

Pictorial Review

Haitian voodoo dolls revealed by X-ray: From radiology to medical anthropology



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ABSTRACT

Objectives: The aim of our study was to carry out the radiographic examination of seven dolls recently collected in the central cemetery of Port-au-Prince (Haiti). These dolls and evidence obtained can be used as a psychological tool to aid in victimological forensic analysis. This can improve our knowledge of magical-religious rituals of Haitian voodoo.

Materials and methods: Radiological examination was performed on these ethnographic objects through X-Ray using a flat panel detector Primax Clisis©. Furthermore, an additional observation was performed using a microscope (Leica EZ4 HD©). All X-ray images have been read on plain film and on a diagnostic workstation by both a medical anthropologist and a radiologist.

Results: These studies bring to light many objects inserted into the voodoo dolls, such as needles, zippers or buttons, while direct observation by microscope confirmed the insertion of human hairs. Linking such discoveries with the current data of traditional Haitian voodoo allowed us to better understand the use, purpose, and fabrication process of these dolls.

Discussion: Medical imaging is essential for the understanding and interpretation of these rituals, and brings knowledge to medical anthropology, especially since there is not much data on this sorcery practice, which is prohibited and punishable by the Haitian law.

Conclusion: The use of forensic tools, such as radiography, on Haitian voodoo artifacts is unprecedented, as is the introduction of this kind of ethnographic objects in the forensic field of victimology.

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1. Introduction

Haitian voodoo originates from mixing ethnic black African, such as Benin and Bantu groups, which is focused on the deportation of slaves towards the island of Santo Domingo since the 16th century [1], where it has evolved in parallel with the original

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homeland. The objects charged with negative occult power [2], called *ouangas* and manufactured in Africa, are found in Haiti, but in an endemic doll form.

Not enough data is available on the taboo activities that are officially punished by Article 405 of the Haitian Penal Code: “All makers of *ouangas*, *caprelatas*, *voodoo*, *donpèdre*, *makandals* and other spells, shall be punished with three to six months' imprisonment and a fine of 60 to 150 gourdes [Haitian currency] by the police court, and in case of recurrence of imprisonment of six months to two years, and a fine of 300,000 gourdes by the court” [3].

For the spell of a doll to successfully work, it requires the acquisition of material belonging to the person such as hairs, nail clippings or clothes, obtained through a network or with the help of accomplices, such as relatives. More importantly, it may be accompanied by more serious acts, including murder.

The knowledge of such practices is therefore based on ancient and modern ethnographic stories, which are often romanticized, and oral testimonies. This animistic religion is performed by two kinds of priests, serving the deities named *loas:houngan*, i.e. a priest serving well, and *bokor*, i.e. serving “with both hands,” which means that they have chosen to also serve evil. Such priests are considered as healers, bone-setters, fortune tellers, and special intermediaries between gods and humans. A *bokor* also has the ability to cast a spell and consecrate *ouangas*.

These objects are in the image of a dual system. Seabrook [4] reports the existence of *ouangas* of love and hate, *ouangas* of birth, protection or death. The objects, whether for good or evil, will use the same processes. They need intimate objects of the person, such as a strand of hair, nail clipping, or a piece of clothing stained with sweat or fat. During the making of his beneficial *ouanga*, Seabrook explains the course of the ceremony: “a red cloth square, which was to serve as an envelope of the *ouanga*, was placed at the center of the room. Besides, there were yellow and red ribbons and feathers dyed in brilliant colors. Leaves of Balsam and castor, and lime roots were arranged around in little piles. Flour saucer, another ash, a bottle of white rum, a bottle of perfume and a small iron crucifix complemented the device of the ceremony. The priest took some leaves and roots, charred on a burning fire and pulverized together in a mortar. The *bokor* filled his mouth and splashed *clairin* spitting all accessories...”. Finally everything was wrapped in the red fabric after various prayers.

As previously stated, these dolls can be associated with more serious acts, such as subtle poisoning or murder. This is evidenced by the following excerpt: “They made a collection in the village and, with the money and shirt of Ti-Joseph [stolen during the night by an accomplice], some men went to another *bokor* living in Trou Caiman, who made a death *ouanga* in a black bag, mixing together pierced needles, rubbed with goat droppings and wrapped with rooster feathers soaked in blood. Moreover, in case the *ouanga* weakened by magic against Ti-Joseph, would not be fast enough, they sent strong men in plain, waiting for Ti-Joseph, and cut off his head one evening with machetes” [4].

