Happiness in the Eye and the Heart: Somatic Referencing in West African Emotion Lexica

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Although many theories about the structure of emotion have been developed, none of them seem to adequately explain the African experience. This study examined the folk emotion lexica of two indigenous West African languages. Fifty monolingual Fante speakers and 50 monolingual Dagbani speakers from rural and semirural Ghana participated in focus groups to generate words in their native language that they use to describe experiences that involve emotions. Qualitative analysis of the emotion lexica generated by the focus group participants revealed frequent somatic referencing in the emotion talk of Fante and Dagbani, although there were differences in the specific body parts mentioned in references to various emotional experiences. The ubiquity of somatic referents in the expression of African emotions suggests that future theories of emotion structure may need to incorporate the concept of embodiment.

Keywords: *emotion; Africa; language*

For more than a century, beginning with William James (1890/1950), psychology has been interested in the nature of emotion and has produced

a large body of theoretical and empirical literature on this topic (e.g., Ekman & Davidson, 1994). More recently, scholars from psychology as well as psychological anthropology, linguistics, and communication have taken up the questions surrounding the mutual influence of culture and emotion (Kitayama & Markus, 1994). Anthropologists have long argued that emotions are social constructions and therefore are variable across cultures (Kövecses & Palmer, 1999). Cultural psychology, in particular, has come to view emotions as being culturally constructed scripts (Markus & Kitayama, 1994; Menon, Morris, Chiu, & Hong, 1999). For instance, Markus and Kitayama (1994) define emotions as "a set of socially shared scripts composed of various processes—physiological, subjective and behavioral—that develop as individuals actively (personally and collectively) adapt and adjust to their immediate socio-cultural, semiotic environment" (pp. 339-340). However, very little work has focused on the nature of emotions and emotional experiences in people of African descent that do not involve psychopathology (see, e.g., Nowicki, Glanville, & Demertzis, 1998, for an exception).

Cultural variations in the semiotic environment to which Markus and Kitayama (1994) refer provide a fertile ground for examining how individuals from various cultures may experience emotions differently. In fact, lexicalization of emotion—and the question of whether various languages have names for the same emotions that English does—has produced a body of scholarship concerning the cultural nature of emotion experiences, although again, Black cultural groups have been understudied with this approach. Recent literature in Black psychology has emphasized the field's need to better understand Africentric cultural values as an integral aspect of the Black ethnic identity (Cokley, 2005; Jones, 2003). Given the common ancestral and cultural origins of Blacks currently residing on the continent of Africa and in the diaspora, an investigation of West African indigenous emotional scripts may inform psychology's understanding of how people of African descent experience and communicate emotion experiences. This study focused on the folk emotion lexica, and in particular the somatic referencing contained in the emotion lexica, of speakers of two West African languages.

CULTURE AND EMOTION LEXICA

The study of emotion lexica across cultures has been approached from multidisciplinary perspectives, with scholars from psychology, anthropology, and linguistics actively contributing to the literature. One line of research of emotion lexica in various indigenous languages has focused on the studies of unique emotion words (mostly in the Pacific Islands and some parts

of Asia) that cannot be directly translated into English, the default language of comparison. For example, Wierzbicka (1992) and Lutz (1988) reviewed numerous instances from different regions of the world where emotions that are assumed to be universal (e.g., anger) are said not to exist because no equivalent word appeared to exist in the indigenous languages of those regions. Russell (1991) has reported that among the Buganda (Uganda), the Ilongot (Phillipines), and the Ifaluk (Micronesia) languages, anger and sadness are packaged together under one emotion. Markus and Kitayama (1994) discuss the Japanese concept of *amae*, which is a type of affection that has no equivalent in the English language. *Schadenfreude* and angst are two well-cited German emotions that have no English equivalents.

Another line of cultural research on emotion lexica has focused on the structure and taxonomy of emotion words and phrases. Overall, theories of semantic structure of emotion account for differences across cultures. However, many of them hint at a deficit model and call for a novel approach. For example, Russell (1991) has argued that English has more than 2,000 emotion words (although fewer than 50% of these are actually used in an "average" person's vocabulary), whereas some languages are known to have as few as 59. Size of an emotion lexicon is sometimes interpreted as being an index of the importance of emotion in each culture. Levy (1984) introduced the concepts of hypercognition and hypocognition of emotion to note cultural variations in the extent to which psychological elaboration of emotion is emphasized. According to his theory, cultures that promote psychological elaboration tend to have more emotion words than those cultures that do not promote psychological elaboration; moreover, within each culture, the emotions that hold particular significance are presumed to be hypercognized. Shaver, Wu, and Schwartz (1992) conducted a cluster analysis of Chinese, Italian, and American emotion lexica using similarity ratings of 110 emotion words per culture, and the researchers concluded that some basic emotion words have a universal structure. However, Shaver et al. (1992) also suggested that the emotions of shame and remorse were hypercognized by Chinese, and joy and happiness by Americans and Italians.

An underlying debate in the cross-cultural research on emotion lexica is what qualifies as an emotion lexicon. It has long been recognized that there are cultural variations in the extent to which the body serves as a prime referent for emotion metaphors. For example, the frequent references to the body in the emotion metaphors have been identified in Chinese (Tung, 1984; Ye, 2002; Yu, 2002), Japanese (Hasada, 2002), West African (Ameka, 2002), Russian (Pavlenko, 2002), and Kaytetye (Turpin, 2002) languages. However, scholars differ in their opinions as to whether such semantic referents to the body may still be classified as emotions.

In one camp, Enfield and Wierzbicka (2002) argued that emotion talk universally tends to include references to internal changes within the inside of the body or specific internal bodily organs. Oatley (1993) argued that even in preclassical Greek culture, emotions were not considered to be mental occurrences but as internal agitations or excitations of the body or its parts. In the other camp, Russell (1991) has argued that the concept of emotion itself may be a Western social construction because there are some non-Western cultures in which no word that directly translates as *emotion* exists and in which somatic referents predominate the lexica that refer to subjective states. Leff (1981) observed that many Asian and African languages did not appear to have clear demarcations between words that were psychological versus those that were somatic (which Leff viewed as more "primitive"). In contrast, Leff argued that Western languages had clearer demarcations between words that referred to a psychological state (which was presumed to be "emotions") versus a somatic state. Following these distinctions, Leff argued that Western languages have a more developed emotion lexican because these languages contain more words to describe psychological states, which engenders finer differentiation among various emotion states. This is not to suggest, however, that Western languages do not contain expressions and metaphors with somatic references to express feeling states (e.g., "my blood is boiling" in English); however, such bodily expressions tend to be used as subordinate to other basic-level terms for specific emotions (e.g., *anger* in English; Ameka, 2002). In contrast, bodily expressions tend to be basic-level expressions in Ewe, a Kwa (Niger-Congo) language (Ameka, 2002).

