
**Toward an Understanding of the Universality of Second Order Emotions**

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Preface

For 32 months I studied a community in which much of life revolves around a pair of emotions. Two projects resulted. One, presented elsewhere, is an examination of how and why the given culture shapes and exploits these emotions. The second, presented below, is a consideration of the underlying capacities which make such cultural manipulation possible. Like the other authors in this volume, I hold that the experience of emotion is the combined product of cultural and biological factors. However, rather than explore that synergy, in this essay I attempt to employ the former as a lens with which to view the latter.

I begin with a description of a Malay emotion which appears synonymous with shame. However, closer inspection reveals that this emotion can be elicited by two fundamentally different sets of conditions. Moreover, it seems that this duality is a pervasive feature of shame-like emotions around the world. If one adopts the position that the capacity to experience a given type of emotion is the product of evolution, then the duality of shame-like emotions is puzzling, for an evolutionary perspective suggests that each emotion ought to address a discrete facet of life. In order to unravel this puzzle, I search for clues regarding the evolutionary history of shame-like emotions and their opposites, pride-like emotions. I explore the display behaviors and cognitive demands associated with each type of emotion, and conclude that two primitive emotions, which I call Protoshame and Protopride, initially developed in order to motivate the quest for social dominance. I speculate that these emotions served as the foundation for more complex emotions which arose when hominids developed the capacity for a model of mind, that is, the ability to understand that other individuals possess minds like one’s own. Such a capacity creates the possibility of a new class of emotions, the second order emotions, which are a reaction to the subjective experiences of other individuals. After examining such first order emotions as pity and envy, I suggest that Protoshame and Protopride were transformed into two second order emotions, Early Shame and Early Pride, which extended dominance-striving motivations into the new social world created by the advent of the model of mind. However, in addition to enhancing competition, the model of the mind also facilitates cooperation. The possibility of significant cooperation resulted in the development of new
versions of Shame and Pride which served to motivate conformity rather than rivalry and, in so doing, set the stage for the blossoming of culture as humankind’s primary adaptation.

THE IMPORTANCE OF MALU

The Logic of Malu

Dusun Baguk is a semi-traditional fishing village on the southwest coast of Sumatra. Most of the 400 residents describe themselves as orang Bengkulu asli, pure exemplars of the Bengkulu, an ethnic group concentrated in and around the city of the same name. The Bengkulu distinguish themselves from both near neighbors such as the Rejang and more distant compatriots such as the Minangkabau on the basis of their distinct dialect of Malay and their emblematic architecture, ritual, cuisine, and performing arts.

Between 1990 and 1993 I conducted fieldwork in Dusun Baguk. A striking feature of life in this community of 90 households is the attention given to one particular emotion: Informants describe a wide variety of behaviors as being the result of a desire to avoid experiencing malu. I was repeatedly told that people attended religious services, visited sick neighbors, participated in feasts, purchased consumer goods, and sent their children to school all so that they would not feel malu with their neighbors. Likewise, I was informed that people did not eat during prescribed fasting periods, abstained from forbidden pleasures such as alcohol and fornication, avoided ostentatious dress, and even regulated the speed with which they walked because to do otherwise would entail the risk of experiencing malu.

My informants told me that people who feel malu avert their gaze, stoop, and avoid social interaction. Numerous observations confirmed this portrait. Inspired by Wierzbicka’s (1986, 1992) proposals for a metalanguage with which to discuss emotions, and Russell’s (1991) and Shaver et al.’s (1992) notions of emotion scripts, I collected 305 detailed cases in which informants spontaneously used the word malu to describe their own or an Other’s emotional state. Focusing on commonalities among some of the more widely discussed cases, I arrived at the following ‘logic’ for malu, a set of conditions
under which the emotion is experienced:  

1) Ego violates a norm  
2) Ego is aware of his failure  
3) an Other is also aware of Ego’s failure  
4) Ego is aware of the Other’s knowledge  
5) Other displays hostility and revulsion towards Ego  
- OR - Ego assumes that Other experiences hostility and revulsion towards Ego  
6) Ego experiences malu, an aversive emotion  

The same logic appears to delineate the emotion described by the English term shame (cf. Fischer and Tangney 1995), and hence ‘shame’ is a reasonable initial gloss for malu. However, closer inspection reveals that there are significant differences between the two terms.

Malu and Rank

The 6-point logic for malu presented above can be used to characterize 87.2% of the 305 cases in which informants employed the word malu. But what of the other 12.8%? A clue as to the nature of the remaining cases lies in informants’ statements that the presence of a superior can cause an individual to feel malu. Indeed, this experience is so salient that the status of high-ranking individuals is often described not in structural terms, but rather with reference to their capacity to elicit a sense of malu in others.

I once watched as an impoverished young fisherman stood with stooped shoulders on the steps of the head of the village’s porch, staring at the ground while stammering out his simple request. Witnesses explained his behavior as resulting from intense feelings of malu. This case does not conform to the 6-point logic of malu described above—failure is the heart of the 6-point logic, yet the fisherman was malu despite the fact that he had done nothing wrong. True, being poor might be construed as a failing, but fate is thought to be as important as effort in such matters, and the fisherman’s poverty was seen as being no fault of his own. His inferiority was in part due to the fact that he was young, since age is an
important factor in the prestige equation in Dusun Baguk, yet being young cannot be seen as a failing of the individual. The 6-point logic simply does not fit cases such as this one. Moreover, all of the 39 anomalous cases are of this type, namely an encounter with a superior.

It appears that there are two facets to *malu*, one premised on failure of some sort, and the other premised on inferiority irrespective of failure or success. But perhaps there is nothing of interest in this finding. Homonymy is common --in English `bank' can refer to both a financial institution and the edge of a river. Note, however, that the display behavior associated with the two types of *malu* is identical: Looking only at behavior, it is impossible to tell whether an individual feels *malu* because he has failed in a public arena or because he must interact with a superior. Likewise, in both cases informants describe an unpleasant sensation and a wish to flee. No such commonalities link a fiscal bank and a topographic bank. Hence, this is not a case of simple homonymy, but rather one in which two very different situations somehow elicit the same response, a response which is labeled by a single term, *malu*.

*Malu* resulting from inferiority is only elicited in situations in which a marked disparity between individuals is a salient feature of their interaction. The poor fisherman would not feel *malu* playing volleyball with the head of the village, for in such a situation equality, rather than rank, is a defining feature of the interaction. We can therefore delineate the following supplementary logic for *malu*: 6

1) Ego assesses an Other as significantly more important than Ego
2) Ego must interact with the Other in a situation in which the discrepancy between Ego and the Other is salient for Ego
3) Ego experiences *malu*, an aversive emotion

This 3-point logic fits all of the cases which are incompatible with the 6-point logic described earlier.

The Puzzle of Two Logics

I will argue that *malu* is a particular instantiation of a panhuman emotion. Holding aside the grounds on which I make this claim, consider what this implies in light of the fact that *malu* has two logics, i.e., a single emotion experience and display can be elicited by two different types of situations. I adopt the
position that a) emotions function as a special way of knowing about how the individual stands in relation to
the world (Lazarus 1991; Nesse 1990); and b) universal features of mind exist because in the past they
offered an adaptive advantage to those who possessed them, and this is especially true of emotions (Izard
1977; Plutchik 1980; Tooby and Cosmides 1990). In this perspective, each emotion is thought to "tell" the
individual about a particular type of relationship with the world (Nesse ibid.), what Lazarus (ibid.) has called
a "core relational theme." For example, fear is a way of "knowing" that the environment is threatening to
the individual. Similarly, the "action tendencies" (Frijda 1986) associated with each emotion serve to
somehow improve the individual's position given the particular type of situation which elicited the emotion:
Running away is a way of mitigating a threat to oneself (Nesse ibid.). All of which leads us to ask, if each
emotion functions to address a particular type of relationship with the environment, why do two
fundamentally different situations both serve to elicit malu? The answer lies in the phylogenetic
development of Shame, a panhuman emotion. However, before examining this possibility, it is important
to consider a second emotion which is significant in Dusun Baguk.

Bangga

The logic of malu revolves around an Other's awareness of Ego's failure. Ego's inadequacies thus
distinguish him from other individuals, attracting negative attention. In other words, Ego 'stands out.'
Consider the following discussion concerning the general concept of 'standing out':
D.F.--Tell me about that word, menyolok ('to stand out').
Informant--People who stand out [feel]² malu.
D.F.--But yesterday the speaker at the mosque (an invited guest from the city) wore very fine clothes,
didn't that make him stand out?
I--His clothes were nice. They were appropriate.
D.F.--So he [was] not malu even though he stood out?
I--No, one can stand out and [feel] bangga .
D.F.--So, sometimes standing out causes one to [feel] malu and sometimes it causes one to [feel]
bangga?

I--Right, it depends on the situation. For example . . . if I were to walk from one end of the village to the other wearing shorts, that would stand out and I would [be] malu . . .

D.F.--But how can we tell the difference, how can we know what will cause malu and what will cause bangga?

I--It depends on the situation . . . basically, it depends on what is appropriate, what is customary. If one stands out in a way which is not (appropriate and customary), one [feels] malu, but if one stands out in a way which is, then that means one stands out in a good way, and so then one [feels] bangga.

