



# The Tayrona and Fungi: Possible connections around a mushroom, fleur-de-Lis, and a bat cult in a pre-Hispanic indigenous tribe in Colombia

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## ABSTRACT

The Tayrona were an indigenous tribe that lived in the Sierra Nevada de Santa Marta and its surroundings on the actual north territory of Colombia. The purpose of the present paper is to suggest the possibility of mushroom use in sacred rituals for spiritual purposes by the Tayrona in pre-hispanic Colombia, this obviously involving a mycological knowledge that would have included uses of fungi as nutritional edibles and medicinal sources. The uses of psilocybin producing mushrooms in the past and in present indigenous inhabitants in the Sierra Nevada de Santa Marta in Colombia is of the most ethnomycological importance and should be studied with rigor and discipline. Psilocybin in recent times has been proposed in medicine as a new way to threat anorexia, depression, anxiety, addictions, among other illnesses that affect human beings in modern times with positive results. There is a part in this document dedicated to psilocybin as a panacea of the future relating all these applications and uses to the Tayrona indigenous culture from pre-Hispanic Colombia and suggesting they had a knowledge of the brain functions and the effects of the mushrooms.

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## Introduction

Since the beginning of culture, mushrooms have been used for spiritual purposes in a shamanic context to achieve enlightenment and direct communication with the deities. The shaman as an intermediary of the deity and man would exercise its role as a medicine man. The use of mushrooms as food has also been recorded since ancestry. The Chinese were the first culture recorded to have cultivated them. (Miles & Chang, 1995). R. Gordon Wasson was the first to make the existence of psilocybin-producing mushrooms known to the world after his visit to Maria Sabina in Mexico. Before this fact was spread it was just a rumor to the point that at the beginning of the 20th century the Academy published a document assuring as a true fact that these mushrooms did not exist and that it was the peyote cactus. Now we know that psilocybin mushrooms exist and more species and genera that produce the compound in the fungi kingdom are being documented by mycologist each

year. Not only *Psilocybe* species produce psilocybin. There are other genera that produce this compound including species from *Panaeolus*, *Gymnopilus*, and the enthomopathogenic fungi *Massospora*. The latest scientific studies in the field of medicine have demonstrated the benefits of psilocybin in the treatment of neurological disorders. Did our ancestors possessed a knowledge that encompassed brain functions and a mastery of the parts of the brain? It is very likely that the answer is positive including the medicinal applications of the mushrooms. The lessons of the past for the benefit of humanity and a promising future must be taken into account and applied to our current learning processes. This document studies the possible use of psilocybin-producing mushrooms by the now extinct Tayrona tribe that lived in the country of Colombia before the arrival of the Spanish. The Tayrona disappeared in the process of conquest and colonization taking with them all their knowledge but



leaving for posterity the legacy of goldsmiths' work that is exhibited in numerous museums around the world including the Museo del Oro in Bogotá, Colombia. (Fig. 1).



**Fig 1.** Golden Tayrona Mushroom Shaman.

Using these clues, we seek to discover the knowledge of mushrooms and their benefits for the brain and human body from this tribe from pre-Hispanic Colombia.

### Materials and Methods

In this article, archeological evidence, specialized bibliography, along with interviews and modern research tools were used to investigate the possibility of sacred mushroom use by the now non-existent pre-Hispanic indigenous Tayrona culture of Colombia. This would suggest neurological knowledge for spiritual and healing purposes that is relevant to the medical uses of psilocybin in recent modern times.

### Results

#### *Archeological Evidence: A Tayrona Mushroom Ocarina and other stuff*

There are two curious pieces found in the Museo del Oro in Bogotá, Colombia from the Tayrona tribe in pre-Hispanic Colombia that suggest mushroom uses. The first figure is very curious. It is an ocarina, a musical instrument. It shows an Tayrona Man-Bat-Shaman sitting on the top of a mushroom. His head resembles the pileus of a mushroom and inside this mushroom head you can see another mushroom guarded in the middle by two mushroom-shaped birds. This musical instrument was probably used in sacred mushroom rituals performed by the Tayrona. (Fig. 2).