What is lacking from this discourse is a discussion of how the native speakers of such non-Western languages describe their feeling states. Further, many cross-cultural studies have contrasted a non-Western language with a Western language (with the English language being the most frequent reference point). Such West versus non-West comparisons may inflate the psychological versus somatic dichotomy in conceptualizing emotion lexica. Writers such as White (1991) and Guthrie (1991) have highlighted the dangers of investigating Black psychology through a Eurocentric lens. As they rightly point out, such an approach often leads to deficit theories suggesting that Blacks are inferior to White comparison groups on psychological constructs such as intelligence and academic achievement motivation. Another consequence of this approach is the lack of attention paid to important aspects of the Black experience, such as racial identity, theories of the self (Shaw, 2000), and TRIOS (Time, Rhythm, Improvisation, Orality, and Spirituality; Jones, 2003), which shape and affect the personality and behavior of individuals from African diasporas.

Given the legacy of oral tradition and orality in Africana populations (Jones, 2003), an analysis of emotion talk in West African individuals may provide further insight into the particular ways in which emotions are communicated in these cultural groups.

Moreover, very few researchers have considered the question of whether the emotion lexica of two ethnolingual groups that are similar to each other (and who may be grouped into one cultural group in cross-cultural comparisons) vary in any systematic ways. This study considered two Ghanaian languages as case studies of variations in emotion lexica of non-Western languages whose speakers are culturally and geographically proximal to each other. Specifically, we conducted focus groups about emotion lexica with monolingual native speakers of two Ghanaian languages in rural and semirural Ghana and analyzed the data using a qualitative approach.[1] Other psychological research on emotion categories in natural languages across the world's languages has used dictionaries to generate emotion lexica (Hupka, Lenton, & Hutchison, 1999). However, there was no English dictionary available for the two Ghanian languages studied here. In keeping with cultural psychology's preferred method for the study of shared meanings in situ (Greenfield, 1997), we chose qualitative method as the appropriate initial step toward a better understanding of emotion concepts in African cultures.

BACKGROUND ON GHANA

Ghana is a country in West Africa, covering an area of 92,100 square miles (238,533 square kilometers, about the size of Colorado) along the Atlantic Ocean shore (Boateng, 1966). Its current population of 20.2 million is ethnically diverse; the numerous ethnic groups (estimated at 100 in 1960) are usually classified under five major groupings, even though intragroup differences exist in terms of the languages spoken, traditions, and history. The major ethnic groupings are the Akan, Ewe, Ga-Adangbe, Guan, and Mole-Dagbane (Gadzekpo, 1997).

From 1874 until 1957, Ghana, formerly known as the Gold Coast, was a British colony. Due to the widespread British influence before and during its colonial history, English is currently the official language of Ghana and is used as an official language of instruction in addition to French and nine Ghanaian languages (Akwapim-Twi, Asante-Twi, Dagbani, Dangbe, Ewe, Fante, Ga, Kasem, and Nzema; Berry, 1995). Indigenous languages are still widely spoken, especially in the rural areas, where it is not uncommon to find some individuals who are monolingual in their ethnic language.

Currently, very few parts of Ghana are ethnically homogeneous due to migrations. Urban centers as well as rural areas that attract migrant labor

are the most ethnically diverse. Due to different amounts of contact with the Western world in Ghana's precolonial history, ethnic groups residing in southern Ghana have been influenced by money economy, Western education, and Christianity for a longer duration and a greater extent than the northern ethnic groups, who are under a greater Islamic influence (Berry, 1995).

Despite the ethnic, cultural, and linguistic diversity in this West African nation, Ghanaians share some common characteristics. First, the African way of life, characterized by the importance of such communal structures as the clan, extended family, and a complex network of social relationships, is found throughout Ghana (Gyekye, 1996). Second, Mbiti (1970) describes African people as being very religious. For example, Gifford (1998) reported that more than 60% of the population in Ghana identify themselves as Christian, 16% as Muslim, and 20% as "adherents of traditional religions" (p. 61). Although attending religious functions is a very important part of everyday life, the importance of religion is manifested in numerous cultural artifacts. For example, Adams, Dzokoto, and Mensah (2003) reported that in a survey of business names in the Ghanaian capital city of Accra, 40.1% included Christian references like "Thank U Jesus Chemical Shop" or "God's Love Enterprises," and that 40.2% of 336 vehicle slogans from diverse locations in Ghana contained similar references. In addition, Ghanaian ethnic groups share a common national history of migration from other parts of Africa to their current locations, their history of colonization under the British rule, and the current nation-state (i.e., as one country under a unified government, with one national anthem and one national pledge of allegiance).

FANTE AND DAGBANI LANGUAGES AND THEIR SPEAKERS

There are estimated to be approximately 70 different languages spoken in Ghana (Grimes, 1996). Despite the cultural differences among Ghana's various peoples, linguists have concluded that all Ghanaian languages fall under either of two major Niger-Congo linguistic subfamilies: the Kwa and Gur groups, found to the south and north of the Volta River, respectively (Bendor, 1989). The Kwa group is made up of 73 African languages (including the Akan, Ga-Adangbe, and Ewe) and is spoken by about 75% of Ghana's population. The Kwa languages are so diverse in their structure that it is difficult to provide a generalized profile. Nevertheless, most of them are characteristically tonal and exhibit vowel harmony.[2] The Gur branch of the Niger-Congo language family is made up of about 85 languages and is spoken by about 20 million people in West African countries from Mali to Benin. The Gur languages are characterized by the predominance of syllabic

nasals that occur only at the beginning of words, and noun class systems. Ghanaian Gur languages include Gurma, Grusi, and Mole-Dagbane (Bendor, 1989).

The two languages selected for this study are Fante (an Akan language from the Kwa group spoken in southern Ghana) and Dagbani (a Mole-Dagbani language from the Gur group spoken in northern Ghana).[3] These languages were selected for the study because they represent the two major linguistic subfamilies and because members of the data collection team were fluent in English and either Dagbani or Fante and had access to rural, monolingual populations in the towns where these two languages were spoken.

