

A S C A P        N E W S L E T T E R

Across-Species Comparisons And Psychiatry Newsletter  
Volume I, No.10, 15 September 1988

A new scientific truth does not triumph by convincing its opponents but rather because its opponents die, and a new generation grows up that is familiar with it. Max Planck

(c/o Kissell Gardner, 1.200 Graves Building (D29), University of Texas Medical Branch, Galveston, TX 77550)

For the philosophy guiding this newsletter, see footnote on p. 6 [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.

Notes: The essay of this issue (p.5) on "Disorders of Leadership" (it could also be "Biology of Leadership") springs from the findings of Drs. Weiss and Beck's (W&B) studies on self-report questionnaires bearing on psychopathy. We are grateful for their permission to reproduce Dr Weiss' 1987 invited presentation to the Royal College of Psychiatrists (he also presented this at UTMB).

We note that RD Masters (who has a chapter in the Social Fabrics book) has contributed a letter (p.3). His area of research bears on a similar topic but with a different approach. I hope for ongoing discussion.

Book Announcements: 1) Social Fabrics of the Hind Michael RA Chance (Ed) assisted by DR Omark.

This book outlines a new evolutionary paradigm for understanding human society and mental structure, originating from the editor's work in primate ethology... supported and further elaborated by the contributors. Do two modes of social interaction, the agonistic and hedonic, underlie social life and corresponding mentality? In agonistic mode we are concerned with self security and our attention is much taken up with being accepted by a

group. This mode is based on a recently discovered state of inhibited (braked) mental arousal. Social behaviour is either authoritarian or authority subservient, and has a tendency to control or be controlled... In hedonic mode, .. [mutually supportive] network[s] of personal relationships [fora] ...[H]edonic mode leads to development of self confidence and a relaxed empathic and collaborative personality with intelligence enhanced....

Contents: Introduction. MRA Chance, A Systems Synthesis of Mentality. GR Emory, Social Geometry & Cohesion in Three Primate Species. TKPitcairn, Social Attention and Social Awareness. MDPower, The Cohesive Foragers: Human and Chimpanzee. FBMdeWaal, The Reconciled Hierarchy. JITani, The Origin of Human Equality. JSPrice, Alternative Channels for Negotiating the Definitions of Social Relationships. RGardner, Psychiatric Syndromes as Infrastructure for Intraspecific Communication. PScott-Lewis, The Therapeutic Use of an Ethogram in a Drug Addiction Unit: Social Referent Allegiances. HMontagner et al, Social Interactions of Young Children with Peers and their Modification in Relation to Environmental Factors. CBarner-Barry, The Structure of Politically Relevant Behaviours in Pre-School Peer Groups. RDMasters, Nice Guys DON'T Finish Last: Aggressive and Appeasement Gestures in Media Images of Politicians. TDKemper, The Two Dimensions of Sociality. FWedgwood-Oppenheim, Organizational Culture and the Agonic, Hedonic Bimodality.

2) Human Nature and Suffering by Paul Gilbert. Hove, East Sussex: Lawrence Erlbaum Associates Ltd.

This volume explores the implications of humans as evolved social animals. Gilbert (PG) suggests that evolution has given rise to

a varied set of social competencies which form the basis of our personal knowledge and understanding. These competencies are classified as: a) Care eliciting b) Care giving c) Co-operating and d) Competing. Each of these are seen as core schemata, or archetypal potentials around which knowledge is built and, from which, our propensity for suffering flows. For example, our predisposition to think of ourselves as superior or inferior to others comes from innate meaning-making competencies which evolve from dominance and social ranking. Gilbert shows how primitive competencies become modified by experience and what happens when this modification is unsatisfactory, for example, leading to preoccupations with fantasy which is dominance and power focused.

Throughout the text PG shows how two psychological systems (derived from ethological and experimental work), labelled the defense and safety systems, dominate the unfolding and integration of human mental life. In the last chapter these varied themes are brought together to indicate how the social construction of self arises from the organization of knowledge encoded within the four competencies. PG highlights how cultural factors may modify and activate many of our more primitive competencies leading not only to pathology proneness but also to behaviours that are collectively survival threatening.

