



## *Piaroa Sorcery and the Navigation of Negative Affect: To Be Aware, To Turn Away*

ROBIN RODD, PH.D.

*School of Anthropology,  
Archaeology, and Sociology,  
James Cook University  
robin.rodd@jcu.edu.au*

### ABSTRACT

*An overemphasis on the interpretation of language has impeded understanding of the cultural and cognitive logic of sorcery's focal acts: divination and sorcery battle. Among the Piaroa of southern Venezuela, divination and sorcery battle are conducted during hallucinogen-induced visions, and are predicated on an epistemology that privileges forms of knowing that are neither linguistic nor language-like. I suggest that Piaroa sorcerers use hallucinogen-induced visions to map the social ecology of emotions in ways partially explainable by cognitive science, and that mature contemplation may provide the anthropologist with a means of understanding relationships between nonlinguistic thought and culture. I interweave an account of my participation in a sorcery battle with neuropsychological interpretations of cognition and emotion to present a navigation of a negative affect theory of sorcery. The navigation of negative affect theory complements sociological and psychoanalytic approaches while emphasizing the cognitive skills and visionary experiences that underpin the practice of sorcery by shamans.*

KEYWORDS: Sorcery, Piaroa, hallucinogens, emotional appraisal, divination

### INTRODUCTION

An overemphasis on the interpretation of language has impeded understanding of the cultural and cognitive logic of sorcery's focal acts: divination and sorcery battle. Among the Piaroa of southern Venezuela, divination and sorcery battle are conducted during hallucinogen-induced visions, and are predicated on an

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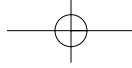
epistemology that privileges forms of knowing that are neither linguistic nor language-like.<sup>1</sup> This article presents a theory of sorcery that outlines the methods and epistemology for interpreting the practice of sorcery by shamans. The navigation of negative affect theory of sorcery complements sociological and psychoanalytic approaches while emphasizing the cognitive skills and visionary experiences that underpin the practice of sorcery by shamans.

Sorcery accusations are not uncommon in Piaroa society, where powerful shamans are attributed the power to kill individuals and to cause long-term suffering to communities. Accusations are associated with a wide range of social circumstances (including conflicts among parents and children or between the families of potential spouses) that result in negative emotions (such as jealousy, guilt, and anger). When the expression of these negative emotions becomes socially problematic (i.e., impedes a community's pursuit of work and love) the following cycle might begin: sufferers invite a shaman to divine the cause of their suffering; and the shaman deflects negative emotions away from victims to a sorcerer by means of sorcery attack. The media of sorcery harm—crystals and malevolent spirits (*māri*)—are analogous to acute negative emotions (felt by individuals) and generalized negative affect (felt by a community), respectively. Divination visions provide the shaman with a gestalt map of social relations and personal motivations that result in emotions while sorcery battle, also conducted during hallucinogen-induced visions, is a means of redirecting negative affect away from victims and towards malevolent sorcerers.

In this article I interweave an account of my participation in a sorcery battle with neuropsychological interpretations of cognition and emotion to present a theory of sorcery as the navigation of negative affect. The navigation of negative affect theory explains the cognitive and experiential logic of the practice of sorcery by shamans, and complements sociological and psychoanalytic approaches. Sorcery divination is considered in relation to cognitive theories of emotional appraisal and Lazarus's (1991) "core relational themes" for emotions. Lazarus's core relational themes, which outline the human-environment relationships that might result in negative emotions, provide a good framework for understanding the sorts of social situations associated with Piaroa sorcery accusations. I suggest that mature contemplation may provide the anthropologist with a means of understanding relationships between nonlinguistic thought and culture, and that Piaroa sorcerers use hallucinogen-induced visions to appraise the social ecology of emotions in ways partially explainable by cognitive science.

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SORCERERS, WITCHES, AND SHAMANS

The etymologies of *witch* and *sorcerer* reveal remarkably similar patterns of meaning, and illuminate relationships between consciousness and emotions as well as between the individual and the community. The word *sorcerer* can be



traced to the French *sorterie* “the telling of lots” and the Late Latin *sortiarius* “a teller of fortunes by lots” (Skeat 1963:503). Here we have the divination aspect of sorcery; becoming aware of another person’s position, and sharing this information to “change lots.” *Witch*, on the other hand, can be traced to the Friesic English and German word *wikken*, and the Medieval Dutch *wicker* as “a soothsayer” and “to predict.” As in “sorcerer,” divination would appear to be integral to early definitions of witchcraft. As we turn to the earliest Norwegian and Icelandic variants of *witch* (*vikja* and *víkja* [plural *Vik-inn*], respectively), we find another important aspect of the sorcery complex: “to turn aside, (2) to conjure away” . . . “To move, turn, push aside” . . . “Thus *witch* perhaps = ‘averter’” (Skeat 1963:613). *Witch* as “averter” or “to move, turn, push aside” comes extraordinarily close to the Latin root for emotion, *émôtus*, meaning “to move away or much” (Skeat 1963:164). Indeed, the Piaroa sorcerer is one who works by *envisioning and turning emotions away*.

I use the word *sorcery* as opposed to *witchcraft* to describe the harmful acts attributed to Piaroa shamans because, since Evans-Pritchard’s (1937) distinction between the two terms, *sorcery* has generally been used to denote learned as opposed to ascribed abilities. There are no people in Piaroa society who have ascribed powers to cause harm by psychic means. Only highly-trained shamans are able to infect people or places with pathogenic agents that are visible and manipulable only by other shamans. I acknowledge, however, that the distinction between *witch* and *sorcerer* has not been unproblematic, and that there has been considerable conflation of the terms, not least by Evans-Pritchard himself (Marwick 1967:232–4; Turner 1964:318–322). In Piaroa society shamans train their minds for years to be able to ensorcel (i.e., to bewitch). However, it is also believed that those who have had the greatest success in learning to become shamans were born with a potential for divination and sorcery that they have been able to develop through ongoing training.

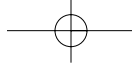
Piaroa people distinguish two types of ritual specialists to which we can apply the term *shaman*: the *yuhuähuäruhua* and the *meyeruhua* (Oldham 1997:242; Mansutti 1986). For the purposes of this discussion I use the term *shaman* to denote a ritual specialist who uses knowledge and power attained during visionary experiences to either heal or harm, and *sorcerer* to refer to a shaman who is, at a particular point in time, occupied with sorcery defense or harm.<sup>2</sup> Further, all Piaroa shamans have the capacity for sorcery. The *meyeruhua* is not attributed the power to cause death by sorcery, although he is attributed the power to inflict minor illnesses or disruptions in the lives of others. The *yuhuähuäruhua*, by contrast, possesses high-end divinatory capabilities and is capable of causing serious harm or death to an individual or an entire community. The *yuhuähuäruhua* occupies a highly ambivalent position in Piaroa society. He is feared for his malevolent capabilities while revered for his divinatory, protective, and curative powers. Stephen (1987a) contends that the primary difference between sorcerers

and shamans, as they have been conceived of by a range of anthropologists, is how their community perceives them. While shamans “may be suspected of controlling dangerous powers . . . it is his restorative role as healer that is stressed by the community.” By contrast, the sorcerer is “primarily [perceived] as the vehicle of punitive force” (Stephen 1987a:74). In Piaroa society the power to cause harm and the power to cure rest on the same continuum along which shamans can be situated, and along which they might move in either direction over the course of their careers. Most *yuhuähuäruhuae* will be considered more sorcerer than shaman by some people at a given time, while more shaman than sorcerer to others, depending on evolving perceptions of this *yuhuähuäruhua*'s involvement in protective or malevolent practices.