This image is a message from the past. In recent years, scientific research has given evidence of the benefits of psilocybin mushrooms. How they connect both brain hemispheres and reset the brain among other beneficial uses. The image possibly refers to a Man-Bat shaman under the effects of psilocybin mushrooms. Anyway these observations are just a suggestion but we are possibly

looking to a mushroom Man-bat shaman of the Tayrona under a extatic trance generated by psychedelic fungi.



**Fig 2.** Tayrona Mushroom Ocarina.

Also the mushroom-shaped figure in the middle of his head guarded by the two mushroom-shaped birds could be a representation of the pineal gland and they also could be representations of the brain hemispheres and they are interconnected by the mushroom in the middle, just as psilocybin interconnects brain hemispheres!

If you search the Internet for Ocarinas made by the Tayrona of pre-Hispanic Colombia probably all of them resemble mushrooms and were used in the mushroom ceremonies as a means to achieve the divine ecstasy with music that accompanied the psychedelic experience (Fig. 3).

Britt A Bunyard on the *PSILOCYBE 101: A PRIMER ON MAGIC MUSHROOMS AND RELATED LITTLE BROWN MUSHROOMS* article featured in *FUNGI MAGAZINE* Volume 4- No. 3 Summer 2012, writes that after the ingestion of the mushrooms: "Psilocybin is rapidly turned into psilocin inside the body. Both resemble the neurotransmitter serotonin, structurally, and as a result bind with serotonin receptors in the brain. Just how psilocin works in the brain is poorly understood but it is known that the serotonin receptors where it binds in the cerebral cortex are involved with the perception of pain and anxiety" (Bunyard, 2011).



Fig 3. Tayrona Mushroom Ocarina.

Scientific studies and papers had shown that the psilocybin compound has many benefits that can be positively applied in medicine including psychotherapy. The scientific community has recognized its medical values and how it can help people that suffer depression, OCD (Obsessive-compulsive disorder), among other mental illness to alleviate their symptoms and help them have a better life-style (Fig. 4).

They were used as medicines by our ancestors and now modernity has rediscovered this value and the international medical community has recognized it as having real benefits for mankind.

Its uses in psychedelic therapy self-induced experiments is becoming more and more popular in my country (Colombia) but this use has also been extending all around the world for some time. Mushroom kits are now sold on the Internet everywhere in the planet and spore trading and home cultivation has increased in every corner of the Earth. Like the spores and mycelium, the Mushroom Culture is expanding. That is something very positive but it has its risks that must be taken in account. Medicine persons providing psilocybin mushrooms must be very careful to whom they are giving them and a responsible use must be encouraged.

The psychedelic therapies that include micro doses should also be taken on account.

R. Gordon Wasson wrote on his article: THE HALLUCINOGENIC MUSHROOMS OF MEXICO: AN ADVENTURE IN ETHNOMYCOLOGICAL EXPLORATION, the following: "Roger Heim, of Paris, our mentor in all matters mycological, has devoted himself to the classification and study of mushrooms and, in 1956, he joined us in the field. He identified them as

Basidiomycetes and, with the aid of his young assistant Roger Cailleux, he succeeded in cultivating almost all of the fourteen species of Mexican hallucinogenic agarics in the Laboratoire de Cryptogamie in Paris, at first in sterile, artificial media, later in compost host houses, thus freeing us of our dependence on Mexico for our supply of raw material. In the Sandoz laboratories of Basel, Switzerland, with material supplied from Paris, a research team headed by Albert Hofmann and including Heim, A. Brack, and H. Kobel succeeded in large-scale culture of *Psilocybe mexicana*, in sterile conditions on artificial media, isolating two distinctive substances. They called one of them psilocybin and the other psilocin and they reduced psilocybin to a pure white crystalline powder, arrived at its molecular structure, and synthesized this compound in full (o-pho-phoryl-4-hidroxy-N-dymethyl-tryptamine)"(Wasson, 1959).



Fig 4. *Psilocybe cubensis* found in Villa de Leyva, Boyacá, Colombia.

There have been found a considerable number of mushroom stones in Central America. In Colombia the findings have been scarce to date but what has been found is very interesting. The following mushroom stone belongs to the Tayrona tribe (Fig. 5). It is very beautiful also stylized in a mushroom shape. There is some kind of circular ornament in the middle of the mushroom head that also suggests a mushroom. Also the features of the face seem to denote that the being is in a trance caused by the ingestion of a psychedelic substance.



