This article was downloaded by: [Arnaud Halloy]

On: 18 July 2012, At: 02:04

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T

3JH, UK



Ethnos: Journal of Anthropology

Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/retn20

Gods in the Flesh: Learning Emotions in the Xang"ô Possession Cult (Brazil)

Arnaud Halloy a

^a University of Nice Sophia-Antipolis, Laboratoire d'Anthropologie et de Psychologie Cognitives et Sociales (LAPCOS)

Version of record first published: 17 Jul 2012

To cite this article: Arnaud Halloy (2012): Gods in the Flesh: Learning Emotions in the Xang"ô Possession Cult (Brazil), Ethnos: Journal of Anthropology, 77:2, 177-202

To link to this article: http://dx.doi.org/10.1080/00141844.2011.586465

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should

be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Gods in the Flesh: Learning Emotions in the Xangô Possession Cult (Brazil)

Arnaud Halloy

University of Nice Sophia-Antipolis, Laboratoire d'Anthropologie et de Psychologie Cognitives et Sociales (LAPCOS)

ABSTRACT Drawing on first-hand ethnographical data from the Xangô, an Afro-Brazilian Cult in Recife (Brazil), I defend that learning possession means in the first place to learn to identify and react to specific emotional states in accordance with cultural representations and expectations. This emotional learning would take place through two potential processes during ritual activity. On the one hand a powerful coupling process linking "uncanny" body arousals to mythological imagination captured by the highly evocative content of songs, invocations, objects and substances during ritual activity. Ritual features such as archetypality, rigidity, regularity, redundancy and spatial and temporal delimitation are propitious for eliciting and "boosting" this coupling process. On the other hand, a social referencing process through which emotional and behavioral reactions towards possessed persons act for novices as reliable indicators of how to recognize, interpret and regulate their own emotional states associated with possession. With growing familiarity with possession's conceptual and experiential background, their emotional reactions might evolve from largely undifferentiated arousal states to "orixá-specific" somatic signature and novices might become more active towards their own possession. They also demonstrate an increasing sensitivity to isolated emotional elicitors of possession as well as a better control over their emotional reaction.

Introduction

ossession¹ is probably the most intimate bodily experience of gods, spirits and ancestors in many religious traditions around the world. At the same time, its manifestations are mostly public and highly conventional, reflecting the diversity of idioms and cultural expectations as to its form and content. Despite such heterogeneity, recent research in cognitive anthropology on the

mental structures underlying the conceptualisation of spirits and mind/body interaction seem to suggest that potentially universal mental mechanisms can account for the success of possession phenomena around the world (Cohen 2007, 2008). Studying possession thus appears a tremendous challenge to both social and psychological sciences – it is at once private and conventional, cognitively constrained and culturally shaped and enacted.

Scientific studies of possession have developed rapidly since the middle of the nineteenth century² (see the Introduction). Unfortunately, social, medical, political and psychological theories are usually presented as mutually exclusive, although scholars have been prompt to recognise the manifold dimensions of possession phenomenon. More recently, however, contemporary anthropologists have started building interdisciplinary approaches to possession (Gell 1980; Smith 2001; Klass 2003; Becker 2004; Luhrmann 2004, 2007; Rouget 2006; Cohen 2007, 2008; Seligman & Kirmayer 2008; Halloy 2009; Luhrmann *et al.* 2010).³ This article follows in their steps, proposing an alternative framework to psycho-medical and socio-functional approaches in anthropology, and suggesting an approach situated at the crossroads of cognitive sciences and ethnography.

While in principle subscribing to a naturalist approach to cultural phenomena (Sperber 1996), the thesis developed here offers two necessary extensions to the mainstream cognitive approach in the anthropology of religion (Boyer 1997, 2001; Barrett 2004; McCauley & Lawson 2004; Cohen 2007, 2008). On the one hand, it argues for an analysis of the contextual conditions constraining communicative and cognitive processes (Severi 2007; Whitehouse 2000, 2004). The most valuable contribution of the cognitive approach consists in drawing the attention of social scientists to 'cognitive constraints' and their potential influence on the conceptualisation and memorisation processes of cultural representations. However, we should also recognise its difficulty of dealing with the complexity of real-life situations, where contextual factors may play a decisive role in cultural learning. On the other hand, some special and recurrent features of cultural transmission can be found not only in conceptual forms, a position defended by cognitive anthropology, but also in how cultural knowledge is embodied into distinctive bodily states, and how it is enacted in performance and the manipulation of artifacts.4 The present study embraces these two (rather neglected) dimensions by developing a cognitive ethnography,5 focused on the processes through which possession is learnt in the Xangô, an Afro-Brazilian cult in Recife. By 'cognitive ethnography', I mean a theoretical and methodological framework focused on learning processes and able to take into account and articu-

late the contextual and diachronic dimensions of learning. Cognitive ethnography can thus be seen as a way of reconciling cognitive and anthropological approaches by reconnecting cognitive processes with subjective experience by means of perception and corporeality as suggested by Csordas (1990, 1993, 1994). However, I do not share the phenomenological view which rejects 'objectivist explanations of religious experience' and sees learning as 'inadequate to account for the phenomena discussed [charismatic healing or possession]' (Csordas 1990: 31–2). In contrast to Csordas' skepticism, I will show that a cognitive ethnography of possession focused on learning processes should not be reduced to 'stimulus-response patterns' (ibid: 33) and that it can 'integrate domains of perception, practice, and religious experience' (ibid: 31) into the same explanatory framework (see also the Introduction).

The present study starts from a conclusion formulated by Rouget (1990) at the end of his authoritative work on music and trance:

In the genesis of every possession cult, and thus of every possession trance, there must have been, at origin, an emotional state lived by an individual and likely to be lived again by others, either spontaneously, or by learning. (1990: 557, my translation)

Those who had the opportunity of being in close contact with possession cults would find it difficult to ignore their emotional dimension. However, few scholars have paid close attention to it (for noteworthy exceptions, see Rouget 1990; Aubert 2004; Becker 2004). My aim here is to offer a better definition of the *type* of emotion constitutive of possession, as well as a better description of the *emotional learning process* at work in the Xangô cult, by considering the role of contextual factors (such as features of ritual action and social signals) in the shaping of emotional responses associated with possession episodes. In principle, spirit possession cannot be reduced to emotional learning, but I will argue here that learning possession means primarily learning emotions. In other words, learning emotions is a prerequisite of every (elective) possession.

Spirit Possession in the Xangô Cult⁶

The Xangô cult

The Xangô cult, an Afro-Brazilian possession cult of Yoruba origin, is located in Recife, the capital of Pernambuco state, in north-eastern Brazil. According to Bastide (1960), its name derives from the popularity of the African deity Xangô in the city. It began in Recife in the late nineteenth century. From being somewhat restrained during the first half of the twentieth century, the cult expanded

I80 ARNAUD HALLOY

rapidly throughout the city from the 1940s to the 1970s, thanks to the influence of charismatic cult leaders (de Carvalho 1987).

The social organisation of the Xangô cult is based on 'saint families' (familias-de-santo). These collective entities rely on initiatory links between their members, elaborated on the model of kinship in a biological family. The initiators are called 'saint-father' and 'saint-mother', initiates 'saint-son' or 'saint-daughter', and these co-initiates subject to the same initiator 'saintbrothers' or 'saint-sisters'. The temple (casa-de-santo or terreiro) is conducted by a saint-father and/or a saint-mother. Every initiate is potentially a future cult chief, which is why initiatory parenthood is at the core of social networks linking various temples through space and time, allowing the spread of knowledge and a constant negotiation of power and leadership (Capone 1999). Xangô members worship two categories of 'spiritual entities':7 the eguns, or family ancestors, and the *orixás* (pronounced 'orishas'), the Yoruba deities associated with natural elements like rivers, the sea and thunder - or with human activities like hunting and iron-working. Due to the influence of popular Catholicism, the word santo ('saint') is frequently used as a synonym of orixá.

