# Human Ethology Newsletter

Editor: Robert M. Adams

Department of Psychology, Eastern Kentucky University, Richmond, KY 40475 USA

(606) 622-1105, 622-1106

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# Membership Dues

It's time to renew for 1985. If your address label does not say 1985 or 1986, it's time to send your check. The standard membership is \$10.00 U.S., and the student membership is \$5.00. The Newsletter is sent first class postage to North American subscribers and air mail to others. Sample issues of the Newsletter are available at no charge to prospective members. Tell a colleague. A membership form is enclosed.

#### Officer Selection Process

The Board is now in the process of preparing a ballot for the election of officers. The ballot will be mailed separate from the *Newsletter*, and sufficient time will be allowed for voting. Your participation is strongly encouraged.

# Deadlines for Submissions to the Newsletter

Target dates for 1985 issues are March, June, September and December. Submissions received by the first of the month of publication can easily be included.

Please continue to submit any items or articles which may be of interest to the membership. Submissions should be legible, but need not be camera-ready.

# **Annual Meeting**

The annual meeting of the International Society for Human Ethology will be June 24-28, 1985 at North Carolina State University in Raleigh. We will meet jointly with the Animal Behavior Society. Further details will be in the March Newsletter.

All necessary forms for submitting a paper are contained in this issue of the *Newsletter*. You must be a member of ABS, or sponsored by an ABS member, to present a paper. ABS membership applications are available from the editor.

There will be an ISHE business meeting, but the day has not been determined.

As they say on the American rock radio ads - BE THERE.

# Human Ethology Forum - Defining Human Nature

#### Ian Vine

(Following is Dr. Vine's contribution to the Forum announced in the June issue of the Newsletter. Please send responses to the Newsletter editor or to Dr. Vine, Interdisciplinary Human Studies, University of Bradford, Bradford, West Yorkshire, BD7 1DP, England - Editor.)

My offer to coordinate contributions on the topic of "Defining Human Nature" produced a null response from the membership. In the belief that this must reflect factors other than a simple lack of interest in the issue, I offer here a tentative outline of an analysis and solution. Perhaps this positive stimulus will be more successful in evoking responses than was the request for more spontaneous reactions?

The concept of 'human nature' is widely appealed to in every-day arguments, while academic theories of human nature abound. Yet it strikes me as remarkable that even in works with the term in their title almost no-one attempts to define this basic concept. Writers normally move straight to substantive questions about the content of human nature without being at all explicit about what it is their theories are theories of. And this surely generates very dangerous ambiguities, upon which many theories unconsciously trade when seeking to establish their case for trait X being humanly natural or otherwise.

Dictionaries are also vague, referring to 'essential' human traits without spelling out what this term itself implies, or else suggesting that they must be innate. A few authors do offer definitions of this latter kind, such as Lopreato (1984, p.33), who refers to "a set of genetically based behavioural predispositions that have evolved by natural selection in part at least under the pressure of sociocultural evolution." The problem with definitions of this kind is that they build a theory of human nature into the concept itself, thereby making it possible for those who reject the theory to deny that there is such a thing as human nature — at least by implication. In their more cautious moments such critics may admit that human nature does exist and is "simultaneously biologically and socially constructed," yet continue to stress its merely facilitative physical features and the cultural-historical malleability of our behavioural or mental traits (Rose, Kamin, & Lewontin, 1984, p. 13). In practice they object to attempts to specify all but the most obvious universal traits, like the capacity for speech, or bipedalism, while insisting that they are not (continued) committeed to the tabula rasa view of the neonate which Midgley (1978) castigates as making nonsense of our conceptions of freedom and morality.

I suggest that the definition of human nature simply cannot be in terms of its supposed determinants, if it is to be sufficiently theoretically neutral to be referred to descriptively by all sides in 'nature-nurture' and related controversies. The use of terms like 'innate' is of little help here. since our genome surely has at least an indirect influence on all of our features - anatomical, physiological, behavioural, and mental; but equally, no phenotypical trait can develop without appropriate 'environmental' contributions. In loose every-day usage 'human nature' need not in fact presuppose rigid genetic specification or phenotypic invariance anyway. It is perfectly coherent to talk of it as evolving culturally, or as varying somewhat with social conditions of life. Surely its essential reference is to traits which are typical, rather than exceptionless, within some (often only tacitly delineated) human population? And of course it is a profound error to think of 'human nature' as in some sense referring to how humans would be in the absence of all particular socio-ecological determinants of ontogenetic processes. One of our more distinctive traits as a species is agreed (on all sides) to be the relative immaturity and flexibility at birth which makes our development susceptible to and dependent upon cultural influences.

