

HOMICIDE OR SUICIDE? A FIRE SITE WITH MULTIPLE OUTBREAKS AND ONE DEATH: THE IMPORTANCE OF CAREFUL OBSERVATION AND INTERPRETATION OF REMAINS

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Abstract: the analysis of a place of death is one of the most disturbing in the Expert's professional life. Differential diagnosis is invariably sought, based mainly on dynamics. In turn, fire sites are difficult and arduous work, especially due to the fact that "not all the pieces of the puzzle are present". In this work we will present how a simple detail made all the difference between homicide and suicide, without the need for practically any knowledge related to the fire area, just with the insight, knowledge and dedication of the local expert team.

Keywords: Murder; Suicide; Fire; Local; Trace elements.

INTRODUCTION

As is clear, the fire is an out-of-control fire. For this to begin, develop and maintain, four conditions are necessary: the existence of fuel and oxidant (mainly oxygen gas) under suitable circumstances, a chain reaction and an initial heat. The origin of this initial heat can be classified as accidental, natural, undetermined or incendiary [1]. In order for us to determine it, it is not enough to gnose the mechanisms of fire emergence, the combustion characteristics of materials, the foundations built over time by observing locations or knowledge about fighting and preventing fires [2]. A thorough analysis of the scene is required.

In this sense, good expert work demands a good Fire Investigation Methodology (MII) [3], in which several essential items are listed. Within this, the identification of the Zone of Origin (ZO), the Initial Focus (IF) and, consequently, the Cause stands out.

However, all the background and study on the science of fire and IIM are practically irrelevant, given the clear existence of multiple Zones of Origin. Therefore, we will have the existence of multiple foci that, if independent of each other, indicate intentional human

action, also known as *arsonism* [4].

In this context of multiplicity and intentionality, and, considering the existence of a body, it remains to be determined whether we are facing a case of homicide or self-extermination.

SCENARIO

An Expert Report must meet the triad of authorship, materiality and dynamics [5]. Considering the existence of a fire with multiple outbreaks and one victim, how can you distinguish whether the fire was caused by a suicide or a homicide? The answer may lie in small details that can clearly confirm the differential diagnosis of death.

in situ case, it was a lady (Fig. 1), aged 64, who woke up in the morning and had breakfast with her grandson, who went to school. About an hour later, CBMSC was called by neighbors, reporting the fire.

On site, a residence with two accesses (Fig. 2). One that allowed you to enter the living room (through the front door) and the other, into the laundry room (through the back door). Both contained furniture that was positioned in such a way as to make (or simulate the difficulty of) access to the interior of the residence difficult (Figs. 3 and 4). Both doors were locked, with no keys in their locks and all the windows in the residence had bars.



Figure 1. General view of the body removed from inside the residence.



Figure 2. Sketch of the location



Figure 3. Rear door blocked by furniture



Figure 4. View of living room with sofa near the front door

According to reports, his son lived on the same land, with whom he did not get along. The daughter-in-law, in her opinion, had affection for the lady and, knowing that she was in the residence, would have broken a window and tried to break down the living room door, without success.

Afterwards, a neighbor breaks down the door, pushing the sofa which made access to the interior difficult, but due to the heat and smoke there is nothing he can do but wait for help. With the arrival of the CBMSC, they entered the scene, removed the victim to the garage – already lifeless – and extinguished the flames, resulting in the aftermath.

The expert work began following the precepts of the MII. After the quick observation of a disconnected multiplicity of outbreaks and, consequently, intentionality, attention then moved to other traces in the scene that could indicate the presence of someone else, with the intention of faking a suicide.

Of criminal interest, blood was observed on the door frame of the room, which contained two clasps (latches/latches) that indicated they were open when the place was broken into. On the kitchen table, a bottle of kerosene that clashed with the dirty environment and a box of amitriptyline hydrochloride with two empty blisters, totaling 30 tablets of 25mg each. Finally, on the outside of the residence, a hose connected to a tap had cuts consistent with those produced by a serrated knife.

After long and thorough expert work, it was possible to confirm that the blood on the doorframe was that of the victim's daughter-in-law, who was injured when she attempted to break the window of the house. Furthermore, the kerosene container – which was full and unsealed – would not have been in that position at the time of the fire, given its cleanliness in relation to the other items on the table, having been placed afterwards. After an interview with the CBMSC garrison,

he was informed that she was positioned there to “facilitate the forensic work”.

