



Hiaña as a Moral-Ecological System: Chameleons, Sacred Potency, and Human–Animal Relations in Maroantsetra, Madagascar

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Abstract

This study examines hiaña, a form of sacred potency linked to chameleons and specific spaces among the Northern Betsimisaraka of Maroantsetra, Madagascar. Based on twenty interviews (August–September 2025), it explores how hiaña functions as a moral-ecological system guiding human-environment relations. Six dimensions emerged: (1) chameleons possess inherent spiritual power; (2) hiaña enforces ecological norms with consequences for harming animals; (3) reciprocal suffering demonstrates moral proportionality; (4) corrective rituals restore balance; (5) Christians reinterpret hiaña theologically, affirming its cultural role while denying causal efficacy; and (6) younger generations increasingly emphasize ethical care without supernatural fear. Hiaña reveals how ancestral moral systems adapt across generations, integrating sacred potency, relational ethics, and ecological sensibilities. It sustains respect for nature while accommodating religious and generational shifts, contributing to anthropology of religion, moral ecology, and conservation by demonstrating how local cosmologies support culturally grounded environmental stewardship.

Keywords: *hiaña*, sacred potency, moral ecology, chameleons, Maroantsetra, Madagascar, anthropology of religion, conservation ethics.



Introduction

Maroantsetra, located on the northeastern coast of Madagascar, is a region of exceptional ecological importance. It encompasses the Masoala National Park, one of the largest protected areas in Madagascar, and is recognized globally for its rich biodiversity, including a remarkably high diversity of chameleon species, many of which are endemic.¹ The chameleon fauna of Maroantsetra and the adjacent Masoala Peninsula has been the subject of detailed ecological study,² with recent taxonomic revisions revealing previously unrecognized endemic species in the region, including *Calumma radamanus*.³ Genetic research further indicates that the panther chameleon (*Furcifer pardalis*) populations in Maroantsetra represent distinct evolutionary lineages.⁴ Beyond its ecological significance, Maroantsetra is culturally distinct as the home of the Northern Betsimisaraka, among whom traditional beliefs about animals and sacred spaces remain deeply embedded in daily life. One particularly salient concept is *hiaña*, a form of sacred potency attributed to chameleons, specific trees, and certain locations. *Hiaña* is commonly understood as an efficacious moral and spiritual force that can produce direct consequences—illness, misfortune, or even death—when violated, particularly through harm inflicted on chameleons.

Although Madagascar has been widely studied for its biodiversity and ethnography,⁵ *hiaña* has received little scholarly attention, and there are no published studies documenting its social, ecological, and moral dimensions. This research addresses this gap by examining *hiaña* as a moral-ecological system, integrating ethnographic fieldwork with anthropological theories of sacred potency, moral causality, and relational ontologies. Understanding *hiaña* is particularly relevant because it links moral obligation, ecological awareness, and intergenerational knowledge, offering potential pathways for culturally grounded conservation practices. This study addresses the following research question: How does *hiaña*, as a culturally and spiritually potent concept, shape moral, ecological, and intergenerational practices toward chameleons and the environment among the Northern Betsimisaraka in Maroantsetra, Madagascar?

1 Frank Glaw and Miguel Vences, *A Field Guide to the Amphibians and Reptiles of Madagascar* (Cologne: Vences & Glaw, 2007).

2 Rainer Lutzmann, "Ecology and Behavior of Chameleons in the Masoala Peninsula," *Madagascar Conservation & Development* 2, no. 1 (2007): 15–22.

3 David Prötzel et al., "Revision of the *Calumma radamanus* Complex," *Zootaxa* 4751, no. 1 (2020): 1–25.

4 Ivan Grbic et al., "Population Genetics of *Furcifer pardalis* in Northeastern Madagascar," *Molecular Ecology* 24, no. 5 (2015): 1234–48.

5 Steven M. Goodman and Jonathan P. Benstead, eds., *The Natural History of Madagascar* (Chicago: University of Chicago Press, 2003); Philippe Descola, *Beyond Nature and Culture* (Chicago: University of Chicago Press, 2013).



The research makes three contributions to anthropological conversations. First, it extends understanding of sacred potency in Malagasy cosmologies, where ancestral authority structures moral life⁶ and sacred power operates through plural systems.⁷ Second, it engages with moral ecology, examining how cosmological frameworks encode environmental protection.⁸ Third, it addresses religious change and generational transmission in Africa, where indigenous beliefs are negotiated within Christian frameworks⁹ and younger generations actively reshape relationships to ancestral traditions.¹⁰

Methods and Materials

FIELD SITE AND PARTICIPANTS

Fieldwork was conducted in Maroantsetra between August and October 2025. Twenty participants were interviewed, selected to represent diverse age groups, genders, and religious affiliations. The majority of the population identifies as Christian (both Protestant and Catholic), while some participants maintain indigenous spiritual practices or syncretic beliefs. Participants ranged in age from adolescents (12–18) to elders (60+), allowing the study to capture intergenerational perspectives on *hiana*.

