ing such matters as evolution and irreversibility, the principles of dissipation and of flow equilibrium, structuralization through breach of symmetry and the functioning of feedback, he turns – though regrettably only in a roundabout way – to their application to economics, such as was elaborated e.g. in certain approaches to an „evolutionary management" and evolutionary management in the field of economics.

The results of chaos research and fractal patterns are clearly discernible in the quality philosophy and company strategy of Total Quality Management (TQM) (J.Ebeling: (5.) *Little Apple Men and Total Quality Management?*). Also – and maybe especially – for the systematizer not specialized in economics this presentation – loosely interspersed as it is with diagrams, graphs and tables – offers useful insights gained from paradigmatic cases.

Quite generally, in fact, the perusal of these refreshingly readable contributions proved to be a fascinating and demanding, yet never laborious and always rewarding undertaking. If any wishes remain open, they pertain to a more precise checking of one or another point in the technical literature. For the elaboration of classifications of knowledge the question as to a taxonomy (or of taxonomies) of change and its control presents itself implicitly, namely the question of how to organize knowledge with a view to political decision-making and action. What becomes equally clear is the sheer necessity of such an approach as a sine qua non for social control on all levels. After a few earlier, initial attempts (e.g. K.Deutsch: *The Nerves of Government*, 1963; St.Beer: *Designing Freedom,* 1974), subsequent approaches were published only in the past few years (see e.g. St.Beer:*Beyond Dispute*, 1994; M.van den Erve: *Evolution Management*, 1994). On the other hand there is no lack of interdisciplinary works (most recently: M.Gell-Mann: *Das Quantum und der Jaguar,* 1994), which lay the foundation for a creative, innovative organization of thinking. The discipline which has interdisciplinarily committed itself to knowledge organization may well feel called upon to take this task in hand even more consistently.

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Union of International Associations(Ed.): **Encyclopedia of World Problems and Human Potential.** 4th ed. München: K.G.Saur Verlag 1994. Vol.1: 1258p., Vol.2: 929p., ISBN 3-598-10842-7 + -11226-2

Much effort has gone into the focus on seemingly isolated world problems, such as unemployment, boredom, endangered species, desertification or corruption. Work on the 4th edition of this Encyclopedia (for reviews of earlier editions see Int.Classif.15(1988)No.2, p.104-107 by M.P.Satija, and 18(1991)No.4, p.235-238, by Ju.Shreider) has now shifted its focus to the hunt for vicious cycles of problems. A cycle is a chain of problems, with each aggravating the next – with the last looping back to aggravate the first in the chain. The more obvious loops may be composed of only 3 or 4 problems. Far less obvious are those composed of 7 or more.

An example is: *Alienation > Youth gangs > Neighbourhood control by criminals > Psychological stress of urban environment > Substance abuse > Family breakdown > Alienation.* Such cycles are vicious because they are self-sustaining. Identifying them is also no easy matter. Like the search for strange particles in physics, much computer time is required to track through the aggravating chains linking problems. A preliminary search along 9 million such pathways has so far identified only 7,000 cycles composed of up to 7 problems. Organizational strategies and programmes that focus on only one problem in the chain tend to fail because the cycle has the capacity to regenerate itself. Worse still is that such cycles tend to interlock, creating the complex of global problems which causes so many to despair. The good news is that identifying vicious cycles is a first step towards designing strategies to reverse or break them. Better still, some problems are linked by serendipitous cycles in which each problem alleviates the next.

Vol.1 of the Encyclopedia currently describes 9,836 world problems clustered into 320 overlapping hierarchies. The problems are linked by some 120,000 relationships of 7 types (*Broader, Narrower, Related, Aggravated by, Reduced by, Followed by, Preceded by).* Problems included are those identified in international periodicals but especially in the documents of some 15,000 international non-profit organizations (profiled in the companion 3-volume *Yearbook of International Organizations,* now in its 31st edition). The Encyclopedia includes problems which such groups choose to perceive and act upon, whether or not their existence is denied by others claiming greater expertise. Indeed such claims and counter-claims figure in many of the problem descriptions in order to reflect the often paralyzing dynamics of international debate. In the light of the interdependence demonstrated among world problems in every sector, emphasis is placed on the need for approaches which are sufficiently complex to encompass the factions, conflicts and rival worldviews that undermine collective initiative towards a promising future.

Volume 2 contains the most comprehensive description of the variety of approaches to human development. While their intention may be to alleviate suffering, paradoxically their blinkered pursuit is often a prime cause of world problems, notably in the case of religious conflict. Not only are there some 1,400 understandings of human development from the spiritual and psychological disciplines of different cultures and traditions, but also 3,050 modes of awareness or experience that are reported to be accessible through such disciplines, often through identifiable sequences or pathways. Buddhism offers the most elaborate perspective, requiring 1,360 interlinked entries.

The Encyclopedia takes an unusual approach to the range of human values. Rather than limiting its focus to the dozen values most frequently discussed (*peace, justice,* and the like), Vol.2 identifies 987 "constructive" or positive values as well as 1,990 "destructive" or negative values. The positive and negative values are clustered into 230 value polarities (like beauty-ugliness) to transcent the semantic confusion associated with many value-words. It is however the negative value terms which are used to sharpen the problematic

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nature of the problem names given in Vol.1. Negative values are systematically cross-referenced to both world problem names and to the complementary positive values (via the polarities). For the first time it becomes possible to trace the positive values in terms of which problems becomes perceptible. Also for the first time, values are cross-referenced to human development where particular approaches or experiences enhance the understanding of a particular value. The editors explore a variety of possibilities of organizing value terms as a prelude to any justification for the current preoccupation with so-called basic values.

