

Book Reviews

Anne Smith (1992)

Understanding children's development (3rd edition).

Wellington: Bridget Williams Books. 313pp.
\$34.95 (rrp). ISBN 0-908912-41-2

Reviewed by Mark Byrd, Department of Psychology, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.

Anne Smith has recently revised and re-edited a new edition of *Understanding children's development*. As with previous editions, this book aims to present parents, teachers, and those who work with young children with a broad overview of the issues relevant to the psychological development of children from infancy to adolescence. Dr. Smith's efforts are quite successful. She has again produced a clear, straightforward, introduction to a complex field. Her book not only gives readers an introduction to the basic principles of learning and development, it also shows readers how to observe and assess the actions and developmental level of the children in their care. This dichotomy is characteristic of Dr. Smith's approach to the field. Most of her chapters are a combination of theoretical ideas and practical implications for the reader. This concerted effort to integrate both theoretical and practical concerns is, perhaps, the book's greatest strength.

Her chapters on the early experiences of infants, social development, thinking in context, and the New Zealand family are particularly good. Of special note, however, is the chapter on the development of gender roles, a chapter that more thoroughly explores this issue than did a similar section in the last edition. Teachers will find especially helpful Dr. Smith's ideas about classroom dynamics and the methods of eliminating sexism from the classroom.

Also of interest, is Keith Ballard's chapter on mainstreaming, disability, development. In this chapter Dr. Ballard points out the necessity of including children in the classroom who may have some sort of disability. As Dr. Ballard suggests, it is not only the disabled children who benefit from such a policy. Able-bodied children can also learn a valuable lesson through such interactions. Further, Dr. Ballard also takes the opportunity to advocate attempts to mainstream Maori culture and values into the curriculum. As both Dr. Smith and Dr. Ballard imply, the integration of groups traditionally excluded from the

curriculum (women, disabled and Maori) can only serve to make everyone a more fully developed individual.

It is one of the book's strengths that Dr. Smith has decided to present an overview of each subject to satisfy the demands of a wide-ranging audience. Unfortunately, this is also one of the book's weaknesses. By choosing to give a brief introduction to so many subjects, it is inevitable that readers will be left wanting more. Tertiary students, for example, will no doubt be curious about more recent theories of development than those of Piaget or Vygotsky. Teachers will appreciate Dr. Smith's views on the necessity of making more comprehensive assessments of their students' skills. They would also probably appreciate information about where to learn about comprehensive assessment skills. Parents will similarly want more information concerning subjects of direct relevance to their lives.

Moreover, the book's chapters tend to read as isolated units, rather than as integrated parts of a whole. This, however, may prove to be an asset for readers. Readers will be able to easily pick out those sections of interest to them and ignore the rest of the material until a later date.

Nevertheless, Dr. Smith has again produced an easily readable book that should prove to be an invaluable source for both teachers and parents alike. Its greatest value might be to serve as a basis for discussion between these two groups. Both groups want the best for the children, but might be uncertain as to how to accomplish this goal. Dr. Smith's book might just serve to stimulate both groups to take action to improve the quality of children's lives.

Sik Hung Ng, Lesley Jenkins, Alison Dixon, & Fiona Cram (1992).

Nurses and Their Work/Te Mahi Naahi

Wellington, New Zealand: Health Research Services, Department of Health
106 pp., \$25.00, ISBN 0-477-07579-7

Reviewed by Michael J. Platow, Department of Psychology, University of Otago, P.O. Box 56, Dunedin, New Zealand.

A couple of years ago, I had the pleasure of encountering an article in a management journal with the enticing title: "The Human Side of Economic Organization" (Griesinger, 1990). As I quickly learned, the enticement was not empty. The paper is, in essence, a plea to managers to

view and structure their organizations as institutions in which individuals strive for "betterment"; value interpersonal resources (i.e., love & status); and are, in and of themselves, valuable assets. Although they do not refer to this article in their own work, Ng, Jenkins, Dixon, and Cram seem to have adopted a similar view in the design and implementation of their survey of over 1,200 New Zealand nurses. Their concern with the "human side" of professional nurses and nursing is expressed from page one onward, and is embodied in their pronouncement that "concern for individual nurses' job satisfaction is important for humanitarian purposes ..." (p.1). With this as their guiding philosophy in the organization of their volume, Ng, et al. have provided a thoughtful research instrument and a practical reference for concerned hospital managers, nurses and other health related workers.