Piaroa sorcery shares many similarities with the malevolent shamanic activity of various lowland South American tribes (c.f. Brown 1986:61; Colson 1977; Harner 1972; Kensinger 1973; Thomas 1982). Thomas's distinction between generalized and particular power in Pemón sorcery applies equally well to the Piaroa context. For example, Piaroa sorcery is “concerned with the elevation of a problem thought of in terms of particularized power (e.g., the specific actions of a sorcerer) to a problem of generalized power . . . [the movement of *märi* in the case of the Piaroa] which must be handled by a river area as a whole” (Thomas 1982:185). As is the case for numerous lowland tribes (c.f. Brown 1986; Harner 1972), Piaroa sorcery involves sending a pathogenic agent, usually a crystal, which flies to and penetrates an intended victim. The pathogenic crystal is sent almost exclusively at night, and usually enters the victim's body while he or she is asleep. Piaroa sorcery can be described as “projective,” after Glick's (1972:1029) account in which the sorcerer and victim do not come into contact and the sorcerer, acting on his own initiative or on behalf of others, propels harmful objects into his victim. As such, the victim, in association with his or her consorts, will seek a cure and also, in some cases, initiate retributive action against the offending sorcerer and/or those sponsoring his attack. The first act of Piaroa sorcery is divination of offensive activity. As Lewis (1996:86) has argued cross-culturally, it is the accuser, not the sorcerer, who sets the process of sorcery in motion. Once a shaman has ascertained that a sorcerer has attempted to infect a victim, the offending sorcerer will be held responsible, and a battle will ensue. If confronted, sorcerers will not deny their involvement in malevolent acts.

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SORCERY, LANGUAGE, AND VISIONARY EXPERIENCE

Visions are central to the practice of Piaroa sorcery, as they are to those of other societies (for example, the Elema [Williams 1940:105]; the Dobu [Fortune 1963:181], the Mekeo [Stephen 1979, 1987a]; the Aguaruna [Brown 1986]; and Peruvian *curanderos* [Joralemon & Sharon 1993]). There have been few in-depth ethnographic analyses, however, of the practices of mental imagery cultivation



employed by shamans or sorcerers to translate information perceived during ASC to practical effect during waking life (see, however, Peters 1981). Although visions have been portrayed as central features of shamanic practice (e.g., Noll 1985; Dobkin de Rios 1984; Harner 1973; Wilbert 1987), according to Stephen (1987a:41), “no comparable interest has focused on the experiential aspects of sorcery.”

Interpreting sorcery according to what sorcerers and their victims say cannot capture the logic of a practice based primarily on nonlinguistic cognition. Mauss (1972:122) argues that judgments made by sorcerers are neither analytical nor logically functioning. “We have clearly shown that this reduction to analytical terms is quite theoretical and that things really happen otherwise in the magician’s mind. His judgments always involve a heterogeneous term, which is irreducible to any logical analysis.” Using the example of two classic studies of sorcery (Lévi-Strauss 1973 and Mauss 1972), Siegel argues that sorcery:

*is a question of articulation, of bringing into language, and particularly of bringing into speech, something that until that time was merely guess, sentiment, and suspicion. It is equally a question of restoring coherence to social life that has been upset by feeling a general sense of malaise.*

[Siegel 2003:135]

Although Piaroa sorcery is concerned with bringing into speech a generalized sense of malaise, this malaise is envisioned before it is vocalized, and what is vocalized is of secondary importance to what is envisioned. Whereas proof of sorcery guilt among other ethnic groups may derive from confessions, proof of guilt among the Piaroa is established in hallucinogen-induced visions where the shaman must carry out his case and retribution. Local community members will be told about the shaman’s visions, divination of, and confrontation with offending sorcerers. In most cases, however, there will be no face-to-face reckoning between the victims and the accused. Knowledge as image is of primary importance relative to knowledge as language.

■  
MÄRIPA: VISIONARY EPISTEMOLOGY

Hallucinogen use is central to Piaroa knowledge systems, constructions of reality, and sorcery practice. Piaroa people privilege information that exists and is retrieved during visionary experiences resulting from the consumption of two plant hallucinogens: *yopo* and *Banisteriopsis caapi*.<sup>3</sup> According to Monod (1970:18) “it is not only that [Piaroa] thought precedes reality, but that drugs precede thought.” Piaroa shamans believe that by training to use *yopo* and *B. caapi*, it is possible to participate in a realm of infinite knowledge and power, which the shaman can use to understand social and environmental questions, as well as to heal or to harm. This visionary knowledge and power is referred to as *märipa*.<sup>4</sup> As one

Piaroa shaman explains, “to have *māripa* is to know everything. It shows you how things are and how things will be, the cause behind the event, the meaning behind the sign.” Relative to the expanses of *māripa*, knowledge developed during waking consciousness is considered to be an inadequate basis for understanding social processes and cause–effect relationships.

Several scholars have suggested that indigenous ASC practices represent a framework for interpreting behavior that is no less objective than the social sciences, and in some cases could provide the basis for a more accurate study of human behavior than the social sciences have provided. For example, Kapferer (1997) argues that while sorcery practice has a similar focus to the social sciences, it comes *closer* to the realities of human processes because it is based on direct observation and experience.

*Sorcery is often founded in a profound grasp of the dynamics involved in the practices of human beings. In other words, the arguments of sorcery practice may be no less significant as a way to a general comprehension of the processes of human action than many of those social science theories constructed independently of the close observation of human action, yet applied to it. Such theories, for all their claims to be scientific and objective, are no less human constructions, than is the work of sorcerers, and in many ways are farther from the concrete problems of human existence and struggle.*

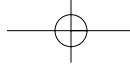
[Kapferer 1997:22]

Many Western models for understanding consciousness have thus far been primitive relative to those developed in Eastern meditative traditions, or to those of Amerindian societies that value and make use of knowledge derived from a range of modes of awareness. According to Tedlock (1987:20), “some cultures are much more interested in and sophisticated about alternative or altered states of consciousness than our own.” Winkelman (1997:404) suggests that, among many traditions, ASC practices provide the basis for the most accurate interpretations of reality.