Possession and ritual practice

Possession by *orixás* is highly valued in the Xangô cult, in contrast with that by *eguns*, which is expressly proscribed, since it is conceptualised as direct contact with death, and thus a potential source of danger and contamination. *Egun* possession is rare, whereas *orixá* possession is a constitutive element of ritual life. Xangô members often describe the possession experience as 'gratifying' (*gratificante*), underlining its positive personal and social consequences. On the personal side, possession by *orixás* is a sign of a relational and affective closeness between the *orixá* and its 'son' or 'daughter', leading to an intimate feeling of self-confidence and protection. On the social side, possession is a sign of the individual's election by the *orixá*, leading to an enhanced reputation in the religious community.

At least two *orixás* are ascribed to every initiate in the Xangô cult. The first is called *orixá-de-cabeça* (lit. '*orixá*-of-the-head'), and the second *juntó* or *adjuntó*, ('joined together'). Every initiate has to worship his/her *orixás* by offering them an annual sacrifice, and receiving them by possession. Every initiate can be possessed by his/her *orixás*, but possession is not a condition for initiation, nor its necessary outcome.⁹

Possession mostly happens during ritual events. It is very much to be expected in public festivals (toques) and in private ceremonies such as sacrifice (obrigação) and baths of leaves (amasî) only open to the members of one terreiro and their invited affiliates. These private ceremonies are part of the initiation process, where first possessions – called the 'birth' of the orixâ – are frequent. But they are also repeated every year for each initiate during festivals in honour of their personal orixâs. If we take into account the fact that a Xangô terreiro may cater to between a dozen and hundreds of initiates, and that initiates from one terreiro also take part in public and private ceremonies in affiliate terreiros, possession opportunities are relatively frequent.

Possession may also happen in the daily life of the initiate, usually revealing the dissatisfaction of the $orix\hat{a}$, who has decided to punish his/her 'son' or 'daughter', for example by possessing him/her at work, in a public place, etc. But extra-ritual possession, when it happens before initiation, can also be interpreted as the election of the 'child' by his $orix\hat{a}$ and, in most cases, as a call for initiation (elective possession).

In all cases, contexts of possession occurrences play a determinant role in the decision to encourage or, on the contrary, prevent a possession episode. Body treatments and collective responses may differ sharply from one situation to another. In this analysis, I will mainly focus on the most common situation of possession by *orixás*, i.e. in the context of ritual. It is during such events that the process of learning possession actually takes place.

Finally, it is worth noting that Xangô members are also aware that possession needs some kind of learning. They insist that learning possession should only take place when individuals present the first signs of an imminent possession what they call the stage of 'irradiation' (irradiação) or 'approximation' (aproximação), as we will see in more detail below. They talk about 'indoctrinating the body' (doutrinar o corpo) in order to explain the process by which 'irradiated' novices are expected to learn how to dance, and to behave according to their orixá's archetypal and aesthetic prerequisites. On the other hand, another discourse claims that *orixâs* are omniscient, and this would explain why some individuals - among them young children - 'just don't need to learn anything', as many initiators explained to me. Such a discourse is reinforced by the idea that some individuals, because of their 'blood' inheritance, are predisposed to entertain a privileged relation to the cult knowledge and to orixás, to such a degree that even initiation would not be necessary (Halloy 2010). But what interests us here is that Xangô members do not consider that the 'irradiation' stage of possession involves any learning process. If they have a precise idea

of *when* and *how* possession should occur, 'irradiation' is simply not a matter of learning, but the result of the willingness and 'acting' (*atuação*) of an *orixá* on the body and mind of its child. In this paper, I will try to show that this first stage of possession is also, in my view, the result of a largely implicit *emotional learning process*, characterised by specific 'gut reactions' and their expressive attunement to cultural expectations.

Possession and Emotions

The idiom of possession

Xangô members distinguish between three stages of possession, based on a set of behavioural patterns and psychosomatic states: first, the 'irradiation/ approximation' (*irradiação/aproximação*) stage that precedes the 'full' possession state or 'manifestation' (*manifestação*). It is usually recognisable by an 'introspective' pause in movement (while singing and/or dancing), and a set of bodily changes that will be examined later in more detail. Secondly, the 'manifestation' stage, characterised by the 'full presence' of the *orixá*, and which expresses itself through dance and archetypal movements and behaviour. It should ideally lead to loss of consciousness and to amnesia. The third stage, called *axerado*, refers to the transitional state between possession and a return to normal. Those in an *axerado* state frequently look as if psychologically 'absent' and/or physically groggy; they may cry or laugh without apparent reason.

Within this general, three-stage classification of possession, a rich vocabulary tries to capture the distinct bodily states associated with the possessed/ orixâ interaction according to their quality and intensity. Xangô members say that the orixâ 'manifests himself' (se manifesta) in his son or daughter, or that he 'takes' (pega), 'embodies' (incorpora) or 'comes down' (baixa). One can frequently hear that the 'child' 'receives' (recebe) his/her orixâ or, more generally, that the orixâ 'acts upon' (atua) his 'child'. This set of expressions underlines the imperious action of the orixâ and the passive attitude of the possessed person.

While this first lexicon depicts the 'manifestation' stage, a second set of words and expressions emphasises the somatic states associated with the 'irradiation' stage. A frequently used spatial metaphor says that the *orixâ* 'gets close' to his 'child' (*se aproxima*¹⁰). He can do this only slightly (*de leve*) or, on the contrary, suddenly and/or violently, 'nailing down' [*se cravar*] his 'child' or 'taking him/her in one go' (*pegar de vez*). But independently of the way the encounter between the *orixâ* and the body of his 'child' takes place, the

closest the *orixá* gets to his 'child', the more intense and vivid the somatic changes.

Based on Xangô members's possession self-reports, I will show in the following section how they conceptualise the $orix\hat{a}/materia^{TI}$ interaction as a dynamic continuum of changes in the body. If, on the one hand, manifestação is characterised by the full presence of the $orix\hat{a}$ in the body of his 'child' – leading (ideally) to the latter's loss of consciousness – irradiação, on the other hand, highlights a large variety of somatic states, varying from shivering and goosebumps to irrepressible trembling, heat waves, outbursts of crying, etc.

Self-reports of possession

One self-report is by Maria-Helena, a young saint-mother, 'daughter' of Yansã¹², describing her first *aproximação*:

I felt an emotion, something like that, an emotion that made me feel like wanting to cry ... But I was not really 'irradiated' ... I did not really feel the <code>orixâ</code>. When I did come to feel [the <code>orixâ</code>] it was in Paulo's <code>terreiro</code>, in my grandfather's house. It was Oxum's¹³ celebration. They started to sing for Yansã and I felt such lightness [<code>leveza</code>], and that's it. Then I fainted [lit. 'I lost my senses'] ... But I was not 'manifested'. I felt as if I was fainting ... I felt my blood as if my blood pressure was going up or down ... I just know that I felt my body fainting ...

What strikes one in this description, is the emphasis on 'feelings', but also Maria-Helena's difficulty to describe them more precisely. She starts by saying she felt an emotion 'that made her feel like crying', but immediately specifies that it was not really an 'irradiation'. And a little later she describes what she considers to be an 'irradiation' through body arousals such as 'lightness', 'blood pressure going up and down' or 'losing her senses'. Maria-Helena's account also clearly expresses two fundamental elements of the possession experience: the *passiveness* felt by the possessed – something 'happens to' them – and the *lack of control* over the changes that occur in their own body.

Kleyde, a 45-year-old initiate, daughter of Xangô, remembers her first 'irradiation' episode:

I became sad ... My heart accelerated, a heat wave invaded my torso ... I really believed I was about to die ...

In this short account, another constitutive element of many irradiation experiences is clearly expressed: they are mythologically informed. Kleyde is a

'daughter' of Xangô, the *orixâ* of thunder and also associated with fire, well-known for his impetuous character. As with many initiates of this *orixâ*, he manifests his presence in their body through 'heat', sometimes expressed as 'heat waves' or, as another of his 'daughters' once told me, as a sensation of a 'fire inside the torso' (*fogo dentro do peito*). But bodily arousals associated with the 'irradiation' stage are not crystallised experiences: they are context-sensitive, and may change according to the initiate's familiarity with possession manifestations and conceptual background. Tarcísio, a young adult and experienced initiate, complained about the inappropriate occurrence and the stagnation of his bodily arousal during the 'irradiation' stage:

I frequently feel intense shivers [arrepios muito fortes], but unfortunately for other saints than mine! ... And my orixá, when he gets close [se aproxima], he doesn't act totally [ele não atua totalmente] ... I just have dizzy spells [arrepios] and things like that ... Until today, I've never been totally manifested ...

