissemination through training programs integrating military, judicial and forensic expertise and the creation of new, more tailored, technological innovations.

Keywords: Battlefield Evidence, Crime Scene Investigation, Military Operations, Counterterrorism.

Limitations

This analysis is primarily based on theoretical frameworks and published protocols, rather than empirical data collection. Field validation of proposed solutions requires further research.

Additionally, the legal admissibility standards vary significantly across jurisdictions, limiting the universal applicability of specific recommendations.

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1. Introduction

The procedural use of evidence collected by military personnel in an operational area – commonly referred to as a battlefield evidence has become an increasingly relevant topic, particularly in recent years, among various stakeholders[2]. The goal is to find solutions that facilitate

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2 Stakeholders include, in accordance with "Guidelines to facilitate the use and admissibility as evidence in national criminal courts of information collected, handled, preserved and shared by the military to prosecute terrorist offences,"

the admissibility in criminal proceedings without compromising authenticity, while acknowledging its unique nature[3].

This evolution reflects one aspect of a changing landscape of modern warfare, where military operations increasingly intersect with civilian judicial systems, creating unprecedented challenges for both military commanders and legal practitioners.

The intrinsic dual nature of battlefield evidence creates tension between the need for operational security and the transparency requirements of fair legal processes.

The significance of this type of evidence extends beyond its immediate tactical value, as it often represents the only tangible link between terrorist activities and their perpetrators in regions where traditional law enforcement capabilities are limited or non-existent.

Among the complexities that may arise at different stages, some appear not immediately resolvable, such as managing the declassification of classified information and establishing shared legal basis in accordance with the jurisdictional frameworks of host nations. Others, particularly those involving applied science, tend to reach consensus through widely accepted protocols and best practices within the scientific community.

There is certainly convergence on the principle of fair trial[4], aimed at generating effective and equitable adversarial proceedings that lead to judicial truth.

However, the definitional challenges extend to fundamental questions about what constitutes admissible evidence when collected under combat conditions.

Traditional forensic standards, developed for law enforcement contexts,

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military personnel, police forces, prosecutors, international judges, and national policy officials.

3 This uniqueness, also highlighted in the Non-Binding Guiding Principles on Use of Battlefield Evidence in Civilian Criminal Proceedings, concerns two closely related aspects: security conditions and available time. The interaction between these two elements is evident in risk management principles, where the duration of exposure to a risk directly

impacts the probability that the anticipated scenario will occur.

4 The right to a fair trial is enshrined in Article 14 of the International Covenant on Civil and Political Rights (ICCPR), which states: "All persons shall be equal before the courts and tribunals. In the determination of any criminal charge against him, or of his rights and obligations in a suit at law, everyone shall be entitled to a fair and public hearing by a competent, independent and impartial tribunal established by law". More recently the principle is evident in "Abuja Recommendations on the collection, use and sharing of evidence for purposes of criminal prosecution of terrorist suspects (2018)"

sometimes may prove inadequate or impractical when applied to active combat zones where personnel safety and mission success take precedence.

This demands the development of modified standards that attempt to balance forensic integrity with operational realities.

Within this framework, the identification, collection, and preservation of evidence collected on the "battlefield" is considered a critical step.

Training on core crime scene investigation principles—such as chain of custody, among others—which are also highlighted throughout the *Non-Binding Guiding Principles on Use of Battlefield Evidence in Civilian Criminal Proceedings*, could serve as a crucial element enabling more battlefield-collected evidence to contribute effectively to criminal proceedings, while not compromising the primary objectives of, among others, Force Protection, Intelligence, and Targeting.

Another consideration is that while law enforcement objectives may be subsidiary in battlefield contexts, this should not automatically justify complete disregard for forensic standards where operationally feasible.

As a matter of fact, where conditions allow, adherence to forensic protocols can significantly enhance the reliability of collected data, benefiting both ongoing operations and future investigations.

Conversely, improper collection and discontinuity in the chain of custody would compromise the evidentiary value in criminal proceedings and undermining the operational efforts undertaken to secure such materials. Errors in collection or preservation may even result in acquittals, potentially conflicting with some of the principles established by UNSCR 1373 of 2001[5].

Therefore, taking a practical approach to the collection and management of battlefield evidence, far from being contrary to the aspirations of the aforementioned non-binding principles, could help better integrate certain regulatory aspects while enhancing their content, particularly in scenarios where operators' available time is severely compressed due to precarious security conditions.

Given these considerations, the following analysis examines three criti-

5 I.e. to ensure that anyone involved in the financing, planning, preparation or execution of terrorist acts or in supporting terrorist acts is brought to justice

cal operational challenges:

time management, operational safety and contamination control, with an insight on some operational structure.

2. Time as a resource in evidence collection

Time, often a limiting factor in some contexts, must be considered a crucial resource that fundamentally shapes the entire battlefield evidence collection process, not only because prolonged exposure increases risk factors for operating personnel, but also because if limited available time leads to collection methods that introduce predictable inadmissibility issues, this could conflict with one of the principles of risk management[6], which emphasizes the unacceptability of exposure to unnecessary risk.

On the other hand, proper time management enables the evolution of findings from mere information to evidence.

Figure 1: The introduction of protocols and standards may involve not only more training for operators, but also formal steps that may be more time-consuming.

The challenge becomes even more complex when considering that modern operational environments often involve multiple layers of evidence - from digital footprints that may be compromised over time, to physical materials that require specific preservation conditions. The intersection of time pressure and evidence integrity creates a dilemma where operators must balance the immediate tactical need for rapid site exploitation against the long-term strategic requirement for legally admissible evidence.

Certainly, finding a balanced compromise that organizes the maximum amount of information for use in judicial proceedings is not easy.

However, it seems reasonable that such a compromise, in this historical

6 *Risk Management, ATP 5-19.*

period, should be sought by starting with crime scene investigation and collection techniques learned by law enforcement —no longer mere mechanical operations but expressions of scientific knowledge[7]—then moving toward solutions that ensure evidence integrity with the declared objective of reducing acquisition time[8].

This approach suggests an evolutionary methodology where proven field techniques serve as the foundation for developing more sophisticated, time-efficient protocols.

Moreover, high-value, time-sensitive evidence should receives priority attention, while materials of uncertain value are handled according to rapid documentation protocols that preserve their potential utility without consuming excessive operational time.

Furthermore, the rapid pace of scientific and technological evolution in forensic sciences is an aspect not to be underestimated, as it can increase the amount of information obtainable from findings that previously lacked such potential.

For example, consider DNA analysis, which at the current state of the art can provide not only a comparable profile from genetic material present in just a few cells on site, but also phenotypic information about the subject[9], age[10], and certain behavioral habits[11], as well as distant familial relationships (e.g., third-degree cousins) through genetic genealogy databases.

Moreover, the integration of advanced technologies such as portable analytical equipment, enhanced documentation systems, and real-time communication with forensic experts can potentially compress the time required for evidence processing without compromising quality.

These technological solutions, however, must be balanced against the additional logistical burden

they may impose on units on the ground, but it is evident that the greater the quantity and quality of information collected, the higher the prob-

7 Curtotti D., Saravo L. (2012) The technical-scientific error at the crime scene: the inevitable mistake and the responsibilities of the scientist, the jurist, and the legislator.
8 Both of Tactical Site Exploitation (TSE) and Sensitive Site Exploitation (SSE)
9 Chaitanya et al. (2018)
10 Horvath (2013)
11 Alghanim et al. (2018)

ability of fostering a virtuous cycle that will enable the planning of future operations, which in turn will generate additional information.

