

# ASCAP NEWSLETTER

Across-Species Comparisons And Psychiatry Newsletter  
Volume I, No. 3, 15 February 1988

Hedonic Anathetic, Well Sometimes Catathetic, Psalicyology

(c/o Russell Gardner, 1.200 Graves Building (029), University of Texas Medical Branch, Galveston, Tx 77550)

For the philosophy guiding this newsletter and for keys to the boxed neologisms, see footnote on p. 5(1). 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.

Announcements; 1. The Evolution and Human Behavior Annual Meeting will take place in Ann Arbor, April 8-10, 1988. Abstracts in a box exactly 6' wide and 3" high should be mailed for arrival before March 1. Excellent speakers already scheduled. For further information, write or call:

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2. Paul Gilbert has a new chapter in press entitled "Psychobiological Interaction in Depression". In S. Fisher and J. Reason (Eds.): Handbook of Life Stress, Cognition and Health. 1988, John Wiley & Sons Ltd.

Editorial: C. Reichelt and S. Fisher point out that the Newsletter has the same initials as the American Society of Composers, Authors, and Publishers. Given our emphasis on communication that includes, and also extends well beyond language communication, we'll consider this accidental juxtaposition salubrious.

Do you notice a change above in the boxed heading of this issue? This stems from a comment that John Price made and that I chose to emphasize in my editorial last issue. It focused on a postulated "neglect of agonistic behavior" and mentioned (along the way) "by psychologists". Some psychologists have taken exception to being so singled out. In the next issue, Paul Gilbert has a most articulate reply!

I can't answer for John, but I was including myself as a neglecter -- as one interested in "mind-science" (psychology generically) and did not mean (consciously at least) to be catathetic to an entire discipline, appearances to the contrary. Well, controversy lives in these pages as it should! Hopefully, although "catathetic" statements may occur accidentally or on purpose, an overall "hedonic" tone will prevail.

I want to emphasize, however, that John Price's contribution in last issue, and now below, a statement by M.T. McGuire, are particularly welcome because these two were two decades ahead of most of us in viewing animal behavior specifically in the context of psychopathology. This issue's essay bears on their points.

Letters to the Editor:

January 6, 1988

A reply to your ASCAP Newsletter. (Issue #1, 15 Dec, 1987] There are lingering problems in the evolutionary approach that seen never to get looked at seriously, at least from my perspective. One is that most species do not have neurotic or psychotic members and, should they, such mem-

bers are not very well tolerated. This raises issues about whether cross-species comparisons are really la] viable way to go for improving our understanding of psychiatric disorders. For example, animals may lack the mechanisms that (underlie) the behaviors that psychiatrists often deal with. I have no difficulty with looking at similar or even dissimilar behavioral, physiological, and anatomical systems across species. In fact, currently, my tendency is to view serious psychiatric disorders as a maladaptive, and representative of a breakdown in selection and/or developmental processes. One or two may be adaptive (e.g., sociopathy) but these may be thought of as psychiatric simply by accident, not design. Whether or not, in talking about psychiatric disorders, we are talking about deviations from normal processes, as you suggest, I am not sure.

Apart from all of the above, I was pleased with your letter for two reasons. First, that you took the time to write it. Second, because you are absolutely correct in suggesting that we need more communication. So, I shall try to contribute.

Michael T. McGuire, UCLA, Calif.

January 4, 1988

... Re the generalizations of the bird peck equation: while I am not fond of mathematical expressions of non-mathematical problems, I think it ... could be generalized to any species with a dominance hierarchy. The real problem is isolating and measuring all the dimensions of these behaviors in highly complex animals. You suggest observing videotapes as a way of expanding the usefulness of the formulae. ... you'll surely have to have many trained observers and very simple taped exchanges at first. Think of the length of time it takes people like Goodall and Fossey to develop an understanding of what is

going on with non-verbal animals who aren't trying to hide .. their feelings. With humans and our dissembling, will be extremely tough to analyze what is going on reliably. Carolyn Reichelt, Wadena, MN

I think that part of this issue's essay addressing Price's essay of last issue also addresses your concerns, which are fundamental. RG

January 19, 1988

Thank you for your most original Christmas card. We were glad you had written about the neologisms because we were thinking that the number of these were beginning to grow rather fast and that perhaps at this early stage we should consider rationalizing the terminology and making it less technical. This especially applies to rank related terms such as those of Price and yourself and Kemper and deWall in Social Fabrics of the Mind, since, in any event, we want to relate these to the two modes [hedonic and agonic}. One of the issues that is set out in the book is whether or not we should have terms for Hedonic ranking, as social relations are looked upon as networks with reciprocity and equality being characteristic of the hedonic mode. It may be worthwhile waiting until the book is out before raising this issue so that everybody could be informed. Let us know what you think.  
2 Feb 1988

Splendid newsletter.' May 1 ask other colleagues to write if they would like to be on the mailing list?  
Michael R.A.Chance, Birmingham, Engl.

