

ASCAP NEWSLETTER

Across-Species Comparisons And Psychiatry Newsletter
Volume 3, No. 3, 15 March 1990

"Scientists cooperate with each other in a metaphorical sense when they engage in disputes, whether amicable or not, but they also cooperate in a literal sense when they form research groups." Hull¹

(c/o Russell Gardner, 1200 Graves Building (D29), University of Texas Medical Branch, Galveston, TX 77550)²

For the philosophy guiding this newsletter, predicated upon combinations of top-down and bottom-up analyses, see footnote on p10³.

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: This issue refocuses ASCAP⁴ on Galanter's book on cults: B Wenegrat reviews it as our featured essay. Reacting also to the Aug issue, L Kofoed sends a provocative letter. MT Singer also reviewed Galanter's book (for Cult Awareness Network News) and makes an implicit point on across-species comparisons that deserves attention.

Two polemics get mentioned this issue: 1) the Harvard antisociobiologists vs the adaptationists. 2) Anti-cultists vs Galanter/Wenegrat-type students of cults. I will note that basic plans might reduce the heat and shed some light on the issues generating both conflicts.

Notes: Remember! The Boston planning group for the "Across-National Comparisons and Psychiatry" ANCAP study meets Sunday, March 25, 1990 from 8:30 a.m. to noon at McLean Hospital. The specific location is Room 132, DeMarnesse Building, 115 Mill St, Belmont, MA (near Trapello Road).

Human Behavior Bibliography Project:

Readers are invited to participate in a project to compile a Bibliography of Human Behavior.

The project will collect titles from numerous disciplines in which human behavior is researched according to methods of the biological sciences. Main fields to be covered are Human Evolution, Cultural Evolution (including Prehistory), Human Biology, Ethology, Sociobiology, Biological Anthropology, Social Psychology, Political Science, Experimental Psychology (learning theory), Endocrinology, Brain Sciences, and Psychopathology.

The bibliography will have Name & Subject index.

Pro-Cite™ is the project database application. It is expected that the published bibliography will be available in book form and on disk, thus giving users great flexibility.

Because of the bibliography's broad scope, standard methods of title search are being augmented by solicitation of titles. If you choose to submit titles, please use the following format:

- Place your ten most significant publications at the beginning of the list.
- Write journal titles out in full. For books, please indicate both the publishers name and place of publication.
- After each title, enter three key words for use in the subject index.
- Titles published after 1980 are preferred. Titles prior to 1980 should be particularly significant.
- Include "in press" publications.

The estimated duration of the project is two years. To facilitate inputting, please submit at your earliest convenience.

Receipt of bibliographies will be acknowledged by surface mail postcard or by Bitnet.

The Project Director is HP Caton; associates are JMC van der Dennen & FK Salter. Editing will be assisted by Section Editors for the fields covered.

Project sponsors are European Sociobiological Society and the Association for Politics and the Life Sciences.

Title lists should be sent to:

Manager
Bibliography Project
Griffith University
Brisbane 4111, Australia
E-Mail: humcaton@pegasus.itc.gu.oz.au

Letters December 28, 1989

The various themes of ASCAP Vol 2 #8 were very interesting to me - your discussion of "basic plans" and of Marc Galanter's interesting work leads me to send you a copy of a recent article of mine. Indeed group membership may activate a basic biologic plan, but I propose a considerably more basic plan than your alpha-reciprocal psalic. The reciprocation involved is not charisma, but rather involvement in a predictable closed group environment, and the leader's major contributions are exclusivity and detailed behavioral rules - basically social structural contributions. I believe "reciprocal altruism", in the sense of Triver's 1971 discussion, is a better explanation than extended kin selection models for the cohesiveness of all sorts of groups where relatedness between individuals is not much higher than for any random members of the population.

The discussion in my article points out the development of a variety of "analogous" behaviors and social constructs such as deceitful communication and reputation in other species, allowing individuals to exploit the adaptive possibilities inherent in reciprocation. I would argue that a greater understanding of reciprocity in its simplest form, with all the possibilities inherent in such a system, will serve us better in understanding social behavior than premature elaboration of "uniquely human" or even "uniquely primate" social characteristics.