3. Operator safety: a priority aspect

In crime scene investigations, operator safety is of paramount importance, both for first responders[12] and for technical personnel, and consequently this aspect is emphasized in manuals[13].

For instance, Henry Lee's Crime Scene Manual (2001) stresses that first responders must always prioritize the safety of operators and civilians upon arrival at a crime scene. Similarly, Practical Crime Scene Processing and Investigation (2019) dedicates an entire appendix to risk management, further reinforcing the importance of operator safety and identifying potential risk factors.

In battlefield evidence collection, operator safety is also identified as a fundamental aspect, as reiterated in Tactical Site Exploitation and Cache Search Operations (2007) and Site Exploitation (2015), which outline key parameters such as exposing the minimum number of people necessary to achieve the objective and minimizing exposure time in the target area[14], in relation to the associated risk, taking into consideration that the battlefield context introduces additional complexity layers, including active threats, unexploded ordnance, structural damage, and potential chemical or biological contamination that may not be present in traditional crime scenes.

It is true that reducing military personnel's exposure to the typical risks of operational areas, with a view to maximizing their safety, certainly represents an effective and widely used strategy for the aforementioned purpose.

However, the implementation of risk reduction strategies can limits the time available for evidence collection, with the risk of compressing the evidence source from potential evidence[15] to a questionable information source.

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12 First Responders at the crime scene are generally police officers/operators, paramedics and fire department personnel.
13 ENFSI Best Practive Manual for Scene of Crime Examination (2022); Practical Crime Scene Processing and Investigation (2019).
14 Tactical Site Exploitation and Cache Search Operations," p. 6 (2007)
15 Guidelines to facilitate the use and admissibility as evidence in national criminal courts of information collected, handled, preserved and shared by the military to prosecute terrorist offences.

This degradation of evidential value can represents a critical failure mode that can undermine the entire purpose of evidence collection, where the resulting materials may fail to meet the standards required for judicial proceedings, essentially rendering the operational risks taken to collect them meaningless.

Moreover in the context of battlefield, the challenge is compounded by the fact that these decisions often must be made under pressure, with incomplete information, and by personnel who may not have extensive forensic training[16].

Finding the right balance between these aspects, without prejudice to the safety of the operator, that is always a priority over preservation of evidence, is not simple.

Some recent publications, such as the OSAC 2023-N-0002[17] Standard for Scene Documentation Procedures, emphasize the necessity of structured documentation protocols to maintain evidence integrity while optimizing safety measures.

Technologies such as drone-based photography represent a paradigm shift, due to the possibility to capture detailed information while keeping personnel at safe distances from threats.

In this context, the development of technologies for evidence collection specifically designed for battlefield applications represents a promising area for future development.

Hopefully, the investment in such technologies, that provide real-time analysis capabilities with military-grade robustness, can enhance both personnel safety and operational effectiveness.

4. On the phenomenon of contamination

Another event that can occur in both crime scene investigation and battlefield evidence collection is contamination.

Let us start from a premise: contamination cannot be completely elim-

16 Training programs should include: basic forensic awareness, evidence handling procedures, safety protocol integration, equipment operation, and decision-making under pressure scenarios
17 While OSAC standards provide valuable guidance for civilian applications, their adaptation to battlefield conditions requires modification to address active threat environments, compressed timeframes, limited resources, and military command structures

inated as it is a corollary of Locard's exchange principle[18] simplified as "every contact leaves a trace". If it is true that "every contact leaves a trace," even the operator accessing a crime scene will inevitably leave traces of their passage while simultaneously removing components present at the scene itself.

Accepting Locard's principle as valid, it is necessary to admit the inevitable modification of the crime scene by personnel operating in such contexts. In this framework, their aim should not be to avoid introducing alterations to the scene, but rather to avoid introducing unnecessary alterations. For established purposes, the generic requirement not to modify the crime scene is therefore utopian, as the scene undergoes a natural and inevitable modification process from the very moment it is created.

Obviously, the identification of contamination is strictly correlated to which elements are, based on scientific and technological development, useful for providing investigative contribution, since other types of contamination that do not involve elements of interest will not be detected because they are not sought. In other words, the more these elements are used in investigations, (e.g. DNA, GSR etc.), the more likely contamination involving those elements will be detected.

One of the strategy in contamination management, not only in the context of DNA analysis, is the use of comparison samples from individuals who accessed the scene, even if those samples are not associated, for security reasons, with personal details of subjects[19].

This approach give the possibility to exclude misleading information preventing erroneous investigative conclusions.

The data coming from the comparison samples can also be organized into exclusion databases[20], in order to have an immediate verification and therefore eliminate the misleading information produced in the early stages of the investigation.

Another phenomenon that can generate unreliable information is the

18 "La vérité est que nul ne peut agir avec l'intensité que suppose l'action criminelle sans laisser des marques multiples de son passage." Locard's principle as found in Edmond Locard's book, L'enquete criminelle et les Méthodes scientifiques (1920) pg 139 E. Flammarion Ed.

19 Protecting the identity of personnel in operational area may represent a security-related necessity

20 Recommendation reiterated in "GE.F.I. Recommendations in personal identification investigations" (2018).

secondary transfer of biological material[21]. As example, we can hypothesize a scenario on the transfer[22] of biological material, in which a genetic profile is extrapolated on an IED which, rather than deriving from the assembler of the device, derives from a third party with whom the assembler had had social contact shortly before[23].

This underscores the dual risk of contamination: it can lead to acquittals when genetic contributions cannot be definitively linked to a suspect, but it can also result in wrongful convictions if contamination is not identified as such[24].

5. Objectives and overview of some operational structure

Beyond the identification of perpetrators for judicial proceedings, battlefield evidence collection serves also a strategic intelligence function, like the understanding of the enemy, their weapon systems, tactics, and intentions in order to counter future threats and reduce risks for troops deployed in operations.

For instance, in counterterrorism operations, we are not limited exclusively to the collection of elements aimed at identifying those responsible for the attack, but also to the collection of information aimed at dismantling the organizational networks (Attack the Network[25]).

Such information, to be effectively extracted from elements collected at the scene, requires a system capable of organizing and managing resources and expertise, such as Weapons Technical Intelligence and the Joint Deployable Exploitation & Analysis Laboratory.

Both adopt NATO standards, doctrines, and procedures to ensure the broadest interoperability[26] and are generally organized into three lev-

21 A hypothetical secondary transfer scenario could involve DNA from a third party with whom the Person of Interest (POI) had social contact being transferred from the POI to the evidence source (e.g., IED components) through handling.

22 Fonneløp et al 2015, Roland et al. 2019.

23 Awareness of current analytical sensitivity in DNA analysis therefore suggests developing competencies to address inherently probabilistic questions where profile attribution is not in dispute, but rather the activity that justifies its presence on the specimen. Bayesian networks have proven capable of providing such support to achieve balanced, transparent, and robust evidence evaluation (for further details: Taroni et al. 2014, "Bayesian Networks for Probabilistic Inference and Decision Analysis in Forensic Science").

24 The Innocence Project, which from 1992 to today has contributed to the exoneration, through DNA analysis, of 375 people, 21 of whom were sentenced to capital punishment. On average, each person was deprived of personal freedom for 14 years (https://innocenceproject.org/exonerate/).

25 For further information, see "Commander's Handbook for Attack the Network" (2011).

26 The capacity to act together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives

els, with the first two active in operational areas.

