

Crime in a prison cell: Epistemic cultures and institutional neutrality in an inquisitorial setting

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Abstract

A death that occurs inside a prison cell initiates a distinct set of procedures from those around a death on the outside. When a confined space within a penal institution of total surveillance and control becomes a crime scene, it may reflect the prevailing institutional cultures and the ways in which they react and adapt. This paper analyses the case of Marcos, who was found dead in a Portuguese prison cell which he shared with another individual. From the discovery of the body to the crime scene inspection by the police, and from the autopsy to the trial, the qualitative analysis of the inscriptions produced in this case reveals and highlight the epistemic cultures involved. As each culture is developed from the professional practices and modes of acquiring and using knowledge, the analysis of their logic contributes to an understanding of how forensic evidence is co-produced and appropriated in the Portuguese legal context. We identify five epistemic cultures: *institutional defence*, *hunch*, *office*, *bubble*, and *'rubber stamp'*. We argue that the apparent neutrality of an inquisitorial criminal justice system enables the development of particular ways of producing, understanding and using scientific knowledge and forensic evidence.

Keywords

Evidence, epistemic cultures, forensics, inquisitorial, penal institution

Introduction

This article contributes to the discussion about the co-production of forensic knowledge by adding to the development of a typology of epistemic cultures surrounding the construction and use of forensic evidence. Thus far, the analysis of criminal case proceedings has led to the identification of

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epistemic cultures within the police, public prosecutors, forensic experts and judges (Costa, 2022; Costa and Santos, 2019). These cultures were descriptively named to convey not only a sort of institutional approach to forensic evidence, but also to illustrate the configurations of relational and instrumental settings among different actors of the criminal justice system.

We have described police practices and interpretations of crime scenes as a 'hunch culture' which tends to draw on accumulated knowledge of criminal behaviour and interpretations of first responders. A 'hunch' aims to describe how the search and discovery of traces usually follows an incipient narrative of a 'typical' criminal case. The Public Prosecution (PP) has the responsibility to conduct the inquiry and to order necessary investigative procedures. In practice, the PP receives updates about the ongoing investigation and, upon conclusion by the police, will determine if there is sufficient ground to produce an accusation. The intervention of the PP could be understood as an 'office culture' in the sense that it predominantly pertains to a documental and bureaucratic liaison between the police in the field and the courts of justice. The participation of forensic experts in criminal cases tends to be framed what we describe as a 'bubble culture'. The term 'bubble' expresses the experts' sense of impartiality and neutrality and the avoidance of interpretation of evidence in the context of any criminal case. Therefore, forensic analyses and reports are usually expressed in the most scientifically accurate and discursively neutral way as possible. When summoned to court, experts tend to avoid going further in their expositions than what is already stated in the reports.

More recently, analysis of criminal cases was complemented with a series of interviews with judges. The role of judges is to interpret and evaluate the evidence produced in court. However, in matters of artistic, scientific or technical expertise, their free appreciation of evidence is ruled out, unless evidence of equivalent value can be presented, or the judge can argue against the evidence. Therefore, the legal setting, the neutrality of forensic laboratories, and the lack of judges' scientific training, tends to contribute to what we could call a 'rubber stamp' culture, in the sense that since judges are often left with the evidence that was produced over the course of the inquiry, which is irreversible, they become powerless to redo the work related to material evidence (Kruse, 2016: 159).

The criminal justice system is fertile ground for the study of the relations among humans and non-humans, which are frequently permeated and mediated by many sorts of 'inscriptions' (Latour, 1987) like statements, exams, records, evidence, testimonies, video/photography. These and many other objects that are produced and travel from a crime scene to the court are assessed and evaluated along their trajectories. The networked processes of establishing truth and facts, not by some inherent quality, but rather by convincing and gathering allies is well founded in Latour's (1987) work. That is to say that the artefacts co-produced along the chain of inquiry in the inquisitorial judicial procedure contribute to the establishment of the material truth of the facts related to the crime. In addition, Kruse's study of the 'social life of forensic evidence' (Kruse, 2016), drawing on Appadurai's (1986) 'social life of things' shows how objects and their biographical trajectories can be socially shaped. In this perspective, crime scene traces can become 'evidence' whose biography '... can be said to span the links of the legal chain, and it involves plaintiffs, suspects, witnesses, crime scene technicians, forensic scientists, police investigators, prosecutors, defence lawyer, judges, and lay assessors' (Kruse, 2016: 12). Forensic evidence can even be resurrected after criminal procedures are terminated, creating forms of a 'cultural afterlife of evidence' (Biber, 2013).

We draw from a constructivist perspective to consider the evidence produced within the penal boundaries to argue that, in its trajectory, the social life of forensic evidence can be infused with multiple meanings, valuations and interpretations, according to the epistemic cultures where it circulates (Knorr-Cetina, 1999). These are defined as ‘those amalgams of arrangements and mechanisms – bonded through affinity, necessity, and historical coincidence – which, in a given field, make up how we know what we know. Epistemic cultures are cultures that create and warrant knowledge’ (Knorr-Cetina, 1999: 1). Therefore, when this perspective is applied to a piece of forensic evidence, we can follow their trajectories as the result of ‘. . . a combination of the different epistemologies of which it has been a part during its social life’ (Kruse, 2016: 160). The modes of production and interpretation of forensic evidence in the context of the different epistemic cultures offer insights about a criminal justice system and the surrounding society.

Forensic evidence involves different forms of knowledge and institutional approaches (Morgan, 2017a, 2017b), requiring a global and holistic understanding of the production processes, from the crime scene to the court. The narratives generated by the attempts of reconstitution of the criminal event tend to be provisional and drawn from the established cultural and professional scripts (Kruse, 2012; Santos, 2014) and affected by constellations of social, cultural and institutional factors. The influence of culture and other social factors in criminal investigation, decision-making and professional scripts, is well evidenced in the UK case of the disappearance of Madeleine McCann (Greer and McLaughlin, 2012; Machado and Santos, 2009).

