



THE DRAGON AND THE ORIGINS OF ART

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The Twenty-first International Conference on the Unity of the Sciences
Washington, D.C. November 24-30, 1997

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Until the 1980s, ideas about human origins were for the most part gradualist. It was believed that a recognisably human lifestyle began emerging some two to three million years ago, in a drawn-out evolutionary process linked with the establishment of bipedalism and tool-making. According to this way of thinking, speech co-evolved with the making of simple stone tools, becoming increasingly complex as technology evolved. Art, ritual, the organisation of kinship and other aspects of culture became more complex in the same gradualistic, piecemeal way.

Such gradualism, although still defended, has recently become a minority position. It is nowadays widely acknowledged that those archaeologists who excavated early hominid sites in Olduvai Gorge, Tanzania, and saw the beginnings of 'home bases', 'language' and 'a sexual division of labour' among these bipedal toolmakers were projecting assumptions and stereotypes derived from modern culture onto the distant past.

Over the past two decades, there has been a revolution in archaeology and palaeontology, leading to the view that the earliest tool-makers, while more intelligent than apes, were involved in essentially primate-style social and reproductive relationships. Admittedly, humans were co-operatively hunting large game animals by at least 500,000 years ago. But there has been found no evidence for art, ritual or other 'symbolic' behaviour at such early dates. Most archaeologists are now agreed that even large-brained humans such as the Neanderthals were not leading a recognisably 'modern' hunter-gatherer lifestyle. The dominant view is that anatomically modern humans emerged in Africa around 130,000 years ago and then, some 60,000 years later, rather suddenly spread across the world in an explosive process known as the 'human revolution'. It was during the earliest stages of this revolutionary process that symbolic art, ritual and language emerged.

This new temporal perspective locates the origins of art not in the distant Plio-Pleistocene but in the much more recent past. This makes recurrent symbolic motifs familiar to folklorists, ethnographers, rock-art specialists and archaeologists more relevant to origins modelling than was previously thought. It has long been recognised that certain levels of patterning in art and symbolism are extremely resistant to change. An exceptionally conservative level is that of

magico-religious belief; here, structures can survive intact for millennia. For the prehistorian, any tradition which manifests such stability, resisting the ravages of time, has special value as a potential source of information about the past.

The death-and-rebirth motif

One such traditional motif is that of death and rebirth. In Christian religious belief, Jesus Son of God bleeds, dies — and is resurrected on the third day. In the European ‘fairy tale’ tradition, Little Red Riding Hood is swallowed by a wolf; she is reborn as the animal’s belly is cut open. The Sleeping Beauty pricks her finger, bleeds, sleeps for a century — and reawakens. In Australian Aboriginal myths, humans are swallowed alive by ‘the Rainbow Snake’ and later regurgitated.

In African and other early states, similar beliefs found expression in ritual regicide. The priest-king’s death was likened to — and carefully timed to coincide with — that of the eclipsed sun or moon. As the celestial body disappeared from the sky, a dragon or other monster was believed responsible for devouring it; as the bright disc reappeared, it was now ‘reborn’. In being ritually killed, the king participated in this cosmic death and rebirth. Identified as the moon or sun, he was equally a bull or other beast, set aside for sacrifice. The Christian notion of Jesus as sacrificial lamb echoes such themes.

The ‘death and rebirth’ motif raises puzzling questions about the nature of human myth, ritual and religion. Are these narratives so similar because — as social anthropologist Claude Lévi-Strauss suggested — they reflect the internal architecture of the human brain? Or do the convergences reflect a shared cultural rather than neurological ‘initial situation’, conveying information about how the symbolic domain first came into being? By examining such stories, can we piece together the evolutionary emergence of religion itself?

A model of the evolutionary origins of religious symbolism must be testable. It must make precise predictions which, if falsified by the relevant evidence, would refute it. This means that the model must be in principle a fragile, intricate structure, vulnerable on numerous fronts. In short, it must be highly ‘improbable’ — and in this sense like life itself. The conditions for its collapse must be almost infinitely greater than those for its continued existence. Yet, despite such ‘improbability’, the fragile structure — the scientific hypothesis — must against all the odds survive. Repeatedly, the numerous precise predictions

derivable from the model must be borne out. The community of specialists committed to such testing must then agree that the improbable model is the best currently available to account for the data. The hypothesis then vindicates itself as a *scientific theory*. Any other kind of hypothesis, and in particular one which takes no risks, fails to qualify.