I propose that we should think of 'human nature' (at least for more formal academic purposes) as a core of general dispositional traits which need not be literally universal for all humans, but can be specified in a way which is sufficiently abstracted from specific cultural practices to legitimate the claim that they have high cross-cultural generality. In other words, and irrespective of specifying the casual mechanisms, a humanly natural trait is one which can be regarded as 'normal' in adulthood (or at any more or less specified stage of lifespan development), across the 'normal' range of variations in developmental environments. The term 'normal' can here be understood in something like its formal statistical sense. That is, in quantitative terms any trait X will differ in intensity across individuals, to a degree which will increase depending upon how inclusive are the sections of the human population being considered — with few individuals at either extreme of intensity, and most close to the norm. Likewise, developmental environments clearly vary, and their range of variation will tend to increase if more cultures and historical epochs are considered. Where the distribution of scores on trait X is relatively unaffected by extending the population (and thus developmental environments) being sampled, that trait becomes a candidate for designation as humanly natural - even if a few whole societies are deviant for it.

It then becomes an empirical matter to identify 'natural' human traits — but there is no implication of rigid uniformity between individuals, or suggestion that the impact of environmental experience cannot make a profound difference even to the general level of a trait within a given individual or group, let alone its precise form (cf. William McDougall's notion of innate instincts being experientially transformed into sentiments about specific objects, 1926). If in fact we find that a trait is approximately normally distributed across humanity at large — as we would expect if

multiple small determinants of a genetic and/or environmental kind affected its intensity — this suggests that it does not depend upon the presence or absence of environmental conditions which are of an all-or-nothing and highly culture-specific kind. Rather, insofar as it is shaped by socialization patterns and other environmental influences on development, the factors in question are those which are themselves typically human. For example, the development of social attachments to those with which one has repeated and predominantly rewarding interactions can be seen as one good candidate for a natural human trait. This claim is in no way undermined by the fact that details of socialization practices differ profoundly between families, subcultures, and cultures, and affect the intensity and nature of human social attachments. Some individuals come to identify fairly strongly with humanity at large, some become psychopathic. The fact remains that the human norm is a moderately strong and moderately restricted attachment to others - so it can fairly be identified as part of human nature, with presumably some appreciable degree of genotypic facilitation, whether highly indirect or relatively direct. How specific and direct the influence is will probably reflect its adaptive utility within our ancestors' evolutionary environment.

Does this suggestion at least provide the basis for a resolution of the basic definitional problem, without prejudging competing theories about which traits are humanly natural and what precise causal forces determine their phenotypic forms? Undoubtedly my suggestions require refinement if they are to become generally acceptable, but I am hopeful that the approach here will not prove totally misguided. Of course it may be objected that traits with the level of abstractness that makes them candidates for being natural are of little predictive utility in explaining any particular and socio-historically situated category of human action. This may often prove to be the cause in practice although it is not clear that definitions can be required to serve such a function anyway. Besides, identifying such natural traits surely does have some substantive implications — although not of the normative kind suggested by some critics of the 'human nature' concept. To know that a trait is and has been natural (even for a restricted population in fact) does suggest hypotheses about its functional utility within particular contexts, and about the likely inertia and costs if systematic attempts are made to change it. These hypotheses must then of course be tested independently; but irrespective of what goals and values inform one's inquiry, it is surely important to know the broad directions in which human biology and lifestyle tend to canalize individual development.

#### References

Lopreato, J., Human Nature and Biocultural Evolution. Allen & Unwin, London (1984).

McDougall, W., Social Psychology, 20th edn. Methuen, London (1926).

Midgley, M., Beast and Man — The Roots of Human Nature. Harvester Press, Hassocks, Sussex (1978).

Rose, S., Kamin, L.J., & Lewontin, R.C., Not in our Genes
 Biology, Ideology and Human Nature. Penguin Books, Harmondsworth, Middlesex (1984).