Lial Kofoed, VA, White River Jct, VT

First the reference:

Kofoed L, MacMillan J: Darwinian evolution of social behavior: implications for group psychotherapy. Psychiatry 1989;52:475-481

You raise the interesting issue of what is more basic: reciprocation to alpha behavior vs closed group affiliation. I understand your reasoning to be that the group therapy situations in which you have been involved function best with a low profile leader and the group members seem involved mostly with each other, via various cohesion mechanisms, rather than via a leader. Your language of explanation invokes reciprocal altruism (RA) vs inclusive fitness (IF) as relevant to "basicness". Would you provide for a future issue of ASCAP how RA seems to you more basic than IF?

But leaving such language aside in this reply, your question goes directly to basic plans. R Hinde in his recent book alludes to taking a middle course in a conflict between the Harvard antisociobiologists and the "adaptationists." Gould and Lewontin⁶ in a ridiculing manner have taken on those they feel in a Panglossian fashion consider everything adaptive; G&L argue instead that there is considerable interaction between genetic "accidents" and inherited traits, as well as between things that embroider core traits and core traits themselves. They note by way of a vivid metaphor that in a Venetian cathedral, wonderful decorations on the interior of an arch tell a compelling story; one architecturally naive could therefore see the decorations themselves as the reason for the structure and its characteristics. In parallel, superficial characteristics of behaviors could be seen as the reasons for a behavior's evolution. On inspecting the cathedral, however, the decorations are obviously embellishments of structures holding the edifice up. The

structural elements, not the embellishments, came first, are the reason for the arch's being.

Basic plans are analogous to the structure of the cathedral. In contrast to those who wax derisive about adaptationist thinking, dispassionate descriptions of basic plans and less basic plans seem interesting. However and whenever the decorations in the cathedral got put there, they of course served some adaptive purpose (not the same as the arches which serve different - older, in some ways more fundamental - adaptive purposes). The question is not that of adaptation but one of levels and which level is older and more basic.

In parallel, group affiliation, with the leader charismatically involved or not, is obviously adaptive also. Now the question of Kofoed is which of the following is structural vs embellishment: the leader-follower interaction (as I think) or the member-member interaction with the leader more-or-less superfluous. My hunch holds that in the course of evolution from less complicated non-humans to more complicated human predecessors to humans themselves, some powerful neuronal structures relating to territoriality and/or social rank hierarchy were like the arches, there first because group connectivity helped individual adaptation to hold the building up); embellished, these produced democratic groups with seeming indifference to the leader. Structural components may have gotten obscured by the embellishment. The follower-follower interactions may so command our attention that we call them member-member instead. DNA encoding more primitive biological plans may be less evident than stones and mortar of the Venetians which can be seen as more basic on simple inspection. We hope that genomic translation of proteins and structure and function will tell us someday a similar story.

Thus, whether my "hunch" is true is as yet an unanswered question. Perhaps Lial Kofoed will point out in future communications that schools of fish or flocks of birds without obvious leaders are more basic than the social rank hierarchy models ASCAP often focuses on and thus a better model from non-humans for the group behavior we see in humans, which group therapy may exemplify. However, recall that Price started with low ranking chickens as "depressed."

Letters

Jan 18-1990

I have read your latest issue of ASCAP. I am interested in contributing to the society, both economically and with hypotheses derived from 7 years of ethological depression studies.

I send two papers published in Acta Psychiatr Scand and a survey of the hypotheses derived from the study.. [with] practical clinical considerations.

I am educated as a biologist and specialized in human ethology and ethological psychiatry...

Tyge Schelde, Frederiksberg Hosp, Denmark

The subscription for ASCAP is listed in footnote 2; the society is nothing more formal than "The ASCAP Readership." (ASCAP is not identical with the Human Behavior and Evolution group.) However, with \$18 we will welcome you as "a reader!"

I trust that I can publish your "Outline: An ethological and evolutionary view of endogenous depression-hypotheses and practical implications" in abstracted form in a future ASCAP. I will send it as is to those I know are coming to the Boston ANCAP meeting.