The evolutionary emergence of novelty

While one approach to the emergence of religion might be mentalistic or psychological — premised, for example, on the emergence of novel cognitive architecture — I am here concerned rather with the co-operative and social matrix. The emergence of magico-religious symbolism, in this perspective, was inseparable from that of symbolic culture more generally. As humans first began to produce art, they were awakening to a whole new level of consciousness, organisational complexity and social co-operation.

It was to deal with transitions between whole *levels* of organisational complexity that Karl Marx and Frederick Engels adopted the notion of ‘dialectics’, an idea derived via Hegel from the classical Greek philosopher Heraclitus. A purpose of the dialectic is to avoid the usual pitfalls encountered by those seeking to explain the emergence of novel form.

Something new — the notion of ritual regicide, for example — comes into being. Do we explain it by saying that it really existed all along, but at first only in some barely noticeable, incipient form? Thinkers have been tempted by this kind of logic, because a manageably small portion of a puzzling phenomenon seems less daunting than the whole, and because once you have the ‘primitive’ form of something, then it can be argued that the basic problems are in principle solved. Gradual evolution can do the rest, being required only to make the pre-existent phenomenon more ‘complex’.

The drawback is that this gets us nowhere if the ‘primitive’ form itself remains to be explained. Did it or did it not embody the novel principle? If not, then the basic problem — the explanation of novel form — remains to be addressed. If the novel principle was already active, then how did such novelty arise? The temptation at this point is to posit a still more ‘primitive’ version, and so on — avoiding rather than addressing the emergence of novelty.

Central to Hegel’s solution was the idea of negation or contradiction. It is possible to imagine that prior to the emergence of a novel structure, that structure was present — but only as the

negative image of what it was to become. Such a dynamic may operate if the new structure represents a solution to an intensifying crisis or problem. If sufficiently intense, a crisis can build towards an explosion — a total restructuring in the course of which contradictions are resolved and novel structure emerges.

Applied to the motif of ritual regicide, such thinking would lead us to seek in hunter-gatherer ritual traditions, not straightforward anticipations of the rituals of kingship — but a reverse dynamic, negating the fundamental premises of state-level political organization and ritual power. Such a reverse dynamic might be a relentlessly egalitarian one. In looking for oppositions rather than simple parallels within the sphere of ritual action, it is necessary to scan the whole spectrum of observances, from public to private, from political to intimate and sexual. Ritual prohibitions, in traditional societies, may be applied across the most diverse of circumstances, from royal investiture to childbirth, from ritual regicide to the seclusion of pubescent girls.

According to conventional thinking, it would be hard to find opposites further removed from one another than, on the one hand, the divine potencies of priest-kings — and, on the other hand, the dangers of pollution emanating from menstruating women. It is well known that in Christian traditions, women have been excluded from the priesthood and subjected to spatial and other restrictions within churches precisely because of their blood, which must never make contact with the sacred blood of Christ.

When Emile Durkheim and Sir James Frazer nonetheless suspected a link between divine or kingly blood and that of menstruation, the puzzling parallels to which they drew attention so offended consensual expectations that little notice was taken. The divine king, Frazer noted, was forbidden to allow the sun to shine on his head; neither were his feet to touch the ground. To conserve his ritual potency, he either remained secluded in his dark inner sanctum, or — if he emerged — had to be carried above ground, with a parasol or other shade keeping the sun from his head. ‘Now it is remarkable’, wrote Frazer, ‘that these two rules — not to touch the ground and not to see the sun — are observed either separately or conjointly by girls at puberty in many parts of the world.’ Menstruating maidens, no less than kings, were traditionally secluded in the dark, away from the ground. They were kept in an attic or — like the heroine in the fairy tale, ‘Rapunzel’ — in a dark tower high above the earth. At all costs, the maiden’s blood had to be set apart, removed from any possibility of

contact with earth. Frazer felt that divine kings destined for ritual regicide were symbolically 'menstruating' and subject therefore to the usual taboos.

