Cosmetics, Identity and Consciousness

Camilla Power

Contents

Introduction: Beauty Before and After Culture	3
Cosmetics and Cosmology	4
Collective Intentionality, Ritual and 'Techniques Du Corps'	8
The Archaeology of Earliest 'Beauty Magic': Darwinian Models	14
Conclusion	17
References	18

```
Strike [the dingo] with the tuft of eagle feathers [used in initiation]
```

Strike [him] with the girdle

Strike [him] with the string around the head

Strike [him] with the blood of circumcision

Strike [him] with the blood of the arm Strike [him] with menstrual blood Send [him] to sleep,...

South Australian shout for running down dingo, M. Mauss (1936), *Body Techniques*

Introduction: Beauty Before and After Culture

Before culture, in the animal world, 'beauty' is a matter of sexual choice and sexual competition. In formulating his theory of sexual selection, Darwin was dazzled by the array of useless ornaments displayed by males, evolved in response to female whim (Cronin, 1992). Among humans we also see such multifarious ornamentation, traditions of cosmetics as various among cultures as among species. Both sexes may wear them for similar purposes of sexual attraction. If any common characteristic runs across animal and human ornament, it lies in the conspicuously wasteful nature of display. The evolution of such extravagance was first theorised by Fisher (1930) as 'runaway sexual selection'. His idea that the particular traits exaggerated under sexual selection may indicate no intrinsic worth has since been challenged by Zahavi's 'handicap principle' (Zahavi and Zahavi, 1997). Costly signals advertise the quality of individuals who bear them, since the extravagant costs weigh more on individuals of lesser quality. Costly signals are 'hard' or 'impossible to fake'; any attempt to 'cheat' will be exposed. The signal is intrinsically reliable.

Darwinian analyses of human body decoration have drawn on handicap theory particularly (e.g. Ludvico and Kurland, 1995). Culturally specific forms of body ornament are read as signals advertising individual quality to prospective mates: endurance of wounds demonstrates pathogen resistance (Singh and Bronstad, 1997); valuable ornaments display wealth (Low, 1979); ritual scars demonstrate commitment among warriors (Sosis *et al.*, 2007).

Yet there exists a fundamental discontinuity between human and animal display. Within the human cultural world, cosmetics create another dimension captured by Malinowksi's phrase 'beauty magic' (1941 [1929], pp. 38, 345–357): the deployment of the ornamented body to invoke other-worldly powers — spells learned from ancestors that create states of taboo or magical potency. Where animal display is purely competitive and individualistic, and always real and 'honest' (Zahavi and Zahavi, 1997), people become marked with identities that are collectively agreed and fictive. Adding the ideal to the real, somehow these are 'fake'; the individual is no longer just herself. In consciously creating an identity, she creates a representation of herself for others.

Here I will argue that the most basic 'techniques du corps' (Mauss, 1950 [1936]) lie at the root of symbolic culture and consciousness itself. In constructing a playful shared fiction of identity, an individual experiences herself as others see her. In asking 'Who am I?' and 'How do I look to others?', she grows aware of her own thinking through the thoughts of others.

The article has three parts. First, I consider cosmetics as the basis of cosmology. The decorated body becomes both art object and organizing subject in kinship-based, self-organizing societies. These societies most closely resemble the ones in which we evolved modern human consciousness and cognition. Can signal selection models, which offer continuity with animal display, contribute to our understanding of this 'cosmological' dimension fundamental to human culture? Secondly, I align arguments by cognitive psychologists Tomasello and Rakoczy on the ontogeny of uniquely human cognition — the transition from individual to shared to collective intentionality (Searle, 1995) — to the original positions of sociologists Durkheim and Mauss on the generation of symbolic communication and social facts. From this perspective, body art, cosmetics and body techniques as basic units of ritual action provide the motor force, the physics behind the 'magic' of institutional reality. Finally, I outline the archaeology of earliest beauty magic, the record of cosmetics usage which provides the first evidence of symbolically organized human culture.

Cosmetics and Cosmology

The term 'cosmetics' derives from the Greek word (kosmos), the plural form of which meant adornment. This word conveys the idea of the whole universe, and of order as opposed to chaos. In the Classical Greek worldview, ordered arrangement gave rise to a sense of both morality and beauty. The cultural anthropologist's term 'cosmology' similarly links moral and symbolic systems to schematic order in the world (cf. Beidelman, 1971, p. 30). The notion unites the rational, in the sense of conceptual organization, and the aesthetic. While the Anglo-Saxon puritan attitude regards adornment as superficial (note the English sense of 'cosmetic'), among kinship-based peoples cosmetics usage has ritually charged significance. As Turner (1980, pp. 112–114) puts it: 'The adornment and public presentation of the body, however inconsequential or frivolous a business it may appear to individuals, is for cultures a serious matter: de la vie serieuse as Durkheim said of religion'.

A contradiction soon arises with the typical English sense of 'cosmetic' as mere surface, implying a trivial adjustment that does not affect underlying structure. Cosmetics applied to the body and/or cosmetic alterations to bodies are ubiquitous aspects of initiatory procedures, designed to be more or less physically and psychologically traumatic. Can 'cosmetic' encompass usages such as genital operations or scarification? If not, where is the line to be drawn? Here I adopt the breadth of perspective of Turner's The Social Skin (1980). Everywhere, he claims (1980, p. 112), the surface of the body

seems to be treated 'not only as the boundary of the individual as a biological and psychological entity but as the frontier of the social self as well'. In their Preface to Self-Decoration in Mount Hagen, Andrew and Marilyn Strathern (1971, p. 1) speak of 'something more than a matter of fashion and cosmetics. In Hagen it is a medium through which people demonstrate their relationship to their ancestral spirits, express certain ideals and emotions, in short make statements about social and religious values'. We are dealing with art objects, they say, 'but the objects are human beings' (ibid.).

Rather than function solely as objects, these cosmeticised bodies are acting subjects in creating surface display. But does this necessarily convey symbolic meaning? The peacock in display mode represents nothing. The medium is the message: look at me, I'm this good! Must we be expressing 'identity' or connecting to cosmos every time we slap on make-up or face paint? One critical current argument among archaeologists of early modern human culture is whether evidence of ritual body paint traditions infallibly indicates symbolic social organization or merely proto-symbolic capacity (see e.g. Mithen, 1999; Kuhn and Stiner, 2007; Henshilwood and Dubreuil, 2009). Must we wait for art objects that can be disentangled from dancing, working and playing bodies, or for lines drawn onto cave walls to be sure that art has started? Perhaps this question should be turned right on its head. Rather than ask, is body art the first art? why not put it: does cosmetic art reveal the first human body, incorporating unique human cultural cognition?