A contribution from Michael Chance on terminology (or any other topic) would indeed be most welcome!

Most assuredly we should ask other colleagues to write and to augment the mailing list. RG

Neurosis/Psychosis in Non-humans and Signal Definition in Humans (Using Emma Quote).

RG

With such issues as Mike McGuire raises, parallels from internal medicine seem useful: Let's conjecture that there evolved a new hemoglobin in a population of humans where an endemic disease held sway. This S variant was unique to humans and conferred resistance to the disease thereby allowing its bearers to reproduce better. Unfortunately, for bearers of a double dose of the S gene, exposure to anoxia produced crises of red cell destruction and severe anemia. Indeed, generations after their ancestors left the area of disease, double gene bearers continued to be victims of S anemia.

This bears on Mike's point because the story assumes that S anemia is unlikely in animals. But study of hemoglobin and its variants in animals is very interesting for human anemias generally and study of S anemia specifically. Indeed, without a reasonably thorough understanding of hemoglobin and its functions, pathophysiologic investigation of S anemia couldn't happen.

Mike notes that psychosis or neurosis don't occur in animals, a point that seems important to him when considering animal behavior in reference to psychiatry. He is not alone of course; such thoughts reflect troubles many have about assumptions underlying this newsletter.

I have little quarrel with Mike's observation of no neurosis or psychosis in animals. But we need an understanding of basic structures of the underlying system that mediates functions potentially gone awry in psychiatry, like hemoglobin's structural importance for oxygen transport functions in the body. When such functions go awry, might psychosis result (as S anemia is hemoglobin gone awry)?

Mike says: "Whether or not, in talking about psychiatric disorders, we are talking about deviations from normal processes...I am not sure."? But, at minimum, such normal processes as hearing, seeing and talking are distorted when a person with auditory and visual hallucinations describes these to others. Psalics simply postulate other intermediary normal processes.

To make this point in another way, do intraspecific communicational states exist that are more fundamental than the emergent variants that psychiatrists have defined as "psychosis" or "neurosis"? Some of us feel that that this hypothesis is ok so long as it can be worked with in producing new and interesting data. Explorations of methods to test it or its derivatives constitutes a primary reason for the AS-CAP Newsletter.

I feel strongly that we must refuse blinders on our thinking because emergent properties that humans possess aren't seen in animals. Rather, we should look for basic plans that don't change from non-humans to humans, though of course each species will have emergent properties as basic plan variants.

For me John Price's ideas about social rank hierarchies of chickens and humans contain excitement. Is the biology underlying social rank hierarchies part of a basic plan of which human hierarchies are simply a variant? His new words and concepts describing commonplace components of human experience indicate to me hypothetical major headings of an evolutionary outline of behavioral determinants, rather than subheadings we may have assumed them to have because of their ordinariness. To put the point simply, what is more ordinary and painful than a put-down, yet more pervasive as part of human and non-human experience?

This brings me to the essay's second part, which reacts to John Price's essay of last issue and to Carolyn Reichelt's concerns about operational definitions and the complexity of communicational behavior.

Recall that John illustrated catathetic signals from Jane Austin's novel Emma (ASCAP #2, 15 Jan 1988). Mr. Knightley delivered "... the most loving put-down in the whole of English literature ..." John asserted Mr. Knightley delivered 3 catathetic signals, or, that he delivered his catathetic signal 3 times. I had trouble with this quantity (there seemed to be many signals during the exchanges) and with the implied definitions.

A "loving put-down" is a contradiction in terms and almost certainly represents a mixture of anathetic and catathetic signals. So I did a quick experimental analysis of the first exchange of the quoted passage, while guided by concepts noted in the first ASCAP issue: Distinctions were made there between signals (S) of two persons (here Mr. Knightley is K and Emma, E) and their catathetic (C) versus anathetic (A) nature. Hence, SC is a catathetic signal versus SA (a buildup or anathetic signal). I arbitrarily used my own sense of units to subdivide the passages and provided some weightings. Please consider this a first draft of possible operational definitions.