#### **Book Review**

Consciousness Regained: Chapters in the Development of Mind

N. Humphrey, Oxford University Press, Oxford, 1984. 222 pp. \$3.95 paperback.

Reviewed by James R. Anderson Laboratoire de Psychophysiologie Universite' Louis Pasteur Strasbourg 67000, France

Humans have it. Chimpanzees and perhaps other 'higher' primates have it. There are good possibilities for wolves, elephants and dolphins, and kittens might also be considered as candidates. Frogs do not have it. Neither do snails, codfish, or herring. Rhinos are probably without it. The possession in question is consciousness, that faculty permitting an individual to introspect and plan courses of action based on an internal model of the social environment, which includes a representation of oneself. In Consciousness Regained, Humphrey explores the evolution of consciousness, along with some of its consequences, in a collection of essays, some new, most published before but likely to carry more weight in this concise and coherent package.

Consisting of lectures, short articles and book reviews, Consciousness Regained presents almost nothing in the way of hard data. In fact most of the facts and figures in the book are to be found not in sections on traditional psychological topics, but rather in the final chapter, on the threat posed by the build-up of nuclear weapons. Elsewhere, instead of confronting tables, bar-charts or graphs, the reader is frequently treated to a skillfully chosen passage of prose, poetry or drama, which both entertains and adds to the intuitive appeal of many of the arguments presented. This approach is probably not accidental; as indicated in several chapters, regaining consciousness means appreciating the role of self-observation — introspection — and intersubjectivity in behaviour, rescuing consciousness from the limiting methods of traditional psychology, especially behaviourism. Humphrey feels that literature and art have a lot to say about consciousness, and in one of his many provocative statements he writes: "The Moscow Arts Theatre, The Arts Studio in New York, The Royal Academy of Dramatic Art in London . . . may well have a better claim than any University Department to be true schools of psychology" (p. 112).

Clearly, some explanation is called for. It is suggested that actors are highly skilled 'natural' psychologists, adept at luring spectators into engaging in mental simulations of social situations, which results in an enrichment of the viewer's insight into the human condition. Drama is seen as a cultural institution for improving our natural abilities as psychologists. Another culturally endorsed psychological 'teaching aid' is the keeping of pets. Domestic animals are relatively short-lived, physically appealing, and free of human moral codes, thus their behaviour and life-death cycles serve as a base on which we can explore and broaden our knowledge of ourselves and our relations with the world. Certain initiation ceremonies, teasing of children by parents, dreaming, and playing are likewise proposed as

mechanisms through which our emotional experiences are broadened and psychological skills sharpened. These ideas are presented in two new chapters. A third describes some advantages of insight through intersubjectivity, such as the enhancement of understanding and communication between people with shared experiences (consider Alcoholics Anonymous, and associations of people suffering from the same problem). In contrast, a lack of such intersubjectivity can lead to unsatisfactory attempts at understanding and communication (for example, between doctors and patients, or males and females). This section of the book is at once highly readable and provocative. (Will other readers be reminded of Desmond Morris?) On numerous occasions one reacts with 'It sounds good, but is there evidence? or 'Could this be verified objectively?' I do not know whether there is an empirical Psychology of the Actor, or whether keeping pets influences the development of social and self-awareness, but my curiosity has been aroused.

The first five chapters examine the evolution of selfconsciousness. Humphrey's main point, that self-consciousness developed in the context of complex social interaction, permitting individuals to anticipate the behaviour of others and calculate elaborate social moves, appears reasonable. The trouble is in the distribution of self-consciousness, and at times Humphrey does not seem to be too clear about it himself. He suggests that: 'Somewhere along the evolutionary path which led from fish to chimpanzees a change occurred in the nervous system which transformed an animal which simply 'behaved' into an animal which at the same time informed its mind of the reasons for its behavior' (p. 37). And later: 'So if consciousness exists at all outside the human species, it most probably exists in those animals that live in sufficiently complex social groups, but not in those that don't' (p. 44). This brings us back to the catalogue of diverse species at the start of this review. Those species proposed as possessing consciousness are so because of their group-living ways of life. But what is a 'sufficiently' complex social group? Do group living lemurs have a greater ability to do natural psychology than solitaryranging orangutans? Where would rats fit in? More importantly, how can we know whether any of the abovementioned animals carries around a self-concept and engages in reflection about its lot? Humphrey offers little advice on how to investigate these issues, but acknowledges our tendency to behave as if animals and sometimes even the inanimate environment were conscious and capable of intersubjectivity. It is clear that the question of who has got it, and whether there might be different shades of it, has to be answered on the basis of objective behavioural analysis. Progress has been made, for example research on social and cognitive capacities in apes and on self-recognition in primates is helping to build a picture of self-awareness in primates. These studies are only touched upon briefly in the book, most of them dating from after the original publication of the chapters concerned. There is still a long way to go, particularly where nonprimates are concerned. Eventually we might reach a stage where we can say that comparative psychology has largely regained consciousness. If so, it will be due to a large extent to the fertile questions raised by books such as this one.