While material objects — as against just pigment or body paint — offer durability potentially down the generations (cf. Kuhn and Stiner, 2007), I emphasize here the convincing immediacy of human beings as 'art' objects and subjects. In Hagen, the most elaborate decoration is worn for temporary displays at dances which celebrate achievements in the ceremonial exchange system (Strathern and Strathern, 1971, p. 3). It signals success in the current round of exchange, rather than lasting superiority. Nevertheless, claims to enduring reputation, authority and future good fortune are made: the reason for decorating is so that 'people will make stories about us' (Strathern, 1979, p. 246); the performance by the presenting clan is offered as evidence, subject to scrutiny of spectators, that ancestral ghosts are giving their support (1979, p. 247); ancestors make decorations bright (Strathern and Strathern, 1971, p. 23). This concatenation of anxious immediacy of present performance, summoning the forces of the clan past to probe the clan future, recalls Rappaport's analysis of the two kinds of signaling going on in ritual (1979). Indexical signals provide information on the here and now state of the participants, while canonical signals invoke enduring moral authority from beyond the here and now. Both kinds of signal are needed to underwrite symbolic communication. 'Beauty magic'draws its power from the play between these two levels, inserting the indexical subjective body into the canonical objective plane of spirits and ancestors. Ritual display locates the cosmeticised performer within the enduring social cosmos. These are 'rituals of social magic' (Bourdieu, 1991, p. 111), adornment casting a 'spell'over the performer — that is, transforming her status in the eyes of the community complicit in and represented by that magic. In constructing her 'fake' identity, representing her 'self', not only does the cosmeticised performer ask 'Who am I? and 'How do I look to the others?', but also asserts: 'This is where I belong in the cosmos' in relation to those others. The scrutiny of her peers decides whether the spell works.

A Darwinian analysis approaching cosmetic usage purely in terms of competitive individual sexual display misses most of this. No doubt courtship display is part of it. In Hagen, 'decorations are thought of as magically "pulling in" valuables and wives' (Strathern and Strathern, 1971, p. 16); omens taken before the display point to the man who makes such an impression that girls flock to his house afterwards (Strathern, 1979, p. 247). Yet, the dancers 'are decorated to the point of disguise... a dancer recognized at once has decorated himself poorly' (Strathern, 1979, p. 243). Decorations should be noticed first before the wearer (1979, p. 244, 248). In belief, the decorated bodies of the dancers are vehicles for the ancestors to make their presence felt. The audience judges the assemblages, becoming critical if 'items are sparse, elements badly arranged and not properly balanced, the total effect "too dark" or "too light"... and if the individual can be recognized easily. These all indicate failure and the absence of ghostly help' (1979, p. 248). Why the emphasis on disguise? One function may be 'to submerge individual in group identity' (1979, p. 249). Strathern further argues that disguise acts as a means to reveal true or intrinsic quality, both for individual and clan. Only a 'rubbish man' attempts to wear decorations not fitting to him. On these occasions what is normally kept secret or under wraps is 'brought outside' (1979, p. 248). The signals are indexical: 'Wealth is laid out, the strength of a clan numbered by its dancing line' (1979, p. 249). ADarwinian applying Zahavi will be at ease with honest signaling of real wealth or alliance strength. But the interesting question, the aspect that ordinary Darwinian analysis fails to capture, is why ancestral ghosts, normally an unseen influence, must 'make their presence known' (*ibid.*)? This, in popular belief, is the ultimate criterion by which the display succeeds or fails.

Cosmetics clearly are deployed for purposes of individualistic sexual selection. But why all the expensive religious packaging? One Zahavian hypothesis is that performers use cosmetics to display their alliances in 'hard-to-fake' and 'easy-to-judge' ways (Power, 2001). If cosmetics serve to display alliances and if humans (of both sexes) are in part selected for their ability to demonstrate such alliances, the sexual selection hypothesis remains valid at the level of ultimate cause. Ritual action engendering magical beliefs provides the mechanism for marking boundaries of enduring alliances. In the example from Mount Hagen discussed above, the idea that disguise may be used to submerge individual in group identity is group selectionist, and unworkable if there is a cost in sexual competition to that individual. But, if the individual gains sexual advantage precisely from the context of dancing with allied clansmen, there is no necessary tension between individual and clan interest. What counts is not only that an individual is well-decorated, but that he dances with a well-decorated coalition, showing off health, morale and numbers. The ritual invocation that decorations should be seen first, before

any individual, and that ancestors make decorations bright, establishes the clan alliance as a body durable through time.

The ability of Hagen dancers to acquire decorative objects is admired as an indication of influence and prestige (Strathern and Strathern, 1971, p. 27). Items difficult to obtain, especially valued pearl shell, good ochre paints, and feathers, may have to be borrowed through trade or friendship networks (Strathern and Strathern, 1971, p. 28). Big-men lend feathers to supporters, and generally men can borrow from clansmen, but rivalry within the clan for the best plumes forces men to turn to connections outside (Strathern and Strathern, 1971, p. 30). At one moka feast, almost 70 per cent of the plumes came from outside the clan: 'Men's ability to obtain items, through whatever channels, demonstrates their individual skill; while the net display which results from their efforts shows the strength of their group vis-à-vis its rivals' (1971, p. 32). Rivalry among clan members threatens the alliance with disunity or even dissolution. Where that happens, the display might justifiably be described by a Darwinian as nothing but a lek — ritualistic display by males, gathered on one dance ground where they can be compared with each other, to attract mates (cf. Miller, 2000). But the displays considered here cannot be conceptualised in this way. The magical insistence on ancestors being needed to make decorations bright is an insistence that competition between individuals be subordinated to coalitionary needs. The audience must 'see', not dancing individuals, but representatives of the clan as a unit. If decorations are not seen first and are not bright, the individual members betray their too great rivalry and disunity. The clan may no longer prove a durable alliance. And — the key point from an evolutionary perspective — then women will not flock to those men, no matter how good any single individual looks. So, sexual selection is guided by the 'presence' of the ancestors.

