"social environment", "profession"). It would be interesting also to extract from the tables of results the categories that came from AMP in order to see if those had been searched significantly more often than the non-AMP categories (e.g., "Genre").

Both the Hjortespring librarians and the library's users were enthusiastic about BH. Among users, 93% said they "liked to use" BH and 63% said it was "easy to understand". A group interview with librarians after the tests were completed showed "a general agreement that a system like the BOOK HOUSE is a useful tool for the daily work with information retrieval tasks in fiction" (III, p. 117). Here, as in all the results reported for the research, only percentages are reported. Statistical significance does not seem to have been calculated for any of the data. For example, in 3358 logs, "Genre" and "Plot" were chosen most often (13% each) and "Intention" and "Front cover" were chosen least often (4% each) (II, p. 87). It would be useful for the revision of the system to know if any of these results occurred more often than could occur by chance. If the results could not have occurred by chance, revisions might be undertaken to enhance those dimensions that had been statistically validated as user preferences. Similarly, in 6000 logged searches, 31% of users chose an analytical strategy (i.E., AMP plus and/or minus various categories), 27% chose to browse icons, 23% chose to search by analogy, and 20% chose to browse records. It would be interesting to know whether these results could have occurred by chance or whether the apparent preference of users for analytical, classificatory searching was statistically significant. This information could prove invaluable in persuading other researchers and/or libraries to pursue the complicated tasks of developing and instituting databases for the content of fiction documents.

Analysis of fiction for information retrieval is a relatively new field, and a number of important problems need study. Research with the SPRING database has addressed some of them, but other equally salient questions do not seem to have been considered. One problem is what constitutes "relevance" in fiction retrieval. This question was raised by J. Austin (1) in reporting the results of previous tests with AMP, and its implications have not been fully explored. Another issue is that categories that occur in the various AMP dimensions and in BH are neither self-evident nor mutually exclusive. As the authors of these volumes pointed out, "overlapping categories such as genre, subject matter and theme were... difficult to distinguish between" (II, p. 133). Their research, however, did not address the problems these complex terms raise for the development of fiction retrieval systems and for users of the systems. Iivonen noted that genres are not mutually exclusive because they are not "defined through their mutual relations, e.g., one genre as the negation of the other" (3, p.15). The same point can be made about "theme", and the implications of this circumstance need further exploration. It would be interesting, for example, to see

whether users could find a novel with which they were familiar by using only the subject analytic capabilities of a fiction analysis system.

We have little experience in analyzing the content of fiction for information retrieval, and the development of AMP has contributed much to our knowledge of fiction retrieval. In particular, the enthusiasm with which users have greeted AMP shows that fiction analysis systems are needed. The tests on AMP and the SPRING database have increased our understanding of the questions that remain to be aired. One main problem for this new research field is that we do not yet seem to have reached consensus on which questions about fiction analysis and fiction retrieval are the most salient for directing fruitful research on designing fiction retrieval systems. Another problem is that we do not yet know how or how much effective fiction retrieval systems differ, if they do, from effective non-fiction retrieval systems. One may hope that work on AMP and the SPRING database will proceed further and that the research field in general will continue to gather momentum.   Clare Beghtol

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UNION DES ASSOCIATIONS INTERNATIONALES: **Encyclopedia of World Problems and Human Potential.** 3rd rev.ed. München-New York-London: K.G.Saur 1991. Vol.1: World Problems 1187p., Vol.2: Human Potential, 954p., ISBN 3-598-10842-7

The totality of world problems presents a highly complicated structure. Also, we must not expect that there exists an optimal approach to describe this structure from a unique point of view without contradictions. The authors and the compiler of this Encyclopedia, A.J.N.JUDGE, have tried to solve a problem that seems to utterly defy solution. Nevertheless they have solved it in some way.