Materials and methods

This article emerged in the context of the Portuguese Innocence Project, created in 2020, with which the authors collaborate. As members of the team, we had access to the judicial proceedings of the cases of individuals claiming to be innocent. After consulting the Ethics Committee of CES for an opinion regarding our double position as researchers and members of the Project, the Ethics Committee issued a positive opinion on 11 May 2022. The article draws conceptual inspiration from the social studies of science (Brown, 2006; Cole, 2013; Jasanoff, 2004; Lynch, 2007), and methodological inspiration from a grounded theory approach (Charmaz, 2006; Firestone, 1993; Glaser and Strauss, 1967; Strauss and Corbin, 1990), whereby the materials from the investigation and subsequent criminal procedure were subjected to a process of analysis, comparison and categorization, in order to extract exemplary and relevant data. This process was informed by previous research on other criminal cases in Portugal (Costa, 2003, 2017; Santos, 2014). Although focusing on a single case, the present analysis stems from the discussions and spontaneous collaboration of two researchers who have been independently studying different aspects of the use of forensic evidence in the Portuguese criminal justice system.

The proceedings that register the interactions in the investigation of a crime include the *inscriptions* (Latour, 1987) that enable the reconstitution of partial assessments, translations and reasonings, and reveal how the evaluation of evidence can influence the course of the criminal narrative (Costa and Santos, 2019; Santos, 2014). Specifically, both authors carried out an integral reading of the court files and discussed the early impressions over several meetings. The subsequent steps involved the selection and extraction of the relevant documents (police reports, court transcriptions and miscellaneous reports), and several other iterations of individual analysis and joint discussion.

There have been several high-profile criminal cases that were analysed where forensic evidence has been used – the most notable being the disappearance of Madeleine McCann (Greer and McLaughlin, 2012; Machado and Santos, 2009) – providing a variety of empirical sources to observe how forensic evidence as an object travels throughout the justice system, affects, and is affected by multiple actors and institutions. Moreover, the uses and meanings of forensic science has also been the subject of interviews and focus groups with several actors of the criminal justice system, from judges, prosecutors, police officers, crime scene technicians and forensic scientists, to sentenced offenders and journalists (Costa, 2003, 2022; Machado et al., 2011). The existing literature about the interactions between the police and forensic laboratories in Portuguese criminal cases was also analysed for comparison and contrast as well as local and national newspapers for news articles about the Coimbra Prison Establishment (CPE).

We will start by briefly describing the case analysed in this paper of the death of an inmate in Portugal inside a prison cell of the Coimbra Prison Establishment (CPE), in January 2016. In 2019, the court found the victim's cellmate guilty. The peculiar circumstances of this case constitute an example of how expert evidence mobilizes and involves diverse actors and institutions, illuminating the specificities of epistemic cultures in an inquisitorial criminal justice system like the Portuguese. In this type of system, the goal of the penal courts is to establish the material truth of the facts and the trial judge conducts the proceedings, ensuring impartiality and objectivity. In this context, the Public Prosecution, the Judiciary Police and the forensic laboratories, according to Law 45/2004, are all legally conceived as neutral and impartial entities working towards the common goal of investigating the material truth of the facts.

Through the analysis of the various *inscriptions* produced about this case, we focus on the socially constructed aspects of criminal investigation and penal justice in order to illustrate how the edifice of apparent interinstitutional neutrality contributes toward a crystallization of practices, procedures and understandings that characterize the various epistemic cultures. By following the biographical trajectory of evidence, our concern is not to prove or disprove the innocence of the defendant, but rather to shed light on the ways in which knowledge is produced and legitimized. The successive movements and instances of interpretive flexibility (Meyer and Schulz-Schaeffer, 2006) in the course of judicial proceedings and forensic evidence draw the boundaries among distinct epistemic cultures in an inquisitorial criminal justice system.

A dead body in cell 17

António, 48 years old at the time of the events and an inmate of the CPE, was convicted in 2019 for the murder of 44-year-old Marcos, found dead on 13 January 2016, on the lower bed of the bunk of cell 17 in Hall G. Marcos was doing the last few days of a sentence of 3 years and 6 months for aggravated theft. He had been followed by the clinical services of the CPE since 2012, as well as by the Coimbra University Hospital. Marcos was undergoing drug substitution therapy with methadone, and was diagnosed with several illnesses: HIV, hepatitis C and tuberculosis.

The construction of the narrative

The story of Marcos's death could begin at around 19:00 on 13 January 2016 when prison guard Vítor entered cell 17 of Hall G and noticed that something was wrong with Marcos. However, this

is where we can see mismatched versions of events begin to unfold. In his statement to the Polícia Judiciária, António said that he woke up at around 9:30 that day and that he found it strange that Marcos was still in bed. António also said that he tried to speak with Marcos again at around lunch time. As Marcos was still unresponsive, António claimed that he alerted prison guard Vítor to the fact that his cellmate was still in bed and did not respond to his appeals. António said to the PJ that the guard dismissed the issue by saying: 'leave him be, he is asleep' (62/16.9PCCBR, 2019: 225). Lastly, António declared that he alerted the guard one more time in the evening before leaving the cell to get dinner.

When prison guard Vítor gave an official statement to the PJ, he said that on 13 January he made the first round at 8:05. He checked through a door peephole that Marcos and António were still in their beds, having opened all the cells for 10 minutes so that the inmates could go out for breakfast. On the second round, at about 12:15, the prison guard Vítor said that he saw António in bed and did not speak to him. At around 14:00, he noticed that the external lock of cell 17 was closed but that António was not inside. Marcos was still in bed. On the round that he made at 17:50, he saw that António was in the cell and that Marcos was still in bed. It was only after opening the cells for the inmates to go out for dinner, at an unspecified time, that he decided to open the cell and talk to Marcos, who did not respond. Prison guard Vítor then reported the situation to his superior, who also came to the cell. According to the guard, António was not in the cell, and he was not allowed to enter when he got back from the refectory.