First Mr. Knightley's signals(S-K): He looked around, as if to see that no one was near, Score: SA-K. This communication from K to E is anathetic (buildup behavior) because K uses care to not embarrass her.

"Emma, I must once more speak to you as I have been used to do: Score: SC-K. K diminishes her status somewhat (i.e., her resource holding potential or R) as E is made less adult.

a privilege rather endured than allowed, perhaps, Score: SA-K. This builds her slightly because he recognizes (politely) that she won't like it and that she is not a child in fact.

but I must still use it. SC-K. Catathetic, as he again asserts she must be made less adult.

I cannot see you acting wrong, without a remonstrance. SC-K and SA-K. Catathetic with a reprimand but anathetic as he implies he's an advisor (hence out to raise her R).

How could you be so unfeeling to Miss Bates?

introducing a weighting. SA-K because he compares present behavior to a previous ideal.

How could you be so insolent in your wit to a woman of her character, age and situation?

2SC-K + 2SA-K. Ditto (plus K states that E has wit and discrimination).

- Emma I had not thought it possible."

2SC-K + SA-K. Ditto.

Now for our second participant, E: Emma recollected, blushed, was sorry, SA-E. Her blush indicates submission and acknowledgment.

but tried to laugh it off. SC-E. She tried to reduce the power of his points (his R) (that she "tried" implies her try was not strong).

"Nay, how could I help saying what I did? SC-E and SA-E. With a tone of respect, she tries to negate catathetic thrusts of his comments.

--Nobody could have helped it. SC-E and SA-E. Though she tries to diminish the power of his comment, she accedes to his argument.

It was not so very bad. I dare say she did not understand me." SC-E.

Now to use the formulae developed in ASCAP's first issue: First, for each individual, what were the numbers of catathetic and anathetic signals ( $S_i = SA_i - SC_i$ )? For Mr. Knightley, this was  $6 - 7 = -1$  and for Emma,  $3 - 4 = -1$ . Solving for hedonic/agonic tone, we perceive that in sum it is agonic [ $Sha = S-K + S-E = (-1) + (-1) = -2$ ], but not much.

In summary, Carolyn should feel vindicated about stressing the complexity of scoring (and of course great issue may [will] be taken with the details of my analysis and scoring.) But there is beauty in that this passage was the first sample of human communication that we tried to deal with because there is such an admixture of respect and criticism that E and K have for each other; John is very right in that it was a "most loving put-down". They are very human.

Perhaps this illustrates that there should be a measure of complexity for analysis of such communications. In this case what about the sum of SA-K, SC-K, SA-E and SC-E? The net Sha score of -2 is accurate, but we find a complexity sum of 20: The conversation was slightly agonic only, but complex and subtle! Indeed, note considerable texture is revealed by examination of fairly simple (but fundamental we hope) communicational dimensions.

Primates, psychotics and lovers alike, do. create more problems for investigators as well as for other conspecifics. But then perhaps communicational subtlety is why people have bigger brains than chickens,

1. 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 voids to define and illustrate new dimensions of comparisons across species. We expect that work in natural history biology in combination 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 not possible now. Compare to pathogenesis in diseases of internal medicine.

Some neologisms (illustrated in the boxed heading) that will hopefully help implement these goals are those of:

1) Michael I. A. Chance: "hedonic" (and 'agonic') refer to relaxed and fan-loving versus competitive monkey groups and to human groupings as well (first initiated with CJ Jolly in 1970, this term is referenced fully in Issue No. 1, Footnote 1.)

2) John S. Price: "anathetic" (versus "catathetic") are new terms to describe a classification of communications between conspecifics (members of a same species). Catathetic messages are "put-downs" whereas anathetic signals "build-up" the target individual.

3) Russell Gardner, Jr.: "Psalic" is a 2 way acronym: Propensity States Antedating Language in Communication and Programmed Spacings And Linkages In Conspecifics. These describe communicational states conjecturally seen in psychiatric disorders and in normals (humans and non-human animals), such as alpha psalic seen in manics, high profile leaders and dominant non-human animals. Eight psalics have been described.

All of the above new or renewed terms are initiated or elaborated in Chance, MRA (Ed) Social Fabrics of the Mind, due out in early 1988, published by Lawrence Erlbaum Associates, Rove and New York.