Of what kind are these problems? To give an idea

here are some examples: Disaccord, Ignorance, Egoism, Vanity, Disease, Uncertainty, Racism, Exploitation, Ethnocentricity, Censorship, Bureaucratic corruption, Suicide, War crimes, Global warming, Class conflict, Family breakdown, Multi-drug abuse, Misleading advertising, Unethical food practices, Overwork, Prenatal wrongful death, Allergy, Divorce, etc.

The encyclopedia as a whole contains 20,958 entries. These are linked by 114,395 cross-references. The two major indexes for each volume contain a total of 91,385 entries. In addition there are 5 section indexes in Vol.2.

We must not underestimate this success and the efforts of the compiler. The importance of this problem and the difficulties opposing its solution are extreme. One of the greatest difficulties is the classification of these problems and the ones of the area of human potential. The classification system used must clear the pattern while not restricting the variety of possible approaches.

Another major difficulty is the multi-dimensional character of the subject and its very fuzzy organization.

So this has been a large-scale job which, to be undertaken at all, required enormous diligence, profound thought as well as a refined taste.

The result of this work may be useful for many sophisticated applications, including some of a quite unexpected nature. I do not regard this Encyclopedia only as a tool for trying to solve world problems or seeking approaches for their solutions. The field of its applications is much broader than that. What I mean is: this Encyclopedia is all the more important because it provides a possibility to solve modern problems on the basis of a variety of religious approaches.

The main purpose of these volumes is to construct patterns of world problems and of possibilities lying in human nature to solve these problems. But the compiler and his authors apparently refuse to assess the importance of these problems and to recommend effective approaches to tackle them. Instead, they try to present all known different points of view, abstaining, in so doing, from any systematization which would have suggested a preferable pattern of problems and approaches for their solution. Nevertheless they use some divisions of topics and cross references between concepts which build patterns and can be regarded as an implicit systematization of the thesaurus type.

The Problems are divided into 10 sections. Six of them include the titles of items; the contents of two sections is represented only in cross references, while the last two sections are used only for editorial purposes and include "problems" considered as inappropriate. Concrete scientific problems, such as the famous mathematical problem proclaimed by D.Hilbert, are not included in this volume. Care has been taken not to give exaggerated prominence to fashionable highly-publicized problems such as Aids, or the endangered species of whales, etc.

Section PA is used for fundamental "abstract" problems frequently not considered sufficiently tangible to appear on the agendas of international organizations (e.g. apathy, corruption, etc.)

Section PB is used for major cross-category world-wide problems which tend to be prominent on the agenda of international organizations (e.g. war, environmental pollution, etc.)

Section PC is used for major cross-sectoral problems of a specific nature.

Section PD is used for detailed problems.

Section PE is used for combinations of other problems or for specifying problems of regions or groups of people (women, youth, etc.)

Section PF is used for exceptional, "fuzzy", potential problems.

Each problem is indexed by a code indicating the section and a number for the place in each section without any semantical role. After the title a definition of the problem is given followed by an explanation of its nature. Conceptual relations to other problems are given by cross references: *Broader, Narrower, Aggravates, Aggravated by, Reduces, Reduced by.* Sometimes important remarks are added to the description of the nature of a problem; this happens under the titles: *Incidence, Background, Claim and Counter-Claim.* Such remarks serve to place a problem into its historical and ontological context.

Before discussing the possibilities of a classification of problems we must clarify what types of entities they represent. This can be done using some metaphors. The most fruitful in this connection is the metaphor of conceptual 'anti-matter': "Problems bear a ressemblance to 'negative theories', viz. they exist in the same way as theories exist (having the same relationship to data and values), but instead of providing explanatory and predictive power to link related phenomena within a coherent framework, they mark the presence of confusion and unpredictable relationships between seemingly unrelated phenomena. They challenge and disrupt the conceptual frameworks which claim to be able to handle them". (Vol.1, p.1185)

Theories are like countries or regions on the Map of Science. Therefore they cannot be described by generic relations typical for classification systems but need to be regarded as regions in geography. Nor can the relation 'Narrower' can be regarded as 'Part of' because there are no homological 'Parts' in this theory in any broader sense (as, e.g., the human arm is homological to the front leg of dogs). This is quite a specific relation of the kind 'is region of'. A problem being a sort of 'anti-theory' suggests very interesting possibilities of problem generating using negative 'operators' or 'qualifiers'. Therefore the compiler proposes (for future editions of this book) to use a presentation of problems in terms of patterns of negative operators, as shown in Table 4 included in the present volume (a reprint of it is given on the next page).