The diverging statements of António and the prison guard Vítor were crucial to understanding the events that led to the discovery of Marcos's dead body and subsequent decisions. António said that he alerted the guard to the fact that his cellmate had not woken up. The guard denied having been informed by António, adding that he asked him why he did not warn anyone and why did he '... spend all day in the cell with a dead cellmate ...' (62/16.9PCCBR, 2019: 234).¹ In the same statement to the PJ, conducted 2 months after Marcos's death, prison guard Vítor concluded that if Marcos '... was the victim of any illicit action during the night, only António could have been the author ...' (62/16.9PCCBR, 2019: 32–37). It is important to stress that the autopsy was made on 14 January 2016 and the report would only be known on 8 November 2016. It is not usual for an autopsy report to take this much time to be issued. The office of the Public Prosecution that ordered the autopsy inquired the National Institute of Legal Medicine and Forensic Sciences – *Instituto Nacional de Medicina Legal e Ciências Forenses* (INMLCF) in May 2016 about the delay and was informed that the report was 'still pending execution by the expert' and that it would be 'sent when concluded' (62/16.9PCCBR, 2019: 78). Nevertheless, it is possible that the PJ's investigation could already have been unofficially informed of the legal medicine expert's findings.

The CPE conducted an internal inquiry into Marcos's death, establishing a sequence of events specifically concerning the prison's routines and the guards' duties and procedures. The time when prison guard Vítor said he suspected something was wrong with Marcos was corrected to 18:50 (not 17:50). This would fit the presumed time at which António left the cell to go to the refectory. When it was found that Marcos showed no response, the prison medical doctor went to cell 17, reported that there were no signs of aggression and having registered the death at 19:05. Acting in conformity with the legal prescription, the director of the CPE reported the occurrence to the local police – PSP (*Polícia de Segurança Pública*), and called the medico-legal expert from the INMLCF, in accordance to Law 115/2009 (Code of Penal Execution and Security Measures), which

states that 'if there are signs of a violent death or of unknown cause, the scene is to be preserved, and the criminal police, the public prosecution, and the competent health entities are to be immediately informed . . . '.

The PSP sent a patrol to the CPE and recorded the event as a 'death without medical assistance' (62/16.9PCCBR, 2019: 104). The INMLCF's medico-legal expert (MLE) conducted the examination of the body and spoke with António in order to understand the circumstances prior to Marcos's death. The MLE report stated that António declared that Marcos had not responded to his call at breakfast time and that he had taken a handful of pills in the previous evening. He also said that, lately, Marcos 'had manifested the will to put an end to his life' (62/16.9PCCBR, 2019: 5), as he felt abandoned by his relatives.

Although the MLE also did not find any signs of struggle or 'recent bruises, namely on the neck', possibly acting on a suspicion of a death under custody caused by prison staff, the expert decided to contact the PJ on duty, leaving at their discretion the need to perform a judiciary inspection. The event of a death under custody did not necessarily imply a judiciary inspection. As such, the PJ, in their inspection report, indicated that there was no reason to require their presence at the scene:

Although the information reported by the medico-legal expert indicated that, apparently, no third-party action had contributed to the death of the inmate, the undersigned preferred to go to the Coimbra Prison Establishment in order to carry out the appropriate judiciary inspection and to collect any other elements.

The PJ added a concluding remark saying that Marcos's death may have occurred in an 'instance of natural death or suicide, assuming that the participation of a third party is removed' (62/16.9PCCBR, 2019: 199–221). The observations of the first responders at the scene begin to illustrate some aspects of epistemic cultures. The circumstances of Marcos's death did not seem to raise the concerns usually attributed to a crime scene. However, while none of the authorities at the scene saw signs of wrongdoing, particularly because there were no signs of violence, the autopsy would provide evidence that changed the course of the narrative. The next section follows the narratives produced from the perspective of several actors and institutions, revealing a typology of the different modes of acquisition and operationalization of knowledge.

The construction of a typology of epistemic cultures

The case of Marcos's death provides an opportunity to develop a typology of epistemic cultures in the criminal justice system by containing differentiating elements when compared with other homicide cases: the victim was an inmate in a penal institution and the first impressions did not suggest that it was a murder case. Most interesting is the fact that the penal institution carried out and concluded its own internal inquiry before the case became a homicide investigation. Essentially, the following narratives demonstrate the manifest convergence of practices developed by the different actors and institutions that would ultimately lead to the conviction of the single suspect.

The penal institution

The architecture of the CPE, an octagon with a panoptic central dome, provides some structural conditions for serious incidents to take place. In the recent past, the CPE had made the news in

local and national newspapers, for problems ranging from a lack of human resources and the dispersion of available guards in internal and external tasks, to non-existing video surveillance, and chronic overpopulation. There are also reports of difficulties in the management and security of the facilities and control of inmates' circulation inside the CPE, drug trafficking and contraband, and multiple instances of violence and threats among the inmates, riots and suicides. The location of the CPE, in the centre of the city of Coimbra, has facilitated the introduction of forbidden items, like drugs and mobile phones, by throwing packages over the walls, or through the involvement of prison staff (Correio da Manhã, 2012; Jornal de Notícias, 2014a, 2014b). Also in 2016 news article, after two guards of the CPE were held hostage by inmates, denounced the insufficient number of guards, which facilitated 'contraband and violence' (Diário de Coimbra, 2016).