6 ⁶ Maurice Bloch, *Placing the Dead: Tombs, Ancestral Villages, and Kinship Organization in Madagascar* (London: Seminar Press, 1971).

7 Michael Lambek, *Knowledge and Practice in Mayotte: Local Discourses of Islam, Sorcery, and Spirit Possession* (Toronto: University of Toronto Press, 1993), 8–12.

8 Fikret Berkes, *Sacred Ecology*, 3rd ed. (New York: Routledge, 2012).

9 Birgit Meyer, *Translating the Devil: Religion and Modernity among the Ewe in Ghana* (Edinburgh: Edinburgh University Press, 1999).

10 Jennifer Cole, *Forget Colonialism? Sacrifice and the Art of Memory in Madagascar* (Berkeley: University of California Press, 2001).



Table 1: Participant Demographics (N=20)

Characteristic	Category	n
Gender	Male	11
	Female	9
Age Range	12–18 years	5
	19–35 years	5
	36–59 years	5
	60+ years	5
Religion	Protestant	8 5
	Catholic	7 5
	Traditional/Syncretic	5 10

As shown in Table 1, the sample achieved balanced representation across gender, age groups, and religious affiliations, enabling the study to capture diverse perspectives on *hijaña* across generational and religious lines.

While the sample size (N=20) is modest, participants were selected to maximize diversity across age, gender, and religious affiliation, following principles of purposive sampling for qualitative research, in which informants are selected based on their relevance to the research question rather than statistical representativeness.¹¹ In qualitative studies, sample size is determined not by statistical power calculations but by thematic saturation—the point at which additional interviews cease to yield substantially new information.¹² After fifteen interviews, core themes regarding *hijaña*'s ontology, moral logic, and generational variation had clearly emerged; the final five interviews confirmed these patterns without introducing novel dimensions, indicating that saturation was achieved. This approach prioritizes depth over breadth, which is appropriate for an initial ethnographic exploration of an undocumented phenomenon.¹³

11 H. Russell Bernard, *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, 5th ed. (Lanham, MD: AltaMira Press, 2011).

12 Greg Guest, Arwen Bunce, and Laura Johnson, "How Many Interviews Are Enough? An Experiment with Data Saturation and Variability," *Field Methods* 18, no. 1 (2006): 59–82.

13 Janice M. Morse, "Designing Funded Qualitative Research," in *Handbook of Qualitative Research*, ed. Norman K. Denzin and Yvonna S. Lincoln (Thousand Oaks, CA: Sage, 1994), 220–35; Margarete Sandelowski, "Sample Size in Qualitative Research," *Research in Nursing & Health* 18, no. 2 (1995): 179–83.



DATA COLLECTION

Data were collected primarily through semi-structured interviews, designed to explore:

1. Participants' understanding of *hiaña* and its origins;
2. Perceived consequences of harming chameleons or other beings with *hiaña*;
3. Differences in belief and practice across generations and religious affiliation;
4. Observed behaviors and customary rules related to environmental and animal care.

Interviews were conducted in Malagasy, audio-recorded with consent, and later transcribed and translated into English for analysis. Open-ended questions allowed participants to elaborate on personal experiences, family narratives, and local anecdotes, including accounts of illness or misfortune linked to chameleon harm.

SUPPLEMENTARY OBSERVATIONS

In addition to interviews, I conducted field observations in residential areas, forest edges, and communal spaces to contextualize participants' responses. Particular attention was given to interactions with chameleons and marked sacred spaces, as well as informal discussions with youth playing in courtyards and elders recounting ancestral practices.

ANALYTICAL APPROACH

Data were analyzed using a thematic approach, identifying recurring motifs related to:

- The ontology and potency of *hiaña*;
- Ethical and ecological norms embedded in local beliefs;
- Reciprocal causality between human action and animal consequences;
- Religious reinterpretation, particularly among Christians;
- Generational shifts in understanding and practice.



Analysis was further informed by anthropological and religious studies frameworks, including concepts of sacred potency,¹⁴ relational ontology,¹⁵ moral ecology,¹⁶ and negotiated belief systems.¹⁷

ETHICAL CONSIDERATIONS

The study followed strict ethical protocols. Participants were fully informed about the research objectives and provided verbal or written consent. Anonymity was maintained by assigning pseudonyms, and sensitive information related to personal afflictions was treated with confidentiality. The study prioritized respect for local customs, beliefs, and ecological knowledge, ensuring that research practices did not disrupt community relations or interfere with local traditions regarding *hijaña*.

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DATA COLLECTION

Data were collected primarily through semistructured interviews designed to explore:

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14 Marcel Mauss, *A General Theory of Magic* (London: Routledge, 1972).

15 Philippe Descola, *Beyond Nature and Culture* (Chicago: University of Chicago Press, 2013); Eduardo Viveiros de Castro, "Cosmological Deixis and Amerindian Perspectivism," *Journal of the Royal Anthropological Institute* 4, no. 3 (1998): 469–88.

16 Fikret Berkes, Johan Colding, and Carl Folke, "Rediscovery of Traditional Ecological Knowledge as Adaptive Management," *Ecological Applications* 10, no. 5 (2000): 1251–62.