*Evidence from contemplative traditions indicates that ASC can provide the basis for a more objective perception of the external world. Rather than being bound up in subjectivity, the transpersonal mode of consciousness is viewed as a means of recognizing the illusions and constructed nature of ordinary perception.*

[Winkelman 1997:404]

In Western society there is an assumption that language precedes knowledge and, secondarily, that literacy precedes higher (professional) types of knowledge. Intellectual development proceeds as one is able to store information coded in words and writing which has been, as far as science goes, highly categorized. Piaroa epistemology, by contrast, is based on the assumption that any meaningful thought, indeed truth, will be experienced during *yopo* intoxication when it is possible to perceive the entirety of the natural order and the fragmentary and



imperfect order of the living (Monod 1970:20). The distinction, essentially, is between a society (the West) that believes it can know particulars by studying particulars, and through an understanding of these particulars move to an understanding of systemic relations, to one (the Piaroa) that begins from a very different premise: that the study of particulars will yield false accounts of their nature, and that only by glimpsing the whole is it possible to understand the particular. Laughlin et al. (1990:20) maintain that the social scientific neglect or misunderstanding of the significance of visionary experiences to many religions and epistemologies “is not accidental, but rather a systematic bias in science born of what we call monophasic consciousness in the enculturation of Western observers.” Societies that integrate knowledge derived from all phases or states of consciousness within one worldview are polyphasic. Euroamerican society, by contrast, can be described as monophasic, because it generally gives credence only to information derived from experiences during waking consciousness, “the phases oriented primarily toward adaptation to the external operational environment” (Laughlin 1997:479; Tart 1972). Positivist and monophasic approaches to interpreting shamanism have not led to the development of adequate models for explaining the psychocultural logic of shamanism, and its enduring cross-cultural significance (Langdon 1992:1).

We can summarize the navigation of negative affect argument thus far. The practice of sorcery by shamans is primarily non-linguistic. Divination and battle occur in the minds of sorcerers, and analyses of sorcery that rely exclusively on the interpretation of speech or on the symbolic analysis of rituals cannot capture sorcery’s cultural or cognitive logic. Māriipa is an epistemology based primarily on non-linguistic knowledge, and underpins Piaroa sorcery practice. Epistemologies that privilege non-linguistic thought need to be accessed through means other than, but not exclusive of, language.

■  
MATURE CONTEMPLATION, NON-LINGUISTIC THOUGHT,  
AND CULTURE

The question of how to interpret visionary knowledge is connected to the question of how best to conceptualize culture. Most definitions of culture assume that it is bound up in language, and that the logic of culture is language-like, consisting of linked linear propositions. Bloch (1998:14) disagrees: “Contrary to what anthropologists tend to assume, we should see linguistic phenomena as a part of culture, most of which is non-linguistic.” Bloch defines culture in such a way that most of it is neither linguistic nor language-like. Culture is “that which needs to be known in order to operate reasonably effectively in a specific human environment” (Bloch 1998:4). That which we know best gets pushed to the subconscious to make space in our consciousness for the appraisal of novel information, which is more readily cognized and expressed in words. Expertise in a given activity implies that the actor no longer needs to think in words about what it is that he or

she does. Linguistic articulation is a time-consuming and cognitively inefficient means of thinking about the things we know best (Bateson 1972:141). Non-linguistic knowledge would accord to something like a connectionist logic of loose, shifting networks that operate in parallel fashion. Linguistic, linear, rational thought accords to a sentential logic. There is a “fluid, transformative boundary between the two” (Bloch 1998:14), meaning that the process of unpacking connectionist, relational thought into words changes the nature of the former. The conclusion Bloch comes to, regarding the methodological implications of culture being primarily non-linguistic, is that once a certain level of familiarity with the way of life of people being studied has been achieved then “we can attempt to understand chunked knowledge through introspection” (Bloch 1998:16).

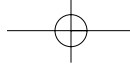
I suggest that mature contemplation can be a valuable ethnographic tool for interpreting non-linguistic thought such as that involved in sorcery divination and battle. Although there is a history of anthropologists using “reflexivity” as a tool in the interpretation of ethnographic data (e.g., Bourdieu 1990), I prefer Laughlin et al.’s (1990) and Laughlin and Throop’s (1999) notion of mature contemplation as an approach to the use of phenomenological data in ethnography. Marcus (1998:193) refers to ethnographic strategies that harp on “the personal quest, playing on the subjective, the experiential, and the idea of empathy” as a “basic or null form of reflexivity” that has “more often than not . . . [reinforced] the perspective and voice of the lone, introspective fieldworker without challenging the paradigm of ethnographic research at all.” Analysis of the psychocultural logic of sorcery, however, requires a methodology that privileges empathy, experience, and practice, because shamanic knowledge is nonlinguistic, empathetic, and learned more by way of imitation than conversation. Mature contemplation is akin to Husserl’s notion of “phenomenological reduction,” a method of training the mind to perceive its internal processes (Husserl 1931; 1977). Much of my work to understand the psychocultural logic of Piaroa sorcery involved phenomenological training, as outlined by Laughlin:

*Phenomenological training directs the mind inward in a disciplined way. The student learns to direct concentration and inquiry toward his or her internal processes, be those processes dreaming, bodily functions (such as breathing, movement, etc.), eidetic imagery, feelings, thought processes, and the like. The training builds habit patterns that counter the Euroamerican conditioning toward ignoring or repressing internal processes and prepares the student for the kind of procedures used in the alien culture for incubating and attaining transpersonal experiences.*

[Laughlin 1997:484]

Mature contemplation can enable the fieldworker to become aware of the structures of consciousness as content rather than self, and could be used to reflect on taken-for-granted thoughts and behavior constitutive of culture





(Laughlin et al 1990:24\_33). I made every effort “to suspend judgment, to bracket personal views as well as a scientific materialist stance, and for the period of fieldwork, to take things [including the perception of spirits] at face value” (Townsend 1997:458). By using mature contemplation to reflect on connectionist-like thought it might be possible for fieldworkers to unpack the layers of networks constitutive of conceptual thought. Mature contemplation has an important advantage over cognitive approaches that rely on the generation of schemas from what people say (e.g., D’Andrade and Strauss 1992). While each approach assumes a fluid, transformative boundary between thinking and language, mature contemplation does not require the fieldworker to work back from what someone said to what they may have thought.

Between 2000 and 2001, I conducted 14 months of ethnographic fieldwork with the Piaroa of Bolívar and Amazonas States, Venezuela, undertaking a shamanic apprenticeship for half of this time. I spent eight months apprenticed to José-Luis, a senior Parguaza River shaman. José-Luis taught me during the evenings when we consumed *yopo* together, and discussed our visions. Over the course of the evening José-Luis recounted stories about other shamans, curing ceremonies, illnesses, sorcery battles, myths, as well as practical information (about plants, animals, and local geography). I attended numerous curing ceremonies performed by José-Luis in his home or that of the family seeking a cure. I also accompanied José-Luis on visits to neighboring villages where we met with other shamans, and during which he taught me how to assess the health of particular people and the community as a whole.

