



The gap between risk awareness and makeshift practices : a criminological analysis of medical waste management in Kinshasa

Célestin Mutshipayi Kalubi¹, Raoul Kienge-Kienge Intudi², Joël Nzampungu Imbole³

¹Lawyer by profession, Célestin MUTSHIPAYI KALUBI is also a learner in master's degree at the school of Criminology of the University of Kinshasa

²Doctor of Criminology and Ordinary Professor, Raoul Kienge-Kienge is Director of the school of Criminology at the University of Kinshasa

³Doctor in communication and PhD student in criminology, Joël NZAMPUNGU is a professor-researcher at the school of criminology of the University of Kinshasa

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ABSTRACT: This article analyzes the paradox of healthcare institutions in Kinshasa which, while fulfilling a mission of care, generate major sanitary and environmental risks through the deficient management of their pathogenic residues. Based on qualitative research conducted within emblematic facilities (Makala General Reference Hospital, University Clinics), this study explores the gap between the risk awareness displayed by field agents and the ubiquity of makeshift practices (such as burning with tires and the use of colonial-era pits). Through the lens of Green Criminology, the study demonstrates that this management is not the result of ignorance, but rather of organizational deviance by omission, dictated by a chronic infrastructural impasse. The findings reveal how sanitation technicians neutralize their guilt regarding pollution through a discourse of "non-choice," transforming the hospital into an actor of silent environmental victimization. The article concludes on the necessity of a preventive criminology focused on the reconfiguration of institutional dynamics and the enhancement of human capital. Rather than moving toward ineffective criminal repression, the study pleads for a regularization of environmental health public policies, aiming to restore the hospital's protective mission in the Democratic Republic of Congo.

Corresponding Author

Célestin Mutshipayi Kalubi

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INTRODUCTION

Within the framework of natural law and the sovereign missions of the State, the medical structure is, by definition, a sanctuary dedicated to life, a space for diagnosis and treatment intended to guarantee the physical integrity of citizens. However, environmental criminology invites us to observe a much darker reality behind the walls of clinics and hospitals: the medical institution simultaneously acts as a production unit for highly pathogenic residues. Anderson (2010, p.23) points out that, "all waste is dangerous, being harmful to human health over time," a statement that makes perfect sense when considering the striking paradox of care producing nuisances. In seeking to restore individual health, several health institutions in Kinshasa generate threats to collective health when their infectious, anatomical or chemical waste is not neutralized according to WHO standards (2014). Therefore, environmental crime should no longer be read solely as a deliberate act of polluting, but as an organizational deviance by omission, that is to say the systemic inability of a structure to align with security imperatives, transforming a place of healing into a source of danger for the ecosystem. This issue takes on a particular significance in the Kinshasa anchorage, where Kinshasa, a megalopolis in continuous expansion, sees the proliferation of both public structures, like HGR Makala, and university as well as private clinics, such as the Malamu Center or Moyo Mwa Ntongo. Unfortunately, this exponential growth in healthcare provision is not accompanied by an update of the infrastructure for managing waste, making the Congolese capital the scene of 'open-air' management where the legal framework, yet based on the Constitution of 2006 and Law n°11/009 of 2011

violently clashes with an archaic materiality. This confrontation between the legal requirement and the archaism of the available means creates an environment where the rule becomes the exception. It is not the intentions of the actors that are at stake, but the very dynamics of the organization which, due to a lack of tools, reorganizes itself around makeshift practices. The gap observed in Kinshasa is therefore not a simple technical negligence, but the reflection of a structural impact: the medical institution is forced to 'tinker' its health survival at the expense of its ecological security. From then on, the challenge is no longer to point out individual culpabilities, but to understand the mechanics of this disconnection between the acute awareness of risks and the persistence of rudimentary methods. If medical and technical personnel know that burning pathogenic residues with tires is harmful, why does this practice remain the operational standard? It is in this interstice between knowledge and doing that our questioning takes root. How do the hospital structures of Kinshasa manage this paradox of producing care while generating danger? More precisely, what is the impact of the infrastructural impasse on the professional dynamics of sanitation workers, and how do they manage to neutralize awareness of environmental nuisance in order to maintain the continuity of hospital service?