- **First Level**. Personnel belonging to the first level have competencies in research, documentation, collection, and preservation of evidence, with preparation of the consequent report on operations performed. In this framework, similarities with the crime scene investigation units of law enforcements are evident.
- **Second Level**. The second level, also in the operational areas, appears as a structure with analogies with forensic laboratories. However, modularity, which characterizes laboratories deployable in operational theaters, represents one of the main peculiarities, which is fundamental for logistical aspects related to transportation. Generally, such operational units are structured with modules dedicated to command and control, production of reports containing analytical results, specimen storage, triage, and specific disciplines (e.g., Forex, Elex, Chemex, etc.), based on pressing needs.
- **Third Level**. For evaluations requiring a higher degree of complexity, or where required disciplines are not available, analyses are conducted by laboratories located outside the operational area. These facilities can provide a comprehensive analytical capabilities including, but not limited to, advanced DNA analysis and digital forensics.

6. Concluding remarks

The convergences between battlefield evidence collection and crime scene investigation lead these two disciplines to share numerous analogies that facilitate dialogue between the green component (military) and blue component (police forces), also supported by specific projects such as Mi-LEx[27].

Generally speaking, the most evident similarities include the necessary initial access to the scene, documentation activities structured through multiple approaches[28] and incorporating, nowadays, the deployment of drones and the application of search patterns. In particular this last

27 Mi-LEx was proposed by Interpol in 2005 with the Vennlig project in Iraq and Syria, subsequently replicated with Project Hamah in Afghanistan, both developed to counter foreign terrorist tighters (FTF).
28 Descriptive, planimetric, photographic, and video documentation. The latter is particularly valued in battlefield evidence collection as it simultaneously enables space documentation and voice commentary recording.

method aims to maximize evidence identification while reducing the risk of bias stemming from the presumption that professional experience serves as an adequate substitute for methodical site inspection; and the procedures for evidence collection, packaging, and management (particularly when intended for courtroom proceedings).

Once evidence are collected, both disciplines identify a collection area that, in case of battlefield evidence collection, should be positioned near the exfiltration route in order to be able to abandon the site by recovering the material found where safety conditions change rapidly. This tactical consideration reflects the unique security challenges faced in battlefield environments, where the ability to rapidly evacuate collected materials may be critical for both evidence preservation and personnel safety.

Among the primary divergences, one cannot overlook the generally expeditious nature of battlefield evidence collection which, while occasionally applicable to crime scene investigation, is certainly not its defining characteristic.

Moreover, the risk persists beyond the collection phase, as operators remain vulnerable during exfiltration, while in crime scene investigation, the risk associated with such events is negligible.

It should also be noted that the development of new technologies and the increased sensitivity of existing ones has expanded the range of specimens capable of providing information and, as an indirect consequence, has altered the time requirements for their management.

The opportunity to implement specific standards that structure these operations within a Quality Management System (e.g., ISO/IEC 17020) represents, in the authors' opinion, an objective to pursue in the future battlefield evidence collection as well, as is occurring nowadays in crime scene investigation[29].

However, the increased time requirement could also affect observation, given the expanded landscape

of extractable information. Citing one of Karl Popper's proposed crite-

29 As an example, reference is made to manual ENFSI-SOC-BPM-02 Version 01, published in December 2022 "Best Practice Manual for the Implementation of a Quality Management System and Accreditation Model for Crime Scene Investigation," whose purpose is to facilitate the implementation of a Quality Management System in CSI processes.

ria—that observation can only arise from a hypothesis[30]—it is reasonable to assert that hypothesis generation will be more contextually appropriate and rewarding, in terms of identifying evidence in the shortest possible time, when operators possess specialized training.

The concept of hypothesis-driven observation has particular relevance in time-constrained battlefield areas, where investigators cannot afford to conduct exhaustive searches without strategic focus.

Continuous education and training are essential, given the rapid evolution of forensic technologies that allowed to executing correct operations in minimal time.

These considerations regarding training and preparation are deliberately emphasized in this work, seeking necessary periodicity also in consideration of the rapid and continuous evolution of technologies and knowledge related to evidence collection which, expressing forms of scientific knowledge, may also be subject to paradigm shifts[31].

Having established the evolutionary process that enables extraction of greater amount of information from crime scenes, compared to the past - and interpretation even at sophisticated levels of complexity - it is useful to conclude this analysis by focusing on the positive effect, in terms of battlefield evidence collection discipline development, resulting from proposed training events involving both green (military) and blue (police) components[32].

In this context, Gendarmerie Type Forces[33], that have a military status and carry out police functions, represent an asset of absolute centrality, given their experience in evidence collection both in operational areas and domestically, as well as their participation as expert witnesses, consultants, and expert witnesses in criminal proceedings.

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30 Popper, "Logic of Scientific Discovery and Open Society" (1989).
31 Paradigm shift describes a fundamental change in the basic assumptions within a dominant scientific theory. This expression was coined by T.S. Kuhn in "The Structure of Scientific Revolutions" (1962).
32 An example of training opportunities is the "Battlefield Evidence Institutional Level Course" held at the NATO SP CoE in Vicenza (Italy)
33 With particular reference to Gendarmerie-Type Forces such as, for example, the Italian Carabinieri, French National Gendarmerie, Spanish Guardia Civil, Portuguese Guarda Nacional Republicana, Dutch Marechaussee, Romanian Gendarmerie, Polish Military Gendarmerie, and Turkish Gendarmerie.

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Preserving Cultural Heritage in the Age of Artificial Intelligence: an overview between protection and weaponisation

Dr. Isabella Marchese

Abstract

The technology of Artificial Intelligence (AI) functions as a transformative power which affects security and cultural heritage preservation (C.H.P). The dual-use capabilities of AI technology create essential ethical and operational challenges. AI technology protects cultural assets through its monitoring capabilities and digitization efforts and predictive threat analysis but it becomes a significant threat when used to launch cyberattacks or spread misinformation or target cultural sites precisely. This research investigates how AI technology interacts with counterterrorism practices and cultural heritage defense to analyze its advantages and threats to worldwide cultural heritage. The research uses case studies and strategic analysis to identify governance systems which will keep AI from causing destruction while maintaining its function as a preservation tool.

1. Introduction

Throughout human history, cultural heritage has been a cornerstone of civilization, encapsulating the traditions, values, and artistic expressions of societies across time. Cultural artifacts, historical monuments, and intangible heritage such as languages and oral traditions provide a sense of continuity and identity, linking past generations to the present and future. However, cultural heritage is increasingly under threat—not only from natural disasters and illicit trafficking but also from modern warfare, cyber threats, and the rise of artificial intelligence (AI).

AI has proven to be a revolutionary tool in various sectors, including security and heritage preservation. From the use of machine learning to detect illegal artifact trafficking to AI-powered drones monitoring cultural sites, the technology has opened unprecedented opportunities for safeguarding global heritage. Simultaneously, AI has introduced new challenges, as malicious actors, including terrorist organizations and cybercriminals, exploit the same technology to target and manipulate cultural assets. Deepfake technology, cyberattacks on digital archives, and AI-driven predictive targeting of vulnerable heritage sites exemplify how AI can be weaponized against cultural institutions. AI intelligence presents a paradox: it can either be a shield protecting our heritage or a weapon accelerating its destruction. The challenge before us is ensuring AI remains a force for preservation and security rather than exploitation and harm.

