Chimpanzee Religious Behaviors: An Answer to Jane Goodall James B. Harrod

Supplementary File 4. Chimpanzee Consortship Rituals

Consortship Practices.

A fourth candidate for chimpanzee religious behavior is the chimpanzee consortship practice. Goodall (1986: 450-453) describes three chimpanzee mating strategies: (a) promiscuity, in 'sex parties' in which multiple males engage in a courtship display with erect penis and associated behaviors, including threats, to command estrous female rump presentation; (b) monopoly, the possession of sexual rights by high ranking males who drive off competitors, involving male courtship display and estrous female presentation; and (c) consortship, an exclusive partner relationship away from main group for up to three months, during estrous and even anoestrous phases. Consortship is the least frequent of the three.

Goodall (1986: 453-465) describes three phases of the consortship ritual pattern: initiation, exclusive relationship, and termination. If in a multi-male sex party, prior to courtship display a male may stay close to the female, obtain food for her and groom her frequently in preparation. Typically a chimpanzee male initiates consortship using signals of the courtship display: penile erection, gaze toward, hair erection, branch holding, branch shaking, rocking back and forth, swagger, foot stamping, and arms stretched toward the female. If the female responds with approach, 'he gets up and moves away, looking back over his shoulder to make sure she follows. If she does not, he stops and repeats his summons' (457). If she still is reluctant a male may wait patiently for a while or become violently punitive and coercing. Within limits, it is a female choice whether or not to consent. To refuse consent she may not follow and may pant-hoot (= 'social excitement', 'food enjoyment'), or if attacked, victim-scream (='social fear, anger, distress') to attract other males to drive off the suitor. If she consents, they depart from the area of the group, often surreptitiously, and consort together, usually near the periphery of the group's territory, where they are safe from the group, though at risk from neighboring groups. The period of exclusive consortship represents an unusually close relationship between two adult non-related chimpanzees of opposite sex, one that may last in some cases over a month. The most successful consortships are the most relaxed and tolerant, and if alarmed the female often runs to the male and the two embrace and kiss. There are many sessions of relaxed, intimate social grooming, in which the male often grooms for longer than his female. Termination of consortship happens when the female surreptitiously 'steals away' back to the group or gives victim-scream call or other call out to attract other males (465).

Goodall notes that if the male is to succeed in moving away from the group with his partner, this requires both male ingenuity and the female herself must be prepared to be cooperative (459). Though there is sometimes coercion, consortship usually requires female consent (479). 'The preference of females for individual males may be crucial to the success

or failure of consortship. High levels of association and grooming of maximally swollen females in the group situation as well as willingness to share food with them were found to be significantly positively correlated with the frequency of male participation in consortship' (Goodall 1986: 474 citing Tutin 1979). As a mating strategy, consortship provides more mating opportunity for low ranking males, may have higher rates of conception than either of the other two mating strategies, and may be a new evolutionary adaptation toward 'stronger and more meaningful pair bonding' in which sexuality may be independent of reproduction (485).

Whether or not consortship meets the Whiten et al (1999) strict definition of 'culture' is yet to be determined by primatologists. Goodall (1986: 144-145) notes that chimpanzees sometimes innovate new components to modify the functional sequences of traditional courtship display, e.g., adding 'leaf-clipping' at Mahale and Bossou; a juvenile at Gombe dropping unproductive aggressive components of courtship display for an 'everted lip flip', which was successful. Similarly to chimpanzee death and birth practices, consortship appears to be a ritualization analyzable into basic recombinatory and permutable formulaic behaviors deployed in pairs of opposite valence and proto-metaphoric communicative behaviors.

- (a) Male prepares by feeding and grooming the female [nurturance instinct]
- (b) Male experiences hair bristle (frisson) and performs courtship display, including erection-invite, swaying side-to-side, branch shaking, foot stamping [sexual instinct]
- (c) Male performs moving-off-and-glancing-back behavior, used in everyday motherchild or male-male friendship relations, here decontextualized and used as sexual consortship invitation, a mimetic metaphor expressing both nurturance and equality of friendship [nurturance instinct]
- (d) Female consents by following [sexual instinct] or refuses using pant-hoot (='social excitement, food enjoyment') or SOS scream ('distress') call for intervention (Goodall 1986: 127)
- (e) Couple nests, feeds, grooms together in tolerant relaxed atmosphere away from the social group [nurturance and affiliative grooming instincts]
- (f) Couple has sexual relations in relatively egalitarian consensual relationship [sexual instinct]
- (g) Couple 'steals away' in silence, in secret and/or by deception of other males in the group power hierarchy and maintains silence during the consortship journey to avoid notice and intervention
- (h) Female gives scream call to terminate the consortship or 'slips away', 'stealing back' in silence to the group (465).

This patterning appears to be an example of what ethologists term 'ritualization of instinct', the conversion of a display with an aggressive intent into one with a more pacific intent, which not infrequently occurs with respect to courtship (Wilson 1980: 110-113; Lorenz 1963: 54-80). In the case of chimpanzee consortship, this ritualization of instinct appears to combine or pair nurturing and the sexual instincts; I note these in brackets in the list above.

As in the case of chimpanzee death and birth rituals, in addition to basic recombinatory and permutable formulaic behaviors deployed in pairs of opposite valence, consortship also deploys an array of 'non-ordinary' communicative behaviors. First, the pairing of everyday courtship display [sexual instinct] and feeding-and-grooming [affiliative instinct] does not occur in either of the 'ordinary' mating strategies, monopoly or promiscuity. The pairing converts the ordinary courtship display into a non-ordinary display, more or less loosed from its associated aggressive domination instinct and re-aligned with affiliative and grooming instincts, so that the paired behaviors then communicate a combinatory signal 'invitation to sexual relations in a consensual affiliative and nurturing relationship like that of mother-child and close friends'.

