

## CHAPTER 12

SEX AND LANGUAGE  
AS PRETEND-PLAY

CHRIS KNIGHT

Lie and alternative, inherent in language pose problems to any society whose structure is founded on language, which is to say all human societies. I have therefore argued that if there are to be words at all it is necessary to establish *The Word*, and that The Word is established by the invariance of liturgy

Rappaport 1979: 210—11

Language can be studied independently, or as an aspect of human sociality. Theoretical linguistics could not exist as a discipline were it not for the relative autonomy of language as a system. Ultimately, however, this system functions within a wider domain of signals which include cosmetics, dress, art, ritual and much else whose study takes us beyond linguistics.

A Darwinian theory of the origins of language must therefore address two issues. Firstly, it must explain the relative autonomy of language. Secondly, it must elucidate the evolutionary relationship between speech and a wider biological, social and symbolic domain of signals and displays.

Primates negotiate socially through displays of dominance, submission, appeasement, threat, sexual arousal and so forth. Each vocal signal forms part of a more complex visual-auditory display which includes posture and facial expression. A chimpanzee may express fear, for example, by a 'pant-scream' accompanied by a 'grin'. Presentation of the rump accompanied by a 'pant-grunt' signals 'respect'. Very different is the intimidatory 'roaring pant-hoot' of an aroused chimpanzee male. Consisting of a series of low-pitched calls, this is always accompanied by a charging display (Goodall 1986: 114—45, 360).

The point about calls of this kind is that they have not been decoupled as low-cost conventional tokens from the wider system of energetically demanding display. In the human case, such decoupling has evidently occurred, giving rise to a tokenistic, digitally organized system — speech — operating on a level quite independent of bodily display (Burling 1993).

At some point in the evolutionary past, the ancestors of modern humans must have had a repertoire of primate-style gestures and displays. Signals of this kind live on as the human species' own gesture-call

system — a ‘universal language’ of smiles, frowns and other ‘hard to fake’ emotional expressions including laughter, crying and so forth (Burling 1993; Ekman 1982). However, while important on the level of personal relationships, in the human case this system no longer carries the main burden of expressing and constituting sociopolitical structure at the global level. Rather, in the case of human hunter-gatherers and other pre-state societies, this function of exciting, mobilizing and giving expression to collective structural relationships has been taken over by ritual. In all traditional cultures, humans invest enormous amounts of energy in the ritual domain. Unlike speech, ritual signals are not confined to a single channel; neither are they necessarily effective in communicating complex trains of thought. Like animal gesture/calls, human ritual displays are characteristically loud, multimedia, emotionally infectious and heavily redundant (Rappaport 1979: 173—246).

Despite evidence of evolutionary continuity human ritual signals differ from their animal counterparts in two ways. Firstly, structure-generating ritual performances are staged not by individuals acting independently but by whole coalitions, whose members dance, drum, sing or otherwise rhythmically coordinate in asserting group identity and a boundary against outsiders (see, for example, Cohen 1985; Harrison 1993). In the human case, moreover, the cognitive outcome is an internal domain of communal pretend-play or ‘counter-reality’. Human ritual performance, when successful, generates a whole new cognitive domain — a virtual world discernible on another representational level from the currently perceptible or ‘real’ one (Durkheim 1912; Gellner 1992: 36—7; Turner 1967).

In speech, pressure for communicative speed and efficiency selects heavily against costly display in favour of tokenistic signalling. In ritual performance, reverse pressures apply, driving signallers to prolong, to repeat and to incur heavy costs. Ritual signals cannot be replaced by tokens without loss of effect. In trance-inducing rhythmic drumming, for example, nothing short of the direct physical and emotional impact of hands repeatedly hitting drumskins will do. Percussionists are not supposed to drum tokenistically. Or take the example of wailing or other public expressions of grief at a funeral. It is the wrenching, costly body- signals which matter, especially when these appear irrepressible. Where mourners remain dispassionate, resorting simply to tokens, there may be little point in staging the ritual at all. In ritual, to lose the display, replacing it by a conventional token, is simply to lose the signal.

Intrinsic credibility or ‘indexicality’ (Pierce 1940) is, then, the hallmark of ritual signals. Paradoxically, however, such signals are deployed within ritual precisely to displace the individual’s reality-based cognition, substituting a collectively defined ‘other-world’ (cf. Chase, this volume). A

funeral occurs when a loved one has died. It is precisely that disturbing social absence which provokes counter-measures, the deceased's continued 'presence' being constructed by emotionally convincing display. If the illusory realm generated by ritual fails to eclipse 'this world', then something is wrong. This is why we feel irritated by someone munching food or otherwise distracting attention during a visit to the theatre. Like a stage-show or television soap-opera, ritual must successfully interfere with the processes of ordinary perception/cognition (Bloch 1985), enabling participants to cut adrift from their own personal reality into an alternative, communal one. At the theatre, reality fades as the auditorium lights are dimmed. A hush descends and the curtain slowly rises, revealing a well-lit stage. We are wafted into another world.

Ancient Greek theatre evolved from ritual. Pre-state societies may not have theatre in the modern sense, but everywhere, performances are staged in giving tangible form to myth (Fontenrose 1959; Warner 1959). Cross culturally, ritual time tends to begin around dusk, when shadows lurk and the hold of reality fails. Trance-inducing dance, fasting and/or hallucinogens may enhance the effect. The whole point of all this is to make people see 'beyond' perceptible reality into the other-worldly domain — that of morally authoritative intangibles (cf. Turner 1967: 93—111). The gods and spirits, normally invisible, must be experienced at least periodically as more real than reality itself.

#### THE RELATIONSHIP BETWEEN SPEECH AND RITUAL

Primate gesture/calls, then, are holistic, both audible and visible signals being embedded in a unitary system of display. By contrast, in the human case, 'ritual' constitutes a gestural system differentiated from vocal speech, the two having evolved along divergent trajectories (see Table 12.1).