**Fig 5.** Tayrona Mushroom Stone

In recent times another mushroom stone was found in Colombian territories (Fig. 6). It was produced by the Muisca tribe and the piece was found in the proximities of Bogotá, in Colombia. The Muisca established relations with the Tayrona and there is a possible cultural ancestral origin that connects both cultures.



**Fig 6.** Muisca Mushroom Stone guarded in the Museo Arqueológico de Soacha. It resembles a mushroom of the genus *Amanita*.

So here we have two possible types of stone representations of the Man-Bat mushroom shamans. They resemble a gold piece also displayed in the Museo del Oro in Bogotá that actually depicts the golden head attire that was used by the Tayrona shamans (Fig. 7). We can see the mushrooms sprouting from the top of the attire. Of the Tayrona artistic representations, the ones made of gold survived in quantity more than the ones made of stone. The vandalism of the conquerors surely sought to preserve

the gold and destroy other pieces that did not represent to them any economic value.



**Fig 7.** Golden Head attire from the Tayrona Man-Bat shamans with fungal details.

So it is the case with the mushroom pieces displayed in the museum that belong to the Tayrona and other Colombian pre-Hispanic tribes that were preserved from the conquerors destruction.

#### ***The Tayrona Fleur de Lis representations and some linguistic connections***

In a previous article written by the author with mycologist John W. Allen, among other themes mentioned and studied in the present paper, there is also mentioned the presence of Fleur de Lis motives in the pre-Hispanic indigenous art of Colombia. (Rodríguez Martínez et al., 2019). The authority in these theme is Carl de Borhegyi. He is the first researcher to point out that Mesoamericans had a tradition regarding the Fleur de Lis. Citing Borhegyi's essay THE RETURN OF LORD QUETZALCOATL, I found this passage worthy of quoting: "In both hemispheres the Fleur de lis symbol is associated with divine rulership, linked to mythological deities in the guise of a serpent, feline, and bird, associated with a Tree of Life, it is forbidden fruit, and a trinity of creator gods. In Mesoamerica, as in the Old World, the royal line of the king was considered to be of divine origin, linked to the Tree of Life. Descendants of the Mesoamerican god-king Quetzalcoatl, and thus all Mesoamerican kings or rulers, were also identified with the trefoil, or Fleur de Lis symbol" (Borhegyi, 2010).

The magic mushroom could possibly be the forbidden fruit Borhegyi is speaking about? I want to point out the presence of Fleur de Lis motives in the Tayrona art on pre-Hispanic Colombia (Fig. 8).

The Chibchan family language that migrated from Mesoamerica and spread to the south reaching the territories of Colombia could be evidence of a Mesoamerican migration to south American territories in ancient pre-Hispanic times. There are loose gossip versions that assure the Tayrona belonged to a migration with a Mesoamerican origin and also that they are related to the Muisca. More around this particular theme will be revealed on the following pages. It is important to point out that the actual indigenous inhabitants of this area had other beliefs that do not trace their origins in Mesoamerica but the tribes that still inhabit the zone descendants from the Tayrona still speak languages belonging to the Chibchan family language so an old connection must not be discarded. There was also cultural, commercial, and botanical exchanges between indigenous cultures located north of Colombia, inhabitants of Mesoamerica and even modern-day Mexico. Pieces of Colombian goldsmithing have been found in Mexico. So this makes a connection between Mesoamerica, the Tayrona tribe in the north of Colombia and the Muisca that also spoke a language belonging to the Chibchan family language. The Muyscubun was the language spoken by the Muisca culture.

There is a possibility that the Muisca could be the mix of a migration of a Tayrona invasion that hybridized with another tribe that already inhabited the inlands of Colombia. The Mesoamerican migration that originated the Tayrona reached the territories of the north of Colombia and while they established the Tayrona culture some others keep their migrations routes to the south finding an old established culture (today called by the researchers Herrera) and this mix originated the Muisca. But who knows? This is not the purpose of this paper. This is just a suggestion but the connections make sense.

Anyway I do believe there is also a connection between the Pre-Inca cultures and the Herrera. Therefore, the influence of the southern inhabitants of pre-Hispanic America should be taken into account and the Chibchan language spoken by the ancient Muisca could also have permeated to quechua and southern American pre-Hispanic indigenous languages in one way or another making this case more controversial and enigmatic.