Your references are: 1) Schelde JTM, Pedersen J, Hannibal E, Behnke K, Nielsen BM, Hertz M: An ethologi-

cal analysis of depression: comparison between ethological recording and Hamilton rating of five endogenously depressed patients. Acta Psychiatr Scand 1988; 78:331-340, and 2) Pedersen J, Schelde JTM, Hannibal E, Behnke K, Nielsen BM, Hertz M: An ethological description of depression. Acta Psychiatr Scand 1988; 78:320-330.

Letters Jan 21, 1990

...observations you made about the Human Genome Project...were very interesting. I am currently at work, on a new book about the project, or more precisely about what the project will teach us about ourselves and our evolution. A good deal of the book will explore quantitative variation and how difficult it is to deal with it. At one I point I examine the efforts to track down schizophrenia genes, and how these genes seem to softly and suddenly steal away. The Amish manic depression gene has done the same thing, it seems.

I did have some thoughts about how pooling together the schizophrenia pedigrees from all those studies might yield up more information... Do you have some recent citations, or know of anything in press, about the latest efforts to track down genes for these two diseases? I am also trying to get some anecdotal information... to flesh out the story of the Canadian family in which the members with schizophrenia also have a partial triplication of chromosome 5. Do you know the circumstantial details of any similar stories?

Christopher Wills, U Cal, San Diego

The Amish reference is Kelsoe JR, Ginns EI, Egeland JA, Gerhard DS, Goldstein AM, Bale SJ, Pauls DL, Long RT, Kidd KK, Conte G, Housman DE, Paul SM: Re-evaluation of the linkage relationship between chromosome 11p

loci and the gene for bipolar affective disorder in the Old Order Amish Nature 1989;342:238-243.

Can readers help Dr Wills whose graceful excerpt instructed us 12/89?

Letters(cont.)

Jan 29/90

Thanx so much for continuing to send the ASCAP Newsletter... I was in San Antonio last week talking with the Southwest Biomedical Research Foundation (big colonies of baboons and chimps) and the UTSA Health Sciences Center Dept. of Psychiatry (Dr Charles Bowden, Dr Robert Leon, etc) about collaborative efforts to collect informative families for psychiatric linkage studies. No studies have been done on the Mexican-American population, which may be a good source of large families for genetic studies. If things go well at San Antonio, I may be talking to you about a similar search at Galveston. Take care. See you at APA.

JL Kennedy, Human Genetics, Yale

Letters (cont.) Jan, 1990

I've asked [the publisher] to send you a review copy of the 2nd edition of The Imperial Animal which has a new introduction in which your readers may be interested.

Best wishes, Lionel Tiger, Rutgers

Received. Much obliged. Are there any problems with replicating portions in a future ASCAP?

Letters (cont.) 30 Jan-90

Enclosed the brief essay, which we have promised earlier.

Thank you for the January no. of ASCAP. We have here a photocopy of Morice's thesis with more comprehensive description of his work.

Axel Randrup Crete Sorensen
St Hans Hosp, Roskilde-Denmark

Thanks for your essay which will enter a future issue of ASCAP. Do you have Dr Morice's current address, as he too might fruitfully contribute a summary essay for ASCAP? The words that the Pintupi use for anger/aggression and psychosis and how these relate to the published words for fear/anxiety and grief/depression seem very interesting for ANCAP.

Letters(cont.) 2-9-90

[With reference to the Hospital Anxiety and Depression Scale presented in ASCAP vol 3 #1 page 2], Dr Snaith's seven descriptors inadequately describe depression. I believe it is reasonable to omit sleep and appetite changes, because they can be associated with so many other problems. But almost all his items relate to anhedonia and there is more to it than that. To list some ideas he didn't touch.

1. He seems to be trying to get at a sense of hopelessness with #12 [I look forward to things] but not looking forward to things doesn't adequately describe a patient's despair. Something like "I believe that I'll never feel better" comes closer.