In the last testimony presented here, Yguaracy, an experienced priest, 40 years old, comments on the first 'irradiation' of his *junto*:

I felt it was not an 'approximation' of my mother Oxum [Yguaracy's main <code>orixà</code>]. It was an 'approximation' of my father Orixalá¹⁴ [his <code>junto</code>] ... It was something different ... And it took time for me to realise what was happening in my own cult house, because I asked myself: 'Ave Maria, do I have Parkinson's disease?' Because my muscles started trembling ... It was something different ... And I think ... I'm sure that it was the first time I'd felt something like that with Oxalá¹⁵ ...

Through these first person testimonies, we learn that *orixás* 'act upon' (*atuam*) the bodies of their 'children', provoking qualitatively distinct bodily sensations from chills/shivers/goose-bumps (*arrepios*) to changes in heart rate and respiration, trembling, dizziness, prickling in the hands and feet, uncontrollable shivering, loss of balance, hot flushes, 'blood boiling', wanting to cry, 'tears in the eyes', raising or decreasing blood pressure, sweating, 'losing one's senses', visual and/or auditory disturbance.

We should also notice that in the Xangô cult possession is not understood as a unique and monolithic state, but rather as a continuum of mental and bodily states oscillating between consciousness and unconsciousness, and between feeble and intense somatic changes varying from vague to specific sensations. In such a conceptual framework, profound loss of consciousness and total amnesia refer to an ideal state – and also a 'theologically correct' discourse

(Barrett 2004: II) – associated with the 'full presence' of the *orixá* into his child's body, but not to the 'irradiation' stage, which is much more allotropic and dynamic.

I return now to my initial question: re emotions constitutive elements of possession – and more specifically of the 'irradiation' stage?

Possession as 'uncanny' gut feelings

I will start by arguing in favour of a 'Jamesian' theory of possession. In essence, the position taken by neo-Jamesian theorists of emotion is that emotions are, in one way or another, constituted by changes in body state responding to evoked thoughts or perceptions of the direct environment (Damasio 1999; Prinz 2004; Robinson 2007). As William James argued more than a century ago:

If we fancy some strong emotion, and then try to abstract from our consciousness of it all the *feelings of its characteristic bodily symptoms*, we find we have nothing left behind, no 'mind-stuff' out of which the emotion can be constituted, and that a cold and neutral state of intellectual perception is all that remains. (1884: 193, my emphasis)

James's argument about emotions is, in my view, directly relevant to possession: possession cannot be defined without considering somatic changes as one of its constitutive elements. In other words, I consider emotional arousal as a precondition for possession.¹⁶ The first argument to which I will come back in the conclusion is theoretical: we cannot abstract emotions from the conceptual framework of spirit possession if we seek to explain its success in so many religious cultures throughout the world. My second (and main) argument in favour of this hypothesis is ethnographic: specific bodily arousals are core elements of possession, and seem to correspond, as I will show in the remaining, to what perceptual theorists of emotion call 'gut reactions' or 'gut feelings'.

Gut reactions correspond to what contemporary philosophers Robinson (2007) and Prinz (2004) respectively call 'affective/non-cognitive' and 'embodied' appraisals, emphasising that gut reactions are spontaneous, 'crude' or 'dirty' body reactions that need a further process of cognitive evaluation in order to be more precisely identified. Following Judith Becker's hypothesis, I suggest that gut reactions at the core of possession are of the same kind as musical or aesthetic emotions:

Musical emotion is still rooted in basic physiological arousal felt in the body and displayed by tears, chills/shivers, goose bumps, palpitation of the heart, and perspiration ... (2004: 52).

But the similarity with aesthetic emotions has its own limitations. First, if music plays a central role in triggering and regulating possession (Rouget 1990; Becker 2004), many other factors such as smells, flavours, touch, images, sounds, body techniques, memories, evocations ... are potential candidates for provoking the initial emotional reaction associated with possession. Secondly, Becker's description of musical emotions does not exactly match the description of the 'irradiation' stage in the Xangô cult, when she argues that musical emotions are selectively focused on some form of happiness or sadness, or mixed emotions such as 'bitter sweetness' or 'beauty and pain' (ibid: 52). Gut reactions associated with the 'irradiation' stage are not of this kind, nor are they ordinary emotional reactions. What Xangô members are dealing with could be described, in Levy's (1973: 151) terms, as 'uncanny feelings'¹⁷, such as particularly intense 'goose-bumps' or persistent 'shivers' as well as unusual and largely undetermined combinations of feelings, leading people to give confused and changing descriptions (see Maria-Helena's self-report above). Thirdly, and even more importantly, what gives the affective appraisal of possession its special flavour is the possible consonance between bodily sensations and the mythological identity of the *orixá* supposed to be acting upon the body of his 'child'. As both Kleyde and Yguaracy state sensations associated with their orixá's 'approximation' match their *orixâ*'s mythological trait: 'heat waves' for Xangô, the orixá of thunder, trembling (and often pain) for Orixalá, the old orixá. Fourthly, the consciousness of 'irradiated' persons' is, in many cases, altered by other psychological states such as dissociation (Lapassade 1997; Budden 2003; Seligman and Kirmayer 2008), hypnotic states (de Heusch 1993; Hell 2008) and absorption, 18 which demand of individuals that they 'attend more carefully to their inner sensations and may intensify a detachment between inner sensations and an external world' (Luhrmann 2007: 99).

Far from being contradictory, the difference between 'crude' / undifferentiated (like intense 'goose-bumps' or persistent 'shivers') and 'orixâ-specific' arousal states (like heat waves) reflects, in my view, two distinct moments in the development of the emotional process of learning possession. As the possession idiom and self-reports suggest, possession in the Xangô cult starts with some kind of intense emotional arousal. Later on, once participants become increasingly familiar with possession episodes and with the conceptual and

mythological background, gut feelings may become more and more 'enculturated', leading to *orixá*-specific 'somatic signatures'. In the second part of the paper I will focus on the learning process underpinning such bodily enculturation. My claim is that emotional responses constitutive of the process of learning possession in the Xangô cult become more acutely discriminated, classified and generated thanks to a process of coupling between the affective and cognitive appraisals which take place during ritual activity. To defend this hypothesis, we need to go a step further in our ethnographic description and define more precisely what kind of emotional elicitors trigger possession in the Xangô cult, and how these are articulated within the pragmatic conditions of ritual action as well as in the imaginative process mobilised during possession episodes.

Emotional learning

In October 2002, I attended an *amasî* of an *Ode* initiate – the *orixâ*-hunter – at the *terreiro* of Paulo, a renowned saint-father, in João Pessoa. When Paulo started to sing for *Ode*, after preparing the decoction with fresh leaves, my hair stood on end and I felt an intense and lasting shiver. An old initiate who was standing by my side put her hand on mine, smiled and told me: 'It won't take long, it won't take long ...'

This episode, even if apparently anecdotal, is an interesting starting-point for our reflection, since it is paradigmatic of the process of learning possession in at least two ways. As I will show, it highlights the tight bond between 'approximation' and ritual features, and points to the crucial role of social environment in the self-identification and regulation processes in possession. In other words, participants at the periphery of ritual action – mere 'observers' – are exposed, even in a softer manner, to the same stimuli inherent to ritual features, and to the same 'social signals' than initiates directly involved in the ritual. A sacrifice episode will help us demonstrate these two dimensions of learning possession.