Another example comes from the Bororo of Central Brazil. Their characteristic elaborate bodypaint designs belong to specific clans which represent in public ceremonial the *aroe*, an immutable 'essence' or soul attached to social groups (Crocker, 1985, p. 34). Clans do not wear the representations they own, but sponsor and decorate a particular group in the opposite moiety¹ as performers, with each representation having an owning group and a performing group. The owner clan 'is exceedingly jealous of its rights over these ornaments and traditionally would punish severely any illegal use of them' (*ibid.*). The complexity of rights and distinctions in Bororo ceremonial property 'is known to most adult Bororo men. When a strange Bororo arrives in the village, they can soon tell his name-group, sub-clan, clan and moiety just from the particular labrete he wears' (Crocker, 1985, p. 35). These symbolic materials not only act as identifiers but mark the channels of social and economic transaction. Collectively hunted game and private vegetable produce are directed in accordance with ceremonial ties defined by *aroe* representation: 'As the Bororo say, "Where the *aroe* representations go, there

¹ 'Moiety', from the French for half, is a division of a society into two complementary halves, most usually exogamous or linked by other mutual ritual obligatory exchange.

also goes the food to nourish the children there" (Crocker, 1985, p. 35). Here, body decorations allow certain religious ideas or entities to be made flesh. Those ideas stipulate social and economic transactions between specific alliances with enduring moral authority. In the above illustrations from New Guinea and South America, superbritual ornamentation marks the major occasions for economic exchange of valuables or food. In Mount Hagen, these feasts build and extend specifically male alliances, and are economically sustained by women's labour in the production of pigs. In the Bororo case, men of one moiety display to draw hunted produce from men of the other moiety, to feed the children of sisters of men of the first moiety (actually children of men from the second). On the one hand, we have exploitation of women's muscle power, on the other, of men's. Who wears the decorations, who signals to whom and who works for whom will vary according to specific ecological context. But in both cases, the institutional legitimacy of the transactions and claims involved in long-term economic circulation are guaranteed by the 'presence' of ghosts or *aroe*. The decorations embody that presence; symbolically they underwrite social and economic order.

In Bourdieu's terms, the 'magic' of the decorations is the 'accumulated symbolic capital of the group' (1991, p. 111); the wearer becomes a delegate of the group. Worn at the appropriate time by the appropriate person, decorations have performative force (cf. Austin, 1978 [1955]). Considering the question of how 'supernatural' power can exist in the form of 'word-magic', Bourdieu discusses the 'physics' of magic:

The laws of social physics are only apparently independent of the laws of physics, and the power which certain slogans have to secure efforts from others without expending effort themselves — which is the very aim of magical action — is rooted in the capital which the group has accumulated through itseffort and whose effective use issubordinate to a whole set of conditions, those which define the ritualsof social magic. (*ibid.*)

If we replace 'slogans' by 'cosmetics' in this passage, the same description applies to the efficacy of 'beauty magic' in motivating economic productive effort. Cosmetics may be likened to 'words'spoken by the body, except that cosmetics are intrinsically costlier, hence more reliable about the quality of the signaller. Like verbal utterances, they are performatives; that is their power. As Ogotemmêli told Griaule (1965, p. 82): 'To be naked is to be speechless'.

Collective Intentionality, Ritual and 'Techniques Du Corps'

During the First World War, Mauss (1950) observed that French and British soldiers could not dig trenches with each other's spades, that their infantry could only march to different rhythms. Physical actions apparently constrained only by biomechanics and

physiology in fact turned out to be inculcated by subliminal processes of education and imitation, a type of human 'dressage'. Such techniques of the body lent themselves to the classic Maussian stance of understanding 'l'homme total', all at once anatomically, psychologically and sociologically. No one level could be separated from the others.

In using the term *habitus*, drawn from Aristotle, Mauss prefigured Bourdieu's (1977) usage, referring to actions, postures or attitudes so routinized and schematized in the everyday, so automatic that they exist in a hinterland of conscious and unconscious. Yet culture and moral purpose, and importantly for Mauss, magical efficacy are implicated in such techniques. His observations on the way girls walk on several continents similarly prefigure Butler's (1990) notion of gender performativity, while illustrating the flexible modes of transmission of those techniques: New York nurses and Parisian demoiselles tried to glide like Hollywood divas while young Maori women got yelled at by their mothers if they failed to show off their special 'gait'. These performances were rarely remarked on or articulated except in the transgression (cf. Butler, 1990). 'Techniques' for Mauss are acts that are traditional, therefore transmissible, and effective (efficace). They do not differ from magical or religious acts — and have the same efficacy — but they 'feel' like purely mechanical or physical bodily acts. Yet these Maussian techniques done properly by the right person in the right context — in which case they only 'feel' natural — have performative force.

Such unconscious or automatic bodily action may seem to belong to another category from the range of cosmetic procedures encompassed by Turner's *Social Skin*. But by highlighting the aspect of performativity the essential continuity between cosmetics in its broadest sense and Mauss' bodily techniques can be understood. Once ritual trauma of circumcision or scarification or lip-plugging has been undergone, the scarred body will be carried with constant reference to these physical, social and symbolic marks. The Kayapo warrior who fits his penis sheath, the mother who paints her child of a certain age with certain colours over specified areas of the skin, these acts will entail *habitus* of Mauss' techniques with necessary discipline and comportment. Whether we think of Bourdieu's priest uttering liturgical slogans, the Kayapo elders' universe delineated through crystal lip-plugs and red and black body paint, or Mauss' Australian hunter's 'shout' for running down dingo, all perform magic. The speaker, wearer or hunter acts as a delegate vested with moral authority by the community which believes in the magic.

Searle (1995), as Mauss and Bourdieu, investigates the 'magic' underlying 'institutional reality'. Knight (2008, p. 239) neatly expresses Searle's contrast of 'brute' and 'institutional' facts: 'Birth, sex and death are facts anyway, irrespective of what people think or believe. These, then, are brute facts. Phenomena such as legitimacy, marriage and inheritance, however, are facts only if people believe in them'. For Searle (1995, p. 45):

Our sense that there is an element of magic, a conjuring trick, a sleight of hand in the creation of institutional facts out of brute facts derives from the nonphysical, noncausal character of the relation of the XandY term in the structure where we simply *count* X things as Y things. In our toughest metaphysical moods, we want to ask "But is an X really a Y?" For example, are these bits of paper really *money*?'

According to Searle, when it comes to tools or machines with physical features which fit them for their assigned functions, such as screwdrivers, 'we do not have this sense of giddiness'. But what is the physics where institutional reality is concerned?

Using the example of US paper currency counting as money, Searle (1995, pp. 45–48) illustrates the process of creation of institutional facts, resting on collective intentionality. Some group, in this case the citizens of the United States, collectively intends that X (paper engraved with five or ten dollar bill patterns under the auspices of the US treasury) is assigned a status and function such that it counts as Y (money). Because the function of money is not performed solely by virtue of physical features of X, the paper, it rests entirely on the collective agreement or acceptance that it is performed.

