

January 1975

Journal

In the next few issues of H.E.N. we would like to examine the basic question of "What is human ethology?" Our purpose in presenting this question is to aid in deciding what should be included, and not included, in a potential human ethology journal. We hope that a basic set of broad boundaries can be developed over time which can be used by the editors in their initial acceptance or rejection of articles. To start the ball rolling we are presenting three comments below. Your reactions and comments will be appreciated.

Comments on Human Ethology by Wm. R. Charlesworth

To call someone an ethologist because he observes children playing in a nursery school or because he studies children's spontaneous reactions to one of Piaget's tasks misses an important point. Ethologists could do such things, but what makes their approach distinctive is that most of them would do such things within the framework supplied by evolutionary theory and in terms of what the theory implies for behavioral research. Observing behavior as it occurs in everyday surroundings, examining it in terms of its ultimate adaptive value for the species as well as its proximate adaptive value for the individual, studying behavior patterns comparatively by demonstrating analogous behaviors in other species, searching for phylogenetic reasons underlying needs and need-associated behavior patterns, identifying contemporary ecological factors which may account for interspecies resemblances and differences, seeking cross-cultural universals in behavior, and developing "standard" definitions, glossaries, dictionaries, taxonomies, and film archives of behaviors (that everyone can use) -- these are the major research activities of most ethologists.

To date, the substantive focus of ethologists has been upon social behavior. Thus, their research topics include courting, bonding, reproducing, early experience, caring for offspring, parent-child interactions (with emphasis on separation and greeting), peer relations in preschool children, behavioral differences between normal and problem children, and cross-cultural comparisons in early behavioral differences between normal and problem children, and cross-cultural comparisons in early behavior and caretaking. These activities are frequently dealt with in terms of the communication behaviors (mostly nonverbal--facial expressions, postures, gestures, etc.) accompanying them as well as in terms of the functions they serve. In addition to social behavior, there is a small but growing body of human ethologists focusing on such non-social topics as cognition (a la Piaget), problem-solving, intelligence and other instrumental, hence potentially adaptive, epistemic behaviors. Concepts used to identify and organize both social and non-social substantive areas are being drawn from evolutionary theory and, whenever appropriate, biology in general as well as physiology.

Methodologically, the tendency in ethology during the first phases of research is to concentrate heavily (but not exclusively) upon field observation or observations in semi-natural situations using a large variety of observable features of behavior as raw data. Filming or video-

taping behavior for subsequent observational analysis is rapidly increasing among human ethologists. Very heavy emphasis is being placed upon developing objective behavioral units with low inferential content and high inter-observer agreement. Experimental manipulation of stimuli is also carried out, but usually in conjunction with, or as a result of, field work. Paper and pencil tests are used sparingly and usually as accompaniments to observational data.

My impression of human ethology's current status is that it is an open discipline with a great deal of internal diversity of opinion and approach. It does not seem to be congealing around any particular set of concepts, persons, or ideology. There is strong resistance to the temptations of becoming a panacea for social problems, although many ethologists feel that its relevance for helping solve such problems should not be ignored. If there is a single unifying theme guiding the discipline, it is that evolutionary theory--broadly interpreted--is a relevant, if not indispensable framework in which to study human behavior. While a flexible, multi-methodological approach is felt to be necessary when applying ethology to humans, there is a strong feeling that the field of human behavior still lacks the massive base of descriptive information of everyday behavior that has characterized the successful efforts of traditional ethology as well as the other biological sciences. The majority of human ethological studies being done are with young children or in some way related to early development, thus reflecting both an interest in studying children as well as a conscious strategy on the part of those interested in testing out evolutionary theory on human behavior.

The above consists of excerpts from an article titled "Developmental psychology and human ethology" by Wm. R. Charlesworth, University of Minnesota. It will appear in the January 1975 Society for Research on Child Development Newsletter.

Comments by Jerome H. Barkow, Department of Sociology and Anthropology, Dalhousie University, Halifax, Nova Scotia, Canada

For me, at any rate, there are two categories of human ethological research: (1) Research or theory explicitly utilizing the perspective of natural selection. The work of Edelman and Omark, or Tiger and Fox, would clearly fit into this category. (2) Research and theory which are obviously relevant to biological evolution (natural selection) even though the researchers and theorists themselves have not sought to make this connection explicit. Most work on non-verbal communication would fit into this second category. (You will note that I am disagreeing with the view that human ethology is to be defined chiefly in terms of its methodology.) Finally, I am defining human ethology so that it includes biosocial anthropology.