In hunter-gatherer cultures, when a young woman first begins to menstruate, she is typically withdrawn and kept in the dark, her blood linked etymologically and in other ways with the moon. Recalling 'The Sleeping Beauty' of the familiar European fairy-tale — asleep for a century in her palace deep in the forest — the girl is now set apart. No contaminating contact can be allowed between her secluded domain and the ordinary, secular world. Durkheim and Frazer could hardly avoid noticing the parallels with secluded priests or priest-kings. Yet of course, menstruating maidens are not heads of state. Neither is it normally considered necessary to kill them. Admittedly, they bleed, go into seclusion — and later re-emerge. But it would be forcing credulity to suggest that such ritual traditions, commonplace among hunters and gatherers, represent in any sense the earliest beginnings of organised state religion or kingship.

The Hegelian alternative is to seek not simple continuities but relations between opposites. A circular movement or 'revolution' brings contraries into conjunction, as does a counterrevolution. We might ask whether ritual regicide emerged through a process in which the ritual dynamic of menstrual seclusion among hunter-gatherers became turned inside-out. Perhaps the earliest state-level societies appeared at first as a 'world turned upside-down': a world in which the main focus of ritual power had become transferred from its traditional location to an opposite point in social space. Perhaps the first kings presented themselves as 'menstruating men' because there was no other way of claiming legitimacy. They were compelled to clothe themselves in puzzlingly incongruous female symbolic garb because their claimed powers over fertility across the kingdom were not their own — they had been usurped from the opposite sex.

The Australian Aboriginal 'Rainbow Snake'

The investiture of a king is a variation on the theme of male initiation. It would not be surprising if this involved 'menstrual' symbolism: male initiation across the world involved 'death' and 'rebirth' modelled on the moon's changes and on female menstrual bleeding.

Australia is a continent whose hunter-gatherer inhabitants until recently had remained untouched by farming cultures for 60,000 years. In Northern Australia, rock-art tells us that

the 'Rainbow Snake' — a figure central to mythology throughout the continent — was celebrated in the region at least 9,000 years ago.

The 'Rainbow Snake' is a mythological being which, in any other part of the world, would be recognised without difficulty as a 'Dragon'. It is a serpentine monster inhabiting rivers, estuaries, waterholes and subterranean streams; in its manifestation as the rainbow, it arches through the sky. In bark painting and rock-art, the great Snake embodies the principle of cyclicity, depicted in spirals, concentric circles and meanders. The central message of the Rainbow Snake is 'fertility' — the principle of death and rebirth. The brilliant, multi-coloured creature is woman-loving, but not unambiguously male. Often, it possesses a womb and/or breasts. With respect to the local kinship regulations, it always acts, paradoxically, as violator, conjoining with women 'wrong-way' or 'incestuously'. It thirsts for menstrual blood, copulating with women at this time.

Aboriginal Australia knew no states or kingships; yet society was far from egalitarian. The great ritual distinction was between initiated men on the one hand, women together with uninitiated boys on the other. Initiated men 'died' and were 'reborn'. They 'died' during the course of painful rites of initiation; in many regions, the penis would be subincised and caused to bleed. As a young man underwent initiation, he would be taken in the dark of night and laid on his back, suspended above ground on a living table provided by the backs of other men. His penis would be pulled back and slit along its length with a stone knife, cutting down to the urethral canal. Much blood would flow; on no account was the victim or his blood to touch the earth.

