

# Chapter 16

## Not Just Body and Decomposition: Forensic Archaeology Preventing Antiquity Crimes



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**Abstract** The term forensic archaeology also identifies a sector that uses archaeological, scientific, and legal disciplines to study and analyse the strategies and modus operandi of criminal groups which endanger and undermine cultural heritage through theft, looting, and national and international trafficking.

A forensic archaeologist serves as an expert or consultant to the court, investigators, law enforcement, lawyers, and other figures, institutions, local authorities, or private individuals and must demonstrate the origin of archaeological finds and art subject to illegal excavations or illicit trafficking and draw up appraisals and assessments on damage to cultural heritage and seized archaeological finds and artwork.

**Keywords** Forensic archaeology · Forensic investigation · Cultural heritage protection · Antiquities crime · Illicit trafficking · Archaeological heritage looting

When archaeological methods are involved in forensic investigations, they are usually used to search for missing bodies, which are generally buried underground, and/or to analyse discovered bodies. Recently, these techniques have become relevant for other purposes as well. Archaeological approaches have become as important in numerous forensic cases ‘without a body’ as they have been in ‘normal’ criminal cases, particularly in Italy and in the Middle East. If the general guidelines followed during the crime scene investigation (CSI) are the same, the differences in the approach are relevant.

A forensic archaeologist’s activities in this sector are quite varied and include demonstrating the origin of archaeological finds and art subject to illegal excavations or illicit trafficking and drawing up appraisals and assessments on damage to cultural heritage and seized archaeological finds and artwork. Therefore forensic archaeology also indicates the professional activities carried out in this field,

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whether in or out of court, by archaeologists, art historians, and other professionals working to protect cultural heritage as experts or consultants to the court, investigators, law enforcement, lawyers, and other figures, institutions, local authorities, or individuals.

If the normal study of archaeological materials is aimed at reconstructing their historical context and events, in legal archaeology the evidence regarding a find's history must also include information about present events: the identification of clandestine excavation areas and illicit traffic, the damages suffered by their contexts, and the possibility of reconstructing them.

At times, some countries refer to this field as judicial archaeology instead of forensic archaeology, creating confusion, improper uses, and disparate meanings.

Mainly in Italy (but not exclusively), the aforementioned term (judicial archaeology) is used in journalism to indicate dated legal cases, defining them as 'the archaeology of justice'; this meaning was also taken up by Judge Ferdinando Imposimato in one of his books: after having recently escaped the failed attack in Addaura, Giovanni Falcone confronted Imposimato, declaring that he was considered a fool in the salons of Palermo for wasting his time getting mixed up in old stories and 'instigating judicial archaeology.'<sup>1</sup>

It is basically for this reason that forensic archaeology is also referred to when there is a lack of a classic crime scene (CSI) at an international level: its purpose is to fight crimes against cultural heritage by consulting various professional figures who can together carry out investigations and work on the prevention and repression of vandalism and crimes against cultural heritage.

In fact, the above term is used to identify all those criminal associations, mainly of a mafia type, that manage the international illicit trafficking of cultural assets, from clandestine excavations to the black market. It is well known that art is third in the ranking in mafia trafficking, preceded only by drugs and weapons; it is also the fourth most profitable market for international crime.

In fact, investigations, seizures, and recoveries of antiquities by the judiciary system and the police are certainly commonplace, with the relative civil and criminal judicial disputes arising from the same. The result is a new professional field of archaeology and other disciplines relating to cultural heritage: more and more often archaeologists, art historians, and cultural heritage professionals in general are called to intervene in prevention, investigation, and repression activities for crimes against cultural heritage and in judicial proceedings related to the seizure or recovery of archaeological finds and works of art circulating in the clandestine market. In comparison with other disciplines used in the criminological and judicial field, we can define the use of the methodological approach of forensic archaeology as a professional field that brings the skills of archaeologists and other cultural heritage professionals into the judicial field to establish the origin of archaeological finds and art subject to illegal excavations or illicit trafficking and draw up appraisals and assessments on seized archaeological finds and artwork or the entity of damages to cultural heritage.

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<sup>1</sup>F. Imposimato, 2013. *The Republic of Unpunished Massacres*, Newton Compton.