Tomasello and Rakoczy (2003) adapt Searle's framework of collective intentionality in proposing two main ontogenetic steps in human social cognition. The crucial initial step begins around 9-12 months old when a child understands others as intentional agents, beginning with gaze following and sharing attention to external objects or events. From this point on children apprehend goal-directed behaviours, and start to coordinate with and communicate shared intentions, expecting adults to 'tune in'to them. This is the springboard enabling children to start creatively using cultural artifacts and linguistic symbols. The second step, coming at three to four years, entails understanding of others as mental agents who may have differing and false thoughts and beliefs, full-scale belief-desire psychology sometimes known as 'theory of mind'. But Tomasello and Rakoczy (2003, p. 124) maintain that it is the nine-month 'revolution' that is the 'real thing' in that it already concerns fully mental states and has all the seeds of the later emerging stage. It is stepping into the social space of 'we intend' that changes everything, enabling the child to participate in and practice fully human cultural cognition. Several years follow of exercising joint attentional activity including 'sharedness' involving self-other equivalence; perspective-shifting; and apprehension of normativity, with some ability to reflect on that.

In contrasting 'shared intentionality' at the earlier stage to 'collective intentionality' emergent at the second, Tomasello and Rakoczy (2003, p. 133, fn5) modify Searle (1995) who distinguishes collective intentionality broadly speaking entailing social facts, from collective intentionality involving constitutive rules establishing institutional facts. But in trying to define what exactly is missing in the earlier stage that develops subsequently, Tomasello and Rakoczy (2003, pp. 133–134) admit there is no clear difference in kind between shared and collective intentions. Understanding false beliefs entails a grasp of objective reality, subjective and intersubjective perspectives all at once, which elude a child before four years. But in gaining this 'view from nowhere', the child is engaging with a progressively bigger and bigger 'we' who intend up to

the point the entire cultural community to which the child belongs is included, with cognisance of norms and beliefs belonging to that community.

The ability to share intentions leads to novel development in children around two the phase known as 'pretend play'— when status may be assigned to objects symbolically and imaginatively rather than only in practical or functional ways. In the first year following the 'revolution', a child can engage via imitation in the shared intention 'this is the way we use X', allowing some understanding of norms as in 'you're not using it properly'. From 24 months, a child may playfully begin to use objects in the 'wrong' way, for instance pretending to use a pencil as a toothbrush. In sharing this intention she will look to an adult to join the 'game' of assigning a new, temporary function to the pencil. The pencil then is socially constituted as a toothbrush (Tomasello and Rakoczy 2003, p. 131). Because the function does not rest in physical features, it is assigned purely by agreement, the collective intention of those engaged in the game. Alongside pretend play with objects will arise ability to play with words, deliberately misnaming things as a joke which adults are expected to enter into. In playing with the conventional uses of words or objects, and deliberately breaking them, the child clearly shows understanding of and reflection on the norms entailed in shared intentional uses (2003, pp. 128–129).

The major achievement of the Leipzig Max Planck Institute study programme of Tomasello, Hare, Call, Rakoczy and colleagues has been to reveal the stark differences between young children and chimpanzees in their attitude to cooperation. Chimps may not lack in competence or cognitive capacity. There is controversy over whether they understand psychological states (Povinelli and Vonk, 2003), although they appear able to read intentions and understand what other chimps see in certain competitive contexts (Call et al., 2004; Tomasello et al., 2003). But they fail to understand communicative or cooperative intentions, and so do not try to share attention with conspecifics by pointing, showing or offering intentional communicative signals (Call and Tomasello, 2005). The 'cooperative eye' hypothesis posits that humans evolved their unique eye morphology of almond shape with white sclera background (Kobayashi and Kohshima, 2001) to enable following of eye direction as the basic mechanism supporting shared attention and cooperative mutualistic social interaction (Tomasello et al., 2007). Where chimpanzees are concerned, gaze-following via head direction appears a distinctly one-way activity.

Whiten (1999) anticipated this 'political'view of the emergence of specifically human cognition with his idea of 'deep social mind' — a necessary coevolution of mutual mind-reading with cultural transmission and egalitarianism. The nine-month ontogenetic 'revolution' enabling the human infant to participate in intersubjectivity and shared intention must be based in a phylogenetic revolution of certain species of *Homo* where strategies of counter-dominance (Erdal and Whiten, 1994) and reverse dominance (Boehm, 2001) became more successful than primate dominance.

For such revolutionary strategies to prevail in a Darwinian world, individuals attempting to maintain physical dominance and monopoly over resources or mates would lose out in terms of eventual reproductive success compared with those more willing to collaborate in shared goals. Social prestige and ultimately sexual rewards would go to those willing to settle for rough equality, and contribute resources or childcare cooperatively. While Hrdy (2009) outlines our evolutionary heritage of cooperative breeding in genus *Homo* as the matrix for shared intentionality, Whiten (1999, p. 180) sketches a 'U-shape' curve (derived from Knauft, 1991), bottoming out with a lengthy egalitarian phase of human hunter-gatherer evolution, before a sharp switch back into hierarchical societies with the advent of farming and pastoralism over recent historic time.

Such an egalitarian context for the evolution of human cognition and consciousness suggests we will learn most from those societies retaining aspects of our long, shared evolutionary heritage — immediate-return hunter-gatherers who aggressively assert egalitarian relations (Woodburn, 1982), including between the sexes. Lewis (2008) examines the multivalent concept of ekila among the Mbendjele forest hunter-gatherers of northern Congo, a collection of beliefs and practices linking together hunting, food, sex, blood, menstruation and exchange relations between people and the forest itself. Ekila practices are true 'techniques du corps', leading to men and women using their bodies in different ways and cultivating different styles of behaviour, for instance of walking and talking in the forest (Lewis, 2008, p. 304). No individual or institution is responsible for teaching about ekila. Diverse rules exert 'an anonymous but pervasive pedagogic action' prompted by the natural curiosity of each person (2008, p. 305). Young children, who are very focused on food, will want to know why their mothers don't eat ekila animals. As they mature, girls and boys discover aspects of ekila beliefs pertaining to spheres of reproduction and women's secrets, and hunting and men's secrets. All told, ekila secures proper sharing, both sexually and economically within the cosmos of the forest. Lewis (2008, p. 305) notes:

Bourdieu (1977) emphasized the inculcation of inequality and hierarchy when suggesting that if culture was embodied in such ways it was almost beyond the grasp of consciousness. By passing from practice to practice without becoming explicit discourse, *habitus* remains unchallenged. *Ekila* is an example of similar processes inculcating egalitarianism.