My relationship with José-Luis took on features characteristic of father–son, brother–brother, teacher–student, and friend–friend relationships. José-Luis has an excellent command of Spanish, which facilitated early bonding between us and an ease of communication. The camaraderie we shared over many nights of shared visionary experiences made continued research possible and pleasurable. Training to use *yopo* is a process of learning to see relationships among people, the environment, and feelings. I recorded my visions in a notebook before sleeping, and continue to remember them clearly now. My questions to José-Luis were guided by the desire to understand the epistemological basis of Piaroa shamanic practice, and the relationship between visionary experience and symbolism. For the most part I let José-Luis dictate what would be discussed on any particular occasion. The questions I asked evolved with the experiences I shared with José-Luis, and as my understanding of Piaroa shamanic practices and sociality developed. Many themes were discussed incrementally over time as José-Luis felt I was ready to understand what he had to say.

Apprenticeship, however, requires surprisingly little verbal communication. Learning is heavily weighted toward imitation: watching and doing. In her study of weavers in Ghana, Lave (1990:310) says that “apprenticeship learning” relies on “assumptions that knowing, thinking, and understanding are generated in practice.”

Much of what we learn and that becomes cultural knowledge is learned gradually through “imitation and tentative participation” (Bloch 1998:7). Participant observation and apprenticeship are ideally suited for interpreting non-linguistic knowledge because they encourage the unpacking of chunked knowledge through introspection, and ways of knowing based on imitation and experience rather than observation and the analysis of utterance.

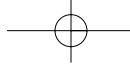
The interpretive limits of an experience-heavy approach to sorcery are fuzzy, and tied to the degree that people from different cultural backgrounds can use nonlinguistic means to communicate nonlinguistic knowledge. Although emotions are one of the most significant types of nonlinguistic cognition (Reddy 2001:64), surprisingly few ethnographers have developed means of interpreting culture-cognition-emotion relationships that move beyond the interpretation of language. Several scholars have emphasized the nonverbal aspects of affective communication (e.g., Urban 1988; Irvine 1995; McNeill 1992). These authors emphasize body language and bodily sounds as relatively transparent means of interpreting feeling. Others have emphasized the possibility of using art and performance as a means of expressing and translating the feelings and meanings of ASC or primary process cognition (e.g., Myerhoff 1995; Bateson 1972). I have attempted to negotiate this issue as best as possible by using an analytic framework that interweaves symbolic interpretation with psychology and neurobiology, and a field methodology that privileges mature contemplation.

■

#### FUNDO NUEVO: EXPERIENTIAL DYNAMICS OF SORCERY BATTLE

I had been living as an apprentice to José-Luis for five months when Camilo, the headman of Fundo Nuevo, a village three hours upriver, paid a visit. Camilo was worried that his village had been ensorcelled. Young men were leaving for the city and returning as strangers to their families, there seemed to be particularly few fish in the water that season, and several young women (including Camilo’s elder daughter) appeared to be infertile or “had gone crazy.” They were “incapable of learning. They grow big, but they always remain like children.” Many, apparently, were listless and weak. Villagers expressed discontent at a rising spate of social dis-ease, prompting Camilo to seek answers and restore village morale. A shaman was required to assess the dynamics of sorcery infection, to divine the offending sorcerer, and to turn back his work. We departed the following morning.

In the mid-1990s, Fundo Nuevo had been an “evangelical town,” a model of the New Tribes Missions strategy of developing indigenous pastors to sustain the presence of the Christian God in heathen lands. Camilo was once a pastor and the headman. He lost his faith in God, however, when he concluded that evangelical songs could neither prevent nor cure illness, and were even less effective at defending his village from sorcery attacks. Like many Piaroa villages, Fundo Nuevo has neither shaman nor pastor. During the period in which Fundo



Nuevo was nominally Protestant, the elder shamans had died or “retired,” leaving no ritual specialists to practice as curers and sorcerers. In order to effect cures, and defend against sorcery attacks, Fundo Nuevo has to invite the participation of shamans living elsewhere.

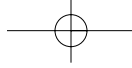
The approach José-Luis took to remedying the sorcery problem in Fundo Nuevo is different only in scale from individual cases of sorcery. Shamanic address of suspicion of sorcery involves the study of local social dynamics, followed by divination of an offending shaman, defensive action to impede further sorcerous attack, and the attempt to clear away residues of the sorcerer’s work by performing curing rituals. Cleaning sorcerous infection and defending against attacks require sustained work over a period of time concordant with the severity of sorcery affliction. The decision to take revenge against an offending sorcerer is a serious matter that usually involves consultation among several shamans.

Divination of the cause of sorcery is prefigured by extensive informal discussions, and continued through sensitive empathetic assessment of local psychosocial dynamics. José-Luis refers to this directed socializing as *paseando* (Spanish for “strolling”): “Now we are going to work. Firstly, one must know how things are. If you don’t understand how people have been infected, you can’t make the bad fish [illness] go away. Let’s go for a walk.”

With gregarious charm, and frequent comic relief, José-Luis works his way through conversations spanning food, home, family, river, state, and national politics. Quixotic storytelling ensue, of tales exotic, stories about me, and of his own travels to Canada, Mexico, and Caracas. Initial, informal conversations are followed up by systematic visits to each house in the town. In this way José-Luis is able to develop a gestalt image of the village mood, as well as awareness of particular problems manifest in individuals: perceived disfigurements in the ideal of harmonious family relations, eating disorders or malnutrition, and impaired physical development.

*How are the people living? They are not happy here. The boy at the last house we visited, look in his eyes. He has bad tongue. I can see märi in his eyes. His mind has gone soft. He has lost the way. When he goes to Ayacucho [Puerto Ayacucho is the capital of Amazonas State] he will drink rum, lose his mind, become a criminal, and forget about his family.*

José-Luis hands me another wad of *B. caapi*. The consumption of *B. caapi* is integral to the acceleration of empathetic capacities that underpin Piaroa shamanic social study. The art of “strolling” relies heavily upon hyper-sensitive empathetic intuition. In this context, conversation is a way of feeling into the lives of those the shaman studies. Intuiting interpersonal emotional dynamics and psychological conditions, however, moves beyond the interpretation of speech. The shaman must study gesture, tone, expression, and the eyes. Day and night, over the duration of our stay in Fundo Nuevo, we sucked fat portions of *B.caapi*.



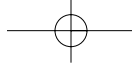
Sustained consumption of *B. caapi* facilitates mental clarity, visual acuity (important for the reading of people in dark interior spaces), and heightened inter-personal understanding (Naranjo 1973; 1979).<sup>5</sup> The shaman *will* find the answer to a sorcery problem. The success he has in alleviating the symptoms of sorcery, however, depend to a large degree on how the shaman is received by those with whom he works. José-Luis's wit and charm contribute to his ability to evoke faith in the minds of others that his efforts will alleviate the harmful effects of sorcery. Language is a tool employed by the shaman to effect changes in the sentiments of those who believe they have been ensorcelled. The ultimate end, however, is not articulation (this is a means), but the alteration of emotional dynamics.