Working in the judiciary field as technicians and professionals at the service of law enforcement, judges, lawyers, institutions, local authorities, or private individuals to carry out the prevention, investigation, and repression of crimes and acts of vandalism against cultural heritage requires, in addition to excellent preparation in the field, knowledge, abilities, and specific skills that the normal academic path in the field of archaeology and cultural heritage today does not provide, as indeed already occurs for many other areas of professional archaeology, thus following the risk of facing the working world with an education that is technically inadequate for carrying out very delicate roles that also involve significant legal responsibilities. In fact, if archaeologist's studies are usually aimed at reconstructing historical contexts and events, in forensic archaeology it is essential to know how to analyse archaeological finds and works of art to derive useful information for drafting expertise on cultural assets for sale, surveys of archaeological finds, and seized works of art; for identifying their origin from illegal excavations, theft, or other illegal activities; for helping investigators reconstruct the channels of illicit traffic; and for making estimates and economic evaluations of assets subject to litigation and the damage caused to cultural heritage by criminal activities and acts of vandalism.

## 16.1 The Italian Situation

From a legislative point of view on the subject, Italy is at the forefront at an international level. The cultural heritage and landscape code (also known as the Urbani Code from the name of the then Minister of Cultural Heritage and Activities, Giuliano Urbani) is an organic body of provisions relating to the cultural heritage and landscape assets of the Italian Republic which was issued with Italian Legislative Decree No. 42 of January 22, 2004.

The code identifies the need to preserve Italian cultural heritage. It considers cultural assets as all tangible and intangible things of artistic, historical, archaeological, or ethno-anthropological interest; this also includes architectural assets, collections of cultural institutions (such as museums, archives, and libraries), naturalistic assets (such as mineralogical, petrographic, palaeontological, and botanical goods), and historical scientific assets, geographical maps, and photographic material (photography, negatives, and audio-visual (cinematographic film)). Intangible and landscape assets are also considered as being of cultural interest.

Not just laws but also operational departments: in Italy we have a single police force which works exclusively in this sector, more specifically the Carabinieri for the Protection of Cultural Heritage (TPC). It works under the Minister for Cultural Heritage and Activities as a directly collaborating office and conducts judicial police investigations, working against all the violations of cultural heritage law carried out by individuals or criminal organizations, in particular clandestine excavations at archaeological sites; theft and receipt of artwork and related illegal trade; damage to monuments and archaeological areas; illegal exportation of cultural

goods; falsifications of antiques and other works of painting, graphics, and sculpture; recycling operations carried out through the reinvestment of proceeds from the illicit trafficking of cultural assets; and crimes against the landscape.

The TPC Carabinieri serve as a centre for information and analysis in the specific field in favour of all the departments of the Carabinieri and the other police forces and periodically perform monitoring and control of terrestrial and marine archaeological sites and UNESCO World Heritage Sites with the support of the Carabinieri Aircraft Group, the Carabinieri Horseback Group, as well as terrestrial and marine departments, all in constant collaboration with the Minister for Cultural Heritage and Activities and the relevant superintendencies.

They carry out constant control and detection activities at exhibitions, fairs, and auctions both in Italy and abroad, as well as with dealers, antique dealers, restorers, and art dealers, also maintaining close contact with the ecclesiastical authorities for the protection of ecclesiastical cultural heritage.

The TPC Carabinieri also operate abroad through Interpol and maintain relationships with other international police forces, participating in conferences, seminars, and research in areas of interest and collaborating with universities, foundations, and national and foreign research centres to conduct studies and develop operationally relevant projects. Organizations such as UNESCO, ICCROM, ICOM, UNIDROIT, and ICOMOS constantly collaborate with each other and with this nucleus to develop training and awareness activities for the public and industry operators at an international level. Specifically, a memorandum of understanding was stipulated with ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) for the performance of collaboration, research, training, dissemination, and promotion activities concerning the protection and conservation of cultural heritage.

Given their extensive experience, the TPC Carabinieri lastly carry out specialist training activities for foreign state ministry officials, police, and customs officers in the framework of specific cultural cooperation agreements at a government level or at the request of international organizations and intervene in crisis areas in the context of international peace missions to protect the concerned countries' cultural heritage, assisting the officials of the Minister for Cultural Heritage and Activities and the superintendents in activities relating to surveys and the securing and recovery of cultural heritage in areas of Italy which have been affected by serious disasters.

The aforementioned Code has been amended on numerous occasions up to the present day. Just before the end of 2017, the Council of Ministers of the Italian Republic reformed, on the proposal of the Minister of Cultural Heritage and Activities and Tourism and the Minister of Justice, the legislation on crimes against cultural heritage, with the declared objective of increasing penalties and introducing more effective instruments for combating the illicit trafficking of cultural goods. The new aspects of the Code include the introduction of crimes relating to illicit trafficking, illicit detention, and theft of cultural assets, as well as a very significant novelty on the prevention front relating to crimes for the unjustified possession of metal detectors.