Before examining these statements in more detail, it is important to recognize the scope of the phenomenon at issue. Physical attractiveness can produce bangga, as can skill at oration and quickness of wit. Hosting a large and impressive feast can make a family feel this way, and having important officials attend the ritual adds to this emotion. Winning an election or a chess game, being known for baking the best cakes, or having many visitors on holidays are all reasons to feel bangga. Likewise, the type of house in which one lives can be cause for bangga, as can the furniture inside the house, a motorcycle on the porch, and so on. Thus, while the desire to avoid experiencing malu is a primary determinant of behavior in Dusun Baguk, the desire to experience bangga is also a significant factor.

Informants stress that `standing out in a good way' involves actions which are `appropriate and customary,’ and which are not `excessive’--one can also `stand out in a bad way.’ In short, if an individual attracts attention to herself through behavior which cultural standards define as bad, others ridicule or condemn her. Conversely, if she attracts attention to herself through behavior defined as good, others praise her. Hence, just as I described the logic of malu in terms of a failing, so too is it possible to delineate the logic of bangga in terms of a success (cf. Goddard 1996): 8

1) Ego successfully fulfills a norm
2) Ego is aware of her success
3) an Other is also aware of Ego’s success
4) Ego is aware of the Other’s knowledge
5) Other displays towards Ego either i) a positive appraisal and affection, or
ii) a positive appraisal and hostility

- OR - Ego assumes that Other experiences (i) or (ii) towards Ego

6) Ego experiences *bangga*, a pleasurable emotion

First, note that this logic seems to also characterize the emotion which English speakers label *pride* (cf. Fischer and Tangney 1995). Second, comparing the 6-point logic of *bangga* with the 6-point logic for *malu* reveals that each is the opposite of the other. This suggests an interesting parallel between the two emotions. We can therefore ask whether *bangga* also possesses a 3-point logic which is the opposite of the 3-point logic of *malu*.

Many languages contain character trait terms, labels which describe longstanding features of personality. These terms often address a tendency to experience particular emotions more frequently or with less cause than is common (Lazarus 1991) – a `shy' person feels `shy' more often, and more easily, than others. In Dusun Baguk, the term *bangga* can refer to either an emotion or a character trait. Generally, when the term is used to refer to an emotion, it is the emotion delineated by the 6-point logic described above. However, when informants use the term as a character trait, they are not referring to the excessive experience of this emotion. Informants state quite plainly “He is *bangga* (character trait), he thinks that he is better than others.” In other words, the character trait *bangga* describes an individual who excessively experiences an emotion based not on positive evaluation by others, but rather simply on rank.

Although Dusun Baguk is an hierarchically organized community, an ethos of egalitarianism pervades many social situations. Accordingly, there are strong proscriptions against displaying a pleasurable emotion elicited by occupying a position of superiority. Furthermore, the character trait associated with a proclivity to experience this emotion is even more strongly prohibited. In common discourse, this emotion is therefore overshadowed by the proscribed character trait. The character trait *bangga* thus both hides and provides indirect evidence of a rank-related form of the emotion *bangga* – like *malu*, *bangga* possesses a second logic in addition to the 6-point logic:

1) Ego assesses an Other as significantly less important than Ego

2) Ego must interact with the Other in a situation in which the discrepancy between Ego and the Other is salient for Ego
3) Ego experiences bangga, a pleasurable emotion

As was true of the 6-point logic, the 3-point logic of bangga is the opposite of that of malu. We are thus confronted by a pair of emotions which are opposites, each of which is characterized by two logics. I believe that both the paired nature of these emotions and the existence of their dual logics reflect important features of human phylogeny.

THE CROSS-CULTURAL PERSPECTIVE

The Panhuman Spectrum of Emotion

Levy (1973, 1984) has argued that culture influences the experience of emotion by selectively highlighting or ignoring different aspects of a panhuman spectrum of emotions, processes which he terms hyper- and hypocognizing. This explains how it is that investigators can come to understand seemingly exotic emotions: We are able to grasp such emotions even though we lack the terms or cultural schemas with which to describe, discuss, and ponder them because we ourselves are capable of experiencing them. This is consistent with a robust finding of cognitive research, namely that cultural/linguistic hypercognizing makes it easier to perceive and think about some things rather than others, but hypocognizing does not preclude perceiving or thinking about anything (D’Andrade 1995; Nisbett and Wilson 1970; Parish 1991).

Levy’s approach raises the question as to what the panhuman spectrum of emotion consists of: If we are to truly understand both human beings and culture, we must explain how the inherent capacities of the former interact with the myriad possibilities of the latter. The problem is that nowhere do we have direct access to this spectrum—no matter where we conduct our investigation or who we use as subjects, we can never arrive at a culture-free window into human beings’ underlying capacity for emotion.
Because we can only work with the materials which the world’s cultures give us, if we are to delineate the complete set of focal emotions, those principal elements which have universal experiential reality, but which are differentially emphasized across cultures, we must compare the emotions identified in one culture with those identified in another. The goal is to discover core notions which are present in diverse cultures.

In seeking to compare culturally-defined emotions across cultures, it is important to distinguish between i) the ‘logic’ of an emotion (a set of conditions which define when and how the emotion will be experienced); ii) the subjective experience of an emotion (how the emotion “feels”); and iii) the display behavior of the emotion (the outward manifestations of emotional experience). The subjective experience of an emotion is extremely difficult to investigate. Hence, in general, investigations of the universality of various emotions fall into one of two categories. Researchers in the social sciences often adopt a content-based approach in which emphasis is placed on the context and reasoning which lie behind a given emotion. In contrast, investigators who identify their work with the natural sciences often employ a display-based approach in which emotions are defined and compared primarily through their behavioral manifestations. The most rigorous position is that which employs both of these approaches.

Content-Based Evidence in Support of the Universality of Malu

With some notable exceptions, anthropologists have not employed systematic means for describing emotions. Many ethnographies which touch on questions of emotion do so in an imprecise manner, often using English glosses not as stepping stones, but rather as direct translations, with no admission that translation may itself be a problematic process (Russell 1991). It is therefore difficult to use the ethnographic corpus to test the universality of a particular emotion, as materials are often not directly comparable. Nevertheless, it is sometimes possible to piece together different observations in order to delineate a tentative logic for a particular emotion in a given culture.

After a preliminary survey of the ethnographic literature, I believe that it is possible to identify an emotion equivalent to the 6-point logic of malu in the following areas: Ireland (Messenger 1971),

In contrast to the sketchy material on emotion present in the ethnographic literature, Western clinicians and psychologists have carefully examined a number of emotions. Researchers have constructed a detailed portrait of the emotion shame (cf. H. Lewis 1987; Tangney and Fischer 1995). This portrait confirms the presence of an emotion possessing the same 6-point logic as that of malu.

With tentative content-based evidence supporting the universality of an emotion characterized by the 6-point logic which I have described for malu, I turn now to the question of the universality of the 3-point logic of this emotion. Parish notes that

The English emotion term “shame” seems peculiar in cross-cultural perspective, because it does not seem to be semantically and socially organized in terms of conceptual links with “timidity,” “fear-fright,” and “respect” in the way that the emotion terms often translated by the English word “shame” generally do. [1991:332 emphasis added]

Parish could well be describing the 3-point logic of malu. Likewise, consider the ancient Greek goddess Aidos, “the personification of modesty, respect, and shame” (Flexner 1987). The Ilongot word betang can be glossed as `shame, timidity, embarrassment, awe, obedience, and respect,’ (M. Rosaldo 1983), while the Pintupi word kunta can be glossed as `shame, embarrassment, shyness, and respect,’ (Myers 1979). Swartz (1991) has explored the relationship between the feelings of `shame,’ `fear,’ and `respect’ elicited by highly prestigious individuals among the Mombasa Swahili, and Nachman (1982) has made similar observations on Nissan Atoll in Papua New Guinea. When I describe the 3-point logic in seminars, North American students and colleagues seem to understand it intuitively. More formally, data collected by Wicker, Payne, and Morgan (1983) demonstrate the experiential reality of the 3-point logic for English speakers despite the absence of a specific emotion term. In sum, there is evidence that, like the 6-point
version of *malu*, the 3-point version is also present in a number of cultures. It would therefore appear that
*malu* is a better example of, or window into, one particular panhuman focal emotion than is *shame*, in that
the former encompasses more features of the universal pattern than does the latter. To avoid confusion, I
will refer to the possibly universal emotion which is characterized by both the 6-point logic and the 3-point
logic as Shame (the capital “S” indicates that this is not precisely the same concept denoted by the
English word *shame*).

Content-Based Evidence in Support of the Universality of *Bangga*

Given that content-based investigations indicate that *malu* may reflect a universal emotion, what
can be said about *bangga*? At first glance, not much. It appears that the problems which I encountered in
exploring the presence of the 3-point logic of *bangga* are not limited to Dusun Baguk. Authors have far
more to say about ‘proud,’ a term referring to both character and demeanor, than they do about the
emotion ‘pride.’ The difference between the attention devoted to an emotion resembling *malu* and that
devoted to an emotion resembling *bangga* may be due to a number of factors. It is possible that loss looms
larger than gain for many peoples (Ketelaar 1993). If this is so, punitive emotions may receive more
attention (from both informants and ethnographers) than rewarding ones. However, I content myself with
the less tenuous, but still speculative, proposition that, as in Dusun Baguk, a concern with notions such as
‘proud’ and ‘arrogant’ can be taken as indirect evidence of the presence of an emotion resembling the 3-
point version of *bangga*. A number of ethnographers mention these terms (Briggs 1970; Dentan 1978;
Gerber 1985; Levy 1973; Romanucci-Ross 1973; Shostak 1983; Wikan 1987). They are also present in
some regard in many of the ethnographies cited earlier.

