

ASCAP NEWSLETTER

Across-Species Comparisons And Psychiatry Newsletter

Volume 4, No. 8, 15 Aug 1991

"All in all, both at the highest scholarly levels and in everyday thinking, people are now much more inclined to ask the commonsense question: how would our ancestors have done it, and how does this relate to how we are doing it today? It is the inverse of the commonsense view that we grew up with that dismissed our evolutionary past as irrelevant and the investigation of it as immoral." Tiger and Fox¹

The ASCAP Newsletter
is
a function of the

International Association
of
Comparative Psychopathology
(IASCAP)²

EXECUTIVE COUNSEL:
President: Michael R A Chance
President-Elect: John S Price
Secretary & Newsletter Editor:
Russell Gardner, Jr³
Treasurer: Leon Sloman⁴
Member: Paul Gilbert

IASCAP Mission Statement: The society represents a group of people who view forms of psychopathology in the context of evolutionary biology and who wish to mobilize the resources of various disciplines and individuals potentially involved so as to enhance the further investigation and study of the conceptual and research questions involved. This scientific society is concerned with the basic plans of behavior that have evolved over millions of years and that have resulted in psychopathologically related states. We are interested in the integration of various methods of study ranging from that focusing on cellular processes to that focusing on individuals to that of individuals in groups.

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.

Features: (1) This issue provides a report of the fourth (Sussex) meeting of the Basic Plan Group p.3
(2) The Price-Gilbert-Price exchange continues with "Conspecific Comparisons" from J Price p.5

ASCAP Newsletter SUBSCRIBERS are an obvious natural membership of the new IASCAP. Please feel invited to join it. There are no dues now. The EXECUTIVE COUNSEL felt that SUBSCRIBERS should be automatically invited to become members and that non-subscribers be nominated by a current member. Join up. Help participate in the decision-making. What other functions should IASCAP have? How should it develop?

Let R Gardner (secretary) know of your interest:
Send form at end of issue
or call (409) 772-3474
or FAX: (409) 772-4288

Editor's Comment: J Battaglia, a psychiatrist from UT Dallas, visited UTMB Galveston with a Grand Rounds presentation that stemmed from his doing psychiatry in Micronesia. He showed wonderful slides and demonstrated in his narrative that he is an excellent physician as well as psychiatrist. A life-long lizard watcher, he discovered a new psychiatric condition amongst the islanders: geckophobia!

Overall Dr Battaglia was struck with how *alike* psychiatric conditions are across cultures. Psychiatric conditions on the islands resembled parallel disorders he sees in the US. As you will see from the report from Sussex, we are far from a cross-national study partly due to my own sense that there is not an agreed on common language nor concepts about many complex behavior patterns probably in fact held in common.

But is a *common language* what we need - especially to connect to the different conceptual levels of our colleagues working in the wet labs? Perhaps we need to search more for a *common alphabet*, natural "bits" of behavioral phenomena that aggregate into larger units: bricks and nails not houses; amino acids not proteins; laughs not euphoria nor elation.

We need easy agreement on such units without elaborate training. John Price's break-down of signals into those that build up vs put down the receiver of such messages exemplify this. John Birtchnell's work provides new promise. From animal work we have the observations of Randrup and Sorensen. They describe stereotypies of caged animals; these resemble autistic behaviors.

Randy Nesse has hoped for progress in the evolutionary basis of behavior like that shown by molecular biology. That success came from working on the *units* within macromolecules. How do macromolecular characteristics stem from the coded chain-links within?

Letters: 15-7-91

Splendid weekend - very productive.

...Here are the references to Christopher Parker's work. Fortunately he completed the largest part of this work before he was killed in a cycle accident at age 45.

1. Parker C: *Opportunism and the rise of intelligence*, in (Eds) Sunderland E, Malcolm T: *The Exercise of Intelligence* NY and London: Garland STTM Press, 1980.

He quotes 5 publications the last two of which are:

2. Parker C: *The antecedents of man the manipulator.* *J Human Evolution* 1974;3:493-500.

3. Parker C: *Behavioral diversity in ten species of non-human primate.* *J Comp&Phys Psychol* 1974;87:930-937.

These I'm sure will refer to his two earlier publications in 1969 and 1973...