A possible explanation is that the Muisca language is a language that mixes the Chibchan language features with the language the Herrera spoke in the past. I will leave this riddle to etymologists. What I can possibly assure you is that a Bat cult arrived from Mesoamerica along with a mushroom and a Fleur-de-Lis cult that extended all over America. Also a mushroom cult performed by the Herrera should not be discarded.

In a personal communication by a trustworthy traveler, I was informed that some of the languages spoken to this day by the natives in the Sierra Nevada de Santa Marta and the places in which the Tayrona inhabited resemble the Muyscubun.

Next I will reveal some curious pieces of the Museo del Oro in Bogota that show Fleur de Lis. All these belong to the Tayrona culture. Other pre-Hispanic tribes in Colombia also casted the Fleur de Lis symbol in their goldsmithing and art productions.

The first piece shows a bird pectoral. For the common people it looks like a plain bird but if you look at the details it looks also a lot like the classic Fleur de Lis symbol. If we only had this piece, there would not be anymore clues for identifying this piece with a Fleur de Lis. Colombian researchers assure there are few vegetable representations in Colombian pre-Hispanic goldsmithing. So the average Colombian researchers always speak of this piece as a bird. Of course there is a bird but also there is an encoded Fleur de Lis.



**Fig 8.** Tayrona pectoral that resembles a Fleur de Lis and the Fleur de Lis the Symbol

When we take a look to the second piece there is no doubt the Tayrona had a cult or something related to the Fleur de Lis. (Fig. 9) This beautiful piece of goldsmithing art of the Tayrona shows a mushroom head Man-Bat shaman performing some kind of entheogenic ceremony. When you see the chest of the shaman you can see a Fleur de Lis. There are two strange supernatural lizard-like beings under the table also (toadstools?), maybe the shaman assistants. Also there are four round circles that look like mushroom caps and adorn the piece that in the whole looks also like a flying bat. He is holding in his hands something that looks like two mushrooms or two glasses full of fungal sacraments.



**Fig 9.** Tayrona goldsmithing piece depicting a Man-Bat shaman under the influence of entheogens assisted by two supernatural beings.

Now the third piece is very similar to the second showing a mushroom head Man-Bat shaman in some kind of trance. Also the ends of the piece look like mushroom caps. The whole piece is a flying bat too. His mushroom head also shows the gills of the mushrooms (Fig. 10).



**Fig 10.** Tayrona goldsmithing piece in the form of a Bat depicting a Man-Bat shaman. Some details resemble mushrooms.

I suggest the Tayrona Man-Bat lore around the sacred mushrooms originated in Mesoamerica and consisted of both *Psilocybe* spp. and *Amanita muscaria*. They perpetrated a cult that arrived to this land. And as in Mesoamerica, the possibility that *Amanita muscaria* mushrooms were also at the disposal for pre-Hispanic Colombian shamans should not be discarded. But this is just a suggestion because it seems that *Amanita muscaria* was introduced to Colombia but more research must be done. A South American *Amanita muscaria* probably is waiting to be discovered and indeed there are more varieties growing in Colombia different to *Amanita muscaria subsp. flavivolvata* (Fig. 11) that was introduced.

It is also important to note that this introduced mushroom has established relations with the endemic Colombian oak showing its invasive capacity (Vargas et al., 2019). And that there are mushrooms belonging to the *Amanita* species endemic to Colombian and South America that include species with psychedelic properties (Fig. 12).

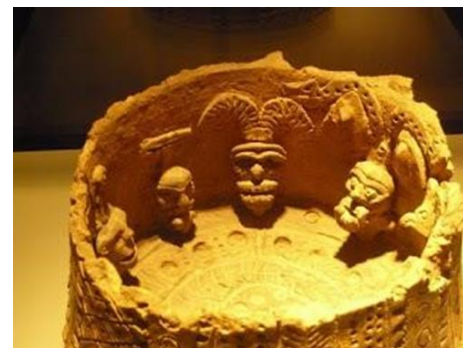


**Fig 11.** *Amanita muscaria* var. *aureola* documented in Villa de Leyva, Boyacá, Colombia



**Fig 12.** *Amanita* suspected of psychoactivity found in Bogotá, Colombia growing next to *Prunus buxifolia* (An endemic Colombian tree).