To these contrasts we can add another, arrived at by inference on the basis of Darwinian signal-evolution theory (Dawkins and Krebs 1984; Zahavi 1987, 1993; see discussion in Knight et al. 1995). According to this body of theory, where we find high-cost, repetitive, multimedia displays, we may infer a function in terms of social manipulation, conflict and exploitation. Resistance on the part of receivers sets up selection pressures acting on signal design. Signallers who encounter 'sales resistance', like modern commercial advertisers, are driven to respond by prolonging and repeating signals, increasing amplitude and resorting to costly multi media displays. Peacocks provide examples of this, as do caribou bulls bellowing at one another during the rutting season. Zahavi (1987) has shown how the discernible costs of such displays enhance their credibility

**Table 12.1** *Signals: speech versus ritual*

<i>Speech</i>	<i>Ritual</i>
Cheap signals	Costly signals
Interpersonal	Group-on-group
Two-way communication	One-way signals
Low amplitude	High amplitude
Dispassionate	Emotive
Vocal-auditory	Multi-media
Digital	Analog
Discrete-combinatorial	Holistic
Productivity/creativity	Repetition/redundancy
Stress on novelty	Stress on conservatism
Conventionally coded	Iconic and indexical
Focus on underlying intentions	Focus on body-boundaries and surfaces

by tapping and hence testing the very reservoirs of quality that signallers are attempting to advertise. High-cost signalling of this kind may be regarded as representing a victory on the part of sceptical receivers spurring signallers to ever greater competitive effort.

By contrast, where we find low-cost, quiet and efficient signals, a cooperative audience can be inferred. If signallers can afford to cut their emission costs, it can only be because listeners are investing corresponding effort in receiving, decoding and acting on signals. This in turn means that signallers and receivers must have shared interests. For such ‘conspiratorial whispering’ (Dawkins and Krebs 1984) to evolve, signallers must be imparting useful information to receivers. Logically, the ultimate cost-cutting strategy would be to resort to purely tokenistic, wholly conventional signals which can be processed categorically at speed — relieving listeners of the need to evaluate gradations in physical performance. According to Zahavi (1993), however, animal ‘conspiracies’ are never sufficiently cooperative. Internal conflict and scepticism precludes ultimate reliance on tokenistic ‘paper money’. Nowhere in the living world do we find purely conventional signalling — with the one puzzling exception of human speech.

This discussion allows us to establish one more contrast — this time functional — between speech and ritual. On the basis of Darwinian signal evolution theory, it can be inferred that speech emerged in a cooperative context while ritual did not. For speech to have evolved, ‘conspiratorial whispering’ in the human case must have been anomalously trusting. By contrast, ritual — with its costly, inefficient features of redundancy and display — can only have emerged out of conflict, manipulation and exploitation.

## FORM AND FUNCTION OF RITUAL SIGNALS

Speech is utterly different from ritual. Yet there remains a connection. Opposition is itself a relationship, and it is clear that speech could have no force or function were it not for its paradoxical connection with ritual.

The inscription on a banknote — ‘I promise to pay the bearer on demand’ — inspires trust only thanks to a system of state printing controls, counterfeit detection and law enforcement including court proceedings and punishment for fraudulent abuse. We are able to use banknotes, then, thanks only to a system of communal action quite external to the paper used to print them. Hunter-gatherer societies are stateless. They lack courts, prisons, money or specialist law-enforcement agencies (Engels 1972 [1884]) However, they do perform rituals. My argument is that costly ritual is the pre-state system of communal action which backs up the otherwise valueless tokens central to speech.

Words resemble banknotes in that they are intrinsically worthless, requiring an external system of controls if they are to be usable at all (Knight 1998). Like commercial transactions, ‘speech acts’, as Austin (1978) has shown, are social transactions dependent on communal validation for their force. The implicit or explicit contracts by which speakers bind themselves are morally authoritative intangibles. But how is it that such intangibles are *representable*? ‘What, for example, is a promise? Can such a thing be seen, heard, tasted, kicked or by any means perceived? Could a group of chimpanzees trade in entities of this kind?’

To deal in social contracts is to agree to enter a virtual world, not unlike that of a board game such as Monopoly. Just as Monopoly money cannot be used without a display of commitment on the part of players, so ‘promising’ presupposes a certain background of commitments and formal expectations. Suppose I preface my propositional utterance with an oath — ‘I swear to tell the truth, the whole truth and nothing but the truth’. For this to count, I must signal by my clothes, my evident situation or in other ways that I am someone of appropriate moral status — the right person to utter such words in this place and at this time. Only then will my oath be accepted as valid (Austin 1978). In short, a promise exists only in the context of commitment to a kind of game. Like an oath, its successful enactment is best thought of as a hard-to-fake, communally verifiable display of commitment or obligation. Only a speaker who can deliver on the hard-to-fake components of his signal can deploy the cheap tokens — ‘words’ — through which collusion in the verbal transaction is secured (cf. Austin 1978; Bourdieu 1992).

A human cultural system may be immeasurably more complex than any

game of pretend-play. But just as a game is constructed out of pretend-play tokens and rules, so human symbolic culture in general is composed entirely of entities constructed via a kind of play.

It is such play which allows the Jalé of Papua New Guinea to restrict themselves to a lexicon featuring just two basic colour terms — roughly ‘dark’ and ‘light’. In other cultures, playing by other rules which demand a further term, ‘red’ is predictably the next one to emerge (Berlin and Kay 1969). It need hardly be stressed that such minimal discriminations operate on a level quite independent of personal colour perception: all humans, in all cultures, discriminate perceptually between an immense variety of different colours. To take another well-known example, among the Nuer, named categories of time are those defined by shared ritual experiences specific to the culture, such as ‘the time of milking the cattle’, ‘when the calves come home’ and so forth (Evans-Pritchard 1940: 100-8). Here again, it is the ritual structure which defines the categories — this time temporal — which are available to be named.