This is the backdrop against which the CPE conducted its internal inquiry. Its purpose did not appear to be a fact-finding mission to investigate what happened, how and why (Arthur, 2022), but merely to establish if there was negligence or inadequate procedures by the institution and its personnel. The pursuit of exoneration can be seen in the CPE's report where it is stated that prison guard Vítor's deposition was 'credible and coherent', and in which it is concluded that 'there are no signs that evidence the eventual existence of omission or negligence by the services that would possibly anticipate or prevent the fatal outcome' (62/16.9PCCBR, 2019: 61–64). The narrative of the CPE's internal inquiry reveals an institutional defensive stance (Goffman, 1961; Katz, 1979) aimed at protecting the prison guards and the institution itself, by establishing that there were no personal or institutional failures.

Although several prison guards and the prison nurse were interviewed in the CPE inquiry, no other inmate, besides António, was summoned for deposition. Essentially, manifesting the professional proceduralism related to the wider culture of institutional defence, the inquiry sought to detail the protocol of the guards, certify who made the obligatory rounds, and at what time (08:00, 12:00, and 17:30). Nevertheless, there is an internal email in the case archive of the director of the CPE to the guards to remind them of the protocol of the rounds, whereby the inmates must stand to be counted and that any irregularity must be reported. By asserting the correctness of professional standards and procedures, the guards' statements override any competing narratives, recollections or beliefs (Arthur, 2022). António was described in the inquiry report as Marcos's 'caretaker' figure, with whom he talked and helped with meals. One element that was stressed was that it was not António who alerted the guards to Marcos's condition, but that the oversight of Marcos's state was due to the guard's alleged kindness in not demanding that Marcos get up for the round because of his fragile health.

The report added the information that it was well known by the guards that Marcos used to spend some time in other halls of the prison trying to get drugs, although he was being treated with methadone. The inquiry explained that António was transferred to Hall G because he had been receiving threats from other inmates. Despite this information, the CPE did not find it relevant to interview any other inmates that could have witnessed some fight, argument, or suspicious sounds or movements from cell 17.

In conclusion, given Marcos's fragile health, the CPE closed the inquiry report on 23 February 2016 stating that the institution had no responsibility in Marcos's death as it was probably the result of the several illnesses that affected him. As Pemberton (2008) suggests, explaining deaths under custody with pre-existing health conditions is one of the common devices of state talk to mitigate responsibility of authorities in deaths under custody:

Considering all that was gathered (. . .) it seems plausible to deduce that the death of Marcos (. . .) was the culmination of a clinical history of a patient with severe pathologies, namely co-infection by HIV and HCV (. . .). (62/16.9PCCBR, 2019: 61–64)

During the court sessions that took place 3 years later, the guards that were called in for testimony would not recall if they were on duty, if they participated in the rounds, or if they remember any detail about the interactions with the inmates on 12 January. Professional proceduralism was adhered to by omission. Similar to what happened in the internal inquiry, only the guards and the prison nurse were summoned for testimony. There was no CCTV evidence to challenge the memories of the custodians. Therefore, no relevant information was added in what conformed to shape a *culture of institutional defence*, whereby all depositions adhered to the same formulae: 'I don't know', 'I don't remember' and describing the procedures as they are stated in the institution's guidelines. If EPC inquiry meant to allow the institution's narrative to be preserved – that whatever happened, it was not the institution's fault – and the guards and other personnel to be exonerated from malpractice, in court, there was a passive denial of events. This is in accordance with Scraton's idea of a political imperative of denial that inhibits disclosure of evidence (Scraton, 2004). Ultimately, this could have been what criminologists classify as 'suicide under custody' or 'administrative negligence', where the authorities could be held responsible for negligent actions or omissions (Eck, 2003; Konvalina-Simas, 2016). In this example from the court, the culture of institutional defence does not seek to blame the victim, but to erase the guards' responsibility in the event. This is also visible in the guard's comment that António had spent the day with a dead cell mate without warning the guards.

Police

At a crime scene, the police usually provide the first sketch, thereby establishing the crime narrative (Lynch et al., 2008; Williams, 2010). Their performance will affect their own area of intervention, but also other areas of expertise (Wyatt, 2014). Likewise, all procedures enacted by the first respondents will shape the biographical trajectory of forensic evidence. Particularly because they will likely decide which traces will be collected and initiate an evidential biography. The police narratives tend not to be grounded on the traces found on the crime scene itself, but rather on socio-professional scripts (Ditrich, 2015; Kruse, 2012). These can be shaped by institutional memory and experience, as well as the police's perceptions of typified criminal behaviour and/or cultural expectations (Santos, 2014). The first impressions of what happened at a crime scene can further be affected by cognitive bias and stereotypical reasoning (Ditrich, 2015).

From a legal perspective, the prison director is responsible for determining the preservation of the crime scene until the arrival of the police. The CPE medical doctor's perception that there were no signs of struggle, and that the victim was afflicted by multiple infectious diseases, provided an initial definition of the situation. When the PSP arrived at the scene and were informed of the scenario, they recorded the event as a 'death without medical assistance', which apparently justified the fact that they did not call for the PJ, as prescribed in Law 49/2008 of 27 August (Law of Organization of Criminal Investigation). First responders, like the Polícia de Segurança Pública (an urban civil police force) and National Republican Guard (militarized police force on roads and rural areas), must inform the Public Prosecution when a crime is detected. They are expected to

evaluate the scenario, to secure the location and preserve the evidence, and to inform the Judiciary Police (PJ) if it is perceived that there is a crime that is under the jurisdiction of the PJ, which has investigative jurisdiction over serious crimes, like murder, sexual crimes or offenses involving firearms. Since there were no evident signs of violence, the cell was not preserved or examined as it would have been in the case of it being assessed as a crime scene.

Because the cause of death was unknown the CPE contacted the INMLCF, which sent a medico-legal expert to the scene. If the death did not occur under suspicious circumstances, the law in force at the time (Law 49/2008) did not require the intervention of the Judiciary Police. However, and perhaps because there were no signs of violence and it was necessary to rule out the involvement of the prison's staff in Marcos's death (Madureira, 2011: 7), the MLE decided to contact the homicide prevention officers on duty of the PJ at 21:00, saying that 'no recent traumatic lesions were observed that could be an adequate cause of death, namely on the neck'. The MLE added that this could be a case of natural death.