Lewis (2008, p. 312) rejects Brunton's (1989) argument that egalitarian societies are inherently unstable and unable to assure cultural continuity, since no individual has the authority to impose tradition or judge innovation. Brunton, says Lewis (2008, p. 312), ignores the importance of nonlinguistic transmission in assuring cultural continuity. He points out that *ekila's* non-linguistic nature makes it difficult to articulate it explicitly, but also difficult to manage by 'authority'. Instead, 'it works by hidden persuasion, by provoking curiosity and stimulating each new generation to discover Mbendjele egalitarian ethics...'(*ibid.*). Brunton's view also diametrically opposes Whiten's understanding of 'deep social mind' where cultural transmission and increasing egalitarianism coevolve in a feedback process with intersubjectivity.

Another Mbendjele polysemic concept vital to learning and transmission, but hard to translate, is massana. These activities are communal and pleasurable, based in complementary gender groups, requiring everyone involved to contribute their cooperative skills (Lewis, 2002, p. 124). Massana cannot be adequately termed 'play', although all children's play activities would be massana. Also incorporated are all public and elaborate rituals (mokondi massana), when secret societies summon powerful forest spirits, yet characterized by fun, joy and laughter (2002, p. 125). Massana covers children's games from the informal to the structured, including Bolu, the children's summoning of their forest spirit, a prototype of adult mokondi (2002, p. 132) requiring collaboration (and contest) between the group of boys and the group of girls. While rivalry adds to the fun, no games involve competition with emergent winners and losers. What is valued is synergy increasing the pleasure of cooperative action. Juniors learn by observation and imitation of slightly older children. 'Peer group action in massana is the major avenue for transmission of cultural and gendered skills' (2002, p. 131), since explicit intergenerational teaching is rare among the Mbendjele and would offend against their egalitarian spirit.

Bolu, the children's mokondi massana, has all the elements of adult mokondi, with its own medicine and a secret ground where the spirit is mustered — a large costumed construction that emerges from the forest accompanied by special songs (Lewis, 2002, p. 133). Girls lure the spirit into camp with their beautiful singing and provocative dancing, taunting and challenging the boys to summon the spirit and guide it from the secret area in the forest. Once Bolu has arrived, the girls have to keep him there with the allure and coordination of their singing and dancing, while the boys must never let Bolu touch the girls, and are responsible for repair and maintenance. Adults play their part, showing respect for the spirit by pretending to be frightened. They make comments and suggestions for encouragement, but this is the furthest they will go, possibly reprimanding anyone who is disruptive of the performance if teasing goes too far and descends into chaos (2002, pp. 133–135).

The broad category of massana shows us that games can be religious, and religious activities games. No line is drawn between the structures, attitudes and performance of the children's 'learning' mokondi and the adults' many and complex communal activities. A ritual grammar of sacredness and secrecy among initiates (here the boys) obtains (2002, p. 135). In fact, Durkheim's (1947 [1915]) notion of the sacred can be extended to all massana mimetic practices, for children of all ages, in the sense that they are communal and cooperative, exciting collective consciousness. Since 'effectively children are doing massana most of the time' (Lewis 2002, p. 128), they are immersed in shared intentionality and collective representation everyday in camp in a way that is profoundly autonomous, not reliant on any specific adult presence.

With massana, people like the Mbendjele show how effectively similar role-playing games and ritual experience are. Durkheim's original — and unchallenged — theory of how to establish a collective representation was that individual minds can only meet and commune by coming out of themselves through movement. The homogeneity of

these movements 'makes the group aware of itself and so brings it into being'. That homogeneity, once established, serves to symbolize the representations (1947 [1915], pp. 230–231). In other words, we dance the same dance; only then can I know the concept in my head is the same as the one in yours. Then we collectively intend, and represent our intention. Here I only extend that argument by adding that child's mimetic play is the rehearsal ground of ritual, and that play/ritual provides the necessary and sufficient scaffolding for all symbolic communication including language. Knight (2000) has argued that animal play offers the precursor to the human language instinct. In play, animals reverse roles; take turns; 'agree' that a play bite is 'not a bite'; play behaviour tends towards counter-dominance and egalitarianism, with real differences of size and strength ignored. As soon as any dominance in competition over resources asserts itself, playtime is over. We are the only great apes who play throughout our lives, past puberty and the travails of sexual competition; we are the only great apes known to pretend-play in the wild at all.

Our unique human cognition then depends on a unique phenomenon, a safe environment for play, shared fantasy and make-believe, unthreatened by conflict over sex and food (Knight, 2000). Egalitarian hunter-gatherer cultures fiercely guard that space via non-linguistic cultural techniques and arenas such as *ekila* and *massana*, which do not devolve on any individual's authority.

This strongly suggests that child development study programmes of the kind of Leipzig MPI need to shift attention from transmission of culture within adult-child dyads, based in primarily linguistic symbols, towards programmes studying children 'in the wild'among intimate peers (cf. Whitehead 2001, p. 24), seeking to understand non-linguistic and more fundamental mechanisms for cooperation and consciousness. As Murinbata and Whitehead (2000, p. 82) comment: 'You value object intelligence over social intelligence and technology over the arts; you teach your children the three Rs much too young when they should be playing and learning to be conscious...'. Whitehead (2001) convincingly argues that the formidable repertoire of social display behaviours practiced by humans from early childhood, especially role-play, are prerequisites of human cooperation, culture and reflective consciousness. We become self-aware by 'taking massana' or entering a 'shared experiential world'. We need to step into each other's shoes in Durkheim's dance.

The Archaeology of Earliest 'Beauty Magic': Darwinian Models

So let's return to make-up, and the body. The first and most natural instrument or technical object of human beings is the body (Mauss 1950). This is what will first be deployed in self-aware social display. In his testing of self-recognition among apes, Gallup (1970) found that chimpanzees familiarised with mirrors were very bothered to

find a dab of red die on their faces, applied during a period of anaesthesia. They would go to the mirror to check it out, sniff their fingers and inspect the spot. But no great ape apart from ourselves ever begins to apply paint to their faces. To intentionally add — or have added — design or colour to oneself is to play with something 'fake' that can only have value if the intention is shared with someone who joins the game. Identity then is pretend-play with the body as technical object. As soon as 'make-up' is applied it is 'magical' and effective, and quickly 'feels' physical and mechanical, a true Maussian technique.

Any researcher who has passed mirrors around a hunter-gatherer camp will know, firstly, how treasured they are and, secondly, what effect they have on beautification practice. Self-decoration, hitherto public and social, suddenly can become private and individual. For the hundred thousand years or more of our egalitarian hunter-gatherer lifestyle, people acted as each other's mirrors, trusting and engaging coalition partners with the creation of identities, and still commonly do in human societies.