There is a growing tendency for students of the more environmentally stable phenomena (particularly those having to do with child and infant development) to define themselves as "human ethologists," while those of us dealing with more labile (culturally modified) realms wind up as "biosocial anthropologists." The "human ethologists" should not forget that culture is the natural environment of our species; nor should the anthropologists forget that "culture" works its variations from biological themes.

Since human ethology is a perspective and not a field its critical issues are those of the discipline to which it is being applied. For example, a basic question of my own field, psychological anthropology, asks "what are the psychological differences across naturally-occurring human populations?" From the ethological perspective, this question might become "What is the biologically possible range of psychological differences across naturally-occurring human populations, what is its central tendency and what are the consequences of approaching the extremes of that range?" For the field of cognitive development a basic question might change from, "What is the universal sequence of cognitive developmental stages in children?" to, "What is the adaptive value of each stage of cognitive development and of the sequence as a whole?"

Comment by Mary D. Ainsworth, % Department of Psychology, University of Virginia, Charlottesville, Virginia 22901

I am inclined to say that ethological research, in distinction to non-ethological research, is concerned with viewing the behavior of the species in question in the light of an evolutionary perspective. The ethologically-oriented researcher asks what survival advantage did this behavior provide that could account for its having been built into the species-characteristic repertoire? Furthermore, the first thrust of ethologically-oriented research is naturalistic--an investigation of behaviors characteristically occurring in the natural environment. When experimentation or laboratory observation is resorted to, the study nevertheless is interpreted as relevant to the naturalistic situation.

#### Funds

The newsletter is supported with funds from the Institute for Research on Exceptional Children, College of Education, University of Illinois-Urbana.

The 1974 England meeting was supported in large part by a grant from the Grant Foundation. William R. Charlesworth obtained the initial grant (1973) from the Grant Foundation who agreed to fund human ethology meetings for three years but on a descending scale and subject to renewal. Robert Marvin obtained renewal in 1974 and we are currently working on application for the 1975 meeting. In 1973 and 1974 N. Blurton Jones supplied additional funds from one of his grants. All of the funds provided through 1974 are exhausted.

Additional funding is also being sought for the 1975 International meeting in England. If you know of potential sources please apply or let us know. Because the meetings are growing in size each year it now appears necessary to award monies competitively on the basis of proposed sessions or papers, at least for the overseas participants. Funds will only be awarded for tourist class fare and room and board in the university dormitories.

No funds will be sought for the human ethology meeting with the Animal Behavior Society since most American and Canadian universities still provide local travel funds.

SUMMER INSTITUTE ON THE EVOLUTION AND DEVELOPMENT OF BEHAVIOR  
at the University of Minnesota June 23 to July 25, 1975

A five week interdisciplinary program on the evolution and development of behavior will be offered at the advanced graduate level for predoctoral students. Stipends of \$450.00 will be available plus an equivalent of round-trip coach airline fare.

Four seminars will be offered:

"Developmental behavioral genetics"	Benson Ginsburg, University of Conn.
"Brain and behavioral development"	Gilbert Gottlieb, Dorothea Dix Hospital
"Primate development"	Phyllis Jay Dolhinow, University of Calif.
"Ethology of child behavior"	Wm. Charlesworth, University of Minnesota Martin Manosevitz, University of Texas

Five distinguished colloquium speakers will also participate.

Application forms and further information may be obtained from:

Dr. Sandra Scarr-Salapatek or  
Dr. William Charlesworth  
Institute of Child Development  
University of Minnesota  
Minneapolis, MN 55455

Completed applications and supporting documents must be received by February 28, 1975. Announcement of awards will be made about March 21, 1975.

Note: this program is designed to introduce graduate students in developmental psychology and other areas to the field of ethology and related fields. Hence it is basically not for human ethologists. Would you please pass this notice on to the appropriate place.