The PJ's report mentions that 'the scene had been altered' and that the body found by the prison guard in prone position on the bed, was now in supine position on the cell floor 'with feet positioned towards the door'. There is no record of when, how, why, and by whom Marcos's body was moved from the bed and stripped from the waist down as documented by the PJ's photographs of the scene. The PJ decided not to collect any traces from the crime scene that could support subsequent decisions (e.g., fingerprints and biological traces, pieces of clothing or Marcos's pillow, where it is reported that 'a small reddish-brown spot was visible') (62/16.9PCCBR, 2019: 140).

The different approaches to the crime scene reveal a form of boundary work between the PSP and the PJ (Costa, 2017; Giernyn, 1983). The PSP disregarded the need to preserve the scene, allowing several people to move about in the cell and to change the scenario. Unlike the PSP, the PJ produced an inspection report and carried out a photographic record of the scene, even if they were called by the MLE to attend a case of supposed natural death.

However, despite their differentiated approach to the scene, PJ adhered to the narrative and sociocultural understandings that were being established by the PSP, namely that the absence of signs of violence and poor health condition meant that Marcos probably died of natural causes related to his various illnesses. Thus, the PJ neither collected traces nor made requests to the INMLCF and were not present at the autopsy. The PJ's investigation was based on taking statements from the prison guards, the nurse and António, which can reveal that the police focused less on gathering evidence of a crime and more to the account-giving of those with authority (Arthur, 2022), and also that the 'truth' produced by the authorities have higher epistemic value (Pemberton, 2008).

When the autopsy report was concluded in November 2016, it mentioned that there were fractures, and that Marcos had a 'violent' death caused by 'mechanic asphyxia through external compression of the neck' (62/16.9PCCBR, 2019: 105). The PJ's narrative conjugated this information from the autopsy report with Vítor's earlier deposition where he concluded that if there had been foul play, the only possible suspect would be António. This comes to show how scientific evidence can affect the development of the criminal narrative by eliciting a sort of 'tunnel vision', which can restrict alternative explanations or hypotheses (Rassin, 2010).

As a manifestation of its *hunch culture*, the PJ dispensed with alternative hypotheses or the search for more evidence and focused on a single suspect – António – 2 years and 5 months after

Marcos's death. António was the only suspect that fit the narrative, in that he was the only person sharing the cell with Marcos, and the crime probably occurred during the night when the cells were supposed to be closed. While this allowed a seemingly credible narrative, it lacked a motive or the means by which António was supposed to have murdered Marcos, even when he was close to the term of his prison sentence.

The public prosecution

In an inquisitorial criminal justice system, the Public Prosecution (PP) bears the burden of proof. Its priority is to establish seeming factuality from the available evidence. In this sense, the PP's narrative appears as a juridical device, which legitimates and reproduces the narrative initiated by the police. This practice stems from the interinstitutional neutrality that separates the entities in the justice system. The PP assumes the factuality of the PJ's narratives and converts it into a legal narrative that is infused with a rhetorical precision that sustains an accusation.

In the case of Marcos, the PP made a selective reading of the autopsy report to find material to support the accusation against António. The accusation produced by the PP contained a mixture of categorical assertions: 'the defendant (. . .) confronted the victim (. . .) grabbed his neck with his hands, with force, squeezing until he asphyxiated', with legal reasoning: 'thus constituting direct and necessary cause of death' (62/16.9PCCBR, 2019: 367), which were extrapolated from the knowledge produced by the medico-legal expertise of the autopsy report. Nowhere in the INMLCF autopsy report does it say that 'hands' were used, nor that there were visible lesions on the body. Moreover, even if 'hands' were used to 'cause mechanic asphyxia through external compression of the neck', it does not necessarily mean that they were António's hands as indicated in the PP's accusation.

By asserting the content and validity of the evidence brought to the proceedings, the PP did not find useful or adequate to pursue (62/16.9PCCBR, 2019: 366) more evidence or alternative explanations for the death of Marcos and produced the accusation against António. The accusation rendered invisible Marcos's fragile health conditions and chronic illnesses, his history of drug abuse, and the frequent visits he would make to other halls of the prison known for drug trafficking. Marcos's personality and biography were occluded, as well as the circumstances surrounding his death. Usually, an office of the PP coordinates the simultaneous investigation of multiple cases. It tends to build its knowledge from previous cases, reports and other documents, delegating operational and investigative tasks to the police. In the present case, given that the PJ works directly under the PP's supervision, there were no questions about the production of evidence or the way in which the inspection of the crime scene was carried out. The legal narrative was built around António's criminal biography. Although Marcos was the victim, his story inside the prison could have helped understand what happened. As suggested by several studies, it would have been important to develop a reconstitution of the crime, focusing on the last 24 hours of the victim's life, with an analysis of the victim's risk exposure, motivational analysis of the suspect and victim, precipitating factors, and interactions between victim and the suspect (Cunningham et al., 2010; Konvalina-Simas, 2016). This lack of focus managed to preclude further reflections on the structural conditions of Portuguese prisons. Rather than explaining the circumstances of Marcos's murder, the PP developed a list of António's previous convictions, without ever mentioning

possible motives for the present crime. The PP portrayed António's past as an indictment, thus reproducing old categories of suspicion (Wacquant, 2001).