The earliest archaeological evidence of repeated and patterned symbolic activity in modern humans and their immediate ancestors is of a cosmetics industry focused on red pigments — ochre, iron oxides, notably blood red haematite. This extends over 300,000 years in Africa, and is regularly found from the time of emergence of modern *Homo sapiens* around 200,000 years ago (Watts, 2009; Barham, 2002). From c.100,000 years ago are found geometric engraved pieces of haematite (Henshilwood *et al.*, 2002; 2009). Accompanying them are necklaces of marine shell beads, found in the southern and northern edges of Africa, and the Near East (d'Errico *et al.*, 2005; Vanhaeren *et al.*, 2006; Bouzouggar *et al.*, 2007; d'Errico and Vanhaeren, 2009), some appearing to be stained with red ochre used as bodypaint. These range in date from more than 100,000 years old at Skhul, to c.75,000 years at Blombos; examples from the Algerian site of Oued Djebbana had come almost 200 km from the sea.

Henshilwood and Dubreuil (2009) inquire what minimal cognitive abilities would be required to produce and use the beads which come from the same period of the African Middle Stone Age (MSA) as the abstract engraved haematite blocks. Applying the same two-level ontogeny to perspective-taking as Tomasello and Rakoczy, Henshilwood and Dubreuil (2009, pp. 52–53) argue that 'wearing of beads suggests that one person can understand how she looks from the point of view of another person'. This, they say, would need the second level of perspective-taking, as when a child of four can fully represent the point of view of others, and is able to reconstruct how an object looks from another's perspective. They propose a shift of cognitive capacity during the African MSA equivalent to the shift between level-1 perspective-taking, effectively Tomasello and Rakoczy's shared intentionality, to level-2, effectively collective intentionality or 'theory of mind'. The minimal abilities needed for the bead-wearing and engraved ochre pieces, they argue, would also enable recursive syntax critical to language, allowing articulation of conflicting perspectives (Henshilwood and Dubreuil 2009, p. 59). So they correlate the evidence of modern cognition in the beads with the emergence of language some 100,000 years ago in Africa.

This argument implies that the earlier cosmetic tradition of pigments does not necessitate fully modern cognition, with something equivalent to the earlier ontogenetic stage of shared intentions sufficing to motivate regular production and application of bodypaint. This view echoes Mithen (1999) and Kuhn and Stiner who suggest that 'pigment-only decorative systems' provided a 'form of individual display... rather than a medium for communicating about more constant, institutionalized relationships among individuals or groups of individuals' (2007, p. 51). Yet I have argued human consciousness and identity entail locating the individual within the social cosmos. This is an interactive feedback of individual and collective: self-decoration is display of the individual in relation to the enduring social group to which she belongs. Cosmetic display, through ritual performance and collective intention, constitutes the social group.

Watts (1998; 1999; 2002; 2009) has performed rigorous analysis of early pigment materials of the MSA. He rejects alternative non-symbolic hypotheses for ochre use, such as hafting weapons, on the basis of colour selection criteria. There is strong bias towards dark, saturated reds among the materials that show use-wear and those with highest levels of modification. The presence of large numbers of small pieces with single grinding facets, which would produce just enough powder for small-scale design purpose, further supports the hypothesis that MSA ochre reveals a cosmetics industry. Watts (2009, pp. 65–66) recalls Durkheim's original predictions from The Elementary Forms of Religious Life that the first collective representations would be abstract; that they would be represented on the body, using red ochre, 'as if' blood, counting as the sacred. ADurkheimian ritual context of cosmetics use is both necessary and sufficient for generating collective consciousness, intentionality and representation of stable moral constructs — effectively Searle's institutional facts. As Watts (2009, p. 82) says 'it is almost inconceivable that the MSA occupants of Blombos were engraving such [abstract] designs onto pieces of ochre while not doing similar things with ground ochre powder on their bodies...'.

Rather than rely on analogy with African or Australian hunter-gatherer ritual bodypaint traditions, Watts (2009) tests the predictions of the single Darwinian hypothesis that to date explains why red ochre became the cultural species marker of *Homo sapiens* as we emerged in Africa and spread out to the Middle East, Eurasia and Australia — originally the 'sex-strike' model (Knight, 1991), now the 'sham menstruation' or 'Female Cosmetic Coalitions' (FCC) model (Knight *et al.*, 1995; Power and Aiello, 1997; Power, 2009). The basic argument goes: female ancestors of *Homo sapiens* faced a grave problem. How could they find enough energy for offspring under selection pressure for increasingly large and metabolically expensive brains? They needed more productivity by males as hunters to support their offspring. However, in the Darwinian world of sexual competition, males could be more interested in finding new fertile females than in supplying the needs of breast-feeding mothers and their infants. Women, unlike chimpanzees, our closest living relatives, do not reveal their fertile time. But, human females cannot easily disguise the sign of menstruation. Menstrual periods clearly mark out which females are coming close to fertility among other pregnant or lactating females.

Dominant males could therefore target cycling females, and neglect those who had the heaviest costs. Burdened females had two possible responses. Either, to prevent males from getting close to any valuable menstrual female, they could try to hide her signal from the males. Alternatively, they amplified and collectivised the signal by joining in coalitions to perform cosmetic rituals, painting themselves up in blood-like pigments.

With this ritual performance, for the first time, a group of individuals shares in representing a fiction. Their dance decorated by red pigment is pretend-play with bodies both subject and object. They collectively intend that it counts as 'sacred blood', 'taboo'or 'magical potency', setting the females apart into a sacred space and time, inaccessible to outsider males until hunting has been successful. All at once, morality (joining in the dance, and not offering sex to outsider males before the hunters return), kinship (females and male kin marked by red cosmetics within the group), economics (obligations of brideservice exchange imposed on outsider male hunters) and cosmology (the 'other world') come into force. They are established as institutional facts, digitally and categorically, to the extent the ritual coalition endures and cannot be divided. While the signals are 'fake' insofar as some non-cycling females 'pretend' to be menstrual, their collective intention is underpinned by hard-to-fake Zahavian costly signaling. The quality of the cosmetic coalitionary display demonstrates honestly the extent and solidarity of the alliance to outsiders. So the FCC model conforms to Zahavian signal selection theory (Power, 2009), allowing evolutionary continuity with animal display. Yet, it accounts for the overthrow of primate-style sexual dominance in establishing the conditions for human cultural cognition and cooperation.