We looked for *Knowledge Organization* in the index of volume 2 and could not find a suitable entry among the 131 ones under *Knowledge* with many subentries. There was also no entry under *Classification*, one may assume that both concepts have not as yet been recognized as human values. (In vol.1 *misclassification* and *classification, erroneous* were identified though as problems!). Insights could be gained, however, by looking into the descriptions going with *Systematics* which has been linked with a number of concepts, such as *cyclic knowledge, discriminative knowledge, experience, creativity, domination, individuality, pattern, polarity, potentiality, relatedness, repetition, structure, subsistence, wholeness, ninefold knowledge, polar knowledge, potential knowledge, relational knowledge*, etc., all of these relating to the 'modes of knowledge' identified by J.G.Bennett and inspired by G.Gurdjieff. Could there be some source for inspiration as to the ideals pursued by ISKO?

Although it is still possible to gather and configure so very much detail into book form (or onto the CD-ROM version of the Encyclopedia and Yearbook at present in preparation), the editors have also been concerned with new ways of visualizing complex networks of relationships. The challenge is to find meaningful ways to navigate through such complexity and to evoke imaginative insights in response to it. In a section on transformative approaches, the editors explore the implications for computer graphics, transformative conferencing and the design of policy cycles capable of responding to vicious problem cycles.

Much emphasis is placed on the potential of new metaphors for governance as an unexplored resource. The suggestion is made that many institutions and policies are trapped in inadequate policy metaphors. In this spirit the Encyclopedia even contains an extensive exploration of the relevance to governance to fruitful cross-fertilization between poetry-making and policy-making − seen as equivalent to the mythical challenge of arranging a marriage between Beauty and the Beast.

Radically different perspectives are offered by this really exciting source of descriptions of human capabilities to policy-makers, social researchers and those concerned with development strategies. New approaches to understanding and action through the deliberate juxtaposition, within the same context, of contradictory perceptions and fundamentally incompatible viewpoints will be discovered and new insights will be evoked.

With such an abundance of most interesting and necessary information it is to be deplored that the price for individual buyers is rather high: each of the two volumes costs DM 548.- and a third volume on "Actions, Strategies, Solutions" is being prepared to appear in mid-1995, also for the price mentioned. One can only hope that our public and scientific libraries are still able to acquire these volumes for the benefit of those being able to understand what mankind has been given to overcome the world problems of today and to act accordingly.

I.Dahlberg

(utilizing most of what the Secretary of the Union des Associations Internationales – UAI – Mr. A.J.N.Judge – has provided in his Press Release).

Forthcoming Conferences 1995
(see also ISKO News)

24-26 April: Las Vegas, USA
4th Annual Symposium on Document Analysis and Information Retrieval (SDAIR'95). Further information: Larry Spitz, Information Science Research Institute, University of Nevada, Las Vegas, 4505 Maryland Parkway, Box 454021, Las Vegas, NV 89154-4021, USA.

25-28 April: Sydney, Australia
Global Cultural Diversity Conference. Sydney Convention and Exhibition Centre. Conference Secretariat: GPO Boox 128 Sydney, NSW 2001 Australia. Phone: 61 2 262 2277, Fax: 61 2 262 2323.

9-10 June: Montréal, Canada
ASI/IASC Annual Convention and Workshops. First combined conference of the American Society for Indexers and the Indexing and Abstracting Society of Canada at Delta Montréal Hotel, downtown Montréal. Correspondence to: IASC/SCAD, P.O.Box 744, Station F, Toronto, Ont., M4Y 2N6 Canada.

13-15 June: Paris, Palais de Congrès.
IDT 95: Information Industries and Markets. Organized by ADBS, ANRT, and GFII. Conference chair: H.Martre, AFNOR President. Information: ADBS, Phone: +33(1)43 72 2525, Fax: +33(1)43 723662.

20-23 June: Moscow, Russia
6th Annual Conference of MAAL, the Moscow Association of Applied Linguistics and the International Terminology Center of the Moscow State University. Contact: Ludmila Minaeva or Sergei Grinev, Faculty of Foreign Languages, Moscow State University, Lenin Hills, 117234, Moscow, Russia.

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Outline

* Subdivisions of 048-, 5, 6, 78, 82, and 88 according to the Information Coding Classification (ICC) described and displayed in Int.Classif.9(1982)No.2, p.87-93 and in the International Classification and Indexing Bibliography, Vol.1, 1982.

A further division of the above scheme was published in Int.Classif.12(1985)No.3, p.147-151. It has been amended in the meantime and will be re-published soon.

** Monograhs on special topics at special subdivisions.

*** CS & T stands for Classification Systems and Thesauri; C & I stands for Classing and Indexing

Language abbreviations:

ar	Arabic	it	Italian
af	Afrikaans	ja	Japanese
bg	Bulgarian	ji	Jiddish
ch	Chinese	Li	Lithuanian
cs	Czech	nl	Dutch
da	Danish	pl	Polish
de	German	pt	Portuguese
ee	Estonian	ro	Romanian
en	English	ru	Russian
es	Spanish	sk	Slovakian
fi	Finnish	uk	Ukrainian
fr	French		
hu	Hungarian		

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