The empathy-rich data of *paseando* serves as the mental background on which *yopo* visions deliver convincing answers to the questions of sorcery illness. Piaroa shamanism is a practice for understanding energy flows among systems; the self, human communities, the ecosystem, and the cosmos. Relationships among these systems are felt by the shaman during hallucinogen-induced visions as mental images such as dancing bands of light and colorful sentient geometries to which feelings and meanings are associated and over which a face, as well as current, past, or future events are glimpsed. The imagery of divination visions is the imagery of feeling the meaning of the social ecology of emotions. Damasio's (1994:145) conception of feeling an emotion echoes the experience of sorcery divination: "A feeling depends on the juxtaposition of an image of the body proper to an image of something else, such as the visual image of a face or the auditory image of a melody [i.e. the trigger that initiated the feeling]."

In order to divine the cause of sorcery, a sorcerer must envision victims, locate where *märi* or a crystal has infected them, and juxtapose these images with that of the face of a sorcerer. The logic of the relationship between images and feelings (of sorcery guilt or a victim's suffering, for instance) during *yopo* visions is radically different, however, to the perception-cognition relations of waking consciousness. During *yopo* visions it is possible to *know* that a particular victim has a sorcery crystal embedded in their stomach, although this person, the crystal, and their stomach may appear as a swirl of communicative light. You might hear their voice but not see their face, or see their face and intuit their voice without hearing a word.

José-Luis and I took *yopo* on numerous occasions in Fundo Nuevo. On the first occasion, I wanted to understand the cause of sorcery in Fundo Nuevo. I sought comprehension of the relationship between social study, *märipa*, and divination. *Yopo* delivered the answers I was looking for:

*I saw a little boy who talked to me. He held out a small green and black stone, explaining that it had come from within his chest. He described his illness. He also said many things in Piaroa that I could not understand. The boy's chest glowed where the stone had been. He pointed me toward the river, and explained that the stone had come from the water. I walked towards the river*



*and it became murky and grey. I knew that something was wrong. The river began to rise up and aggressively engulf me. As I glided back to open eye thoughts I thought of Camilo's daughters. Do they have some part to play in the sorcery equation?*

Meanwhile, José-Luis had divined the identity of the offending sorcerer. It was Najaré, an old shaman now living in Puerto Ayacucho. José-Luis told me that the boy I saw in my vision was the son of his uncle. This child died young as a result of Najaré's sorcery. "Najaré has always been bad. He has killed before, and he has still not learnt his lesson. Very bad."

The following day José-Luis invited Camilo and his two sons into our house to tell them what we had ascertained from the previous evening's yopo experiences. I recounted the visions I had concerning the child, the water, and the daughters. Camilo and his sons listened intently and appeared to be satisfied with our interpretation. Camilo replied by saying that Najaré had once wanted to take his elder daughter as a second wife, but she had rejected him because of too great an age difference. So it was anger of rebuttal that had motivated Najaré to make Camilo's daughter infertile, and the whole village unhappy.

Camilo and his sons set about writing a legalistic synopsis of the situation. They prepared a letter to be taken by me to Caracas where I could "study it" further, and "enter it into my computer." The letter was an affirmation of Najaré's involvement in "criminal activities" (i.e., sorcery). His trial was one of visions. Beyond the shadow of shamanic doubt he was found guilty of being a "murderer." No one in Fundo Nuevo had yet died as a result of Najaré's purported sorcery, but his intentions, it was agreed, were murderous. The letter read as follows:

*Fundo Nuevo, 14-05-2000*

*This criminal was here for two weeks. He went up the river, and there he worked his sorcery. He also went into the forest, the hills. There he found a large crystal and with it he sent a spirit [fantasma, there was significant discussion about how best to translate märi into Spanish].*

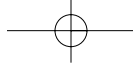
*He was a criminal before leaving for his home, and he asked to marry Camilo's daughter. She did not like him, did not want to marry a criminal. She is 14 years old. The criminal said, "well you will see what will happen to your community then." Then the criminal returned to his home.*

By drafting a letter, Najaré's guilt would be permanently exposed, his power to effect harm negated in its submission to Western technology (a computer), and the equation of sorcery to criminal guilt. That evening, José-Luis would confront Najaré. "It is a war. And we are going to fight," José-Luis told me. Feeling high from my perceived early success at divination, and keen to understand more, I approached this next visionary experience with the intention of understanding the experiential dynamics of sorcery attack.

José-Luis and I inhaled the first round of *yopo* trays early in the evening. My visions were clear and strong. I floated up along radiant beams of light before I began to feel an incredible temptation to fall, and to keep on falling. Relaxation and security gave way to the temptation to lose control of my visions and to submit to the desire to fall into a soft, white void. I felt as if I were being sucked into a murky hole, and that my mental and physical health were at risk if I did not take measures to change this pattern of hallucinations. I had seen disturbing imagery in previous *yopo* visions, but this was different. It felt like a trap. So I fought hard, remembering how José-Luis had taught me to use my *huräruä* (a wild pig tusk talisman that is a shaman's weapon during *yopo* encounters in the spirit realm). "This is your weapon. Hold it with your forefinger, and never let go." I concentrated on repelling what was sent to me and slashed the air with my *huräruä*. "Hissssssss . . . rrahhhh! Hissssss . . . rrah!" Then I saw the face of Najaré. He had sensed that I was looking for him and was not happy. The attack lasted a couple of minutes before the seduction of falling faded, the sorcerer's face etched in my mind.

José-Luis frequently referred to sorcery attack in terms of "falling." One falls prey, in a hole, under the spell of another shaman's *märipa*, falls weak, falls ill, and falls dead. In order to kill a person, a sorcerer must dig a hole in the ground, placing their *huräruä* inside. The sorcerer channels a pathogenic crystal through his *huräruä*, making an intended victim "fall" into a hole in the visionary terrain of *yopo* space-time. "Falling" is also the best description of the sensation a shaman experiences when he is attacked. Attacks are traps set in the *yopo* vision realm in which the ground beneath one opens up, or in which flying darts (*pidoqui*) must be avoided. In order to prevent infection by sorcerous crystals, the intended victim must use his *märipa* and *huräruä* to turn away the offending shaman's assault. Defense involves actively renegotiating the hallucinogenic landscape by way of turning the sensation of danger away from oneself and back at the offending sorcerer. Slashing a tightly held *huräruä* is a means of focusing energies to repel the malevolent intentions of other sorcerers. The *huräruä* is a powerful symbol that enables the deflection of malevolent desires and negative affect.

The highest forms of Piaroa divinatory knowledge are attained from flight to the stars. The sensation of falling below ground is associated with confusion, loss of control, incomprehensibility, terror, suffering, madness, darkness, and evil. During *yopo* visions, it is possible to see and travel along energetic flows between tiers of lower and upper worlds. To travel upward is to be in command of one's visionary experience, to be able to source valued information. The higher one goes, the more information becomes accessible. To be pulled down is to surrender control of the visionary realm to chaos, confusion, and fear. This loss of control can result in sorcery infection, the dissolution of a shaman's *märipa*, and temporary insanity (*ke'rau*).