The major contribution of this volume lies in its description of the development and evaluation of a *job satisfaction inventory* designed specifically for nurses. It was the opinion of the authors that preexisting job satisfaction scales failed to capture features unique to professional nursing (i.e., type of nursing education), rendering these scales inadequate. Initial identification of the unique features of nursing, and hence question development, proceeded rationally, guided by both the authors' philosophical and political perspectives, and initial interviews with nurses. The final job satisfaction inventory is comprised of eight separate sub-scales (derived from a factor analysis) measuring attitudes towards administration, co-workers, career advancement, work schedules, patient care, education, physical environment and communication with patients and doctors. Chronbach's alpha for the entire inventory is .86, although it varies considerably with each subscale.

In addition to these components of job satisfaction, the authors included subscales measuring "unsettling responses" (e.g., level of current job "fulfillment"; comparison of current job with next best alternative) and "quitting intention". These latter two subscales derived from the author's adoption of Ajzen and Fishbein's (1980) Theory of Reasoned Action, which provides a model for the relationship between attitudes and behaviour. Rather than viewing job dissatisfaction as directly causing job quitting, Ng, et al. asserted that the latter was actually the final stage in a sequence of causally related thoughts and behaviours. Specifically, they hypothesized that job dissatisfaction causes unsettling responses,

which in turn causes quitting intention. It is the latter that was expected to exhibit the strongest relationship with actual quitting.

To evaluate this hypothesized casual sequence, the authors administered their inventory twice over a six month period. This longitudinal nature of their study provided a means for Ng, et al. to conduct sequential (cross-lag) analyses, from which they made inferences regarding causal relationships between responses on the inventory and actual quitting. As expected, the single best predictor of quitting was not job dissatisfaction, but actual quitting intention. In addition, two items from a biographical subsection, marital status and "type of basic nursing training", were significant predictors of job quitting (with quitting highest among single nurses with comprehensive training).

While reading the volume, I was left with the impression that some readers may not be particularly impressed with a formal analysis demonstrating that it is precisely those people who say they are planning on quitting who, indeed, quit. However, the concerned hospital manager should think twice before dismissing the study outright. The key feature is not the simple correlation between these two variables, but Ng, et al.'s *sequential analyses*. The lesson to be learned from the latter is that, although the initial grumbles of nurses may not lead directly to quitting, they may signal the beginning of a broader set of stages that are quite likely to lead to quitting. I found this to be a particularly positive finding, especially from the perspective of managers concerned with employee attrition. It says "there's still time to improve things". The grumblings should be taken seriously, but not as intentions to quit. Rather, they should be viewed as an early warning sign, as the foreshadowing of quitting intention, which will likely lead to eventual quitting.

Viewed in this light, the inventory is a particularly subtle diagnostic tool that can help identify early stages of employee departure. Indeed, this diagnostic feature of the inventory is highlighted by the authors in their final chapter. In addition to this function, Ng, et al. offer their instrument as a tool to be used in the evaluation of intervention programs and other structural changes that may occur within hospital setting itself, or within the broader social-political context (in one chapter they report the impact on nurses' attitudes of two major pieces of legislation impacting upon the medical profession that occurred between the

first and second survey). These two practical features are, in my view, the primary achievements of the inventory.

Overall, Ng, et al. have succeeded in providing the health community in general and nurses in particular with a practical tool for research, diagnosis, and evaluation of nurses' job satisfaction. This tool is accompanied by a clearly and sensitively presented set of observations and inferences about the attitudes, opinions and general demographic composition of New Zealand nurses at the end of the 1980's. Indeed, it is quite clear that the author's goal was not to provide academics with an empirical evaluation of a particular psychological theory, but rather to offer health workers a practical resource, empowering both hospital managers and nurses alike. This volume is certainly to be recommended to anyone wishing to gain insight in these topics, or searching for a means for evaluating them him- or herself.