# The Identity of Human Ethology

#### Herman Dienske

Primate Center TNO, 151 Lange Kleiweg, 2288 CJ Rijswijk The Netherlands

A politician who merely advertizes himself as somebody who applies political insights to the society is not likely to yield many votes. Likewise, a society that identifies itself as promoting the application of ethology to humans, without well-structured specifications, is probably not strong in competition. There are many persons with political aspirations, but there is only one International Society for Human Ethology. Would it do well if there were competitors?

In 1980 and 1981, several articles about the identity of Human Ethology appeared in this newsletter. These primarily concerned Human Ethology as a science. Establishing the aims of a society, however, requires a somewhat different approach. A scientist reaches beyond the limits of theories and disciplines. But a society needs a core that defines its identity well enough to attract members, make these recognize their place in the area of science, and promotes their collaboration.

Human Ethology, as a branch of science, deserves to be honoured with a special society. For ethology has various approaches that are only undernourished twigs of the other scientific branches that study the human species. It is ethology, not the human species, that justifies the special area of the Society. I do not see a fundamental difference with, e.g. Rat Ethology or Planaria Ethology. However, we are humans ourselves and this implies an empirically well-founded high degree of scientific self interest.

The specialties of Human Ethology mainly stem from biology. It is the kind of questions that mainly distinguishes ethology from other disciplines. I think that the following items succinctly describe the core of Human Ethology.

- Theories. These are generally biological (genetics, evolution including sociobiology) as well as more specifically ethological (causal theories).
- 2. Practical methods. Behaviour description, categorization and quantification of the occurrence of these categories are originally ethological, powerful tools.
- 3. Comparisons of humans with other species, and comparisons among humans in different societies.
- 4. Behavioural ecology: functionality, optimality, and strategies.
- 5. Behaviour development from the viewpoints of adaptation and phylogeny.
- Applications of these five approaches to other disciplines concerning human behaviour: psychology, psychiatry, anthropology, and politicology.

This list is by no means original. But that is not necessary here. It is important that most of the Human Ethology work, as found for instance in the Current Literature section of this newsletter, finds its place under at least one of these headings.

I had to resist the temptation to elaborate on the six areas specified above. There is not much need for that here,

because this contribution does not focus on science but on the International Society for Human Ethology. The membership of the Society encompasses a variety of disciplines. I believe that this is not primarily so because members want to do interdisciplinary research. They mainly see perspectives in the application of the ethological approach to their work. For this reason, the core of Human Ethology must not be a melting-pot of disciplines. That would lead to an identity crisis. The core is ethology, being applied by scientists from various disciplines.

It has been a habit to hold ISHE meetings along with conferences of other societies. This seems very practical. However, it also demonstrates hesitation about the sufficiency of the interest of scientists in Human Ethology. A similar hesitation follows from the absence of a journal named "Human Ethology."

It will greatly favour the ISHE if the Society, that is going to have its Officers, will hold an independent meeting that is especially devoted to an overview of the core of Human Ethology. It could be organized thematically, based on the six points given above or modifications thereof. It would be a demonstration of maturity if the meeting will not be held simultaneously with another meeting (such as that of the International Primatological Society, Germany, last week of July, 1986) but independently before or after that meeting.

The Society has reached the age of puberty. Let us head towards adulthood.