Instinctual ritualization pairing of normally independent and even opposite behaviors repeats itself in a second mimetic-transference key. A moving-off-and-glancing-back behavior in ordinary everyday usage is used in mother-child or male-male friendship relations to request 'follow me'. In the consortship ritual it appears to be decontextualized and converted into a non-ordinary signal, a mimetic metaphor, expressing an offer of sexual relations with nurturance and friendship equality.

A third mimetic transference seems to occur when an everyday pant-hoot signaling 'social excitement' and 'food enjoyment' or scream call signaling 'social fear, anger, distress' is decontextualized—or used deceptively—to refuse or terminate the ritual, in order to return to the everyday group's search for food enjoyment, excitement and security.

Fourth, the consortship ritual is framed by 'stealing away', sometimes using silence and deception, from the hierarchical social group and 'stealing back' into it in silence or sometimes using vocalizations in a non-ordinary, deceptive manner to interrupt the ritual. Goodall's phrase 'steal away' might be viewed as anthropomorphic projection, but I see it as pointing to a ritual action reversal that frames the beginning and end of the ritualization. The phrase also captures the anti-hierarchical and subversive aspect of consortship. As Goodall observes, female preference does not always tally with rank, and may subvert the hegemonic rules of the male power structure (1986: 479, citing de Waal 1982: 175). It also indicates the non-ordinary mimetic-transference signaling that frames the ritual, as well as the use of silence during the central journey phase of the ritual, the 'heart'—if I may use such a metaphor—of the consortship, the period of empathic intimacy.

There appear to be four to six consortship higher-order emotion communicative behaviors (Table C).

Table C: Chimpanzee Consortship: Higher-Order Emotion Communicative Behaviors		
Communicative	Everyday Signal	'Non-Ordinary' Signal
Behavior		(mimetic transferences)
Silence	If in foreign territory and	the everyday signal transferred to a
	not in own social group	non-ordinary context of affiliative
		relationship
Feeding and grooming	Affiliative instinct	'Frisson and sexual arousal of
Hair bristling (frisson)	Mating instinct,	solicitation of consortship combined
and courtship display	secondarily aggression	with affiliative (mother-child
	instinct	attachment, close friendship)
		relationship'
Move-off and Glance-	Request: 'follow-me'	'Invitation to male/female friendly,
back gesture	(friendship or maternal	nurturing relationship'
	reattachment)	
SOS Scream call	Distress, call for	'Non-consent, free choice'
or pant-hoots	intervention	
Deceive	Deceive higher-status male	'Steal away' and then 'steal back'
	to obtain food, etc.	

Similarly to chimpanzee ritualization of death and birth, consortship appears to include analogues for all five components of a trans-species definition of religion (Table 3.)

Table D: Chimpanzee Ritualization of Consortship		
Behaviors (including mimetic transference calls)	Components of Trans-Species Definition of Religion	
Preparatory groom and food sharing Couple steals away in silence; journeys in silence, may steal back in silence Watchful journeying on periphery of territory, both novel environs and risk from neighbors	Reverence (showing deep respect, devotion, intense love), with silence (hush) Careful observance (observing carefully), with calling-out announcement or remark	
Male experiences hair bristle (frisson); performs courtship display: erection-invite, sway side-to- side, foot stamp, shake branches Female consents to journey by following in response to glancing-back 'follow me' gesture (ordinarily mother-child and male-male friendship gesture → mimetic metaphor, both of nurturance and equality)	Wonder (awe as fascination, curiosity, desire to know more) with respect to a surprising, non-ordinary phenomenon	
? Female refuses, calling for intervention with pant-hoot ('social excitement', 'food enjoyment') or scream ('fear, anger, distress')	Dread (awe as terror, astonishment) before that which overwhelms by its magnitude, beneficence or lethality	
Couple nest, feeds and groom together in tolerant relaxed intimacy away from the social group Couple has sexual relations in roughly egalitarian consensual relationship	Communion in empathic intimacy, with respect to aliveness, animacy, 'binding-back-together behaviors	

Van Gennep (1960 [1908]) defined the basic elements of human marriage as a passage rite: (a) separation from the group; (b) resistance, which may establish consent; (c) union in a free, liminal space, which may involve sharing bed or food; and (d) reintegration into the group. While he thought of human marriage as 'an essentially social act' (117), Victor Turner (1969) emphasized that the liminal phase of human religious ritual, which is essentially subversive of hierarchical structure, 'anti-structure'. It appears that the chimpanzee consortship has elements found in Van Gennep's pattern as well as Turner's subversive aspect.

Further, I suggest there is a degree of similarity to the human phenomenon of 'romantic love', which is an essentially liminal, subversive, anti-structure act, which, at the same time, is an act of intimate dyadic communion. I see no reason to hold to a contrary position, such as that of the theologian Fischer (2005: 303, 308), which dogmatically forbids use of the word 'love' for any but humans and their anthropomorphic projections. I note that Goodall describes how chimpanzees experience a dynamic of patience and impatience over who is in the mood for consortship and for intercourse (1986: 460-64), which in its dynamics of the

libido appears to be a chimpanzee analogue for the 'nod of consent' in the 'all-too-human' variant.

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