Summer Workshops

Training Institute on the Genetics of Developmental Processes for  
Social Scientists

June 16 - August 1, 1975

At the University of Colorado, Boulder, Colorado  
for students at the advanced graduate and postdoctoral level. U.S. citizens  
only. Living and travel stipends are available. For application forms and  
further information write to:

Dr. Gerald E. McClearn  
Institute for Behavioral Genetics  
University of Colorado  
Boulder, Colorado 80302

The deadline for completed applications is February 28, 1975

Roster of Human Ethologists .

In newsletter no. 1 we sent out a "vita" requesting acknowledgement  
of your interest in a newsletter, meetings, etc. Below we are publishing  
a list of those who responded. This last year we debated about how to group  
the names into areas of interest. We finally decided that was impossible,  
and so we are simply presenting the names alphabetically. If your name  
does not appear would you please send us: (1) name, (2) current address,  
(3) current interests, (4) recent articles--especially those that reference  
other articles. During the next year we will go through the alphabet  
twice.

Donald R. Omark  
IREC, 51 Gerty Drive  
U of I - Urbana  
Champaign, IL 61820

and

Robert S. Marvin  
Department of Psychology  
University of Virginia  
Charlottesville, VA 22901

## Roster of Human Ethologists

- Aiello, John R., Department of Psychology, Douglass College, Rutgers University, New Brunswick, New Jersey 08903. Interests: Effects of crowding on the elderly; The development of the use of space as a function of social affect; Racial and socioeconomic differences in proxemic behavior; Methodological issues in research on human crowding and nonverbal behaviors; Development of Personal Space, Human Ecology, in press.
- \* Altmann, Jeanne, Allee Laboratory of Animal Behavior, University of Chicago, Chicago, IL 60637. Articles: (with Stuart Altmann) Baboon Ecology, Chicago: University of Chicago Press, 1973; "Observational study of behavior: sampling methods." Behaviour, (1974), XLIX.
- Ambrose, J.A., Minster Lovell Mill, Oxford OX8, 5RN, ENGLAND, Ph.D.
- Appleton, Peter L., Park Hospital for Children, Headington, Oxford, ENGLAND  
Interests: Using human developmental ethology in a practical clinical setting. Setting up project on aggression.
- Argyle, Michael, Department of Experimental Psychology, South Parks Road, Oxford, OX1 3PS, Interests: perceptual processes in interaction, cognitive processes in interaction, behavioral sequences in interaction, individual differences.
- Armstrong, Gordon D., 105 Elliott Hall, University of Minnesota, Minneapolis, MN 55455 Interests: Working on relationship between displacement behaviors in animal and humans and their relationship with Freudian defense mechanisms.
- Bart, William M., 330 Burton Hall, University of Minnesota, Minneapolis, Minnesota 55455, Interests: methodological problems involved in human ethology.
- Battersby, Harold R., State University of New York Geneseo, Anthropology, Sturges 119 B. Geneseo, New York 14454. Linguistics-Uralic and Altaic Studies. Interests: Semiotics, kinesics, proxemics. Research: whistle communication.
- Bigelow, Robert, Department of Zoology, University of Canterbury, Christchurch, New Zealand Articles: The Dawn Warriors: Man's evolution toward peace. Boston: Atlantic-Little, Brown, 1969. "Relevance of ethology to human aggressiveness. Int. Soc. Sci I.23 (1), 1971. "Population pressure and the physical and cultural evolving modern man" Proc. N.Z. Ecol. Soc. 18:5-7, 1971. "Evolution of cooperation, aggression and self-control." In Nebraska symposium for 1972. University Nebr. Press, 1973. "Genetic drift and human evolution." Bollettino di Zoologia 39 (1): 39-51, 1972. "The role of competition and cooperation in human evolution." IXth ICAES, mouton, The Hague, Netherlands. "The "Instinct" problem." Unpublished MS.