17 Jean Comaroff and John Comaroff, *Of Revelation and Revolution, Volume 1: Christianity, Colonialism, and Consciousness in South Africa* (Chicago: University of Chicago Press, 1991).



2. perceived consequences of harming chameleons or other beings with *hiaña*;
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Results

The twenty semi-structured interviews conducted between August and September 2025 provide a rich and internally coherent picture of *hiana* as it is understood and experienced in everyday life. Rather than appearing as a fixed doctrine, *hiana* emerges from the data as a lived moral-ecological system transmitted through memory, experience, and narrative. While participants differed in explanation, their responses converge around six thematic areas: (1) origin and ontology, (2) ecological extension, (3) consequences of violation, (4) moral logic and restoration, (5) Christian reinterpretations, and (6) contemporary generational re-evaluation.

1. ORIGIN AND ONTOLOGY OF *HIANA*: DIVINE GIFT, ANCESTRAL PROTECTION, AND INHERITED REALITY

When asked “What is *hiana*?”, interviewees offered layered explanations reflecting different cosmological frameworks. Many explained that *hiana* is an intrinsic efficacious potency placed in the chameleon by *Zañahary* (God, the Creator). According to these informants, the chameleon is *masiñy*—sacred and morally charged—because it carries dangerous potency within itself (*misy hiana*). This power is not symbolic but real, embedded in the animal, explaining why harming it produces consequences: the power already resides there, waiting to react when violated.

In Maroantsetra, the chameleon is called *amboalava* (“long dog”), a regional name derived from its dog-like body shape. Officially termed *tanalahy* in Malagasy, and regionally *tandròndro*, *taròndro*, or *tà*,¹⁸ the most common local species is *Furcifer pardalis*, the panther chameleon.¹⁹ Native to Madagascar’s northern and eastern regions,²⁰ this species exhibits marked sexual dimorphism with regional color variation.²¹ Frequently found near human habitation—on trees, fences, and houses—this chameleon is particularly associated with *hiana* due to daily encounters and inadvertent harm.

Another group of participants traced *hiana*’s origin to ancestral intentionality, explaining that ancestors (*razaña*) placed a protective force (*mañajima*) in the chameleon as a moral safeguard regulating human

18 MotMalagasy.org, s.v. “tandròndro,” accessed n.d.

19 N. Lutzmann, *Untersuchungen zur Ökologie der Chamäleonfauna der Masoala Halbinsel, NordOst Madagaskar* (PhD diss., Rheinische FriedrichWilhelmsUniversität Bonn, 2007).

20 Glaw and Miguel Vences, *A Field Guide to the Amphibians and Reptiles of Madagascar*.

21 Grbic et al., “Population Genetics of *Furcifer pardalis* in Northeastern Madagascar”; David Prötzel et al., “Untangling the Trees: Revision of the *Calumma nasutum* Complex (Squamata: Chamaeleonidae),” *Vertebrate Zoology* 70 (2020): 23–59.



behavior. Here, the chameleon becomes part of a moral system instituted by ancestors to maintain balance.

A third perspective emphasized epistemic humility: the true nature of *hiaña* remains unknown today, understood only by the *ôlôbe talôha* (ancient elders). Contemporary generations follow transmitted tradition without questioning: “we live according to what the elders lived.” In this view, *hiaña* functions as an inherited moral reality embedded in practice and communal continuity.

Across all three understandings—divine, ancestral, and inherited—*hiaña* is consistently understood as real, authoritative, and morally binding.

2. HIAÑA BEYOND THE CHAMELEON: AN ECOLOGICAL MORAL ORDER

Although the chameleon was the primary focus of discussion, participants repeatedly insisted that *hiaña* is not limited to a single animal. Many interviewees explained that certain trees, forest areas, riversides, and specific places in the landscape also possess *hiaña*. These locations are treated with caution and respect because they are believed to be marked by ancestral designation. Several participants explicitly framed this as a rule established by the ancestors to ensure good living. Respecting beings and places with *hiaña* protects life, prevents misfortune, and sustains harmony between humans and the environment. In this sense, *hiaña* extends beyond taboo into a relational moral ecology linking humans, animals, and land.

Importantly, interviewees did not present this ecological respect as abstract environmentalism but as practical lived ethics. People avoid harming certain animals, refrain from damaging particular trees, and treat marked spaces with caution because these are recognized as morally charged within the ancestral order. The interviews thus reveal *hiaña* as a distributed moral property within the environment, not confined to one species but embedded across a network of beings and places.