The presumed impartiality of the judicial entities tends to hinder a more proactive role of the PP by creating an environment where its contribution is to frame the police's construction of plausible narratives into stories with legal meaning. The decision to interpret the autopsy report as supporting the thesis that António killed Marcos because they shared the same cell required the probable time of death to coincide with the period during which the cell was locked. Because of this inference, the burden of proof was placed on António, who had to somehow prove that he did not murder Marcos during the night. This sort of attitude by the PP can be explained by an *office culture* that tends to take a relatively passive posture towards the production of forensic evidence. This has been observed by the authors in the study of other criminal cases (Costa, 2022; Costa and Santos, 2019), where the PP accepted the production of evidence and the decisions made by the authorities at the crime scene without question.

The forensic experts

In Portugal, there are two official entities with authority to perform forensic analysis for judicial purposes: the INMLCF and the PJ's Laboratory of Scientific Police (LPC). Both laboratories are under the jurisdiction of the Ministry of Justice. Experts' duties are to cooperate with the courts and to provide forensic exams, analyses, technical and scientific support. Between the police, the prosecution and the court, it is the forensic expert's (neutral) role to transform crime scene traces into a scientific report, making 'inherent uncertainties manageable' (Kruse, 2016: 70). These reports are generally expressed in ways that remove the possibility of a direct juridical translation of their results, or to provide scientific answers to juridical doubts (Santos, 2014). In this case, the autopsy report of the medico-legal expert described the following lesions in Marcos's neck: '*Cartilaginous structures (observation in fresh and after formaldehyde fixation): Fracture of the posterior upper right tip of the thyroid cartilage, with irregular edges, surrounded by blood infiltrations; Fracture of the upper left tip of the thyroid cartilage, without apparent surrounding blood infiltration. Hyoid bone (observation in fresh and after formaldehyde fixation): Fracture in the transition zone of the right greater horn with the body of the hyoid bone, with irregular edges, surrounded by blood infiltration*' (62/16.9PCCBR, 2019: 104).

The experts play a pivotal role between the crime scene and the court, as 'obligatory passage points' (Callon, 1986: 205) in the transformation of the materiality of traces into the probative value of evidence. The social life of forensic evidence is marked by various forms of experts' boundary work (Gieryn, 1983) by which they seek to establish the epistemic distinction of their knowledge and to maintain a posture of neutrality. Since court appearances are part of their professional demands, the bubble culture can be understood as an institutional practice that protects laboratories and experts from claims and interpretations that are made by other epistemic cultures, before or after the passage through the laboratory. The experience of experts as well as their knowledge of judicial procedures tends to foster evasive attitudes to safeguard the reliability and credibility of forensic science. The use of expressions such as 'not necessarily', 'it is not usual to find', 'it is not consistent' or 'it would be plausible to suppose' are some of the examples that we found in the expert's court deposition. As neutral expert witness, the MLE faced the tension between what was recorded in the report and the search for hypothesis' validation by the judge.

Judge: (. . .) the report is categorical in saying that the cause of death was ‘mechanic asphyxia through external compression of the neck’. (. . .) this is compatible or is it the same as saying that he was asphyxiated by placing hands on the neck, or could (. . .) the instrument (. . .) used for the compression (. . .) have been an object?

Expert: I cannot state what sort of instrument was used. Because, if you look at it, I just wrote ‘extrinsic compression of the neck’. (. . .) It does not mean (. . .) that there was not a mediating object (. . .) between the hands of the aggressor and the victim’s skin.

Judge: Exactly. So, you are saying that it is possible (. . .) that strangulation was done by using, for example, a pillow?

Expert: It could have been made (. . .) with a pillow, for instance, in between, which would have not left marks.

Judge: (. . .) a situation like that, would it be compatible with all that you found in the autopsy?

Expert: Yes. (. . .) it would be compatible with what I found in the autopsy. (. . .) Sometimes, when a victim is suffocated with a pillow, there might be lesions that are not immediately visible, but that (. . .) with the *post mortem* dehydration can be seen through the parch-mentization of the skin. This was not the case. (. . .) But that does not invalidate that there could have been something that could compress the victim against the mattress (. . .). (Authors’ underlining (62/16.9PCCBR, 2019: Audio file 20190204112840_2808606_28070709, 1m22s)

The expert ended up admitting the plausibility of the thesis suggested by the judge, that Marcos’s neck was compressed in a way that caused fractures on both sides of the neck without leaving marks. While agreeing that the cause of death was ‘probably’ made by ‘choking’, there was a fundamentally decisive aspect from the MLE’s court deposition – Marcos’s estimated time of death.

Judge: (. . .) is it possible, according to your analysis, to have an idea of when the death occurred (. . .)?

Expert: (. . .) I have the expert examination of the scene, which was made on 13/01/2016 and was concluded at around 22:30. And, coincidentally, I was the one who did the autopsy, but also made the examination of the scene. When I examined the victim (. . .) the livor was fixed. (. . .) Normally, in order to have fixed livor, it is never less than 12 hours (. . .) Always more (. . .) between 13 hours and 12 hours and then it starts to fixate (. . .).

Judge: (. . .) we are talking about eight in the morning of the 13th, so you are telling me that, necessarily, the fixed livor that you witnessed lead us to conclude that the death must have occurred between 19:00 the previous day and 8:00 that day.

Expert: It would be plausible to suppose that.

Judge: Because we know that he was alive at 19:00 in the evening.

Expert: Yes.

Judge: And we know that this cell was opened at 8:00 in the morning.

Expert: Yes.

Judge: So, you are telling us that at 8:00 in the morning, probably (. . .) he was already dead.

Expert: Yes. . . Even because there is a stage in which (. . .) it appears that he did not get out of bed to have breakfast (. . .).

Judge: But this is information provided by witnesses.