Obrigação for the Ogun of Tássa (May 2003)

On her knees in front of her *orixâ*'s altar, Taísa, a 14 year-old initiate, presents the first signs of an 'irradiation' at the beginning of the sacrificial song: staring into space, her chest vibrating evenly, discreetly rocking to and fro, with a grave and severe facial expression typical of many male *orixâs*. When the animal's blood was poured over her head and shoulders, her whole body shivered and started to

tremble intensely. Then her initiator invited her to hold the animal's severed head by herself. She obeyed with difficulty, as if she had - at least partly - lost control of her own movements. Her mother, who was standing at her side, helped her in her task. After adding salt and palm oil to the cut throat, the initiator asked Taísa to drink the blood from it. At first she touched the warm flesh with her lips half-heartedly, but within a few seconds, she behaved more enthusiastically until she avidly plunged her face into the meat. Such a change in Taísa's behaviour was warmly welcomed by those present, who saw in it an intensification of the orixá's 'acting' (atuação) upon his 'daughter'. The initiator then switched from the sacrificial to the *orixâ*'s song repertoire. The initiate responded instantaneously: her head shook violently from side to side and the limited motion of her torso became powerful and rhythmic, pulsating at the same cadence as the audience's clapping and the small percussion instruments that had just entered. From that moment on, people began joyfully celebrating the presence of Ogun, who would be invited - after finishing the sacrifice - to stand up and dance facing his initiator for a few minutes, before being released until the public ceremony next day.

The ritual unfolding of possession as described in this *obrigação* episode brings to light recurrent patterns of ritual features which play a central role in the triggering but also in the cognitive framing of emotional responses associated with possession episodes.

Ritual features and 'perceptual attractors'

Among the 'obvious' features of ritualised behaviour (Rappaport 1999), as recently described by Liénard and Boyer, three are directly relevant to the present case study. First, ritualised actions are literal and rigid: 'What is important is that people strive to achieve a performance that matches their representation of past performances, and that they attach great emotional weight to any deviation from that remembered pattern' (2006: 816). I see two distinct characteristics in this first feature: there is a correspondence with what Humphrey and Laidlaw (1994) call 'archetypality', meaning that ritual actions are 'perceived as discrete, named entities, with their own characters and histories' (1994: 89). And there is also a high degree of stability of ritualised actions – at each occurrence actors tend to perform them in a very similar manner, and their organisation is largely constrained by a quite rigid and complex ritual syntax (Lawson & McCauley 1990) or script (Boyer 1997).

The second feature is the redundancy of ritualised actions. As already stressed by Lévi-Strauss (1971), this redundancy is a constitutive feature of

such actions: the same actions or gestures are sometimes repeated a number of times. I would add that if ritualised actions and gestures are usually redundant, they might also be regular, meaning that the whole ritual is frequently repeated in a determined period of time, as is the case with private and public ceremonies in the Xangô cult.

The third 'obvious' feature of ritualised actions is that they are spatially and temporally delimited: within a determined space and time, ordinary behaviours are 'suspended', and 'particular acts' can be thus performed.

My claim is that recurrence in ritual behaviour is accompanied by recurrence in the unfolding of possession episodes. More precisely, the three features of ritual action mentioned above are propitious for eliciting possession, thanks to 'perceptual attractors', i.e. perceptions that have a highly emotional and evocative potential. Among perceptual attractors in the Xangô cult we find blood and amasí? with their singular smell, taste or tactile sensation when they are poured over the head and shoulders, but also specific bodily techniques such as kneeling down in front of the orixâ's altar as well as invocations and songs for the orixâs. All these elements of ritual action are propitious for triggering powerful inferential and emotional responses in initiates by coupling sensory stimulation (tactile, auditory, kinesthetic, visual, olfactory, vestibular and gustative) – the 'sensory capture' with representations and images about possession and orixâs' attributes and mythological traits (the orixâ's identity, his character and psychological profile, what he did to humans and to other orixâs in myths, etc.) – the 'imagination capture'.

In the emotional learning process at work in possession, perceptual attractors can be even more powerful or efficient because they remain 'invisible' to initiates. One can provide at least three reasons for this, starting with the large and dynamic diversity of emotional elicitors (smells, rhythmic patterns, songs, bodily treatments...etc.) present in most rituals where possession is expected (amasí obrigação, feitura, toque). This diversity of ritual stimuli as well as the 'sensory overload' (Cox 1969: 110, cited in Gell 1980: 233) it may entail, prevent a clear apprehension of what actually triggers the emotional response. A second reason for the invisibility of emotional stimuli may result from the type of emotional reaction involved. 'Embodied appraisals' (Prinz 2004) or 'affective priming' (Zajonc 1980; Murphy and Zajonc 1993) happen very fast, automatically and below the threshold of conscious awareness, triggered by partial and incomplete perceptual information rather than clearly conscious representations (LeDoux 1996). In other words, pre-attentive or unconscious stimuli (Leventhal and Scherer 1987) would play a central role in eliciting the gut

reactions associated with the initial stage of possession. The invisibility of emotional elicitors might also be reinforced by a *shifting of attention* from external to internal factors, which may happen in two ways: through 'absorption' which seems constitutive of possession phenomena (Luhrmann 2004; 2007; Luhrmann *et al.* 2010), and makes the 'irradiated' person focus on his somatic and mental states, not on environmental features; or through 'event coding' of possession (Frijda & Mesquita 1997) conceptualised as the *atuação* or *aproximação* of an *orixá*, which makes those 'irradiated' understand and evaluate their own possession according to the intensity and quality of their bodily sensations.

Because of their largely invisible nature, perceptual attractors reinforce the 'obviousness' and 'reality' of possession by giving it a bodily and emotional foundation, and at the same time they trigger a powerful 'evocative process' (Sperber 1974) – the 'imagination capture' – by coupling the sensations and bodily states – the 'sensory capture' – with potential cultural meaning and expectations.

More specifically, imagination capture might lead to what Rouget (1990) calls 'identification' with the deity thanks to the highly evocative content of an orixá's song and invocations. As de Carvalho (1993) convincingly demonstrates, Xangô musical repertoire is composed of two functional groups of chants that correspond grosso modo to two distinct phases of the ritual process: 'functional songs', that are above all structuring elements of ritual syntax, and 'songs for the *orixás*', performed during bodily treatments of the initiate in private rituals as well as during public festivals. Songs for the orixás, according to de Carvalho, are 'much more emotional, dynamic, and energetic, especially during trance occasions, when the presence of gods is celebrated with joy' (ibid: 205) unlike functional songs that are performed with some kind of 'musical indifference', characterised by its distance 'from the world of emotions that each ritual creates' (ibid). Furthermore, as Segato stresses, it is worth noting that Xangô members also discriminate each orixá's repertoire from the others 'for the state of mind it generates and for the emotions and sensations it triggers when it is performed' (2000: 237). As we can see in the obrigação episode above, the triggering or intensification of possession episodes frequently happens when the initiator shifts from the functional repertoire to the *orixá* repertoire. Consequently, songs for the *orixás* not only provide a symbolic content of the ritual by suggesting identification with the *orixá*, but are also able to trigger or intensify the initial emotional response.

Partly in the Yoruba language, partly in Portuguese, the invocation of an *orixá* is also highly evocative and emotionally coloured in the Xangô cult,

because of its crucial role in 'calling' the *orixâ*. When possession is expected, the saint-father will start invoking his initiate's *orixâ*, summoning him to 'come down' and 'take' his/her 'child'. Like *orixâ*'s songs invocations may provoke or intensify the initial body arousal and, additionally, they might also inform the possessed on the unfolding of his/her own possession. In other words, they are part of a series of social signals communicated by the initiator and the audience for interpreting and regulating what is happening (emotionally) to the 'irradiated' person.