These ethnographic data allowed the ability to distinguish between the evil and the beneficial anthropomorphic *ouangas* through the possible use of cloth in various colors, such as black and red, but also through the type of ceremony with the use of droppings and blood applied to this *ouanga* on one side and aromatic leaves and roots on the other.

2. Material and methods

Seven voodoo dolls have been collected from the Central Cemetery of Port-au-Prince during the month of November 2014 by one of the authors (P.C.) during an anthropological survey

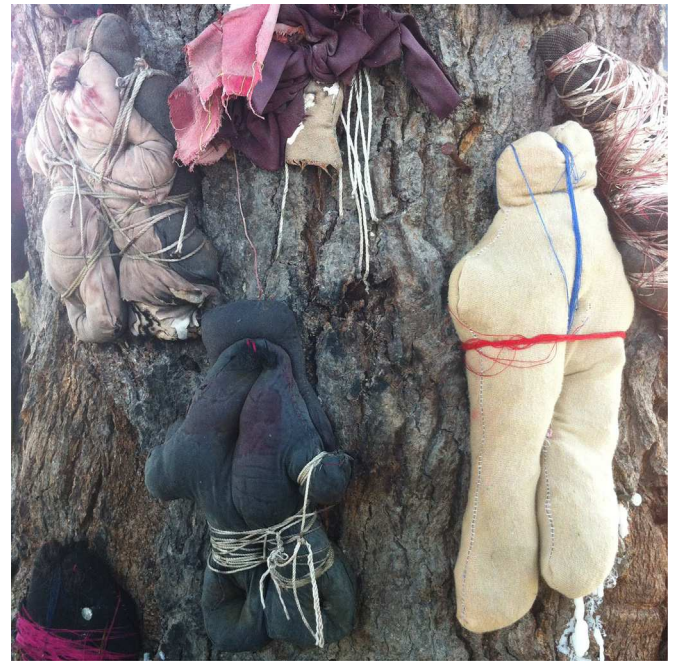


Fig. 1. In situ voodoo dolls (surface of a modern grave within the central cemetery of Port-au-Prince, Haiti).

(Fig. 1).

They have been examined by radiography using a flat panel detector Primax Clisis©. An a.p. X-ray image was obtained for each doll at 50 kV. All X-ray images have been read on plain film and on a diagnostic workstation by both a medical anthropologist and a radiologist. A complementary examination of organic remains was carried out using binocular lenses (Leica EZ4 HD©).

3. Results

These *ouangas* with schematic anthropomorphic forms are all conducted from a front and back piece of fabric, which are sewn together with pink, white or black yarn. There are three dolls made of black fabric, two of red fabric and the last of white fabric. We have five separate dolls and a duo. With previously collected data, the group may already be split according to their appearance and choice of fabric use, such as the dolls made of red fabric and the ones made of black fabric, including the duo.

This duo (Fig. 2) consists of dolls made from white and black fabric (measuring 24.5×12 cm and 20×9.5 cm) without apparent sexual sign. This leads to several interpretations that require consideration. Perhaps these dolls signified a couple, a father/son, or siblings. Only the size and girth can give an indication on a sex ratio. The white doll is the larger of the two people portrayed. These two entities are tied by the legs using a white cord. A black fabric also binds this duo, which is fixed through the white cord but with two needles attached to one leg of each individual. Several needles piercing the duo and the fabric are visible on the surface.

The two black sewn dolls are made of black tissue and pink stitching (Fig. 3). One of these measures 17×11 cm² and has the right leg bent which, as a consequence, is shorter than the other. Perhaps this is due to a physical anomaly, such as a chronic disease or abnormality of the leg, and may have been present on the target victim. It is also possible this may simply be a clumsy, unintentional mistake in fabrication of the doll. Black hairs have been added at the top of the head and at the insertion of what appears to represent a penis. The hairs have been confirmed by a direct



Fig. 2. The duo white and black voodoo dolls.



Fig. 3. Two blackish voodoo dolls with pink stitching.

binocular lenses examination to be of human origin (Fig. 4). The second black doll measures 14×11 cm. It seems to be representing a woman, as no penis is portrayed. Both dolls have a very dirty surface in common that is reminiscent of the application materials cited by Seabrook.