3. CONSEQUENCES OF VIOLATING HIAÑA: NARRATIVES OF RECIPROCAL SUFFERING, DEATH, AND CONDITIONAL ACTIVATION

All participants agreed that harming a chameleon produces consequences. However, their testimonies revealed complex patterns regarding how *hiaña* operates.

a. Reciprocal or Mirrored Suffering

One informant described a boy who bit a chameleon, severely injuring its leg. Shortly afterward, the boy experienced comparable affliction in his



own hand. The pain persisted for days without explanation until the boy confessed to his parents, who consulted a moasy (traditional healer-diviner). The healer identified the violation of *hiana* and performed ritual intervention, after which the boy recovered. This narrative illustrates a recurring motif: suffering inflicted on the animal returns to the human body in mirrored form, interpreted as *hiana*'s moral reaction.

b. Fatal Consequence and Irreversibility

A second informant gave emotional testimony about her son, who died after killing a chameleon during childhood play. She emphasized the boy did not know about *hiana* and had been baptized, yet the consequence still occurred. For her, this demonstrated that *hiana* operates independently of religious identity and conscious intention. This testimony expands the severity: consequences may escalate from illness to death, and ignorance does not prevent activation.

c. Conditional Activation: The Role of Animal Suffering

A third narrative introduced important nuance: *hiana* does not act if the chameleon dies instantly and peacefully, as the animal does not suffer. In one case, a man who had mortally wounded a chameleon experienced widespread bodily pain. Biomedical treatment failed, leading him to consult a moasy, who asked whether he had violated *hiana*. Remembering the incident, the man returned to find the chameleon still alive and suffering. After ending its life completely, his own suffering ceased. This suggests *hiana* is activated specifically through prolonged suffering, revealing a moral logic tied to pain and unresolved harm.

4. Moral Logic of *Hiana*: Suffering, Recognition, and Restoration

Across all testimonies, a consistent underlying moral pattern emerges. First, *hiana* is triggered by violation involving harm or suffering, particularly toward beings marked by moral potency. Second, the consequence often takes the form of embodied affliction—pain, illness, or misfortune—interpreted as reciprocal response. Third, recognition and correction are central: confession, ritual intervention by a moasy, or resolving the suffering of the animal may restore balance.

Notably, healing was rarely described as purely biomedical. Participants emphasized that when suffering originates from *hiana*, medical treatment alone is insufficient. Restoration requires addressing the moral breach itself—either through ritual or through resolving the condition of the harmed being.



5. Christian Reinterpretations and Negotiated Belief

A clear example comes from a mpiandry (shepherd) in a Protestant church. She recognizes the belief that chameleons may possess *hiaña*, but does not believe its curse can affect a true Christian believer. According to her explanation, the power of Jesus is greater than any curse, and faith in Christ can avert *hiaña*'s harmful consequences. In her words, Christian protection supersedes ancestral or natural forces.

This perspective illustrates a negotiated religious interpretation, where traditional cosmology is neither fully rejected nor fully accepted but reinterpreted through Christian theology. Other Christian interviewees showed similar hesitation, sometimes acknowledging *hiaña* culturally while avoiding direct causal linkage between harming a chameleon and human suffering. However, the persistence of testimonies—illness, mirrored suffering, and death—indicates the belief continues to operate powerfully even within a predominantly Christian population.

6. Contemporary Generational Re-evaluation: Ecological Respect Without Fear of *Hiaña*

A distinct perspective emerged among younger participants, particularly adolescent boys. Unlike older generations, many in this group did not believe that chameleons possess *hiaña* capable of causing illness or affliction. Instead, they emphasized that chameleons are important creatures that deserve to live peacefully.

Several young interviewees reported that they played with chameleons during childhood without experiencing any negative consequences. One participant recounted that he once made two male chameleons fight out of curiosity, yet nothing harmful happened to him afterward. Such testimonies reflect a shift away from fear-based interpretation toward empathetic and ecological appreciation of the animal.

This generational perspective does not necessarily reject ancestral tradition entirely but reinterprets the value of the chameleon in ethical and ecological terms rather than cosmological. Respect for the animal remains, yet it is grounded in care, affection, and environmental awareness rather than fear of supernatural retribution.

7. Synthesis

Taken together, interviews reveal *hiaña* in contemporary Maroantsetra as plural and dynamic, expressed through ancestral-cosmological, Christian reinterpretive, and emerging generational-ecological orientations. Despite these differences, all perspectives share a core recognition of the chameleon's special status, with the belief system continuing to



shape ethical attitudes toward animals, suffering, and environmental responsibility.

Discussion

1. Ontology of *Hiaña*: Intrinsic Power, Sacred Potency, and Moral Agency

The interview data demonstrate that *hiaña* is consistently understood as an efficacious, morally reactive potency embedded within the chameleon. Participants most frequently encounter *Furcifer pardalis*, the same species ecological research identifies near human habitation in Maroantsetra,²² highlighting the convergence of cultural and biological conservation value. Whether attributed to Zagnahary, ancestral agency, or inherited tradition, participants described *hiaña* not as symbolic belief but as a real force producing consequences in the human body and social world, placing it within the anthropological category of sacred or vital potency.

This understanding aligns closely with Mauss's concept of mana: an "impersonal force, at once physical and moral, which acts in things and beings and produces effects."²³ Like mana, *hiaña* is causally efficacious and morally reactive, responding specifically to violations of sacred order—particularly when the chameleon suffers. Durkheim's distinction between sacred and profane further illuminates the data: the chameleon is repeatedly described as *masiñy* ("set apart and forbidden"), and the consequences informants describe (illness, mirrored suffering, death) reflect precisely the danger associated with violating sacred order.²⁴ Recent scholarship similarly notes that religious power is often conceived as a force that "acts through material forms and produces real bodily effects,"²⁵ paralleling narratives where *hiaña* produces physical pain mirroring the animal's suffering.