The analysis of the scientific literature confirms the urgency of this situation by stressing that inappropriate disposal, particularly through uncontrolled incineration or discharge into water courses, leads to long-lasting pollution of soils and groundwater (Prüss et al., 1999). Chartier et al. (2014) also specify that the improper handling of sharp objects and chemical substances increases the risks of systemic contamination for the surrounding populations. In developing countries, the work of Caniato et al. (2015) demonstrates that medical structures evolve in a context of chronic resource scarcity where waste management is systematically relegated to the background, far behind clinical emergencies. In sub-Saharan Africa, researchers like Manga et al. (2011) and Manyele & Anicetus (2006) have revealed that staff perceptions directly influence the quality of sorting: a mistaken or minimized perception of environmental risks inevitably leads to inappropriate behaviors, thus perpetuating the negative ecological impact.

It is precisely at the heart of this gap that the present study, focused on what we call a "gap" between risk awareness and the effectiveness of methods, takes place. On the one hand, interviews conducted with sanitation technicians attest to a real lucidity regarding the dangerousness of residues; on the other hand, makeshift practices impose themselves as a daily fatality. It is a question of understanding how informed professionals, haunted by the memory of disasters like the collective suffocations of Kasongo-Lunda in 1984¹, come to use tires and oil to burn medical waste in the heart of the city. The infrastructural impasse, marked by the use of manual incinerators and wells dating from the colonial era, acts here as a powerful mechanism for neutralizing ecological awareness, where material constraint ends up dictating a deviant practice despite the acute perception of danger. Faced with this observation, the general objective of this research is to analyze in depth the gap between this perception of risks by the staff and the effective practices observed in Kinshasa. More specifically, it will describe the way in which sanitation staff interpret environmental threats, to identify with precision these "makeshift practices" that characterize current management, and finally to evaluate the real impact of this "bricology" on public health. To guide this reflection, the induced hypotheses postulate that the persistence of makeshift practices is not the product of an indifference to risk, but the expression of an infrastructural impasse that forces actors into a 'bricology' of survival. In this context, the acute awareness of the danger is systematically neutralized by the urgency of the continuity of hospital service. In a subsidiary way, we support the following axes: management of residues is perceived as a peripheral activity and devalued within the medical hierarchy. This marginalization leads to a break in the chain of responsibility between the act of care and the act of sanitation, isolating maintenance technicians in a solitary risk management. The use of archaic methods of elimination (incineration with tires, colonial wells) transforms the hospital institution into a vector of diffuse environmental victimization. The hospital, through an organizational deviance suffered, paradoxically becomes a focus of atmospheric and underground nuisances, thus reversing its primary mission of protecting life.

1. THEORETICAL FRAMEWORK

This point lays down the conceptual foundations necessary for understanding the phenomenon under study. Far from a simple technical analysis of waste management, environmental criminology (Green criminology) allows us to apprehend the hospital not only as a place of cure, but as a space for the production of ecological damage structured by deviance and neutralization mechanisms.

1.1. Organizational deviance by omission

As part of this research, the management of medical waste in Kinshasa is analyzed from the perspective of organizational deviance. According to Ermann and Lundman (1978, p. 55), an organization is deviant when its actions (or inactions) deviate

¹ The incident at the Kasongo-Lunda General Reference Hospital around 1984 constitutes a textbook case in environmental criminology, tragically illustrating the materiality of the peril associated with artisanal management of chemical residues. By carrying out the open burning of expired stocks of medicines, without any filtration device or compliance with atmospheric safety protocols, the institution unintentionally generated a dense toxic cloud in the heart of the city. The immediate reaction of the human ecosystem was not long in coming: a collective suffocation of residents coupled with an epidemic of "flu" persisting for three days, revealing acute poisoning by inhalation. This account, beyond the historical anecdote, serves as empirical proof for the concept of diffuse environmental victimization; it demonstrates that the hospital, when it improvises an incinerator without adequate technical means, inverts its social function to become a focus of environmental pathology, transforming an act of administrative management into a concrete health disaster.

from the prescribed standards in order to achieve organizational objectives. In Kinshasa, this deviance is not due to a deliberate desire to harm, but to what we describe as deviance by omission.