It thus appears that there is indirect content-based evidence of the presence of emotions
resembling the 3-point version of *bangga* in many cultures. But what of the 6-point version of *bangga*?
Some form of public performance appears to be present in every culture. It seems that performers are
often motivated in part by the possibility of applause. Positive evaluation by others, in this case an
audience, is precisely the factor which elicits a rewarding emotion in the 6-point logic of *bangga*. 
Accordingly, while it is admittedly a tenuous form of evidence, the universality of performance may indicate that an emotion resembling the 6-point version of bangga is widespread. We can therefore coin a second label, Pride, for the possibly universal emotion described by the 3-point and 6-point logics which characterize bangga.

Display-Based Evidence of Universality

I have noted in passing the display behavior associated with malu. Below is a more complete description of this display based on observations of many naturally occurring instances (identified as such by informants):

1) averted gaze
2) face turned down and away from others
3) stooped shoulders
4) shrinking posture
5) bent-kneed, shuffling gait
6) reddening of the face and neck
7) attempts to avoid being seen, culminating in flight

This is the prototypic display behavior which English speakers associate with shame, and which psychologists have described in the West (previous cit.s; Fischer and Tangney 1995). In his seminal work on emotion, Darwin (1872) described this configuration and argued that its widespread distribution amounted to evidence of universality. However, Darwin's reliance on anecdotal evidence collected by observers who lacked a uniform method forces us to discount his conclusions, and, unfortunately, no ethological work of equivalent scope has yet touched on this issue. Eibl-Eibesfeldt's comprehensive text (1989) mentions the universality of “embarrassment” only in passing. Ekman, the dean of emotion ethology, allows that “shame-guilt” and “embarrassment” may be universals, but notes that the evidence is still equivocal (quoted in Lazarus 1991).

The dearth of ethological data pertaining to Shame may be due to the fact that most comparative
studies focus on facial displays of emotion, yet Shame involves a whole-body display (Lazarus 1991; see Campos et al. 1994). As a last resort, we are forced to return to the ethnographic corpus in search of ethological data. Some ethnographers supply us with sufficient ethological data to conclude that the Shame display is present in the region studied (for example, see Dentan 1978; Epstein 1992; Levy 1973; Nachman 1982; Tonkinson 1978). However, the systematic recording of emotion display data is relatively uncommon. Nevertheless, one observation frequently accompanies ethnographic accounts of emic emotions which are characterized by the Shame logic: Again and again we are told that individuals who experience this emotion seek to hide their faces and avoid contact with members of their group, to the point that they may even flee. “When you are ashamed,” Gregor’s Mehinaku informants explain, “it hurts to be seen,” (1977:221). Less clear-cut is the tantalizing fact that it is common for shameful events to be described in emic terminology as causing a “loss of face.” In sum, although the display-based evidence relating to Shame is woefully inadequate, the meager data that do exist suggest universality.

Consider the display behavior associated with bangga:

1) eye contact is sought
2) face is slightly elevated and turned towards others
3) squared shoulders
4) erect posture
5) stiff-legged gait
6) seek out opportunities for exhibition

This display is the same as that which English speakers associate with pride --compare this description with synonyms which Roget’s Thesaurus lists for pride and proud: “hold up one’s head, hold one’s head high, stand up straight, hold oneself erect, never stoop, look one in the face, look one in the eye, erect, stiff-backed, stiff-necked, lofty, swollen, puffed up, nose in the air, look down one’s nose,” (Chapman 1977) (see Fischer and Tangney 1995; Mascolo and Fischer 1995; Nathanson 1992).

Darwin (op.cit.) argued that the pride display is universal. However, as I noted, Darwin’s methods are less than ideal. Once again we encounter the problem that cross-cultural psychologists have not paid much attention to whole-body emotion displays, while ethnographers have not collected detailed
ethological data. Nevertheless, there is some evidence that this display is present in a number of societies, for we find observations such as the following, taken from Lindholm’s account of the Swat Pukhtun: “[Proud men] carry themselves erect, walk with a swagger, and look one another straight in the eye,” (1982:218) (for examples in markedly different cultures, see Chagnon 1983; Weiner 1988). Hence, although the question cries out for serious and extended study by ethologists and cross-cultural psychologists, preliminary behavioral evidence suggests that Pride may be a panhuman emotion.

THE PHYLOGENETIC ORIGINS OF SHAME AND PRIDE

What the Displays Tell Us

For now, I will content myself with the smattering of data which indicates that it is conceivable and perhaps even reasonable to view malu and bangga as local instantiations of focal points on the panhuman spectrum of emotion. Natural selection has importantly shaped human emotions. Each emotion thus has, or at one point had, a particular `purpose’: Each provides a specific adaptive advantage to individuals who are capable of experiencing it. Accordingly, if we assume that Shame and Pride are universal emotions, we can inquire as to the adaptive advantage which these two emotions may have provided at some point in the past. Attempting to answer this question suggests explanations regarding the puzzling features of Shame and Pride, namely why each emotion has two logics, and how this came to be.

The behaviors associated with Shame and Pride are opposites of one another. This holds true on a point-by-point basis, and along the three primary axes which characterize these displays, as illustrated below: 18

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<th></th>
<th>Shame</th>
<th>Pride</th>
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<tr>
<td>eye contact</td>
<td>avoided</td>
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<td>manipulation of</td>
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When these behaviors are considered against the backdrop of patterns in primate and mammalian behavior, a central theme appears. In many primates and other species, staring is a component of threat behavior, while gaze avoidance is a component of appeasement behavior (Chevalier-Skolnikoff 1973). Next, in many, perhaps most vertebrates, increasing apparent body size is a component of threat behavior, while decreasing it is a component of appeasement behavior (Eibl-Eibesfeldt 1989). Jolly notes, “Bodily posture is one of the most consistent communicative gestures throughout mammals as a whole. Confident or threatening animals hold themselves straight, look big, and walk with stiff-legged swagger. Submissive ones hunch over, crouch, or lie down,” (1985:208). Lastly, seeking visibility is a central part of many primate threat displays, while avoiding interacting with others or attracting attention to oneself is often a form of submission (Rowell 1966). In sum, if a Martian ethologist were to study human Shame and Pride displays, she would probably conclude that the interactions in which these displays are observed consist of attempts to negotiate or reaffirm issues of dominance and subordinacy.

The Congruence of Logic and Display

We can conceptualize the logic of a given emotion as the set of events which give rise to an assessment of one's standing with regard to a particular facet of the world (Nesse 1990). Social relationships constitute one portion of Ego's interactions with the world. Any given social relationship can have many dimensions, and each of these is addressed by a particular emotion or pair of emotions. For example, one important dimension of a social relationship is the degree to which Ego is positively or negatively inclined towards the Other. This dimension is addressed by the emotions Affection and Hostility. For any given emotion, the logic, feeling, and display are consistent with one another and are
mutually reinforcing. The logic of Affection involves “a desire to help and approach the Other,” while the logic of Hostility involves “a desire to hurt and repel the Other.” The associated displays are consistent with these logics: The Affection display involves an opening up of the face and a masking of threatening characteristics, while the Hostility display involves a closing down of the face and an exaggeration of threatening characteristics (Eibl-Eibesfeldt 1989).

In addition to the degree to which Ego is positively or negatively inclined toward the Other, another important feature of any relationship is the question of rank. We can expect that an emotion or pair of emotions will address this aspect of the relationship, and that this emotion or pair of emotions will be composed of a logic, a feeling, and a display which are consistent with one another. I have argued that the Shame and Pride displays are each well-organized systems of behavior which, drawing on components common across primates, communicate messages of inferiority and superiority, respectively. Consider the 3-point logic of Shame:

1) Ego assesses an Other as significantly more important than Ego
2) Ego must interact with the Other in a situation in which the discrepancy between Ego and the Other is salient for Ego
3) Ego feels something unpleasant

Likewise, recall the 3-point logic of Pride:

1) Ego assesses an Other as significantly less important than Ego
2) Ego must interact with the Other in a situation in which the discrepancy between Ego and the Other is salient for Ego
3) Ego feels something pleasant

In contrast to the 6-point logics with their emphasis on Ego’s performance relative to some standard, these logics define a matched pair of emotions centered wholly upon issues of dominance. Hence, unlike the 6-point logics, the 3-point logics are thematically consistent with the displays associated with Shame and Pride, as the displays serve principally to communicate assessments of relative superiority and inferiority. This suggests that the 3-point logics of Shame and Pride are the original forms of these emotions.
The above conclusion is further supported by the difference in the complexity of the cognitive demands entailed by the two types of logics. The 6-point logics depend upon Ego’s ability to recognize what the Other knows or does not know, a sophisticated capacity found only in humans and perhaps some apes and cetaceans (more on this later). In contrast, the 3-point logics require merely the ability to assess relative superiority, a capacity probably present in most, if not all, vertebrates. Hence, while many ancestral species must have been capable of the information processing required for the experience of emotions based on the 3-point logics, it is only in the evolutionarily recent past that creatures appeared who were capable of experiencing emotions based on the 6-point logics. In sum, based on a) the congruence between the 3-point logics and the displays, and b) the relative simplicity of the cognitive demands of the 3-point logics, I propose that the 6-point logics arose at some point after the logic/display configurations of Shame and Pride had already developed. Ultimately, the 6-point logics displaced the 3-point logics and relegated them to a secondary role in both emotions. But before I turn to the events which precipitated this change, we must first consider the origins of the initial 3-point versions of Shame and Pride.