At this point, four items remained about which doubts remained:

- medicine packs;
- the absence of keys in the doors (the son reported that he had a copy of the room door, but “didn't know where it was”);
- the locks on the room door are showing no sign of forced entry;
- the hose near the garage, on the ground, contains cut marks.

Supporting the suicide hypothesis, why remove the keys, if the doors were locked and with furniture that made them difficult to open? Why lock the front door, take away the key, put a sofa in front and not close the windows? Why cut the hose?

On the other hand, supporting the hypothesis of homicide, all previous answers would be satisfied, since the author would have taken the keys with him and, being outside, would not have been in a position to close the doors. The cut in the hose would be to make fire-fighting action more difficult and the medicine would be to dope it.

Considering the factors exposed, the Expert could tend to end his Report with a “verdict” of homicide, with indications of modification of the scene to fake a suicide. That is, if he did not answer “harmed”. A word that is of no use or little use for an adequate investigation and criminal prosecution.

In clarifying this issue, the key point of this work was a crucial detail that went unnoticed throughout the fieldwork and part of the time it took to produce the expert report: on the inside of the door, shadow marks (Fig. 5). Part of them matched the height of the sofa arm there (Fig. 6), indicating that the region was preserved from soot during the fire, due to the proximity of the sofa to the door.

It remained to be seen whether it was



Figure 5. Shadow marks on the door



Figure 6. Shadow mark on the door consistent with the height and design of the sofa arm



Fig. 7. Maximum possible distance obtained by someone outside the residence

possible, from the outside, to pull the sofa so close to the door as to produce such a white area and still be able to close the door.

There was the opportunity to return to the site of the facts which, luckily for us, had not been altered. To test the thesis that the sofa was pulled by someone outside the residence while closing the door, this procedure was carried out in different ways and by different people. This possibility, together with the rest observed and analyzed, would give rise to the hypothesis of homicide.

However, despite the different means adopted, there was not enough space to carry out the maneuver. In other words, someone located outside the residence would not be able to pull the sofa close enough (Fig 7), in such a way as to allow the production of marks left by the sofa (which protected it from the deposition of soot resulting from the fire). Thus, it was finally possible to conclude that the position and marks on the main door were not consistent with its closure from the outside, therefore deducing that it was **the victim-perpetrator who had done it.**

CONCLUSION

It is clear that the Site Expert needs to be very cautious and thorough in his analyses, as *lato sensu*, there is no possibility of repeating exams. To do this, you must record the entire site upon your arrival, preferably with videos. Then take as many photos as possible that can be, minimally, related to the facts examined. However, you must have a minimum of knowledge of different fields, to be able to draw conclusions quickly, allowing you to test your hypotheses.

Furthermore, treat each case as unique and not be carried away by cognitive bias. There is no precise study on completed suicides in Brazil, but it is known that the majority are committed by men [4:1], mostly using

hanging and firearms [6]. Among women, poisoning predominates, followed by firearms and hanging. In general, the fire method (X76) [7] is little used and has high lethality [8]. In the case of attempts, among women, they mostly occur among young, single, poor people [9] and using alcohol [10]. In other words, the case at hand would go against the already minimal statistics related to this type of death. Therefore, as a way of contextualizing the facts, all actors involved in the event must be interviewed, especially in cases of fire, to obtain the greatest possible dimension of what happened.

The disparity between the realities of Brazilian Experts is notable. However, as can be seen in the case narrated, the simple verification of several initial disconnected fire outbreaks was enough to confirm intentional human action, not requiring any more in-depth knowledge on the part of the expert.

Considering the existence of a victim inside the location, with his death clearly related to the fire event, all that remained was to determine who was responsible for the fire.

Especially, this may not be so trivial, but the sagacity of a selfless observer would indicate the resolution, through the simple observation of marks produced on a door and a logical perception. It would only be enough to test the thesis to prove that the shadow could only exist with the proximity of the sofa to the door and that this approach could not be produced by someone outside the residence.

All of this would make it possible to establish an occurrence of self-extermination, with the probable dynamics being the prohibition of access, ingestion of medication and the subsequent provocation of multiple fires.

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