The medical institution finds itself in a systemic inability to comply with Law No. 11/009 of 09 July 2011 on fundamental principles for environmental protection. Indeed, article 41 of this law imposes a secure management of hazardous waste, but the lack of financial and technological resources (incinerators up to standards, sorting circuits) creates an impossibility of conformity. As explained by Punch (2000, p. 245), "organizations under extreme economic constraint develop behaviors of 'institutional survival' that push them to transgress environmental standards." Here, environmental crime arises from deficiency: the hospital becomes deviant because it no longer has the means to be virtuous. This situation echoes the work of Caniato et al. (2015, p. 15) who point out that "in fragile states, waste governance is sacrificed for immediate clinical care".

1.2. Neutralization techniques

To understand how sanitation personnel reconcile their awareness of risk with polluting practices, it is necessary to mobilize the theory of neutralization techniques developed by Sykes and Matza (1957, p. 667). These authors demonstrate that individuals who transgress a norm develop justifications to mitigate their guilt and protect their self-image.

The analysis of an interview at HGR Makala reveals a dominant technique: the denial of responsibility. To the question of whether they are thinking about pollution, the agents' response is unequivocal: "Yes, but we have no choice." This 'non-choice' is a psychological defense mechanism. By invoking material constraints (absence of vehicle, manual incinerator), the agent no longer perceives himself as a polluter, but as a victim of a faulty system.

Sykes and Matza (1957, p. 668) note that this form of neutralization allows verbal adherence to the law while violating it in practice. Most hospital staff in Kinshasa "neutralize" the impact of incineration with tires by arguing that the urgency to rid the services of infectious waste takes precedence over air quality. White (2008, p. 12) specifies in his analysis of green crime that these justifications become 'organizational scripts' legitimizing pollution in the name of public service continuity.

1.3. Environmental victimization

The framework of green criminology redefines the notion of victim. Williams (1996, p. 21) was one of the first to insist that environmental crimes produce victims who have no voice: future generations, the ecosystem and marginalized populations.

In Kinshasa, the management of waste by burying it in colonial-era wells or wild incineration creates a diffuse environmental victimization. Soils and groundwater become invisible victims of what Prüss et al. (1999) describe as lasting chemical and bacteriological contamination. The story of the Kasongo-Lunda incident in 1984 illustrates this reality: residents, victims of suffocation, were not attacked by an individual, but by institutional negligence.

According to Lynch and Stretesky (2003, p. 220), "these victims are often ignored by the classical penal system because the damage is slow, cumulative and not immediate." The hospital, by dumping toxic effluents, participates in an immediate "crime without a plaintiff", but whose impact on public health in the long term constitutes a major harm. Nature is no longer just the setting for care, it becomes the receptacle of social and organizational pathologies in the Congolese health system.