2. He completely misses the overwhelming guilt feelings over things that are not the patient's fault - global responsibility issues - the patient is bad, sinful; the illness is a just/unjust punishment. The patient believes that his anger can kill - magical thinking stuff.

3. A patient may feel invisible, as if he were some kind of fantasy and might not really exist at all. I believe such ideation is related to submissive extremes.

4. Related to this "invisibility" is the sense of valuelessness so pervasive in the depressed patient.

5. Also related is the intense sense of inadequacy to everything and everyone.

6. And most important, I believe,

is the "knowledge" the depressed patient may "have", that he has no control (and deserves none) over his own life, being at the mercy of everyone and everything. That's very important, because when the patient begins to know that he does have some control, he may feel better. Suicidal threats are partially a grasping for some control, poor as it is.

The four point scale is probably ok, because it could measure degree, if you are interested in that. However, if I understand correctly, you would like to develop an international, multi-cultural scale. So does degree matter? Perhaps including more descriptors, such as I listed, might serve the purpose better. "Yes" and "no" answers would be easier for relatively untrained administrators of the instrument to use, such as the nurse's aides that you and I used in the GERIAT nursing home project in Minnesota.⁷

Issues such as I've raised are too important to leave out of your deliberations. I'm convinced that hierarchical matters are very important; so is the related sense of personal inadequacy. As it stands, the depression part of the instrument is incomplete; all of the items used could have other explanations than depression.

Carolyn Reichelt, Wadena, MN

Letters(cont.) 9-2-90

.. would it be helpful to circulate my evolution of social anxiety paper before the [ANCAP] conference? Obviously any feedback would be great for me...

The issue of depression and rank is not so much defeat as suggested in last ASCAP and what I initially thought, but social control and degree of inhibition in a social world. Hence shame etc play important roles.

Best wishes, Paul Gilbert, Derbyshire, England

* Featured Essay *

Galanter's Sociobiological Theory Discussed by B Wenegrat

In his recently published book Cults: Faith, Healing, and Coercion (Oxford U Press, 1989), Marc Galanter - Professor of Psychiatry at NYU Med School, Chairman of the Amer Psychiat Assoc's Committee on Psychiatry and Religion, and well-known researcher - discusses research and theories pertinent to understanding why people join religious cults. One theory he discusses is his own sociobiological theory of cult membership. Galanter first outlined his theory in 1978, based on a study of members of the Divine Light Mission.⁸ The 1978 article attracted little attention, however; to my knowledge, discussion of his theory in his recent book is the first time he has returned to the thesis since first describing it.

I have elsewhere reviewed empirical evidence pertinent to Galanter's sociobiological theory. The following is an abbreviated discussion of Galanter's theory, empirical studies supporting it, its applicability to mainstream religion, and its practical implications.

Galanter turned to sociobiological concepts in order to account for data gathered in a survey of 119 converts to the Divine Light Mission, an Eastern religious cult which once was notorious for having a 13 year old guru, known as Maharaj Ji.¹⁰ Converts retrospectively reported that joining the Mission had alleviated psychological symptoms from which they had earlier suffered. The degree of reported relief correlated strongly with the extent to which converts perceived themselves to have joined a cohesive and exclusive social group. Galanter hypothesized that the psychological symptoms reportedly relieved by cult membership were due to disaffiliation from tightly-knit larger-than-family so-

cial groups. Membership in the Mission, according to Galanter, alleviated the painful state of disaffiliation, leading to symptom relief.

From a sociobiological viewpoint, individuals must belong to stable larger-than-family social groups in order to adhere to reciprocal altruism, mutualism, and other advantageous social strategies. In the environment in which human social behavior evolved, failure to maintain membership in a stable social group must have been severely penalized, in an inclusive fitness sense. Thus, perceptual, cognitive, and affective mechanisms which act to maintain group membership must have been selected for and should be apparent today. The most salient innate cognitive dispositions promoting affiliations with stable groups are the tendencies to categorize others invidiously as in-group or out-group members and the tendency to conform to the consensual reality of the social group. The readiness with which individuals categorize others according to their membership in arbitrary social groups has been demonstrated experimentally. The tendency to cognitive conformity is especially important to engagement in mutualistic projects and has been demonstrated in laboratory as well as naturalistic settings. The most salient affective disposition promoting affiliation is the tendency to become distressed when affiliation is threatened. This is the distress that, according to Galanter, motivates cult membership and is relieved following conversion. It is most dramatically evident in hex death and other phenomena attendant on ostracism.