Fante speakers are 1 of the 10 major matrilineal ethnic groups classified as the Akan people of Ghana. (The other Akan groups are Ahanta, Akwamu, Akwapim, Akyem, Asante, Bono, Kwahu, Nzema, and Sefwi.) The most prominent of these is the Asante tribe, which rose to power during the late 17th century and gained international historical acclaim as one of the most powerful kingdoms in Africa's history (Arhin, 1976). Asante is also a major site of the production of the Kente cloth, which has become popular in recent times as an expression of Blackness by Africans both at home and in the diasporas.

The land to the north of the Black Volta River is occupied mostly by a heterogeneous group of people who speak one of three Gur languages of the Niger-Congo linguistic family: Mole-Dagbane, Gurma, and Grusi.[4] Of these, Mole-Dagbane is the most widely spoken, and its dialects are spoken by the Nanumba, Dagomba, Mamprusi, Wala, Builsa, Frafra, Talensi, and Kusase peoples.

METHOD

OVERVIEW OF METHOD

The qualitative approach used in this study is best characterized as a cultural domain analysis of words and phrases, a tool used in ethnography. This approach to analysis of the text follows the sociological tradition, which treats text as a window into human experience and is in contrast to the linguistic tradition, which treats text as an object of analysis itself (Tesch, 1990). Two types of texts can be elicited and analyzed in the sociological tradition: (a) words or phrases generated by techniques for systematic elicitation and (b) free-flowing texts such as narratives and responses to open-ended interview questions (Ryan & Bernard, 2000). Because the focus of this study was on folk emotion lexica in Ghana, we chose to systematically elicit

words and phrases from native monolingual speakers of two languages in Ghana to identify free lists of items that belong in a cultural domain (or a list of words in a language that "belong together") and to assess the relationships among these items.

Free lists of words or phrases have been described as particularly useful in qualitative methods for the purpose of identifying the items in a cultural domain (Ryan & Bernard, 2000). Free lists can be elicited through a variety of methods including short open-ended questions on surveys, interviews, and focus groups. In this study, focus group was used as a method to elicit the free lists for several reasons. First, the focus group method is considered to be a collectivistic rather than an individualistic research method that allows for multivocality of research participants' experiences (Madriz, 2000) and, as such, is suited to the rural and semirural cultural traditions of the native Fante and Dagbani speakers. In the daily lives of the residents of Mankesim and Tamale where the data were collected, people routinely gather in communal settings such as the village marketplace to socialize, thus a focus group method that allows for interactive exchanges among the participants was deemed to be more culturally appropriate than one-on-one interviews with researchers. Second, many Fante and Dagbani speakers are not literate in their own languages, thus focus groups or group interviews allowed for modal native speakers of these languages to fully participate. Third, focus groups are increasingly used by feminist and postmodernist ethnographers (Madriz, 2000) because the method is believed to reduce the influence of the interviewer on the research participants by shifting the power balance toward the group and encouraging the collective voices to emerge (Frey & Fontana, 1993).

Once collected, the words and phrases freely generated by focus group participants were translated from Fante and Dagbani into English for cultural domain analysis. The analytic method involved a modified componential analysis, which is a qualitative technique developed by linguists to produce models based on logical relationships among the distinctive features identified across the words (Ryan & Bernard, 2000). Componential analysis identifies a set of features that best describe the domains of interest, then systematically examines each item (emotion lexicon in this study) for these features. Using this approach, the first author, who is a native of Ghana, identified the salient features and then examined the features of each emotion lexicon to note similarities and differences between the lexica in the two languages. This method follows from similar emotion lexicon analysis of several non-Western languages such as Japanese (Hasada, 2002), Ewe (Ameka, 2002), and Sanskrit (Shweder, 1993). One bilingual English-Fante speaker and one bilingual English-Dagbani speaker were consulted during this process to ensure the trustworthiness of the interpretations.

PARTICIPANTS

Fante speakers. Data collection with Fante speakers took place in Mankesim, a coastal town in Ghana, and in a nearby fishing village. Mankesim is located in the central region of Ghana. The exact population of the town is unknown, but it is estimated to be somewhere between 2,000 and 5,000. Mankesim functions mainly as a market town; it is the site of small-scale trading of agricultural products such as maize and pineapples, which are grown in the surrounding villages.

The researchers identified places in Mankesim where Fante speakers worked in groups of three or more. Locations were selected at random from this sample and a total of 50 volunteers (all monolingual Fante-speaking Mankesim residents) was recruited from these places. The sampling model used to recruit participants was purposive to the extent that we sought out a range of individuals in various settings from different walks of life who may represent the experiences of ordinary Fante-speaking town and village residents. The sample included 15 dressmaking apprentices, 10 taxi drivers and vulcanizers,[5] 10 market women, 5 farmers, 5 fishermen, and 5 mothers waiting to have their children weighed at a prenatal clinic. Although information about their socioeconomic status was not obtained, these professions are representative of the inhabitants of Mankesim. Of those who reported their ages, the age range was 18 to 65. About 10% of the sample did not know how old they were.[6]

Dagbani speakers. Dagbani focus groups were carried out in farming villages on the fringes of Tamale. Tamale is located in the northern region of Ghana and serves as the capital city of this geographical area. With an estimated population of about 350,000, Tamale functions primarily as a commercial hub; it is the site of trading of agricultural products such as yams, cereals, and livestock, which are grown and reared in the surrounding villages and towns. The sample size was 50 and the strategy for locating the participants was similar to that used in Mankesim, but the Dagbani focus group facilitator, due to an oversight, did not systematically collect information concerning the age, sex, and occupation of the participants.

PROCEDURE

Upon oral agreement to participate in the study, the Fante and Dagbani speakers were interviewed in small focus groups (made up of between 3 and 6 participants). The Fante focus groups were conducted by one of the two female Ghanaian facilitators (fluent in English and Fante), who were

both college educated and in their 20s. The Dagbani focus groups were conducted by a male Ghanaian facilitator (fluent in Dagbani and English) who was college educated and in his 20s. The average duration of a focus group was about 1 hour.