2. METHODOLOGICAL APPROACH

This research is fundamentally inscribed in a constructivist epistemological posture and adopts a comprehensive paradigm. Far from wanting to coldly quantify behaviors or to draw up exhaustive statistics, the objective here is to grasp the deep meaning that the actors give to their daily practices at the heart of Kinshasa hospital tensions. To do this, the study favors an inductive approach; it does not start from pre-established theories to verify them in a top-down manner, but delves into the field to bring out original concepts. In this perspective, the semi-structured interview has established itself as the ideal tool, because it allows access to the subjectivity of the actors. To probe 'perceptions', what the agent thinks or feels in the face of 'practices', what he actually does on the ground, it was necessary to open up a flexible space for speech where the interviewee can justify his transgressions and reveal the nuances of 'non-choice'. That only a qualitative exchange can highlight. This immersion took place within an empirical field made up of emblematic medical structures in Kinshasa, notably the HGR Makala, the University Clinics, the Moyi mwa tongo Medical Center and the Malamu Medical Center. In order to ensure the richness of the data, the sample, constituted by reasoned choice, includes twelve (12) strategic resource people. This diverse group consists of senior executives, but it relies mainly on the field expertise of sanitation technicians. These engineers and agents represent the "first responders" to the waste and are the beating heart of the investigation. The robustness of the data collection was ensured by the triangulation of three complementary techniques: the semi-directive interview articulated around a guide of thirteen open questions, the direct observation allowing to confront the discourse with the materiality of manual incinerators or wells, and finally the rigorous documentary analysis of the National Plan for Biomedical Waste Management as well as the 2011 Law. The deployment of these tools continued until the principle of theoretical saturation was reached, at which point the new interviews no longer provided novel conceptual elements, confirming a redundancy of 'makeshift practices'. and neutralization mechanisms across the different investigated sites. Finally, particular attention was paid to ethical imperatives, as researchers ensured strict compliance with the principle of free and informed consent. Each participant has been previously informed of the scientific purposes of the study in order to ensure transparent collaboration. To ensure the safety of agents, whose statements are sometimes critical of the state apparatus or their own hierarchy, anonymity has been systematically proposed. All data was treated with the strictest confidentiality, ensuring that

the speech released in the context of this research could not, under any circumstances, be detrimental to the career or integrity of the officials interviewed.

3. PRESENTATION AND ANALYSIS OF THE RESULTS

This section presents the results of our study and deconstructs the mechanics of waste management within Kinois medical structures. The analysis of the collected data reveals, as a first fundamental result, an acute awareness of risk among field agents; an observation that breaks the myth of pollution by ignorance to give way to a more complex reality: that of a scientific knowledge trapped in material poverty. To understand how this paradox settles permanently, our analysis revolves around three interconnected themes and their specific points of tension according to our empirical data:

1. Risk awareness (Theme 1): We will confront the rationality of actors with the theoretical frameworks of green criminology. This exploration is based on three axes:
 - The diagnosis of agents, which reveals a psychological conflict between integrated standard and necessity for transgression;
 - The weight of expertise, marked by a fracture between trained engineers and lay performers;
 - The perception of relegation, this feeling of marginalization that promotes institutional fatalism.
2. Makeshift practices (Theme 2): This section paints an X-ray of daily deviance through:
 - The breakdown of the sorting chain, where clinical care removes environmental responsibility;
 - The archaeology of treatment, characterized by the use of obsolete colonial infrastructure;
 - The deadly 'bricolage', analyzing the systematic use of burning tires as a survival strategy.
3. Impacts and resonances of transgression (Theme 3): Finally, we will analyze the consequences of this management through:
 - The memory of risk, by mobilizing the traumatic echo of the Kasongo-Lunda incident (1984);
 - Invisible pollution, dealing with the sacrifice of groundwater by burying;
 - The State as accomplice, exploring the neutralization of responsibility through the systemic deficiency of public authorities.

3.1. The "awareness of risk"

This section constitutes the empirical core of our investigation. The aim here is to confront the rationality of field actors with the theoretical frameworks of environmental criminology, in order to analyze how scientific knowledge and an acute awareness of danger find themselves caught up in unsurpassable structural constraints.