This paper examines the dual role of AI in the preservation and destruction of cultural heritage, analyzing its applications in monitoring, digital archiving, and recovery while also highlighting the threats posed by AI-driven cyberattacks and disinformation campaigns. Through an exploration of case studies, including INTERPOL's[1] Project PSYCHE, UNESCO's AI-Powered Monitoring System[2], and the Leonardo Database operated by the Italian Carabinieri[3], we will assess the effectiveness of AI-based heritage protection. Furthermore, the paper will propose governance frameworks and counter-AI strategies to mitigate risks while maximizing AI's potential as a guardian of global heritage.

By addressing both the opportunities and challenges posed by AI, this paper aims to provide insights into the ethical, legal, and technological considerations required to navigate the evolving landscape of cultural heritage protection in the AI era. The question remains: will AI serve as a shield or a weapon? The answer lies in the choices policymakers, security professionals, and cultural institutions make today.

2. The Strategic Importance of Cultural Heritage

2.1 The Role of Cultural Heritage in National and Global Stability

1 https://www.interpol.int/content/download/19023/file/WOA_CreatingNationalCulturalHeritageUnit_brochure_2019-01_EN.pdf
2 https://www.unesco.org/en/artificial-intelligence
3 https://www.coespu.org/articles/database-stolen-works-art-leonardo-and-swoads-salvatore-rapicavoli

Cultural heritage is far more than a collection of historical artifacts and traditions—it is the bedrock of civilization, shaping national identity, fostering community cohesion, and serving as a testament to human achievement. It provides a shared sense of belonging, reinforcing social stability and mutual understanding across generations. When properly preserved, cultural heritage plays a fundamental role in nation-building, reconciliation, and diplomacy, offering countries a symbol of continuity and resilience in times of political and social upheaval.

On a global scale, cultural heritage facilitates cross-cultural dialogue and international cooperation. Historic monuments, ancient manuscripts, and artistic masterpieces serve as a bridge between past and present, fostering respect and understanding among diverse populations. UNESCO's 1972 World Heritage Convention[4] underscores the universal value of cultural heritage, highlighting its role in promoting peace and intercultural exchange. Preserving these assets is therefore not just an issue of historical significance but a critical component of international stability and security.

From an economic standpoint, cultural heritage is also an essential driver of tourism, education, and creative industries. Many nations rely heavily on their cultural landmarks as a source of revenue and employment, making the protection of heritage sites an economic necessity. The loss of cultural heritage, whether through destruction or theft, can have profound socio-economic repercussions, eroding the cultural identity of affected populations and limiting their ability to recover from crises.

Recent studies and reports also highlight an interesting aspect, namely that the digitalization of cultural heritage and the proliferation of virtual tourism have emerged as significant components of the global economy, a transformation accelerated by the COVID-19 pandemic. As physical travel became restricted, cultural institutions worldwide turned to digital platforms to maintain public engagement and preserve cultural narratives. This shift not only ensured continuity in cultural access but also opened new avenues for economic development, education, and international collaboration.

In Italy, the pandemic catalyzed the expansion of digital cultural offerings. The Italian Ministry of Culture launched initiatives such as "La

4 https://whc.unesco.org/en/convention/

Cultura Non Si Ferma,"[5] providing virtual access to museums, archaeological sites, and archives. This move was complemented by the development of digital twins and 3D reconstructions of cultural sites, enhancing remote engagement and educational outreach. Moreover, the Italian government's allocation of €200 million for the digitalization of cultural heritage underscores the nation's commitment to integrating digital technologies into cultural preservation and tourism.

In the United States, institutions like the Smithsonian and the Getty Museum leveraged digital platforms to offer virtual tours and online exhibitions, making cultural content accessible to a global audience. The National Endowment for the Arts reported increased public engagement with digital cultural content during the pandemic, highlighting a shift towards online consumption of cultural experiences. Additionally, the U.S. travel industry has seen a rise in virtual tourism experiences, with companies offering immersive VR tours of national parks and historical landmarks, catering to audiences seeking safe and accessible travel alternatives[6].

China has been at the forefront of integrating digital technologies into cultural heritage and tourism. The National Cultural Heritage Administration promoted the use of virtual reality and online exhibitions to preserve and showcase China's vast cultural assets. Platforms like the China National Museum's virtual tour and the Dunhuang Academy's digital archives have provided global audiences with access to China's rich heritage. The government's support for digital infrastructure has facilitated the growth of digital tourism, with virtual tours of historical sites becoming increasingly popular among domestic and international tourists[7].

The integration of digital technologies into cultural heritage and tourism has significant economic implications. According to a report by the World Economic Forum, the digitalization of cultural heritage can stimulate local economies by attracting digital tourism, creating jobs in digital content creation, and promoting cultural industries. Furthermore, UNESCO's initiatives, such as the #ShareOurHeritage campaign, have emphasized the role of digital platforms in preserving cultural diversity

5 https://iicnairobi.esteri.it/en/gli_eventi/calendario/la-cultura-non-si-ferma-weareitaly-2/
6 https://journals.sagepub.com/doi/10.1177/27523543231216774?icid=int.sj-full-text.similar-articles.5&utm_source=chatgpt.com
7 https://www.tandfonline.com/doi/full/10.1080/23311886.2024.2347013?utm_source=chatgpt.com

and fostering global cultural exchange[8].

Looking ahead, the continued advancement of technologies like augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) promises to further transform the landscape of cultural heritage and tourism. These technologies can enhance immersive experiences, facilitate interactive learning, and provide innovative solutions for preserving and interpreting cultural assets[9]. However, challenges related to digital equity, data privacy, and the preservation of intangible cultural heritage must be addressed to ensure that the benefits of digital cultural initiatives are accessible to all.

2.2 Cultural Destruction as a Weapon of War

Throughout history, cultural heritage has been deliberately targeted as a strategy of war, with the aim of demoralizing communities, erasing historical narratives, and dismantling collective identities. The destruction of cultural assets is not merely collateral damage—it is often a calculated act of psychological and ideological warfare designed to eliminate the symbols of a society's past and disrupt its future.

One of the most notorious examples of cultural destruction as a wartime tactic occurred during World War II, when Nazi forces looted thousands of artworks across Europe, seeking to redefine cultural history in alignment with their ideology. Similarly, during the Yugoslav Wars of the 1990s, the destruction of mosques, churches, and historical sites was used to erase the presence of entire ethnic communities, an act that was later classified as cultural genocide by the International Criminal Tribunal for the former Yugoslavia (ICTY).

In the 21st century, terrorist organizations have exploited cultural destruction as both a propaganda tool and a funding mechanism. The Islamic State (ISIS), for example, systematically destroyed cultural heritage sites such as Palmyra in Syria and the Mosul Museum in Iraq[10], not only to instill fear but also to dismantle historical legacies that opposed their extremist ideology. In parallel, the illicit trafficking of looted antiquities has provided terrorist groups with a lucrative source of revenue,

8 https://www.wired.com/beyond-the-beyond/2020/04/unesco-to-the-rescue/?utm_source=chatgpt.com
9 Boboc, R. G., Bautu, E., Gîrbacia, F., Popovici, N., & Popovici, D.-M. (2022). Augmented Reality in Cultural Heritage: An Overview of the Last Decade of Applications. Applied Sciences, 12(19)
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fueling further violence and instability.