This is a further sign that institutions in Italy have recently begun to focus more on criminal activities linked to the illicit trafficking of art and antiquities, which with their annual turnover of between 6 and 8 billion dollars constitute the most profitable organized crime business worldwide after drugs and weapons. Moreover, Italy is one of the most affected countries: it has an average of three ascertained crimes a day, and the subtraction of cultural assets from the community is estimated at around 150 million euros a year. Fortunately, despite often inadequate legislation, Italy is also among the first in the world for its ability to combat the illicit trafficking of art and antiquities and their recovery.

## 16.2 Case Studies

Numerous forensic cases, in which archaeological approaches have been used, have become as important as the criminal cases, particularly in Italy. In this section, two examples will be discussed.

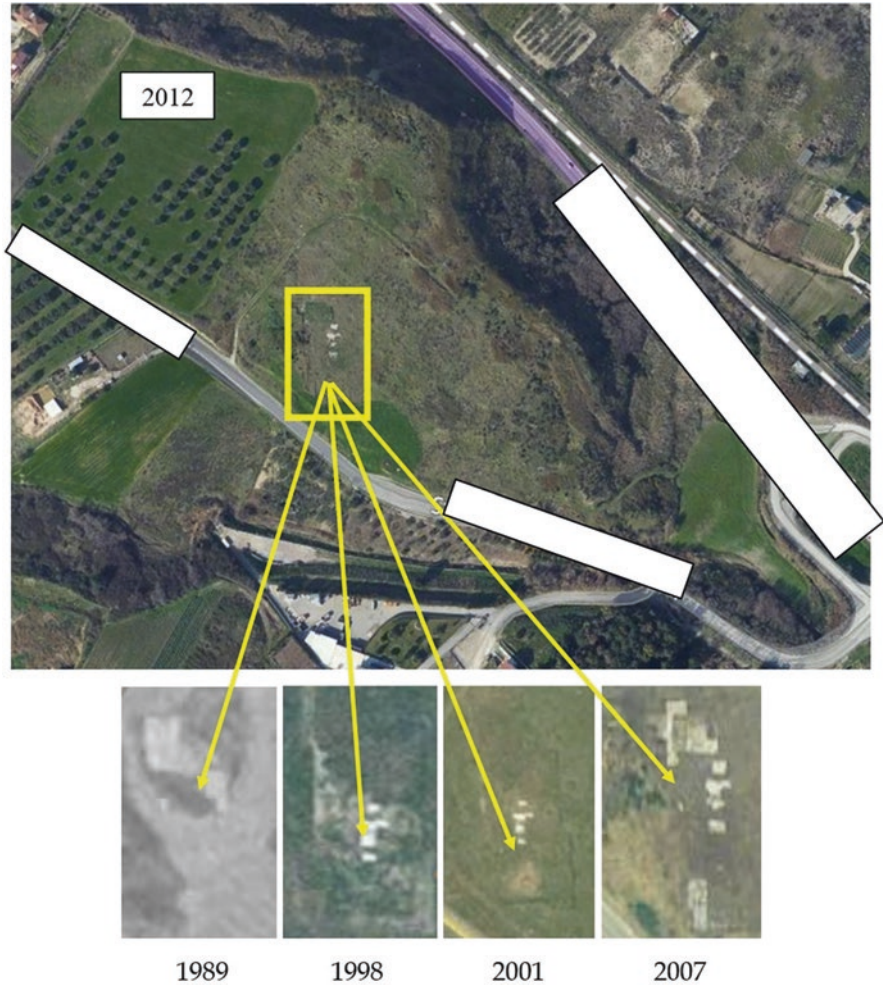
Both of them involve the Ministry of Cultural Heritage, which places legal restrictions on areas with high archaeological potential. Based on this, nobody, including the landowners, can remove soil for any purpose, from building new construction to planting. In these cases, private landowners can confirm the presence or absence of archaeologically relevant remains beneath their soils. The non-destructive methods and the archaeological evaluation are the best options to help a proper act to preserve and protect antiquities in an adequate way.

### 16.2.1 *Southern Italy*

In the first case, the private landowners of this area had the opportunity to confirm the presence of archaeologically relevant remains beneath their soils using ground-penetrating radar (GPR) and to ask the superintendent and the ministry to remove or reduce the legal restriction to a more well-defined area.

In particular, the archaeological find consists of a series of post holes relevant to huts, clay fragments from ceramic dish mixing, some botanical remains, and remains of decorative elements dating back to protohistory. The discovery has been widely documented and is almost entirely stored in the local museum, excluding the largest wall structures. In this regard, it was necessary to perform a careful analysis of the historical satellite images to determine how the effective portion of land had been excavated and how extensive the archaeological finding in relation to the cadastral excerpt present in the report of the superintendent was (Fig. 16.1).