Emotions as Goals: The Function of Protoshame and Protopride

For clarity, I will refer to the emotions composed of a 3-point logic and a complete display, but lacking the 6-point logic, as Protoshame and Protopride. Although we can view the displays associated with Protoshame and Protopride as derived from earlier threat and appeasement displays, this in no way explains why feelings should be associated with the logics that produce these displays. This is not a trivial point, for, at least subjectively, emotions are primarily ‘about’ feelings. In both Bengkulu and North America Shame involves feeling ‘small, afraid, dirty, and exposed’ (Holland and Kipnis 1994; Lindsay-Hartz et al. 1995; Wicker et al. 1983), while Pride involves feeling ‘big, happy, shining, and in control’ (Mascolo and Fischer 1995; Nathanson 1992). I will return to these specific feelings later. First, we must consider why feelings exist at all.

Emotions are subjectively distinguished from one another in part on the basis of variation with
respect to two criteria, intensity and hedonic aspect (pleasantness/unpleasantness) (Frijda 1986; Plutchik 1980). The salience of these two features in the subjective experience of emotions is what allows emotions to influence action. There are several ways in which emotions can influence action. In the simplest situation, an event occurs which causes Ego to experience an emotion, and, as a consequence of that emotion, Ego acts. We can represent this as

\[ \text{EVENT \rightarrow EMOTION \rightarrow ACTION} \]

In this situation, the intensity of an emotion serves to indicate the significance of the stimulus, and hence how dramatic the response should be, while the hedonic aspect indicates whether the reaction should be toward or away from the stimulus. However, even simple creatures learn from experience, and thereafter attempt to avoid events which were unpleasant and to seek out events which were pleasant. In other words, if initially emotions are a reaction to an event, and actions are a consequence of emotions, learning scrambles this sequence, so that individuals act in order to shape events which will cause them to experience particular positive emotions or allow them to avoid experiencing particular negative emotions (Nesse 1990; Parish 1991). We can represent this modified sequence as

\[ \text{ACTION \rightarrow EVENT \rightarrow EMOTION} \]

In this situation, emotional states themselves constitute objectives, with the characteristics of an emotion influencing action before the emotion is experienced, rather than after. The level of intensity of a particular emotion serves to define its significance as an objective, indicating how hard the individual should strive to achieve it. The hedonic aspect determines whether the objective is a goal (something to be sought) or an anti-goal (something to be avoided).

Each emotion is ‘about’ one particular feature of Ego’s relationship with her environment. Specifically, the feelings of a given emotion act in conjunction with the logic of that emotion to create a specific goal or anti-goal within the range of possibilities which constitutes Ego’s relationship with her environment. For example, the logics of Protoshame and Protopride address one aspect of Ego’s relationship with an Other, namely the question of who is superior and who is inferior. However, simply knowing that these two possibilities exist does not lead Ego to seek out one and avoid the other. Rather, it is the addition of feelings to these logics which give them motivational significance: Because feeling
`big, happy, shining, and in control' is very rewarding (it is a high intensity pleasant emotion state), being superior to Others becomes a goal. Conversely, because feeling `small, afraid, dirty, and exposed' is very punishing (it is a high intensity unpleasant emotion state), being inferior to Others becomes an anti-goal, something which should be avoided. In short, because Protopride makes it rewarding to be dominant while Protoshame makes it punishing to be submissive, these emotions shape behavior by leading individuals to strive for higher rank.

Drives, Emotions, and the Origins of Protoshame and Protopride

Observations of goal-directed behavior, particularly that which is highly regular across individuals, lead investigators to assume that some factor is responsible for the behavior. “Drive” is the name which is often given to such factors. However, if we turn the investigative lens on ourselves and focus on subjective experience rather than external behavior, it seems that we never experience drives per se. We act because of emotions, whether it is in anticipation of them or as a consequence of them (Westen 1985). Emotions result in patterned behavior largely because they create goals or anti-goals: The logic of an emotion determines what actions must be taken in order to achieve the desired outcome. When the logics of several emotions complement one another, the patterns in observable behavior become even more noticeable. Viewed in this manner, a “drive” has no independent existence--the patterns which lead us to identify such a “drive” are produced by sets of emotions.

Because higher rank often corresponds with greater reproductive success, natural selection may have favored a drive for dominance in many species, including humans (Daly and Wilson 1988; Symons 1992; Washburn and Hamburg 1968).24 We can combine this argument with the earlier observations that i) drives are composed of emotions, and ii) Protopride and Protoshame concern issues of dominance. Hence, the capacity and proclivity to experience Protopride and Protoshame were selected for because these emotions lead individuals to strive for dominance, a behavior which, in the long run, increases reproductive success.
In asserting that the 3-point logics preceded the 6-point logics, I noted that the latter require greater cognitive complexity, as they depend upon Ego’s ability to recognize what the Other knows or does not know. As discussed above, competition with conspecifics importantly affects reproductive success. The ability to compete in a social arena is significantly enhanced by the capacity to understand that others have minds like one’s own, and to think about others’ thoughts, that is, to possess and use a model of mind, as this furthers the ability to both deceive others and evaluate the sincerity of their threats and friendly overtures (see Byrne and Whiten 1988). In large part this is because an awareness of other minds importantly changes the way in which Ego is affected by Others’ emotion displays.

In some cases, emotion displays seem not to be categorically distinguished from other kinds of environmental stimuli, eliciting a direct and apparently automatic response: The ‘mock surprise face’ (eyebrows raised, eyes open wide) elicits increased interest from even very young infants, while the ‘frown face’ (eyebrows knitted, eyes narrowed) causes infants to avoid interaction (Stern 1977). However, most reactions to emotion displays do not seem to be of this automatic type. I believe that this is primarily due to the importance of a model of mind in human interaction. First, recall that I argued that emotions often function as goals. This assertion is premised on the assumption that creatures remember the experience of emotions, a reasonable supposition given the mounting evidence regarding the critical role played by emotions in the learning process (LeDoux 1994). Second, note that awareness of the physical aspect of oneself (in the reflexive rather than the direct fashion) is presumed to be associated with the presence of a model of mind (Anderson 1984; Gallup 1982). Now, consider the following:

\[
\text{IF} \quad (1) \quad \text{Ego can recall emotions which she experienced in the past} \\
\text{AND} \quad (2) \quad \text{Ego is sufficiently aware of her own actions to make a connection} \\
\quad \quad \quad \quad \text{between her emotion displays and the displays of others} \\
\text{AND} \quad (3) \quad \text{Ego is aware that others have minds like her own}
\]
THEN  Ego is likely to recognize emotion displays not simply as
threatening or rewarding stimuli in the environment, but rather as
cues to the internal state of the Other.
The clues which displays provide are interpreted on the basis of empathy, the formation of an association
between the Other’s display and Ego’s memory of the subjective experience of the corresponding
emotion. The ability to make this connection allows Ego to use introspection as a means of predicting how
the Other’s emotional state may lead to action (Humphrey 1983). Clearly, such predictive abilities are likely
to be highly adaptive. Accordingly, this combination of factors probably contributed to selective pressure
for the capacity for a model of mind (op. cit.),25 26

The Blending of Emotions

Emotions appear to blend like colors from an artist’s pallet. This has led researchers to search for
“basic” emotions, elements equivalent to the primary colors from which all other combinations are created
(see Ekman and Davidson 1994). While productive, such an approach holds the danger of leading
investigators to discount the fundamental importance and universality of emotions produced by blending
(Lazarus 1991). We pause now to consider blended emotions which emerge out of dominance
relationships, as understanding these emotions provides insight into the factors which affected the
transformation of Protopride and Protoshame.

Up to this point I have contrasted threat behavior with appeasement behavior. This pairing
emphasizes the issue of rank as a feature of Ego’s relationship with an Other. However, it is also possible
to emphasize proximity as a feature of such a relationship. In general, if Ego and an Other interact, it is
because they are physically near to one another. From this perspective, the opposite of threat behavior is
affiliative behavior: A fundamental feature of Ego’s relationship with any Other is the degree to which Ego
attempts to drive the Other away or, conversely, the degree to which Ego seeks to cause the Other to be
near. With regard to subjective experience, the contrast is thus between Hostility and Affection. Consider
the consequences of emphasizing this facet of Ego’s relationship with an Other when there is a disparity
in rank between the two individuals: Ego can evaluate the Other as either superior or inferior on some specific criteria. In each case, Ego can also experience either Hostility or Affection towards the Other. This produces four possible combinations:

<table>
<thead>
<tr>
<th>Hostility towards Other</th>
<th>Affection towards Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other is superior to Ego</td>
<td>(1)</td>
</tr>
<tr>
<td>Other is inferior to Ego</td>
<td>(3)</td>
</tr>
</tbody>
</table>

In each of these situations, a unique blend of emotions occurs. I describe these emotions below, and provide content-based and display-based evidence of possible universality in the respective notes:

1. If the Other is superior to Ego on the basis of some criteria, it is because the Other possesses something which Ego does not (strength, size, a beautiful tail, a new car, etc.). Protopride and Protoshame work together to lead Ego to desire that which Ego lacks and the Other possesses. Desire or ‘wanting’ is probably one of the most fundamental elements on the emotion pallet. In configuration (1), desire for what the Other possesses combines with Hostility towards the Other to produce envy (Neu 1980).

2. When the desire to possess that which Ego lacks and the Other possesses combines with Affection towards the Other, Ego experiences admiration.