Male secret/sacred rites were aimed primarily at countering the ritual potency of women. As the blood-shedding operation was in progress, participants valued the process as a means of transferring ritual power from women to themselves. Myths explain that during the ancestral period or Dreamtime, potency was one-sidedly monopolised in women's hands. Women held ritual power thanks to their wombs and menstrual cycles, enabling them to bleed periodically and hence to create life. Each menstrual period was a moon-like 'death'; it was also a re-entry into the womb of the Rainbow, Snake or Mother. The myths say that women overstepped the mark, abusing their power or in some way wielding it incorrectly. The Rainbow Snake was angered by this; the cycles of renewal of nature and the cosmos were now in danger. Their patience eventually exhausted, men called a halt to women's destructive and anarchic rule. Following a decisive struggle, the ritual community of women was finally

defeated and the present world order — premised on the rule of men — was established in its place. To this day, men during their blood-letting rituals claim to ‘menstruate’ in a subtly different way from women; taking mere boys and making true men of them, they also ‘give birth’ in a superior, different way. When men bleed from the penis or other bodily part, the flow is conceptualised as the ‘sacred’ menstruation of female ancestral beings, now of necessity handled and carefully regulated by men. Such blood is quite different from the menstrual blood of living women, which is dangerous and offensive to the sacred powers.

In the Dreamtime or period of the Ancestral Beings, women ritually synchronised their menstrual flows, and thereby conjured up the potency of the great Rainbow Snake. In one myth from North East Arnhem Land, Two Sisters (known as the Wawilak Sisters) sat down, opened their legs, menstruated together and put ‘loops’ of this blood round one another’s necks. They then found themselves ‘swallowed’ by a ‘Snake’. This and other narratives clarify an important point: the ‘Rainbow Snake’ is not conceptualised as an objective entity, external to human social or religious life. On the contrary, it is something *in which to participate*. It is a ritual congregation, a religious community, constituted — according to the myths — by kinswomen who menstruate in synchrony and thereby assert their oneness. Women became ritually ‘swallowed’ when they menstruated, engulfing one another in such womb-blood — rather as Christians, through Holy Communion, become one in the body of Christ. Nowadays, according to Australian Aboriginal male elders, women are no longer allowed to commune religiously in this way. Only men are permitted to menstruate in synchrony; only men are permitted to bleed together and become incorporated thereby into the body of ‘the Snake’. By the same token, women in ancestral times were allowed to derive ritual potency and solidarity from the experience of childbirth. Today, by contrast, women must give birth in isolation from one another and without ritual accompaniment; only men are permitted to ‘give birth’ — in elaborate rituals of initiatory ‘rebirth’ — in ways which are collective and which enable the birth-givers to derive power from such creativity.

Whatever the historical value of Aboriginal Australian ‘rule of women’ narratives, their accuracy as descriptions of current ritual practice is undeniable. Men in the course of their initiation ceremonies really do snatch boys away, depriving women of connection with their male offspring. They really do turn childbirth and menstruation into a sources of isolation and disempowerment for women, connection and strength for men. Men really do bleed periodically, supplanting women in the exercise of the associated ritual powers.

It is important to note that when a young male initiate is ritually secluded, he is subjected to food-taboos and other regulations *as if* he were a menstruant. Initiated males in Aboriginal Australia are not, of course, divine kings. Yet through initiation and symbolic 'menstruation', they 'die' and are 'reborn' in a structurally comparable way. This means that in other parts of the world, when the political institution of kingship was first established, the associated rituals need not have been invented *de novo*. If ceremonies of initiation like those in Australia were already in place, we need only assume that as kingship emerged, such ceremonies were locally preserved, structurally unchanged, under politically transformed circumstances.

The origins of human symbolic culture

All of this can be parsimoniously explained on the basis of the 'sham menstruation/sex strike' model of human cultural origins. According to this body of theory, symbolic culture emerged from the pursuit of novel strategies of signalling and display. These displays focused on women's bleeding as a signal of imminent fertility; it was in this context that the 'death and rebirth' motif became established. In order to understand this process, it is important to know how signals evolve in the animal world.

Signals are deployed not in order to share information, but in order to shape others' cognition and behaviour. Where the interests of listeners and signallers conflict, both sides pursue strategies which reflect this. Primates on occasion signal deceptively — drawing on incipiently 'symbolic' cognitive capacities — but do so only for selfish, competitive gain. A primate deceptive representation, therefore, is never valued by others; resistance to deception prevents it from being collectively perpetuated or elaborated.