The last piece I am analyzing is made of mud or clay. It looks like a gathering of Man-Bat shamans. They are all crowned with Fleur-de Lis motives (Fig. 13).



**Fig 13.** A gathering of Tayrona Man-Bat shamans.

If Boherygi is right and the ancient Mesoamericans professed some kind of worship to the Fleur de Lis symbol it is highly probable that this cult arrived in pre-Hispanic Colombia via different migrations. I think the origin of the Tayrona Bat, Mushroom, Fleur de Lis cult is in Mesoamerica and these Man-Bat shamans spread it all around the pre-Hispanic Colombian territory sharing their entheogenic knowledge with other tribes that did not even belong to the Chibchan family. Research around the Mesoamerican god Camazots will give new insights to the case.

It is also probable that the Herrera people, the original dwellers of the lands that would become known later as the Muisca territories worshipped a lunar goddess and were ruled by a queen. In this cultural hybridization the Tayrona bring with them a solar deity and all this originated in the Muisca pantheon but more research must be done on the subject.

### *Three curious Tayrona pieces in the Museo del Oro*

There are three curious pieces of the Tayrona goldsmithing art that deserve to be analyzed; I will proceed to do the task. The first image shows what I think is a gold pendant with two birds and between the space is what seems to be a mushroom. When we turn this figure upside down it also resembles a mushroom cap (Fig. 14).



**Fig 14.** Tayrona goldsmithing piece that represents two birds. The space in the middle resembles a mushroom.

The second image is very intriguing. It is a beautiful pectoral. It is a scene that shows two birds and what in the middle seems to be a sun emerging from the underground. If my suspicions are right this sun represents the sun and the mushroom at the same time (Fig. 15). This piece has some features that resemble Mithraism. It is very important to make out the observation and point out the connection.

The scene also shows some decorative spirals that elude to an experience with an entheogen.



**Fig 15.** Tayrona pendant that shows two birds guarding the sun. Spirals represent the hallucinogenic vision of the Tayrona shamans. The sun could be the mushroom.

At this point I shall remind the reader of the following: when we analyzed the Tayrona ocarina, it showed a mushroom Man-Bat shaman sitting on a mushroom. His head is a mushroom and inside his head are two mushroom-shaped birds that are guarding a mushroom in the middle. The mushroom ocarina gives us a clue about the botanical identity of what this space in the middle of the birds means in the pieces we are analyzing right now i.e. a mushroom.

There is myth from the Muisca that deserves to be related at this point. In the beginning there was total darkness and suddenly the god Tchyminigagua appeared. From the shoulders of Tchyminigagua two crows were born, the same as the European Odin. They started to fly. One to the left and the other to the right. While the birds waved their wings light started to flow from their beaks. That is how light appeared in the cosmos and the way the whole Universe was created.

These could be also Tayrona goldsmithing representations of the Muisca Tchyminigagua God legend. A deity that could have been shared by both cultures in the past or different deities with similar features like the European Odin. Tchyminigagua was the main god of the Muisca pantheon.

It is very important to note that in ancient Europe, *Amanita muscaria* mushrooms were named in some parts as Ravens bread. The lookalike of the raven and the crow is worthy to highlight at this point.

As suggested, this particular piece has some features that resemble Mithraism. Of course there were no Mithraism and Freemasons in the ancient Tayrona times but the Sol Invictus symbolism as the two birds that resemble Castor and Pollux suggest a priestly caste with a

mycological knowledge of some kind they could have involved some kind of secret society.

It has been claimed a head of a Roman sword was found in the north of America and also there is the Father Crespi story in Ecuador. Still, many mysteries are unsolved and further research must be done. But the notion of Roman travelers lost at sea and ending up in America must not be discarded adding to the many other visitors before the Spanish conquest including the Chinese and the Vikings.



**Fig 16.** One of the Father Crespi artifacts. This one resembles some of the Tayrona goldsmithing art. (From Father Crespi Photo Archive)

If you look carefully at one of the Father Crespi artifacts found in Tayos Cave in Ecuador it resembles some of the motifs used by the Tayrona culture. The father Crespi piece shows two feline type animals (Probably jaguars) while the Tayrona piece shows two birds. A sun is in the middle and there is a pyramid (Fig. 16).

Something important to mention is while in the ocarina and in the first exposed Tayrona golden object in this chapter the birds are looking at each other, in the last Tayrona goldsmithing piece exposed the birds are giving each other their backs.