Galanter's theory leads to several predictions. First, persons likely to join a cult should be disaffiliated from other social groups. In their germinal study of the conversion process, Lofland and Stark showed that this indeed is the

case.¹¹ According to L&S, converts to the cult they studied were so socially isolated that they "could, for the most part, simply fall out of relatively conventional society unnoticed." Levine observed the same phenomena among converts to several other cults, and Galanter¹⁰ showed that disaffiliation predicted conversion among attendees at Unification Church ("Moonie") workshops.

Cult recruiters go out of their way to target groups, such as university students, young travellers, or the elderly infirm, who are likely to be disaffiliated from social groups. Young recruits from university campuses provide a major source of cult members.

Second, Galanter's theory predicts that cult recruitment will proceed by making the subject feel part of the group, rather than by ideologic conversion. In fact, virtually all cults today recruit by offering comradeship to potential converts. They "love bomb" them, as the process has been called.¹³ Religious dogma is mentioned only after potential recruits have become attached to the group. In L&S's phrase, adopting the dogma at that point is merely coming to "accept the opinions of one's friends."¹¹ Of course, accepting the consensual reality of one's perceived social group may be especially easy, due to innate dispositions. Long and Hadden described early unsuccessful efforts of the Unification Church to recruit new members by ideologic conversion, without the preceding effort to integrate the potential recruit into the social group.¹⁴

Third, Galanter's theory predicts that commitment to religious cults will be enhanced if members maintain close proximity to each other and isolate themselves from others. L&S considered communal residence essential to consolidating commitment of cult members.¹¹ Galanter and his co-workers found that Unification Church

members spent 94 percent of their nights in communal residences. Before Unification Church members lived in communal residences, there was a high attrition rate among new members.¹⁴ Currently all major religious cults have communal living arrangements. Historically, social isolation, whether imposed from without, as it was upon the Muslims, or voluntary, as it was for the People's Temple, appears to help stabilize new religious sects.

Finally, insofar as feelings of solidarity with the social group motivate cult membership, those who feel that less intensely should be the first to leave. Studies of individuals who voluntarily leave religious cults indicate that their leaving was preceded by a period of disaffiliation from the social group, and was not especially motivated by ideological issues.

Studies by Allport and others show that a significant proportion of members of mainstream churches are ethnocentric, conformist, racially prejudiced, and highly concerned with status in their social group. ' Because he believed that their religiosity serves other than spiritual needs, Allport called these individuals "extrinsically" religious, and differentiated them from other, "intrinsically" religious, members of mainstream churches. In light of Galanter's thesis about religious cults, and the obvious group significance of ethnocentrism, racial prejudice, conformity and status seeking, it is easy to imagine that the needs extrinsically religious persons are trying to satisfy are related to membership in larger-than-family groups. If so, the same innate affective need for affiliation with larger-than-family groups fuels religious cults and contributes to mainstream religion.

Many secular groups resemble religious cults in that they provide

a close-knit, exclusionary affiliative experience for their members. Galanter's theory may be applicable to these secular groups as well as to religious ones.

The practical implications of Galanter's theory are two-fold. First, Galanter's theory implies that religious cult membership provides an indirect measure of society's failure to constructively satisfy group-affiliative needs, especially of the young. Young people can make friends, of course, but our society may be failing to provide them with a real sense of community, which is more than the sum of their dyadic relationships. This point has been convincingly made by Bellah and his colleagues. Consequently, public policy makers who wish to decrease the appeal of cults should aim their efforts less toward individuals than toward their social conditions. On university campuses, for example, efforts to expedite the social integration of young college students might shut off cult recruiters from some of their likeliest prospects. Freshman students arriving at large campuses today often feel cut off from any real community. Although mainstream religious groups and other organizations may help some students overcome their alienation, communal living arrangements are probably most important in the crucial period when the student has just left home. Yet, on many large campuses there are severe shortages of affordable spaces in communal residence halls. Along with other measures combatting alienation, building adequate residence halls may immunize some students against religious cults much more effectively than didactic warnings.