3.1.1. The diagnosis of agents

The analysis of interviews conducted at HGR Makala reveals, at first glance, that the sanitation staff does not operate in ignorance. On the contrary, agents demonstrate a detailed understanding of the pathogenicity of the residues they handle. To the question concerning their perception of waste, two agents make an unequivocal diagnosis: "We in the maintenance department and some colleagues from the nursing staff know that medical waste is dangerous, but are limited because we do not have the appropriate equipment. [...] Sometimes, when there is no space in the incinerator, we put tires burned using oil to allow us to dispose of the waste. This statement perfectly illustrates what Sykes and Matza (1957) identify as the conflict between the integrated social norm and the necessity of its transgression. The agents do not deny the risk; they circumvent it through a 'makeshift technique'. The use of tire and oil is not perceived as an environmental crime by the agent, but as a desperate technical solution to "free" the hospital from its infectious load. In criminology, this posture reflects a knowledge under tension: the subject is aware of producing an atmospheric nuisance (burning tires releasing dioxins), but it prioritizes the dangers. For him, the immediate risk of an epidemic within the pavilions takes precedence over the diffuse risk of environmental pollution. According to White (2008), in contexts of precariousness, "management of the worst" prevails over "management of one's own".

3.1.2. The weight of expertise

A second point of tension lies in the organizational divide between technical expertise and manual labor force. An interview reveals an alarming disproportion: the hospital has only four (4) sanitation technicians (Engineers) to supervise fifty-one (51) employees. «We are four sanitation technicians [...] we work with fifty-one collaborators who have not received specific training, but we guide them». This configuration creates what the sociology of organizations calls a "bottleneck of expertise". Normative knowledge, the one who knows the WHO guidelines (2014) and Law n°11/009 is concentrated in the hands of a tiny minority, while daily enforcement is delegated to a critical mass of lay workers. This "profane execution" mechanically increases the risk of inadvertent deviation. For Punch (2000), organizational deviance is often rooted in this transmission defect: the engineers "guide", but the lack of formal training of the 51 employees weakens the chain of responsibility. Knowledge is here a rare resource that becomes exhausted in supervision, giving way to empirical practices where the survival reflex replaces scientific protocol.

3.1.3. The perception of relegation

Finally, the awareness of risk is deeply eroded by a feeling of institutional marginalization. Sanitation workers see themselves as the 'invisible' in the medical hierarchy. This relegation is evident when they compare their service to other more prestigious departments such as the operating room. «We do everything so that our service is like the other services. Unfortunately, we are not really respected». This quest for recognition reveals an asymmetry of power within the hospital. In environmental criminology, the social status of the department responsible for environmental protection influences the effectiveness of its action. If the sanitation service is perceived as the "poor relation", its alerts on well saturation or lack of fuel for the incinerator are less likely to

be heard by Management. This marginalization favors what Caniato et al. (2015) call «budget relegation». The agents also express a certain fatalism in the face of state ownership: "We are a state hospital, it is he who must take care of us. Not the opposite in any case." This discourse marks a break in individual commitment: the agent, feeling abandoned by the institution (lack of equipment, absence of vehicle), ends up abandoning the norm. Awareness of risk remains, but it is neutralized by the feeling of an organizational injustice: why comply with costly and tiring environmental protocols when the institution itself does not provide the minimum vital for the service? Hence, risk awareness among the agents of the different hospitals under study is not absent, it is hindered. It runs up against a failing materiality that forces bricolage, an unbalanced human structure that dilutes expertise, and an organizational culture that invisibilizes those who clean the slags of care. Knowledge is no longer a tool for transformation, but a psychological burden that agents neutralize through the discourse of 'non-choice', transforming the hospital into a factory at risk despite the competence of its executives.

3.2. The 'makeshift practices'

This section explores the materiality of waste management within medical structures in Kinshasa, where deviance is no longer a pathway accident but a structural component of daily operations. Through an "X-ray" of behaviors, we observe how the infrastructural deficiency transforms care gestures into acts of systemic pollution.

3.2.1. The break in the sorting chain

Source separation is the cornerstone of any rational management of medical waste, according to WHO standards (2014). Despite this, direct observation and interviews at HGR Makala for example reveal an early break in this chain of responsibility. Caregivers (doctors and nurses), focused on clinical emergency and patient survival, seem to shift environmental responsibility onto sanitation staff. "The waste produced by the nursing staff is not sorted, we sometimes have trouble incinerating it".

