

# Chris Knight's theory of human origins

## An abridged account

by Edmund Bradden

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### *Ritual and the Origins of Culture*

'In selective adaptation to the perils of the Stone Age, human society overcame or subordinated such primate propensities as selfishness, indiscriminate sexuality, dominance and brute competition. It substituted kinship and co-operation for conflict, placed solidarity over sex, morality over might. In its earliest days it accomplished the greatest reform in history, the overthrow of human primate nature, and thereby secured the evolutionary future of the species'

Marshall Sahlins, *The Origin of Society* (1964 p. 65).

Human culture is usually seen as having been invented by men. The most sophisticated version of this idea was put forward by Lévi-Strauss in *The Elementary Structures of Kinship* (1969). Lévi-Strauss argues that the foundation of culture is the institution of the incest taboo and the elementary structures of kinship that flow from this. According to Lévi-Strauss the incest taboo is established by men in order to reinforce the bond between them. The taboo results in a kinship structure based on the 'exchange of women'. Lévi-Strauss argues that the foundation of culture is marriage and that marriage is essentially an alliance between families rather than a contract between men and women.

Knight (1991) points out that Lévi-Strauss makes no attempt to explain how the incest taboo or the exchange of women came about. Lévi-Strauss argues that the taboo and associated kinship systems are the foundations of culture but he says nothing about the changing ecological conditions or mode of subsistence that brought about the transition from nature to culture. For Lévi-Strauss, human culture is the direct product of the structure of the human mind.

Knight (1991) argues that in his subsequent work on mythology, Lévi-Strauss set out to provide further evidence for the claim that the structure of the human mind was the source of structure in culture. Mythology provided the ideal material for this project because for Lévi-Strauss it was a realm of pure thought with no obvious practical function. While it could be argued that kinship systems had material conditions of existence, mythology provided direct access to the structure of the human mind and the laws by which it operated.

As Knight points out, this project immediately came up against the problem that myths are usually regarded by specialists as having ideological and practical functions and that 'ritual action in particular mediates between mythology and life, shaping and constraining the logic of myths' (Knight 1991

p79). In carrying out his project, Lévi-Strauss argues that not only is myth separable from ritual but that the two move in 'opposite directions'. Lévi-Strauss argues that myth imposes an intellectual structure on life which ritual seeks to undermine. Myth represents the supremacy of culture over nature by imposing intellectual categories on life, whereas ritual represents the attempt to get back to an undifferentiated unity with nature. Ritual undermines the work of thought. As Knight points out, for Lévi-Strauss ritual must be separated from myth not only because ritual is identified with the physical intimacies of life but because the themes of ritual in traditional culture are not those which Lévi-Strauss thinks they ought to be:

'Ritual, he feels, does not seem to single out for special attention men's marital alliances or the 'exchange of women'. Instead, it appears to foster confusion between the categories of 'sister' and 'wife', as also between 'animal' and 'human'. Far from crystallising the observance of marital obligations and the incest taboo, ritual often seems to celebrate sexual license and symbolic incest' (Knight 1991 p. 83).

Knight argues that Lévi-Strauss is forced to separate ritual from myth in order to justify his project of seeing culture as a direct product of the human mind. If ritual and myth are inseparable then a completely different theory would be required to explain the unity between them – one which takes account of their material conditions of existence.

For the same reason that he is forced to separate ritual and myth, Lévi-Strauss is also forced to reject totemism as a real phenomenon. If totemism existed – i.e. if there was a link between taboos on incest and taboos on eating certain foods and killing certain animals – then the relationship between these phenomena and ritual life could not be ignored. In *Totemism* and *The Savage Mind* Lévi-Strauss argues that totemism is 'imaginary' – an arbitrary category invented by nineteenth century thinkers. For Lévi-Strauss, totemism is no more than a mode of classification. There is no intrinsic connection between kinship-linked naming systems and food taboos: animal species are chosen for no other reason than that they are 'good to think' with.