Conclusion

A narrowly individualistic Darwinian view of cosmetics usage, focused on competitive sexual display, does not account for 'beauty magic' — deployment of the ornamented body to invoke 'otherworldly' powers. In 'rituals of social magic', cosmetic adornment casts a 'spell' over the performer, transforming her status in the eyes of the community complicit in that 'magic'. Human consciousness resides in this representation of the self in the eyes of peers: the ability to apprehend perceptions of others and understand one's own thoughts through others. These magico-religious functions do not form a separate level of analysis from Darwinian sexual selection; the expensive religious packaging is intrinsic to the attraction. Cosmetics constitute performers as members of bounded and enduring ritual coalitions; individuals display this quality in coalitionary contexts in order to become attractive as individuals.

The body is the first natural object and instrument deployed in the performative construction of institutional reality. Techniques of the body such as *ekila* taboos among the Mbendjele, combined with 'shared experiential worlds' of ritual and play such as *massana* are sufficient to establish stable cultural traditions where moral authority does not reside in any individual but is distributed throughout an egalitarian collective.

Such egalitarian relations are critical to engendering intersubjectivity — a willingness to share what I am thinking with you, and seek to know what you are thinking of my thoughts.

The pigment usage evidenced in the African Middle Stone Age reveals ritual body-painting traditions, regularised from the period of emergence of modern *Homo sapiens*. Habitual ritual action focused on 'beauty magic' must generate sacred collective representations. These first cosmeticised bodies possessed fully modern human cultural cognition and consciousness. The Female Cosmetic Coalitions model is the only Darwinian account of why red ochre became the cultural species marker of *Homo sapiens* as we emerged in Africa and spread around the world.

References

- Austin, J.L. (1978 [1955]) How to Do Things with Words, Oxford: Oxford University Press.
- Barham, L.S. (2002) Systematic pigment use in the Middle Pleistocene of south central Africa, *Current Anthropology*, **31**, pp.181–190.
- Beidelman, T.O. (1971) The Kaguru, a Matrilineal People of East Africa, New York: Holt, Rinehart and Winston.
- Boehm, C. (2001) Hierarchy in the Forest: The Evolution of Egalitarian Behaviour, Cambridge, MA: Harvard University Press.
- Bourdieu, P. (1977) Outline of a Theory of Practice, Cambridge: Cambridge University Press.
- Bourdieu, P. (1991) Language and Symbolic Power, Cambridge: Polity Press.
- Bouzouggar, A., Barton, N., Vanhaeren, M., d'Errico, F., Collcutt, S., Higham, T., Hodge, E., Parfitt, S., Rhodes, E., Schwenninger, J.-L., Stringer, C., Turner, E., Ward, S., Moutmir, A. & Stamboul, A. (2007) 82,000-year-old shell beads from North Africa and implications for the origins of modern human behavior, *Proceedings of the National Academy of Sciences*, **104**, pp. 9964–9969.
- Brunton, R. (1989) The cultural instability of egalitarian societies, *Man* (N.S.), **24**, pp. 637–668.
- Butler, J. (1990) Gender Trouble: Feminism and the Subversion of Identity, New York: Routledge.
- Call, J., Hare, B., Carpenter, M. & Tomasello, M. (2004) 'Unwilling' versus 'unable': Chimpanzees' understanding of human intentional action, *Developmental Science*, 7, pp. 488–498.
- Call, J. & Tomasello, M. (2005) What do chimpanzees know about seeing revisited: An explanation of the third kind, in Eilan, N., Hoerl, C., McCormack, T. & Roessler, J. (eds.) *Issues in Joint Attention*, pp. 234–253, Oxford: Oxford University Press.

- Crocker, J.C. (1985) Vital Souls: Bororo Cosmology, Natural Symbolism, and Shamanism, Tucson, AZ: University of Arizona Press.
- Cronin, H. (1992) The Ant and the Peacock, Cambridge: Cambridge University Press.
- d'Errico, F., Henshilwood, C., Vanhaeren, M. & van Niekerk, K. (2005) Nassarius kraussianus shell beads from Blombos Cave: Evidence for symbolic behaviour in the Middle Stone Age, Journal of Human Evolution, 48, pp. 3–24.
- d'Errico, F. & Vanhaeren, M. (2009) Earliest personal ornaments and their significance for the origins of language debate, in Botha, R. & Knight, C. (eds.) *The Cradle of Language*, pp. 16–40, Oxford: Oxford University Press.
- Durkheim, E. (1947 [1915]) The Elementary Forms of the Religious Life: A Study in Religious Sociology (trans. J.W. Swain), Glencoe, IL: The Free Press.
- Erdal, D. & Whiten, A. (1994) On human egalitarianism: An evolutionary product of Machiavellian status escalation?, *Current Anthropology*, **35**, pp. 175–183. Fisher, R.A. (1930) *The Genetical Theory of Natural Selection*, Oxford: Clarendon Press.
- Gallup, G.G. (1970) Chimpanzees: Self-recognition, Science, 167, pp. 341–343. Griaule,
 M. (1965) Conversations with Ogotommêli. An Introduction to Dogon Religious Ideas, Oxford: Oxford University Press.
- Henshilwood, C.S., d'Errico, F. & Watts, I. (2009) Engraved ochres from Middle Stone Age levels at Blombos Cave, South Africa, *Journal of Human Evolution*, **57**, pp. 27–47.
- Henshilwood, C.S., d'Errico, F., Yates, R., Jacobs, Z., Tribolo, C., Duller, G., Mercier, N., Sealy, J., Valladas, H., Watts, I. & Wintle, A. (2002) Emergence of modern human behaviour: Middle Stone Age engravings from South Africa, *Science*, **295**, pp. 1278–1280.
- Henshilwood. C.S. & Dubreuil, B. (2009) Reading the artifacts: Gleaning language skills from the Middle Stone Age in South Africa, in Botha, R. & Knight, C. (eds.) The Cradle of Language, pp. 41–61, Oxford: Oxford University Press. Hrdy, S.B. (2009) Mothers and Others: The Evolutionary Origins of Mutual Understanding, Cambridge, MA: Belknap Press of Harvard.
- Knauft, B. (1991) Violence and sociality in human evolution, *Current Anthropology*, **32**, pp. 391–428.
- Knight, C. (1991) Blood Relations: Menstruation and the Origins of Culture, London and New Haven, CT: Yale University Press.
- Knight, C. (2000) Play as precursor of phonology and syntax, in Knight, C., Studdert-Kennedy, M. & Hurford, J.R. (eds.) *The Evolutionary Emergence of Language: Social Function and the Origins of Linguistic Form*, pp. 99–119, Cambridge: Cambridge University Press.
- Knight, C. (2008) 'Honest fakes' and language origins, *Journal of Consciousness Studies*, **15** (10–11), pp. 236–248.
- Knight, C., Power, C. & Watts, I. (1995) The human symbolic revolution: A Darwinian account *Cambridge Archaeological Journal*, **5**, pp. 75–114.

