

ASCAP NEWSLETTER

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Biologists must constantly keep in mind that what they see was not designed, but rather evolved.
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For the philosophy guiding this newsletter, see footnote on p. 7 (21). Newsletter aims: 1. A free exchange of letters, notes, articles, essays or ideas in whatever brief format. 2. Elaboration of others' ideas. 3. Keeping up with productions, events, and other news. 4. Proposals for new initiatives, joint research endeavors, etc.

Notes: This exciting issue features the Birmingham Group. Other correspondence (there is much) awaits Vol 212. Michael Chance leads off and then the group as a whole presents a manuscript. That he begins is most fitting as his ideas, excitement and encouragement have sparked and maintained many of us. He is truly a father of whatever field ASCAP represents. (In the next issue look for a discussion of whatever indeed that seems to be?!)

Reverted Escape. Pear and Fright.

by MRA Chance, Birmingham, Engl
Accuracy of meaning is essential to the successful formulation of new hypotheses. Whenever a new feature of social structure is established it should be accurately described. That is why the term "reflected escape" is more correctly replaced by "reverted escape" to describe the behaviour of a low ranking monkey which returns towards a more dominant individual that has just threatened it, instead of moving away or going out of sight. (See "reverted escape" in the index of Social Fabrics of the Mind(SF)(21). Reverted escape is a specifically primate elaboration of these "submission behaviours" found in other mammals, eg rats [31.

The same care for the meaning of a word is required when taking over a word for describing attributes of human mentality such as "fear." This can take on many shades of meaning, but a type of emotion can be inferred when behaviour of the same kind is seen to take place in both animals and humans [4]. As the description of this withdrawal behaviour in humans, monkeys and rats takes on the same two forms of escape on the one hand and submission on the other. It is important to use different words for the inferred emotion accompanying each of them. It is proposed that fear be used when submitting or reverted escape takes place and "fright" when escape takes place.

THE BALANCE OF THE TWO MODES: DEFICITS OR EXCESS? (A Contribution from the Birmingham Group). The Agonic and Hedonic Modes, By now most readers of ASCAP will be familiar with the notion of resource holding potential (RHP). Before an animal makes a challenge for access to breeding resources he/she has to be evaluate his/her comparative RHP. This evaluative ability has both state (5) and behavioural effects. An estimate of favourable RHP releases the expression of agonistic behavior and confident display. This stimulates reciprocal antagonistic behaviors in competitors who also estimate their relative RHP favourably, but antagonistic behavior is in-

hibited In those that evaluate they have unfavourable RHP, ie, they evaluate they would lose if it came to a fight [6]. An unfavourable estimate of RHP releases escape behavior in territorial species and submissive behaviors In group living species. Confident display has an Inhibitory effect on the display of conspecifics unless they evaluate that they could depose the dominant or competitor. Animals enact submissive displays to the challenge of other animals that are evaluated to have greater relative RHP. This preparedness facilitates group living and acts to control serious antagonistic encounters.

In agonic groups the cohesion of the group rests with the propensity for subordinates to be fearful (or induce fear if in interaction with one more subordinate) and enact submission or reverted escape. Asymmetry in the agonic mode arises from a number of sources including a) maturity, b) differences in agonistic competence (eg male-female), and c) history of previous agonistic encounters. Cohesion of the agonistic group works through the punishment areas of the brain in the recipient of the catathetic signal (Price-SF): The group is organised around a hierarchy of potential threat.

However, not all groups operate in the agonic mode and an alternative to the above form of interactions has been noted. This has been called the Hedonic Mode (Chance-SF). Structures and styles of groups operating in the hedonic mode (especially chimps and human hunter-gatherers) develop their cohesion by the enactment of mutually supportive roles. Social cohesion becomes determined not by the subordinates 'knowing their place/rank position,' or by exhibition of fighting ability/strength, or by a 'dance' of catathetic and submissive signals, but by a process of reciprocal interaction mutually reinforcing and beneficial to each member of an interaction. The social structures of these groups becomes coordinated through positively reinforcing Interactions.