3. Saying that the Other lacks that which is desirable is another way of stating that the Other possesses that which is undesirable (lacking strength means being weak, etc.). Hence, in recognizing that the Other is inferior, Ego can place the Other in the class ‘things which are undesirable.’ Unpleasant smells or tastes, or sights which are associated with these, evoke a universal disgust reaction involving a pulling back of the lips and a wrinkling of the nose (Ekman 1984; Eibl-Eibesfeldt 1989). Transferring this emotion to the social domain (Darwin 1872) and combining it with Hostility towards the Other produces the emotion contempt (Lazarus 1991; cf. Rozin et al. 1994).

4. Combining the recognition that ‘the Other is inferior / lacks that which is desirable’ with Affection towards the Other produces pity.
The above discussion can be summarized using the 2x2 matrix presented earlier (cf. Krech and Crutchfiel 1969) (because I am positing that these four emotions are universal, I use their capitalized forms):

<table>
<thead>
<tr>
<th>Hostility towards Other</th>
<th>Affection towards Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other is superior to Ego</td>
<td>Envy</td>
</tr>
<tr>
<td>Other is inferior to Ego</td>
<td>Contempt</td>
</tr>
</tbody>
</table>

The Focus of Evaluative Emotions and the Model of Mind

There is a subtle difference in focus between the four emotions described above and Protopride and Protoshame. Both Protopride and Protoshame focus on *Ego’s position relative to the Other*. In contrast, Envy, Admiration, Contempt and Pity all focus on *the Other’s position relative to Ego*. Although both types of emotion are concerned with the class of relationships in which there is a discrepancy in importance between Ego and Other, Protopride and Protoshame center on Ego, while Envy, Admiration, Contempt and Pity center on the Other. This is why, in a given Ego/Other relationship, Ego may simultaneously experience an emotion from the former group and an emotion from the latter group: When Ego is superior to the Other, Ego may feel both Protopride (‘I am more important than you’) and Contempt (‘You are less important than me’). Conversely, when Ego is inferior to the Other, Ego may feel both Protoshame (‘I am less important than you’) and Envy (‘You are more important than me’).

Understanding that Envy, Admiration, Contempt and Pity focus primarily on the Other is particularly important if we shift our perspective from that of the individual who experiences these emotions to that of the individual who elicits them. Ego is able to identify when an Other displays Envy, Admiration, Contempt, or Pity towards him. These displays convey messages to Ego about how the Other views their relationship by communicating how the Other views Ego. Envy, Admiration, Contempt and Pity can thus be seen as *messages to Ego about Ego*. And it is here that the capacity for a model of mind becomes significant. If (1) Ego is able to recognize that, just as he assesses Others, so too do
Others assess him; and (2) Ego is able to relate the Other’s displays to feelings which he himself has experienced towards Others, then the Other’s display of Envy, Admiration, Contempt or Pity offers a novel perspective from which Ego can view himself (Harré 1990; Mead 1934). For example, when Ego views the Other’s Contempt display, the following two realizations are combined: (1) ‘The Other is reacting to me,’ and (2) ‘The other is feeling Contempt.’ This combination leads Ego to the conclusion ‘Aspects of myself may be such as to merit Contempt.’ As a result of the model of mind, this conclusion may then serve as the stimulus which elicits another emotion.

The Process of Comparing Evaluations of Oneself

The model of mind allows Ego to use the Other’s emotion display as a means of gaining a different perspective on himself. For example, because Contempt is premised on evaluation, being the target of Contempt gives Ego two perspectives from which he can evaluate himself, his own and the Other’s. If Ego believes that he and the Other share the same standards, two possibilities exist. When Ego compares his own evaluation of himself with the evaluation conveyed by the Other’s emotion display, the two can either match or fail to match. If viewing himself from the perspective of the Other constitutes an event which can elicit an emotion in Ego, we would expect these two situations (congruent evaluations and incongruent evaluations) to elicit different emotions. Consistent with this expectation, informants in Dusun Baguk repeatedly emphasized that if Ego agrees that an Other’s criticism of him is apt, Ego will feel *malu*, but if Ego considers the criticism to be unjust, he will feel *mane* ‘angry, offended’ (cf. Griffin 1995).33 34 35

Matching Evaluations, the 6-Point Logics, and Questions of Rank

Informants’ statements concerning when Ego will feel *malu* as opposed to *mane* are consistent with the 6-point logic of Shame:

1) Ego violates a norm

2) Ego is aware of his failure
3) an Other is also aware of Ego’s failure

4) Ego is aware of the Other’s knowledge

5) Other displays hostility and revulsion towards Ego

-OR- Ego assumes that the Other experiences hostility and revulsion towards Ego

6) Ego experiences *malu*, an aversive emotion

The presence of a norm (point (1)) tells us that Ego shares with the Other a standard for behavior. Point (2) tells us that Ego evaluates himself negatively. Points (3), (4) and (5) tell us that Ego is aware that the Other evaluates him negatively. In other words, there is a match between Ego’s evaluation of himself and the Other’s evaluation of him. But why should this logic hold? That is, what is it about the match between Ego’s negative self-evaluation and the Other’s negative evaluation of Ego which elicits an unpleasant feeling and a particular display from Ego?

Recall that because high rank improves the individual’s reproductive success, selection favors individuals who experience superiority as rewarding and inferiority as punishing. The Other’s negative evaluation of Ego is isomorphic with (and may be couched in terms of) the statement ‘You are inferior to me.’ If Ego agrees with the Other’s negative evaluation of him, he also agrees with the Other’s assessment of his position relative to the Other. We are now in precisely the same situation as that which elicited Protoshame, namely there is an obvious and salient discrepancy in rank between the Other and Ego. Accordingly, the same punitive feeling is elicited, ‘feeling small/being afraid.’ To this core feeling is added a sense of being befouled or dirty, for Ego has recognized that the Other’s Contempt, composed of Disgust and Anger, is justified: In Dusun Baguk, *malu* is linked to a cluster of terms which includes ‘stained,’ ‘dirty,’ ‘despised,’ and so on. Likewise, in describing this sensation, North American English speakers use phrases such as ‘I felt like dirt,’ ‘I had egg on my face,’ or ‘I put my foot in my mouth,’ all expressions related to the feeling of Disgust. Similarly, Strathern’s (1977) Melanesian informants explicitly relate Shame to physical revulsion.

The same selective pressures which were responsible for the aversive feelings of Protoshame come into play once more when both Ego and the Other evaluate Ego negatively. Likewise, the same considerations which shaped the Protoshame display force Ego to overtly signal his inferiority to the Other
once he has recognized the congruence between the two negative evaluations. The Protoshame display is the ideal vehicle for communicating this message. And this explains how it is that Shame can have two logics: The 6-point logic of Shame uses both i) the existence of a shared standard for behavior, and ii) the ability to see oneself through the Other’s eyes in order to create a new means of assessing relative standing. Yet, because the question of relative standing is a very old one, the 6-point logic employs the subjective experience and the behavioral manifestation of an emotion which initially developed with a much simpler logic. Hence, the two logics share a single form, with one logic governing reactions in certain contexts, and the other governing reactions in other contexts: When Ego is confronted with a vastly superior individual, the old 3-point logic produces the appropriate feelings and display; when Ego concurs with a Contemptuous Other’s assessment of him, the more recent 6-point logic kicks in and produces largely the same result. Lastly, given the consistent inverse relationship between Shame and Pride, it should be clear that exactly the same circumstances have resulted in an identical piggybacking in the case of the 6-point logic of Pride and the 3-point logic of Protopride.

**RELATIONSHIPS BETWEEN EMOTIONS**

First and Second Order Emotions

Envy, Admiration, Contempt and Pity are all reactions to the characteristics of an Other. In contrast, Shame is a reaction to the way that an Other feels about Ego. That is, Shame is a reaction to an Other’s reaction to Ego. Pride, which has the same general structure as Shame, is of the same type. I propose that we thus distinguish between two classes of emotions: First order emotions are those which are a reaction to the characteristics of the Other, while second order emotions are those which are a reaction to first order emotions--provided that he agrees that it is justified, Ego feels Shame when an Other displays Contempt. We can indicate that a particular first order emotion serves to elicit a particular second order emotion by saying that the former (Contempt, for example) is the complement of the latter (Shame, in this case). Two of the four first order emotions are the complements of Shame, and two are the
The following diagram depicts the relationships between the various first and second order emotions:

**first order emotions**
- Contempt
- Pity
- Admiration
- Envy

**second order emotions**
- Shame
- Pride

In light of these relationships, we can rewrite the 6-point logics of second order emotions as follows:

**Shame**

1) Ego violates a norm
2) Ego is aware of his failure
3) an Other is also aware of Ego’s failure
4) Ego is aware of the Other’s knowledge
5) Other displays towards Ego either (i) Contempt or (less commonly) (ii) Pity
   -OR- Ego assumes that Other experiences Contempt or Pity towards Ego
6) Ego experiences Shame, an aversive emotion

**Pride**

1) Ego successfully fulfills a norm
2) Ego is aware of her success
3) an Other is also aware of Ego’s success
4) Ego is aware of the Other’s knowledge
5) Other displays towards Ego either (i) Admiration or (ii) Envy
   -OR- Ego assumes that Other experiences Admiration or Envy towards Ego
6) Ego experiences Pride, a pleasurable emotion