The focus group protocol was originally prepared in English (see Appendix A) and then translated to Fante and Dagbani by bilingual psychologists in Ghana. According to the Ghanaian research teams' knowledge, there was no word in either Fante or Dagbani that translated exactly to the English word *emotion*. Therefore, the English protocol had to be modified to incorporate further probes to elicit the construct of interest. A modified frame substitution task (D'Andrade, 1995) was used to generate probes, such as "If you win the lottery, you may be ____" and "If someone close to you dies, you may be ____," that were consequently added to the instructions. Following such probes, participants would then typically nominate the Fante or Dagbani words to describe the internal feeling states that are culturally appropriate to the situations. The facilitators then referred to these examples whenever participants nominated purely physiological states such as hunger and thirst.

The groups were conducted entirely in either Fante or Dagbani. At the beginning of each group, each participant was asked to name as many examples of emotions as he or she could. Then, the participants were asked to generate examples of situations that elicited each emotion, the subjective experience associated with each emotion, typical behavior associated with people who experience each emotion, and the typical behavior or reactions of others around the person experiencing that emotion. The facilitators took notes of the responses given. (The interviews were not audiotaped because many of the participants were uncomfortable with being tape-recorded.)

TRANSLATIONS

The data were processed using three steps. First, two English-Fante bilingual speakers independently provided semantic translations of the Fante emotion labels into English using contextual information (e.g., behavior, reactions, situations that elicit the feeling, etc.) provided by the participants (see Appendix B for an example of the translated raw data). Apart from one word (*abrebrese*), the translators unanimously agreed on English emotion equivalents. In the case in which more than one English translation of a Fante word was obtained, all the English words were considered in the analysis. Second, the two English-Fante bilingual speakers independently provided literal translations of the Fante emotion labels through morphemic translations, with 100% agreement. Finally, as an additional translation check,

the English translations of emotion labels were back-translated into Fante by two independent English-Fante bilingual speakers not involved in the Fante to English translation process, with a 100% agreement. The same procedure was conducted on the Dagbani data using two bilingual (English-Dagbani) speakers whose independent translations resulted in 100% interrater agreement for each Dagbani expression, and two back-translators who also achieved 100% concurrence. The translated data in each language were subjected to cultural domain analysis using the modified componential analysis of emotion lexica, as earlier described.

RESULTS AND DISCUSSION

FANTE EMOTION LEXICON

A term that is equivalent to the English word *emotion* does not exist in the Fante language. Participants in the focus group frequently used the word *atsinka*, which covers both emotional experiences (such as happy and sad) and physiological states (such as hunger and thirst). An English translation of atsinka suggested by the Fante-English translators is "what one feels or senses inside." This analysis focused on the "emotional" atsinka (i.e., states of atsinka that involve what English speakers would consider as emotions) named by the Fante speakers. For purposes of uniformity across languages, we excluded expressions (containing more than one word) that were used to describe emotional states (e.g., *m'ani nka*, which translates into "I am not happy"). Also the term *adwen-dwen* (brain-brain), which appears to be the Fante translation of the English verb "to worry," was excluded from the discussion due to a lack of consensus about meaning by translators, and the term *abrebrese* was excluded due to the translators' consensus that this word could not be translated into English.

The list of discrete emotional atsinka terms that the Fante focus group participants nominated, along with their approximate English equivalent emotion terms and the literal English translations, are shown in Table 1.

Fante speakers generated 16 different emotional atsinka. Examination of the literal English translations reveals the prevalence of somatic references in the Fante emotional atsinka. Of the 16 emotional atsinka generated by the participants, 5 of the terms referred to the eye, 3 to the self or skin, and 1 each to the face, ear, chest, and stomach. In Fante, the word used to refer to the self and the skin has the same origin, and for that reason, these were put as alternatives for the literal translation. However, the bilingual translators specified which of the two was being referred to for each of the emotional atsinka. Some of the words had dual functions. For instance, although

TABLE 1
Words Nominated by Fante Speakers
That Describe Emotional Atsinka

English Equivalent	Fante Word	Literal Translation
Envy	Ahowoyaw	**skin/self**-pain
Anger	Ebufo	**chest**-grow
Anxiety	Ayemhyehye	**stomach**-burn
Joy, contentment	Anika	**eye**-agree/reach
Shame	Aniwu	**eye**-die
Excitement, happiness	Anigye	**eye**-get
Fright	Akomatu	**heart**-fly
Sorrow	Yawdzi	pain-eat/feel
Surprise	Ahobo	**self/skin**-drunk
Guilty, ashamed	Anyito	**Eye**-put
Humility	Ahobrase	**self/skin**-under/**self/skin**-in-submission
Tired, weary	Brε	—
Agitated, ill, irritable	Basa	—
Peace, contentment	Asomdwee	**ear**-cool
Ashamed, disgraced	Anyimguase	**face** floored (more than lost face)
Determined, jealous	Anibre	**eye**-red

NOTE: "Body" words appear in bold.

ayemhyehye refers to anxiety, it can also be used to describe an upset stomach if the subjective experience is one of a "burning stomach."

Although the participants nominated Fante words (*yawdzi* and *awure-huro*) whose English equivalent is *sorrow*, they did not identify any Fante word whose English equivalent would be *sadness*. Upon further discussion in the focus groups, it became clear that the way to express sadness in Fante is to indicate that one is not feeling happy (m'ani nka). The literal English translations of the Fante words *yawdzi* and *awurehuro* did not include references to any specific organ. Of note, words that describe the emotion of loneliness were noticeably absent from the atsinka that the participants spontaneously nominated. Further probes by the facilitators (using scenarios that might elicit the subjective feeling of loneliness) failed to elicit a Fante word or expression that could be considered an equivalent of the English term *loneliness*.

DAGBANI EMOTION LEXICON

The participants did not generate any Dagbani word for *emotion*, nor was there a Dagbani equivalent of the Fante word *atsinka*. The Dagbani

TABLE 2
Dagbani Emotions

English Equivalent	Dagbani Word	Literal Translation
Anger	Suli	—
Happiness	Suhipelli	white **heart**
Contentment	Nyagsim	feeling "sweet" or good
Peace	Suhidoo	**heart** at rest
Anger	Suhiyigsili	agitated **heart**
Sadness	Suhisajingu	destruction of the **heart**
Admiration	Bomma Nyuli	positive envy
Envy/jealousy	Jelinsi Nyuli	hatred envy
Worry/anxiety	Ninimooi	**eye**-red
Fear	Dhem	—

NOTE: "Body" words appear in bold.

speakers nominated nine emotion words, five of which had references to parts of the body (see Table 2). The heart appears to be a very important seat of emotions in Dagbani, with four of the nine nominated emotions being related to the heart. Probes by the facilitator (using scenarios that might elicit the subjective feeling of loneliness) also failed to elicit a Dagbani word or expression that could be considered an equivalent of the English term *loneliness*.