I awoke from my encounter with Najaré to see José-Luis “throwing” away *märi* with violent slashes of his *hurärua*. “Red, black, green with red . . .” José-Luis felt and saw “eleven thousand million crimes.” He pointed, eyes glazed, in several directions, “over here . . . there . . . *Märi* want to kill you! Listen . . . they are teasing us. The *märi* are laughing.” José-Luis shook his head. Outside our hut the dogs were barking, birds were squawking. There were many, many *märi*, and they were angry. José-Luis explained that Najaré had come looking for me.

*Najaré killed a shamanic apprentice in Apure State. Najaré didn't want the student to learn, so he killed him. It is very dangerous to take yopo here away from my house. When you take yopo, other shamans know. They can see you. For this reason you must protect yourself and your family from those who might wish you harm. Najaré is an enemy of mine, so he is now an enemy of yours, and I must protect you.*

In José-Luis's first battle with Najaré, he was forced to contend with attack by pathogenic crystal, and by *märi* co-opted by Najaré. José-Luis's account of this battle is as follows:

*I saw a hole open up in the ground in front of me. [Najaré] wanted to kill me. I flew to the mountains where there were five other shamans [including me]. I saw Najaré there. He shot a crystal at me but it missed. I have never fought this sorcerer before, but I know of him. He wanted to kill me, but I was too powerful for him. There were two thousand märi, one of which was sent to kill me. I killed it instead, and Najaré left.*

*Märi* are evil spirits that live in the forests, mountains, dark streams, and waterfalls. They are most active at night, when they frequently take the form of bats. *Märi* exist to torment the lives of people, feeding on human suffering and death. It is said that “before there were many Piaroa and few *märi*. Now there are millions of *märi*, and few Piaroa.” The number of *märi*, and the degree to which they are active, are indices of sorcery activity and negative affect in a given region at any particular time. When the activity of *märi* is significantly high, shamans must battle hard to slaughter them. The battle is ongoing. *Märi* attack and retreat in flows according to their own desire to torment, and the malevolent whims of sorcerers. *Märi* are conscious beings, but they can be manipulated by shamans to cause harm to particular people, entering a victim's sleeping body to cause any number of illnesses. As the sorcerer slaughters or fends off *märi*, he manipulates the flow of negative affect within and between communities. *Märi* can be conceived of as a Piaroa symbol for negative, nonconscious affect<sup>6</sup>. As Zajonc argues, nonconscious affect can be redirected toward and attached to any number of focal points.

*There is no such thing as a free-floating cognition. But nonconscious affect is quite different. It is more like moisture, it is like odor, like heat. It can disperse, displace, scatter, permeate, float, combine, fuse, blend, spill over and become attached to any stimulus, even totally unrelated to its origins.*

[Zajonc 2000:54]

José-Luis did not sleep that night. Instead, he continued to consume *yopo* and slaughter *märi*. At dawn, José-Luis performed curing rituals on dozens of the village's women and children. The night after the sorcery battle was very quiet. There were no bats or various other manifestations of *märi* about to molest us. José-Luis said that they were weary from the previous evening's fighting. "The moon is red. It will be tranquil tonight and hot tomorrow. We will sleep well. *Märi* will not be back here soon."

While José-Luis declared that "we have won the battle here," he conceded that further action would be required to arrest Najaré's continued malevolent activity. Two shamans from upriver were to have arrived to assist José-Luis in a final confrontation "to finish off the evil sorcerer." The two shamans never arrived. Revenge would have to wait.

■  
SORCERY AS THE NAVIGATION OF NEGATIVE AFFECT: DIVINATION,  
DEFLECTION, AND EMOTIONAL APPRAISAL

According to the navigation of negative affect theory of sorcery, Piaroa shamans interpret the social ecology of emotions during hallucinogen-induced visions, and exert efforts to redirect socially problematic negative emotions away from a person or place and towards a sorcerer deemed guilty of causing this suffering. The primary media of Piaroa sorcery transmission, *märi* and sorcery crystals, can be interpreted as generalized negative affect and acute, negative emotions. In this context, the shaman works on behalf of a community to understand the social relational nature of emotions, and takes responsibility for navigating group affect in the interests of limiting the social consequences of acute negative affect. Divination of the cause of sorcery suffering may be underpinned by a heightened ability for conscious emotional appraisal, involving the development of integrative neural networks.

People behave in order to avoid certain emotions, and to pursue certain others (Damasio 2000). The strategies we employ to achieve these ends change over time as our schemas of goal-pursuit and goal-conflict change through experience. Emotional valence can be defined as the degree to which events, things, or situations are pleasant or unpleasant, and is considered by some psychologists to be the origin of all goals (Frijda 1994:199). Reddy (2001:122) uses the term *navigation* to describe the way that social interests and personal goals are negotiated in a particular cultural context according to the political and social dynamics of that environment. Navigation is also a good way of conceiving how Piaroa





shamans cultivate mental images during *yopo* visions, the experiential domain of their practice. The primary symbols of Piaroa sorcery are sorcerous crystals and *märi*, which a sorcerer sends into the body of an intended victim, and which are seen and manipulated during *yopo* visions. Transmission of *märi* and sorcery crystals is analogous to the redirection of negative affect toward a person deemed guilty of some social transgression, or suffering from any number of acute negative emotions. *Märi* represent generalized evil, and can be interpreted as a visionary manifestation of negative emotional valence. While *märi* can be directed by a sorcerer, they generally affect an area (household or village). Sorcerer's darts or crystals, sent to one or a couple individuals, represent a particular, socially problematic, negative emotion. Clusters of negative emotion accrue among individuals and are felt and dissipated through the visionary divination and deflection of a sorcerer's work.

The institution of sorcery can be seen as a system of emotional navigation, orchestrated by shamans, to bring individual actions in line with social expectations, and to redistribute negative emotional valence. Although Ellen (1993:18) is critical of "sociological theories" of sorcery that posit fear of accusation as a means of preventing people from behaving in antisocial ways, because they cannot be effectively measured, Piaroa people make explicit their hesitation to transgress social taboos for fear of sorcery attack. José-Luis knows that to cheat on his wife could precipitate sorcery attacks against him or his family. He expresses his restraint from adultery in terms of the potential of sorcery attack. A woman from San Rafael, a village upriver from José-Luis's house, feared being a target of José-Luis's sorcery when she was accused of stealing money from a tourist. Similarly, Bené, a man of the lower Parguaza, tells how he had been ensorcelled by the disapproving father of an ex-girlfriend.

*I was sick, very sick. Skinny, very skinny. My girlfriend's father was a shaman, and he wanted me dead. So I went to see a shaman in Puerto Ayacucho. He went to kill the other shaman [who had ensorcelled me], but I said "no, just cure me." I didn't live with that girl long. Now I am fine and the other shaman doesn't bother me.*

Bené feared the repercussions of escalating a battle with his ex-girlfriend's father. So he contracted a cure for his illness, but not revenge against the father, and acceded to the father's desire for him and the daughter to be separated. If we see sorcery as the navigation of negative affect, then fear of sorcery is a logical response to situations in which goal conflict arises out of social transgression, in this case a socially unacceptable partnership.