'Social referencing' and emotional regulation

'Social referencing', the second way by which meaning is conferred to sensory capture, may be defined as a complex skill in which another person's emotional expressions and behaviour can be used as information about mostly ambiguous external events, involving 'an active and complex process of appraisal and judgment rather than a merely passive contagion of emotion' (Camras & Sachs 1991: 27-8, cited in Walker-Andrews 1997: 444). During ritual action, as we can clearly see in the obrigação for Ogun, when a person shows the first signs of 'irradiation', everybody starts looking at him/her, calling the *orixá*, enthusiastically singing and dancing so as to intensify the 'approximation' of the *orixá*. The initiator, more than anyone else involved, focuses his attention and conducts the initiates' behaviour by calming them down or, on the contrary, by intensifying the 'irradiation' through his own affective and bodily commitment. Social referencing thus plays two major roles in learning possession. It is mainly thanks to the reactions of the audience toward him that the 'irradiated' person learns to appraise his own somatic signals correctly and to distinguish between common emotions and the somatic signs of an *aproximação*. Social referencing also acts as an emotional regulator: the 'irradiated' persons learn to react appropriately to what is happening 'inside' them. This has been called the 'canonical manifestation' of the emotional regulation: 'first, one has an emotion, then one regulates it' (Campos et al. 2004: 385). The following episode about Rafael, an initiate around 25 years old, clearly shows this regulation process at work during ritual activity.

The sacrifice that day lasted more than 6 hours. Everybody was exhausted. When Paulo, the saint-father started the Iyanlé for Xangô, he decided to go directly to the orixá's repertoire, showing his wish to see Xangô 'coming down'. Musical instruments

were brought in and, copying the old saint-father's enthusiasm, the assembly threw its last energies into singing and dancing for the 'beloved <code>orixâ'</code>. Nina, an experienced initiate, 'received' her Xangô, who started to dance vigorously. Many other initiates presented the signs of 'irradiation'. Among them, Rafael, son of Xangô, who sat on a chair and started to cry ostentatiously. Within half a minute, before his saint-father was able to calm him down, he stood up violently from his chair and started to dance wildly, and in a quite unusual way: he alternated between wide, powerful and uncoordinated movements, moving fast across the room, and almost complete immobility, during which he was still crying and shouting repetitively but also recovering his breath. However, something was wrong with Rafael's Xangô: the two young drummers were obviously failing to take this 'manifestation' very seriously, exchanging ironic smiles. His saint-father finally managed to calm him down, and took him into the <code>peji</code>, the room with the <code>orixâ</code>'s altars. He returned to the main room a few minutes later, as if nothing had happened.

How did Xangô members interpret Rafael's possession?

According to the young musicians accompanying the ritual, there was no doubt about it: 'It was an <code>èkê!</code>', a simulated trance. For one of them, the <code>orixâ</code>'s unusual behaviour (extreme agitation, alternately walking and stopping, repetitive shouts), his rapid exhaustion and Rafael's reappearance after only a few minutes without any trace of the <code>orixâ</code>'s passage inscribed in his face or body, as is to be expected after violent possessions, confirmed his impression of a simulation.

But the most interesting interpretation came from Júnior, a 25-year-old saint-father. He simply told me: 'He [Rafael] was filled with enthusiasm, so it was not well resolved ...' (Se entusiasmou, então ficou mal resolvido ...)

According to Júnior, the Rafael episode was not a 'false trance', but involved bad emotional regulation. In other words, he recognised Rafael's 'manifestation' as legitimate, while also emphasising that Rafael had not adjusted appropriately what he actually felt – his 'uncanny' feelings – to what was (culturally) expected of him in terms of expressive behaviour. Instead of throwing himself desperately into the dance, he should have stayed calm, adopting a more introspective attitude, waiting for an intensification of his *orixâ*'s *atuação*. His saint-father's reaction identified the maladjustment of the initiate's emotional state. But the issue was not only about proper (normative) behaviour. As we can observe in this particular case, possession learning is not just about learning how one should behave – the 'display rules' (Ekman & Friesen 1969) – or how to feel in certain contexts – the 'feeling rules' (Hochschild 1979), – but also how to

react to such feelings appropriately (Campos et al. 2004; Eisenberg & Spirad 2004; Spinrad et al. 2006).

The dynamics of perceptual attractors

The process of emotional learning in possession is not crystallised once and for all: it changes as the possession idiom and episodes of possession become increasingly familiar. In this last section, I describe a tendency observed in the development of emotional expertise, as well as certain potential strategies developed by the experienced possessed in order to provoke or intensify their own possession.

By following the learning process of various Xangô members' during my fieldwork in Recife, and comparing cult leaders' and novices' expertise in possession, I identified two tendencies in the evolution of their sensitivity to emotional elicitors leading to possession. The emotional response to stimuli seems to *improve with time* – possession on the part of experienced initiates requires less intense sensory stimulation than that of novices. It might well be triggered by just one element present in the contexts of first possessions, or even, as we will see, by imagined or remembered situations. At the same time, such individuals develop better *control* over their own possession through 'auto-induction' techniques or, on the contrary, by resisting their *orixâ*'s *manifestação* (even if only temporarily).

The convergence of these two tendencies – increased sensitivity to isolated emotional elicitors and better control over emotional reaction - might look contradictory at first sight, but it is not. It reveals, in my view, a growing perceptual expertise, as well as an increasing mastery of regulating emotion during possession. Such emotional self-regulation helps us understand, for example, why the possession of cult leaders and experienced initiates occurs with such fluidity and, most of the time, in expected moments. Many external factors can intervene in the development of expertise in possession. The age of the first contact with possession is very important. The youngest person possessed that I was able to observe was 6 years old in the Gege cult.²⁴ His orixá - Obaluayé²⁵ - was impressive and his possession convincing. The expertise of religious leaders might also play a decisive role: some develop a particular talent for triggering and developing adequate emotional reactions in others: vocal inflexions while calling the initiate's orixá, authoritative staring, repetitive and/or specific gestures or body treatments are all potential elicitors of the initial arousal ('irradiation') stage. Some experienced ilu26 players are also

well known for being skilful inducers of possession thanks to their musical abilities.

However, we can also identify at least two 'internal' factors for triggering possession. Even if it is hard to evaluate precisely how active people are in their own possession, observations and self-reports by experienced initiates indicate two closely related ways of triggering and/or enhancing the arousal of possession.

The first way is a cognitive factor. Luizínho, a young saint-father, once told me:

When I dance for Xangô, I see my mother with her *orixá* on my side. I do it and these images come to me, of my mother with Xangô, and then I ask him a lot of good things for her.

Paulo, the patriarch of the saint-family I studied, emphasised the affective dimension of such images:

To sing for the $orix\acute{a}s$ is not only singing ... It is singing and having emotions ... When I sing I think of my father, my grand-father [both renowned cult leaders] ... And my entire body is shivering! This shivering is so strong! It's a strong emotion ... And it is not [because] the $orix\acute{a}$ [is] close to me ... It's [just] me thinking about my father ... 27

Luizínho's and Paulo's reports underline the possible role played by *imagination* or, more precisely, by emotional memories in triggering or intensifying the initial emotional response to possession. But they also suggest that such emotional memories are themselves embedded in bodily techniques such as singing and dancing. My observation of initiates during public festivals tends to support this idea; we can frequently observe that initiates get more intensely involved in singing and dancing when the cult leader starts to sing for his/her personal *orixâ*, i.e. the ritual sequence when their possession is actually expected. We can thus infer from these recurrent situations that increased bodily commitment in dancing and singing might also intensify the absorption and emotional processes involved in possession, by enhancing the coupling between kinaesthesic sensations – the sensory capture – and imagination.

Conclusion

On the basis of this ethnographic analysis, I will advance at this point several theoretical claims about emotions as constitutive elements of possession.

First, if the emotional states at the origin of possession episodes are 'uncanny' gut reactions, as I argued here, cultural influence might go as deep as to 'stamp' largely spontaneous emotional responses. As Mauss (1936/2003) and many of his successors (Bourdieu 1972; Parlebas 1981; Warnier 1999; Crossley 2004; Wacquant 2005) have argued, the 'habits of the body' are social-biological-psychological constructs. The present case study is an invitation to enlarge this category from sensory-motor or 'kinesthesic socialisation' (Bateson 1975: 152) to deeply rooted bodily states such as gut reactions. These 'somatic signatures' of the *orixá*, as I call them, are not prior to cultural categorisation as they directly contribute to the 'identity conditions of our emotions' (Prinz 2004: 143). In the case of the Xangô cult, learning possession means first of all learning to know how it feels like to be 'irradiated' by an orixá and to react appropriately to such emotional reactions. Thus the 'socially informed body' (Bourdieu 1972/ 2000) is also an emotional body, undermining the evidence of a clear frontier between biological and cultural dimensions of emotional learning in real-life contexts (Wikan 1990; Desjarlais 1992; Leavitt 1996; Surralès 2003; Gieser 2008).