The satellite photos of the area show that, from 1989 to 2007, the research was focused mainly on a certain part of the sandy plateau, confirming what was documented by the temporary expropriation of the superintendent. In particular, just



**Fig. 16.1** The main figure shows the plateau with the archaeological restriction, in particular the archaeological site as it appeared in 2012 (in yellow). In previous years, the only area of the plateau that changed is the area affected by the temporary expropriation of the superintendent. In the bottom of the figure, it is easy to recognize the evolution of this area (and the archaeological excavation) from 1989 to 2007 (the year of the backfilling)

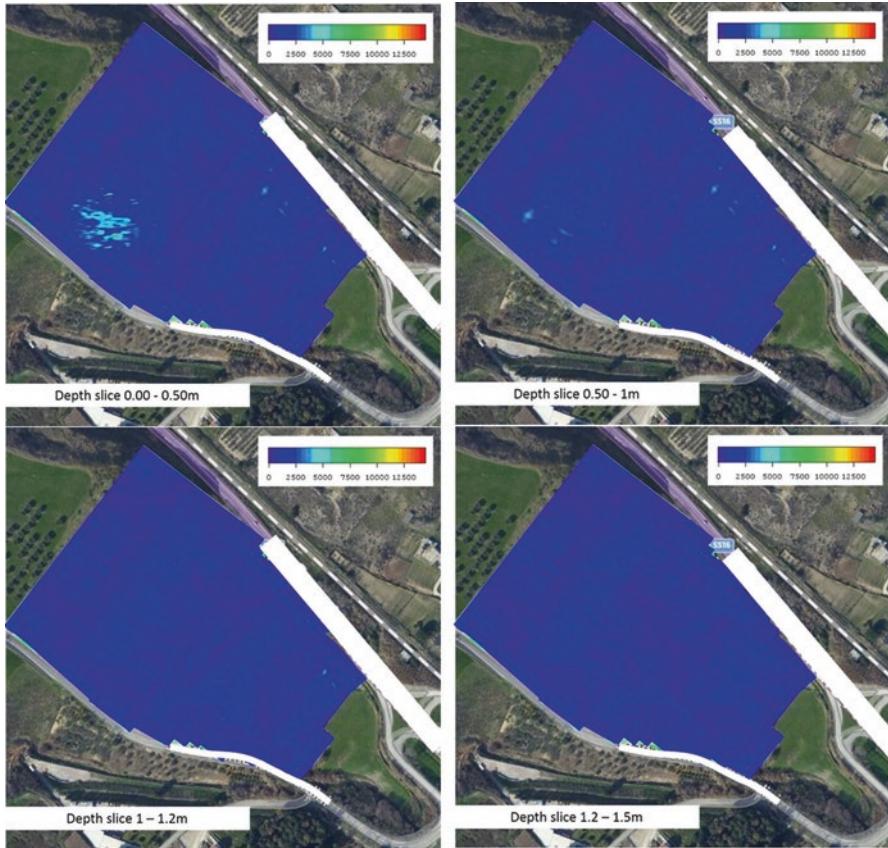
three cadastral particles were investigated by archaeology for a total of approximately 2 ha.

After 2007, when the temporary expropriation was finished, the excavations were backfilled, and the most relevant remains were collected (Fig. 16.2). In 2014, the superintendent together with the Ministry of Cultural Heritage decided to place more severe legal restrictions in the area. The restrictions do not allow building or cultivating or, generally, removing soil from the interested area.





**Fig. 16.2** From the top, the final stages of the excavation of the archaeological site in 2007; in the middle and at the bottom, the area as it is today after the backfilling using white nonwoven fabric



**Fig. 16.3** In the figure, it is possible to note not only the dimensions of the plateau on which the Ministry of Cultural Heritage put the restrictions due to archaeological potential issues but also the relevant results of the forensic GPR investigations. The archaeological remains were not deeper than 1 m ( $v = 0.12$  m/ns). Based on these results, the Ministry has reduced the restriction from 11 to 2 ha

The area of interest was clarified in 2007 as a result of the careful analysis of the satellite photographs, the field walking, and the GPR surveys to demonstrate how the areal dimensions of the superintendent's restriction was objectively too large.

The area affected by GPR prospections was approximately 11 ha and demonstrated how the use of this geophysical tool has allowed both high-resolution and detailed results. In fact, the GPR depth-slice results at different depths (up to 3 m from the surface) (Fig. 16.3) showed no particular anomalies. The only anomaly is the strong presence in the subsoil of the remains previously excavated and documented by the superintendent to a depth of 0.10–0.50 m.