- Bodnar, Ferencz A., Schroder van der Kolkstraat 10, Utrecht, Nederland  
Articles: "An Explorative Ethological study of the social behavior structures of a group of mentally retarded children" 1973, 6 (3) Bull. Nat. Ziekenhuisraad; "Sequential Analysis of Behavior Observations in Young Children" (Dutch) F.A. Bodnar, em E. van Baren Kets, Ned. Tijdsch r. Psychol. 1974 29
- Brasch, Walter M. Ohio U., Athens, Ohio 45701, Gordy Hall 204 Interests: Mass communications. Nonverbal languages.
- Burghardt, Gordon M., Department of Psychology, University of Tennessee, Knoxville, Tennessee 37916, Articles: "Instinct and Innate Behavior: Toward an Ethological Psychology" in The Study of Behavior: Learning, Motivation, Emotion, and Instinct. Edited by Nevin, John A., and Reynolds, George S. Scott, Foresman and Company, Glenview, Illinois, 1973, 00. 418.
- Bushnell, Margaret, Educational Development Group, Intext Publishers, 257 Park Avenue South, New York, NY 10010., Interests: Nonverbal communication aspects of ethology
- Callan, Hilary M.W., % Foreign, Commonwealth Office (Beirut), King Charles Street, LONDON SW1A 2 AH Articles: "Ethology and Society (1970) Oxford Monographs in Social Anthropology; "Attention, Advertence in Human Groups" (Soc. Sci. Inform. 1972); "Attention, Advertence and Social Control" (in preparation)
- Camras, Linda, 912 South 49th Street, Philadelphia, PA 19143 Interests: Verbal and non-verbal communication in a potentially competitive dyadic interaction or encounter.
- Cantle, Stephen, Department of Human Ethology, Chelsea College, Manresa Road, London SW3, ENGLAND Interests: application of existing ethological principles to the study of nonnal adult behavior under natural conditions: compilation of a baseline measure of interaction between a group of 33 schizophrenics in a local mental hospital. (Research project)
- Cary, Mark S., Department of Psychology, University of Pennsylvania, 3815 Walnut Street, Philadelphia, PA 19104., Interests or papers: Smell in human social interaction, unpublished MS, nonverbal openings to conversations, to be given at EPA, 1974.
- Charlesworth, William R., Institute of Child Development, University of Minnesota, Minneapolis, MN 55455.  
Interests: (1) Rationale for why ethologists should study humans.  
(2) Greeting behavior in preschoolers.  
(3) Tool using behavior: its ontogenesis in young humans.  
(4) Role of intelligence in adaptive behavior; can ethology add anything new and relevant?
- Articles: (1) The role of surprise and expectancies in cognitive development. In D. Elkind and J.H. Flavell (Eds.), Studies in cognitive development: Essays in honor of Jean Piaget, New York: Oxford University Press, 1968.

- (2) With Kreutzer, M.A. Facial expressions of infants and children. In P. Ekman (Ed.), Darwin and facial expression: A century in review. New York: Academic Press, 1973.
- (3) Charlesworth, W.R. Ethology: A new invasion. Contemporary Psychol., 1973, 18, #3, 106-107.
- (4) Charlesworth, W.R. Human intelligence as adaptation: An ethological approach, In L. Resnich (Ed.) The nature of intelligence, Pittsburgh, Lawrence Erlbaum Associates, (1975).
- (5) Charlesworth, W.R. Discussion of fear. In M. Lewis and L. Rosenblum (Eds.) Fear: The origins of behavior, Vol. II, New York: Wiley and Sons. (1975)

Child, Maureen M., Dept. of Psychology, University of Edinburgh, 1, Roxburgh Street, Edinburgh, U.K. Interests: Initiation of social interactions in pre-school children. The development of a basically ethological method of studying social behavior in children: extending traditional ethology to take account of the context in which behavior occurs and the directedness of behaviors in a social situation. (In preparation - an 'idea' paper)

Chisholm, James S., Institute of Child Health, 30 Guilford Street, London WC1N 1EH, ENGLAND and Dept. of Anthropology, Rutgers University, New Brunswick, NJ 08903 U.S.A. Research in progress: "Developmental ethology of the Navajo" - ethological observations of mother-infant interaction in first 18 months of life on Navajo reservation. Special attention to neonatal behavior, "attachment" behaviors, sequencing of behaviors, behaviors associated with cradleboard use.

Ciolek, T.M., Department of Anthropology, Rspaes, Australian National University, Box 4, P.O. Canberra ACT 2600., Interests: Nonverbal communication; greeting and parting behavior in man.