It is very interesting that the *Functional Classification* system elaborated by A.J.N.Judge for the year-

book volumes (see his Global Action Networks (1) of 1986/87) of the Union of International Associations was not applied here. The cells elaborated therein were good enough to class topics; however, the concordance between topics and problems seems to be a fuzzy one.

The second volume includes a list of concepts which gives a pattern of the human potential. Its concepts are classed by division into sections having different conceptual structures. Every title is indexed by two letters that describes the section and the subsection and an entry number, again without any semantical significance.

The Section *Human Development* (H) is divided into the subsections "Human Development Concepts" (HH) and "Modes of Awareness" (HM). Each entry is built up as follows: After the title a definition and description follow, sometimes a context is given as well as bibliographical references. The following cross references are used: *Broader, Narrower, Related, Preceded by, Followed by.* In Subsection HM an additional letter (from "a" to "g") indicates the different levels of awareness. The letter "a" means Awareness of God, Mystical Unity, Cosmic Consciousness, etc. The letter "g" denotes Physical, sensory, brain waves, etc. These codes may be regarded as columns on the matrix with rows reduced to one square.

The section *Integrative Knowledge* (R) is divided into the following three subsections: "Integrative concepts" (KC), "Embodying discontinuity" (KD), and "Patterning disagreement" (KP). In Subsection KC no cross-references are used and the contents of its items includes only descriptions (occasionally with alternative interpretations). An entry name may be followed by other names if given. There are also no cross references in subsection KD. The role of description is played here by a comment on the historical setting.

The subsection KP is divided into subparagraphs which are given an index number before the titles. Here, the concepts of the various subparagraphs are in conceptual relationship to one another. As the series stands, the entries suggest a variety of classification schemes to clarify and relate the different notions of ordering. Each of them includes a set of viewpoints which is diluted into qualitative distinctions in later entries.

The contents of Section M: *Metaphors and Patterns* may be considered as complementing the other sections by the manner in which human development options, integrative knowledge and the complex nature of world problems are communicated. This section is subdivided into the subsections *Metaphors* (NM), *Patterns of Concepts* (MP), and *Symbols* (MS). In subsection NM, entries may be composed of the following descriptive elements: Entry number, Entry name, Substrate (brief description of the phenomenon highlighting the processes on which the metaphor is constructed), Metaphor, Special features and Contrast (indicating the contrast between the usual understanding of some particular processes and the metaphor suggesting a new point of view.

Entries in subsection MP includes Entry number (which may be followed by a Qualifier ("a" - clearly defined pattern, "b" - reasonably well-defined pattern, "c" - poorly defined pattern), Pattern, Physical environment, Socio-organizational environment, Conceptual environment, Intra-personal environment. Two types of cross-references are used: *Broader* and *Narrower.* Entries in subsection MS include: Number, Entry name, Description, Connotation and Cross-references (Broader, Narrower, and Related).

The purpose of section T (*Transformative approach*) is to provide a context for the presentation of accessible techniques which offer possibilities of making an immediate difference in the manner in which resources are mobilized in response to the global problem situation. It is divided into subsections TC (*Transformative conferencing*) and TP (*Transformative policy cycles*). The entity of TC may be composed of the following elements: Entry number, Entry name (perhaps followed by an alternative name), Description (with an indication of possible innovative developments and the transforming potential of this type of conferencing wherever appropriate), Advantages and Disadvantages. The cross references *Broader* and *Related* are used, but only very rarely.