Over evolutionary time, resistance to deception in the animal world sets up distinctive selection pressures, determining signal design. Where resistance is high, signals requiring positive effort to pick up or decode tend to be simply ignored. Faced with resistance from listeners, signallers must seek to overcome this by using loud, multi-media displays which can exploit receivers' perceptual biases. Modern commercial advertising operates on this principle; counterparts in nature include peacock displays and other extravagant courtship 'rituals'. Signals of this kind are likely to be costly to produce, but if the gains are commensurable, then the signalling strategy may achieve stability. In nature, wherever we find extravagant multimedia displays, we may safely infer that receivers, over evolutionary

time, have driven this elaboration by ignoring all except the most eye-catching and irresistible signals.

In the human case, symbolic culture arose as a novel domain of elaborate and costly deceptive signalling. Whereas an ape will engage in deceptive signalling only for its own selfish gain, human symbolic culture is co-operative. All art, all ritual, all myth, all religion and indeed all human symbolic culture may be thought of as 'collective deception'. For art and religion to arise, creative fictions had to be accorded social value instead of being rejected as exploitative deceptions. This dialectical reversal — the positive social endorsement of signals previously rejected as lies — occurred as deceptive signalling began to be deployed by co-operative social groups. There is only one way in which deceptions can be valued by group members and elaborated instead of being rejected: the group must be co-operatively directing the deceptive signals outwards, targetting and exploiting outsiders.

Collective deception targetted against outsiders is the secret of human 'ritual'. The specific context for its emergence was one of conflict between female and male reproductive strategies. The primordial strategy of the mammalian male is to seek out and copulate with fertile females. To maximise his reproductive output, the male is driven to save time on getting females pregnant, choosing his moments, moving from one female to the next. The human female, however, had no interest in being abandoned by her mate on becoming pregnant; her counter-strategy was to make this as difficult as possible. Her moment of ovulation was concealed; sexual receptivity was extended throughout the cycle. Deprived of information about fertile moments, the human male had no alternative but to invest time in his partner.

In the course of evolution, then, the human female phased out those signals which, in other primates, divulge to the opposite sex information about whether and when a female can be impregnated. Female humans were compelled to hide such information in proportion as they produced ever more encephalised, hence costly and burdensome, offspring. Male assistance in provisioning was needed if mothers were to balance their energy budgets.

However, not all information about fertility could be kept from males. In any local group of females, most would be pregnant or nursing. Whenever a young female in such a group came of age, or whenever a nursing female resumed cycling, her menstrual bleeding would differentiate her from the other females. In effect, by signalling her own imminent fertility,

such a female would be 'breaking ranks' with the other females in her local group — she would be divulging to local males precisely that time-saving information on which philandering strategies could build. Any dominant male should be alerted, attempting to bond with the imminently fertile female, even if this meant abandoning his currently pregnant or nursing partner. Whatever any increased risks to his existing offspring, we would expect such a male to balance these against the very large fitness gains of successful philandering.

In this context, we would predict female coalitionary counter-strategies driving up the costs to males of attempts to philander in this way. The onset of menstruation should alert all other females in the vicinity. The presence of an obviously-fertilisable female in their midst should be perceived by them as a sexual threat, likely to tempt away their own male partners in her favour. Mothers, sisters and more distant kin should unite to keep philanderer males away; they should all stand guard over the menstruant and bond with her. They should take advantage of her attractions — the message of 'fertility' sent out by her blood — for their own coalitionary use. Males willing to expend mating effort in the hope of achieving impregnation should be exploited at this point, manipulated to expend mating effort of value to the whole coalition.

This is the basis of the 'sham menstruation' model of the origins of ritual action, as developed by anthropologist Camilla Power of University College London. The argument runs as follows:

1. Art began as sexual signalling.
2. The signals drawn upon in early 'artistic' contexts were menstrual, indicating not immediate but *imminent* female fertility.
3. As a signal, menstrual blood was too valuable and potentially disruptive to be left to individual menstruants. As she began to bleed, each imminently fertile woman found herself watched and guarded, not only by her female kin but by all other females in the locality. Local females — threatened with losing their mates — shared an interest in guarding her from philanderer males, keeping them at bay.