Michael RA Chance, Birmingham, Engl

Letters (cont): 18th July 1991

I shall include our historic meeting at Plumpton in my autobiography!

... I enclose two papers.

I was intrigued by your suggestion that the relatives of manic patients are more successful than people in general. Do you have a reference...?

I hope we shall keep in touch. By the way, I...welcome contribution[s] ... to the British Journal of Medical Psychology. Paul Gilbert is the Assoc Editor concerned with evolution.

John Birtchnell, Editor, British Journal of Medical Psychology. Institute of Psychiatry, London.

I've drafted a summary of your Plumpton contribution for ASCAP.

The reference to higher achieving families of manics that you requested is in the September 1989 ASCAP number (see "Notes" on page 1).

Here's indeed looking forward to future communications!

Fourth Basic Plan Group meeting at Odintune Place, Plumpton. By RG

The fourth meeting of the Basic Plan Group (BPG) merged with a meeting of the Birmingham Group. We started 5 July and ended 11 July with much left to say. Except for John Price and myself, the membership shifted, with Paul Gilbert coming and leaving early, Leon Sloman unexpectedly arriving a day later than planned, and Michael Chance coming in a later phase; John Birtchnell and David Stevens also arrived later, each for a day. A newcomer to ASCAP Michael Waller, drove from Harpenden with a manuscript and discussion of his version of selfish gene theory.

The meeting took place at John Price's home at Odintune Place, Plumpton. This extraordinary site just north of Brighton and west of Lewes is part of an estate dating from the 12th century and the particular house is a comfortable one from the 1930's. We were surrounded by a view of the South Downs and a landscape of fields and hedgerows, with occasional buildings clustered in the distinctive grouped patterns of the English countryside. For the conference, we mostly had sun after a rainy spring and early summer, although occasionally a cold mist reminded us of how far north England really is compared to the gulf stream's origin off gulf-coast Texas.

We evolved issues not only in the formal drawing room - in front of a fire when the weather was cool. Unscreened windowed doors were open as needed when warmer because this part of the world seems to breed few mosquitoes. We also met on the patio, in the kitchen and in the formal dining room also open to the greensward. Moreover, in various groups, we also talked while walking about the grounds, noting in passing many many English roses, daisies, and fields of red poppies. Also this is land with public walkthroughs as rem-

nants of the English commons. Leon's investment in gait, for instance, was illustrated by his indefatigable walks, after which he often provided singular proposals or commentaries.

The group felt indebted to Antonia Price and appreciated the patience with which she and other members of the family and household graciously received visitors who came and went over many days. The meeting was a once-in-a-lifetime experience for at least some of the conferees and she was a nurturant figure for the process; at breaks and mealtimes, she grasped instantly and constructively many of our intellectual and logistical issues and helped forward our progress; she has a knack of cutting jargon to plain language to test whether the proposition still held. We also wish to thank Suzie Gardner as a consistent, supportive, helpful presence throughout who also took many pictures commemorating the occasion. Jean Gilbert, with husband Paul much invested in the ritual agonistic behaviors of championship cricket (they met when he was captain and she scorekeeper of an English cricket team), instructed the Americans on features of the game.

To summarize what happened at the conference: a number of projects got furthered: several jointly authored projects were extended still further or newly planned, references and methodologies were exchanged, schemata and points of view jointly relevant to various individuals got articulated with resolution of some difficult problems. We decided that although terminologies and frames of reference varied, our actual similarities were greater than superficially apparent. For example the psalic concept of Gardner compared to the spacing dimensions of Birtchnell seemed interestingly compatible. Sloman and Price with the help from the rest of us spent time on outlining the differences emphasized in

recent issues of ASCAP and hammered out an agreement for a more user-friendly terminology.

Many of the things discussed are slated for publication here or elsewhere, but no concrete research plans evolved from the meeting: we are not now planning cross-national data collection on depression and defeat. More importantly, however, the many and helpful idea exchanges caused us to want more such interactions.

The organizational planning outcome of the meeting stemmed from disappointment over a rejected symposium proposal that had been sent to the Royal College of Psychiatrists meeting just prior to the BPG meeting. This meant that BPG members who otherwise could have made the trip to England did not because their institution would not pay their costs. We assume content was not the problem. Paul Gilbert sent his abstract independently of symposium and was accepted. Moreover, the area interested Hugh Freeman, Editor of the British J of Psychiat, so that he invited John Price to lunch and invited him to provide a paper for the journal.