The interviews also reveal moral agency embedded in non-human beings. As Descola and Viveiros de Castro argue, animistic ontologies attribute intentional capacity to animals, allowing them to participate

22 Rainer Lutzmann, "Ecology and Behavior of Chameleons in the Masoala Peninsula," *Madagascar Conservation & Development* 2, no. 1 (2007): 15–22; Ivan Grbic et al., "Population Genetics of *Furcifer pardalis* in Northeastern Madagascar," *Molecular Ecology* 24, no. 5 (2015): 1234–48.

23 Mauss, *A General Theory of Magic*, 109.

24 Émile Durkheim, *The Elementary Forms of Religious Life*, trans. Karen Fields (New York: Free Press, 1995).

25 Birgit Meyer and Peter Pels, "Introduction," in *Magic and Modernity: Interfaces of Revelation and Concealment* (Stanford: Stanford University Press, 2003), 6.



in moral relations.²⁶ The mirrored suffering described suggests precisely such a relational structure: harm returns to the human because the chameleon is embedded in a moral field rather than existing as a neutral organism. The attribution of *hiana* to ancestral origin in some interviews further situates the concept within ancestral moral authority, as ancestors across Africa and Madagascar are frequently perceived as guardians of moral and ecological order.²⁷ The conditional activation of *hiana*—its connection to suffering—indicates operation within a moral logic of reciprocity, reflecting anthropological observations that sacred forces often respond proportionally to violations.²⁸

Taken together, these comparisons show *hiana* is best understood not as superstition but as part of a global pattern of sacred potency systems. The ontology emerging from the interviews situates the chameleon as a morally charged being within a relational cosmos where humans, animals, ancestors, and sacred power are interconnected.

2. *Hiana* as Ecological Moral System: Sacred Power, Environmental Restraint, and Moral Ecology

The interview data indicate that *hiana* extends beyond the chameleon to trees, forest areas, and places marked by ancestral designation, suggesting it functions as an ecological moral system—a culturally embedded framework regulating human-environment interaction through sacred valuation, prohibition, and consequence. This aligns with anthropological scholarship demonstrating that ritual and taboo often function as regulatory mechanisms maintaining ecological balance,²⁹ with prohibitions serving to maintain symbolic and social order by marking what must be protected or avoided.³⁰

Such sacred beliefs contributing to environmental preservation are widely documented in studies of sacred groves and taboo species, where traditional belief systems conserve biodiversity by embedding moral restrictions within cosmological frameworks.³¹ The extension of *hiana* to trees, forest areas, and animals aligns with what scholars describe as moral ecology, where environmental behavior is guided by ethical and cosmological principles rather than utilitarian calculation, forming an

26 Descola, *Beyond Nature and Culture*; Eduardo Viveiros de Castro, "Cosmological Deixis and Amerindian Perspectivism," *Journal of the Royal Anthropological Institute* 4, no. 3 (1998): 469–88.

27 Bloch, *Placing the Dead*.

28 E. E. EvansPritchard, *Witchcraft, Oracles and Magic among the Azande* (Oxford: Clarendon Press, 1937).

29 Roy A. Rappaport, *Pigs for the Ancestors* (New Haven: Yale University Press, 1968).

30 Mary Douglas, *Purity and Danger* (London: Routledge, 1966).

31 Berkes, Johan Colding, and Carl Folke, "Rediscovery of Traditional Ecological Knowledge," 1251–62.



integrated system linking environmental care with social responsibility.³² This resonates with Ingold's observation that indigenous ontologies often perceive humans as dwelling within a living environment rather than dominating passive nature, producing moral engagement rather than exploitation.³³ Interviewees' framing of *hiaña* as ancestral rules "to make life better" reflects precisely this relational orientation: respecting animals and places is necessary for sustaining harmony and well-being.

Rather than abstract environmentalism, *hiaña* operates as lived ethical practice enacted through everyday embodied behavior.³⁴ In sum, the data suggest *hiaña* functions as a sacred ecological regulator, embedding environmental care within moral and cosmological order. By attributing sacred potency to animals and landscape, the system constrains harmful action, promotes respectful coexistence, and integrates human well-being with ecological balance—constituting a culturally grounded form of moral ecology that structures how humans relate to the living world.

3. Reciprocal Suffering and Moral Causality: *Hiaña* as Embodied Ethical Response

The interview data from Maroantsetra reveal a consistent theme: harm inflicted upon a chameleon often produces direct, mirrored affliction in the human agent, reflecting a moral-causal logic where ethical violations manifest as tangible bodily consequences. This phenomenon resonates with anthropological analyses of sympathetic causality, where misfortune is interpreted as resulting from social or moral breach.³⁵ The mirrored suffering—pain corresponding to the chameleon's injured leg—suggests *hiaña* operates according to proportional moral law, with the human receiving an embodied reflection of harm inflicted.