Contents: Acknowledgements. Introduction and Overview. A Legacy from the Past: The Role of Human Nature. The Mapping of Human Nature. The Psychobiology of Some Basic Mechanisms. The Psychobiology of Peripheral Systems. Care Eliciting and Attachment Strategies. Care Eliciting and Theories of Psychopathology. Care Giving and Nurturance. Disorders of Care Giving. Co-Operation. Co-Operation: Some Blocks and Pathologies. Competition: Status, Power and Dominance. Some Psychopathologies of Power and Dominance. Beyond the Power of Reason. Personal Reflections. Appendices.

Letters July 22, 1988

I thought you might be interested in more details about our book (Glantz and Pearce [G&P]- ASCAP #9). Here is the description for WWNorton:

3) Exiles from Eden: Psychotherapy from an Evolutionary Perspective updates our understanding of human nature. Bringing together findings from archaeology, anthropology, and biology, G&P describe the evolution of basic human traits, such as the need for fairness, zest for teamwork in small groups, obsession with family, love of gossip, pervasive interest in sex, nagging envy, explosive jealousy, and sex differences in behavior. These traits, which evolved in hunting and gathering bands long before the invention of agriculture, once helped humans to survive and reproduce in a dangerous environment. In the modern world these traits often lead us in directions that make life more difficult, particularly by leading us to have distorted ideals. G&P show how modern men and women can become aware of and sympathetic to their natural inclinations, and how psychotherapists can help people to make wiser compromises between their inclinations and the pressures of society.

Our method is to reflect on the meaning for psychotherapy of these usual human traits—not a book about psychotic or affective disorders. It is about regular human misery.

We have striven to be as clear and direct as possible. We avoid technical language or concepts that would make it difficult.

Are you aware of the work of Robert F Bales? Bales is Prof Emeritus in Social Relations from Harvard. His life work is the study of small groups. He is actively working in business consultation now, using Symalog, a method of polling individuals about how they see the other people in the group, assembling their traits into diagrams of the groups displaying three dimensions Bales believes to be crucial (and not factors of each other), and letting group members know more about what is going on in the group and how it might change. The three dimensions of individual traits are: friendly-unfriendly, dominant-submissive, and accepting authority in regard to tasks-not accepting authority. The

last dimension can also be thought of as "degree of task orientation" (I think). .. Bales approach seems relevant to higher level groups. ..

What seems pertinent to your point of view is his appreciation of the role of friendliness in group process. (He is friendly.)

John K Pearce, Cambridge, Mass

In your list of "basic human traits" I gather you are talking of traits all humans have, including those that didn't start with humans. ASCAP is very interested in including the counterparts and/or forerunners in non-humans of such traits involved in group process, eg, what are the neural/endocrine mechanics of small group attachment behaviors? Do we/how do we share these with non-humans? Do they have the same design features but different origins than neural/endocrine mechanics of groupy other species? Or are they homologous (shared with ancestors common to the humans and the non-humans)? RG

July 25 88

We (The Birmingham Group) are still holding discussions on definitions. As we go deeper into the nature of the two modes. Agonic and Hedonic, the influence of levels both as expressed between species, non-human primates and ourselves, and within the brain itself, introduces unresolved complications. These we hope will partly be resolved by integrating what we know of the two modes with Paul MacLean's triune brain since this is another reflection of the evolutionary process culminating in ourselves.

Michael RA Chance, Birmingham, Engl

Aug, 1988

A quick note in reply to ASCAP #9. I find the terminological issues very secondary and ultimately trivial. What is needed is an objective description of cues - and of the cul-

tural expectations associated with them (which our studies show can vary significantly). Context matters too, as does prior experience, in determining social interaction. As a result it is more useful to focus on primary emotions than on fuzzy debates about theoretical labels - a threat can, after all, reassure me if it is directed toward my enemy by my friend, and terrorize me if directed to me by my rival. The enclosed may explain my point of view. [2]

RD Masters, Dartmouth, Hanover, NH

Objective descriptions and context indeed are very important (compare WJ Smith [3] for non-humans). But terminology (and the concepts the terms apply to) are hardly secondary, trivial or fuzzy if a central focus is kept upon our aim of across-species comparisons, especially as multiple lines of inquiry become necessary. Indeed, what are "primary" emotions? What are "emotions" from an evolutionary viewpoint? (See response to JK Pearce this page as that applies here as well.) We need to be very careful about reified concepts that lead us to think we know more than we do. Thus, to answer my own question, might emotional expression be conspecific communication as well as internal state. Much more can/will be said but enough for now. RG