Cloak, F.T. Jr., 1417 East Cook Springfield, IL 62703, Articles: "Is a cultural ethology possible? (accepted for publication by Human Ecology, probably in March 1975 issue)

Coelho, George V., NIMH Parklawn 18C04, 5600 Fishers Lane, Rockville, MD 20034. Articles: Introduction and Chapters 1 and 2 of NIMH publication Social Change and Human Behavior. Section I of bibliography. Mental Health and Social Change. Chapter 13 of Coping and Adaptation. Coelho, G.V., Hamburg, D.A., and Adams, J.E. (Eds.) New York, Basic Books, in press.

Coffin, Robert, % Dept. of Anthropology, Memorial University, St. John's NFLD. CANADA Interests: ethological study of some aspect of children's social behavior, i.e., control of aggression, dominance hierarchies, etc.



- Condon, William S., Boston U. School of Medicine, 80 E. Concord St., Boston, Mass. 02118. Psychiatry. Interests: Human communication. "Sound film analysis of normal and pathological behavior patterns," (with Ogston) J OF NERV AND MENT DISORDER 143.4 (1966). "A segmentation of behavior," (with Ogston), J OF PSYCHIAT RES 5 (1967).
- Connolly, Kevin J., Dept. of Psychology, University of Sheffield, Sheffield, S10 2TN, ENGLAND Articles: Ethological techniques and the direct observation of behaviors, ethological studies of child behavior, patterns of play and social interaction in pre-school children, reactions of pre-school children to strange observers.
- Count, Earl W., 2832 Webster St., Berkeley, CA 94705 Articles: Being and Becoming Human: Essays on the Biogram. (Book). On the idea of Protoculture. In: Symposia of the IV Int'l. Cong. of Primatology. Vol.1.
- Deutsch, Robert D. %Morganstern, 205 Third Ave., New York, NY 10003, Interests: Organization of behavior in face-to-face interaction; territorial antecedents of aggressive behavior in a group in institutionalized patients.
- Ellgring, J.H. Max-Planck - Institute f. Psychiatric, 8 Muenchen 40, Kraepelinstr. 70, West Germany, Articles: "Processes of learning in the recognition of eye-signals," Evr. J. soc. Psychol. 1972, 2; "Problems in the recognition of gaze direction" In v. Cranach and I. Vine (Eds.) Social Communication and Movement. London: Academic, 1973.
- Ellis, M.J., School of Physical Education, Dalhousie University, Halifax, Nova Scotia, Interests: playful responses, biased towards the ill and handicapped as special sub-groups.
- Engel, Von Raffler, Walburga, Committee on Linguistics, Nashville University Center Council, Vanderbilt University, 372 Elmington Avenue, Nashville, Tennessee 37205., Interests: Language acquisition from an ethological standpoint.
- Evans, Gary W., Institute for Man and his Environment, Blaisdell House, The Commonwealth of Massachusetts, University of Massachusetts, Amherst MA 01002 Interests: Environmental psychology, personal space, crowding, and environmental cognition.
- Fiske, Alan P., Committee on Human Development, 5730 Woodlawn Avenue, Chicago, IL 60615. Interests: Sensitive period in the acquisition of "group identity membership" in humans. Paper: Kin Investment and Social Organization.
- Gallup, Gordon G., Psychology Dept., Tulane University, New Orleans, LA 70118. Articles: "Tonic immobility in the chicken". Catalepsy potentiation by uncontrollable shock and alleviation by imipramine. Psychosomatic Medicine (in press).