SIMILARITIES BETWEEN FANTE AND DAGBANI EMOTION LEXICA

Primacy of embodiment. Although linguistic scholars tend to disagree about the origin and the development of West African languages (Bendor, 1989), many are inclined to think that many of the Niger-Congo languages have a common ancestor. Despite the difference in the development of the Fante and Dagbani into languages where there is almost no lexical overlap, some structural similarities are evident. This study's findings indicate that in both languages, somatic symbolism, or embodiment, is evident in their emotion vocabulary. This also supports Ameka's (2002) observation with Ewe (another Niger-Congo language) that lower level terms for various experiences do not differentiate between emotion, sensation, perception, cognition, and so on to the same extent that Western languages do.

Radley (1998) defines embodiment as a central condition of social life through which individuals symbolize their world. These data collected in the two languages suggest that the body is an integral part of the symbolism used in the expression of affective experience by their speakers. This is important

because examining the symbolism can be a way to tap into underlying dynamics of human experience (Tung, 1984). According to Lyon (1999), emotions mediate an organism's relationship to its social environment and should be considered as contextually embedded phenomena with somatic, behavioral, interpretive, and communicative dimensions. Cultural research in emotion has shown that culture shapes the relative salience of these various dimensions (e.g., Markus & Kitayama, 1994). In Fante and Dagbani, the somatic dimension appears to be a salient one.

Number of nominated emotion atsinka. In both Fante and Dagbani languages, the focus groups took more than an hour to complete in most cases. Although the participants were repeatedly probed for other Fante or Dagbani words to describe their feeling states, the total number of discrete emotion terms provided in each language was relatively small: 16 in Fante, and 9 in Dagbani. Although the limited number of emotion words generated by the focus groups of native Fante and Dagbani speakers may be partially a function of the data collection method (as opposed to consulting Fante or Dagbani dictionaries, for example), it may also suggest that a relatively circumscribed number of words are salient to native speakers of both languages as they think about their daily experiences.

Lack of salience of loneliness. Noticeably absent from the emotion vocabulary nominations of both Fante and Dabgani speakers was an indigenous equivalent for the English emotion of loneliness. At the end of each focus group, the group participants were asked to nominate words to describe how they might feel in a situation in which they were by themselves for an extended period of time. The general response was that there was no specific word for this, but they would not feel happy if such situations were to occur. This raises the interesting question of whether the feeling state characterized by the English word *loneliness* is not as salient in traditional Fante- and Dagbani-speaking cultures. Ghanaian culture is considered to be highly collectivistic (e.g., Suh, Diener, Oishi, & Triandis, 1998), and the lack of spontaneous nominations of expressions that suggest loneliness as a feeling state may reflect a relative lack of instances in which an individual is alone, as a result of the reality of Ghanaian rural life.

DIFFERENCES BETWEEN FANTE AND DAGBANI EMOTION LEXICA

The emotional expressions of Fante- and Dagbani-speaking peoples, particularly in their references to body organs, suggest some similarities between these ethnocultural groups. After all, this study was carried out

TABLE 3
Somatic Referent of Emotions Named in Both Languages

Overlapping Emotions	Fante	Dagbani
Anger/anger	chest	heart
Happiness	eye	heart
Peace	ear	heart
Sadness	eye	heart
Worry/anxiety	stomach	heart

using ethnic groups that are in close geographical proximity to each other, have a common national history, and have similar cultural values. Thus, similar patterns in a linguistic analysis of their emotional lexica should not be surprising. However, despite the importance of embodiment in the verbal expression of affect in Fante and Dagbani, the two languages differ from each other in some ways that are of psychological interest.

First, although embodiment is prominent in both languages, they differ in the specific body parts scripted for emotions. Table 3 summarizes the English translations of emotion terms that were nominated by Fante and Dagbani speakers. The Fante emotional *atsinka* were associated with different parts of the body, whereas all the Dagbani ones referred to the heart. The eye and the skin/self seem to be of importance for Fante speakers, whereas the heart seems to be an important seat of the emotions for Dagbani speakers.

Second, the literal translations of the emotion words in Fante and Dagbani reveal that both groups of speakers nominated expressions that translate into English as "eye-red" to describe an emotional experience (*anibre* in Fante, *ninimooi* in Dagbani) with divergent meanings. In Fante, the word *anibre* can be used to describe either a state of "being determined to achieve something" or "jealousy" depending on the context.[7] However, the Dagbani speakers described *ninimooi* as referring to a "state of worry." This provides an interesting example of an emotion lexicon in two West African languages having the same symbolic embodiment yet signifying different subjective experiences.

Natural Semantic Language (NSL; Wierzbicka, 1994) is often used in cross-lingual semantic analyses to examine similarities and differences in the meanings attached to words and expressions. Data from Fante participants on the usage of *anibre* suggest that the experience associated with this term can be explained in NSL as follows:

a. X thinks something like this:
b. Something good happened to person Y.

   c. The same kind of thing did not happen to me.
   d. I want the same good thing that happened to person Y to happen to me.
   e. X feels something bad toward person Y because of this.
   f. Because of what X feels, X's eyes become red.

Anibre also has the following meaning in Fante in NSL (cf. Ameka, 2002):

   a. X thinks something like this:
   b. Something can happen.
   c. I want this thing to happen.
   d. I don't want anything else.
   e. I can't think about anything else.
   f. Because of this I want very much to do something.
   g. X feels something because X thought something like this.
   h. Something happens in a person's eyes when a person feels like this: People can see that the person's eyes are red.

Because different situations can be attributed to why eye-red occurs, the Fante listener must pay attention to contextual cues to determine whether the speaker means the first or the second definition.

In Dagbani, ninimooi eye-red can be explained as follows in NSL:

   a. X thinks something like this:
   b. Something bad can happen.
   c. I don't want something bad to happen.
   d. I can't think that this bad thing will not happen.
   e. Because of this I want to do something.
   f. X feels something bad because X thought something like this.
   g. Something happens in a person's eyes when a person feels like this: People can see that the person's eyes are red.