Asymmetry in the hedonic mode arises from reassurance/safety and valuing signals, which act to reduce spacing as animals engage in reciprocal roles that are positively reinforcing to participants. Again asymmetry may arise from a) maturity - in this case there may be the asymmetry of care-receiving and care-giving, b) differences in the role competence, eg, running, hunting, knowledge, etc. c) previous history of reinforced role enactments.

We suggest that the terms RHP and the (catathetic/submissive) signals emitted to express it should be kept conceptually distinct from the prosocial signals of the hedonic mode. To cut a long story short, whereas agonic dominance is part of the agonic system, in the hedonic mode the concern is with prestige, implying a desire to be seen of value to others (Kemper-SF). Prestige is a concept that takes on special importance when we consider sociocultural fitness. The important concept here is that in the hedonic mode, RHP is translated into Social Attention Holding Power /Potential (SAHP)(5). One gains SAHP by the ability to enact social roles that others in the group bestow value on. And because others bestow value they are acutely likely to listen and be influenced by the displays of those they value. In other words, one's SAHP in part rests with the validating and confirming actions of conspecifics. In humans this is translated into the pursuit of value and appreciation. That is, in our social interactions we are looking for signals that confirm what we are displaying is of interest/value to others. When these are present, agonism is inhibited and joint exploration (display) is facilitated.

Our human concepts of self-esteem are intimately linked to our evaluation of our relative value, and this in part depends on the positive reinforcing signals in the social domain. Consequently, in many but by no means all, of our social interactions, we are looking for positive mirroring, not submissive compliance. Asymmetry in the hedonic mode is therefore enacted by roles that are mutually beneficial, not fear/compliance inducing. This leads to a very important concept: in the hedonic mode, the responsibility for the stabilisation of SAHP is not individual but mutual. Furthermore, signals must be voluntary. Signals in the hedonic mode may be asymmetrical, as for example, the follower of a much admired leader, and they are emitted spontaneously (again, see Kemper-SF). In other words, in cooperative/friendly interactions, it is the positive valuing responses that facilitate the interaction. We seek mutually to add to and contribute to the interaction. In this way, we seek not to inhibit the other but to facilitate the exploration and development/welfare of the other and ourselves.

While RHP may be able to explain some of the formal properties of the self-esteem system of the hedonic mode, such as the tendency to make global self-evaluations and to exhibit wide variations in self-esteem (7), the concept of RHP cannot account for the detailed and varied structures of the hedonic mode. Indeed, the hedonic mode evolved long after the RHP system and the brain structures that support the hedonic mode are superimposed on the RHP system in the manner suggested by MacLean in his description of the triune brain. This is why it is necessary to introduce the concept of SAHP and perhaps other components which constitute varied sources for self-esteem in humans.

What seems unclear at the present is whether the social asymmetry of Woodburn's "immediate-return foraging societies (chimpanzees, !Kung bushmen, etc) which appear as peaceful

and mutually satisfactory differentiation into leaders and followers on foraging expeditions (see also Power-SF) is a modification of the alpha and omega (group) psalics, or a manifestation of the nurturer/nurturant psalic, or an entirely new development in those neomammalian parts of the brain subserving the hedonic mode. A related concern is how submission may lead to post-agonistic, affiliative behaviour in previous contestants (see de Waal-SF). In both cases we may observe the importance of evolution as a tinkerer rather than an engineer (ASCAP113).

It seems to us therefore that while RHP remains a most important concept to understand the structure of relations in the agonistic mode, this concept is insufficient to understand the interactions of the hedonic mode. This is because it does not account for the enormous importance of the degree to which mutual valuing (working through the positive reward systems) and the way we try to make the other feel safe with our presence. Moreover, it would have been impossible to engage the mutual learning and sharing of skills/knowledge, so much part of the hunter/gatherer social style, unless signals were expressed in the social domain that made contribution a positively reinforcing activity. Learning in part depends on respect and the value we place on others. We are probably not much motivated to learn from people we do not value or respect unless the purpose is to avoid punishment.