This inability to sort at the source illustrates a conflict of sociological roles. The caregiver perceives sorting as a subaltern task, foreign to his mission as 'savior'. In criminology, this negligence can be analyzed as a deviance by indifference, where the prioritization of priorities overrides the environmental norm. Punch (2000, p. 248) insists that "when production objectives (here, care) saturate the mental space of actors, 'peripheral' security rules are the first to be sacrificed". This initial rupture condemns sanitation technicians to handle mixed bags, increasing the risks of percutaneous accidents and making subsequent incineration inefficient and more polluting.

3.2.2. The archaeology of treatment: Obsolescence as a norm

Faced with the lack of advanced technologies, Kinshasa medical structures are part of a true "archaeology of treatment". The study reveals a systematic use of infrastructures dating from the colonial era, creating an anachronistic gap between modern medicine and the elimination tools used. An interviewee relates: "We put ash in the wells that date back to Belgian times. We have a second well for the placentas and we dispose of at night". The use of these century-old wells constitutes a form of structural transgression. These infrastructures were not designed to absorb the volume and chemical toxicity of the current pharmacopoeia. Prüss et al. (1999, p. 14) warn that "the unsafe burial of infectious waste and placentas in non-sealed wells leads to a slow but certain contamination of groundwater". Here, obsolescence is not only a technical delay, it is a modality of environmental degradation. The nocturnal elimination of placentas, mentioned by the agents, suggests a form of unconscious concealment, a "clandestine" practice that compensates for the lack of urban sanitation services capable of treating this anatomical waste.

3.2.3. The deadly "DIY": Incineration with tires as a survival

The most salient aspect of this X-ray is undoubtedly the use of what we call "deadly bricolage". When the manual incinerator is saturated or inefficient, personnel invent makeshift disposal processes that violate all atmospheric safety standards. An interviewee tells: "Sometimes, when there is no space in the incinerator, we put burnt tires using oil to allow us to throw away the waste". This practice, although pragmatic in the eyes of the agents, constitutes a major environmental crime within the meaning of green criminology. Burning tyres releases highly persistent toxins, such as dioxins and furans, which accumulate in the food chain and the human body. Based on White (2008, p. 22), one can speak of "rationality of urgency": the agent chooses the evil that he can control (the black smoke from the tires) to eliminate the evil he fears (the accumulation of infected syringes).

DIY here becomes an institutional survival norm. The hospital, lacking the means to transport waste to controlled landfill sites, self-authorizes direct air pollution. This process transforms the act of sanitation into an act of victimization: to "clean" the hospital, we poison the air of the residents. This practice, institutionalized by the lack of vehicles, illustrates the bankruptcy of the medical waste management system in D.C. where dangerous improvisation replaces environmental engineering.

3.3. Impacts and resonances of the transgression

This section analyzes the consequences of observed organizational deviance, exploring how the transgression of environmental norms is enduring and transforms public space into a scene of silent victimization.

3.3.1. The memory of risk: The echo of Kasongo-Lunda (1984)

The dangerousness of makeshift practices is not a simple theoretical hypothesis; it is based on a traumatic memory that runs through the history of public health in the Democratic Republic of Congo. To illustrate the materiality of the peril, it is appropriate to mobilize the story about the General Reference Hospital of Kasongo-Lunda around the years 1984. At that time, the uncontrolled incineration of expired medicines within the hospital grounds had caused such a dense emission of toxic fumes that the surrounding population was suffocated and an epidemic of flu persisted for three days. This historical incident serves as

empirical evidence for the theses of Chartier et al. (2014) on the dangerousness of atmospheric emissions from chemical waste. In environmental criminology, this story demonstrates that damage is not a possibility, but a historical certainty. When the hospital improvises itself as an incinerator without the proper filters, it ceases to be a place of care and becomes a hotbed of environmental pathology. This legacy of 1984 resonates with the current practices of HGR Makala: the use of oil and tires to burn waste only reproduces, forty years later, the conditions of an imminent health disaster.