Factor Analysis of Missouri Psychopathy Scale by JMA Weiss & NC Beck

U Missouri Sch of Med, Columbia, Mo  
Ed. hint: read the items less as "offender" terminology and lore as social rank hierarchical terms:  
Introduction: This paper compares statistically matched groups in India and the United States using 947 Ss tested and interviewed in both countries. In each location, Ss were in 4 categories: community-resident controls, general psychiatric patients, alcohol/drug abusers, and imprisoned criminals. The instrument used was our Missouri Descriptive In-

dex (MDI), an empirically-derived self-report inventory whose items sample a variety of psychiatric and social problems. The only major cultural differences demonstrated on the MDI were that American males tended to endorse more items related to aggression while Indians of both sexes tended to endorse more items relating to physical health problems.

A series of cluster and discriminant function analyses provided 23 items for a psychopathy scale adjusted for culture, class, and gender. This had high content, construct, and concurrent validity. Frequency counts of item scores produced a quadrimodal distribution: non-psychopaths (both "ill" and "normal"), partial or parapathopaths, and true psychopaths. Factor analyses of these four groups emphasized that traits basic to the psychopathic character are: aggression and impulsivity, social and sexual irresponsibility, and arrogance/bravado, as well as propensity for problem drinking/substance abuse, all with evidence of generalized poor judgment and chronicity.

Psychopathy Factor 1: impulsive aggressivity.

- Since childhood I've been losing my temper when I get angry.
- At times I feel like hurting someone else physically.
- For years, I've done stupid things when I get upset.
- I get into arguments with people in the family or on the job.
- I've got a quick fuse when it comes to obeying silly laws.
- I get mad when cops try to push me around.
- Family troubles are the worst of my problems.

Loadings: 99% of true psychopaths  
80% of parapathopaths  
25% of non-Pd "normals"  
18% of non-Pd "ill"

Psychopathy Factor 2: sexual/social irresponsibility

- It doesn't matter if you pick up someone just for a one-night stand
- Having sex with the same partner gets to be a drag after a while
- I like to drink when things get slow
- I get mad when cops try to push me around
- I've got a quick fuse when it comes to obeying silly laws.

Loadings: 87% of true psychopaths  
68\* of parapathopaths  
24\* of non-Pd "normals"  
4\* of non-Pd "ill"

Psychopathy Factor 3: Arrogant bravado

- Host rules are made for fools and suckers
- I'm better than my mate in almost every way
- My home life is bad because other people act too bossy
- Most kids steal once in a while, when there's nothing more interesting to do
- I get into arguments with people in the family or on the job
- I've got a quick fuse when it comes to obeying silly laws.

Loadings: 85% of true psychopaths  
57% of parapathopaths  
21% of non-Pd "normals"  
19% of non-Pd "ill"

Psychopathy factor 4: Problem drinking/substance abuse

- I like to drink when things get slow
- I keep getting in jams for no good reason
- For years, I've done stupid things when I get upset
- I need help
- I am careless about money matters
- I lose jobs because of the way I act
- My nervousness makes me blue
- I want to go to a hospital because I am upset

Loadings: 74% of true psychopaths  
59% of parapathopaths  
32% of non-Pd "normals"  
49% of non-Pd "ill"

Conclusion: Since the differences between "normal" controls and diagnostic groups were significantly greater than those between cultural groups regardless of diagnostic assignment, our hypothesis that

transcultural differences are more important than intracultural differences in determining psychopathic traits and behaviors appears to have been substantiated.

Essay: Disorders of Leadership. RG

Is leadership a fundamental behavior pattern? I argue here yes: fundamental, basic, a behavior pattern shared with non-human animals, even rather primitive ones, such as fish or reptiles dominant over conspecifics. My conventional sense growing up was quite opposite of this: leadership behaviors didn't seem different than anyone else's, except perhaps for polish in an after-dinner speech, or changes in manners or posture taught in a self-improvement course. However, I remember a schoolyard bully who wasn't polished, but he got other kids (peer conspecifics including me!) paying attention (Cf Chance).