The use of AI in modern warfare further complicates these challenges. AI-powered predictive modeling and satellite imaging have enabled military forces to identify, assess, and target key cultural landmarks with unprecedented precision. While such technology can be used to protect cultural sites, it can just as easily be weaponized to maximize the impact of cultural destruction. Moreover, cyberattacks targeting digital archives pose a new and evolving threat, with AI-enhanced malware capable of erasing centuries of historical records in an instant.

Given these realities, safeguarding cultural heritage is not just a matter of historical preservation—it is a crucial element of global security, counterterrorism, and conflict resolution. Governments, international organizations, and cultural institutions must develop comprehensive strategies to protect cultural assets from both physical and digital threats. The integration of AI into these efforts must be carefully managed to ensure that it remains a tool for preservation rather than destruction.

3. AI as a Guardian of Cultural Heritage

AI-powered monitoring systems have revolutionized the ability to detect threats to cultural sites. INTERPOL's Project PSYCHE, for example, employs AI-driven analysis of satellite imagery, dark web activity, and social media to track illicit activities related to cultural heritage. Similarly, UNESCO's AI-Powered Monitoring System integrates drone surveillance, satellite data, and on-the-ground sensors to detect potential risks in real-time.

3.1 AI in Artifact Protection and Recovery

AI has played a crucial role in identifying, tracking, and recovering stolen artifacts. The Leonardo Database, managed by the Carabinieri Command for the Protection of Cultural Heritage (TPC), and the ICOM Red Lists[11] have incorporated AI-driven analytics to identify trafficked cultural objects and assist customs and law enforcement agencies.

A recent case that underscores the importance of AI in artifact recovery is the ongoing war in Ukraine. Since the 2022 Russian invasion, thousands of Ukrainian cultural artifacts and artworks have been looted or

11 https://icom.museum/en/red-lists/#:~:text=Red%20Lists%20present%20the%20categories,being%20illegally%20sold%20or%20exported.

destroyed. AI-assisted tools have been used to track the illicit trafficking of stolen artifacts, providing crucial intelligence to Ukrainian and international law enforcement agencies. The development of AI-based object recognition systems has helped identify missing artifacts on the black market, supporting international efforts to recover and return stolen cultural treasures[12]. This case highlights how AI can be an indispensable tool in cultural heritage recovery in times of conflict.

3.2 Digital Preservation and Immersive Technologies: Enhancing Cultural Continuity Through AR and VR

The advancement of augmented reality (AR) and virtual reality (VR) technologies has significantly transformed the field of cultural preservation and public engagement with heritage sites. These technologies have enabled the digital reconstruction of historical environments and artifacts, allowing for the remote exploration of cultural heritage and enhancing the visitor experience. According to Boboc et al. (2022), AR has been successfully applied in various contexts, including 3D artifact reconstruction, virtual museums, and the preservation of intangible heritage[13].

In Italy, cultural institutions have leveraged AR and VR to create digital experiences for visitors. For example, the Royal Museums of Turin have developed the MRT Virtual app, which allows users to explore the collections remotely and interact with 3D models of exhibited works. Similarly, the digital reconstruction of Ancient Olympia in Greece, utilizing VR, provides an immersive experience that allows visitors to engage with the historical site as it appeared thousands of years ago. These initiatives demonstrate the potential of AR and VR to offer new ways of engaging with cultural heritage, particularly in regions with limited physical access to heritage sites[14].

Globally, the use of AR and VR in cultural tourism has been rapidly expanding. A study conducted in Spain compared the emotional impact of VR and AR applications on visitors to heritage sites, revealing significant differences in sensory and motivational experiences among par-

12 Global Smithsonian Institute. (2023). Remotely Monitoring Ukraine's Cultural Heritage: Conflict Observatory.
13 https://www.mdpi.com/2076-3417/12/19/9859?utm_source=chatgpt.com
14 https://business.esa.int/news/italian-consortium-uses-arvr-and-satellite-technologies-to-expand-access-to-fragile-historical-sites

ticipants[15]. In Greece, the Chronos app allows tourists to visualize how archaeological sites appeared 2,500 years ago through AR, enhancing the cultural experience and attracting a wider audience. These technological advancements not only increase the accessibility of cultural sites but also contribute to a broader global interest in cultural heritage preservation.

However, despite the numerous benefits, the implementation of AR and VR in cultural heritage preservation presents challenges, such as the need for standardization, data management, and staff training. It is crucial to establish guidelines and best practices to ensure the long-term effectiveness and sustainability of these technologies in the field of cultural heritage.

4. The Dark Side: AI as a Tool for Cultural Erasure

4.1 AI-Enhanced Targeting of Cultural Sites

AI-Enhanced Targeting of Cultural Sites The precision of strategic targets identification and attack has substantially increased through AI implementation in warfare. Terrorist organizations together with hostile state actors use AI-powered satellite imagery and geospatial analysis and predictive modeling to identify vulnerabilities in cultural heritage sites which allows them to launch precise calculated strikes against both physical structures and the symbolic fabric of communities. The protection of cultural monuments in conflict zones remains a major concern because these sites function as identity anchors for religious temples, libraries and ancient settlements.

A 2023 NATO report on emerging threats to cultural property highlighted the use of AI-enhanced drones for reconnaissance and targeting of religious sites during the Nagorno-Karabakh conflict. This case underlines the pressing need for international humanitarian law to evolve in step with technological innovation (NATO Strategic Communications Centre of Excellence, 2023).[16]

In the near future, the proliferation of commercial satellite services combined with increasingly accessible open-source AI tools may democratize this capability, allowing even non-state actors to acquire precise geolocation data for cultural landmarks. Without robust legal deter-

15 *https://link.springer.com/article/10.1007/s10055-025-01109-0?utm_source=chatgpt.com*
16 *https://www.nato.int/cps/en/natohq/news_211795.htm*

rents and monitoring systems, such developments could dramatically escalate targeted cultural destruction.

4.2 Deepfake Technology and Historical Manipulation

AI-generated synthetic media—pose a profound threat to cultural integrity and public trust. Unlike traditional misinformation, deepfakes can convincingly alter audiovisual records of historical events, create fictitious "testimonies," or simulate expert commentary, thereby sowing confusion about the authenticity of cultural narratives.

Recent incidents have demonstrated the technology's capacity to undermine historical facts. For example, deepfakes were used in 2022 to fabricate archival footage suggesting the falsification of key WWII events, which then circulated widely on social media platforms before being flagged and removed[17]. In cultural heritage terms, the danger lies in the manipulation of archival materials, museum collections, and documentary sources to serve revisionist or extremist agendas.[18]

Looking forward, AI-generated historical simulations may blur the boundaries between reconstruction and fabrication. Virtual heritage experiences, while valuable pedagogical tools, risk legitimizing inaccurate representations if not subject to rigorous academic oversight. Institutions will need to adopt verification protocols and embed digital provenance markers to protect the epistemic integrity of their collections.

4.3 Cyber Threats to Cultural Institutions

Cyber Threats to Cultural Institutions AI-enhanced cyber threats are a growing concern for libraries, museums, and heritage archives. Cultural institutions are often underfunded in cybersecurity, making them soft targets for ransomware attacks and data manipulation campaigns. In 2022, the British Library faced a sophisticated ransomware incident that compromised access to digitized collections and research databases.[19]

Malware equipped with AI can autonomously adapt to bypass security protocols, learn institutional behavior patterns, and selectively corrupt or delete data. This kind of targeted sabotage could permanently erase

17 Diakopoulos, N. (2023). Deepfakes and the Future of Truth. MIT Press.
18 Ivi
19 Jisc. (2023). Cybersecurity in UK Cultural Institutions: Annual Threat Report. Jisc Publications.

entire archives, especially if institutions lack redundant storage or fail to maintain decentralized backups.[20]

In the short term, heritage institutions must strengthen cyber-resilience frameworks, including: investment in AI-assisted anomaly detection tools, staff training in digital hygiene and phishing prevention, and the adoption of zero-trust architecture in data infrastructure.