Expert: By his cellmate. (62/16.9PCCBR, 2019: Audio file 20190204112840_2808606_28070709, 7m23s)

As illustrated and documented in previous studies (Costa, 2003, 2017; Costa and Santos, 2019; Machado and Santos, 2011; Santos, 2014), the prevalence of public perceptions about the inaccessibility of scientific jargon contributes to the shaping of a *bubble culture* among forensic experts, which is performed as unassailable discursive objectivity to isolate them from other legal actors and a refusal to translate their work in ways that imply causation or responsibility. This can be characterized by a sort of 'sterilization' of experts' discourse, taking the form of *laboratorial inscriptions* (Latour, 1987) like autopsy reports, DNA tests or ballistics examinations, or as expert witnesses in court proceedings. The experts' bubble culture in an inquisitorial context can be expressed through passive attitudes such as repeating the statements made in the written reports or providing generic explanations about laboratorial procedures or protocols. Above all, the experts avoid breaches in their *shields of neutrality* by circumventing answers that might be understood by courts as interpretation of evidence in the context of a given case. This is visible when the expert declares in court: 'I just wrote "extrinsic compression of the neck"'. This is the expert's way of asserting that further conclusions, namely about how the compression was made ('hands'), are the court's responsibility.

The MLE was not immune to contextual information, namely when saying in court that Marcos did not have breakfast. This information came from the MLE's questioning of António, and was not information acquired from the autopsy, as Marcos's stomach contents were described in the report. The MLE's deposition was accommodating in the sense of not disagreeing with the judge's reasoning and suggestions regarding the *post mortem interval* (PMI), the way in which Marcos was killed, with the supposed use of a pillow that, while it is described as having reddish-brown stains, was not submitted for forensic analysis.

Judge

The judge plays an active role in court and is seen as the *expert of experts* (Dias, 2007). It is their responsibility to determine which evidence is admissible and to assess it within the presented case. However, judges are constrained in the free appreciation of expert evidence of technical, scientific or artistic nature (Article 163 of the Code of Penal Procedure). Number 2 of Article 163 determines that if the judge's assessment diverges from the expert's opinion, they must justify their divergence. When António was tried for the murder of Marcos, the judge conformed with the testimonial evidence presented by the prosecution – the depositions of the prison guards and the prison nurse. There was no documental evidence that attested to the times of the rounds and who made them, and the nurse's statement that the medication round was made at 20:30 was disregarded by the court. In the absence of other evidence and given that António was instructed by the court appointed lawyer to remain silent, the accusation would be supported by forensic evidence, namely the cause of death and the estimated time of death.

The estimated time of death, or *post mortem interval*, remains an elusive forensic object. The PMI 'determines the amount of time from the moment an individual dies and the moment that the cadaver is found' (Sousa, 2019: 1). Although there are several indicators that can be considered for an estimation, several studies suggest that there is some degree of imprecision in its use (Donaldson and Lamont, 2014; Sampaio-Silva et al., 2013; Sousa, 2019). Therefore, although experts use PMI in the production of reports, this is mostly an 'informed guess' (Sousa, 2019: 17). Sousa suggests that the determination of the PMI can be seen as a 'utopic question' and even as

a 'fictional alienation'. In the case of Marcos, there were no witnesses to the death and therefore it is not possible to say with any degree of reasonable certainty that Marcos died at a given time.

The court pondered all the evidence produced in trial and determined that Marcos's death occurred between 19:00 of 12 January and 08:00 of 13 January. This interval corresponded to the time period when the cells were locked, thus fitting the previously constructed narrative that Marcos was alone with António in the cell, and that only António could have killed Marcos. However, as can be seen in the expert's replies to the trial judge, there was avoidance to commit to a narrower interval for Marcos's time of death. Furthermore, the fact that the nurse stated having distributed medication² to the inmates at 20:30 on 12 January is omitted from the evidence. Hence, the PMI should start at least after 20:30, until 08:00, when the cells were allegedly opened. In fact, the MLE was questioned in court about whether the death could have occurred after 08:00. The MLE vaguely replied that '. . . at the scene we did work with this hypothesis (. . .)' (62/16.9PCCBR, 2019: Audio file 20190204112840_2808606_28070709, 17m12s), without adding further explanations, or even why it was abandoned.

Faced with the evasive replies from the MLE, the judge tried to fill in the blanks and to lead the MLE's answers, both in the cause of Marcos's death and at what time it occurred. The judge tried to find scientific answers that science is still not able to provide with the desired certainty, and that the expert in court was not willing to explain.

The several identified epistemic cultures can pose obstacles to the judge's decision-making process. With a large part of investigative tasks attributed to the police forces, who deliver a supposedly finished product to the PP (Costa, 2022), it is not infrequent that by the time judges are presented with the evidence they are left with very little room to question the production of evidence during the investigation. This has been previously described as an acceptance of '*ready-made evidence*' (Costa, 2022). If there were flaws, procedures that were not carried out, incorrect practices or speculative interpretations, there might not be a chance to repeat the forensic examination of the crime scene. The evidence produced in the inquiry ends up being legitimated by its (re)production before the court. Therefore, rather than questioning or assessing probative value, judges will mostly settle for the evidence that is brought to trial, configuring a culture of '*rubber stamp*' evidence.

Conclusion

Portuguese forensic culture is not known for public controversies over scientific evidence or its credibility. Since there are only two authorized public institutions that provide forensic services to the courts – the Laboratory of Scientific Police and the National Institute of Legal Medicine and Forensic Sciences – it is also rare in inquisitorial proceedings to have a defendant challenge the production of forensic evidence. The absence of adversarial contests in penal matters and the state monopoly over forensic expertise reinforce the institutional objective of judicial neutrality. Analysis of the case of Marcos's death illuminates the distinctive aspects of several constellations of practices and sociocultural understandings that shape epistemic cultures. In the context of an inquisitorial criminal justice system, the production and instrumental use of forensic evidence can therefore be moulded to fit the institutional interests of epistemic cultures. By operating in an environment of apparent neutrality, the different epistemic cultures combine their efforts to achieve the '*material truth of the facts*', thereby revealing in this endeavour their own distinctive marks in the ways of obtaining, evaluating, and validating knowledge. On the one hand,

neutrality in inquisitorial settings is fundamental for preventing miscarriages of justice since, on principle, actors work towards a common goal in which they are themselves personally disinterested. On the other hand, this may foster acritical confidence in previous assessments and interpretations, which can contribute to substantiate narratives based on fragile evidence.