The second implication, as already suggested by Levy (1973), is that emotional reactions are not necessarily felt and expressed through explicit emotional words or categories. If gut feelings, in the present case, are triggered by the action of a deity upon one's body, the appropriate cultural idiom might be largely metaphorical, translating the quality and intensity of body sensations associated with possession into 'physical' or 'proxemic' terms (*irradiação* or *aproximação* respectively).

A third theoretical implication exposes the limits of the cognitive approach in anthropology, as argued in the introduction to this article. In this ethnographic study I underline the pivotal role of ritual practice in triggering and shaping emotional reactions associated with possession. I also delineate two processes potentially lying at the core of this mechanism: a coupling process between sensory and symbolic captures, spurred on by specific features of ritual action such as archetypality, rigidity, redundancy, regularity, spatial and temporal delimitations, and a social-referencing process through which emotional and behavioural reactions towards 'irradiated' persons act as reliable indicators of how to react to emotional states associated with possession. As a consequence, one could argue that religious practice contributes in an essential manner to cultural transmission by anchoring cultural ideas about possession in deeply rooted emotional reactions as well as in social interactions. If one wishes to provide a 'synthesised explanatory account of spirit possession' (Cohen 2007: 96), one should take into account that possession is lived through patterns of

affects, percepts and interactions which along with the conceptions of possession that cognitive approaches have rightly identified (Cohen 2007, 2008) are good candidates for explaining its wide success around the world.

A fourth implication refers to the importance of a diachronic approach to processes of learning possession. As I suggest in this article, Xangô members might become more active by triggering or intensifying their own 'irradiation' thanks to active affective recollection and/or intensification of body commitment in ritual action. This requires long-term involvement with Xangô rituals, and increasing familiarity with the possession experience and its mythological background. At the perceptual level, more experienced participants demonstrate a growing sensitivity to isolated emotional elicitors, as well as better control over their emotional reactions. At the emotional level, their bodily reactions seem to evolve from largely undifferentiated arousal states to 'orixá-specific' somatic signatures. Finally, as illustrated by Rafael's episode, a necessary step in the process of learning possession consists in correctly evaluating and adjusting emotional responses to highly conventional and expressive behaviour.

As I have showed in this paper, the process of learning possession in Recife's Xangô cult offers a striking example of the close and dynamic interaction between thinking and feeling and of the psychological and pragmatic features of learning contexts. It puts forth a novel approach, cognitive ethnography, which brings together the naturalist and ethnographically informed approaches to culture.

Acknowledgements

I am very grateful to Vlad Naumescu, Joël Candau, François Berthomé and three anonymous reviewers for Ethnos for many useful comments and criticisms of earlier drafts of this paper.

Notes

- I. My use of 'possession' in this article will refer primarily to 'possession trance', as it is defined by Bourguignon (1976). See the introduction to this special issue for an historical and epistemological discussion on possession studies.
- 2. In Brazil, academic interest in possession started at the end of the nineteenth century with Rodrigues's work (1900), which initiated a psycho-medical approach developed up to the end of the 1930s by Ramos (1934), Querino (1938), Cavalcanti (1935) and Fernandes (1937), for whom trance-like phenomena were mostly identified with psycho-pathological states. This approach suffered a serious setback when influential culturalist Herskovits (1943, 1958) emphasised the normal, cultural character of religious possession. Most anthropologists studying Afro-Brazilian cults follow this line, among them Bastide (1958) and Ribeiro (1950–51, 1978), both of whom insist on the socially adaptive character of possession. Contemporary

studies explore dimensions of possession from diverse perspectives: post-structural (Goldman 1987), socio-economic (Motta 1993), sociological (Ortiz 1990), psychological (Augras 1983; Segato 1995; Lepine 2000), ethno-musical (de Carvalho 1993), socio-political (Dantas 1982, 1987; Maggie 1988; Boyer-Araujo 1993; Capone 1999), phenomenological (Wafer 1991), socio-historical (Johnson 2002) and cognitive (Cohen 2007, 2008).

- For a brief overview of original approaches to possession in recent anthropology, see our introduction to this special issue.
- 4. I develop this last dimension in a forthcoming paper (Halloy 2012).
- 5. First coined by Hutchins (1995), the term 'cognitive ethnography' is currently used to define a specific way of thinking about cognition in a situational and distributed framework, with a particular interest for spaces inhabited by tools and material devices (Hollan et al. 2000)
- This research draws on first-hand ethnographical data, gathered during 14 months of fieldwork between July 2001 and September 2003.
- The vernacular expression 'spiritual entities' designates all the spiritual beings present in Afro-Brazilian religions.
- 8. Many Xangô temples also worship 'spiritual entities' (Exus, Caboclos, Mestres etc.) from the Jurema cult, a well-liked and quite popular Afro-Amerindian cult in Recife. In the saint-family I studied, however, Jurema and Xangô are strictly separated in time and space, the former remaining at the margins of candomblé which is strongly inscribed in a prestigious kinship sustained by an 'agnatic' conception of transmission (Halloy 2010). For these reasons, my analysis will focus on possession by African deities.
- 9. "Contrary to other modalities of Afro-Brazilian cults (Verger 1957; Bastide 1958; Elbein dos Santos 1975; Vogel *et al.* 1993; Vatin 2005), almost no explicit teaching takes place during initiation in the Xangô cult. What novices are concretely exposed to is an intense impregnation process of what makes the materiality of gods (sensations, emotions, interactions with persons, substances and artefacts), oriented towards the transformation of their sensitive experience of the spiritual world (Halloy 2005).
- 10. This spatial metaphor also connotes an affective closeness between the child and his divinity, underlining the 'intimate' and affective nature of the relationship between the *orixâ* and his 'child' (Opipari 2004; Halloy 2007, 2009).
- II. When referring to possession episodes, Xangô members usually designate the initiate's body by the expression 'material' (materia).
- 12. Yansã is the goddess of storms and wind.
- 13. Oxum is the goddess of soft water and of fertility.
- 14. Oxalá is an old orixá, sometimes considered as the father of all orixás.
- 15. Orixalá and Oxalá are synonyms in the Xangô cult.
- 16. In this paper I will not discuss the cases of 'false' possessions, which are part of most 'elective'-possession cults (Leiris 1958). My point here is that most good 'pretenders' in the Xangô cults are also 'possessed for real', because one needs first to learn what a real possession is in order to simulate it accurately.
- 17. 'Uncanny feelings' can be defined as a type of feeling specific to the context of the 'unknown', the 'strange' or at least the unusual (Levy 1973: 151).

18. "Absorption" is best understood as the mental capacity common to trance, hypnosis, dissociation, and much other spiritual experience in which the individual becomes caught up in ideas or images or fascinations' (Luhrmann et al. 2010: 75).

- 19. A perceptual attractor can also be defined as a perceptual salience associated with semantic elements and emotional intensity.
- 20. Amasí or agbó designates the plant decoction prepared during the amasí ceremony.
- 21. In a seminal article, Gell (1980) suggests that 'assault on the equilibrium sense' in religious practices of the Muria is a central 'psycho-physiological mechanism' leading to possession.
- 22. I borrow this expression from Hell (2008: 20), giving it my own interpretation.
- 23. Ritual sequence of food offering for Xangô.
- 24. The Gege cult is another Afro-Brazilian modality of cult in Recife.
- 25. An *orixá* healer, Obaluayé is also associated with skin diseases and land (*terra*).
- 26. Ilu means 'drum' in Yoruba. In the Xangô cult, powerful rhythmic patterns are played on three ilus, the bass one improvising in time with the orixâ's dancing.
- 27. Paulo is not allowed to be possessed because he is a *babalaô*, an oracle expert in the Xangô (Halloy 2010). Paulo's case is particularly interesting because it shows how very similar emotional response to similar events and situations can be interpreted and treated within the same cult in distinct ways according to the social status of the affected person.