On a strategic level, there is a growing argument for establishing an international cultural cybersecurity network, supported by INTERPOL and UNESCO, to share threat intelligence and coordinate responses to attacks on global heritage institutions.

4.4 Manipulation of Historical Media and Deepfakes: Emerging Threats to the Authenticity of Cultural Heritage

The rapid development of artificial intelligence (AI) technologies has introduced new challenges in the preservation and interpretation of cultural heritage, particularly through the use of deepfakes. Initially conceived for entertainment purposes, these tools are now being employed to create highly realistic audiovisual content that can alter historical and cultural perceptions.

Deepfakes, which use generative neural networks to overlay faces or voices onto existing videos, have been applied in artistic contexts to explore new forms of expression. For instance, artist Gillian Wearing utilized this technology to extend her exhibit "Life: Gillian Wearing" at the Cincinnati Art Museum, creating new narratives through deepfake videos[21]. However, the use of such technologies raises ethical concerns about the manipulation of identity and historical memory.

Furthermore, the application of deepfakes to manipulate historical content represents a significant threat to the authenticity of cultural heritage. According to a UNESCO report, the automation of content creation through AI can fabricate historical events, falsify evidence, and spread hate speech, eroding trust in authentic sources[22]. This ability to alter visual and auditory reality makes deepfakes powerful tools for distorting history and creating false narratives.

20 Europol. (2022). Threat Assessment on Cyber Risks to Cultural Heritage. Brussels: Europol Publications
21 https://cuseum.com/blog/2019/12/17/3-things-you-need-to-know-about-ai-powered-deep-fakes-in-art-amp-culture?utm_source=chatgpt.com
22 https://www.unesco.org/en/articles/ai-and-holocaust-rewriting-history-impact-artificial-intelligence-understanding-holocaust?utm_source=chatgpt.com

The proliferation of deepfakes is exponential, with an estimated 100% growth every six months. In 2023, approximately 500,000 deepfake videos and audios were shared on global social media platforms, with projections suggesting an increase to 8 million by 2025[23]. This rapid increase presents significant challenges for verifying content authenticity and protecting cultural heritage from harmful manipulations.

To address these threats, it is essential to develop advanced deepfake detection tools and promote digital literacy among the public. Furthermore, international collaboration is necessary to establish regulations governing the use of AI technologies in cultural heritage contexts, ensuring the protection of historical and cultural truths.

5. The Ethical and Strategic Imperative

5.1 AI Governance and Regulatory Frameworks

The ethical governance of AI in the cultural heritage domain remains fragmented and underdeveloped. While frameworks such as the EU's Artificial Intelligence Act (2023) and UNESCO's Recommendation on the Ethics of Artificial Intelligence (2021) provide foundational principles, they are often generalist in scope and lack specific guidelines tailored to cultural heritage. A 2022 report by the European Parliament stressed the need for sector-specific governance models that account for the sensitive nature of cultural data and the symbolic value of heritage assets (European Parliament, 2022).

Transparency is key: institutions must ensure that AI systems used in heritage protection are explainable and auditable, especially when applied to monitoring, surveillance, or classification tasks. Cultural impact assessments—analogous to environmental or human rights impact assessments—should be mandated for large-scale AI deployments in museums, libraries, and archaeological projects.

INTERPOL and UNESCO could co-lead a working group to develop binding protocols, possibly modeled after the Tallinn Manual's approach to cyberwarfare, adapted for heritage protection. This could culminate in an international treaty or protocol analogous to the 1954 Hague Convention, but specific to AI and cultural heritage.

Artificial Intelligence (AI) has seen an ever-growing impact on cultural

23 *https://www.openfox.com/deepfakes-and-their-impact-on-society/?utm_source=chatgpt.com*

sectors, from heritage preservation to museum engagement. However, the adoption of these technologies raises significant ethical concerns regarding the protection of human rights, transparency, and inclusivity. In response to these challenges, the European Commission introduced the *AI Act*, the world's first comprehensive legal framework on AI, establishing risk-based regulations to ensure AI's trustworthiness and respect for fundamental rights. The AI Act is designed to provide guidelines for the responsible development and application of AI systems, ensuring they are safe and ethical in diverse cultural contexts[24].

Similarly, UNESCO adopted the "Recommendation on the Ethics of Artificial Intelligence" in 2021, providing a global ethical framework for AI development and use. The recommendation advocates for principles such as transparency, accountability, and respect for human dignity. With the endorsement of 194 member states, this initiative establishes the Global Observatory on Ethics of AI, which supports governments in implementing ethical policies and fostering global dialogue on the responsible use of AI in culture (UNESCO, 2021).

Moreover, UNESCO organizes events such as the *AI and Intangible Cultural Heritage Webinar* held in October 2024, where experts discussed the impact of AI on intangible cultural heritage, stressing the need for inclusive technologies that respect the rights of indigenous populations and ensure equitable access to digital cultural resources[25].

These global initiatives highlight the critical importance of an ethical and inclusive approach to AI in cultural contexts. They aim to preserve cultural diversity while promoting equitable access to digital cultural heritage and fostering the global cooperation needed to regulate AI's role in shaping cultural narratives.

On a global scale, numerous organizations are developing regulatory frameworks and guidelines to ensure the responsible and inclusive use of AI, particularly in the areas of cultural heritage and the arts.

In November 2021, UNESCO adopted the *Recommendation on the Ethics of Artificial Intelligence*, which provides the first global standard on AI ethics. This document, applicable to all 194 member states, underscores fundamental principles such as transparency, accountability,

24 *https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai*
25 *https://www.unesco.org/en/articles/recommendation-ethics-artificial-intelligence*

and inclusivity, with a special focus on safeguarding human rights and dignity. The recommendation also promotes the adoption of ethical impact assessment tools and the development of technical expertise in AI ethics[26]

UNESCO regularly hosts the Global Forum on AI Ethics, an international event bringing together global leaders, AI experts, industry pioneers, and policymakers to address critical challenges and opportunities in AI development. The forum focuses on the implementation of UNESCO's ethical guidelines, balancing innovation with responsibility, and promoting global collaboration to shape inclusive and ethical AI governance frameworks[27](UNESCO, 2021).

In 2025, the United Nations Alliance of Civilizations launched the HUMAN-AI-T initiative, designed to align the development of AI with universal ethical values, cultural heritage, and human dignity. This global effort aims to integrate humanity into AI, promoting cultural diversity and respect for human rights in the context of technological development (UN News, 2025).

UNESCO's *Memory of the World* Programme is an international initiative aimed at safeguarding the documentary heritage of humanity against collective amnesia, neglect, deterioration, and deliberate destruction. The program promotes the preservation of valuable archival and bibliographic collections and facilitates the reconstruction of dispersed or relocated documentary heritage, enhancing accessibility to and dissemination of these materials (Wikipedia, 2025).

Despite the progress made, significant challenges remain in implementing ethical AI governance in cultural contexts. Continuous international collaboration is needed to develop regulations that govern AI use in cultural heritage, ensuring the protection of historical and cultural truths. Moreover, promoting digital literacy and ethical awareness among cultural professionals and the public is essential to addressing the moral and societal implications of AI.