But in the course of his varied contacts with the Royal College, John learned that the symposium was likely denied because we were not allied with an organization. While we knew this early on, there was little discussion of a solution until 9 July, when we coalesced as an executive committee to originate a new association and to plan its initial governance.

The following considerations played out over late afternoon and dinner as fundamental to our thinking:

1) The core members of the BPG would be an executive counsel: Michael Chance, John Price, Russell Gardner, Leon Sloman and Paul Gilbert. Until we become familiar with legal strictures, we will be an organization by mutual agreement but without dues because tax and jurisdictional laws come into play when

money changes hands.

2) The ASCAP Newsletter is an official function of the group. Russell Gardner will continue to manage The ASCAP Newsletter as before (\$18 per year via the University of Texas Medical Branch). ASCAP subscribers are natural members of the new association if individuals are interested.

3) Periodic face-to-face scientific proceedings are a major rationale for the group and will continue to the maximum extent possible: informal, hedonic, focused on working out conceptual issues and research plans. Even as such activity is carried out, each participant must be able to present his or her data and points of view with no one figure dominating. The group will be low key with success dependent on satisfaction of the members, not on the numbers recruited into the organization.

4) The new association should be international and focus not only on psychiatry but more generally on psychopathology in juxtaposition to normality, comparing species and comparing cultures, emphasizing the biology of the individual but on both cellular and whole organism levels and with respect to the individual's programmed interactions with others.

5) A first president of the group is naturally Michael Chance with John Price the president-elect, to become president after a year. The secretary will be Russell Gardner in view of his ASCAP activities and the treasurer will be Leon Sloman in view of his fund-raising activities for a symposium sponsored by the University of Toronto in August, 1991. Paul Gilbert is an important Executive Committee member in view of his signal contributions to the literature.

6) To determine the legal ramifications as well as the rules and regulations of such associations or societies, Russell Gardner was instructed to make inquiries of comparable organizations, noting espe-

cially international considerations.

7) The tentative proposed name for the new society, the International Association of CompArative Psychopathology (IASCaP), was derived as follows: first during early afternoon on 9 July, Leon Sloman suggested to John Price that we ought to come up with a formal name for the group that had assembled with such productivity so that the group's interests could be furthered. They brought this idea to the rest of the group.

The structure and name came next, evolving over dinner with JSP the phrase-master on official wordings. LS suggested that the initials of "ASCAP" were good and also gave credit to the publication that fostered the gathering. RG pointed out that "ASCAP," although appropriate for a newsletter, was less so for a society because the "American Society of Composers and Performers" already exists. LS noted that adding "I" (for International, a fundamental feature of the group) would mean that ASCAP's initials could be retained which may be more important than the particular words in the name. The group agreed.

"Comparative" implies the comparative approach in biology, ie, basic plan thinking, although we don't on the one hand wish to restrict ourselves to "across-species" - basic plan implies that across-cultural comparisons are valuable, eg, Eibl-Eibesfeldt's and Ekman's work with emotional communication in varied human groups suggests that emotions are biologically based communications. A problem with psychopathology is that psychopathology as seen in humans is seldom evident in animals as Michael McGuire pointed out in an early ASCAP number.

8) We drafted a mission statement (p1). However, the drafted materials so far (name, mission statement, plans) are tentative, awaiting further work by the Executive Committee which actively solicits the interest

and advice of the ASCAP readership/writership as it felt that ASCAP subscribers are the natural group from which to elicit membership (see the form at end of issue).

Moreover, the above as "drafted minutes" may be modified at the next meeting of the Executive Committee.

Conspecific comparison - a reply to Paul Gilbert by J Price

Paul is right.⁶ I should simply have presented the theory (that depressive states evolved as part of the yielding component of agonistic behaviour), rather than confuse everyone with trying to rebut an objection (that depression is essentially yielding behaviour but depressives sometimes seem adept at getting their own way). Also, the title should have been "Metaphors of Yielding", a term which encompasses both voluntary submission and depressive yielding.