3.3.2. Invisible pollution: The sacrifice of groundwater

Beyond air pollution, visible and immediate, management practices in Kinshasa generate underground degradation, more insidious and sustainable. The use of colonial-era wells for the disposal of incineration ashes and liquid effluents (placentas, blood, biological liquids) constitutes a direct assault on the urban ecosystem. Prüss et al. (1999, p. 22) point out that incineration residues often contain heavy metals and dioxins which leach into the soil. In Kinshasa, where a large part of the population depends on artesian wells and private boreholes for its water supply, this practice is fraught with consequences. By dumping waste into "Belgian" non-sealed wells, medical structures contaminate the city's water resources. This form of pollution, described as a «slow crime» by Nixon (2011), creates a delayed victimization: residents consume water polluted by the very structures that are supposed to protect them. The environmental damage here is total, affecting both air quality (incineration) and water purity (burial), creating a cycle of toxicity of which the hospital is the epicenter.

3.3.3. The State as an accomplice

The analysis of responsibility cannot be limited to field staff. Our empirical data reveal a powerful defense mechanism: the discharge of responsibility on the state apparatus. This statement is not only an administrative observation; it is a posture of neutralization in the sense of Sykes and Matza (1957). The agent defends himself from his own deviant practice by pointing to the failure of his employer, the State. In criminology, one can speak of systemic complicity. The State, by providing neither vehicles nor electric incinerators, nor training to the 51 employees, becomes the architect of deviance. As Punch explains (2000, p. 250), "the deviant organization ends up considering illegality as a functional necessity." Since the State is not fulfilling its part of the contract (financing and equipment), the staff considers that they are no longer required to comply with environmental standards. This "complicity by default" transforms the management of medical waste into a lawless space where pollution is accepted as the price to pay for maintaining a sham public service. The impact is then not only ecological, but also moral: it consecrates the collapse of environmental ethics within the technical elite of the nation.

CONCLUSION

This study, anchored in the harsh reality of medical structures in Kinshasa, allows us to empirically confirm the existence of a deep gap between the rationality of the actors and the materiality of their actions. The synthesis of our investigations demonstrates that the perception of risk, although real and scientifically supported among agents, is not sufficient to ensure a practice in accordance with green criminology standards. Without the "form", that is to say, without a minimum infrastructure composed of electric incinerators, hermetic sorting circuits and secure means of transport, ecological awareness finds itself neutralized by the urgency of institutional survival. This discrepancy highlights that knowledge cannot be transformed into virtue without adequate technological support; in the absence of it, it becomes a psychological burden which the staff evacuates through the discourse of 'non-choice'. Most of the hospitals in Kinshasa are thus prisoners of a deviance by omission where excellence in medical diagnosis tragically coexists with a 'bricology' of elimination that belongs to the last century. Faced with this alarming observation, remediation cannot be limited to simple reminders of administrative orders or the multiplication of legislative texts without material anchoring. We argue here for the establishment of a "preventive criminology" applied to the hospital environment. This must imperatively go through a massive provision of modern equipment, but above all through an urgent human requalification. It is unrealistic to hope for sustainable management of medical waste as long as fifty-one untrained employees continue to handle pathogenic substances under the sole supervision of four engineers. The specific training of this critical mass of workers is the indispensable lever to restore the chain of responsibility and put an end to the deadly practices of incineration with tires and oil. By way of opening, this research highlights the imperative need to rethink the responsibility of hospital institutions in the Democratic Republic of Congo, beyond the sole individual fault. While classical law often exhausts itself in a quest for personal guilt, the recurrence of documented damages suggests an approach centered on organizational deviance. If the State appears as a passive accomplice by its material disengagement, the solution does not lie in an ineffective criminal repression, but in a structural regularization of environmental health policies. The transition from "bricology" to health engineering requires a reconfiguration of institutional dynamics and a real valorization of human capital. By restoring the technical capabilities and professional dignity of sanitation workers, it becomes possible to ensure that the act of caring regains its primary purpose, finally freed from the tragic cycle of ecological victimization.

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