Within a ceremonial house among the Kabyle in North Africa, the dry, light area of floor-space counts as ‘the place of honour’ while the darker, moister area is ‘the place of the tomb’ (Bourdieu 1990). No one in the dwelling who remained unaware of this distinction could speak or act within the house in an appropriate way. An Australian Aboriginal landscape is in a comparable way ‘totemic’ — structured by morally authoritative intangibles. Here, the red stains in a rock mark a mythical being’s bloody death; there, a misshapen boulder is all that remains of a Dreamtime ancestor; in this pool dwells the fearsome ‘Rainbow Snake’ (Barnard, this volume; Mountford 1978; Strehlow 1947).

Such examples show how every linguistic term for a discriminable ‘thing’ in symbolic culture is tokenistic of some *game-defined* entity, in principle no different from the pretend-play components of a Monopoly game. Words do not map to external, perceptible realities — only to things established as ‘real’ through the playing out of the local game. This is why I would argue, contrary to Chase (this volume), that symbolic reference and symbolic culture are logically inseparable and so must have evolved together.

On the one hand, then, there is the perceptual level of representation. Life is made up of realities such as a chimpanzee might spontaneously perceive — realities such as the hardness or taste of a Monopoly board, or the clothing or body-odour of one of the players. But on the other hand, participants in game-like domains must negotiate their way through a virtual world — a world of contractual intangibles which ‘exist’ only because it is agreed to act collectively ‘as if’ they did. Ritual is this collective acting out. It is not an optional add-on with respect to the rest of symbolic culture. It is the actual playing of the game — life conducted

‘as if’ the gods or other morally authoritative intangibles were real (cf. Chase, this volume).

In entering into the spirit of a game, each player must override physical reality, which now becomes external to the game’s own illusory domain. Suppose, for example, one player of Monopoly is larger or more muscular than another. This is irrelevant: it does not permit the stronger partner to take advantage. To play properly, the players must set aside the dispositions applicable in ordinary life in favour of the quite different rules internal to the game. Each player must undergo a kind of conversion experience, analogous to an initiation rite, after which nothing remains what it seemed. Portions of worthless cardboard now count as ‘streets’, small bits of wood are ‘houses’, bits of paper are ‘banknotes’. Such eclipsing of reality transports participants into a shared domain of acted-out fantasy which constitutes the game.

In pre-state societies, ‘rites of passage’ (Van Gennep 1960) are designed to bring about in each individual precisely that ‘conversion experience’ necessary for the local game to appear playable. Only once the gods, spirits and comparable intangibles seem experientially real are individuals in a position to function within the symbolic domain. There are good reasons why initiation rites tend to be painful, manipulative, coercive and generally ‘unfair’. The reason is the same as that which makes all ritual unfair. Ritual, like warfare, cannot afford to assume that there are any rules.

It may seem paradoxical to reflect that while game-like behaviour must by definition be ‘fair’, ritual signals cannot be. The explanation is that if behaviour is to be judged as fair, a set of rules for making such evaluations must already exist. But what if no one wants to play by the rules? Imagine a festive family gathering spurning Monopoly in favour of socializing, eating or watching television. To get them to play, it will clearly be useless to offer Monopoly banknotes as bribes. All other tokenistic appeals will equally fail. The only solution is to step outside such pretend-play, intervening in reality itself. Loudly halt the conversation, take the food off the table, switch off the television. The convenor must ‘cheat’ in order to get people to play, switching off their involvement in perceptible reality, amplifying the attractions of pretend-play, overstepping all rules in securing compliance with rule.

This is the task of ritual. Like civil war, its function is to assert physical mastery by a particular coalition dictating the terrain on which future games are to be played. It is therefore no surprise to find that ritual signals differ from words in presupposing no prior adherence or commitment. Ritual, like violence, impacts on its human victims directly, seeking out vulnerable spots in the targeted biological and psychological material. Coercive intimidation, hallucination, dance, rhythm, seduction and emo-

tional manipulation all have their place. In much of Aboriginal Australia, boys were initiated into rule-governed adulthood by having their genitals attacked in practices ranging from circumcision to the excruciating ordeal of subincision (Montagu 1974). If part of the definition of 'fairness' is two-way negotiation on the basis of agreed rule, then this was clearly unfair. But all ritual signals have to work like this. To secure commitment to the world of 'rules' and other such communal make-believe, the habits and dispositions of ordinary life must first be coercively defeated (Bloch 1985). We can put this another way by saying that no one would be 'taken in' by ritual signals with their improbable 'other-worldly' messages if such signals did not hit below the belt, using what by rational or logical standards would seem unfair methods of persuasion.

#### EVOLUTION OF COLLECTIVE DECEPTION: THE 'WARFARE' MODEL

Young primates may engage in play — such as play-fighting — which prepares them for adult life (Bruner et al. 1976). But they do not engage in communal pretend-play — play in which all agree to act out an imaginary scenario. Even if they were capable of this, it seems doubtful whether they would have a motive. Why invest energy in colluding with someone else's illusory world when the real one is so much more engaging?

Of course, primates do not engage only with reality. Primate 'tactical deception' has been closely studied, in part because it arguably prefigures human 'symbolic' usage. In the primate case, however, reality-defying signalling is not cooperative. It is always 'Machiavellian', individualistic and competitive. Suppose a baboon falsely signals by its posture that it has seen a threatening leopard, seeking by this deceptive signal to gain a selfish advantage (cf. Byrne and Whiten 1985). Can we speak of the fictional leopard as 'symbolic'? Clearly not. The signaller's selfishness means that conspecifics will have no reason to collude with the fiction. The imaginary 'leopard' will therefore not be taken up by others and sustained. Once the fiction is exposed, all interest in it will disappear. On this basis, 'memic' evolution of fictions (Dawkins 1976) will simply never get off the ground.