In his distinction between social comparison by intimidation and social comparison by attraction, I think Paul has made a very fundamental point - one that has certainly clarified things for me. This thinking about social comparison in an evolutionary context starts with Darwin's idea of sexual selection, and then there is Ginsberg's view of social organisation as providing an arena for social comparison, and then Wynne-Edwards idea of conventional competition for conventional goals; but I cannot recall anyone getting anywhere near Paul's analysis. We can now see ritual agonistic behaviour as one form of social comparison which is one form of the social competition which subserves intrasexual selection. Since this is all very new, I think it might be helpful if I just reflect back to Paul my current thinking about the evolution of social competition as it has been affected by his contribu-

tion.

The evolution of human social life can be seen as the evolution of ever more sophisticated and effective methods of sexual selection, and it might be helpful to enumerate some of the possible stages, concentrating mainly on the intrasexual component of sexual selection:

1. *Unritualised social competition*

Many insects kill members of the same sex, some worms plug each other's sexual orifices, some beetles spray each other with anti-aphrodisiac gas; this category includes any action to reduce the other's viability or fertility over which the victim has no role in "consenting". Possibly the suppression of sexual development of pheromones in some rodents and new world monkeys comes into the category; otherwise it does not occur in vertebrates.

2. *Ritual agonistic behaviour*

In ritual agonistic behaviour the loser, being unharmed, must consent to lose. He has the option (at an unconscious level) of not consenting, and can be said to choose between consenting and non-consenting strategies.

In evolutionary terms, ritual agonistic behaviour seems to perform two rather separate functions. To the extent that it takes the form of intergenerational conflict, it serves to delay reproduction until later in the life span. To the extent that it is intragenerational conflict, it serves to create lifelong variation in fertility within a socially interacting cohort of conspecifics. It is this second function which subserves intrasexual selection, and which concerns us here.

According to the simplest view, each individual has to choose between two strategies, a dominant strategy in which he reproduces more and a subordinate strategy in which he reproduces less. The dominant

strategy is designed to maximise his own reproduction, the subordinate strategy is designed to maximise the reproduction of his close kin (and depends for its selection on the "kin selection" component of inclusive fitness). For individuals in this system, the overall strategy is similar to Maynard Smith's "assessor" strategy; on at least one occasion in their ontogeny they have to assess their chances and choose between the dominant of "hawk" substrategy on the other hand, and the subordinate or "dove" substrategy on the other.

How does they make this choice? There are a number of possibilities which have not in fact evolved. They could leave it entirely to the opposite sex and adopt the strategy "If chosen as a mate, adopt dominant strategy; if not chosen, adopt subordinate strategy", thus relying entirely on the intersexual component of sexual selection and eliminating the intrasexual component. Or, they could do it by counting heads, such as, "If the home/nest contains more than x individuals when you reach age y, adopt subordinate strategy, otherwise adopt dominant strategy." What has in fact evolved is a form of social comparison, which bears a certain resemblance to co-consultation. We can imagine a primitive vertebrate, scratching its head and wondering whether to adopt a dominant or subordinate strategy, so it chooses a consultant, and says, please help me make up my mind. The consultant says, use me as a yardstick, if you find yourself superior to me, your chances are good and you should adopt the dominant strategy; otherwise you should play safe and adopt the subordinate strategy. The consultation takes the form of a fight in which our indecisive individual uses the strength of the consultant as a yardstick to estimate his own strength, and after the consultant he either says to himself "I am a strong

person" and adopts a dominant strategy, or "I am a weak person" and adopts a subordinate strategy. Of course the interaction is symmetrical and the "consultant" is making a similar decision (it is a co-consultation). This could be called *dyadic comparison* because, in each comparative episode, each individual compares himself with one other. It is the main form of vertebrate social comparison and is called ritual agonistic behaviour.

As Paul points out, group living provides the opportunity for more sophisticated social comparison, and probably the selection mediated by ritual agonistic behaviour in groups is more effective than occurs in territorial species. The opportunities for effective comparison in a single fight are limited, but if animals live in groups they have extended time in which to evaluate each other's strengths. Fights can follow a long period of mutual assessment, can be protracted, and be divided into bouts.