In this case, it was possible to observe how the penal institution itself managed the course of the narrative through a *culture of institutional defence* that laid the foundation for the establishment of facts in a way that excluded more problematic issues. In fact, there were several instances that indicated problems in the surveillance and the rounds, as an internal email from the CPE attached to the court proceedings clearly attested to the need to ensure that proper procedure was followed.

A *hunch culture*, stemming from the cultural and socio-professional repertoires of the police forces, can lead them to 'find evidence' that fits the available information, albeit silencing or ignoring alternative narratives. In the case of the death of Marcos, the trajectory of the police when arriving at the scene was biased by the presumption of a natural death and, therefore, they considered that it was not necessary to preserve the scene or to collect any traces. As in other analysed cases, like Madeleine McCann, Joana Cipriano or Ana Saltão (Costa, 2017, 2022; Costa and Santos, 2019; Machado and Santos, 2009), initial *hunches* about the scenario can determine the course of the investigation and the possibility to select and gather evidence. The *office culture* can be associated with the public prosecution's role since it tends to assume a passive stance towards the production of forensic evidence, not questioning, but rather legitimating the work made by the police. The presence of the hunch and the office cultures have been observed in other criminal cases where the efforts to collect potential evidence are subordinated to stories and their actors that, seemingly, fit together (Costa and Santos, 2019; Santos, 2014). There appears to be an underlying belief that forensic evidence will ultimately lend its supposed objectivity and scientific certainty to the narrative being constructed that is often based on socio-professional and cultural understandings about types of crimes, suspects and their *modus operandi* (Costa, 2017)

The *bubble culture* enables the preservation of boundaries between forensic laboratories and the courts. Forensic experts will actively enforce the separation from crime scene work by documenting in minute detail the traces as they arrive (Costa, 2003; Santos, 2014). The analyses are completed in the form of standardized forensic reports. The expression of results tends to avoid categorical claims, leaving to the judicial authorities the task of drawing conclusions about the results of the reports and the activity of the defendant.

From the information gathered in the first hours after the discovery of Marcos's body, the first respondents mobilized their ways of knowing to construct a narrative that would be upheld by the autopsy report, which turned out to be the only piece of forensic evidence in this case. Because there was no collection of traces at the crime scene, the autopsy would have to provide the scientific legitimacy to the narrative where António was the author of the crime. Therefore, the sentence reproduces the accusation and records as a proven fact that António 'approached the victim Marcos Silva and grabbed his neck with his hands, with force, squeezing until he asphyxiated'.

The evidence that reaches the judge is a product of the work and interpretations developed by other epistemic cultures, particularly concerning forensic evidence (Costa, 2022; Costa and Santos, 2019; Santos, 2014). The autopsy expert report and the determination of the time of death were enough to provide the scientific support to the judicial decision-making process, contributing to the judges' culture of '*rubber stamp*' evidence. Trial judges can, at any time, request new exams or expert opinions. However, these rules of evidence foster a tendency to rubber

stamp the appreciation of evidence. In an adversarial justice system, each of the parties can summon their own expert witnesses and litigate about the experts' credibility, the techniques and methodologies employed, and the value of the evidence. In an inquisitorial justice system like the Portuguese where there are two institutions under the Ministry of Justice that are authorized to conduct forensic exams and to issue reports, the judge is often led to conform to the evidence that is brought to court, having a very narrow margin to disagree or to interpret.

Nevertheless, because there was no confession by António and there was a lack of evidence to demonstrate the activity of the defendant, the judge explained the use of judicial presumption. This is a legal argument whereby when a fact is known, the rules of experience allow the existence of another fact as a necessary consequence of the first. In other words, the judge argued that if Marcos died before the cells were opened in the morning, and the only person in the cell was António, it must follow that António murdered Marcos.

In this sense, while it may be possible to carry scientific elements to the production of evidence in court, there are several factors that may contribute to the mobilization of different forms of knowledge, thus contributing to an image of scientificity and interinstitutional neutrality (Costa, 2022). When the internal investigation of the CPE was quick to conclude that there had been no negligence in a context of natural death, the development of the criminal investigation only started to take shape from the information provided from the autopsy. By that time, and because there was no possibility of carrying out an examination of the crime scene, and it was not found relevant to question other inmates, the only narrative left was that in which the CPE was exonerated. That is, a homicide instead of a death for lack of assistance, suicide or accidental death.

The analysis of this case offers insights into the structural and cultural framework in which the investigation, prosecution and trial were carried out. It suggests an overall tendency for the criminal justice system to follow the path of least resistance. Ultimately, the necessary changes to the law are often brought about by signal crimes (Innes, 2004), but appear to carry little to no influence on the diverse epistemic cultures and practices. This does not mean that to follow the path of least resistance of a given narrative and to regard forensic evidence as a mere legitimating accessory to support it will increase the probability of judicial miscarriages. Above all, it may likely represent more missed opportunities to preserve crime scenes and to collect evidence in order to carry out effective criminal investigations.

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Notes

1. All translations are the authors' responsibility.
2. The court files reveal that António also took prescribed medication – alprazolam (anxiolytic) and midazolam (sedative and sleep inducer). In Marcos's histopathological report, the following medication was identified: quetiapine (433 ng/mL) and oxazepam (440 ng/mL). The inspection report of the scene lists Marcos's prescribed medication and only oxazepam is on that list. The concentration of quetiapine in Marcos's blood – an atypical antipsychotic medication used for the treatment of schizophrenia, bipolar disorder, and major depressive disorder – lends credibility to António's claim that he saw Marcos take a handful of pills. Since it was not medically prescribed, the quetiapine was likely acquired from other inmates.

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