5.2 Counter-AI Strategies and Defensive AI Applications

Algorithmic Bias and Cultural Representation AI models are only as objective as the data on which they are trained. Cultural datasets are

26 *https://www.unesco.org/en/artificial-intelligence/recommendation-ethics*
27 *https://www.unesco.org/en/forum-ethics-ai*

often skewed toward dominant narratives—Western, colonial, or urban-centric perspectives—leading to the exclusion or misrepresentation of marginalized cultures, Indigenous knowledge systems, and intangible heritage.

This issue has already surfaced in AI art and museum applications. A 2021 analysis by the MIT Media Lab showed that image recognition tools trained on European art collections failed to accurately classify African and Indigenous artifacts, reinforcing Eurocentric taxonomies (MIT Media Lab, 2021). To address this, institutions must: diversify training datasets to include a broader spectrum of cultural expressions; involve community stakeholders, particularly from underrepresented regions, in the algorithm design process and implement bias audits and external peer reviews before deploying AI tools in heritage classification or recommendation systems. Inclusive AI design is not merely a technical challenge—it is a cultural responsibility. Without proactive measures, heritage AI could inadvertently reproduce the very inequities it seeks to guard against.

5.3 Cross-Sector Collaboration

Dual-Use Dilemma The dual-use nature of AI refers to the capacity for a single technological capability to be used for both beneficial and malicious purposes. In the heritage context, tools developed for preservation—such as object recognition, geolocation tracking, or metadata analysis—can also be weaponized for looting, targeting, or ideological manipulation.

One illustrative example is the adaptation of heritage monitoring tools for geopolitical surveillance. A 2023 review published by the Brookings Institution highlighted cases where satellite-based archaeological mapping software was repurposed to monitor religious minorities under authoritarian regimes, raising red flags about AI misuse[28].

Short-term risks include: the repurposing of AI algorithms for state-sponsored censorship of cultural narratives and the use of heritage AI to profile or surveil ethnic or religious communities under the guise of protection. Mitigating these risks requires: embedding ethical constraints and "off-switch" mechanisms into AI systems, requiring dual-u-

28 Brookings Institution. (2023). Dual-Use AI in Heritage Surveillance: Geopolitical Risks and Safeguards. Washington, DC.

se impact declarations as part of funding and deployment frameworks and creating oversight bodies, potentially modeled after data protection authorities, with jurisdiction over AI used in cultural contexts.

As the line between civilian and strategic technology continues to blur, only robust, anticipatory governance will ensure that AI strengthens—rather than threatens—cultural resilience

6. Case Analysis and Strategic Interventions

The intersection of artificial intelligence (AI) surveillance, authoritarian governance, and cultural heritage has become a critical area of concern in contemporary geopolitics. Authoritarian regimes increasingly employ AI-powered surveillance technologies to monitor and control ethnic and religious minorities, often under the guise of national security or public order. These technologies, while ostensibly aimed at enhancing security, frequently result in the erosion of civil liberties and the suppression of cultural identities.

In the Xinjiang region of China, the government has implemented an extensive surveillance infrastructure known as the "Skynet" system, which utilizes facial recognition, biometric data collection, and AI algorithms to monitor the Uyghur Muslim population. This system has been instrumental in identifying individuals based on ethnic features, leading to widespread human rights abuses, including arbitrary detentions and forced assimilation efforts[29]. The integration of AI in these surveillance practices underscores the potential for technology to be leveraged as a tool for cultural repression.

Similarly, in Tibet, the Chinese government employs AI-driven surveillance to monitor religious practices and suppress expressions of Tibetan identity. Technologies such as facial recognition cameras are deployed in monasteries and temples to track attendees and identify individuals engaged in activities deemed subversive. This digital oversight extends to online platforms, where communications are monitored, and religious content is censored, further restricting the cultural and religious freedoms of the Tibetan population[30].

The implications of AI surveillance extend beyond the borders of Chi-

29 https://en.wikipedia.org/wiki/Persecution_of_Uyghurs_in_China?utm_source=chatgpt.com
30 https://en.wikipedia.org/wiki/Religious_Sinicisation_under_the_Xi_Administration?utm_source=-chatgpt.com

na. Authoritarian regimes worldwide are adopting similar technologies, raising concerns about the global spread of digital authoritarianism. The export of surveillance technologies, often accompanied by the exportation of authoritarian practices, poses significant challenges to international human rights standards and the preservation of cultural heritage[31].

In conflict zones such as Ukraine, the use of AI surveillance technologies has been employed to monitor and protect cultural heritage sites amidst ongoing hostilities. While these technologies can aid in the preservation of cultural assets, they also introduce risks related to privacy and the potential misuse of surveillance data. The balance between security and civil liberties remains a contentious issue, particularly as nations navigate the complexities of warfare and cultural preservation in the digital age.

In conclusion, the convergence of AI surveillance and authoritarian governance presents significant challenges to the protection of cultural heritage and the safeguarding of human rights. As technology continues to advance, it is imperative for international bodies, governments, and civil society to collaborate in establishing ethical frameworks and regulations that ensure AI is used to promote, rather than undermine, cultural diversity and individual freedoms.

6.1 Ukraine: Cultural Heritage and the Frontlines of Conflict

The ongoing war in Ukraine has significantly highlighted the weaponization of cultural heritage, emphasizing its strategic role in modern warfare. Since the Russian invasion in February 2022, UNESCO has verified damage to over 485 cultural sites, including churches, museums, monuments, and libraries, underscoring the deliberate targeting of cultural identity in the conflict[32]. These attacks are not merely incidental; they reflect the use of cultural heritage as a tool of psychological warfare, aimed at eroding the cultural foundations of the Ukrainian nation.

In response, Ukrainian institutions, supported by European and international partners, have adopted innovative technologies to document and mitigate the destruction. AI-powered satellite imagery and social media scraping have played an essential role in monitoring looting and

31 https://www.wired.com/story/artificial-intelligence-watching-us-judging-us/?utm_source=chatgpt.com
32 https://www.unesco.org/en/articles/damaged-cultural-sites-ukraine-verified-unesco?utm_source=-chatgpt.com

the destruction of cultural sites in real time. This digital documentation has proven vital for both preserving the historical memory of the conflict and for planning recovery efforts[33].

However, the use of AI in the conflict is not one-sided. On the other hand, there is evidence that AI-powered targeting systems have been used by Russian forces to identify and strike cultural infrastructure. These actions contribute to the psychological warfare efforts aimed at destabilizing communities and undermining national identity. The weaponization of cultural heritage in this manner demonstrates the dark side of AI's potential in conflict zones, where it becomes a tool not only for preservation but also for destruction[34].

The situation in Ukraine clearly highlights the urgent need for international frameworks that provide formal protections for cultural heritage in conflict zones. Protecting digital cultural records under international humanitarian law, including offering immunity to servers hosting such data, is essential for safeguarding cultural memory. Furthermore, the creation of AI observatories under the auspices of UNESCO could help monitor and regulate the use of AI in cultural contexts, ensuring ethical standards are upheld. Additionally, leveraging machine learning and blockchain technologies to track and repatriate trafficked artifacts can help mitigate the losses incurred during conflicts, ensuring that stolen cultural assets are returned to their rightful owners.

Ultimately, Ukraine's experience underscores that cultural heritage is far from being mere collateral damage in modern warfare—it is a strategic target. To respond effectively, there needs to be a comprehensive approach that combines AI, diplomacy, and robust digital safeguards. These efforts must be at the core of cultural policies in conflict zones to ensure the protection of cultural identity amid the complexities of war.