The NSL analysis above illustrates the divergence between Fante and Dagbani cultural scripts that are thought to cause the feelings of eye-red.

A different type of divergence between Fante and Dagbani expressions—that concerning the organs referenced—can also be illustrated using the NSL analysis, with the Fante and Dagbani expressions both translated into the English word *happiness*. In Fante, *anigye* can be explicated as follows:

   a. X thinks something like this:
   b. Something good happened or something bad did not happen.
   c. X feels something good because X thought something like this.
   d. Something happens in a person's eyes when a person feels like this: The eyes get (something).

In Dagbani, *suhipelli* would be explicated as follows:

a. X thinks something like this:
b. Something good happened or something bad did not happen.
c. X feels something good because X thought something like this.
d. Something happens in a person's heart when a person feels like this: The heart becomes white.

These differences in cultural scripting clearly reflect differences in biocultural ontology, or the ethnophysiological body (see Hinton & Hinton, 2002). They also beg the question: What divergent aspects of the Fante-speaking and Dagbani-speaking cultures shaped this difference in the bodily seats of emotions? It is unclear whether this difference can be linked to differences in geographical location. Dagbani tribes are situated inland, in the northern, drier part of Ghana (mostly Guinea Savanna woodland), whereas Fantes reside in coastal Ghana where the vegetation is a mixture of tropical rain forest and coastal shrub and grassland. Southern Ghana is more heterogeneous in terms of information contained in natural vegetation and, as such, visual cognition may be more salient in the everyday life of Fantes. Further cultural analyses of the symbolic importance of the eye or the heart in other aspects of these languages may yield rich semiotic environmental data that are necessary to further explore these hypotheses.

LIMITATIONS

The interpretations of the findings from this study are clearly constrained by the choice of sample and method for the investigation of the structure of the Fante and Dagbani emotion lexica. First, as mentioned earlier, it is unclear whether the emotions nominated by the participants in the study represent an exhaustive emotion lexicon for each of the languages in this study. Nevertheless, the somatic bias in the accessible emotion words spontaneously generated by monolingual Fante and Dagbani speakers remains important. Another limitation of the analysis is that the exact relationship between labels and underlying psychological processes remains undefined. Not having a word that corresponds perfectly with the English word *emotion* does not imply the absence of such subjective states in an implicit or experiential level. For example, Ekman (1972) reported that the Dani people of New Guinea did not have words for the six emotions considered basic and universal. Nevertheless, the concepts were implicit within Dani culture. As such, the conclusions of this study are limited by the extent to which these emotion labels mirror other cognitive and physiological states of the emotional experience.

Second, there are some limitations associated with the focus group method used in this study. We used hour-long focus group interviews to collect the data because this format was suited for the purpose of collecting data in a culturally acceptable manner to the research participants. However, because all the data analyzed in this study were based on self-reported, recalled incidents in a group setting, it is possible that the group process inhibited individual participants from nominating expressions or experiences that may be socially undesirable. Furthermore, the resultant data were not adequate for analyses of the underlying structure of the emotions. Other methods such as similarity sortings or numerical ratings of pairs of emotion words may have yielded quantitative data that would be suited for the comparisons of the structures underlying the native emotion lexicon (e.g., via multidimensional scaling). Alternatively, experience sampling of emotion experiences would have yielded contextually situated data that may be more representative of their everyday lives. However, both methods were considered inappropriate to the cultural groups under study because of the low literacy levels among monolingual Fante and Dagbani speakers residing in rural areas.

Finally, according to Beeman (1985), differences in bodily referents of emotional lexica across languages do not necessarily reflect differences in the ability of their speakers to differentiate between the psychological and somatic states. As such, the findings of this study should not be interpreted as necessarily reflecting the abilities of Fante and Dagbani speakers to make such distinctions. Similarly, it should not be assumed that these different ways of representing emotions necessarily mirror different ways of experiencing emotion in these cultures.

CONCLUSIONS

Semantic models of emotion are important in the understanding of the Black experience of emotion. Recall that neither the Fante nor the Dagbani languages had a word that was directly equivalent to the English word *emotion*, and the Fante term *atsinka* that was used to query the focus groups referenced internal states of what English speakers think of as emotions and sensations. This study found that somatic referencing is salient in the everyday folk emotion lexicon generated by the native monolingual speakers of two different Ghanaian languages. In both Dagbani and Fante, the majority of nominated emotion words were associated with specific somatic references, in which body organs were inferred to undergo physiological changes in response to external antecedent events. Moreover, these words that make up the emotion lexicon of Fante and Dagbani speakers appeared

to be construed as basic terms for describing their experiences (rather than as metaphors) by the monolingual native speakers of these languages, similar to the findings by Ameka (2002) in another African language.

Furthermore, the comparison of the English literal translations of the Fante and Dagbani terms found that the seats of somatic references for the emotions differed across the two languages. In Fante and Dagbani, different body organs were scripted for similar feelings in some instances and the same body organs were scripted for different feelings in other instances. Such findings highlight the role of the semiotic environments in scripting the experiences of emotions.

This study provides further evidence that the body organs are amply referenced in communicating emotions in two West African languages of Ghana. This understanding of normative modes of emotion expressions among native speakers of two West African languages has clear psychological implications for people of African descent. Specifically, the salience of embodiment in the folk emotion lexicon among rural monolingual speakers of West African languages suggests that the Eurocentric formulation of emotion that often presumes the supremacy of nonsomatic referenced emotion terms (Leff, 1981) may not fully account for the nature of emotions experienced by people of African descent. In addition, at least among Fante native speakers, there was a category of internal states (atsinka) for what the West subdivides into emotions and sensations. Our finding that both Fante and Dagbani native speakers generated emotion words, almost all of which contained bodily references in their semantic roots, suggests that mental and bodily states may not be as clearly distinguished in their lived daily experiences as they are among individuals from English-language-speaking groups. As a consequence, emotion as a psychological construct among people of African descent may diverge qualitatively from emotion as we know it in the West. Hinton and Hinton (2002) suggest, in semantic network analysis of panic sensations, that each culture has its local ethnophysiology (or folk theory about the origins of symptoms and sensations) that is evident in the semantic referents to the body and physiology. Our findings suggest the possibility that emotion among people of African descent may be a construct that centrally involves the somatosensory experiences.