All Piaroa sorcery accusations can be associated with negative emotions that arise from social conflict. José-Luis says that most of the sorcery cases he deals with concern disagreements between lovers and ex-lovers or their families. A Piaroa shaman from another river system cites jealousy and anger as the root of sorcery.

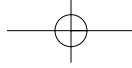
Socially problematic emotional responses arising from strained, skewed, or unhealthy family relationships (involving power struggles between husbands and wives and between parents and children) are frequently associated with sorcery accusations. A third shaman spoke of a Piaroa human rights activist who was seeking treatment for a sorcery attack, manifested physically in a painful skin ailment. The shaman explained to his patient that a *criollo* sorcerer was ensorcelling him because “the *criollo* does not want [the human rights activist] to speak.”<sup>7</sup> This case highlights two streams of explanation for sorcery: those dealing with motivations to alter existing political orders (Zeleneitz 1981:5; Lindenbaum 1979; Taussig 1987), and those concerned with the movement from traditional (indigenous) to state and market economy political structures (Latham 1972; Lindenbaum 1981). The transgressions of social norms in this instance, however, are still ones that the Piaroa shaman sees in terms of fear and envy arising from *criollo*–Piaroa relationships.

A social system of emotional navigation is implicit in many theories of sorcery. Negative emotions or emotional states are often associated with illness and sorcery/witchcraft—c.f., the Chewong (Howell 1981), the people of Toraja (Hollan and Wellenkamp 1994), the Cheyenne (Strauss 1977), the Kwara’ae (Watson-Gegeo and Gegeo 1990), the Guadelupe (Bougerol 1997). Sociological analyses have focused on a relationship between social tension and sorcery activity (e.g., Kluckhohn 1970). The deflection of the socially problematic expression of individually-felt emotions is an important aspect of the dispersal-deflection-release of social tension precisely because emotions only exist within an individual as he or she relates to other individuals (Kapferer 1997:222; Lutz and Abu-Lughod 1990:11; Besnier 1995:236). Kluckhohn (1970:227) argues that the effectiveness of witchcraft in defusing anxiety depends upon *individual adjustment* merging with *group adaptation*.

*Witchcraft channels the displacement of aggression, facilitating emotional adjustment with a minimum of disturbance of social relationships . . . . Anxieties may be disguised in ways which promote individual adjustment and social solidarity.*

[Kluckhohn 1970:232]

Stephen (2000:731) maintains that explanations of sorcery should move beyond those framed around “a simple release of social tension,” and that sorcery can be understood in terms of “the means of deflecting guilt away from the grieving self,” and “fantasy processes of hostility inherent in mourning.” Several scholars have applied Jungian, Freudian, or Kleinian psychoanalytic interpretations of guilt, grief, and fantasy to explain cross-cultural constants in sorcery symbolism (Levine 1973; Stephen 1987b, 2000; Riebe 1987). Although Piaroa sorcery accusations are sometimes made following deaths, most cases of sorcery are not related to death or the grieving process.



In order to understand Piaroa sorcery we need a framework that moves beyond sociological or psychoanalytic approaches, and that elucidates relationships between the personal and social aspects of a *full suite* of negative emotions. Lazarus (1991) has developed a social ecological model of emotions, which is useful for understanding the sorts of social interactions and goal conflicts associated with sorcery accusations. Frustration of a goal may lead to any one of the negative emotions: anger, anxiety, guilt, shame, sadness, jealousy, or envy, which the Piaroa associate with sorcery. Lazarus identifies core relational themes (person–environment relationships) that figure for the following negative emotions as:

*Anger: A demeaning offense against me and mine.*

*Anxiety: Facing an uncertain, existential threat.*

*Envy: Wanting what someone else has.*

*Guilt: Having transgressed a moral imperative.*

*Fright: Facing an immediate, concrete, and overwhelming danger.*

*Jealousy: Resenting a third party for loss or threat to the affection of another.*

*Sadness: Having experienced irrevocable loss.*

*Shame: Having failed to live up to an ego ideal.*

[Lazarus 1991:122]

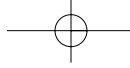
Emotions arise from human–environment relationships following two parallel types of cognitive appraisal processes: one automatic, unconscious, and uncontrollable; and one that is conscious, deliberate, and under volitional control (and is hence susceptible to cultural conditioning) (LeDoux 1996; Lazarus 1991; Panskepp 1997). Although anthropologists have focused on cultural emotion words, the social circumstances to which these emotion words refer (e.g., Lutz 1988; Rosaldo 1980; Wierzbicka 1994), or the expression of emotions across cultures (e.g., Urban 1988), little anthropological attention has been paid to the ways that people across cultures may entrain the capacity for emotional appraisal. The cultural study of emotional appraisal figures to be a fertile field for understanding the limits of cultural variation in ontogenetic development. According to LeDoux (1996:67) the line between conscious and unconscious appraisal is “thin and fuzzy.” “Although the appraisal process itself occurs unconsciously, its effects are registered in consciousness as an emotional feeling.” Knowing how to alter the impact of emotional responses requires understanding and ranking group and individual needs according to urgency, and in a manner that prefigures possible adaptations to unexpected developments (Bower 1992:4; Pribram 1980). Lazarus (1991:410) concedes that psychologists have not developed the means to understand aggregate assessments of inter- and intra-individual emotional responses accruing as a result of the social interplay of long- and short-term goal pursuits.

A shaman’s visions are his means of appraising current and future emotional responses. It is possible that *yopo* visions provide the shaman with a visionary framework for understanding and ranking group and individual needs in ways

that Western psychology cannot. Having *māriṣa* involves an ability to conceive of long- and short-term personal and social goals, the particular in relation to the whole. Divining the cause of sorcery requires envisioning the interplay of long and short terms goals, formulating aggregate assessments of a community's affective valence, and is contingent on a learned capacity for something like conscious emotional appraisal. Divination visions involve the juxtaposition of a sense of a community's overall emotional valence with imagery representing the social transaction of emotions among individuals. When the valence is strongly negative, the sorcerer will envision *māri*. The effort the shaman expends in fighting *māri* is indicative of an attempt to turn away negative emotions.