References

Aubert, L. 2004. Les Feux de la Déesse. Rituels villageois du Kerala (Inde du Sud). Lausanne: Payot.

Augras, M. 1983. O duplo e a metamorphose. Petrópolis: Vozes.

Barrett, J. 2004. Why Would Anyone Believe in God? Cognitive Science of Religion Series. Walnut Creek: Altamira Press.

Bastide, R. [1958] 2000. Le Candomblé de Bahia. Transe et possession du rite de Candomblé (Brésil). Paris: Plon.

—. 1960. Les Religions africaines au Brésil. Paris: Presses universitaires de France.

Bateson, G. 1975. Some Components of Socialization for Trance. Ethos, 3(2):143-155.

Becker, J. 2004. *Deep Listeners. Music, Emotion, and Trancing.* Bloomington and Indianapolis: Indiana University Press.

Bourdieu, P. 1972/2000. Esquisse d'une théorie de la pratique. Paris: Seuil.

Bourguignon, E. 1976. Posssession. San Francisco: Chandler & Sharp Series in Cross-Cultural Themes.

Boyer, P. 1997. La religion comme phénomène naturel. Paris: Bayard.

—. 2001. Et l'homme créa les dieux. Comment expliquer la religion. Paris: Robert Laffont.

Boyer-Araújo, V. 1993. Les traditions risquent-elles d'être contaminées? Paradigmes scientifiques et orthodoxie religieuse dans les cultes de possession au Brésil. Journal de la société des américanistes, 79:67–90.

Budden, A. 2003. Pathologizing Possession: An Essay on Mind, Self, and Experience in Dissociation. *Anthropology of Consciousness*, 14(2):27–59.

Campos, J., C. Frankel & L. Camras. 2004. On the Nature of Emotional Regulation. *Child Development*, 75(2):377–394.

Capone, S. 1999. *La quête de l'Afrique dans le candomblé. Pouvoir et tradition au Brésil.* Paris: Karthala.

- Cavalcanti, P. 1988. As seitas aficanas do Recife. Estudos afro-brasileiros, trabalhos apresentados ao ? Congresso Afro-Brasileiro em 1934 em Recife, 243–257. Recife: Fundação Joaquim Nabuco, Massangan.
- Cohen, E. 2007. The Mind Possessed. The Cognition of Spirit Possession in an Afro-Brazilian Religious Tradition. Oxford: Oxford University Press.
- —. 2008. What is Spirit Possession? Defining, Comparing, and Explaining Two Possession Forms. *Ethnos*, 73(1):101–126.
- Crossley, N. 2004. Ritual, Body Technique and (inter)Subjectivity. In *Thinking Through Rituals. Philosophical Perspectives*, edited by K. Schilbrack. pp. 31–51. New York, London: Routledge.
- Csordas, T. 1990. Embodiment as a Paradigm for Anthropology. *Ethos*, 18(1):5-47.
- —. 1993. Somatic Modes of Attention. Cultural Anthropology, 8(2):135–156.
- Csordas, T. (ed). 1994. Embodiment and Experience. The Existential Ground of Culture and self. Cambridge: Cambridge University Press.
- Damasio, A. 1999. The Feeling of What Happens. Body and Emotion in the Making of Consciousness. San Diego, New-York, London: A Harvest Book Harcourt Inc.
- Dantas, B.G. 1982. Repensando a pureza nagô. Religião e Sociedade, 8:15-20.
- —. 1987. Pureza e poder no mundo dos candomblés. DE MOURA, E. (org). Candomblé. Desvendando identidades. pp. 121–128. São Paulo: EMW Editores.
- De Carvalho, J.J. 1987. A força da Nostalgia. A Concepção de Tempo Histórico dos Cultos Afro-Brasileiros Tradicionais. *Religião e Sociedade*, 14(2):36–61.
- de Carvalho, J.J. 1993. Aesthetics of Opacity and Transparence: Myth, Music and Ritual in the Xangô Cult and in the Western Art Tradition. *Latin American Music Review*, 14(2):202–229.
- de Heusch, L. 1995. Possédés somnambuliques, chamans hallucinés. In *La transe et l'hypnose*, edited by D. Michaux. pp. 19–46. Paris: Auzas Imago.
- Desjarlais, R. 1992. Body and Emotions. The Aesthetics of Iillness and Healing in the Nepal Himalayas. Philadelphia: University of Pennsylvania Press.
- Eisenberg, N. & T. Spirad. 2004. Emotion-Related Regulation: Sharpening the Definition. *Child Development*, 75(2):334–339.
- Ekman, P. & W. Friesen. 1969. The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding. Semiotica, 1:49–98.
- Elbein dos Santos, J. 1975. Os Nago e a morte. Petropolis: Editora Vozes.
- Fernandes, G. 1937, Xangôs do Nordeste. Investigções sobre os cultos negro-fetichistas do Recife. Rio de Janeiro: Civilização Brasileira.
- Frijda, N.H. & B. Mesquita. 1997. The Social Roles and Functions of Emotions. In *Emotion and Culture. Empirical Studies of Mutual Influence*, edited by S. Kitamaya, H.S. Markus. APA Science Volumes, pp. 51–88. Washington: United Book Press.
- Gell, A. 1980. The Gods at Play: Vertigo and Possession in Muria Religion. *Man*, 15:218–247.
- Gieser, T. 2008. Embodiment, Emotion and Empathy. A Phenomenological Approach to Apprenticeship Learning. Anthropological Theory, 8(3):299–318.
- Goldman, M. 1987. A construção ritual da pessoa: a possessão no candomblé. *Candomblé. Desvendando identidades.* De Moura, C. (org.), pp. 87–120. São Paulo: EMW editores.

Halloy, A.. 2007. 'Un anthropologue en transe. Du corps comme outil d'investigation ethnographique'. In *Corps, performance, religion. Etudes anthropologiques offertes à Philippe Jespers*, edited by P. Petit & J. Noret. pp. 87–115. Bruxelles: PubliBook.

- —. 2009. 'Incorporer' les dieux. Les ressorts pragmatiques de la transe de possession religieuse dans le culte Xangô de Recife (Premières pistes). In *La conscience dans tous ses états, Approches anthropologiques et psychiatriques, cultures et thérapies*, edited by S. Baud & N. Midol. pp. 77–95. Elsevier Masson Editions.
- 2010. 'Chez nous, le sang reigne!'. Apprendre la tradition dans le culte Xangô de Recife. Terrain, 55:10-27.
- —. 2012. 'Objects, bodies and gods. A cognitive ethnography of an ontological dynamics in the Xangô cult (Recife – Brazil)'. in Making Spirits Materiality and Transcendence in Contemporary Religions.. London: I.B. Tauris (Tauris Academic Studies).
- Hell, B. 2008. Négocier avec les esprits *tromba* à Mayotte. Retour sur le 'théâtre vécu' de la possession. *Gradhiva*, 7:7–23.
- Herskovits, M.J. 1943. Pesquisas etnologicas na Bahia. Bahia: Museo d'Estado.
- —. 1958. *The Myth of the Negro Past*. USA: Harper & Brothers.
- Hochschild, A.R. 1979. Emotion Work, Feeling Rules, and Social Structure. *Amercian Journal of Sociology*, 85(3):551–575.
- Hollan, J., E. Hutchins & D. Kirsh. 2000. Distributed Cognition: Toward a New Foundation for Human-Computer Interaction Research. *ACM Transactions on Computer-Human Interaction*, 7(2):174–196.
- Humphrey, C. & J. Laidlaw. 1994. The Archetypal Actions of Ritual. A Theory of Ritual Illustrated by the Jain Rite of Worship. Oxford: Clarendon Press.
- Hutchins. 2005. Cognition in the Wild. Cambridge: MIT Press.
- James, W. 1884. What is an Emotion? *Mind*, 9:188–205.
- Jonhson, C. 2002. Secrets, Gossip, and Gods. The Transformation of Brazilian Candomble. Oxford: Oxford University Press.
- Klass, M. 2003. Mind over Mind. The Anthropology and Psychology of Spirit Possession. Oxford: Rowman & Littlefield.
- Lapassade, G. 1997. Les rites de possession., Anthropos. Paris: Laureys Steven.
- Lawson, E.T. & R.N. McCauley. 1990. Rethinking Religion: Connecting Cognition and Culture. Cambridge: Cambridge University Press.
- Leavitt, J. 1996. Meaning and Feeling in the Anthropology of Emotions. *American Ethnologist*, 23(3):514–539.
- LeDoux, J. 1996. The Emotional Brain. The Mysterious Underpinnings of Emotional Life. New York: Simon & Schuster Paperbacks.
- Leiris, M. 1958. La possession et ses aspects théâtraux chez les Ethiopiens de Gondar. Paris: Plon.
- Lepine, C. 2000. Os estereótipos da personalidade no candomblé nagô. In *Candomblé. Religião do corpo e da alma*, edited by C. De Moura. pp. 139–163. Rio de Janeiro: Pallas.
- Leventhal, H. & K. Scherer. 1987. The Relationship of Emotion to Cognition: A Functional Approach to a Semantic Controversy. *Cognition and Emotion*, 1(1):3–28.
- Levi-Strauss, C. 1971. Mythologiques IV: l'homme nu. Paris: Plon.
- Levy, R.I. 1973. *Tahitians. Mind and Experience in the Society Islands.* Chicago: Chicago University Press.