Second, psychiatrists and clinical psychologists are often called upon to treat individuals who have been involved in religious cults or secular cult-like groups. Galanter's theory has important clinical im-

plications for understanding these patients. For example, insofar as Galanter's theory is correct, many cult members will be found to have joined their cults for reasons adventitious to their personality structure. Instead, chance conditions leading to a state of disaffiliation will be found to have made them vulnerable to the cult's appeal. Insofar as personality leads to cult conversion, it will be because personality problems have impaired the patient's ability to forge on his or her own the type of relational bonds provided by the cult. Galanter's theory, in other words, draws the clinician's attention to social anxieties, inhibitions, and skills, rather than to the existential or family issues other theoretical frameworks single out for attention. Galanter's theory also implies that the criterion for health in ex-cult members should be the ability to satisfy group-affiliative needs in a socially constructive way, consistent with their fullest individual development, and not simply staying away from the cults they left. Many ex-cult members go on to lead alienated, dissatisfied lives, or to join secular groups with cult-like social structures. Many others may become extrinsically religious members of mainstream churches. Outcomes like these may please family members and public policy makers desiring to curb religious cults, but in light of Galanter's thesis, they indicate the apparent "cure" has merely been symptomatic. The underlying problem with larger-than-family social groups has not been resolved in a constructive fashion.

Finally, Galanter's theory is useful for understanding religious behaviors of the mentally ill. For example, studies have shown that although patients with schizophrenia-like disorders are often religiously preoccupied, they are not especially

drawn to cult-like religious groups, nor especially successful once inside them.^{9b} These studies can be understood in light of Galanter's theory that membership in these groups serves affiliative needs. Many of the signs and symptoms of schizophrenia spectrum disorders can be seen as manifestations of a failure to adhere to innate group-related social strategies.¹⁹ In particular, patients with these disorders fail to form the affiliative bonds that make it possible to overcome interpersonal fears in close-knit groups. Thus, in spite of their religiosity, they lack the usual motives for religious cult membership.

Cults: Faith, Healing, and Coercion has rightly attracted considerable public and scientific attention. It will undoubtedly become a source of inspiration to those who believe in the value of applying evolutionary concepts to complex human behaviors. I recommend it highly to ASCAP readers.

From "Special Book Review Section"
CAN:Cult Awareness Network News 12/89

Margaret Thaler Singer is a distinguished US psychologist whose extraordinarily skilled reading of Rorschach responses figured powerfully in a remarkable study several decades ago. As a fierce advocate of free and independent thinking, she has become concerned about aggressive recruiting of disaffiliated youth by cults and their power to hold them. In her review of Galanter's book, she criticizes that he links under the rubric of "charismatic groups" multiple and highly different organizations, some bad, some good, some coercive, some less coercive. Thus, for example, she states: "Few persons familiar with Alcoholics Anonymous and its non-coercive, non-violent, independence promoting methods would attempt to explain its conduct in the

same category with the Ayatollahs and many modern cults." But she raises issues that can interest us, even as for ASCAP purposes we are less political - as we oppose evil forces less by political means than to understand their biology.

To quote further: "Galanter's ...two tactics - calling diverse groups charismatic but ignoring their vast differences in conduct, and beginning his explanations about membership only after a person has become involved with a group, keep him in logical binds throughout the volume.

One similarity does not equate diverse groups: One common attribution (charismatic) among myriads of characteristics on which groups such as cults, the Ayatollah, and Alcoholics Anonymous differ, is not logically the most important characteristic in understanding their conduct. For example-, elephants, lions and sheep all breathe oxygen. However, elephants are herbivores with no natural predators; lions are carnivores with no natural predators and sheep are predators who get preyed on a lot. It is their differences that are paramount in explaining their conduct. Their differences tell more about the conduct of the animals than the fact that all these organisms metabolize oxygen. ...

