eight sections of the book. One finds solace in that the editors were aware of this and have tried to overcome it, in some sections, by cross referencing topics covering the same points.

In summary therefore Parts I, II and III should be consulted by all concerned with development work. For practitioners involved in specific issues consultation should be made of the other parts dealing with their area of concern. These parts are concerned with social and economic development, health, agriculture and disasters. Here one finds very interesting detailed treatment of specific programmes with examples experienced in the field. For example, on energy sources and use mention is made of strides made in India and China in biomass production, etc.

I recommend this book as a must for all development workers in the Third World: for Zimbabwean workers Oxfam's experience in the handbook will be invaluable given the developmental problems the country is currently facing. I see this book going a long way in assisting development workers in the Third World. It could also be used in schools that are teaching development as a subject.

Reviewed by Luke K. Jonga, Norwegian People's Aid, Harare, Zimbabwe.

About Understanding – ideas and observations on cross-cultural communication, Andreas Fugelsang, Dag Hammarskjöld Foundation, Uppsala, Sweden, 1982, 231 pgs, US\$12,00.

A major aim of this interesting book is to increase our understanding of cross-cultural communication, and especially its relations to language and media technology. Fugelsang introduces the task by contrasting modern western logical thought with third world thinking patterns. He abhors the notion that those who use traditional modes of thought are "illiterate, irrational and prelogical", proposing that such misconceptions are due to an ethnocentric language trap. In other words, when western scientists analyse the so-called 'tribal cultures', they do so through culturally biased eyes, obviating perception of wholeness, unity and order. Fugelsang's main argument here is a restatement of the Whorf-Sapir principle of linguistic relativity that perception of reality is a function of the language used, which differs from culture to culture. If cross-cultural communication is to occur, mutual understanding is necessary. Unless observers have a similar linguistic background, perceptions of reality will differ.

Psychologists have examined this proposition extensively. They conclude that there is little to justify the claim that language differences determine or restrict thought in the direct way that Whorf claimed (Dodd and White, 1980: 291). Nevertheless, there seems substance in Fugelsang's propositions. provided we extend 'language' to incorporate other communication modes. including media, gestures and signs - as indeed did the linguistic philosopher Wittgenstein - together with the attitudes, beliefs and judgements that colour all forms of communication

Fugelsang admits these qualifications in his discussion of the need to 'demystify our words', his argument devolves on a set of Western 'myths', including 'the logical universe', 'the world of pure reason', 'the essential goodness of modern technology', 'the validity of the consumer society as a model for national development,' 'the beauty of the educated mind' and 'the poverty of illiteracy'. All this is fair enough, as is his assertion that third world social practitioners should become aware of their unwitting acceptance of these myths, so that their efforts towards social transformation might become more meaningful.

Reasonable too is his claim that we do not fully understand the ongoing process of social transformation, nor do we know how to process the information that is involved. But here we come to a case of the 'byter bit'. In his ensueing discussion of information theory entitled "The Opposite of Uncertainty", Fugelsang is paradoxically forced into the tricky terrain of abstract logic, with the result that some sections may not be easily understood by the readers to whom the book is addressed. Be this as it may, the gist of this chapter is that social transformation is best approached through programmation. The word 'programme' is used to refer to the planning of a series of actions in a certain order which, in fact, serves to forecast future events in reality. Fugelsang maintains that everyone uses programmes, giving as examples: the Bemba farmer, whose programme for agriculture is shaped by tradition and personal experience to provide the biggest yield; the Copenhagen delicatessen owner, whose recorded accounts ensure higher efficiency and greater profits; the Tollai wild pig trapper in New Guinea, who knows how and where to set his traps for maximal entrapment; and the NASA space exploration programme, whereby information about the solar system is revealed (interestingly he does not add the capitalistic spinoff which also accrues). In each example, Fugelsang claims, information is processed in the same way, by describing sequences of action in reality aimed at reducing uncertainty. The important consideration here, he argues, is that such programmes are recorded in different languages which can lead to cross-cultural communication problems, the subject of his next chapter. Before considering this I should note my reservations regarding Fugelsang's assertions about programme-determined actions.

Literary speaking, a programme means 'something written before'. In Fugelsang's usage this is obviously not the case, since neither the Bemba nor the Tollai use writing. Admittedly, the advent of modern computerisation broadened the meaning of 'programme', so that now perhaps it is legitimate to use it to describe any action-plan, whether formulated or not. Nevertheless it seems relevant to refer to a distinction drawn by the reviewer some 20 years ago between the action systems of traditional and modern societies (Mundy-Castle, 1968; see also 1984). The crux of that argument is that programmation characterises modern societies and serves to delimit freedom of action, since it creates the illusion of a future that is already 'there'.