Note that because the model of mind allows Ego to guess at an Other’s evaluations of her, it is
possible to experience second order emotions as a consequence of an imagined meeting with a real Other, or even as the consequence of an imagined meeting with an imaginary Other. I label these experiences partially and completely psychogenic second order emotions, respectively.\textsuperscript{39} The ability to experience this type of emotion gives the individual an additional competitive edge, as it increases the likelihood that when Ego actually does interact with an Other, Ego’s past behavior will have been such as to place Ego in a favorable position. Once again, we see emotions combine with the ability to anticipate the future, and to hold a model of mind, in a manner which increases fitness by furthering the quest for high rank. Hence, we can view completely psychogenic second order emotions as the apex of a process of development that began with the simple rank-related emotions Protopride and Protoshame.\textsuperscript{40}

\textbf{EMOTIONS, COOPERATION, AND CULTURE}

Rivalry, Audience, and Late Second Order Emotions

The story which I have told of the origins and workings of second order emotions is able to account both for facts such as ‘Dusun Baguk villagers avoid interacting with high-ranking officials,’ and for facts such as ‘Dusun Baguk villagers will go into debt rather than own a bicycle which is inferior to those of their neighbors.’ In short, at this point we have a good understanding of how second order emotions play a part in dyadic relationships, whether they are relationships in which rank discrepancies are firmly established or relationships in which rank discrepancies are being determined. Consider, however, the following case:

It is evening in Dusun Baguk. Families sit on their front porches, relaxing at the end of the day. A young man rides a bicycle down the dirt road in the center of the village. He hits a rock, loses his balance, and falls. Many people, both young and old, laugh and call out to him, making jokes and telling him to look where he’s going. He hangs his head, hops back on the bike, and hurriedly peddles away.

The youth has failed to adhere to one or more norms (‘Look where you’re going.’ ‘Young men should be
athletic and coordinated,’ etc.). Furthermore, there are Others who, by their comments and their Contempt displays, demonstrate that they are aware of his failure. In other words, the situation is entirely consistent with the 6-point logic of Shame, as is the young man’s display behavior. But where is the dyadic relationship? With whom is the young man negotiating rank, that they should show Contempt and he should feel Shame? With the old grandparents who chuckled at him? Unlikely--they are so superior to him that drawing attention to the the young man’s failings in no way improves their rank. Is he competing with the small children who yelled at him? Equally unlikely--they too are so far removed from him in the hierarchy that even reducing his rank does little to improve their own. True, some of the young man’s peers are among those who witnessed his fall, but they are a minority, and, besides, they have no control over the actions of either the very old or the very young. It seems that the relationship is not dyadic at all, in that it is not between Ego and a particular Other. Rather, the relationship is of the type which I noted earlier in discussing the universality of performance, a relationship between Ego and an audience. Moreover, it appears that many cases of Shame involve relationships of this type (Baumeister 1982; Buss 1980; Goffman 1959). Furthermore, the same is true of Pride. Clearly, we must reconsider our portrait of second order emotions. But before we can do so, we must return once more to the consequences of the development of the capacity for a model of mind.

Types of Cooperation

Webster’s defines `cooperation’ as “the act of working or operating together to one end; joint operation; concurrent effort or labor.” In short, to cooperate, individuals must coordinate their efforts. There are two different strategies for achieving this. One way of ensuring coordination of effort is by radically limiting the number of possible reactions to particular stimuli, a strategy employed in social insects. An alternative strategy involves possessing the ability to anticipate the actions of others and shape one’s own behavior accordingly. Unlike the `limited response’ strategy, this approach allows cooperation in an unlimited number of domains. However, it suffers from the problem that, as a species’ behavior becomes increasingly flexible and complex, it is more and more difficult for any given individual to anticipate the
Cooperation and the Model of Mind

To understand how it is that humans can cooperate despite enormously flexible behavior, we must first consider a number of issues concerning the relationship between present and future action. It seems that even fairly simple animals have objectives. However, most creatures are unable to use their knowledge about the existence of objectives to predict the actions of other creatures because they lack a model of mind—knowing about one’s own plans for the future does not help one to anticipate others’ actions if one does not recognize that they have minds like one’s own. Limitations on the ability to predict others’ actions limit the possibility of coordinating action. However, the situation changes dramatically when creatures acquire the capacity for a model of mind. Once Ego recognizes that the Other possesses objectives, then Ego can use her knowledge about the Other, about the situation, and about her own objectives to guess at what the Other’s objectives might be. In turn, this allows Ego to anticipate the Other’s actions in a variety of settings, often far in advance, and, as a result, Ego is able to coordinate her actions with the Other’s. Thus, by making it possible for individuals to exploit their knowledge of objectives in order to predict others’ actions, the model of mind makes cooperation possible in an unlimited number of domains.

Selective Pressure and Cooperation

Cooperation can be adaptive in two ways. First, cooperating with Others can further the survival of individuals with whom Ego shares genes. Second, cooperating with Others can benefit the individual directly, either by procuring resources or by reducing the number of competitors. Examples include cooperative hunting and cooperative territorial defense and raiding, all of which have been observed in chimpanzees. Importantly, because participating in cooperative activity increases Ego’s inclusive fitness, selection favors the possession of traits which make it possible for Ego to cooperate effectively...
While Machiavellian factors may have contributed to the initial development of the capacity for a model of mind, once this capacity existed it allowed for heightened cooperation.\textsuperscript{42} In turn, the advantages provided by cooperation further increased selective pressure for the capacity for a model of mind.\textsuperscript{43} Note, however, that while the model of mind makes extensive cooperation among creatures with highly flexible behavior possible, it does not ensure that individuals will be motivated to behave in a manner which effectively realizes this possibility. Motivation, after all, is primarily the domain of the emotions.

\textbf{Emotions and the Opportunity to Participate in Cooperative Action}

Ego’s opportunities to benefit from complex cooperative activities depend upon how effective he is as a member of a cooperative group. This is so for two reasons. First, Ego’s participation is dependent on the willingness of Others to include him in those activities, and Others’ decisions depend upon his past performance. Second, if Ego is allowed to participate, his share of the spoils will likely depend on both his current and his past performance: Among Taï chimpanzees, the amount of meat which an individual obtains from a cooperative hunt is primarily determined by the extent of his participation in such hunts, and this is also a factor in meat distribution among some hunter-gatherers (Boesch 1994; Shostak 1983).

Anticipating any joint activity entails forming expectations of the other participants as well as of oneself. A prerequisite for effective participation in activities premised on the coordination of action between individuals is thus the ability to recognize both the Other’s objectives and, relatedly, the expectations which the Other holds for Ego. Hence, Ego’s past and present success in anticipating Others’ expectations of him translates into effective participation in cooperative activities, and effective participation translates into both more frequent inclusion in such activities and a greater share of the spoils.

The ability to anticipate Others’ expectations of Ego requires both a model of mind and considerable experience. However, of equal importance, Ego must be motivated to conform to the
Other’s expectations if he is to perform effectively--simply being able to guess what those expectations consist of has no influence on Ego’s efficacy unless he acts on those guesses. Note that only the Other can know how well Ego manages to conform to the Other’s expectations. This means that the best way of ensuring that Ego will continually strive to conform to the Other’s expectations is for the Other’s reactions to have motivational significance for Ego. Motivational significance is accorded a situation when it serves to elicit emotions in Ego, both because those emotions lead to immediate actions and, more importantly, because they serve as goals and anti-goals when Ego is contemplating future action. Hence, it is to Ego’s advantage if negative evaluations from the Other elicit painful emotions and positive evaluations elicit pleasant emotions.

Recall that (i) the Other’s first order emotions give a message to Ego about Ego, and (ii) these messages are principally concerned with the Other’s evaluation of Ego. First order emotions thus constitute an ideal stimulus for the elicitation in Ego of those punishing and rewarding emotions which would give motivational significance to the Other’s evaluation of Ego’s performance in a cooperative endeavor. Moreover, punishing and rewarding emotions which could be elicited by the Other’s first order emotions already exist in the form of second order emotions. In short, the advantages provided by inclusion in cooperative activity may have generated selective pressure which resulted in a novel application of second order emotions. *Whereas initially second order emotions functioned to promote competition, in this new application they functioned to promote conformity to others’ expectations.*

In striving for dominance, Ego competes primarily with individuals who occupy positions near his own in the hierarchy. Accordingly, the prototypic competitive event is dyadic, as Ego struggles to supplant an immediate superior or to hold off a challenge from an immediate subordinate. This means that Ego must be sensitive to the first order emotions of a particular Other, his immediate rival. In contrast, the possibility of cooperative activity creates pressure for Ego to demonstrate his competence to *all* individuals with whom he might someday cooperate--Ego cannot afford to focus only on the reactions of members of the immediate cooperating party, because tomorrow may see opportunities for cooperation with individuals who today are merely observers. Furthermore, provided that minimal communication is possible, Ego must
be concerned even with the reactions of individuals with whom he could never engage in cooperative activity, as these individuals might convey a negative evaluation of him to other individuals with whom Ego could cooperate. Hence, whereas second order emotions were initially elicited by the first order emotions of a single Other who constituted a rival, these same emotions came to be elicited by multiple Others who constituted an audience.