Finally, such cultural conceptions of internal feeling states in turn may have implications for conceptions and expressions of distress states. For example, somatic manifestations of depression and other mental disorders have been found to be more dominant upon initial presentation among patients in Africa as well as among Africans in the diaspora (e.g., Okulate, Olayinka, & Jones, 2004). Further research in this area may explore the link between expressions of normative and pathological states among Blacks.

APPENDIX A
Focus Group Protocol

1. What positive (or negative) feelings do you usually feel?
2. What unusual positive (or negative) feelings have you felt?
3. For each of the feelings you mentioned
   a. Describe the feeling to me.
   b. Give an example of a situation that resulted in your experiencing that feeling, OR What events preceded the feeling?
   c. What were your thoughts at that time?
   d. What did you do when you experienced that feeling?
   e. How did the people around you/the other people in your life react to you while this was happening?
   f. How do other people react in similar circumstances?

APPENDIX B
Examples of English Translations of Dagbani and Fante Raw Data

Dagbani emotion word: suli (anger)

Causes
   When provoked by a superior
   Being treated wrongly by others
   Being cheated by others
   When one fails to get what one wants
   When someone refuses to give you food when you are hungry

Subjective experience
   Feels like they have put pepper in one's body
   Your heart feels like fire is burning it
   You feel heat within your body

Action of the person experiencing emotion
   Squeeze face
   Beat up the person who caused the anger
   Shout at the person
   Sit down quietly
   Will not talk to anyone again

Reactions of others
   Avoid the person
   Ask the person to be patient
   Hold the person
   Ask the person to give all to God

What other people do
    Avoid the person who caused it
    Warn the person
    Refuse to greet or talk to the person
    Sit down for some time
    Hit the person with a stick

<div align="center">Fante emotion word: anigyei (excitement or happiness)</div>

Causes
    Earning money
    Being given a gift
    No reason; you just wake up feeling it

Subjective experience
    Your heart feels nice
    Pleasurable feeling

Actions of the person experiencing the emotion
    Singing
    Dancing
    Laughing
    Smiling
    Depends on situation (e.g., what the money will be used for)

Reactions of others
    Ask what happened
    Share in the feeling
    Some people don't show it

What other people do
    Pray
    Do the same
    Some drink to celebrate

NOTES

1. There is a debate in and out of psychology concerning the assumptions underlying studies of lexicalization of emotion. Poststructuralists and critical theorists following the works of Jacques Derrida (e.g., see Hepburn, 1999) would likely question the apparent presumption in which text and language are equated with internal states such as emotion. A recent issue of *Psychological Inquiry* was devoted to a debate among emotion researchers, with Sabini and Silver (2005) critiquing the mainstream assumption in psychology that each of the lexicalized emotion terms names a unique experiential state. It is beyond the scope of this article to fully address these theoretical issues. We simply note that our analytical approach to emotion lexica in West African languages does not intend to privilege language (or in this case, the words used to communicate about emotional experiences) as the only representation of the psychological experience.

2. In tonal languages, pitch levels differentiate otherwise identically pronounced words. Kwa languages use a down-step system in which high pitches are lowered after low pitches. Vowel harmony refers to a system of mutual selection or restriction among the vowels that can go into the makeup of a word.

3. Dagbani is also known as Dagbanli, Dagbane, Dagomba, and Dagbamba.

4. The exceptions include Guan-speaking Gonja, the Akan-speaking Chokosi, and the Mande-speaking Busanga.

5. Vulcanizers fix car tires.

6. This is not unusual in rural areas in Ghana, due to the high rate of illiteracy. Older rural dwellers typically identify their ages by reference to major salient events in colonial Ghana such as a drought or a visit by the Queen or governor.

7. "Eye-red" is also the English literal translation of *ŋkúbiā*, an expression for jealousy in Ewe, another language in the same Kwa family as Fante (Ameka, 2002).

REFERENCES

Adams, G., Dzokoto, V. A., & Mensah, K. O. (2003). *Christian identity in African spaces: Public representations in Ghana*. Unpublished manuscript, University of Kansas, Lawrence.

Ameka, F. (2002). Cultural scripting of body parts for emotions: On "jealousy" and related emotions in Ewe. *Pragmatics and Cognition*, *10*, 27-58.

Arhin, K. (1976). The structure of Greater Ashanti. *Journal of African History*, *7*, 65-85.

Beeman, W. O. (1985). Dimensions of dysphoria: The view from linguistic anthropology. In A. Kleinmann & B. Good (Eds.), *Culture and depression: Studies in the anthropology and cross-cultural psychiatry of affect and disorder* (pp. 216–243). Berkeley: University of California Press.

Bendor, S. J. T. (Ed.). (1989). *The Niger-Congo languages: A classification and description of Africa's largest language family*. Dallas, TX: Summer Institute of Linguistics.

Berry, L. (Ed.). (1995). *A country study: Ghana* (Area Handbook Series, Call No. DT510.G44 1995). Washington, DC: Library of Congress Federal Research Division.

Boateng, E. A. (1966). *A geography of Ghana* (2nd ed.). Cambridge, UK: Cambridge University Press.

Cokley, K. O. (2005). Racial(ized) identity, ethnic identity, and Afrocentric values: Conceptual and methodological challenges in understanding African American identity. *Journal of Counseling Psychology*, *52*, 517-526.

D'Andrade, R. (1995). *The development of cognitive anthropology*. Cambridge, UK: Cambridge University Press.

Ekman, P. (1972). Universals and cultural differences in facial expressions of emotion. In J. Cole (Ed.), *Nebraska symposium on motivation 1971* (Vol. 19, pp. 207-283). Lincoln: University of Nebraska Press.

Ekman, P., & Davidson, R. J. (Eds.). (1994). *The nature of emotion: Fundamental questions*. New York: Oxford University Press.

Enfield, N. J., & Wierzbicka, A. (2002). Introduction: The body in description of emotion. *Pragmatics & Cognition*, *10*, 1-25.

Frey, J. H., & Fontana, A. (1993). The group interview in social research. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 20-34). Newbury Park, CA: Sage.

Gadzekpo, S. K. (1997). *History of Ghana since pre-history: A textbook for senior secondary schools*. Accra, Ghana: Royal Crown Press.

Gifford, P. (1998). *African Christianity: Its public role*. Bloomington: Indiana University Press.