*Collectively sustained* deception, by contrast, is the essence of the game-playing known as 'symbolic culture'. How close do chimpanzees get to this in the wild? When a group of common chimps raids into a neighbouring territory, the leaders may insist on silence from the whole band, enforcing this through reprimands (Goodall 1986: 490-1). Although the group is now physically present in the invaded neighbourhood, we might say that its members are 'pretending' not to be. However, this still falls short of symbolism. Silence provides no fictional signal which can be collectively elaborated or sustained. To generate symbolism, communal pretend-play



would have to go a step further — from cooperative non-signalling to active reality-defying display.

Coalitions strong enough to constrain their members' behaviour do not form in a vacuum. They need an external threat capable of generating internal cohesion on the necessary scale. It has been suggested that evolving *Homo* recurrently engaged in group-on-group contests equalling or exceeding ingroup/outgroup conflict between neighbouring bands of common chimpanzees; ingroup 'moral' codes may have emerged in such contexts (Alexander 1989). This theory would lead us to suppose that something akin to 'war' drove the evolutionary emergence of human morality and symbolic culture.

It must be conceded that 'primitive warfare' provides a plausible context for the emergence of collective deception. Success in warfare depends not merely on direct physical violence but also on psychological factors such as surprise, intimidatory display, rumour and the advance dissemination of fear. Turning to the evolution of *Homo*, it is not difficult to picture early prefigurations of such group-on-group psychological tactics, and to understand how they may have led some way down the road towards symbolism.

Aggressive displays by coalitions of pre-modern humans would have had internal as well as external functions, coming under correspondingly contrasting selection pressures. Within an aggressive coalition, while preparing to fight, individuals can afford to communicate their intentions internally by means of cryptic 'nods' and 'winks'. In other words, *short-hand, abbreviated versions* of the behavioural routines involved in coalitional defence or war preparations may suffice in such contexts. However, given the risks of reliance on cheap signals (Zahavi 1987, 1993), even such internal tokenism will remain ultimately dependent on the shared obligation to resort at least periodically to genuine fighting. Only each individual's sustained display of genuine commitment to fight the enemy — clearly, a costly signal — will generate the internal trust necessary for low-cost ingroup tokens to work.

Here, then, we have a possible solution to our basic question: How did 'speech' become decoupled so decisively from 'ritual'? The 'primitive warfare' model (Alexander 1989) suggests an answer: this decoupling was a consequence of group-on-group conflict, which — to the extent that firm ingroup/outgroup boundaries became established — drove ingroup signalling down one evolutionary trajectory and external signalling along a radically divergent one, the two systems nonetheless remaining mutually interdependent.

Aggressive displays are iconic and indexical (Peirce 1940): just as smoke means fire, so a body of men performing a war dance means war. When I see and hear the signs of an approaching army, I am persuaded to flee

neither by symbolic metaphor, nor by assent to any code, but directly in proportion as the drums, pennants and weaponry seem to *demonstrate* the threat posed by that force. The signals, then, work only by claiming a verifiable fit with the currently perceptible world. Suppose I deduce that the displays are mere bluff, exaggerated out of all proportion to the violence which can really be mounted. Then the signals have failed in their purpose.

This is a weakness in the theory that symbolism arose out of group on-group conflict or 'warfare'. It would seem that the model cannot get beyond indexicality — signals which remain ultimately reality-bound. 'What, then, of the 'counter-reality' which constitutes human cultural symbolism? In this, signals can be seen, perceptually, to bear no relationship to reality Yet far from nullifying the message, recognition of such patent pretend-play prompts a search for meaning 'on another level'. In observing the pretend-play, we ask: What is the signaller *intending* us to understand (cf. Grice 1969)?

In this context, the kinds of conflict intrinsic to 'warfare' may be simply too unremitting to generate symbolic culture. No army can afford to see through the enemy's bluff, discern the signalling intention — and then collude with that intention. Yet cooperation of this kind is precisely what symbolic communication entails. Every signal, viewed in terms of its own intrinsic properties, is wholly unconvincing. This being so, we seek to discern what the signaller is *attempting* to convey (Grice 1969). The difference between ritual display and the use of symbolic tokens is that the former does not assume prior collusion — ritual faces the task of securing cooperation from the target, whether by fair means or foul. Cooperation in *symbolic* performance, whether ritual or verbal, by contrast does assume prior collusion. Even should the audience 'see' on a perceptual level that everything is pure pretence, they must still suspend disbelief. It is difficult to see how 'warfare' could bring this about.

In addition to this difficulty, the 'warfare' model fails to capture the essence of hunter-gatherer ritual as a means of demarcating ingroup/outgroup boundaries. In warfare, each army or aggressive coalition wins on some occasions, loses on others. By contrast, human hunter-gatherers invest enormous amounts of energy in elaborate ritual performances *which are not expected to fail*. Investment in performances such as initiation rites in normal times far outweighs investment in violence aimed at territorial neighbours. In fact, Australian Aboriginal ritual structures appear designed precisely to transcend simple ingroup/outgroup territorial conflict, setting up 'chains of connection' — structures of ritually defined interdependence — stretching across the landscape. In north-east Arnhem Land, Australia, a major initiation ceremony such as the *Djungguan* gathered together clans normally dispersed over a wide area, often speaking mutually

incomprehensible dialects (Warner 1957). A simple ‘territorial warfare’ model would not predict any of this.

### THE EVOLUTION OF INITIATION RITES

Ritual is not quite the same thing as war, although it may be valid to conceptualize it as ‘war by other means’. A crucial difference is that warfare relies overwhelmingly on physical violence. Ritual by no means excludes violence, but performers reduce the costs of actual fighting by resorting in the first instance to display. Ritual display, moreover, is not necessarily or exclusively aggressive or intimidatory — it may equally be seductive (cf. Miller, Power this volume). Hence while military strategies can be discussed without reference to sexual strategies, this is not possible in the case of ritual action. When dancers prepare for a collective ritual display, *all* the signalling potentialities of the human body are in principle there to be drawn upon. Hunter-gatherer ritual performances in fact establish ingroup/outgroup boundaries recurrently coinciding with those between exogamous kin-groups. The aim is less to kill than to impress the enemy and in consequence to secure the best possible deal in marital exchanges with the outgroup — using not only threats but gifts and all available techniques of manipulation, exploitation and seduction (Knight 1991).