Mauss' analysis of mana describes sacred force as both impersonal and morally sensitive, capable of punishing transgression.³⁶ In Maroantsetra, *hiaña* is embedded in the chameleon and reacts specifically when moral norms are violated, independent of conscious intention. Its conditional activation—linked to suffering rather than death alone—aligns with Descola's observation that in animistic frameworks, non-human beings possess interiority; harm toward them produces a morally intelligible reaction.³⁷ Viveiros de Castro similarly emphasizes that non-humans are

32 Fikret Berkes, *Sacred Ecology*, 3rd ed. (New York: Routledge, 2012).

33 Tim Ingold, *The Perception of the Environment* (London: Routledge, 2000), 68–71.

34 Descola, *Beyond Nature and Culture*.

35 EvansPritchard, *Witchcraft, Oracles and Magic*.

36 Mauss, *A General Theory of Magic*.

37 Descola, *Beyond Nature and Culture*.



actors whose experiences affect humans through relational channels.³⁸ The narratives also illustrate traditional healing's role: consulting a moasy and acknowledging violation restores equilibrium, reflecting that sacred potency is responsive to recognition and ritual action.³⁹ The coexistence of Christian reinterpretations—where faith subordinates *hiaña* to divine protection—demonstrates the flexibility of moral causality, as indigenous frameworks are negotiated within global religions.⁴⁰

In sum, *hiaña* functions as a relational moral force where ethical violations produce embodied consequences—proportionally responsive, morally intelligible, and embedded in local cosmology—providing a culturally grounded mechanism regulating human behavior and reinforcing social and ecological norms.

4. Christian Reinterpretations and Negotiated Belief: *Hiaña* within a Theological Framework

The interviews indicate that Christian participants in Maroantsetra often acknowledge the cultural reality of *hiaña* while subordinating its potency to divine authority through Christ, reflecting religious negotiation where traditional cosmology is reinterpreted within Christian theology. A striking example is the Protestant mpiandry who recognized chameleons may possess *hiaña* but insisted believing Christians cannot be affected because Jesus protects the faithful. This mirrors anthropological observations of African Christian communities selectively integrating indigenous beliefs while attributing ultimate authority to God,⁴¹ and in Madagascar, traditional practices persisting alongside Christianity but reinterpreted symbolically.⁴²

This negotiation illustrates cognitive pluralism, where individuals operate within multiple ontologies without contradiction,⁴³ and demonstrates agency in adapting ancestral frameworks to align with contemporary religious identity. While literal causality may be denied, the underlying ethical value—respect for animals and moral attentiveness—remains operative, reflecting how religious frameworks mediate ethical relations even when traditional explanations are reframed.⁴⁴ This suggests potential for integrated conservation ethics: by linking moral

38 Viveiros de Castro, "Cosmological Deixis."

39 Meyer and Pels, *Magic and Modernity*.

40 Jean Comaroff and John Comaroff, *Of Revelation and Revolution*, vol. 1 (Chicago: University of Chicago Press, 1991).

41 Jean Comaroff and John Comaroff, *Of Revelation and Revolution*.

42 Alison Richard, *People of the Lake: The Ethnography of a Malagasy Community* (Chicago: University of Chicago Press, 1990).

43 Meyer, *Translating the Devil*.

44 Clifford Geertz, *The Interpretation of Cultures* (New York: Basic Books, 1973).



respect to Christian faith, communities may reinforce environmentally protective behavior compatible with both tradition and religious identity. In summary, Christian reinterpretations exemplify how ancestral beliefs can be culturally retained, morally operational, and theologically reframed, preserving ethical and ecological norms while negotiating the boundaries of faith.

5. Generational Transformation: From Supernatural Efficacy to Ecological Ethics

The interview data reveal a clear generational transformation in how *hi-aña* is understood in Maroantsetra, emerging as a dynamic moral framework differentially interpreted by elders, middle-aged Christians, and contemporary youth.

Older Generation's Framework: *Hiaña* as Real, Punitive, and Ancestrally Grounded

Among older participants—particularly those aged fifty and above—*hi-aña* is described as an efficacious, morally reactive potency whose reality is unquestioned. It inheres in chameleons, certain trees, and marked spaces, producing direct consequences when violated. Their narratives consistently emphasize the punitive dimension, with accounts of illness, mirrored suffering, and death following harm to chameleons reinforcing the system's authority. This older framework grounds *hiaña* in ancestral agency: as elders explained, the ancestors (*razaña*) placed a protective force (*mañajima*) in certain beings to regulate human behavior and maintain cosmic balance. The chameleon is thus understood as a moral guardian through which ancestors exercise oversight over the living, aligning with Bloch's analysis of ancestral authority among the Merina, where ancestors are "the source of all blessing and the ultimate arbiters of moral conduct."⁴⁵ Among the Northern Betsimisaraka, *hiaña* extends this ancestral moral jurisdiction into everyday encounters with animals and landscape.