Could it be possibly to track the Man-Bat Shamans origin in a secret society of some type in Mesoamerica that extended its activities all over the American territories? A migration that originated in Siberia, travelled all over North America and ended in the south of the American continent?

There is an evident cultural and artistic connection between the Muisca and the Tayrona. Below, you can see two pectorals (Figs. 17, 18). The first one is Muisca and the second one is Tayrona. I really do believe the Tayrona was made first. I think the Tayrona culture as stipulated did influence the Muisca artistic and mushroom traditions and in the meantime the Muisca culture also permeated the

Tayrona tribe before the Spanish arrival interrupted the cultural exchange.



**Fig 17.** Muisca goldsmithing piece that shows Mushroom shamans at a gathering.



**Fig 18.** Tayrona goldsmithing piece that shows Mushroom shamans at a gathering very similar in style to the Muisca piece shown on Fig.17 but probably done on an earlier time period.

Probably the coastal Tayrona Shamans of the North got access to the *Amanita muscaria* or a similar species while traveling in the Colombian inland country. Specifically, in Muisca territories, maybe an endemic variety, or a psychoactive *Amanita* belonging to another species; and the fact that Mesoamerican and North American travelers could have brought dried hallucinogenic mushrooms and a mycological knowledge with them on South American explorations should not be discarded -a mushroom cult complex that extended all over America.

The third object analyzed in the present section shows a beautiful Tayrona pendant that also depicts the form of



a mushroom. In this case it could be a *Panaeolus* or a *Psilocybe* (Fig. 19). Maybe *Psilocybe Zapotecorum*. Mushrooms of these species had been reported to the north of Colombia. Just to support the case.



**Fig 19.** A Tayrona pendant that depicts a mushroom similar to one of the *Panaeolus* or *Psilocybe* species.

Lots of this pendants similar to this one are on display in the Museo del Oro in Bogotá. It is not crazy to stipulate the Tayrona were a mushroom culture and these pieces, like the ocarinas, in question are representations of mushrooms.

Colombian mycologist Maria Margarita Pulido reported *Psilocybe zapotecorum* on the Sierra Nevada de Santa Marta. A possible candidate of one the psychedelic species used in their rites in the past by the Tayrona and a mushroom, that still could be used by the tribes that inhabit the Sierra Nevada de Santa Marta to the present day. (Pulido 1983).

### ***A Muisca Legend of The Bat***

There is an old Muisca legend regarding bats. The story goes as follows. Taking a car from Bogotá without leaving the Department of Cundinamarca on one of the roads that lead to Girardot very close to the well-known restaurant named Donde Otavio, a place well known for its delicious preparations, is located the municipality of Tena. Nearby is the lagoon of Pedro Palo whose old indigenous Muisca name is Tenasucá, surrounded by exotic flora and fauna. Many paranormal stories are told that have happened in the immediate vicinity of the lagoon. And they are known by the inhabitants of the town. Many years before the Spanish conquerors arrived the Muisca told this story that began with the adventures of a beautiful pregnant girl on the shore of the lagoon. Early in the morning she was picking flowers and decorating her hair. When suddenly she saw a beautiful toad of bright colors that caught her attention. When she had this visions, she was lured to catch the animal. For the Muisca, frogs, toads, and snakes were sacred. It was taboo to kill them and it was forbidden to touch them. The girl was punished by a thunderbolt that suddenly fell from the sky and killed her. When the toad saw what was happening, it took the newly born child in its hands before its mother died and led him to the bottom of the lagoon. There the toad