Greenfield, P. M. (1997). Culture as process: Empirical methods for cultural psychology. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology, Volume 1: Theory and method* (2nd ed., pp. 301-346). Boston: Allyn & Bacon.

Grimes, B. F. (Ed.). (1996). Languages of Ghana. In *Ethnologue: Languages of the world* (13th ed.). Dallas, TX: Summer Institute of Linguistics.

Guthrie, R. V. (1991). The psychology of African Americans: A historical perspective. In R. Jones (Ed.), *Black psychology* (3rd ed., pp. 33-46). Berkeley, CA: Cobb & Henry.

Gyekye, K. (1996). *African cultural values: An introduction*. Lansing, MI: Sankofa.

Hasada, R. (2002). "Body part" terms and emotion in Japanese. *Pragmatics & Cognition*, *10*, 107-128.

Hepburn, A. (1999). Derrida and psychology: Deconstruction and its ab/uses in critical and discursive psychologies. *Theory & Psychology*, *9*, 639-665.

Hinton, D., & Hinton, S. (2002). Panic disorder, somatization, and the new cross-cultural psychiatry: The seven bodies of a medical anthropology of panic. *Culture, Medicine & Psychiatry*, *26*, 155-178.

Hupka, R. B., Lenton, A. P., & Hutchison, K. A. (1999). Universal development of emotion categories in natural language. *Journal of Personality & Social Psychology*, *77*, 247-278.

James, W. (1950). *Principles of psychology*. New York: Dover. (Original work published 1890)

Jones, J. M. (2003). TRIOS: A psychological theory of African legacy in American culture. *Journal of Social Issues*, *59*, 217-241.

Kitayama, S., & Markus, H. R. (Eds.). (1994). *Emotion and culture: Empirical studies of mutual influence*. Washington, DC: American Psychological Association.

Kövecses, Z., & Palmer, G. B. (1999). Language and emotion concepts: What experientialists and social constructionists have in common. In G. B. Palmer & D. Occhi (Eds.), *Languages of sentiment: Cultural constructions of emotional substrates* (pp. 237-262). Amsterdam: John Benjamins.

Leff, J. (1981). *Psychiatry around the globe: A transcultural view*. New York: Marcel Dekker.

Levy, R. I. (1984). Emotion, knowing, and culture. In R. A. Shweder & R. A. Levine (Eds.), *Culture theory: Essays on the mind, self and emotion* (pp. 214-237). Cambridge, UK: Cambridge University Press.

Lutz, C. A. (1988). *Unnatural emotions: Everyday sentiments on a Micronesian atoll & their challenge to Western theory*. Albany: State University of New York Press.

Lyon, M. L. (1999). Emotion and embodiment: The respiratory mediation of somatic and social processes. In A. L. Hinton & N. Quinn (Ed.), *Biocultural approaches to emotions* (pp. 182–212). Cambridge, UK: Cambridge University Press.

Madriz, E. (2000). Focus groups in feminist research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 835-850). Thousand Oaks, CA: Sage.

Markus, H. R., & Kitayama, S. (1994). The cultural shaping of emotion: A conceptual framework. In S. Kitayama & H. R. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 339-351). Washington, DC: American Psychological Association.

Mbiti, J. (1970). *African religions and philosophy*. New York: Doubleday.

Menon, T., Morris, M. W., Chiu, C. Y., & Hong, Y. (1999). Culture and the construal of agency: Attribution to individual versus group dispositions. *Journal of Personality & Social Psychology*, *76*, 701-717.

Nowicki, S., Glanville, D., & Demertzis, A. (1998). A test of the ability to recognize emotion in the facial expressions of African American adults. *Journal of Black Psychology*, *24*, 335-350.

Oatley, K. (1993). Social construction in emotions. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 341-352). New York: Guilford.

Okulate, G. T., Olayinka, M. O., & Jones, O.B.E. (2004). Somatic symptoms in depression: Evaluation of their diagnostic weight in an African setting. *British Journal of Psychiatry*, *184*, 422-427.

Pavlenko, A. (2002). Emotions and the body in Russian and English. *Pragmatics & Cognition*, *10*, 207-241.

Radley, A. (1998). Displays and fragments: Embodiment and the configuration of social worlds. In H. J. Stam (Ed.), *The body and psychology* (pp. 13-29). London: Sage.

Russell, J. A. (1991). Culture and the categorization of emotions. *Psychological Bulletin*, *110*, 426-550.

Ryan, G. W., & Bernard, H. R. (2000). Data management and analysis methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 769-802). Thousand Oaks, CA: Sage.

Sabini, J., & Silver, M. (2005). Why emotion names and experiences don't neatly pair. *Psychological Inquiry*, *16*, 1-10.

Shaver, P. R., Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation. In M. S. Clark (Ed.), *Emotion: Review of personality and social psychology* (pp. 175–213). Newbury Park, CA: Sage.

Shaw, R. (2000). "Tok af, lef af": A political economy of Temne techniques of secrecy and self. In I. Karp & D. A. Masolo (Eds.), *African philosophy as cultural inquiry* (pp. 25-49). Bloomington: Indiana University Press.

Shweder, R. A. (1993). The cultural psychology of the emotions. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 417-431). New York: Guilford.

Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality & Social Psychology*, *74*, 482-493.

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer.

Tung, M. P. (1984). Symbolic meanings of the body in Chinese culture and "somatization." *Culture, Medicine and Psychiatry*, *18*, 483-492.

Turpin, M. (2002). Body part terms in Kaytetye feeling expressions. *Pragmatics & Cognition*, *10*, 271-305.

White, J. (1991). Toward a Black psychology. In R. Jones (Ed.), *Black psychology* (3rd ed., pp. 5-14). Berkeley, CA: Cobb and Henry.

Wierzbicka, A. (1992). Talking about emotions: Semantics, culture, and cognition. *Cognition & Emotion*, *6*, 285-319.

Wierzbicka, A. (1994). Emotion, language and cultural scripts. In H. R. Markus & S. Kitayama (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 133-196). Washington, DC: American Psychological Association.

Ye, Z. (2002). Different modes of describing emotions in Chinese: Bodily changes, sensations, and bodily images. *Pragmatics & Cognition*, *10*, 307-339.

Yu, N. (2002). Body and emotion: Body parts in Chinese expression of emotion. *Pragmatics & Cognition*, *10*, 341-367.