- Kobayashi, H. & Kohshima, S. (2001) Unique morphology of the human eye and its adaptive meaning: Comparative studies on external morphology of the primate eye, *Journal of Human Evolution*, **40**, pp. 419–435.
- Kuhn, S.L. & Stiner, M.C. (2007) Body ornamentation as information technology:
- Towards an understanding of the significance of beads, in Mellars, P., Boyle, K., Bar-Yosef, O. & Stringer, C. (eds.) *Rethinking the Human Revolution*, pp. 45–54, Cambridge: McDonald Institute Research Monographs.
- Lewis, J. (2002) Forest hunter-gatherers and their world, Ph.D. thesis, University of London.
- Lewis, J. (2008) Ekila: Blood, bodies, and egalitarian societies, Journal of the Royal Anthropological Institute (N.S.), 14, pp. 297–315.
- Low, B.S. (1979) Sexual selection and human ornamentation, in Chagnon, N. & Irons, W. (eds.) *Evolutionary Biology and Human Social Behavior*, pp. 462–487, North Scituate, MA: Duxbury Press.
- Ludvico, L.R. & Kurland, J.A. (1995) Symbolic or not-so-symbolic wounds: The behavioral ecology of human scarification, *Ethology and Sociobiology*, **16**, pp. 155–172.
- Malinowski, B. (1941 [1929]) The Sexual Life of Savages in North-Western Melanesia, New York: Halcyon House.
- Mauss, M. (1950 [1936]) Les techniques du corps, in Lévi-Strauss, C. (ed.) Sociologie et Anthropologie, pp. 365–386, Paris: Presses Universitaires de France. Miller, G.F. (2000) The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature, London: William Heinemann.
- Mithen, S. (1999) Symbolism and the supernatural, in Dunbar, R., Knight, C. & Power, C. (eds.) *The Evolution of Culture: An Interdisciplinary View*, pp. 147–169, Edinburgh: Edinburgh University Press.
- Murinbata, T. & Whitehead, C. (2000) Why consciousness conferences are not really getting us anywhere: A stone-age anthropologist explains, *Journal of Consciousness Studies*, **7** (6), pp.81–85.
- Povinelli, D.J. & Vonk, J. (2003) Chimpanzee minds: Suspiciously human?, *Trends in Cognitive Science*, **7**, pp.157–160.
- Power, C. (2001) 'Beauty magic': Deceptive sexual signaling and the evolution of ritual, Ph.D thesis, University of London.
- Power, C. (2009) Sexual selection models for the emergence of symbolic communication: Why they should be reversed, in Botha, R. and Knight, C. (eds.) *The Cradle of Language*, pp. 257–280, Oxford: Oxford University Press.
- Power, C. & Aiello, L.C. (1997) Female proto-symbolic strategies, in Hager, L.D. (ed.) Women in Human Evolution, pp. 153–171, New York: Routledge. Rappaport, R.A. (1979) Ecology, Meaning, and Religion, Berkeley, CA: North Atlantic Books.
- Searle, J.R. (1995) The Construction of Social Reality, London: Penguin.
- Singh, D. & Bronstad, P.M. (1997) Sex differences in the anatomical locations of human body scarifications and tatooing as a function of pathogen prevalence, *Evolution and Human Behavior*, **18**, pp. 403–416.

- Sosis, R., Kress, H. & Boster, J. (2007) Scars for war: Evaluating alternative signaling explanantions for cross-cultural variance in ritual costs, *Evolution and Human Behavior*, **28**, pp. 234–247.
- Strathern, A. & Strathern, M. (1971) Self-Decoration in Mount Hagen, London: Duckworth.
- Strathern, M. (1979) The self in self-decoration, Oceania, 49, pp. 241–257.
- Tomasello, M., Call, J. & Hare, B. (2003) Chimpanzees understand psychological states—the question is which ones and to what extent, *Trends in Cognitive Science*, **7**, pp.153–156.
- Tomasello, M., Hare, B., Lehmann, H. & Call, J. (2007) Reliance on head versus eyes in the gaze following of great apes and human infants: The cooperative eye hypothesis, *Journal of Human Evolution*, **52**, pp. 314–320.
- Tomasello, M. & Rakoczy, H. (2003) What makes human cognition unique? From individual to shared to collective intentionality, *Mind and Language*, **18**, pp. 121–147.
- Turner, T.S. (1980) The social skin, in Cherfas, J. & Lewin, R. (eds.) Not Work Alone: A Cross-Cultural View of Activities Superfluous to Survival, pp. 112–140, London: Temple Smith.
- Vanhaeren, M., d'Errico, F., Stringer, C., James, S.L., Todd, J.A. & Mienis, H.K. (2006) Middle Paleolithic shell beads in Israel and Algeria, *Science*, **312**, pp. 1785–1788.
- Watts, I. (1998) The origins of symbolic culture: The southern African Middle Stone Age and Khoisan ethnography, Ph.D. thesis, University of London.
- Watts, I. (1999) The origin of symbolic culture, in Dunbar, R., Knight, C. & Power, C. (eds.) *The Evolution of Culture*, pp.113–146, Edinburgh: Edinburgh University Press.
- Watts, I. (2002) Ochre in the Middle Stone Age of southern Africa: Ritualised display or hide preservative?, South African Archaeological Bulletin, 57, pp. 1–14.
- Watts, I. (2009) Red ochre, body painting and language: Interpreting the Blombos ochre, in Botha, R. and Knight, C. (eds.) *The Cradle of Language*, pp. 62–92, Oxford: Oxford University Press.
- Whitehead, C. (2001) Social mirrors and shared experiential worlds, *Journal of Consciousness Studies*, 8 (4), pp. 3–36.
- Whiten, A. (1999) The evolution of deep social mind in humans, in Corballis, M. & Lea, S.E.G. (eds.) *The Descent of Mind: Psychological Perspectives on Hominid Evolution*, pp. 173–193, Oxford: Oxford University Press.
- Woodburn, J. (1982) Egalitarian societies, Man, 17, pp. 431–451.
- Zahavi, A. & Zahavi, A. (1997) The Handicap Principle, Oxford: Oxford University Press.

Journal of Consciousness Studies 17, No. 7–8, 2010. <researchgate.net/publication/263156865_Cosmetics_Identity_and_Consciousness> Correspondence: Camilla Power, Anthropology Programme, School of Humanities and Social Sciences, University of East London, 4–6 University Way, London, E16 2RD Email: c.c.power@uel.ac.uk

www.thetedkarchive.com