As a result, the rank order in a group should reflect small differences in strength, skill, intelligence and courage (the components of RHP). Ritual agonistic behaviour amplifies these small differences into gross social disparity.

3. *External mediation of intrasexual selection*

In human evolution there has been a major change in ranking behaviour. Instead of two rivals A and B fighting it out between themselves, the choice between A and B is made by C, D, E, etc. This is the change which Paul has pointed out as so important. In order to achieve social success, A has to make himself attractive to C, D and E rather than make himself intimidating to B. Selection is now by external judges rather than by interaction between the rivals themselves. The scope for greater efficiency of selection, and for cultural variation

in the criteria of selection, opens up an entirely new "ball game" of the sexual selection process. In fact, this development must have been about as important as the development of sexual selection itself. To distinguish it from the dyadic comparison which occurs in ritual agonistic behaviour, the evaluation of A and B by C, D and etc could be called *polyadic comparison*. Of course it is seldom as simple as that, and in most cases everyone is evaluating everyone else.

Does this kind of sexual selection occur in animals as well as man? In macaques, baboons and chimpanzees the outcome of ritual agonistic behaviour is affected by alliances with same-sexed conspecifics, so that the capacity for alliance formation is being selected for as well as fighting ability. The choice between two potential allies offers a primordium of polyadic comparison, in that the criterion of choice is not so much "Does he intimidate me?" as "Is he likely to intimidate the other fellow (and, if so, is he likely to favour me)?"; this is still some way from, "Which of the two is more attractive?", but it as a major advance from the evaluation of others entirely in terms of dyadic comparison. In chimpanzees, in addition, the influence of female group members affects the rank order in males, and this is a further step towards intrasexual polyadic comparison; in fact, it is similar to the situation in at least one tribe of American Indians in which only males are allowed to run for office and only females are allowed to vote.

In human society polyadic comparison has been enormously increased in importance, particularly due to language and the opportunity this gives for the comparers to discuss those being compared, and for the careful allocation of prestige; it also gives the group members the opportunity to discuss the criteria for

the allocation of prestige. But it has not replaced the other forms of social competition, and so we see them operating side by side.

Some consequences of polyadic comparison

1. *Proscription of agonistic behaviour by society.* Groups practising polyadic comparison would have an enormous advantage over groups still limited to dyadic comparison (agonistic behaviour). Culturally they would be at an advantage because their leaders would have those characteristics which are the criteria for the allocation of prestige, and in most human groups these appear to be a combination of competence and dedication to the interests of the group. Groups with such leaders should outperform groups whose leaders were selected for power to intimidate. Genetically, the polyadic groups would tend to have more members with qualities of competence and unselfishness because there is a correlation in most human groups between prestige and reproduction; therefore we have probably experienced a gene/culture co-evolution for competence and group loyalty.

Among those groups practising polyadic comparison, there would be an advantage to those groups in whom selection was *entirely* by polyadic comparison, and therefore there would be an advantage in preventing agonistic behaviour as much as possible. Therefore we can expect ritual agonistic behaviour to be proscribed by groups, both in their childrearing practices and in their code of behaviour for adults. In childhood there is an enormous parental influence towards non-intimidatory behaviour, see for instance the life histories described by Vaillant in his Adaptation to Life, in which a cohort of American college men report severe sanctions on aggressive behaviour during their childhoods. The

proximate reason for parents stopping their children from quarreling may well be that they find the noise irksome, or that they consider it bad manners, or that they think the children should spend the time improving themselves in some way; but the ultimate, evolutionary reason may be that they want to decide the children's rank order themselves by the giving and withholding of praise and criticism, and so they do not want the rank order decided by the children themselves in the course of quarreling (ritual agonistic behaviour). Also they want to develop in their children the mentality that looks for SAHP in the form of praise rather than RHP in the form of the submission of others, so that when they leave home they will still be oriented towards polyadic comparison. The widespread existence of bullying in school playgrounds⁸ might seem to gainsay this thesis, but it is probably due to the fact that there were no schools in our 'environment of evolutionary adaptedness'. Glantz and Pearce⁹ have pointed out that in hunter-gatherer society children seldom interact with each other in the absence of adults.