For Darwinians, a deeply rooted and pervasive form of intraspecific ‘warfare’ is the inevitability of conflict between the sexes (Dawkins 1976; Trivers 1972; Hill and Kaplan 1988). A model of human ritual as originating in ‘warfare’ pitting all females against all males would clearly be unrealistic. However, females are related to males not only as mates/spouses. They are also mothers/sisters/kin. If the concept of sexual conflict is integrated with that of coalitionary kin-bonding, we may construct a model of sexual ‘warfare’ which has promising potential to account for the emergence of symbolic culture in forms consistent with data from the hunter-gatherer ethnographic record.

Suppose males in alliance with sisters and other kin conduct ‘warfare’ against outgroup males, seeking to exploit their muscle-power by offering marital access only in return for provisioning. This is not an unreasonable idea: hunter-gatherer ‘brideservice’ embodies precisely this principle. A young man seeking a bride first has to prove himself as a hunter. When he has made a kill, he may stand a chance of sexual acceptance. He takes the meat to the kin of his chosen bride. They may inspect the meat and, if satisfied, allow the young man to stay a night. If he wants future sex, he will have to bring more meat. Should he prove unlucky, lazy or incompetent, he may be told to stay away. To avoid unwanted liaisons, many hunter-gatherers remain distrustful of sons-in-law for years, preventing them from asserting permanent marital rights in their brides. Even after a

child has been born, the young man will usually be expected to make substantial regular contributions of meat to both the bride and her kin (Collier and Rosaldo 1981; see discussion in Knight 1991: 122-53).

Success in this strategy presupposes women's ability to mobilize male kin where necessary against uncooperative mates or spouses. 'Where this condition is met, the relationship between wife's kin and in-marrying bridegroom may be emphatically hierarchical and one-sided. Among many hunter-gatherers, a male will not even be considered as a potential son-in-law before he has undergone initiation, the function of which is to teach him what ritual obligation means. There must be no answering back. Victory to the 'wife-givers' is predetermined long in advance (Knight 1991: 122-53). If this is 'war', then, it is peculiar in that the same side invariably wins. This may seem less puzzling, however, when we remember that for the 'defeated' side, there is much consolation. The 'exploited' outgroup males are in fact being allowed access to the group's fertile females. The reproductive fitness of these males will be enhanced if they obtain hunted meat not in order to eat it themselves but as a form of currency which can be traded for sexual access, with the benefits accruing to their offspring (cf. Hill and Kaplan 1988). On Darwinian grounds, we would not expect these males to resist such 'exploitative' arrangements beyond a certain point.

In all this, loud ritual signals are securing coalitionary dominance in order to maintain a system of economic 'exploitation'. The immediate beneficiaries are coalitionary alliances of mothers and their offspring, who would otherwise be unable to secure comparable meat-supplies (cf. Key and Aiello, this volume). Note, however, that the strategy is one in which males as mates are being exploited not by females acting alone but by mixed-sex kin-based coalitions. Ingroup males, no less than females, are engaging in the necessary economic 'exploitation' of outgroup males who in turn — as brothers in relation to their own kinswomen — help sisters/mothers 'exploit' *their* in-marrying spouses and sons-in-law.

In evolutionary perspective, the emergence of such coalitionary strategies may be seen as female-driven (Power and Aiello 1997). Evolving human females, heavily burdened with increasingly encephalized, slow-developing offspring, would have been under pressure to secure investment from wherever this could be obtained. Support in rearing offspring could potentially be enlisted from (a) local kin-related females, (b) kin related males and (c) male sexual partners. I have argued (Knight 1991; Knight et al. 1995) that the optimal strategy was to draw on support from all three, securing coalitionary backing from (a) and (b) in the task of economically exploiting (c). Females enhanced their fitness, if this model is accepted, by combining sexual allure with coalitionary organizing skills aimed at maximizing 'brideservice' exploitation of spouses.

To make this model testable, we may explore its internal logic, drawing out theoretical predictions which can then be checked against the findings of hunter-gatherer ethnographers, archaeologists, rock-art specialists and others with relevant test-data.

A major problem would have been posed by menstrual bleeding. When she menstruates, a female signals her imminent fertility. For reasons quite independent of 'culture', this amounts to a 'danger' signal to all other females in the vicinity (Power, this volume). The problem for pregnant and lactating mothers is that they cannot display such blood. The all-too-evident distinction set up between the menstruant and other local females tells philanderer males whom to bond with and whom to temporarily abandon. Left to themselves, males under such circumstances may compete for access only to cycling (hence fertilizable) females. Success may then go to those dominant males best at abandoning any pregnant or breast-feeding partner in favour of a newly menstruating female — best at driving off the competition, bonding with the menstruant and mate-guarding her until impregnation has been achieved. Subdominant males may then find themselves threatened with loss of their sexual partners at the very moment when these are imminently fertile. As males compete for access to visibly menstruating females, non-cycling females will lose out, abandoned by their distracted mates.

In real life, however, every male strategy for asserting monopoly control over female reproductive value is likely to be met by a female counter-strategy (Gowaty 1997). Again quite independently of 'culture', a mother should simply *not allow* her menstruating daughter to be coopted and privatized under male sexual dominance. Defending against this possibility, she should bond tightly with the especially valuable female at precisely such a time. Sisters, brothers and other close relatives should equally feel threatened, bond with her and resist on her behalf.

As Power (this volume) has pointed out, the obvious additional counter-strategy for females threatened temporarily by their inability to menstruate is to cheat. Thanks to the intrinsic nature of the signal, which offers shareable blood, cheating is a possibility. What can prevent pregnant and breast-feeding mothers from painting up anyway with surrogate 'menstrual' blood? In this context, any red pigment — a daughter's menstrual blood, blood from an animal, red berry juice, red ochre — may serve the purpose. Dominant males may in theory still draw a dividing line between genuinely and artificially menstruating females. But this can be countered if local females physically bond with any menstruant, preventing active discrimination between them.