Others had noticed earlier. The Greek historian, Thucydides, stated (c.420 BC) that "Of the Gods we believe, and of men we know, that by a necessary law of their nature they rule whenever they can." [4] Interestingly, in his period of ancient Greece (the millenium before Christ), democracy is thought to have been born [5], ie, during this historical era, the strong individual's push to rule became somehow modulated so the "law of their nature" became more attuned to laws evolved culturally. Even rulers, humans seemed to learn then, can be ruled, or at least influenced, by those being ruled.

Of course, we have no trouble identifying modern day tyrants who make Thucydides sound up-to-date. And so do psychopaths, as W&B show above. Such people seem creatures of a nature unable to ever subjugate to anyone. Do they exhibit, we question, disordered leadership, in a manner similar to mania.

Can the terms used in the MDI be re-cart in social rank hierarchical terms? On inspection of them (p.4), I think so. Using factor labels, here's a summary:

<u>Factor name</u>	<u>Suggested translation</u>
1. Impulsive aggressivity	Aggressive privileges of dominants
2. Sexual/social irresponsibility	Sexual/other prerogatives of "entitled" tyrants
3. Arrogant bravado	Above-the-law attitudes mixed in with assumption of a leader's command and ability to punish others assumed to be subordinates
4. Problem drnkng substance abuse	"Noone tells me what to do & I'll take what I can"

Conclusion: 1) The psychopathy self-report statements with greatest loadings have easily detectable social rank hierarchical meanings. 2) Transcultural findings indicate more likelihood that a genetically determined communicational propensity state might be operating, ie, alpha psalic. For future studies of the genetics of alpha psalic and propensity for demonstrating abnormal phenotypes for it, not only bipolar illness should be examined, but psychopathy (and other conditions) as well. The time may soon be coming - perhaps not too far off - when a gene conferring vulnerability to bipolar disorder will be discovered and can be spliced into inbred mice. [6]. What can be looked for in the behavior of mice that might have relevance to the disorder? At this time, we have no relevant metric! Hypothesizing fundamental genetic programs that determine hypothetical alpha psalics may help, as well as what programs determine thresholds for its activation, in patients and in normals, eg, charismatic leaders.

ASCAP #11 (October 15, 1988) will present a Reichelt-Price exchange of correspondence about communications of/with the depressed person. Also, A Randrup (recall ASCAP #9) contributed another letter and an abstract on "stereotypy" and across-species investigations of this psychiatric phenomenon seen in zoo animals

1. 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 not 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 "agonic" refer to the tone of groupings of conspecifics (members of a same species) i.e., relaxed and fun-loving versus tense and competitive. First initiated with CJ Jolly in 1970, this term is referenced fully in ASCAP #1, Footnote 1.
- b) John S. Price: "anathetic" and "catathetic" describe conspecific communications. Catathetic messages "put-down" whereas anathetic signals "build-up" the resource holding potential (R) 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 communicational states conjecturely seen with psychiatric disorder and normality (human and non-human), ie, alpha psalic seen in manics, high profile leaders and dominant non-human animals. Eight 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, HRA (Ed) Social Fabrics of the Mind, due out in 1988, published by Lawrence Erlbaum Associates, Hove and NY

- ? a) Masters RD, Sullivan DG, Lanzetta JT, McHugo GJ & Englis BG: The facial displays of leaders: Toward an ethology of human politics. (1986) J Social Biol Struct 9: 319-343.
- b) Sullivan DG Masters RD: "Happy Warriors": Leaders' facial displays, viewers' emotions, and political support (1988) Amer J Polit Sci 32: 345-368.

3. Smith WJ (1977): The Behavior of Communicating: An Ethological Approach. Cambridge: Harvard U Press

4. Thucydides: History of the Pelopennesian War translated by Richard Crawley. London and Toronto: J.M.Dent and Sons, Ltd, 1910, p.397.

5. a) Grant M (1987): The Rise of the Greeks NY: Charles Scribner's Sons
- b) Hopper RJ (1976): The Early Greeks NY: Barnes and Noble

6. Cox D (1988) Personal communication