Radiography has allowed the discovery of unexpected elements. For the couple (Fig. 5), it is possible to count a total of 58

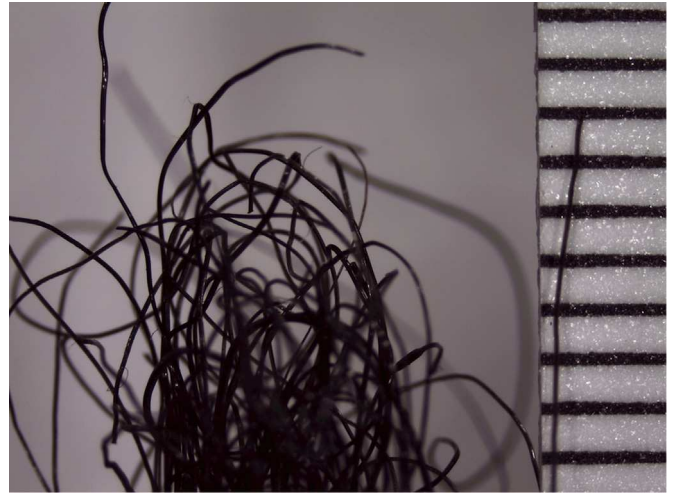


Fig. 4. Microscopic examination of black doll hair (magnification $\times 40$).



Fig. 5. Radiography of the duo white and black voodoo dolls.

needles, which breaks down to 20 for the white doll, 33 for the black doll and 5 for the fabric. For the male subject, radiography reveals inside the filling of the same leg, a button inserted in the thigh or the right side, which could be used to refine the identification of the target subject (Fig. 6).

Regarding the two dolls made from red cloth (Fig. 7) (measuring 19.5×14 cm² and 15.5×13.5 cm), they represent two men of different size. Here, again, with the addition of hair and/or facial hair displayed on the skull and genitals of the dolls. The smallest doll has a black spot on the face, which can be the result from participation in a possible ritual during the spell, a flaw during the production, or an accident. Radiographically, only the latter has a deposit in the filling, which is a staple (Fig. 8). No area of application is distinguished on the surface, which can confirm the



Fig. 6. Radiography of the two voodoo dolls with pink stitching.



Fig. 7. Three red voodoo dolls. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

positive application of these dolls.

The last doll (measuring 22×12.5 cm) has a different profile than the others (Fig. 7) in the sense that it is made of two fabrics of different colors, where the posterior face is black, while the front is red. The representation of the woman's hips is clearly marked, and a subsequent application of hair in the pubis leads to the conclusion that the doll represents a woman. The radiograph shows the presence of two separate zippers or two fragments of the same



Fig. 8. Radiography of the three red voodoo dolls.

side of a zipper (Fig. 8). The surface is immaculate on both sides and no “malicious” action is distinguishable. The interpretation of the latter is more complex and raises many questions; should we see the representation of the union of two extremes in the image of “a blessing in disguise”? The presence of zipper elements inside of the doll could constitute a love charm which join and hold two things together.

4. Discussion

The use of radiography will allow a better understanding of contemporary or old objects, to confirm or deny the old data, but above all, demonstrates the interest of introducing forensic techniques in ethnology and archeology [5]. This will allow the “autopsy” of the artifact with obvious respect for its integrity through non-destructive and non-invasive techniques.

In this case, X-rays brought a new clarity to Haitian magical-religious practices, and especially new fields of research, such as chemical analysis to know the elements used or applied. Also, the radiographic analysis raised questions, for example, about the evil role of each doll and the meaning of the fabric used. Were both entities only bewitched and not used, or were they made in order to harm and not to kill, the reverse of the couple?

Conventional radiographical and CT-scan examinations of museum and ethnographical objects are becoming more frequent. The implication of medical practitioners, such as forensic anthropologists and radiologists, will increase within the next few years, in a context of expertize and repatriation process. Such results are important to know for future comparison and analyses.

5. Conclusion

The observation of damage of a victim by biomedical tools of forensics can then be applied on both physical trauma but also on

the indirect and psychological weapons such as are these dolls. The process of analyzing of a cultural artifact as a spiritual weapon is unprecedented in the field of victimology, and takes a full part of any judicial procedures. The characterization of the fabrication process of voodoo dolls is of great interest for the legal investigation, as parts of the victim's body (hairs, nails) and clothes are included in these artifacts. They could be assimilated to a profanation of the human body's integrity, and be an aggravating factor for sorcery activities. To an ultimate degree, the making of such an artifact in the practicing voodoo Haitian populations, can lead to an assassination, and could then represent an evidence of premeditation.

The study highlighted a cultural practice that is realized to be more complex with the use of various materials not visible to the naked eye, which show a proper vocation for each victim.

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