# Ethological Contributions to Research in Political Science

Readers of the Human Ethology Newsletter will know that several political scientists are engaged in efforts to apply ethological methods and findings to problems in political science. The chances and difficulties related to such an interdisciplinary transfer were discussed at a meeting which took place in Tutzing (West Germany) in June 1984. At this meeting papers prepared by political scientists were discussed by colleagues from their own discipline, from other social sciences, and from the life sciences. The meeting showed that ethological concepts and methods can be applied to a vast array of problems with which social scientists are usually concerned. The following papers were presented at the conference:

- "Ethological Methods in the Study of Basic Types of Political Behavior" (C. Barner-Barry)
- "Linking Ethology and Politics: Evolutionary Perspectives" (P.A. Corning)
- "Physiology of Aggression" (J. Ch. Davies)
- "Human Nature: Dialectic of Social and Biological" (V. Denisov)
- "Some Problems of Using Ethological Concepts to Speculate on Human Social Behavior" (H. Flohr)
- "The Neurocognitive Dimension of Political Decisions: Ethological Parallels" (W. Kitchin)
- "Do Languages Behave Like Animals" (J.A. Laponce)

- "Facial Displays and Political Leadership" (R.D. Masters)
  "The Ethology of Political Cognition" (S.A. Peterson)
- "Comparative Ethology of Primate Politics" (G. Schubert)
  "Dominance and Influence in Small Group Decision-Making" (J.N. Schubert)
- "Ethology and Political Philosophy" (A. Somit)
- "Evolution of Political Systems by Natural Selection" (T. Vanhanen)
- "Psychophysiological Techniques in the Biological Study of Political Behavior" (M.W. Watts)
- "Coronary-Prone Behavior and Political Decision Making" (T.C. Wiegele)

There are no plans to publish the papers of this conference in a single volume. However, those who are sterested in the topics discussed at this meeting can obtain copies of single papers from prof. Dr. Heiner Flohr, Universität Düsseldorf, Sozialwissenschaftliches Institut, Politikwissenschaft I, Universitätsstrasse 1, D-4000, Dusseldorf, 1, West Germany.

# Current Literature

# Articles and Chapters

- Bacciagaluppi. M. (1984). Some remarks on the Oedipus complex from an ethological point of view. *The Journal of Psychoanalysis*, 12, 471-490.
- Bavelas, J.B. (1984). On naturalistic family research. *Family Process*, 23, 337-340.
- Booth, C.L., Lyons, N.B., & Barnard, K.E. (1984). Synchrony in mother-infant interaction: A comparison of measurement methods. *Child Study Journal*, 14, 95-114.
- Bouhuys, A.L., & Alberts, E. (1984). An analysis of the organization of looking and speech-pause behviour of depressive patients. *Behaviour*, 89, 269-298.
- Buss, David M. (1984). Evolutionary biology and personality psychology: Toward a conception of human nature and individual differences. *American Psychologist*, 39, 1135-1147.
- Callan, H. (1984). The imagery of choice in sociobiology. *Man*, 19, 404-420.
- Eisenberg, N., & Giallanza, S. (1984). The relation of mode of prosocial behavior and other proprietary behaviors to toy dominance. *Child Study Journal*, 14, 115-122.
- Gottlieb, G. (1984). Evolutionary trends and evolutionary origins: Relevance to theory in comparative psychology. *Psychological Review*, 91, 448-456.
- Hadar, U., Steiner, T.J., Grant, E.C. & Rose, F.C. (1984). The timing of shifts of head postures during conversation. *Human Movement Science*, 3, 237-246.
- Hamilton, M.E. (1984). Revising evolutionary narratives: A consideration of alternative assumptions about