6.2 The British Library Cyberattack. A Strategy for Institutional Recovery

The ransomware attack on the British Library in October 2023 resulted in unprecedented disruption to one of the world's most important cultural institutions. While the attackers' identities remain unconfirmed, the

33 https://www.unesco.org/en/articles/supporting-digitization-museum-collections-and-documentary-heritage-ukraine?utm_source=chatgpt.com
34 https://en.wikipedia.org/wiki/Art_theft_and_looting_by_Russia_during_the_invasion_of_Ukraine?utm_source=chatgpt.com

incident revealed systemic vulnerabilities in cybersecurity preparedness across the heritage sector. Digitized collections, public access systems, and interlibrary communications were all significantly affected. As of mid-2024, recovery efforts have remained partial, hindered by outdated infrastructure, data loss, and limited in-house expertise.

To support a strategic and sustainable recovery, the following multi-pronged approach is proposed:

- Immediate Response Infrastructure: establish an AI-enhanced threat detection and response system trained specifically on cultural institution attack patterns. Open-source tools like MITRE ATT&CK or IBM's AI-based QRadar could be customized for this purpose.
- Digital Twin Deployment: create a "digital twin" of the library's infrastructure to simulate restoration efforts, model vulnerabilities, and develop adaptive backup scenarios.
- Public–Private Partnerships: form long-term alliances with cybersecurity firms (e.g., CrowdStrike, Palo Alto Networks) to outsource core resilience infrastructure and training.
- UNESCO and UK Government Support: mobilize heritage-specific funding under the umbrella of the UNESCO Memory of the World program and the UK National Cyber Strategy.
- Open Access Transparency: develop a public accountability framework documenting what was lost, what is restorable, and what systemic reforms are underway.

By adopting a transparent, AI-driven, and partnership-based model, the British Library can set a precedent for cultural cyber-resilience in the 21st century.

7. Emerging Risks and International Regulations: Safeguarding Cultural Heritage in the Age of AI and Modern Warfare

As artificial intelligence (AI) technologies continue to evolve, their role in modern warfare has become increasingly complex and contentious. One of the most pressing concerns is the potential for AI to be weaponized, not only for physical destruction but also for the manipulation of

cultural identity and historical memory. The use of AI in military contexts, particularly through autonomous systems, raises serious ethical questions regarding accountability, the protection of civilians, and the preservation of cultural heritage. In the case of Ukraine, for example, AI has been used to target cultural sites, effectively weaponizing cultural heritage as a tool of psychological warfare and destabilization. The precise targeting of monuments, churches, and museums underscores the strategic value of cultural heritage in contemporary conflicts. This trend could lead to an increasing use of AI-powered drones and autonomous vehicles to destroy or damage culturally significant sites with unprecedented precision.

The ethical implications of such practices are profound. The manipulation of cultural history through AI is not limited to physical destruction; AI-driven deepfakes and digital alterations can distort historical narratives and rewrite the past. For instance, AI technologies are increasingly capable of creating hyper-realistic fake media, including videos, audios, and images, that can be used to falsify historical events or misrepresent cultural identities. This poses a serious threat to the integrity of historical records and the preservation of cultural heritage. By distorting the collective memory, such technologies could fuel conflict and further divide societies, especially in regions where cultural identity is already a source of tension. The ability to manipulate the historical narrative through AI highlights the urgency of establishing ethical frameworks to govern the use of these technologies in sensitive cultural contexts. Moreover, the development and deployment of AI in modern warfare raise critical questions about the role of international law in regulating these technologies. Currently, international humanitarian law does not adequately address the use of AI in cultural heritage destruction or historical manipulation. Therefore, the call for new regulations to safeguard cultural heritage in conflict zones is more urgent than ever. As AI continues to play a larger role in military strategy, the need for robust ethical standards, clear accountability measures, and legal protections for cultural heritage becomes paramount.

In response to the emerging risks posed by AI, several international frameworks have been developed to regulate and govern its use, with the goal of protecting human rights, cultural identity, and historical memory. The European Union, in particular, has taken a proactive approach in creating regulations that aim to manage AI's influence on society.

The *AI Act* (Culture Action Europe - European Parliament Adopts the AI Act: Implications for Culture)[35] and *the General Data Protection Regulation (GDPR)* are two pivotal pieces of legislation that have profound implications for the protection of cultural heritage. The *AI Act*, introduced in 2021, represents the first comprehensive regulatory framework for artificial intelligence globally. It establishes clear guidelines on the use of high-risk AI systems, including those employed in cultural heritage sectors, with an emphasis on transparency, accountability, and ethical use. For cultural institutions, these provisions ensure that AI technologies used for digitizing heritage, monitoring cultural sites, or tracking looted artifacts are applied responsibly and in line with international human rights standards.

The GDPR, on the other hand, provides a critical layer of protection for digital cultural records. With the increasing digitization of cultural heritage materials, such as museum collections and archival documents, data privacy has become a critical issue. The GDPR's strict data protection laws ensure that digital cultural artifacts and personal data linked to these assets are handled with the utmost care, providing a legal framework to protect against unauthorized use or exploitation. For example, if a cultural institution in a conflict zone digitizes its collections to preserve them from physical destruction, the GDPR mandates that such data must be stored and transmitted securely, ensuring that it is not misused for surveillance or manipulation purposes. Beyond the European Union, the global community has also been engaging in discussions around the ethical use of AI, particularly in conflict zones where the destruction of cultural heritage is a real threat. UNESCO has played a pivotal role in advocating for the protection of cultural heritage under international law. Its *Recommendation on the Ethics of Artificial Intelligence* provides comprehensive guidelines on how AI can be used responsibly in cultural contexts, focusing on issues like transparency, accountability, and respect for cultural diversity. However, the global implementation of such frameworks remains inconsistent, with different countries adopting varying approaches to AI regulation. Some nations, particularly authoritarian regimes, have shown little interest in adhering to international norms, instead using AI for surveillance, censorship, and even the destruction of cultural heritage.

The responses from governments worldwide to these challenges are

35 *https://cultureactioneurope.org/news/european-parliament-adopts-the-ai-act*

varied but increasingly aligned. While the European Union's regulatory framework sets a global standard, other nations are exploring their own AI governance models, often in partnership with organizations like UNESCO, to ensure the ethical application of AI in the cultural sector. The rise of AI-based surveillance in authoritarian regimes and its potential misuse for cultural repression and manipulation is a crucial consideration. As AI technologies continue to shape the future of warfare, culture, and human rights, the need for comprehensive international regulation has never been clearer. It is imperative that the global community collaborates to establish enforceable legal frameworks that protect cultural heritage from the adverse impacts of AI, especially in regions already vulnerable to conflict and historical manipulation.

8. Conclusion: A Shared Responsibility

As AI continues to redefine global security paradigms, its role in cultural heritage protection cannot be overlooked. And, as we stand on the precipice of an AI-driven future, the responsibility to safeguard cultural heritage is not just a matter of security but a moral imperative. AI will shape the destiny of cultural preservation—whether for good or for ill depends on the choices we make today. The institutions best positioned to address these challenges must leverage their expertise to steer AI governance in the right direction. The stakes are clear: failure to act will result not only in the loss of invaluable cultural artifacts but also in the erosion of the historical foundations that define civilizations. AI can be a shield or a weapon; the choice lies in how we choose to wield it.

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