Liénard, P. & P. Boyer. 2006. Whence Collective Rituals? A Cultural Selection Model of Ritualized Behavior. American Anthropologist, 108(4):814–827.

- Luhrmann, T. 2004. Metakinesis: How God Becomes Intimate in Contemporary US Christianity. *American Anthropologist*, 106(3):518–528.
- —. 2007. How Do you Learn to Know that it is God Who Speaks? In *Learning Religion*. Anthropological Approaches, edited by D. Berliner & R. Sarró. pp. 83–102. New York, Oxford: Berghahn Books.
- Luhrmann, T.M., H. Nusbaum & R. Thisted. 2010. The Absorption Hypothesis: Learning to Hear God in Evangelical Christianity. *American Anthropologist*, 12(1):66–78.
- Maggie, Y. 1988. O medo do feitiço: relações entre magia e poder no Brasil. Rio de Janeiro: Thesis, National Museum.
- Mauss, M. 1936/2003. Les techniques du corps. *Sociologie et anthropologie*. Paris: Quadrige Presses Universitaires de France, pp. 363–386.
- McCauley, R. & T. Lawson. 2004. Bringing Ritual to Mind. Psychological Foundations of Cultural Forms. Cambridge: Cambridge University Press.
- Motta, R. 1993. La Rationalité dans la Magie: Economie du Xangô de Recife. In *Jeux d'Identité: Etudes Comparatives à partir de la Caraibe*, edited by M-J. Jolivet & D. Rey-Hulman. pp. 355–365. Paris: L'Harmattan.
- Murphy, S. & R. Zajonc. 1993. Affect, Cognition, and Awareness: Affective Priming with Suboptimal and Optimal Stimulus. *Journal of Personality and Social Psychology*, 64:723–739.
- Opipari, C. 2004. Le Candomblé : images en mouvement, São Paulo-Brésil. Paris: L'Harmattan.
- Ortiz, R. 1990. A morte branca do feiticeiro negro. Umbande e Sociedade brasileira. Rio: Editora Brasilense.
- Parlebas, P. 1981. Contribution à un lexique commenté en science de l'action motrice. Paris: INSEP.
- Prinz, J. 2004. Gut Reactions. A Perceptual Theory of Emotions. Oxford: Oxford University Press.
- Querino, M. 1938. Costumes africanos no Brasil., Bibliotheca de divulgação scientifica. Rio de Janeiro: Civilização Brasileira.
- Ramos, A. 1934/1988. O negro brasileiro. Recife: Fundação Joaquim Nabuco, Massangana. Rappaport, R. 1999. Ritual and Religion in the Making of Humanity. Cambridge, U.K: Cambridge University Press.
- Ribeiro, R. 1950–51. O Negro em Pernambuco Restrospecto de suas praticas religiosas. *Revista do arquivo Publico*, 5–6(7–8):571–587.
- —. 1978. Cultos afro-brasileiros do Recife: Um estudo de ajustamento social. Recife: Instituto Joaquim Nabuco de Pesquisas Sociais.
- Robinson, J. 2005/2007. Deeper than Reason. Emotion and its Role in Litterature, Music, and Art. Oxford: Clarendon Press.
- Rodrigues, N.R. 1900. O animismo fetichista dos negros baianos. Salvador: Reis & Co.
- Rouget, G. 1980/1990. La musique et la transe. Esquisse d'une théorie générale des relations de la musique et de la possession. Paris: Gallimard.
- —. 2006. Transe : théâtre, musique et neurosciences. Cahiers de musique traditionnelle : chamanisme et possession, 19:211–220.

Segato, R. 1995. Santos e daimones. O politeismo afro-brasileiro e a tradiçao arquetipal. Brasilia: editora UNB.

- —. 2000. Okarilé: Uma toada icônica de Iemanjá. Revista do Patrimônio Historico e Artístico Nacional, 28:237–253.
- Seligman, R. & L.J. Kirmayer. 2008. Dissociative Experience and Cultural Neuroscience: Narrative, Metaphor and Mechanism. *Culture Médicine and Psychiatry*, 32:31–64.
- Severi, C. 2007. Le Principe de la Chimère. Une anthropologie de la mémoire. Paris: Presses de l'Ecole normale supérieure.
- Smith, F.M. 2001. The Current State of Possession Studies as a Cross-Disciplinary Project. *Religious Studies Review*, 27(3):203–212.
- Sperber, D. 1974. Le symbolisme en général. Paris: Hermann.
- —. 1996. *La contagion des idées*. Paris: Odile Jacob.
- Spinrad, T., N. Einsenberg, A. Cumberland, R. Fabes, C. Valiente, S. Shepard, M. Reiser, S. Losoya & I. Guthrie. 2006. Relation of Emotion-Related Regulation to Children's Social Competence: A Longitudinal Study. *Emotion*, 6(3):498–510.
- Surralès, A. 2003. Au coeur du sens. Perception, affectivité, action chez les Candoshi. Paris: Chemins de l'ethnologie.
- Vatin, X. 2005. Rites et musiques de possession à Bahia. Paris: L'Harmattan.
- Verger, P. [1957] 2000. *Notas sobre o culto aos orixás e voduns*. Editora da Universidade de São Paulo: São Paulo.
- Vogel, A., Da Silva Mello, M.A. & Pessoa de Barros, J.F. 1993. *A Galinha d'Angola. Iniciação e identidade na cultura afro-brasileira*. Rio de Janeiro: EDUFF/FLASCO/Pallas.
- Wacquant, L. 2005. Carnal Connections: On Embodiment, Apprenticeship, and Membership. *Qualitative Sociology*, 28(4):445–474.
- Wafer, J. 1991. *The Taste of Blood. Spirit Possession in Brazilian Candomblé*. Contemporary Ethnographic Series. Philadelphia: University of Pennsylvania Press.
- Walker-Andrews, A.S. 1997. Infants' Perception of Expressive Behaviors: Differentiation of Multimodal Information. *Psychological Bulletin*, 121(3):437–456.
- Warnier, J-P. 1999. Construire la culture matérielle l'homme qui pensait avec ses doigts. Paris: PUF.
- Whitehouse, H. 2000. Arguments and Icons. Divergent Modes of Religiosity. Oxford: Oxford University Press.
- —. 2004. Modes of Religiosity. A Cognitive Theory of Religious Transmission. Cambridge: Altamira Press.
- Wikan, U. 1990. Managing Turbulent Hearts. A Balinese Formula for Living. Chicago, London: University of Chicago Press.
- Zajonc, R. 1980. Feeling and Thinking: Preferences Need no Inferences. American Psychologist, 35:151–175.