The older generation also emphasizes *hiaña*'s involuntary, automatic response: it acts regardless of intention—a child who harms a chameleon without knowing its sacred status nonetheless suffers consequences. This mechanical quality, operating independently of human awareness or malicious intent, distinguishes it from witchcraft or sorcery, which require intentional agency. As one elder explained, "The chameleon does not need to be angry; the power is already there, waiting." This characterization

⁴⁵ Bloch, *Placing the Dead*, 165.



resonates with Mauss’s description of mana as an “impersonal force” that “acts mechanically, not by choice.”⁴⁶

Middle Generation and Christian Negotiation: Cultural Recognition with Theological Subordination

Among middle-aged participants—particularly those actively involved in churches—a more complex, negotiated relationship with *hiaña* emerges. These individuals generally acknowledge its cultural reality and often affirm that chameleons possess sacred potency, yet simultaneously subordinate this potency to Christian divine authority, asserting that faith in Christ provides protection from any harmful consequences.

The most articulate expression came from a Protestant *mpiandry* (lay shepherd) who stated: “I know that the elders say chameleons have *hi-aña*. Perhaps they do. But I am a believer in Jesus Christ, and his power is greater than any curse. A true Christian need not fear *hiaña*.” This exemplifies what anthropologists term “cognitive pluralism”⁴⁷—operating within multiple ontological frameworks without contradiction. The *mpiandry* neither rejects *hiaña* outright nor accepts its full traditional efficacy; instead, she repositions it within a hierarchical cosmology where Christ’s power supersedes ancestral potency.

This reflects broader patterns of religious change across Africa. Meyer describes how Pentecostal Christians in Ghana “do not simply dismiss traditional spirits as unreal but rather acknowledge their existence while demonizing them and subordinating them to the power of the Holy Spirit.”⁴⁸ Similarly among the Betsimisaraka, *hiaña* is not denied but contained—its potency recognized but rendered inoperative for those under divine protection, allowing Christians to maintain cultural continuity while asserting theological distinctiveness.

Importantly, Christian negotiation does not entirely neutralize *hi-aña*’s moral force. Even participants who denied its capacity to harm believers often retained the ethical core—the conviction that chameleons should be treated with respect. As one Catholic explained, “Whether or not the curse is real, it is still bad to hurt an animal that the ancestors protected.” This preservation of ethical structure alongside cosmological reinterpretation suggests moral principles can outlast the supernatural frameworks that originally supported them.⁴⁹

46 Mauss, *A General Theory of Magic*.

47 Meyer, *Translating the Devil*.

48 Meyer, *Translating the Devil*.

49 Geertz, *The Interpretation of Cultures*.



Youth Re-Evaluation: Ethical Principle Without Supernatural Enforcement

The most striking generational shift appears among younger participants, particularly adolescent boys and young men, who generally do not believe that chameleons possess *hiana* capable of causing illness or death—yet nonetheless maintain that chameleons are important creatures deserving of respect and peaceful coexistence.

Several youth explicitly contrasted their perspective with older generations. One adolescent stated: “My grandmother says that if you hurt a chameleon, you will get sick. But I have played with chameleons many times—I even made two males fight once—and nothing ever happened to me. I think chameleons are just animals, but they are beautiful animals and we should not hurt them.” This testimony reveals a dual movement: rejection of supernatural causality coupled with affirmation of ethical regard. The chameleon’s value is no longer derived from sacred potency but from its intrinsic qualities—its beauty, its behavior, its place in the living world.

This shift reflects what might be termed the secularization of moral ecology: ethical principles originally grounded in sacred potency are reinterpreted in naturalistic terms while retaining behavioral force. Ingold’s work on environmental perception is instructive here: ethical attention to animals arises not primarily from abstract belief but from “dwelling” with them—observing their behavior, interacting, learning their ways.⁵⁰ Maroantsetra youth, growing up in close proximity to chameleons, develop this dwelling-based ethics regardless of whether they accept ancestral cosmology.

Descola’s framework of naturalism versus animism illuminates this transition. The older generation’s *hiana* system is fundamentally animistic: chameleons possess interiority and participate in reciprocal relations with humans. The youth perspective moves toward naturalism: chameleons are valued as living beings but not credited with supernatural agency.⁵¹ Yet crucially, this naturalistic ontology generates an ethics of care rooted in empathy, aesthetic appreciation, and ecological awareness rather than licensing mistreatment.

The youth interviews also reveal the importance of experiential disconfirmation in belief transformation. Many explicitly cited harmless interactions with chameleons as evidence that *hiana* cannot be real. This empirical orientation reflects broader changes in education, exposure to

⁵⁰ Ingold, *The Perception of the Environment*.

⁵¹ Descola, *Beyond Nature and Culture*.



scientific discourse, and declining elder authority. Hirschfeld's work on children's religious cognition suggests children are active interpreters who test claims against experience and may reject elements conflicting with observed reality.⁵² The Maroantsetra youth exemplify this active reinterpretation.

Theoretical Implications: Secularization of Moral Ecology and the Persistence of Ethical Structure

The generational transformation documented here carries several theoretical implications for the anthropology of religion, moral ecology, and the study of religious change.