In contrast to Lévi-Strauss, for Knight ritual and totemism are inseparable from myth. Knight defines ritual as 'collective symbolic action which in the most powerful way organises and harmonises emotions. Without this, there could have been no early human language, no kinship, no culture' (Knight 1991 p. 80). Knight also rejects Lévi-Strauss's psychologising of totemism. Although he agrees that there is no such 'thing' as 'totemism' separate from sacrifice and other rituals of atonement, Knight argues that what is important is whether there is a 'unity of principle' linking taboos on incest with taboos on food and on the killing of certain animals. In support of this argument, Knight presents ethnographic material which shows that such a principle of unity exists. Among hunter-gatherers, taboos on incest are linked to taboos on food and taboos on killing certain animals.

In *Blood Relations*, Knight challenges Lévi-Strauss' and all other theories that see culture as a male creation, presenting an alternative theory in which human culture is based on solidarity and the exchange of services between

men and women. In this theory, women have an active and crucial part to play in the foundation of culture.

Like Marshall Sahlins as quoted at the beginning of this essay, Knight argues that in order for human solidarity to exist, sex had to be controlled. Among primates there is an ever present threat of conflict between males over access to females; this places severe constraints on the forms of solidarity that can emerge. For social solidarity to be sustained, sex had to become subjected to law, i.e. it had to become governed by rules and taboos. Knight argues that the role of females was fundamental in ensuring that sexual relations became governed by law and taboo.

Drawing on primate field studies informed by sociobiology and hunter gatherer ethnography, Knight shows that female primates have different priorities to males. While males are primarily interested in sex, females are interested in securing food for themselves and their offspring. In order to ensure that males provide food, evolving human females develop strategies for controlling male access to sex. Among hunter-gatherers, young males have to prove their worth as potential husbands. Men must prove that they are good hunters and they will provide meat for their wives and in-laws. For females, marriage is primarily an economic transaction. Females use sex to induce men to hunt for them: no food, no sex.

Knight locates the origins of culture in the female solidarity that emerges to regulate sexual and marital relations. Women resist male domination by subordinating short-term sexual goals to longer-term economic goals. It is this female strategy (with help from male kin) that explains the origins of the 'own-kill' rule, the incest taboo and the elementary structures of kinship.

In explaining the origins of female solidarity, Knight places particular significances on women's ability to synchronise their menstrual cycles. Menstrual bleeding poses a major problem for females in that males will seek to bond with females who show visible signs of their fertility. According to Knight females and their male relatives bond together to resist predatory males. Females adopt a strategy in which they in effect 'cheat' by all appearing to menstruate at the same time. This can be achieved by painting themselves with surrogate 'menstrual' blood.

Non-human primates signal 'no' to sex by displaying lack of arousal or interest. However, if females are to signal 'no' to sex, deliberate measures must be taken: human females must reverse the normal body-language displays indicating 'yes'. Thus instead of signalling '*right species, right sex, right time*' the human female must signal '*wrong species, wrong sex, wrong time*'. In signalling 'no' to sex females set up a communal counter-reality. According to Knight the origins of culture are to be located in this female strategy of saying 'no' to sex.

Knight argues that this account of the origins of culture is reflected in myth and ritual, illustrating this with reference to numerous myths and ritual practises in traditional societies. One example is male initiation ritual in

Aboriginal Australia, which is associated with the myth of the 'rainbow snake'. Knight argues that such initiation rites reflect and perpetuate a situation in which women have become subordinated to men, men having appropriated the ritual power that originally belonged to women. In these rites, boys had to have their flesh cut to allow the blood to flow. Where 'male menstruation' became the rule, women's menstruation became feared as a threat to male supremacy. Female menstruation became seen as polluting while male menstruation was seen as positive, magical and conducive to good hunting luck.