4. Coalitions of pregnant, nursing and older females exploited each young menstruant's blood, using it as a means of harnessing local male mating effort to the advantage of themselves and their offspring.
5. Insofar as there was conflict between signallers and their male targets, signals now took the form of loud, multi-media 'advertising displays'. The basic message was 'imminent fertility': a promise of fertile sex in the near future, available to males respecting female coalitionary resistance in the present.
6. Competition between neighbouring female coalitions for local male energies drove the elaboration of such displays.
7. Where there was insufficient blood for effective displays, artificial substitutes were developed. These may have included animal blood, vegetable colourants or clays.
8. The mining and treatment of red ochre and associated manufacture of crayons — visible in the sub-Saharan Africa archaeological record from about 130,000 years ago — is evidence for the emergence of the predicted 'cosmetics industry'. Women by this time were already engaging in menstrual rituals, 'painting up' with ochre cosmetics.

The 'sex-strike' theory

The symbolic cultural revolution became consummated as this strategy was pushed to its conclusion. Females increasingly 'painted up' with red cosmetics, doing this not merely reactively — whenever someone in the neighbourhood began to menstruate — but regularly each month, as a means of motivating outgroup males to hunt at a distance and bring back the meat. To make this strategy work, females needed a way of signalling 'No' to unco-operative males. Building on the 'sham menstruation' tradition, they signalled 'Keep away, we are menstruating' on a regular monthly basis whenever meat-supplies were low. Faced with male resistance, they augmented publicly displayed menstrual blood (both real and cosmetic) with bodily displays of their inappropriateness as sexual partners for human males. Since courtship 'ritual' in the animal world involves signalling 'right species/ right sex/ right (fertile) time', systematic reversal of these signals became adopted as the signature of sex-strike. Females signalled '*wrong species/ wrong sex/ wrong time*'. They called off their 'strike' action,

reverting to sexually available (*human/female/fertile*) status only as supplies of meat were brought back to camp. Note that as females went on strike, they not only 'metamorphosed' into animal form; the animal represented was at the same time *bleeding*. The motif of sacredness as *bleeding*, '*dying*' animal was now central to symbolic life.

To counter outgroup male attempts at rape or other defiance, females formed coalitionary alliances not only with one another but also with their male offspring and kin. To prevent highly mobile males from sexual cheating, synchrony in menstrual signalling had to be maintained not just locally but across the landscape. Each strike, in other words, had to be a general one, implying phase-locking to a universally accessible external natural clock. The only clock of appropriate periodicity was the moon. The whole system could only work if collective hunting was a periodic work/rest activity governed by a *monthly* on/off rhythm, with the proceeds of each large, ceremonially prepared 'special' hunt augmented during the rest of the month with food from less organised kinds of foraging/scavenging.

Lunar/menstrual time is most simply structured through bisection, yielding a waxing and a waning half of each month. A strike is an all-or-nothing event, either 'off' or 'on', giving two possibilities: 'on' during waning moon while 'off' during waxing, or vice versa. Action during waning moon would have scheduled the climax of hunting, butchering and transporting activities within the darkest portion of each month. Since this would have limited the effective day length available to complete such activities, the reverse polarity was adopted — strike action during waxing moon, climaxing with the return of the hunt by or around full moon. As 'on' switched each month to 'off' at this point, fires were lit, meat was cooked and marital relations resumed.

Sex-strike theory specifies mythico-ritual time as essentially lunar; it also predicts *periodic female inviolability* as a discernible focus of early hunter-gatherer ritual traditions. Ritual potency more generally is predicted to display everywhere a characteristic signature, revealing its ancestry in menstrual inviolability. Power should be switched 'on' by one set of signals, 'off' by another:

TABLE 1

ON	OFF
Loud signals	Weak signals
Waxing moon	Waning moon
Seclusion	Availability
'Other world'	'This world'
Night	Day
Wet	Dry
Bleeding/raw	Cooking/cooked
Hunger/being eaten	Feasting
Flesh taboo	Flesh available
Production	Consumption
Kinship	Affinity
Gender inversion	Heterosexual polarity
Animality	Humanity