Late Second Order Emotions and the Development of Culture

We can distinguish between the initial form of second order emotions and the results of their later modification by terming the former 'early second order emotions' and the latter 'late second order emotions.' Ego's inclusion in cooperative activity is dependent on her ability to meet Others' expectations, and those expectations are, in turn, related to shared standards for behaviors which are relevant to cooperation. As a consequence, the significant adaptive advantage offered by participation in cooperative activities generated selective pressure for an increase in the attention paid to these standards. Late second order emotions were the vehicle through which this increase in attention was achieved. Moreover, because late second order emotions entail a sensitivity to the reactions of all individuals, Ego must be concerned with her performance vis-a-vis shared standards when interacting with any other member of her group. It is only a small step from this situation to one in which the shared standards with which Ego is concerned are not limited to the question of cooperative activity--once Ego is concerned with how all Others evaluate her, it is not difficult for shared standards governing other types of behavior to become salient as well. This is because an Other may extrapolate from situations that do not involve cooperation to those that do--an Other may think “If that individual does not follow shared standards in this context, how can I be confident that he will do so if I invite her to engage in cooperative activity?”

I propose that the emotions which, via the reactions of others, rewarded conformity and punished deviance applied equally well to shared ideas which did not involve cooperative action per se. Once this step had been taken, the efflorescence of such ideas began. In turn, in an interaction similar to that
connecting the model of mind and cooperation, increasing reliance on ideas shared by members of the group as a means of adaptation heightened the selective pressure for the capacity to experience late second order emotions. Hence, *a positive feedback loop arose in which the use of culture and the emotional foundation on which it rested each increased the importance of the other*. Viewed from a behavioral perspective, Shame and Pride became the foundation for a system of social control premised on conformity to cultural understandings, and this allowed for enormous increases in both social and cultural complexity. This led to our modern condition, a state in which we are defined as a species as much by our ability (and proclivity) to experience Shame and Pride as by our reliance on culture as a means of adaptation (cf. Schneider 1977; Scheff 1988).

Both Shame and Pride are the summation of three ‘generations’ of emotions. Protoshame and Protopride were primitive emotions which motivated and facilitated the quest for rank. Early second order emotions served the same purpose after the capacity for a model of mind changed the nature of self-evaluation. This capacity also facilitated cooperation, introducing a new target for adaptive patterns of motivation, with late second order emotions being the result. The accompanying figure summarizes this process.

**INSERT FIGURE HERE**

For both negative and positive versions, all three ‘generations’ share a common display pattern and a common subjective experience. As a consequence, the three generations are often emically identified as a single emotion or as a cluster of closely related emotions. However, because each generation has a different focus, Shame and Pride operate in three distinct situations:

1) Situations of marked superiority or inferiority (the domain of Protoshame and Protopride)

2) Situations of dyadic rivalry (the domain of early second order emotions)

3) Situations of conformity to an audience’s expectations (the domain of late second order emotions)

Lastly, although these three types of situations are analytically distinct from one another, actual events sometimes involve more than one of the three types, i.e., Shame and Pride can be overdetermined.

Today, the vast majority of the world’s societies continue to employ Shame and Pride as the
principal mechanisms of social control. In a few societies, particularly those which are large and heterogeneous, these emotions have been partially supplanted by other emotions: Guilt and `Virtuousness’ serve many of the same functions as Shame and Pride, but differ in that they are not premised on the opinions of an Other. But what these emotions consist of, and how they came to be, is a story for another paper.
NOTES

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1. A pseudonym.

2. I entered the field with considerable fluency in Indonesian. Although all but the elderly speak Indonesian, I then devoted the first year to learning the Bengkulu dialect. All discussions cited were held in that dialect.


4. Informants were unaware of my interest in emotion, and discussed events either of their own accord, or in response to general requests for explanation (“Why did he do that?” etc.). For a detailed description of methods, see Fessler 1995.

5. Compare with Goddard’s (1996) semantic account of the “thoughts” which lead to Malaysian malu. The national culture/language of Malaysia, though notably distinct, nevertheless shares many elements with a number of the Malay cultures of Sumatra, including Bengkulu.


7. Although the Bengkulu dialect contains a verb, meraso, meaning ‘to feel,’ this is often dropped. Like
other forms of Malay, Bengkulu lacks a `to be' verb. Bracketed terms are inserted for clarity.

8. Again I rely on cases involving the spontaneous use of bangga in conversation. However, conflict with an egalitarian ethos causes many such statements to refer to a disapproved character trait linked to, but distinct from, an emotion (see text). Accordingly, as the example indicates, on those occasions when informants were clearly referring to an emotion, I followed a more directive approach than was true with regard to malu.

9. This contrasts with the Malaysian case wherein, according to Goddard (1996), terms other than bangga are used to refer to `arrogance.' In Dusun Baguk these same terms are synonyms for bangga (see Fessler 1995). It would be interesting to know whether Malaysian synonym tests revealed the same finding, or whether the two cultures indeed differ in this regard.

10. It is important to distinguish three axes along which emotions can be evaluated:

1) Cultural salience--emotions can be hyper- or hypocognized in a given culture

2) Normative value--experiencing (and expressing) particular emotions can be culturally prescribed or proscribed

3) Hedonic value--an emotion can be either rewarding or aversive

Many combinations of these variables are possible. For example, in Bengkulu, malu is a hypercognized, prescribed, aversive emotion, i.e., it is an unpleasant emotion which is culturally elaborated, and which good people feel in appropriate circumstances (see Gerber 1985; Goddard 1996; Parish 1991).

11. A prominent contemporary position holds that emotions are culturally constructed to such a degree that it is impossible to speak of universals (cf. Lutz 1988). While I concur that culture plays a critical role in emotional experience (see note 12), I believe that the evidence presented herein supports the assertion that shame-like emotions, though differently elaborated and employed by their respective cultures, are premised on a universal experience. Moreover, I question whether our understanding of humanity is advanced by blinding ourselves to such sizable overlap across cultures -- there are differences between beagles and bulldogs, but it is impossible to fully understand either if we insist that there is no such thing as a canine per se.

12. In addition to questions of hypo- and hypercognizing, culture also interacts with emotion in a number
of fundamental ways. Because reality is culturally constituted, culture defines the objects, events, and relationships which elicit emotions. Cultures also include `display rules,' understandings which specify when certain emotions should be displayed and how. These issues are important in any cross-cultural study of emotion, but I do not address them here because combining the emphasis on the logic of an emotion with attention to display behavior can sidestep such concerns. See Kitayama and Markus 1994; Mesquita and Frijda 1992; Russell 1991; Scherer 1994; Wierzbicka 1993.

13. Note the word ‘capacity’ here. The human mind and the human reliance on culture coevolved synergistically. Accordingly, fully `emotional' humans are necessarily also fully `enculturated' humans: It is not simply a question of `If only we could strip away the culture, then we would be able to see all of the emotions,' as culture is not simply pasted over the human core. Rather, complex emotions probably only emerge through experience in patterned social interactions, and culture is a primary determinant of such patterning (see also Gerber 1985).

14. I intentionally use the word `focal' rather than `basic' here. In the psychological literature, `basic' has come to refer to elementary emotions which can be combined to create more complex or `blended' emotions. I agree that this distinction between `basic' and `blended' is a meaningful one. However, I am interested in exploring the universal aspects of emotional capacity rather than simply investigating the most fundamental building blocks of experience. As I will argue later, I believe that a number of `blended' emotions are both universal and importantly central to a whole host of complex interrelationships between a number of panhuman emotions.

15. I am polarizing the two approaches in order to emphasize their differences.


17. Darwin’s material is further complicated by the fact that he conflates Pride with “arrogance” and Shame with “humility,” confusing character traits with the emotions upon which they are based. A number of recent authors make the same mistake.

18. The Pride display does not contain an analog of blushing. Space does not permit an explanation of the evolution of blushing, but I will offer one in a future publication.
19. Some forms of submissiveness involve attention-getting, as in posterior presenting in many primates. However, this does not detract from the observation that avoiding attracting attention is often a way of being submissive.

20. See also Gilbert and Trower (1990), Leary et al. (1992). Components of these behavioral configurations have also been independently identified as indices of dominance and subordinance in human social relations (Maclay and Knipe 1972; Mehrabian 1969; Weisfeld and Beresford 1982; Zivin 1977).

21. These displays exist because it is always `cheaper' to signal superiority or inferiority than to demonstrate it in a contest (see Maynard-Smith 1982; Frank 1989).

22. Note the emphasis on size (feeling “two inches tall” or “ten feet tall,” in North American colloquialisms), a feature wholly consistent with the size = importance equation with serves to unite the displays of Shame and Pride with their respective logics.

23. As many investigators have pointed out, events lead to emotions only because a process of interpretation takes place which gives meaning to those events. Moreover, it is precisely with respect to the process of interpretation that culture exercises a powerful influence (Epstein 1992). While accounting for how such interpretation takes place is an important part of our total understanding of emotions, I hold this question aside.

24. The relationship between dominance and reproductive success is complex, particularly among primates. In contrast to earlier models of a winner-take-all struggle, it is increasingly clear that cooperation is intimately linked to reproductive success, both directly and via the formation of coalitions in the competition for rank (see Ellis 1995 for review; also Pusey et al. 1997).

25. This position is contained within many of the versions of the theory which attributes a Machiavellian origin to the model of mind.

26. It is in regard to the issue of empathy as I have described it here that infants’ different reactions to various emotion displays at different ages are of interest. M. Lewis (1995) and Amsterdam and Levitt (1980) have argued that infants’ only begin to identify themselves in a mirror at the age of 18-24 months. While there is some debate as to the extent to which such mirror tests reveal the presence of a model of
mind (see Anderson 1984), it seems clear that if Ego is unable to recognize herself in a mirror, at the very least she lacks the self-reflexive awareness of her own actions (point 2 in the discussion) which is a prerequisite for making the connection between Others’ emotion displays and her own subjective experiences. Hence, if an infant below the age of 18-24 months responds with avoidance to a `frown face,’ there is good reason to believe that the `frown face’ merely constitutes a frightening external stimulus for the child, and is not associated with any claims or plans which the Other may be seen as making.