The outcome will be a situation in which, whenever a woman menstruates, the signal sparks a contest. On the one hand, this is a contest for dominance between sexually motivated males. But on the other hand,

contesting this whole dynamic are the menstruant's kin, who have no interest in allowing the outcome to be decided by naked sexual conflict between outgroup males. Their interest lies in retaining control over the menstruant, preventing any outgroup male from successfully privatizing her. That way, they can ensure that additional mating effort expended by outgroup males accrues to themselves as a coalition. If all equally 'paint up', constructing the menstruant as inseparable from themselves, then every outgroup male can be fed the illusion that his current partner is imminently fertilizable. In this way, success in turning the menstrual signal from a threat into a communal asset can in principle be achieved. The whole strategy may be conceptualized as a form of female 'cheating'. Subverting the 'natural' game of male philandering and inter-female sexual competition, females backed by male kin establish monopolistic control over their own sexual availability, thereby introducing a new game.

An advantage of this 'sham menstruation' model (Power and Aiello 1997; Power, this volume) is that it is archaeologically testable (Watts, this volume). It also parsimoniously accounts for the evolutionary emergence of initiation ritual (Van Gennep 1960) as the key institutional mechanism for generating and perpetuating the uniquely human domain of counter-reality or 'symbolism'.

The term 'counter-reality' is here used to mean reality inverted or turned upside-down. We may now see how a strategy of menstrually linked sexual and political *counterdominance* (cf. Erdal and Whiten 1994) would by its internal logic have produced such an effect. Chimpanzees who display the 'female' sexual posture of submission to males as a 'token of respect' (Goodall 1986: 129, 360) are not turning the world upside-down. By contrast, anatomically modern human females who resisted philanderer males, establishing such resistance as an evolutionarily stable strategy, may well have started a social revolution while constructing a symbolic domain at the same time.

Non-human primate females signal 'no' very simply, by displaying sexual lack of arousal or interest. An anoestrous female chimp has no problem in keeping males at bay. Her body itself sends a clear message, and males are unlikely to be interested. Human females, however, have developed continuous sexual receptivity, and the biological human male is liable to 'read' the corresponding signals as indicating 'possible yes'. This confronts women with a rather special challenge. If they are to signal an unmistakable 'no', this cannot be 'left to nature'; deliberate measures may have to be taken.

Signalling 'yes' involves an indexical display of individual sexual identity, fertility, readiness, reproductive value and so forth. A moment's thought will clarify why signalling 'no' in the human case would have generated the opposite — communal 'counter-reality'. The key point is that

for a coalition of human females to signal ‘no’ must logically be to *reverse* the normal body-language displays indicating ‘yes’. To see what this entails, let us take the case of a female chimpanzee in oestrus. In a competitive display, she signals with her rump that she is definitely a chimpanzee (and no other species), definitely female (rather than male) and that she is in her fertile state. We might gloss this as an advertisement conveying three messages: ‘*right species, right sex, right time*’: From this we may deduce the signals logically indicative of sexual ‘no’ or defiance. The alluring display in the human female case should be reversed, so as to read ‘*wrong species, wrong sex, wrong time*’. The female coalition, whenever one of its members is menstruating, should not only blur the distinction between themselves and the menstruant, indicating by artificial cosmetics ‘we are all menstruating’ (cf. Power, Watts this volume). They should also dance or otherwise signal in body-language ‘we are animals’ and ‘we are males’. Reality, on this basis, will be countered on all fronts.

#### ORIGINS OF THE SYMBOLIC DOMAIN

The value of this model is that it accounts for the whole pretend-play game — the game of symbolic cultural production and reproduction — which must be established if speech as a subsystem is to work. This game involves sex, kinship and also economics; its premise is that ‘rules’ operate across the board.

A reality-defining representation is now being staged in direct pursuit of a fitness-enhancing kin-coalitionary strategy of exploiting the provisioning energies of outgroup males. Attempts by such males to fight over, harass or privatize an imminently fertile daughter/sister are resisted.

A young woman’s first menstruation now triggers a performance — a public display of her fertility, marriageability and equally her current inviolability and inseparability from her kin-group. Protecting her may mean forming around her a solid wall of resistance. Signalling ‘no’ to outgroup males involves staging a kind of ‘theatre of the absurd’ — females posturing as ‘male’, humans pretending to be ‘animals’.

The outcome is a simple form of ‘initiation ritual’, triggered by the onset of menstrual bleeding, involving coercive monopoly control over the menstruant, constructing ‘blood’ (real or surrogate) as the ultimate taboo-signal, generating a communal domain of ‘counter-reality’ — and ensuring that the central reality-defying representation is well respected and defended. Members of the ingroup embrace the paradoxical, ‘totemic’ representation (‘wrong species’ etc.) as an expression of their own group identity/inviolability (cf. Durkheim 1912). We would expect outgroup males to perceive the display as deceptive — those supposed ‘males’ are clearly only females, those alleged ‘animals’ really human beings. However,

since the ‘deceptive exploiters’ include these males’ own spouses and offspring, the victims will have good reasons to accept the underlying message. For them, the point to grasp is that some things are sacred. In the final analysis, ‘No’ means ‘No’. The pretend-play displays which signal this are literally false. Yet they are ‘true’ on another level — as metaphorical fictions through which communal resistance is expressed. ‘Symbolic culture’ is now enabling cooperation between camps which might otherwise have been constructed as ‘enemies’; such cooperation may be fitness-enhancing, yet in being secured via coercion it is also in a sense ‘unnatural’ (cf. Chase, this volume).