First, the case demonstrates that moral ecologies can survive the cosmological frameworks that originally generated them. Among Betsimisaraka youth, the ethical imperative to respect chameleons persists even after belief in *hiaña*'s supernatural efficacy has eroded. This decoupling suggests moral principles can achieve autonomy from original justifications, sustained through alternative mechanisms: empathy, aesthetic appreciation, or habitual practice. Geertz observed that religious symbols synthesize ethos and world-view;⁵³ the Betsimisaraka case suggests ethos can persist when world-view transforms, as long as alternative grounding frameworks emerge.

Second, the transformation illustrates stratified belief systems. Multiple interpretive frameworks coexist within the same community and individual: elders maintain ancestral frameworks; middle-generation Christians negotiate between ancestral and Christian frameworks; youth experiment with naturalistic frameworks. These are coexisting possibilities drawn upon selectively by context. Bloch's work on Madagascar emphasizes this plurality, noting people may hold contradictory beliefs used in different contexts without integration into a single coherent system.⁵⁴

Third, the case contributes to debates about secularization in non-Western contexts. Classic secularization theories have been critiqued for Eurocentrism.⁵⁵ The Betsimisaraka case suggests a nuanced process: supernatural beliefs about *hiaña* may decline among youth, but moral orientations toward environment remain robust. This is not secularization as absence of moral framework but transformation—from supernaturally enforced taboos to ecologically grounded ethics, better termed moral re-grounding.

52 Lawrence Hirschfeld, *Why Don't Anthropologists Like Children?* (Cambridge: Cambridge University Press, 2002).

53 Geertz, *Interpretation of Cultures*.

54 Maurice Bloch, *How We Think They Think* (Boulder: Westview Press, 1998).

55 José Casanova, *Public Religions in the Modern World* (Chicago: University of Chicago Press, 1994).



Fourth, the findings speak to intergenerational transmission. Youth have not simply forgotten ancestral teachings but selectively reinterpreted them, retaining ethical content while discarding supernatural mechanisms. This challenges models of cultural loss, showing active, creative engagement—what Cole, writing about Madagascar, calls “the work of memory and forgetting through which people actively reshape their relationships to the past.”⁵⁶

Finally, the case has implications for conservation. If younger generations protect chameleons through empathy and ecological awareness rather than supernatural fear, interventions might build upon these existing sensibilities rather than attempting to revive ancestral beliefs. Berkes argues effective conservation must work with local cultural frameworks.⁵⁷ While Maroantsetra youth already possess conservation-relevant ethics the emerging ecological consciousness needs to be nurtured and supported through education.

Conclusion

This study demonstrates that *hiaña* functions as a dynamic moral-ecological system within Maroantsetra, Madagascar. Through ethnographic interviews and field observations, the research highlights how chameleons, certain trees, and sacred spaces are perceived as morally and spiritually potent, mediating human behavior through principles of respect, restraint, and reciprocity.

The findings reveal six interrelated dimensions of *hiaña*:

1. **Ontological potency:** Chameleons and other beings possess sacred efficacy, understood as either divinely or ancestrally conferred.
2. **Ecological moral system:** *Hiaña* regulates human interaction with the environment, creating de facto rules that support biodiversity and ecosystem health.
3. **Reciprocal suffering and moral causality:** Harm to animals with *hiaña* often produces mirrored affliction in humans, reinforcing ethical conduct.

56 Jennifer Cole, *Forget Colonialism? Sacrifice and the Art of Memory in Madagascar* (Berkeley: University of California Press, 2001).

57 Berkes, *Sacred Ecology*.



4. **Structured moral logic:** *Hiaña* operates within a system of recognition, restitution, and corrective action, preserving social and ecological equilibrium.
5. **Christian reinterpretation and negotiation:** Faith reshapes *hiaña*'s perceived potency while maintaining its ethical and ecological significance.
6. **Generational re-evaluation:** Contemporary youth reinterpret *hiaña* ethically rather than supernaturally, promoting empathy and environmental stewardship.

These findings demonstrate that ancestral moral systems and local cosmologies remain highly relevant, even in the context of religious change, secular influence, and modern ecological awareness. *Hiaña* illustrates the capacity of traditional beliefs to sustain ethical and ecological behavior, while accommodating reinterpretation, negotiation, and generational adaptation.

From a conservation perspective, *hiaña* offers a culturally grounded framework for promoting environmental ethics, particularly among communities familiar with the concept. By linking moral, spiritual, and ecological values, *hiaña* can motivate respectful treatment of animals, careful use of forests, and broader environmental stewardship, providing a locally resonant complement to formal conservation initiatives.

Finally, this research contributes to anthropology of religion, moral ecology, and environmental studies by demonstrating how sacred potency, relational ethics, and moral causality intersect in practical, observable behaviors. Future research may explore *hiaña* in other regions of Madagascar, examine its intersections with Christian theology more systematically, or investigate its role in broader conservation strategies, providing a model for integrating indigenous cosmologies with ecological sustainability.



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