27. It is unclear whether desire is itself an emotion or simply a component of other emotions.

28. This combination is clearly marked in Dusun Baguk, and is found in ethnographies describing widely disparate cultures (e.g., Briggs 1970; Devereux 1939; Epstein 1992; Goddard 1996; Gmelch 1985; Heider 1991; Jones 1972; Lindholm 1982; Romanucci-Ross 1973; R. Rosaldo, 1980; Savishinsky 1994; Shostak 1983; Spiro 1996; additional references in Foster 1972). Further evidence of universality is the wide distribution of the notion of the `evil eye,’ the idea that envy causes supernaturally-mediated harm to an individual who possesses that which is desired by others (see Dundes 1992; Foster ibid.). A number of investigators have argued that envy is universal (Foster ibid.; Frijda 1994; Lazarus 1991; Schoeck 1969). The envy display seems to be similar to that used for hatred (intense Hostility)-- narrowing of the eyes caused by tensing the muscles below the eyes, thrusting the lower jaw slightly forward, and pulling the corners of the mouth slightly down. Envy and hatred are probably distinguished largely on the basis of context (Darwin 1872). However, despite extensive ethnographic documentation, little systematic ethological research has been performed on the envy display.

29. In Dusun Baguk, there is no term for admiration--informants used a more general term meaning `surprised’ or `amazed’ when asked to describe how they feel in this situation (Darwin argued on ethological grounds that “Admiration apparently consists of surprise associated with some pleasure and a sense of approval,” (1872:289) -- it would be interesting to see how frequently Admiration and Surprise are linked cross-culturally, and to compare such findings with ethological data on the components of the Admiration display). However, Dusun Baguk contains positive evaluative adjectives, including words like `impressive,’ and these were often spoken in a tone of voice, and within a larger behavioral scenario,
which both I and my informants interpreted as constituting evidence of positive emotion on the part of the speaker. This indicates that Dusun Baguk people can both experience and express admiration even if they have difficulty labeling the emotion itself succinctly. Because both ethnographers and ethologists have paid little attention to admiration, it is difficult to judge its universality. Nevertheless, I find it significant that admiration is clearly experienced even in Dusun Baguk, a place where the domain of ridicule and insults is hypercognized (there are nine words for `stupid'), and people describe their social environment as “a small pond with a lot of crocodiles.”

30. Dusun Baguk speakers use a single term for both emotions, distinguishing between the two meanings on the basis of context (cf. Gerber 1975). Many of the ethnographies which describe Pride also mention contempt. On the ethological side, Darwin (ibid.) was convinced of the universality of contempt, and this position has recently received extensive support (Ekman and Friesen 1986, 1988; Ekman and Heider 1988).

31. As is true of all blended emotions, the ratio of the two elements determines the character of the blend: If the inadequacy of the Other is emphasized and affection plays a minor role, pity resembles disgust. If the reverse is true, it resembles love (pure affection) (cf. Lazarus 1991). An emotion resembling pity is clearly marked in Dusun Baguk, and, indeed, seems to be hypercognized in many Malayo-Polynesian cultures (Gerber 1985; Heider 1991; Levy 1973), as well as in Japan (Doi 1974). I suspect that a thorough review of the ethnographic corpus will reveal additional evidence of the universality of pity. It seems that, as is true of many blended emotions, the display behavior for pity is not unique--contextual clues serve to distinguish the pity display from that caused by a blend of sorrow or dismay and Affection. Unfortunately, much of the biological literature which might address relevant issues focuses on the consequences of behavior in this context (the problem of altruism) rather than on the display behavior itself.

32. The importance of context in identifying many of these displays poses no inherent obstacle to their recognition, as Ego is likely to be in a good position to identify the relevant contextual elements.

33. Though otherwise insightful, Goddard (1996) may have overlooked the importance of congruence, as he does not distinguish between [others knowing something bad about Ego] and [others (merely) thinking something bad about Ego] as elicitors of Malaysian malu.
34. Relatedly, if Ego believes that an Other’s praise for him is apt, he will feel Pride, but if he disagrees with the Other’s assessment of him, he will feel Shame. This is because it is dangerous to be elevated to a position of dominance which one does not deserve, for sooner or later Others will discover one’s inadequacies and punish one for the deception. Showing Shame in this situation is thus a way of rejecting the assertion of one’s superiority by claiming inferiority. Accordingly, the more lavish and the less deserved the praise, the more Ego will feel and display Shame. This is responsible for everything from the phrase “Oh, you shouldn’t have!” when one is given a gift (a common form of tribute) to the red-faced stammering of the honoree at a banquet (cf. Goddard 1996).

35. Note that the scenarios which informants used in discussing these possibilities did not involve wide differences in importance between Ego and Other. If the disparity between Ego and Other is great enough, Ego will feel *malu* regardless of his opinion of the other’s criticism. This is because in such a situation the 3-point logic of Protoshame overshadows the 6-point logic of Shame.

36. In parallel with this reasoning, it is also possible to identify continuity between the 3-point logic emotions and the 6-point logic emotions at an elementary subjective level. From this perspective, Protoshame and Shame are both emotions in which Ego experiences himself as “bad (in relation to other people).” Because being subordinate and having failed are both ways of being “bad (in relation to other people)” they elicit the same affective sensation. Conversely, both Protopride and Pride are emotions in which Ego experiences himself as “good (in relation to other people).” Because being dominant and having succeeded are both ways of being “good (in relation to other people)” the individual reacts to them with the same positive feeling-about-self (I am indebted to R. D’Andrade and F. Bailey for directing my attention to this; see Parish 1991:331-2).

37. Another way of phrasing this is to say that first order emotions are *emotions about someone*, while second order emotions are *emotions about someone’s emotions*. This distinction parallels that which Dennett (1987) draws between first order intentionality (*beliefs about the world*) and second order intentionality (*beliefs about beliefs*). Likewise, Bateson (1972) distinguishes between Learning I (*learning about the world*) and Learning II (*learning about learning*). In each case the process is reflexively turned back upon itself. Moreover, the three processes are probably related in a causal as well
as a logical fashion. Consider the following: Before you can know that other people know things (second order intentionality), you must learn that you learn things (Learning II). Why? Well, if a chimp or a child recognizes (learns) that she knows things today which she did not know yesterday, it means that she has stepped outside of her current state and compared it with her previous state. Having seen herself as an actor, it then becomes possible to recognize that other actors must have minds too (Humphrey, 1983). In other words, Learning II (the child learns that she has learned things) leads to second order intentionality (the child is aware that she is aware, and hence that others are as well). The model of the mind is an organized set of schemas (D'Andrade, 1987, 1995). This information structure is constructed via second order intentionality -- once one knows that others know things, one can begin to build a representation of how it is that they know things. Part of this model involves emotions: Ego has a representation of other minds which includes not merely the ability to know things the way Ego knows things, but also the ability to feel things the way Ego feels things. Included in this part of the model is the concept that emotions are premised upon evaluation. And it is this feature of the model of mind which allows for second order emotions. So, to experience these special emotions one must have a model of the mind which deals with emotions, and to have a model of mind one must realize that others know things, and to realize that others know things one must realize that one knows things oneself, and to realize that one knows things oneself one must realize that one knows things now that one did not know before, which is another way of saying that one must learn that one learns things. We can summarize this entire sequence by saying that Learning II makes second order intentionality possible, and second order intentionality makes second order emotions possible. Phew.

38. Although Pity is premised on a negative evaluation of Ego, and hence can elicit Shame, it does not always do so. It appears that if Ego’s situation is dire enough, the desire for assistance overshadows concern with an Other’s negative evaluation of Ego.


40. Protopride and Protoshame are first order emotions, as they are directly elicited by features of the Other (attractiveness, prestige, skill, etc.) relative to features of Ego, and do not involve an empathic
assessment of the Other’s subjective state. As noted, first order emotion displays can elicit other first order emotions without an empathic process -- just as the anger display can elicit fear in a baby, so too can the Protoshame display elicit Protopride in an Other (indeed, this is probably the dynamic present among most nonhuman animals). However, the interaction of emotions is complexified by the presence of a model of mind. Because Protopride and Protoshame displays can provide insight into the subjective state of the Other, Ego can use them as a source of information about himself. For example, Ego may think “I assess myself as having failed, and I assess him as having succeeded. He is holding himself erect and gazing directly at me, therefore he feels Protopride, having assessed me as inferior to him. His assessment thus matches my own, and I therefore feel Shame.” Hence, Protopride may act as a complement to Shame, and Protoshame and may act as a complement to Pride.


42. The prevailing view is that opportunities to exploit others were the initial impetus for the development of a model of mind. However, coalitions are extremely important among some nonhuman primates (see note #24), hence it is possible that both opportunities for exploitation and opportunities for cooperation importantly drove the early development of the model of mind.

43. This feedback relationship, like others discussed below, is of the general type described by Cosmides and Tooby (1987).

44. Focusing not on the mechanics of cooperation, but rather on the importance which social living holds for humans as a result of cooperation, Baumeister and Tice (1990), Leary (1990), and Miller and Leary (1992) have proposed that selection has favored a cluster of emotions which serve to motivate individuals to conform to social norms in order to preclude ostracism.

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