If we regard pursuit of SAHP as a late phylogenetic social strategy that fosters inclusive fitness, then a number of things become clear:

Some Implications: 1. A fundamental aim of psychotherapy is to help the patient switch from experiencing the world in the agonic mode to experiencing that is consistent with the hedonic mode. If a patient has a competitive (agonic) relationship with a spouse, then therapy may need to involve the spouse or family (5). In other cases the agonism may arise entirely from within the patient and he/she may see others as critical/rejecting or endorses such attitudes to the self (3).

2. The patient may be stuck in the agonic mode because of social circumstances; eg, an individual may have a punitive boss or exist within organisational structures that are organised in the agonic mode (Wedge-wood-Oppenheim-SF). Various options may exist for helping here, including helping the person disengage from self-rating on the basis of what happens at work, gaining the confidence to leave the situation, or learning to be more assertive.

3. Even if patients are operating in apparently hedonic environments they may believe that they have not been bestowed enough SAHP in the form of admiration, recognition or prestige. This may be described as representing a gap between aspiration and perceived performance or reinforcement for performance. A similar situation was outlined by the ego-analysts (eg Bibring, 1953) and seen as the gap between the ego-ideal and actual ego ability. However, in this situation, the person may regress to the global negative forms of self-evaluation characteristic of the RHP system.

4. Therapy does not aim to increase RHP by trying to make someone more domineering or hostile. However, if patients are anxious because they are not confident to "display" or stand up to others in egoistic situations, then assertive training may be helpful. In Eastern forms of psychotherapy, especially those that include training of the self with the martial arts, a major distinction is made between offensive as opposed to defensive acts (8).

5. So much for therapy; what about

other relationships? Suppose that you have what you think to be a friendly relationship with someone but gradually over time they do not send any signals that they value, ie, they rarely invite you to see them and when you do meet, they don't seem that interested in what you have to say; they don't laugh at your jokes, follow up points you make in conversation, etc. There is no catathetic signal here: nobody is putting you down, nor may this friend be interested if you pay him/her attention or not, yet our esteem may take a knock. Maybe you would ask questions of yourself: "Does he/she think I'm boring? Have I offended him/her? Does he/she think I'm incompetent?" We suggest that the key to understanding this situation is via the perceived loss of SAHP.

The Role of Development. In development too, we see the enormous importance of attention holding to the progress of the infant. At first there is the experience of the mother as a provider contingent on the displays of the infant (hunger, boredom, distress). But later we see what Kohut has called the exhibitionist stage. Here the child engages in various displays (eg somersaults, learning to read, etc) and is very keen to demonstrate these emerging talents to the parents; and later, peers. What could be the function of this notable process? Well, it seems to us that this functions for one important purpose: to set the platform for the internalisation of SAHP. The child is seeking acknowledgement of his displays and ability to invoke positive, reinforcing, mirroring responses. From this grows the confidence to become a social actor in a world of conspecifics, enacting and

displaying behavior with the expectation that others will bestow value on them. Furthermore, parents often train their children to not behave agonically with their peers, ie, to educate their children into the idea that value is not determined by who can hit who the hardest.

Of course this does not mean that the agonic options for pursuing inclusive fitness now disappear from the child's repertoire, but generally if they are expressed, they are short lived encounters. Unfortunately for some these developmental stages do not go so well. The child may be subject to consistent hostility from parents or may model parental hostile behavior. Consequently there is no internalisation of SAHP and the child is forced to negotiate the world in a more primitive agonic way. He/she becomes either excessively aggressive or submissive. Furthermore, in the histories of various personality disordered folk, we see a preoccupation with themes of power, rage and needs for revenge. These people are very shame prone. What is missing in such persons' psychology is the sense that he can have value to others or that he/she can display to others (eg tell jokes) without fear of being put down or provoking catathetic signals. In fact, there is increasing evidence that there is a developmental arrest in the capacity for self-other valuing. These people may have a deep sense of emptiness and aloneness. This emptiness relates to an inner sense of no value and not belonging.