- Geiger, Richard A., English Linguistics, University of Goettingen, 34 Goettingen, Nikolausberger Weg 15, West Germany. Interests: cross-cultural communication problems.
- Getis, Arthur, Dept. of Geography, Rutgers University, New Brunswick, NJ 08903 Articles: "Spatial Behavior: Rats and Man," (with B.N. Boots). The Professional Geographer, Vol. 23, 1, 11-14, Jan. 1971. "Spacing of Human Groups", (with G. Merk), Proceedings of the Association of American Geographers, Vol. 5, 80-83, 1973. "Representation of Spatial Point Pattern Processes by Poly a Models", forthcoming in M. Yeates, ed..
- Ghosh, Samir, K., Human Ethology Group, Max-Planck-Institut, 8136 PERCHA/ Starnberg Enzianstrasse 12, WEST GERMANY Articles: Toward a Grammar of Greetings in Proceedings of Vith International Congress of Linquists, Bologna, Italy, 1972. Use of Fingers in Bengal: Culture (unpublished) prepared for 1st International Congress of Semiotics, Milano, 1974. Sociolinguistics of Abuses (unpublished)
- Gramza, Anthony F., National Teachers College, Evanston, IL Paper in progress: Research on Stereotypes in normal preschool children and children's play responses to varied tactile stimuli.
- Grant, Ewan C., Chelsea College of Science and Technology, University of London, Basic Medical Sciences Group, Manresa Road, London, SW3
- Gray, James L., Psychology Dept., State University of New York, Stony Brook, NY 11790 Dissertation: "A laboratory study of human aggression: An approach from ethology".
- Greenberg, Mark, Gilmer Hall, University of Virginia, Charlottesville, VA 22903. Interests: Decline of attachment and development of role-taking.
- Gump, Paul V., Box 158, Oskaloosa, Kansas 66066 Interests: Ecological psychology.
- Gutstein, Joyce, Dept. of Zoology, University of California, Berkeley, CA 94720 Interests: "An ethological study of social interactions among children." University of Wisconsin. Unpublished Master's thesis. 1973.
- Hailman, Jack P., Department of Zoology, Birge Hall, University of Wisconsin, Madison, Wisconsin 53706. Interests: human nonverbal communication signals, animal behavior.
- Hannan, Thomas E., 109 Graduate Residence, University of California, Davis, CA 95616. Articles: "The priming mechanism of maternal behavior as a possible source of postpartum mental illness." A proposed paper will deal with the effects of post partum depressed mothers on the development of their children.
- Harper, Lawrence, V., College of Agricultural and Environmental Sciences, Agricultural Experiment Station, Department of Applied Behavioral Sciences. Research: Development of social behavior in mammals: Effects of early experience on later behavior; parent off-spring relationships; maternal and filial behavior; hormonal and environmental determinants of sex

differences in behavior; ontogenetic and situational determinants of the patterning of species-typical behavior; play; social influences on children's dietary preferences.

- Harris, Richard M., Bronx State Hospital, Cognitive Development Service, 1500 Water Place, Bronx, NY 10461, Research project: dealing with voice functions in mental retardation. Interests: human paralanguage (voice modulation) as a system of signs and interrelations with other sign systems (verbal, kinesic, proxemic); the social and psychological functions of paralanguage in the organization of social interaction; interrelations between vocal competence and intellectual and adaptive capacity.
- Hartup, Willard W., Institute of Child Development, University of Minnesota, Minneapolis, Minnesota 55455 Interests: child development
- Haviland, Jeannette M., Dept. of Psychology, Livingston, Rutgers University, New Brunswick, NJ 08903 Proposed Papers: "An ethological study of affect development in infancy." "Proxemic and verbal interaction in crossed-age pairs."
- Herrlitz, Wolfgang, Deutsches Seminar der Universitat, 74 Tübingen Wilhelmstr. 36, GERMANY Interests: the (linguistically based) analysis of communication in the classroom; social behavior and symbolic interaction in educational set-ups.
- Hewes, Gordon Winant, U of Colorado, Anthropology, Boulder, Colorado 80302. Interests: Human language origin, especially the gestural theory, cross-cultural studies of postural behavior. "World distribution of certain postural habits." AMERICAN ANTHROPOLOGIST 57 (1955). "Primate communication and the gestural origin of lg." CURRENT ANTHROPOLOGY 14.1 with CA comment.
- Hinde, Robert A., Medical Research Council Unit on the Development and Integration of Behavior, Sub-Department of Animal Behaviour, Madingley, Cambridge Articles: Hinde, R.A. (1972) Non-Verbal Communication. Cambridge University Press. Hinde, R.A. and Stevenson-Hinde, J. (1973) Constraints on Learning., Academic Press, London. Hinde, R.A. (1974) The Biological Bases of Human Social Behaviour. McGraw-Hill, NY
- Hoaglund, Mary L., 5133 Wooddale Avenue, Edina, MN 55424, Interest: Behaviors of Adolescents during written tests; naturalistic observation as a technique in educational evaluation.
- Hold, Barbara, 8 München 40, Schleissheimerstr. 274, West Germany. Interests: development of dominance hierarchies in children; Article: Rangordnungsverhalten bei Vorschulkindern, Hcmo, in press.
- Hopf, Sigrid, D-8 München 40, Kraepelinstr. 2, West Germany. Articles: "New findings on the ontogeny of social behavior in the squirrel monkey." Psychiatria, Neurologia, Neurochirurgia, 74, 1971; "Study of spontaneous behaviour in squirrel monkey groups: observation techniques, recording devices, etc." Folia primat., 17, 1972.