We have now modelled an ‘initial situation’ capturing the essence of human magico-religious ritual and belief (cf. Knight 1991, 1997; Knight et al. 1995). On the one hand, there is currently perceptible reality. On the other, ritual performers are insisting on the secondary status of this reality. ‘Counter-reality’ — a domain in which the sexes merge, ‘sacred’ blood flows and humans metamorphose into animals — is being vigorously asserted, and for moral reasons accorded higher status. Among the Khoisan, menstrual onset triggers a performance known as the ‘Eland Bull Dance’ (Figure 12.1), in which the girl herself is constructed as the ‘Bull’ (Power and Watts 1997; Watts, this volume). Core myths of this kind are not idle fantasies; they have moral, ‘sacred’ status (cf. Durkheim 1912; Fontenrose 1959). Anyone who expresses doubt is clearly not entering into the spirit of the game.

Now that the basic principle of symbolism is established, new possibilities for linguistic evolution are opened up. To maintain group cohesion and communal identity in opposition to the outgroup, full performative display — ‘ritual’ — continues to be required, the corresponding costly signals of coalitionary commitment serving internally to authenticate a novel system of low-cost tokenistic communication between conspirators (Knight 1998). Speech can be conceptualized as communal pretend-play, which — along one evolutionary trajectory — becomes adapted for specialised ingroup use to the exclusion of outsiders (cf. Nettle, this volume). The very high levels of ingroup trust now established mean that within each ritually defined coalition, discriminable portions of communally standardized pretend-play can be reduced to vocal tokens — ‘words’. Instead of meeting resistance, use of such tokens in fictional elaboration finds social support, placing conspirators under pressure to externalize complex trains of thought via extended signal sequences. Mental processes, for the first time, can be rendered transparent via a repertoire of low-cost tokenistic substitutes for shared, acted-out representations. Darwinian selection pressures, in this novel situation, favour those most fluent in handling such tokens, each speaker recursively embedding fictions whose mutual relationships remain represented in the mind as bodily gestures (cf.





Fig. 12.1 ‘Wrong sex/wrong species/wrong time’: *Southern San rock painting, Fulton’s Rock, Drackensberg Mountains, Natal, South Africa (redrawn after Lewis- Williams 1981: Fig. 10). The image depicts a young woman undergoing her first menstruation ceremony — the ‘Eland Bull Dance’. The young woman is shown enrobed within the circular outline of her special menstrual hut. In ritual construction, she is both gender-reversed and species-reversed. She herself is the ‘Eland Bull’; around her dance ‘eland cows’ playfully engaged in ‘copulation’ with her. Note the ‘eland tails’ of the female dancers and the barred penises (indicating ritual sexual abstinence) of the males.*

Johnson 1987). Exapting neurophysiological capacities evolved at an earlier stage for handling a system of calls still heavily embedded in mimetic gesture (Armstrong et al. 1994; Donald 1991), syntactical speech now rapidly evolves.

If this model is accepted, the first ‘word’ in human language betokened not a physical thing, but a morally authoritative intangible. We can put this another way by saying that the founding speech-act must have been

*contractually* effective (cf. Deacon 1997; Rappaport 1979: 173-221). It invoked the most general of all pretend-play representations, at the apex of the ritually constructed taxonomy. If the earliest language-users had been religious in the contemporary sense, that 'ultimate' reality would have been 'God'. While among southern African hunter-gatherers, *wrong sex/wrong species/wrong time* yields 'Eland Bull' (Power and Watts 1997), in Aboriginal Australia, the same paradoxical negativity yields 'Rainbow Snake' (Knight 1983, 1988, 1991: 88-121). At the deepest level, believers strive for certainty via ritual and liturgical invariance (Rappaport 1979). For this reason, certain core features of the founding signal resist change. To this day in Christian belief and iconography, Divinity is paradoxically both human male and sacrificial lamb, his blood ensuring rebirth by washing sin away. In the beginning was 'The Word' — the performative convening of the human symbolic domain.

#### REFERENCES

- Alexander, R. D. (1989) 'Evolution of the human psyche', in Mellars, P. and Stringer, C. (eds), *The Human Revolution. Behavioural and Biological Perspectives in the Origins of Modern Humans* (Edinburgh: Edinburgh University Press), pp. 455-513.
- Armstrong, D. E., Stokoe, W. C. and Wilcox, S. E. (1994) 'Signs of the origin of syntax', *Current Anthropology* 35: 349-68.
- Austin, J. L. (1978) *How to Do Things with Words* (Oxford: Oxford University Press).
- Berlin, B. and Kay, P. (1969) *Basic Color Terms: Their Universality and Evolution* (Berkeley: University of California Press).
- Bloch, M. (1985) 'From cognition to ideology', in Fardon, R. (ed.), *Power and Knowledge: Anthropological and Sociological Approaches* (Edinburgh: Scottish Academic Press), pp. 21-48.
- Bourdieu, P. (1990) 'The Kabyle house or the world reversed', in *The Logic of Practice* (Oxford: Polity Press).
- Bourdieu, P. (1992) *Language and Symbolic Power* (Cambridge: Polity Press).
- Bruner, J. S., Jolly, A. and Sylva, K. (eds) (1976) *Play: Its Role in Development and Evolution* (New York: Basic Books).
- Burling, R. (1993) 'Primate calls, human language, and nonverbal communication', *Current Anthropology* 34: 25-53.
- Byrne, R. and Whiten, A. (1985) 'Tactical deception of familiar individuals in baboons', *Animal Behaviour* 33: 669-73.
- Cohen, A. P. (1985) *The Symbolic Construction of Community* (London: Tavistock).
- Collier, J. F. and Rosaldo M. Z. (1981) 'Politics and gender in simple societies', in Ortner, S. B. and Whitehead, H. (eds), *Sexual Meanings. The Cultural Construction of Gender and Sexuality* (Cambridge: University Press), pp. 275-329.
- Dawkins, R. (1976) *The Selfish Gene* (Oxford: Oxford University Press).