It sometimes happens that SAHP becomes focussed on care-eliciting signals. For example, consider the patient who reacts with anger or depression to a statement that there is nothing wrong with them (ASCAPI7). The person may interpret this message as a loss of SAHP. In other words, the only role the person may feel able to enact to obtain SAHP is a care eliciting one. The person gains a sense of worth through the interest other people take in their signals of distress. They are saying, "If my symptoms are worthy of your interest,

then I must have some worth." This phenomenon may be understood once it is recognised that SAHP depends not on individual action but on the ability to elicit (non-hostile) interest and valuing from the other. When SAHP is lost, the person may regress to the display of either submissive or hostile/catathetic signals as an alternative social enactment.

So, to sum up then, we can say that the way we translate concepts like RHP into the human situation needs to be handled with caution. If we are too broad in our application, then we will lose the specificity and preciseness of these terms. Furthermore, in our therapy we may miss the great importance people place on a need to be seen as an agent of value and the way they engage the yielding subroutine not by a loss of dominance but by a loss of SAHP and sense of having value.

A Focus on What Evolution Adds. ASCAP is essentially concerned with cross species patterns of behavior and attempts at revealing basic designs underlying mental patterns. However, as RG has pointed out, the pursuit of inclusive fitness is to a large degree enacted in the arena of social displays. Indeed, intersexual selection (as opposed to intrasexual selection which is the arena for RHP) depends on the ability to display in such a way that mates are attached and approach behavior facilitated. Consequently, it is the interaction that must be focussed on, rather than the individual. Humans have a complex array of potential display behaviors that may meet with social success (unlike the reptile whose options are limited and relatively automatic.) Furthermore, humans are in a position to exert some choice over their displays. Even though they may feel like

behaving agonically, this may be inhibited at the behavioural level because it is recognised that this is not in their best long term interests or because of moral concerns.

Consequently, our task is twofold. First, to understand the underlying themes and goals of interaction as may be apparent in cross species behaviours. But second, to understand how evolution has produced variation which via success in interaction leads to new forms of behavior, motives and goals becoming established in new genotypes. Moral behavior or need for love, for example, are not available as options for reptiles but are of great importance to humans. The Avoidance of Reductionism in Gene Research. Consequently, we cannot explore issues of dominance or alpha states as if these components (eg, morality) of human competence do not exist. In the psychopath for example (ASCAP# 10) it is not sufficient to think in terms of genes for dominance, although such research as outlined by Weiss and Beck (same issue) is a most valuable contribution. We must also consider that in psychopathic behavior there is an absence of cooperative and moral/empathic behavior. In other words, (if one is interested in gene control of behavior), the psychopath is not simply understood as having genes for certain behaviors (eg aggressiveness, dominance or Alpha) but may also be thought of as lacking genes for certain behaviors (moral abilities). In this analysis, we would be as interested in what is missing as we are in what is present. To put this another way, for some reason (be it genetic, organic or developmental), the psychopath seems unmotivated by desires to be of positive value to others or to enact caring compassionate behaviors to his/her fellow human beings. His/her social behavior seems to represent a more reptilian pattern relatively uncomplicated by other pro-social concerns that are important repertoires in humans.

One possibility may be that there is an absence of neomamsalian hedonic and SAHP systems, leaving the individual with an unmodified agonic and RHP system for construing his/her social world. There may be critical periods during development where, for the hedonic mode and SAHP system to become a stable part of a person's construct system and way of understanding the social world, particular kinds of inputs are necessary (eg, receiving positive valuing/mirroring responses from a parent.)