Hutt, Corinne, Department of Psychology, University of Keele, Keele, Staffs, ST5 5BG, ENGLAND Articles: Behaviour studies in Psychiatry, Pergamon Press, 1970; Direct Observation and measurement of behaviour, Charles C. Thomas, 1970.; (with S.J. Hutt) Early human development, Oxford: Oxford University press, 1973.

Irwin, D. Michelle, Box 9, Teacher's College, Columbia University, New York, NY 10027. Interests: Nonverbal communication in young children.

Jensen, Donald D., Professor of Psychology, University of Nebraska, Lincoln, Nebraska, 68508, Articles: Operationism and the question, "Is this behavior Learned or Innate?" Behavior, 1961; Polythetic Biopsychology: An Alternative to Behaviorism, Current Issues in Animal Learning: a Colloquium, edited by James H. Reynierse, University of Nebraska Press, 1970; Paramacia, Planaria, and Pseudo-learning, Animal Behavior Supplement I; Polythetic Operationism and the Phylogeny of Learning, Chemistry of Learning, Plenum Press, 1967.

Johnson, R. Peter, 211 Child Development Lab., 1105 W. Nevada, University of Illinois, Urbana, IL 61801 Interests: behavior genetics and child development.

Judge, Jamey L. (Ms.), Department of Psychology, University of Tennessee, Knoxville, Tenn. 37916, Proposed dissertation: An Ethological analysis of dyadic agonistic encounters in pre-school children.

Kanzler, Walter W., Department of Biology, Wagner College, Staten Island, NY 10301, Research Interests: Releasing mechanisms and releasers in humans; comparative study of behavior in individuals of different cultures; establishment of rank orders in human groups.

Kendon, Adam, Dept. of Anthropology, Research School of Pacific Studies, Australian National University, Box 4, P.O. Canberra, A.C.T. 2600, AUSTRALIA Articles: "A description of some human greetings", In R.P. Michael and J.H. Crook (Eds.) Comparative ecology and behavior of primates. London: Academic Press, 1973.

Kleck, Robert E., Department of Psychology, Dartmouth College, Hanover, New Hampshire, 03755 Interests: physically stigmatized children in naturalistic settings (summer camps).

Lakin, Martin, Department of Psychology, Duke University, Durham, NC 27706, Interests: Group development in early childhood, antecedents of group processes in early childhood.

Lambert, William W., Uris Hall, Cornell University, Ithaca, NY 14850 Articles: Lambert, W.W., Promise and Problems of Cross-Cultural Exploration of Children's Aggressive Strategies. To appear in W.W. Hartup and J. deWit (Eds.) Aggression: Origins and Determinants. (in press)

Liebllich, Anna Katz, Committee on Cognition and Communication, Beecher Hall, 5848 South University Avenue, The University of Chicago, Department of Behavioral Sciences, Chicago, IL 60637 Articles: Smith, W.J., Chase, J. and Liebllich, A.K. Tongue-showing: a facial display of humans and other primate species. Semiotica (in press).

Lockard, Joan S., Department of Neurological Surgery or Psychology, University of Washington, Seattle, Washington 98195. Articles: The Study of Human Primate Social Behavior - Western Psychological Association, 1973; The Ethological Study of Human Grimaces, Gestures, Postures and Stances - Psychonomic Society Meeting, 1973; Adult Human Ethological Data on the Phylogenetic Distinction Between Smiling and Laughter - Animal Behavior Meeting, 1974.

Lore, Richard, Department of Psychology, Douglass College, Rutgers University, New Brunswick, NJ 08903. Interests: Animal ethology.