The experience of being covered in blood is thought of by men in terms of being 'swallowed' by an immense 'rainbow' or 'snake'. This creature is seen as a threat to women:

'In being placed in awe of the 'snake' construed as alien monster, women were made to *fear their own blood-potency*. Their own reproductive powers were being alienated from them – taken from them, turned into their opposite and constructed as a force opposed to all women – in the most dramatic way imaginable' (Knight 1991 p. 42).

Knight argues that the rainbow snake was not invented by men. He rejects previous interpretations of the snake as representing water, the weather or the phallus. These interpretations are Eurocentric, too one-sided and do not do justice to the way that the rainbow snake is seen by native informants. According to Knight's interpretation: 'The snake was an ancient menstruation-inspired construct which men had taken over for their own use. It was 'blood relations' in masculinised form' (Knight 1991, p. 42).

In a detailed examination of the myth of the rainbow snake and other myths found in traditional societies, Knight shows how they reflect the origins of culture as founded on female solidarity, menstrual synchrony and the periodicity of sex-strike action. Myths reveal how these female strategies invert the natural order in order to found the human symbolic order:

'Rainbow snakes always seemed to violate their communities' exogamous laws, conjoining 'incestuously' only with their own blood, their own kin or flesh. She/he/it was said by informants in the various accounts to be not only 'incestuous' (that is, in correct sex-strike fashion, hostile to normal heterosexual, exogamous marital intercourse) but also 'like a rainbow', 'like our mother', 'like power', 'like metamorphosis', 'like the Dreaming' and like many other shimmering, changing, life-creating or life-devouring things' (Knight 1991 p. 48).

In Knight's theory, myth, religion, ritual and totemism are inseparable. Myth is not a pure realm of thought but is deeply imbedded in the everyday life of people in traditional societies. Myths are embodied in rituals and reflect the origins of culture. Far from moving in 'opposite directions', ritual and myth form a unity and are to be explained in terms of the material conditions of existence of hunter-gather societies.

According to Lévi-Strauss, culture is the product of the human mind. However Lévi-Strauss does not explain how or why the mind came to be structured in

the way that it is. Like Lévi-Strauss, evolutionary psychologists also explain culture as the product of the way the human mind is structured. However, unlike Lévi-Strauss, these theorists give a detailed account of these structures and how they evolved as our ancestors adapted to their prehistoric environment.

Evolutionary psychology has been used to account for the existence of cultural products such as religious beliefs. Thus, for example, Pascal Boyer has argued that 'The explanation for religious beliefs and behaviours is to be found in the way all human minds work' (Boyer, 2002 p. 3). The human mind is not just a 'blank state' but is made up of a number of 'inference systems'. These systems are products of the way human minds were formed as a result of our evolutionary history.

Boyer argues that for humans to survive, they need information provided by other people and, most importantly, they need information about other peoples' mental states. The human mind has been adapted for social life. Boyer argues that religious concepts, notions of supernatural beings and spirits are in effect a by-product of the workings of the normal human mind. In particular, this type of mind operates with concepts of agency and with an intuitive morality. These and other inference systems do not cause people to have religions or to believe in the existence of gods or supernatural beings and spirits. But they do make it possible:

'People do not invent gods and spirits, they receive information that leads them to build such concepts' (p. 184).

Like Lévi-Strauss, Boyer reduces culture, religion and ritual to psychology. Boyer gives a plausible and interesting account of how it is possible for the mind to generate religious concepts. However, Boyer's account tells us nothing about the content of religious beliefs or how these are connected to other institutions and practises. Boyer argues that humans have the minds they have because they are 'social beings'. This is a circular argument. Boyer gives no account of how humans became such social beings in the first place.