- Dawkins, R. and Krebs, J. R. (1984) 'Animal signals: mind-reading and manipulation', in Krebs, J. R. and Davies, N. B. (eds), *Behavioural Ecology. An Evolutionary Approach* (Oxford: Blackwell Scientific), pp. 380-402.
- Deacon, T. (1997). *The Symbolic Species. The Co-evolution of Language and the Human Brain* (London: Penguin Books).
- Donald, M. (1991) *Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition* (Cambridge, Mass.: Harvard University Press).
- Durkheim, E. (1912) *Les Formes élémentaires de la vie religieuse* (Paris: Alcan).
- Ekman, P. (1982). *Emotion in the Human Face*. Second Edition (Cambridge, England: Cambridge University Press).
- Engels, F. (1972) *The Origin of the Family, Private Property and the State* (New York: Pathfinder Press).
- Erdal, D. and Whiten, A. (1994) 'On human egalitarianism: an evolutionary product of Machiavellian status escalation?' *Current Anthropology* 35(2): 175-83.
- Evans-Pritchard, E. E. (1940) *The Nuer* (Oxford: Clarendon Press).
- Fontenrose, J. (1959) *Python. A Study of Delphic Myth and its Origins* (Berkeley: University of California Press).
- Gellner, E. (1992) *Reason and Culture* (Oxford: Blackwell).
- Goodall, J. (1986) *The Chimpanzees of Gombe. Patterns of Behavior* (Cambridge, Mass, and London: Belknap Press of Harvard University Press).
- Gowaty, P. A., (1997) 'Sexual dialectics, sexual selection, and variation in mating behavior', in Gowaty, P. A. (ed.), *Feminism and Evolutionary Biology: Boundaries, Intersections, and Frontiers* (New York: Chapman & Hall), pp. 351-84.
- Grice, H. (1969) 'Utterer's meanings and intentions', *Philosophical Review* 78: 147-77.
- Harrison, S. (1993) *The Mask of War. Violence, Ritual and the Self in Melanesia*, (Manchester and New York: Manchester University Press).
- Hill, K. and Kaplan, H. (1988) 'Tradeoffs in male and female reproductive strategies among the Ache, I and II', in Betzig, L. L., Bogerhoff Mulder, M. and Turke, P. (eds), *Human Reproductive Behaviour* (Cambridge: Cambridge University Press), pp. 227-305.
- Johnson, M. (1987) *The Body in the Mind. The Bodily Basis of Meaning, Imagination, and Reason* (Chicago and London: University of Chicago Press).
- Knight, C. D. (1983) 'Levi-Strauss and the Dragon: *Mythologiques* reconsidered in the light of an Australian Aboriginal myth', *Man* (n.s.) 18:2 1-50.
- Knight, C. D. (1988) 'Menstrual synchrony and the Australian rainbow snake', in Buckley, T. and Gottlieb, A. (eds), *Blood Magic. The Anthropology of Menstruation* (Berkeley and Los Angeles: University of California Press), pp. 232-55.
- Knight, C. D. (1991) *Blood Relations, Menstruation and the Origins of Culture* (New Haven, Conn. and London: Yale University Press).
- Knight, C. D. (1997) 'The wives of the sun and moon', *Journal of the Royal Anthropological Institute* (n.s.) 3: 133—53.
- Knight, C. D. (1998) 'Ritual/speech coevolution: a solution to the problem of deception', in Hurford, J. R., Studdert-Kennedy, M. and Knight, C. (eds),

- Approaches to the Evolution of Language: Social and Cognitive Bases* (Cambridge: Cambridge University Press), pp. 68-91.
- Knight, C. D., Power, C. and Watts, I. (1995) 'The human symbolic revolution: a Darwinian account', *Cambridge Archaeological Journal* 5(1): 75-114.
- Lewis-Williams, J. D. (1981) *Believing and Seeing. Symbolic Meanings in Southern San Rock Paintings* (London: Academic Press).
- Montagu, M. F. A. (1974) *Coming into Being Among the Australian Aborigines. The Procreative Belief of the Australian Aborigines* (London and Boston, Mass.: Routledge & Kegan Paul).
- Mountford, C. P. (1978) 'The rainbow-serpent myths of Australia', in Buchler, I. R. and Maddock, K. (eds), *The Rainbow Serpent* (The Hague: Mouton), pp. 23-97.
- Peirce, C. S. (1940) 'Logic as semiotic: the theory of signs', in Buchler, J. (ed.), *The Philosophical Writings of Peirce* (New York: Dover, 1955 edn), pp. 98-119.
- Power, C. and Aiello, L. C. (1997) 'Female proto-symbolic strategies', in Hager, L. D. (ed.), *Women in Human Evolution* (London and New York: Routledge), pp. 153-71.
- Power, C. and Watts, I. (1997) 'The woman with the zebra's penis. Gender, mutability and performance', *Journal of the Royal Anthropological Institute* (n.s.) 3: 537-60.
- Rappaport, R. (1979) *Ecology, Meaning and Religion* (Berkeley, Calif.: North Atlantic Books).
- Strehlow, T. G. H. (1947) *Aranda Traditions* (Melbourne: Melbourne University Press).
- Trivers, R. L. (1972) 'Parental investment and sexual selection', in Campbell, B. (ed.), *Sexual Selection and the Descent of Man 1871—1971* (Chicago: Aldine), pp. 136-79.
- Turner, V. (1967) *The Forest of Symbols. Aspects of Ndembu Ritual* (Ithaca, NY and London: Cornell University Press).
- Van Gennep, A. (1960) *The Rites of Passage* (London: Routledge & Kegan Paul).
- Warner, W. L. (1957) *A Black Civilization* (New York: Harper).
- Zahavi, A. (1987) 'The theory of signal selection and some of its implications', in Delfino, U. P. (ed.), *International Symposium of Biological Evolution* (Ban: Adriatic Editrice), pp. 305-27.
- Zahavi, A. (1993) 'The fallacy of conventional signalling', *Philosophical Transactions of the Royal Society of London B* 340: 227-30.