In response to Lial Kofoed earlier in this issue, we noted that the polemic between the Harvard antisociobiologists and the adaptationists is one that can be resolved by invoking the ideas of levels and basic plans; similarly, a common basic characteristic can equate diverse groups while at the same time not minimizing nor trivializing their differences.

Let us note that oxidative metabolism is a basic plan or platform upon which embellishments can tell different adaptive stories. What diverse animals eat or how they defend themselves are the levels of analysis that Dr Singer would prefer to work. But such variations are players and the basic plan or platform is the stage. Perhaps so to are the variations, evil and not evil, upon a group affiliation basic plan of humans and their ancestors, based on social rank hierarchy (or not).

1. Hull DL (1988): Science as a Process: An Evolutionary Account of the Social and Conceptual Development of Science. Chicago: U Chi Press, p 15
2. For ASCAP Vol 3 (Jan through Dec, 1990) please send \$18 (US dollars) for the 12 issues.
3. 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. Both top-down and bottom-up analyses are needed. 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.
 - b. J.S.Price: "anathetic" and "catathetic" describe conspecific messages. Catathetic messages "put-down" and anathetic "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 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. 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).

These new or renewed terms are initiated or elaborated in Chance, MRA (Ed) Social Fabrics of the Mind. Hove and NJ: Lawrence Erlbaum Associates, 1988.

 - d. Paul Gilbert: Social Attention Holding Power/Potential (SAHP) focuses upon the non-aggressive facets of leadership when this is deployed in the hedonic mode. See ASCAP v.2, #1 and his new book: Human Nature and Suffering, Hove and NJ: Lawrence Erlbaum, 1989.
4. ASCAP Vol 2, #8, Aug 1989
5. Hinde RA (1987): Individuals, relationships & culture: Links between ethology and the social sciences. Cambridge: Cambridge U Press
6. Gould SJ, Lewontin RC: The spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme. Proc R Soc Lond B 1979;205:581-598.
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9. a. Wenegrat B (1989): Religious cult membership: A sociobiological model. In M Galanter (Ed.) Cults and new Religious Movements: A Report of the American Psychiatric Association. Washington, D.C.: Amer Psychiat Press
- 9.b . Wenegrat B (1990): The Divine Archetype: The Sociobiology and Psychology of Religion. Lexington, MA: Lexington Books.

10. Galanter M: Psychological induction into the large-group: Findings from a modern religious sect. Amer J Psychiat. 1980;137:1574.
11. Lofland J, Stark R: Becoming a world-saver: A theory of conversion to a deviant perspective. American Sociological Review. 1965;30:862.
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15. Galanter M, Rabkin R, Rabkin J, et al: The "Moonies": A psychological study of conversion and membership in a contemporary religious sect. Am J of Psychiat 1979;136:165.
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- 17.b. Allport GW: The religious context of prejudice. J Scientific Study of Religion 1966;5:447.
- 17.c. Allport, GW: Ross JM (1967): Personal religious orientation and prejudice. Journal of Personality and Social Psychology 5:432.
- 17.d. Spilka B, Hood RW, Gorsuch RL (1985): The Psychology of Religion: An Empirical Approach. Englewood Cliffs, NJ: Prentice-Hall.
18. Bellah RN, Madsen R, Sullivan WM, et al (1985): Habits of the Heart: Individualism and Commitment in American Life. Berkeley: University of California Press.
19. Wenegrat, B (1984): Sociobiology and Mental Disorder: A New View. Menlo Park, CA: Addison-Wesley.
20. Weiner H, Thaler M, Reiser MF, Mirsky IA: Etiology of duodenal ulcer: I. Relation of specific psychological characteristics to rate of gastric secretion (serum pepsinogen). In (Ed.) LA Gottschalk, PH Knapp, MF Reiser, JD Sapira, AP Shapiro Psychosomatic Classics: Selected Papers from 'Psychosomatic Medicine', 1939-1958. 1972, pp 25-35.