In her recent book *Pinker's List*, Elaine Morgan has questioned many of the assumptions of evolutionary psychology on which Boyer's theory is based. Morgan argues that although the brain may be said to be composed of modules (Boyer's inference systems), these can be culturally acquired as well as genetically inherited. As Morgan points out, the first time we ride a bicycle we make a conscious effort to control the muscles in our bodies to keep upright, but when we have done this often enough the 'brain wraps this information up in a bike-riding module' which is activated the next time we ride a bike. There is also a module in the brain for walking. According to Morgan, the toddler is not born with this module. Instead, 'like the cyclist, it creates it by trial and error'. These behaviours are very different from that of the spider which 'is born with a behavioural module for spinning a web and has no need to create it'. As Morgan points out: 'These two behaviours are entirely different. Yet whenever EP (evolutionary psychology) identifies a behavioural module it treats it as inherited rather than acquired, without first examining

and eliminating the other possibility' (Morgan 2005 p. 107). In the same way, Boyer assumes that the inference systems underlying religious concepts are inherited from our distant past rather than acquired in some other way.

Knight has argued that not only is ritual an essential component of myth but that it also has an important part to play in the evolution of language. In his paper *Sex and Language as Pretend Play*, Knight sets out to give an account of the evolutionary origins of language. In order for language to emerge, Knight argues that a symbolic domain must be created. Language detaches humans from an immediate relationship to reality. It creates an alternative reality, a world of pretend-play which can only function on the basis of cooperation and trust. If a symbolic domain is required in order for language and speech to function, the question arises as to how a symbolic domain emerged. Knight's argument is that the symbolic domain arises from human solidarity based on a strategy adopted by females and their male kin to deny outgroup males access to sex. The female strategy of saying 'no' to sex establishes a counter reality necessary for the creation of a symbolic domain and hence a space in which speech can emerge.

Knight argues that human language has been decoupled from the vocalisation bound up with bodily display characteristic of primate vocal communication. This decoupling has given rise to speech, a digitally organised system independent of bodily display.

In human societies, the primate gesture system and bodily display has been largely replaced by ritual. Like animal gesture-calls, human ritual displays are loud and multimedia. However, human ritual differs from animal gesture calls in that they are collective and generate a virtual world.

Knight points out that speech is radically different from ritual. Ritual display is high-cost and energetically demanding. Resistance on the part of receivers leads to prolonged, repeated and costly displays. Human ritual display is a cooperative response to manipulation, conflict and exploitation. Speech is low cost, energetically undemanding and presupposes that cooperation exists already. Although speech and ritual are radically different, speech could not function unless it was backed up by ritual. Words are like banknotes in that they are intrinsically worthless and require an external system of rules and enforcement in order to function. Knight's argument is that 'ritual is the pre-state system of communal action which backs up the otherwise worthless tokens central to speech' (p 232).

Knight argues that words do not map to external, perceptible realities but to entities existing in the virtual world created by speech and language. These entities and the commitments and obligations to which they give rise exist only in so far as it is agreed to act collectively 'as if' they did.

In order for this pretend world to exist, humans must be detached from immediate reality. Knight argues that in pre-state societies it is ritual that performs this function: 'rites of passage' are conversion experiences in which participants are more or less forcibly required to enter an alternative reality:

'Only once the gods, spirits and comparable intangibles seem experientially real are individuals in a position to function within the symbolic domain' (p. 234).

The existence of ritual and initiation rites presupposes the existence of human solidarity. The question then becomes: 'What is the basis for human solidarity?' Knight rejects the argument that warfare provides the basis for human solidarity, or that this is what allows speech to be decoupled from ritual. According to the 'primitive warfare' theory, group-on-group conflict enables firm ingroup/outgroup boundaries to be established. Knight agrees that in communicating internally within aggressive coalitions, individuals can communicate their intentions by means of 'nods' and 'winks'. An argument can be made that these short-hand abbreviated signals drove ingroup signalling down an evolutionary path which eventually led to speech. But Knight points out that the kind of signalling involved in aggressive display cannot provide the basis for symbolic culture. Knight rejects this whole theory because displays of male-on-male aggression remain reality-bound. The signals only work if there is a verifiable fit between them and the perceptible world. This kind of signalling cannot generate the counter-reality required for symbolic culture to emerge.