We can partially account for a shaman's heightened ability to understand the social and temporal weave of emotions in terms of the entrainment of neural systems, which might not otherwise function simultaneously. A range of studies has sought to explain transcendent experiences or shamanic knowledge in terms of neural integration or the induction of interhemispheric cerebral coherence (e.g., Lex 1979; Laughlin et al. 1990; Mandell 1980; Newberg and d'Aquili 2000; Krippner 2000; Winkelman 2000). Each brain hemisphere mediates sensory data differently, and serves specialized complementary functions that come into play in an alternating fashion, according to information being processed at any particular time. Generally, while one side is operating, the other is inhibited from operating (Trevarthen 1969). A range of ritual practices, including hallucinogen use, can induce periods of synchronous interhemispheric discharges (Mandell 1980; Winkelman 2000). The "cerebral cortex likely underlies the development of complex thought, language, religion, art and culture" (Newberg and d'Aquili 2000:256). Traditional views of the brain suggest that the left hemisphere mediates language and sequential analytic thought (Sperry et al. 1979; Nebes and Sperry 1971; Gazzaniga 1970); and that the right realizes "gestalt perceptions, imagery, and in general, the construction of sensorial events as wholes, and wholes-within-wholes" (Laughlin et al. 1990:129). The right hemisphere is associated with nonverbal forms of communication involving emotional transactions, kinesthetic perception, and "awareness of human disability" (Luria 1966:90; see also Bogen 1969). Prolonged interhemispheric coherence might encourage the recognition of bodily conditions such as emotions and illnesses in terms of social relationships, *and* the ability to analyze how these conditions might be dealt with sequentially.

Maclean's theory of the triune brain (1973, 1990, 1993) affords a complementary means of understanding the sorcerer's heightened perception of emotional processes. The triune brain theory, based on ethological and anatomical study and evolutionary principles, divides the human brain according to anatomical, structural, and functional components. The three formations, proto-reptilian, paleomammalian, and neomammalian have different structures that mediate distinct psychological and behavioral functions. Each has its own forms of



subjectivity, intelligence, space–time recognition, motor functions, and capacity for memory. Although the three segments are integrated to make the whole, which we recognize as the anatomically modern human brain, the three divisions represent a functional hierarchy of information-processing capacities that provide the basis for distinct forms of consciousness. Accordingly, the paleomammalian brain, which we share with other mammals, is associated with the experience of emotions, while the neomammalian brain, including the neocortex and parts of the limbic system, enables symbolic thought and the ability to reason. If sorcery practices concern the appraisal and navigation of emotions, then it is possible that the regular consumption of *yopo* and *B. capi*, around which Piaroa sorcery practice revolves, may allow for the entrainment of neocortical and paleomammalian neural structures in the interest of heightening the ability to reflect on the social ecology of emotions. Achieving greater cortical control of subcortical regions involved in emotional processes would enable the sorcerer to successfully navigate group affect.

José-Luis describes sorcery as the highest level of shamanic practice: “To practice sorcery is very difficult, like the fifteenth year of studies, like the postgraduate level for shamans. You must know all that there is to know.”



#### CONCLUSIONS

Reliance on the interpretation of language has impeded analysis of cultural practices, such as sorcery, which are based on nonlinguistic cognition. This article has proposed that the practice of sorcery by shamans should be considered to be a system of navigating negative emotions within and among individuals. The navigation of negative affect theory of sorcery, which combines the appraisal, and symbolic and social negotiation of emotions, brings together the two halves of historical definitions of witchcraft and sorcery, divination and deflection, and offers a means of exploring the experiential and cognitive logic of sorcery.

The navigation of negative affect theory of sorcery can be summarized as follows: The focal acts of shamanic sorcery are divination and battle. The practice of sorcery by shamans is predicated on an epistemology that privileges nonlinguistic thought, which can be accessed by the ethnographer through a process of mature contemplation. The sorcerer navigates the social ecology of emotions during visionary experiences whereby the cause of sorcery suffering is divined as a socially–problematic response to goal conflicts, envisaged as culturally significant hallucinatory motifs, and a battle against an offending sorcerer ensues. Divination and sorcery battle occur in a hallucinatory terrain where the primary media of sorcery harm, crystals and *māri*, are indicative of strong negative emotional valence within an individual or a community, respectively. Lazarus’s (1991) core-relational themes for negative emotions provide a template for understanding the possible cross-cultural and social-relational bases of sorcery.

The sorcerer's ability to divine the answer to sorcery questions may be predicated upon the development of conscious emotional appraisal: knowing which sorts of social relationships result in which negative emotions. Piaroa sorcery practice may be underpinned by the entrainment of neural systems amenable to feedback dialogues that extend innate capacities for analytic thought and affective information processing through their systemic integration.

The navigation of negative affect theory demonstrates how sorcerers envision relationships between the personal and social aspects of a full suite of negative emotions associated with sorcery, and how the practice of sorcery relates to an epistemology privileging nonlinguistic thought. Although divination may involve the union of linguistic and nonlinguistic thought, divination does not follow a linear logic reducible by reason to words. This paper has attempted to demonstrate how mature contemplation and neuropsychology might be combined to provide ethnographers with means of interpreting the nonlinguistic aspects of culture.

#### ENDNOTES

1. The Piaroa are an ethnic group of approximately 12 thousand people who inhabit tributaries of the mid-upper Orinoco in Bolívar and Amazonas States, Venezuela. The Piaroa subsist by cultivating bitter cassava, fishing, hunting, and collecting wild fruits, and live in communities of 30–500 people (c.f. Overing 1975; Overing and Kaplan 1988; Mansutti 1990; Zent 1992). The fieldwork on which this article is based was conducted between 1999 and 2001. Fieldwork would not have been possible without the generosity of many Piaroa people and especially that of José-Luis Díaz and his family.
2. Based on extensive cross-cultural research, Winkelman (1982, 1986) has defined sorcerers as a separate type of malevolent shaman. To the Piaroa, however, there are no essentially evil or good shamans.
3. Piaroa shamans are masters in the use of at least three psychoactive plant substances: *yopo* is a snuff derived predominantly from the ground seeds of the *Anadenanthera peregrina* tree; sections of *Banisteriopsis caapi* cambium are consumed prior to *yopo* insufflation; long hand-rolled cigars are consumed regularly. *Yopo* contains a range of tryptamine alkaloids that act synergistically with *B. caapi*'s betacarboline alkaloids to produce vivid visions. See Rodd 2002 for an account of Piaroa *yopo* and *B. caapi* preparation, use, and pharmacology.
4. I have addressed the probable cognitive logic of *máripa* elsewhere (Rodd 2003). *Máripa* has many parallels among other lowland South American indigenous societies (c.f. Reichel-Dolmatoff 1975, 1996 for the Tukano; Colson 1977 on the Akawaio; Thomas 1982 on the Pemón; Kensinger 1973 for the Cashinahua; and Hamer 1972 for the Jívaro).
5. The first isolation of a chemical compound from the *B. caapi* plant was made by Fischer (1923), who named the crystalline compound *telepatina* (telepathine) for its purported ability to induce telepathic awareness in users. In 1928, Elger proved that telepathine was identical to harmine, isolated years earlier from *Peganum harmala*. Many years later, researchers also found harmaline and tetrahydroharmine in stems of *B. caapi* (Hochstein & Paradies 1957).

6. Nonconscious processes are mental events that occur outside the individual's awareness. Nonconscious events may or may not become accessible to the conscious mind through the practice of mature contemplation.
7. *Criollo* is the Spanish word that Piaroa people use to refer to the settler or "Creole" society (i.e. any Venezuelan person whom the Piaroa consider to be non-indigenous).

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