Such delusory certainty guides programme-determined man into the easy life of pre-ordained security, provided the programme fits life's exigencies and denies him his capacity for spontaneous, *ad hoc* determination of behaviour. The latter characterises traditional societies, whose 'programmes' (to use Fugelsang's term) are not explicitly formulated and in consequence are far more adaptable and versatile than those that are written.

In his examination of the problems of language and cross-cultural communication, Fugelsang focuses on cultural differences between third and modern worlds in fundamental concepts like space, time, measurement, objectivity, subjectivity, the spirit world and cosmology. He makes the important point that culture is the language in which people structure their experience so that they may share knowledge with each other. He recognises the need for further classification of conceptual differences that arise between oral and written language users, and launches in to a fascinating historical account of the history of writing. To this he adds a section questioning the cross-cultural validity of Piagetian conservation procedures for cognitive development assessment, stating that Piaget's theory may not be applicable in Africa.

Important here is that assessment of conservation acquisition depends on meaningful testing, which requires the grasping of children's intentions. Conventional Piagetian procedures often fail in this condition, so that conservation is not elicited, whereas if intentions are grasped, conservation is observed. The problem for the cross-cultural psychologist is to break the meaning barrier, and this requires study of nonwestern communication modes.

Fugelsang considers this problem in his chapter on words and concepts, in which he argues that traditional thought is not fundamentally different from modern scientific thought. This proposition is not new (e.g. Horton, 1967; Gay and Cole, 1967). The important question raised concerns the influence of writing on cognition and communication, and the work of Levi-Strauss (1966) and Goody (1971) suggests it has a powerful effect. As Goody observes, literacy encourages special forms of linguistic activity associated with special kinds of problem raising and solution, in which lists, formulae and tables play a prominent part. Fugelsang makes no reference to these works, yet they are relevant to his thesis.

Chapter 7 is concerned with the logic of spirits, a theme on which the reviewer has also written (Mundy-Castle, 1984). I am not quite sure that I agree with Fugelsang's conclusions that memory pictures and eidetic imagery are sufficient explanation for the 'existence' of spirits, and that seeing a spirit is the same as seeing a mental image. Nor am I happy with his denigration of the idea that magic is irrational. Perhaps I am the victim of a language trap, but I still have a great respect for irrationality, and, for that matter, magic and witchcraft. When Fugelsang argues that magic is simply a rational attempt by people to control their reality, I am tempted to conclude it is he who is caught in a logic trap.

In the remaining chapters, Fugelsang develops his ideas on cultural life in traditional villages, notably in Papua New Guinea and various parts of Africa. As with the rest of the book, these make interesting and provocative reading, and the whole work is profusely illustrated, with well-chosen photographs, pictures, tables and diagrams. There is a useful chapter on visual perception and its relation to pictorial and other forms of visual communication, and an excellent chapter on the promise and problems of community health in the village.

I hope that this review conveys my admiration for this excellent book. It is a must for anyone engaged in cross-cultural education, primary health care and nutrition, and would make useful reading for most psychologists, sociologists and social workers, especially those engaged in Third World endeavours.

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Measurement and Analysis of Socio-Economic Development, Donald McGranahan, Eduardo Pizarro and Claude Richard, UNRISD, Geneva, 1985, no price stated.

Social Indicators for Human Development, Ian Miles, Pinter, London, 1985 £18.50.

The two books for review present very different UN perspectives from which to tackle the important question of how to understand and conceptualise development. McGranaham's book is a very technical work published by the UN Research Institute for Social Development, precisely subtitled "An enquiry into international indicators of development and quantitative interrelations of social and economic components of development". Miles' book, though physically much smaller, has a much wider interest, for the author seeks to elaborate on how social indicators "can be used in attempts to assess and improve the human condition" (p. 1), and is a report presented to the UN University under the auspices of its Goals, Process and Indicators of Development (GPID) Project (see Journal, Vol 1, No 1, article by Valashakis and Martin).

McGranahan's book is not easy reading. Some 171 pages of figures, and graphs are consigned to annexes, while the text itself presents arguments for combining a number of quantitative cross-national statistics to form indicators for relative development. Correlation and regression, as commonly understood, are rejected as methods of statistical analysis in favour of what is called a 'correspondence system of analysis', a form of regression analysis that does not choose between dependent and independent variables. Some 19 key indicators are selected (e.g. expectation of life at birth, per cent adult male labour in agriculture, per capita energy and steel consumption, combined primary and secondary school enrolment) and charted on a 'development