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- Griesinger, D. W. (1990). The human side of economic organization. *Academy of Management Review*, 15, 478-499.
- Raymond Cochrane & Douglas Carroll (1991) *Psychology and social issues: A tutorial text*. London: The Falmer Press.
ISBN 1-85000-836-1 (paper).
Reviewed by Mark Byrd, Department of Psychology, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.
- In *Psychology and social issues: A tutorial text* Raymond Cochrane and Douglas Carroll provide a series of 20 essays designed to provoke discussion among the members of Introductory Psychology tutorial groups. The essays, authored by a variety of U.K. researchers, cover a wide-range of topics (e.g., eating disorders, drug and alcohol abuse, gender relations, etc.) and are accompanied by discussion questions at the end of each chapter.
- The essays in this book are generally well-written and will serve as good introductions to the topics for beginning psychology students. Moreover, the discussion questions at the end of each chapter should have no difficulty in provoking discussion among tutorial students. Indeed, the authors should be credited for playing "devil's advocate" and including such questions as "Can sex between adults and children ever be acceptable?" that accompanies the essay on child abuse.
- There are however, a number of limitations to this volume of which potential users should be aware. As the title states, the essays in this volume are concerned solely with social issues. The book would benefit greatly from the inclusion of essays that will encourage student discussion in other areas of psychology, such as sensation and perception or statistics. Further, there are too few data-gathering or naturalistic observation exercises provided by the authors of the essay. It would have been nice if more of the authors could have been encouraged to give examples of how their points can be shown to work in "real-life". Potential New Zealand users of this book should also be aware that although the essays concern themselves with research from the U.K. and the U.S., many of the topics (e.g., racial relations or psychology and the nuclear threat) can easily be adapted to suit tutorials.
- Despite these limitations, *Psychology and social issues: A tutorial text* will accomplish its purpose and provide a useful supplement to most introductory psychology courses. It will provide students with an introduction to the psychological issues underlying many relevant social topics and should encourage lively and interesting discussions in tutorial sessions if not in the lectures themselves.
- Mark Worden (1991) *Adolescents and their families: An introduction to assessment and intervention*. New York: Haworth Press.
ISBN 1-56024-102-0 (paper).
Reviewed by Cynthia M. Bulik, Department of Psychology, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.
- Adolescents and their families: An introduction to assessment and treatment* is a surprisingly scholarly and honest guide for dealing with the intimate complexities of clinical work with adolescents in the context of the family. Worden clearly has a functional understanding of a range of family therapy approaches and successfully borrows from various schools in outlining his approach. He first presents a context for understanding families using the Circumplex Model of

family interaction. He then weaves the three dimensions of cohesion, adaptability and communication through the remainder of the book on assessment and treatment. After developing a guide for comprehensive assessment of the adolescent and the family, he presents tasks, issues and potential pitfalls of the initial, middle and termination phases of therapy. With the liberal use of rich and varied case material, the applicability of his outline becomes apparent for a wide variety of potential clients.

Perhaps the most valuable feature of the book is his honest approach to the feelings and limitations of the clinician. With frank discussions of countertransference reactions that often arise when dealing with difficult adolescent clients who expertly test limits, he models well the triumph of therapeutic technique over instinctual response. In so doing he also shares basic but effective approaches for working in this modality.

This book is best suited for individuals who are beginning work with adolescents but it also worthwhile for more seasoned clinicians as a concise review. In addition his fresh approach serves as a reminder of the at times labyrinthine but predictable interplay between adolescents and their families.

Michael C. Corballis (1991)

The Lopsided ape: Evolution of the generative mind

New York: Oxford University Press

366pp, ISBN 0-19-506675-8

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Humans share 98% of their genes with chimpanzees. In fact, chimps resemble us (genetically speaking) more closely than they resemble their next closest relative, the gorillas. In this fascinating book, Corballis considers what difference the 2% makes, addressing the time honoured questions of whether and how we differ from other animals. In answering these questions Corballis guides the reader adeptly through research findings from anthropology, cognitive psychology, evolutionary biology, linguistics and neuropsychology, to develop a provocative account of the human condition.

Descartes claimed that a divine soul and language made us unique — in other respects we were indistinguishable from other animals and

mechanical replicas (apparently there was a passion for clockwork animals in 17th century France). The important feature of language for Descartes was its generativity, the fact that an unlimited number of sentences can be constructed from a rather small number of phonemes (44 in English). Not surprisingly, Corballis rejects divine attention as the source of our uniqueness, but substitutes GAD, *the generative assembling device*. This device, located in the left hemisphere, provides a generative style of representation responsible not only for our linguistic prowess, but also for our manufacturing skills and our ability to recognize manufactured objects. According to Corballis, GAD is part of the 2% of our genetic heritage not shared by chimps.

In developing his argument for the existence of GAD, its location in the human left hemisphere and its absence in other animals, Corballis covers an impressive range of material and provides general reviews on human evolution (ch's 2 & 3), handedness (ch 4), language (ch 5), the evolution of human language (ch 6), the localization of language and praxic functions in the brain (ch's 7 and 8, respectively) and the nature of hemispheric duality (ch 10). These chapters are written in a clear, non-technical style, making them attractive for graduate seminars or advanced undergraduate classes. The chapter on language is especially good, with potentially difficult concepts like Markov chains, universal grammar and parameter-setting made easily accessible.