This is a tight set of constraints. It means, for example, that a menstruant ('on') may amplify 'blood' by signalling 'hunger', 'kinship intimacy', 'gender inversion' and/or 'animality' (all 'on'). But she *cannot* enhance her potency by being seen in bright light, on dry ground, with her marital partner or by a cooking fire (all 'off'). From one culture to another, political factors will naturally alter ideological *meanings*, that is, the positive or negative valuation of terms. Menstruation, for example, may appear as 'supernatural potency' or as 'pollution' according to women's political status. But through all such variation, the model predicts ritual traditions relentlessly to define menstrual potency as incompatible with feasting, strong light, cooking *or any other signal from the 'off' column*. I term such formal consistency — unchanging across all cultures and all historical periods — the *time-resistant syntax* of symbolic ritual and myth.

We now have a testable model of the origins of symbolic culture. Find a single myth or system of ritual signalling from any part of the world which violates any of the above predictions, and the model falls. A culture which said, for example, that ritual power is best mobilised as the moon wanes would present a problem. The ritual potency of hunters, shamans, magicians, divine kings and all others should increase only with waxing moon, falling away as the moon wanes. No-one should believe that meat is best cooked by women when they are menstruating. To menstruate is to render flesh bloody, hence 'raw'. By the

same token, we do not expect signals to identify good cooking as ritually 'noisy'. The model associates loud signals with blood, hence menstruation, which in bloodying flesh is 'anti-cooking'. Wherever myths posit any kind of relation between cooking and noise, it should be negative. Counter-examples would falsify the model.

The dragon and the origins of art

I have argued that the earliest rituals had nothing to do with male dominance, hierarchy or kingship. On the contrary, they were a manifestation of egalitarianism, collectivism and 'counterdominance'. The first rituals were staged to prevent dominant males from monopolising sexual access to menstrual females. In thwarting male philandering strategies, *other females* stepped in to bond with menstruants, backed in this by their male offspring and kin. It was as if each menstruating woman, instead of being allowed sex with the local dominant male, became instead 'married' to a whole coalition of female and male kin intent on guarding her and protecting her from him. Both the girl and those protecting her were 'wrong species' and also 'wrong sex' with regard to outgroup males, signalling this in unmistakable body language, dance and gesture. The outcome was a many-headed, blood-red coalition — a sexual 'picket line'. Fearsome in defying dominance in males, stretching like a social movement across the landscape, linked with the periodicity of the moon, it stood guard over the ultimate value in its possession — the treasure of human female fertility.

Occupying a central place in the heraldry and myths of kingship across the ancient world was the figure of 'the Dragon'. In the East, the Dragon's powers were inseparable from those of the ruling dynasty. Associated with the periodicity of the moon, 'incestuous' in its defiance of all normal sexual boundaries, snake-like or reptilian in form, human in its love of women, the principle of cyclicity and cosmic renewal, the Dragon was depicted as the enemy of ordinary marital sex — and also the source of ritual power.

If this creature corresponded to the menstrual coalition which established human culture, then in depicting it, artists should always have been heavily constrained. We might predict that all dragons — like women during menstrual seclusion — should signal 'raw', not 'cooked'. Demanding bloody tribute, they should emerge in storms or darkened skies, never under a bright sun. An eclipse should signal the monster's potency; marital sex should be antithetical to it. No dragon should seek legitimate marriage or otherwise respect normal kinship rules; none should bring gifts in brideservice. Not only should no dragon do such things. No

construct central to early rock art or religion should defy such expectations, either. There should be no celebrations of marital sex, no pair-bonds, no nuclear families, no couples. Such constraints acting on images of 'divinity' should operate implacably and unchangingly, across all cultures and all historical periods.

Should such predictions be borne out, we would have to conclude that representational art emerged as one aspect of the ritual construction, through dance, pantomime, body-paint and song, of a domain of *counter-reality*. 'Art' as an expression of symbolic culture meant constructing an *alternative* world — a 'virtual' domain, standing opposed to the directly perceptible or 'real' one. This counter-reality was established by the female sex, backed by male kin, as a means of resisting sexual exploitation. Females periodically repelled male advances by signalling *wrong sex/wrong species/wrong time*. In doing so, they constituted themselves and their kin as 'divinity' — thereby establishing the cultural domain.

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