By understanding what evolution adds to basic designs we may be better able to think in terms of attributes (or genes) that are missing as well as attributes (or genes) that are present. Similar concerns exist for various forms of pathology. Some pathologies are due to absence rather presence.

We suggest that it is by understanding that evolution adds to basic designs in the phylogenetic ladder that we get closer to understanding pathology not only in terms of what is activated or amplified but also what is absent. If for example we decide that the hedonic mode is an important evolved constituent of higher primate and human possibilities and behaviors, then the question is not only to understand the more primitive agonic mentalities but also the failure of the hedonic node: why is it not activated in a particular situation or person?

Finally, we should note that various possibilities for the construction of social meaning exist [5]. Humans do not lose the capacity to behave agonistically by virtue of having an hedonic component. Indeed, over the course of any interaction individuals may switch between the agonic and hedonic. Indeed, our current thinking and deliberations focus

upon the sources of this switching, the signals involved, and the kinds of sequences of behaviour that are provoked when interactions switch between the two modes.

Next issue features Ricarda Müssig's evolutionary hypothesis of why the kugelbaum (round-topped tree) is always the very young child's stereotypic first drawing of the human being.

Volume I issues of ASCAP are available on request.

1. Crick F: What mad Pursuit: A personal view of Scientific Discovery, Sloan Foundation Science Series/Basic Books: 1988. Quoted in review by John Cairns (Mature 1988:336:268 (Nov 17 issue)

2. ASCAP philosophy and goal. High scientific importance rests on comparing animal behaviors across-species to understand better human behavior, knowing as we do so that evolutionary factors must be considered for understanding properly such behaviors. To accomplish these comparisons, very different new ways of viewing psychological and behavioral phenomena are required. This in turn explains why we need new words to define and

illustrate new dimensions of comparisons across species. We expect that work in natural history biology combined with cellular-molecular biologic research will emerge as a comprehensive biologic basic science of psychiatry. Indeed, this must happen if we are to explain psychiatric illnesses as deviations from normal processes, something act possible now. Compare to pathogenesis in diseases of internal medicine.

Some neologisms that hopefully will help implement these goals are those of:

a) Michael R. A. Chance: "hedonic" and "hedonic" refer to the tone of groupings of conspecifics (members of a same species) i.e., relaxed and fun-loving versus tense and competitive [3].

b) John S. Price: "anathetic" and "catathetic" describe conspecific communications. Catathetic messages "put-down" whereas anathetic signals "build-up" the resource holding potential (I) of target individuals.

c) Russell Gardner, Jr.: "psalic" is a 2 way acronym: Propensity States Antedating language In Communication and Programmed Spacings and Linkages In Conspecifics. This describes communication states conjecturally seen

with psychiatric disorder and normality (human and non-human), ie, alpha psalic seen in manics, high profile leaders and dominant non-human animals. light psalics are named alpha (A), alpha-reciprocal (AR), in-group omega (IGO), out-group omega (OGO), spacing (Sp), sexual (S), nurturant (N), and nurturant recipient (NR).

All of the above new or renewed terms are initiated or elaborated in Chance, MRA (Ed) (1988) Social Fabrics of the Mind. Lawrence Erlbaum associates, New York.

3. Chance MRA, Jolly CJ (1970): Social Groups of Monkeys. Apes and Men London: J.Cape; NY: Dutton.

4. Grant BC, Mackintosh JW: Social behavior of the Male laboratory rat. Behaviour 1963;vol 21:

5. Gilbert P: Human Mature and Suffering love, last Sussex: Lawrence Erlbaum, 1989

6. Price JS, Slonon L (1987): Depression as yielding behavior: an animal model based on Schjelderup-Ebbe's pecking order. Ethology and Sociobiology 8::858-988.

7. Editorial Lancet 1988;2:943-944

8. Puller JR Martial arts aid psychological health. Brit J Med Psychol 1988; 61:317-328.