In adult life, fighting between same-sexed adults is also proscribed. Duelling was forbidden by monarchs, not because of the fear of loss of life (which was slight), but because the king wanted prestige to go to people he approved of rather than to those who were skilled with the sword or pistol. What dyadic competition is allowed between adults is governed by society's rules rather than by nature's. Fine differences in ability can be assessed by pitting individuals against each other in sport and in intellectual tests. But these are polyadically controlled dyadic comparisons. Prestige is allocated not only for performance but also for sportsmanship, and bad marks are allocated to those who are seen to cheat

or who do not accept the decision of the referee.

Because of this proscription, ritual agonistic behaviour is only seen in situations over which society has little control: in prisons, on street corners, in the school playground, in the family and in situations in which master and servant are alone together. Also, society does not proscribe ritual agonistic behaviour in marriage; in fact, sayings abound to the effect of "Never interfere between husband and wife". This may well be because the rank order within marriage does not affect the rank order in the group as a whole, and therefore it affects neither the choice of leaders nor the correlation between prestige and reproduction.

One or two contributors to this debate in *ASCAP* have questioned the idea that ritual agonistic behaviour does not occur in everyday human social interaction. It may indeed occur in subtle forms (such as damning with faint praise in committee meetings) but I very much doubt whether the mild forms that may occur contribute to rank order.

2. *Development of latency period.* Students of baboon social life have pointed out that the brief period of immaturity before the adolescents join the adult dominance hierarchy is a time in which they evaluate each other, and each group of peers has worked out its rank order by the time the canine teeth have developed. The human latency period allows a much extended time of mutual evaluation by the peer group. It also allows the previous generation to play an important part in the evaluation, and of course in human life we see a whole professional class of evaluators ranking our adolescents according to adult standards. Therefore, whereas the accepted function of the latency period is to allow more learning, we can add the additional function of

allowing ranking according to ability to learn and according to other attributes which are manifested at this stage of development.

3. *Religion and war as projective tests.* Society wants individuals who are assertive and capable and yet have the capacity for submission of their individual goals to those of the group. The induction of children into religious practices allows an evaluation of this capacity for submission, and also provides a test of memorising capacity by requiring the child to learn scripture and ritual.

The wars of primitive man are ritualised and the death rate is low. There is much observation of individual fighting attributes. In this way society can allocate prestige to those who will risk their lives for the sake of the group. This is a possible explanation for the universality of religion and war in human groups: those groups that lacked these aids to polyadic comparison did not survive.

4. *Why people are nice.* On the whole society allocates prestige to people who are nice. Nice means that they are decent, honest, reasonable, cooperative people who put the good of the group before their own selfish interests; they are also likable and interested in their fellow human beings. Thanks to polyadic comparison human groups have been selecting for niceness for millions of years, and we have become very good at it. Therefore we have to some extent overcome the legacy of dyadic comparison which is to select for intimidating, selfish bullies. The genes may be selfish, but the people are unselfish, and it is the people we have to interact with, not the genes. I think in this sense the message of evolutionary biology is an encouraging one. We are nice because, for a very long time, we have selected each other to be nice.

Hedonic dyadic comparison

Of course in the hedonic mode there is a lot of comparison of social attention-holding power (SAHP) on a dyadic basis. This takes two main forms. There is furtive comparison, in which, for instance, a woman will look round a room she enters to make sure she is the most attractive woman present; this involves a comparison of herself with each other woman separately. Then there is the episode of mutual appraisal when two people meet. This is similar to the assessment stage of ritual agonistic behaviour; the differences are that it is SAHP rather than RHP that is being compared, and that evaluations of favourable relative SAHP are not signaled in the form of catathetic signals; in fact, politeness often directs the dyad into an exchange of anathetic signals (compliments) whatever the result of the evaluation. This helps to prevent a switch to the agonistic mode, because inappropriate signals of favourable relative RHP lead to loss of face (loss of SAHP). It seems likely that dyadic evaluations of unfavourable relative SAHP, either furtive or mutual, may cause social anxiety or possibly even depression (fall of SAHP) but this is a matter for future empirical study.