The GPR investigations confirm the archaeological presence in only a limited area (2 ha) and not deeper than 1 m and highlight the complete absence of other remains beneath the soil.



In this first case, the GPR survey scientifically refuted the possibility of finding further archaeological remains in the investigated area and reset the level of archaeological potential in the area, giving the Ministry of Cultural Heritage and its superintendent a unique possibility to better define the restrictions.

### **16.2.2 Northern Italy**

This case demonstrates how if on the one hand Italy is truly at the forefront of legislation and operations regarding the protection of archaeological heritage and on the other there is a lack of specific training in forensic archaeology; this results in the preparation of archaeological reports which are fallacious and deleterious to a correct forensic investigation.

This study initially envisaged carrying out a thorough analysis of all the documentation collected in relation to the case of an alleged illegal excavation in an area subject to archaeological restriction.

This case provided for a forensic inspection of the areas which were subjected to the alleged violation, also supported by GPS technology (Global Positioning System) in order to accurately map and locate the areas concerned. Furthermore, a small GIS (geographic information system) was created in order to visually clarify the geographical position of the violated areas.

This study showed that both the reports which had been drafted and the technical-archaeological surveys not only had evident signs of incongruity, imprecision, and at times fallacies but also demonstrated a lack of technical and scientific rigour, limiting themselves to simple and subjective assessments full of reasonable doubts.

Moreover, this report showed the presence of an archaeological restriction in the area in question but in an area that was only partially affected by the investigation in which there was neither an enclosure nor any public signage informing of this restriction. Furthermore, it shows how the discovery of the seized finds was fortuitous, and not necessarily carried out within the restricted area (Fig. 16.4).

## **16.3 Conclusions**

Good archaeological expertise can lead to different conclusions with respect to initial impressions and the initial configuration of crimes. Although there may be some procedural gaps in a system for the protection of cultural property that is theoretically more than valid, and although these procedural flaws can be greatly diminished, if not eliminated, with the correct use of forensic archaeology in the field of cultural heritage protection and antiquity crime, it is imperative to firmly emphasize that the possession of an archaeological find is a serious offence both on a normative level and on an ethical and moral level, as it is always the result of clandestine



**Fig. 16.4** The route (in blue) to take on foot to reach the area under investigation. The white circle and red circle always, respectively, represent the lack of a part of the walls and the location of the intervention. At the bottom, on the right, and on the left, some photos of the area are shown which demonstrate the total absence of signs and/or fences

excavation and therefore contributes to the destruction of the cultural sites and heritage of an entire nation, if not of humanity.

## 16.4 In Memory of

On July 26, 2017, a hero from another era was lost: a pioneer and protagonist in the fight against crimes against cultural heritage. This man was Roberto Conforti. He died at the age of 79, 42 of which he worked in the Carabinieri (from 1961 to 2002), dedicated to fighting crime and protecting cultural heritage, remaining loyal to the State and its institutions even when they turned against him.

He led the Carabinieri for the Protection of Cultural Heritage from 1991 until his retirement. His leadership brought the Carabinieri to become the world's leading police corps for the fight against crimes against cultural heritage. He and his 300 soldiers carried out hundreds of operations and recovered thousands of archaeological

finds and works of art, including a number of impressive ones such as the Capitoline Triad, a number that is symbolically well-suited to his heroic and unequalled struggle against criminals of art.

After having left the Carabinieri, he continued his commitment to raising awareness for the protection of cultural heritage as President of SIPBC – the Italian Society for the Protection of Cultural Heritage.

In dedicating this chapter to his memory, the author would like to remember him with some of his brief but incisive considerations on Italian cultural heritage: “Italy is a collection of dense cultural contexts, with strong specific connotations and deep historical roots. From the Alps to Pantelleria, there is no corner lacking testimony of this thousand-year-old civilization, whose expressions are not just a legacy of antiquity, but play a significant role for the cultural and economic growth of the nation. The immense heritage is widespread in space and interacts with the land, both in its urban and landscape context. It is varied in relation to the typologies that characterize it. It is purely ours, as unlike in other countries, it is made up of assets produced in our own land. It is immanent to the geographical area it was created for. It is placed in such a way as to create a chronological cultural testimony. It is an expression of our identity”.<sup>2</sup>

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<sup>2</sup>R. Conforti, 1998. *Criminal law concerning the protection of cultural heritage*, in A. Balloni (ed.), *Criminology and Security*, Milan, pg. 95.