educated and nurtured the child. The kid grew up learning the secrets of music and eventually became a flute master with time and practice. The boy spent his time around the lagoon playing the flute while he grew up. The people of the indigenous Muisca town that was located very close to the lagoon were surprised and curious to know what was the origin of such beautiful music. The boy by that time was already a teenager about to become a man. The town's people finally discovered the secret and took the boy to live with them. There he learned the truth. Kana the god of Thunder had murdered his mother. He decided to take revenge for what happened and through three balls of magic thread he managed to ascend to the kingdom of heaven. When the god Kana opened the door of his house to go hunting, the boy managed to enter. At sunset just before nightfall, Kana returned home and greeted his wife and children. He sat down to dine upon the deer he hunted after his wife cooked it for him. Through the magical artifice of becoming a bat, the boy has hidden himself on the dark side of the roof of the house. He hung on the ceiling holding his feet in the usual manner of bats. At some point of distraction, the bat poisoned Kana's food and killed him instantly. Then he murdered all members of Kana's family except his youngest son, who was a baby. He proceeded to return with the son of Kana to the earth transformed back into his human shape. He is now already a man and returned to his house. Time began to pass and the rains stopped all over the place. There was no sight of the toad that raised and educated him. The lightning and thunder were gone along with the rains; it was the beginning of a long drought. Upon realizing the consequences of his actions, the protagonist of this story went to the lagoon and threw the child into its waters. A supernatural light surrounded magically the place and there was a new god of Thunder in the sky. There was a new Kana in heaven. Instantly it started to rain. The thunderbolts made their appearance again. The next morning all of the frogs and toads around the lagoon began to sing placidly. The croaking of the toads filled the place like a wonderful melody. The toads made their magical appearance all over the place just like mushrooms after the rains.

In the municipality of La Mesa near the lagoon *Psilocybe caeruleascens* has been reported. Near Girardot there has been found some species of the *Panaeolus* genera. More research must be done. To the north is the Department of Tolima. There is lots of fungal activity including psychedelic species documented growing in Tolima. Tolima Pre-Hispanic tribes often represented Man-bats and Man-jaguars in their goldsmithing work. Also to note is the use of edible mushrooms for nutritional purposes by actual peasants in Tolima territories (Rodríguez Martínez, 2022).

This particular legend of the Bat has suggestive elements that point to fungi: the rains, toads and frogs. Also the thunderbolts. Zeus was the god of mushrooms and thunders in old Greece. The Fungi were also related to Thor. This can give us clues around a mushroom cult practiced by the Muisca among other tribes in pre-Hispanic America. Before the role of the spore was discovered in the reproduction of fungi by modern science, it was believed that these were generated by rainfall and lightning strikes after storms. There is an old legend that assures an *Amanita muscaria* grows everywhere a thunder strikes earth. (Lowy, 1974) In Colombia there is an edible species used by the peasants in Boyaca known as “hongo del rayo”. Science has proven that electrical activity plays a crucial role with respect to the growth of fungi.

In English the word ‘toadstool’ is a common designation for *Amanita muscaria*. Translated to Spanish it means literally: El Taburete del sapo or The chair of the toad.



**Fig 20.** Photo of a toad sitting over the top of *Amanita muscaria*. Photo by Jeff Sarault; The Toadstool.

It is a possibility that a totemic relationship between toads, snakes and fungus was established between Muisca and other tribes of pre-Hispanic Colombia and also in all America that also included the bat in a prominent way. This relationship also involved other animals and entheogens like jaguars, snakes, toads, and the Yage potion with its key ingredient DMT. A totemic animal shaman identification was part of the spiritual system of ancient cultures that involved the use of the entheogens available. The Muisca worshiped snake goddesses and their priestly caste used many entheogens including Yopo, Coca, and Tobacco, and portrayed themselves as men transformed into bats. Their pantheon included also a plethora of animal gods.

The Muisca worshiped the Sun and the Moon. They were idolaters. They practiced sacrifices that consisted of feeding the Sun with the victims ready for this. Moxas children were specially destined for this. In many of their

attitudes and behaviors they remembered the natives of ancient Mesoamerica, even if by the times of the conquest, Muisca were leaving behind the sacrificial practices. The Muisca case and the suggestion of a mushroom cult was studied in a previous article (Rodríguez Martínez et al., 2019).

The Muisca appear in the historical map around 600 after Christ, in the sixth century. It is an approximation. Today there are direct descendants from members of the tribe among us. We are Muisca in one way or another. The etymological origin of the name of the city of Bogotá, the capital of Colombia, is Muisca.

The current descendants of the Tayrona that live in the Sierra Nevada de Santa Marta are the Koguis, Arhuacos, the Wiwas, and the Kankuamos. There are many books around the Koguis and the Arhuacos. All these tribes spoke languages that belong to the Chibchan languages. The Muisca language is extinct but there are modern revival movements.