Use of same mechanisms

It is likely that the SAHP system of hedonic polyadic competition developed out of the RHP ritual agonistic behaviour system, rather than starting from scratch. Thus in the RHP system we have catathetic signals in the form of threat and attack causing a fall in RHP which triggers a further fall in RHP which is the core element of depression. And in the SAHP system we have catathetic signals in the form of disapprobation causing a fall in SAHP which triggers a further fall in SAHP which is experienced as depression. Although the nature of the catathetic signals is

different, it seems likely that the mechanism for receiving the catathetic signals is the same, also the mechanism that converts receipt of catathetic signals into fall of RHP, and also the hardware that calculates whether a fall in RHP is sufficient to trigger the depressive "devaluation" of RHP that takes the form of depression. And the SAHP system, as in the RHP system, the withdrawal of an anathetic signal has the same effect as a catathetic signal. The main difference in the SAHP system is that catathetic signals are no longer signals of favourable relative RHP; in fact they have no comparative component; instead of signaling "I am better than you" they signal "You are no good." Likewise, anathetic signals are no longer signals of unfavourable relative RHP, signaling, "You are better than me"; instead, they signal "You are good", without any implication as to the SAHP of the speaker. This may be one reason why there has been such an enormous development of anathetic signaling in the polyadic system.

SAHP and RHP are components of human self-esteem, and the evolutionary sequence RHP---SAHP---self-esteem goes a long way to explaining why there is such wide variation in human self-esteem, why there is "global" self-esteem rather than separate self-esteem for each characteristic, and why depression is associated with a global fall in self-esteem rather than just the component which is relevant to the social situation.

In summary, I think Paul's development of the SAHP/polyadic comparison system has made it possible to relate the yielding hypothesis to actual human behaviour, to integrate it with all the current psychological work on social comparison (particularly concerning social anxiety, shame and guilt) and to relate both the above to evolutionary biology. Keep going, Paul.

1. Tiger L, Fox R: The Imperial Animal NY: Henry Holt, 1989, p.xxv
2. The report on the Basic Plan Group meeting at Odintune Place, Plumpton, Sussex, England describes the origination and nature of this association. This is a tentative name at this time but the executive committee has decided on the permanence of the initials: IASCAP.
3. c/o R Gardner, 1.200 Graves Building (D29), University of Texas Medical Branch, Galveston, TX 77550 FAX: 409-772-4288. For ASCAP Newsletter Volume 4 (Jan through Dec, 1991) please send \$18 (or equivalent) for the 12 issues. For subscription to the ASCAP Newsletter, make checks or money orders out to "Department of Psychiatry and Behavioral Sciences, UTMB."
4. At this time the organization has no official budget. The treasurer's function is restricted to fund-raising for particular meetings or other functions that are fiscally independent of IASCAP.
5. a. Birtchnell J: Interpersonal theory: criticism, modification, and elaboration. Human Relations 1990;43:1183-1201.
 b. Birtchnell J: Towards a theory of relating. Manuscript submitted for publication.
6. Gilbert P: Price-Gilbert exchange. Conspecific competition as a model for the biological infrastructure of depression: problems with "do depressives get their own way?" ASCAP Newsletter 1991;4:(May issue#5)2-7
7. Ginsberg BE: Breeding structure and social behavior in mammals: a servo-mechanism for the avoidance of panmixia. In (Ed) DC Glass: Genetics NY: Rockefeller University Press and Russell Sage Foundation, 1968.
8. Tattum DP: Violence and aggression in schools. In (Ed) Tattum DP, Lane DA: Bullying in Schools. Stoke-on-Trent: Trentham Books, 1989, pp 7-19.
9. Glantz K & Pearce JK: Exiles from Eden: Psychotherapy from an Evolutionary Perspective. London: W.W.Norton, 1989

To: EXECUTIVE COMMITTEE, **IASCAP** Date: _____/_____/_____
 c/o Russell Gardner, Secretary, 1.200 Graves Building (D29) ,
 UTMB, Galveston, TX 77550-2777. FAX: (409) 772-4288.

From: (First Name) _____ (Last Name) _____

Address: _____ Highest degree: _____

_____ Occupation: _____

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(Use reverse side as needed)

Subject: I am interested in becoming a charter member of **IASCAP:**

(check one)

____ (1) to which I am invited by being a subscriber to the ASCAP Newsletter during the calendar year 1991.

____ (2) to which I am nominated by **IASCAP** member: _____

(BLOCK LETTERS)

IASCAP member signature: _____