- sexual selection and competition for mates. American Anthropologist, 86, 651-662.
- Harris, H.V.C. (1984). Sexual attraction: A test of sociobiological theory. Zygon, 19, 317-330.
- Hausfater, G. (1984). Infanticide: Comparative and evolutionary perspectives. Current Anthropology, 25, 500-501.
- Lamb, M.E., Thompson, R.A., Gardner, W.P., Charnov, E.L., & Estes, D. (1984). Security of infantile attachment as assessed in the "strange situation": Its study and biological interpretation. *The Behavioral and Brain Sciences*, 7, 127-171. (Followed by peer commentary)
- Lee, P.S.C., & Suen, H.K. (1984). The estimation of kappa from percentage of agreement interobserver reliability. Behavioral Assessment, 6, 375-378.
- McAdams, D.P., Jackson, R.J., & Kirshnit, C. (1984). Looking, laughing, and smiling in dyads as a function of intimacy motivation and reciprocity. *Journal of Personality*, 52, 261-273.
- Nicholson, B. (1984). Does Kissing Aid Human Bonding by Semiochemical Addiction? *British Journal of Dermatology*, 111, 123-129.
- Powell, J. (1984). Some empirical justification for a modest proposal regarding data acquisition via intermittent direct observation. *Journal of Behavioral Assessment*, 6, 71-80.
- Richer, J.M. (1980) Communication, non-communication, culture and autism. *In: Ethology and non-verbal communication in Mental Health.* Eds. Corson, E.O. & Corson. Pergamon Press, Oxford.
- Richer, J.M. (1979). Human Ethology and Psychiatry. In: Textbook of Biological Psychiatry. Eds. Van Praag, H.M., Lader, M.H., Rafaelsen, O.J., Sachar. E.J., Marcel Dekker, Inc., New York.
- Richer, J.M. (1983) The Development of Social Avoidance in Autistic Children. In: *The Behaviour of Human Infants*. Eds. Oliverio, A., Zappella, M.
- Riskind, J.H. (1984). They stoop to conquer: Guiding and self-regulatory functions of physical posture after success and failure. *Journal of Personality and Social Psychology*, 47, 479-493.
- Stier, D.S., & Hall, J.A. (1984). Gender differences in touch: An empirical and theoretical review. *Journal of Personality and Social Psychology*, 47, 440.
- Turke, P.W. (1984). On what's not wrong with a Darwinian theory of culture. American Anthropologist, 86, 663-667. (Attempts to refute two primary attacks on a Darwinian theory of culture.)

#### **Books**

Box, H.O. (1984). *Primate behaviour and social ecology*. New York: Methuen.

- Bridgeman, D.L. (Ed.) (1983). Nature of prosocial development - Interdisciplinary theories and strategies. Florida: Academic Press. (Includes chapters by D.T. Campbell, R. Trivers, D. Krebs, etc. on topics of ethological and sociobiological interest.)
- Frey, S. (1984). Die nonverbale kommunikation. SEL-Stiftung, Dr. Gerhard Zeidler: Postfach 400749, 7000 Stuttgart 40.
- Huntingford, F. (1984). The study of animal behaviour. New York: Methuen.
- Itzkoff, S.W. (1983). The form of man, the evolutionary origins of human intelligence. Massachusetts: Paideia. ("... human intelligence is a uniquely natural product of the physical and biological forces . . .")
- Lea, S. (1984). *Instinct, environment, and behaviour*. New York: Methuen.
- Poole, T.B. (1984). Social behaviour in mammals. New York: Methuen.
- Rosenblum, L.A., & Moltz, H. (Eds.) (1983). Symbiosis in parent-offspring interactions. New York: Plenum.

### Ethology and Sociobiology - Discount

Subscriptions to Ethology and Sociobiology are available at a 20% discount to ISHE members. Member rate is \$33.60. You may send your check and statement of ISHE membership to: Elsevier Science Publishing Co., Inc., P.O. Box 1663, Grand Central Station, New York, NY 10163.

### Human Ethology Abstracts V: Available

The fifth edition of Human Ethology Abstracts, by Wade Mackey, is available. The abstracts, a complete issue of Man-Environment Systems is available to non-subscribers. Send a check for \$3.00 for HEA V or \$17.50 for all five editions, postpaid to: The Association for the Study of Man-Environment Relations (ASMER), P.O. Box 57, Orangeburg, NY 19062.

HEA VI, edited by Esther Thelen, is nearing completion.

#### Ethology 85

The 19th International Ethological Conference will be held August 24 - September 2. There will be a full session on Ethology and Human Psychology. For details write: Ethology 85, Department de Biologie du Comportement, 118, route de Narbonne (Bat IVR3), 31062 Toulouse Cadex, France.

# International Conference on the Meaning of Faces

This interdisciplinary meeting with contributions from psychology, anthropology, theatre, and the visual arts is sponsored by the British Psychological Society (Welsh Branch). It will be held June 26-28, 1985, at Dyffryn House, Cardiff. There will be invited papers from Professor I. Eibl-Eibesfeldt, Professor P. Ekman, and Sr. E. Gombrich.

Conference details are available from Dr. J. Davidoff, Department of Psychology, University College of Swansea, Singleton Park, SWANSEA SAZ 8PP.

#### We're Having an Impact

The flier for the second edition of Neil Salkind's *Theories of Human Development* announces as the first of its many new features; a chapter on ethology and sociobiology. The publisher is John Wiley & Sons.