It's important to note that the famous anthropologist Gerardo Reichel-Dolmatoff in his book: Goldwork and Shamanism: An Iconographic Study of the Gold Museum of the Banco de la República, Colombia, documented the present day use of hallucinogenic mushrooms in the Sierra Nevada de Santa Marta in Colombia by Kogui shamans in their initiation (Reichel-Dolmatoff et al. 2005).

In the city of Bogotá there are several indigenous people who have preserved their language. It has been said that the language of the Muisca and that of the Tayrona belong to the Chibcha language family. The indigenous languages spoken these days in Sierra Nevada de Santa Marta belong to the Chibchan languages. The influence of the ancient civilizations of Peru, the Pre-Inca in the Muisca cannot be ruled out. Also the original dwellers of Pre-Muisca territories could have spoken a language of their own that could have influenced the Muisca language and the possibility of mushroom cult practices by the Herrera must be studied.

Analyzing this Muisca Man-bat legend has allowed us to get an idea about what could have been the cult of the Tayrona around bats, fungi, and the Fleur de Lis.

The next Tayrona piece shows a shaman in complete meditation. It appears to be a mushroom sprouting from his head and he is wearing a Fleur de Lis pectoral. A stylized bat is flying all over the scene (Fig. 21).

## Discussion

The possible practice of a mushroom cult by the Tayrona related with the Muisca culture, in pre-Hispanic America times, is suggested in the present article. The analysis of certain pieces of goldsmithing representing Man-Bat

shamans is conclusive and could be related to the Tayrona priestly castes. The Tayrona mushroom ocarina and other pieces analyzed in the present document complement the idea.



**Fig 21.** A Tayrona object that shows a Mushroom a Man-Bat shaman. A mushroom is sprouting from his head. A bat is flying all over the scene.

On my last visit to the Museo del Oro before I left I was walking around the Tayrona section. Two particular pieces caught my attention.

The first shows what appears to be an anthropomorphized *Amanita muscaria* (Fig.22). The fantastic being carries a basket. Probably he is picking the sacred mushrooms.



**Fig 22.** Tayrona anthropomorphized *Amanita muscaria*?

On the following image you can see two Tayrona baskets also exposed in the Tayrona section of the Museo del Oro (Fig. 23).

In the one on the right side in its upper part you can see from the observer's point of view a small figure that looks like a red heart, an *Amanita muscaria* mushroom, or maybe a Fleur-de-Lis (Fig. 24) Why not all three?



**Fig 23.** Tayrona baskets. The one in the right shows over its top something that looks like a red mushroom.



**Fig 24.** Tayrona basket detail.

On my last visit to the museum it seemed to me that the red pieces had been rearranged. In conversations with different members of the Arhuaco tribe who wanted to maintain their identity secret, they told me about the presence of fungi in the Sierra Nevada de Santa Marta and its surroundings. Reports from these reliable informants included sightings of *Amanita* and *Psilocybe* species. This must be verified. To my knowledge *Amanita* species have not been reported in the zone.

According to my informants the mushrooms are still used for spiritual ailments. This must be verified by proper scientific studies in the zone.

Two words were given to me. Also several ways to write them. Here I transcribe them:

Ka'gu Zitii to designate the *Amanita muscaria*.

Ka'gu Chakiru to refer to the mushrooms belonging to the genus *Psilocybe*. The Arhuacos claim to be descendants of the Tayrona.

There is no doubt that sacred mushrooms have been used in the Sierra Nevada de Santa Marta and territories nearby to it since ancient times.

Mushroom cults in Colombia today are still celebrated. Recent information ensures that the Embera-chamii ethnic group performs a ceremony that differs from those performed by Maria Sabina in México. The Embera-chamii velada is not permeated by Catholic elements. It lacks the religious syncretism present in the Mexican

mushroom velada (Rodríguez Martínez et al., 2019). There are also reports regarding the Uitoto. The myths and legends of the Uitoto have characteristics that clearly suggest a use of sacred mushrooms and mushrooms are mentioned in them (Preuss, 1994). Uitoto use mushrooms as nutritional edibles. *Psilocybe caerulescens*, *Psilocybe hoogshagenii*, and *Psilocybe muliercula* had been reported in the Putumayo zone. There is gossip around regarding the use of mushrooms belonging to the *Psilocybe* genus in Putumayo by indigenous tribes. All this must be documented and investigated. More research must be done.

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### Conflict of interest

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