The main argument for generativity as the source of our uniqueness comes in chapter 9, "The generative mind", where Corballis claims that "out of praxis there has emerged a special form of representation whose most important property is *generativity*" (op. cit., p.218). The uniqueness of generative language to humans was established in earlier chapters. Here, Corballis extends the notion of generativity to the mental representation and recognition of objects (especially manufactured objects). Generativity is a feature of contemporary accounts of object recognition (e.g., Biederman, 1987; Marr, 1982), and Corballis argues that the left hemisphere mediates this kind of recognition. This part-based scheme is most suitable for manufactured objects, which are *created* generatively from a rather small set of component types. For other kinds of objects, especially natural objects, a more holistic, and primarily right hemisphere, system is used. Evidence from the incidence of agnosias and from studies of mental imagery

supports these claims. For example, Farah (1991) has shown that agnosias (recognition problems) seem to be associated either with alexia (reading problems) and left hemisphere damage, or with prosopagnosia (the inability to recognize faces) and right hemisphere damage. In addition, the generation of images of part-based objects appears to be a left hemisphere process. Therefore the evidence from agnosias and image generation is broadly consistent with the GAD claim.

The GAD thesis also offers a new slant on hemispheric duality (ch 10). The left hemisphere is now generative (which is not dissimilar to earlier views of the left hemisphere as analytic, rational and propositional) and the right hemisphere is holistic, specializing in those aspects of the human condition that resist a generative interpretation and for which, Corballis notes, words fail us (emotion, spatial abilities and music appreciation).

Finally (ch 11) Corballis carefully negotiates a mine-field of conflicting results to generate a highly plausible account of how cognitive abilities in general and GAD in particular come to be lateralized in growing brains. The account builds on earlier work with Michael Morgan (Corballis & Morgan, 1978; Morgan & Corballis, 1978) in which asymmetric growth gradients control the development of lateralization in what is otherwise an intrinsically symmetric, laterally equipotential system. Rapid growth is the ideal neural environment for learning, and intriguingly the left hemisphere undergoes a growth spurt between 2 and 4 years of age, precisely when children's language becomes generative, with the ability to produce full sentences (and when children, or at least boys, play with lego and construction toys). A later growth spurt in the right hemisphere at 8–10 years may account for the shift from piecemeal (left hemisphere) to configural (right hemisphere) recognition of faces.

The GAD claim allows Corballis to integrate a wide range of findings, and the plausibility of the account seems to me to be about proportional to the plausibility of the available data itself. For example, I doubt that many would find some of the evolutionary speculations convincing, based as they are, "on a few old teeth, bones and stones" (Corballis, 1991; p.47). Attempts to understand cognitive evolution are even more fraught, given that even the old teeth and bones do not speak to this issue. However, this has not prevented the evolution of language from becoming a topic of intense debate (Piattelli-Palmerini, 1989; Pinker

& Bloom, 1990). Corballis sides with Pinker and Bloom against Piattelli-Palmerini, arguing that language evolved gradually, a view that is almost certainly correct. However, the precursors of linguistic generativity in tool manufacture that Corballis cites in support of this view, seem a little far-fetched. For example: "different tools could be made from the flakes struck from a single core ... This ability may reflect something of the hierarchical property of language, whereby sentences can be elaborated into words or words into the primitive alphabet of spoken speech" (op. cit., p.64), or "with the appearance of blade technology and the ensuing explosion of manufacture and invention, we see a property that is more unequivocally associated with human language. That property is generativity — the ability to construct an unlimited number of different forms from a finite number of elementary parts" (op. cit., p.65).

More generally, one might wonder whether the generative system developed for language was really exapted for recognition (of objects), as claimed, or whether generative systems might not have evolved separately for language and object recognition. There are certainly precedents for the independent evolution of similar solutions to a problem, with the evolution of eyes in phylogenetically unrelated animals perhaps the best known for example. Analogously, similar principles underlie the neural coding of visual, auditory and somesthetic information in the brain, but there is little reason to think that these systems did not evolve independently. The similarities may result from constraints imposed by the organization of the brain itself (e.g., the need for short connections) and by very general computational constraints (e.g., how to convert temporally or spatially distributed information into conclusions about what's out there). Similarities do not always indicate common evolutionary origins. The independent evolution of generative systems might also account for the different locations of language and object recognition areas in the brain and would avoid the difficulty of explaining how a generative system specialized for visual object representation evolved from one adapted for speech production and auditory linguistic analysis.

Nevertheless, generativity is a highly appealing candidate for human uniqueness. The concept can be clearly spelled out, giving it a clear lead over some rival candidates, particularly consciousness, although Dennett's recent book, "Con-

consciousness explained" (1991), does an excellent job of demystifying this concept. A more appealing candidate is a theory of mind, which Cheney and Seyfarth (1990) claim monkeys don't have, despite their impressive social and cognitive skills. Of course humans are unique in many ways, big noses, and bodily baldness included, and no single candidate is likely to capture the human condition.

One of the aims of science is to develop theories that account for a broad range of data. In the *The Lopsided Ape* Corballis accomplishes this with a theory of human uniqueness that integrates what we know about cognition, neuropsychology, evolution and developmental biology. The account is plausible, thought-provoking and about as consistent with the data as could be expected, given that the data is not always very consistent with itself.

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