Knight argues that his own theory of female sexual counterdominance works better than the 'primitive warfare' model. Counterdominance can be collectively expressed only by defying one kind of reality in favour of another. As a consequence of the strategy of female sexual counterdominance ('wrong sex, wrong species, wrong time'), biological reality itself is replaced by counter-reality. This model, then, accounts for the emergence of a symbolic domain and thus provides the basis for speech to work as a subsystem of the symbolic domain. Females (supported by their male kin) periodically signal 'no' to sex. Between kin who might otherwise suffer from internal sexual conflict, this establishes the high levels of ingroup trust required for the tokenistic, digitally organised system of speech to develop.

In his recent book *The Talking Ape*, Robbins Burling also shows how the gesture-call system used by humans and non-human primates differs from human speech and language. Burling argues that these two systems of communication are so radically different that human language could not have evolved from the gesture-call system:

'However subtle our gestures and calls are, they are fixed in form and fixed in meaning. Only over the course of the thousands of generations that are needed for natural selection can a set of gesture-calls be expanded or elaborated. You can never use gesture-calls to say anything that is truly new. Language is open. The system of gesture calls is closed' (Burling 2005, p36).

After several good chapters describing the unique characteristics of human speech and language and the sign language used by the deaf community, Burling raises the question of what caused complex human language to evolve. In accounting for this, he relies on Geoffrey Miller's *The Mating Game*. According to Burling in this book, Miller argues that 'traits' such as art, religion, human creative intelligence, ethical ideals, sense of humour and

language are to be explained by the theory of sexual selection i.e. these traits '...contribute little to the serious business of survival, but they are wonderfully helpful in attracting a mate' (Burling 2005, p. 202).

According to Burling, then, complex human language evolved because those who could use it better than others were more successful in 'the mating game' and thus were more successful in the competition to pass on their genes:

'...language is used for social purposes, to gain an edge, to accomplish our goals. The better our language, the better our chances in life and, most importantly, the better our chances for passing our genes on to later generation' (Burling 2005, p. 208).

This theory seem to me to represent the triumph of *a priori* theorising over empirical evidence and it is this kind of sociobiological theorising that Knight effectively demolishes in *Blood Relations* and in his paper on the evolution of language. Knight shows that rather than the competitive striving between individuals to pass on their genes, it is *human solidarity* and *co-operation* that are more likely foundations of human symbolic culture and language.

Knight effectively demonstrates the importance of ritual to human culture and shows how ritual it has an important function in the evolution of language. The particular story that he tells about the origins of human culture may or may not be true but it is certainly an improvement on theories that see human culture as the direct product of the human mind or which see cultural phenomena such as religion and ritual as by-products of the way the mind was supposedly formed by evolution.

Knight is aware of some of the difficulties that his theory of the origins of culture faces. For example to what extent are sociality and a symbolic domain presupposed in the period before the sex-strike is instituted? In order for the sex-strike to be effective do all women have to be involved all of a sudden and if not how is the sex-strike to be effective if many women do not participate? As Knight points out these kinds of questions arise in all theories of origins. Does this mean that all theories of origins must forever remain more or less plausible stories or myths?

To properly assess Knight's theory would require a background knowledge of archaeology, evolutionary anthropology, evolutionary psychology (and its predecessor sociobiology), social anthropology and mythology which I do not have. This in its self is a measure of the scope and ambition of Knight's theory. Whether the theory turns out to be true or not it seems to generate a research programme and a number of hypotheses that are capable of being tested. This is more than can be said for most theories in the social sciences. The theory also appears to be well grounded in the data presented and presents a fascinating account of the origins of human culture. The theory also integrates the findings of a number of different disciplines into a coherent and satisfying whole. If Knight resembles 'a shaman with a spread-sheet' (Kohn, 1999 p198) then he has put his spread-sheet to productive use in exploring and accounting for the origins of the virtual world that is the human symbolic domain.

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