The entries of subsection TP constitute an editorial experiment based on the pattern of concepts implicit in the much publicized Chinese classic, the *"Book of Changes"*. These are translated into modern language.

Problems are ever growing in our times and they may be solved on the basis of a varying system of values. Quite naturally therefore, there follows a Section on *Human Values and Wisdom* (V). Its Subsection "Constructive Values" (VC) includes positive values with integrative polarities followed by cross references on entries of subsection "Value polarities" (VP). The Subsection "Destructive values" has a similar structure as VC and includes negative values (anti-values). Another structure has been given to Subsection VP. The numeric constituent of the Entry number has been designed to correspond somehow to the code number for equivalent concepts in the edition of Roget's Thesaurus used to identify polarities and is followed by a Qualifier that connects an entry with the entities of the next Subsection on "Value types" (VT) which contains 45 main categories classifying the polarities. The last constituents are: Dynamics, Integrative complex (with cross references to subsection VT), and Constituent values (with cross references to subsections VC and VD).

It is evident that the organization of items is free enough and that a classificatory order has been sacrificed for the sake of freedom in the use of this voluminous reference work.

The contents of this Encylopedia, however, is not a suggestive and methodological one. Rather it can be called casuistical in the old positive sense of this word as it was used in medieval times. It does not aim at recommending an optimal approach to deal with problems but

it wants to help in analyzing complicated and sophisticated cases.

This way of seeing and handling things is surely symptomatic of our times. By the influence of Francis Bacon and modern epistemology of science methodology has received a very important place in scientific activity and reflective thought. It can be assumed that in the near future we will return from the methodological point of view to the casuistical one as practiced in medieval times This will lead to a new form of casuistics as the art to seek efficient solutions to global problems. It will also be a new form of rationality based on religious foundations.   Julius Schreider

(1) Union of International Associations: Yearbook of International Organizations. 1986/87. Vol.3: Subject Volume. Global Action Networks; Classified directory by subject and region. 4th ed. München-etc.: K.G.Saur 1986. (Here Appendix 6, 20p.) (See also Int.Classif.11(1984)No.2, p.69-76, + No3, p.139-50)

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COMAROMI, John P., SATIJA, M.P.: **Exercises in the 20th edition of the Dewey Decimal Classification.** New Delhi, Sterling Publishers 1990. 127p.

Since the previous edition of this text-book - *Introduction to the practice of the Dewey Decimal Classification* (1987) - the title has been changed, and the well-known authors are now in alphabetical order on the title page. A new edition became necessary with the publication of the 20th edition of the DDC. The authors claim, that the new edition can also be used in connection with DDC-18 and DDC-19. This claim seems justified, considering that the structure of the new edition is unaltered, the text relatively unchanged, and the greater part of the examples retained. Evidently there is no need to make alterations in a book, that has proved satisfactory, apart from including examples, that have to do with the differences between DDC-19 and DDC-20.

Classification is an intellectual play with the most obvious practical consequences. It is the act of fitting the document under classification into its proper place, in line with other documents of an identical scope or with a similar content. If a document has been well classified, it offers, together with other members of the same class and with the neighbouring classes, a logically beautiful exposition of human knowledge in a given field. This facet of the classification process is dependent on the quality and intuition of the classifier, and can hardly be taught at library schools, rather in real life.

What can be taught is the use of the classification system rules, the number building, which is also an interesting facet of the classification process. Number building can be taught without real books; book titles as similar as possible to real books are ideal materials. Number building instruments in the DDC are, besides

the main schedules, the subdivision tables, and the rules of precedence. As in other faceted systems the order of precedence is important and could not be left to individual taste.

To make it possible for library school students to master such techniques together with the many possibilities of synthesis that have grown throughout the many editions of the DDC is the scope of this textbook. The resulting class numbers are in themselves unintelligible to users of the system who are not classifiers, or in other ways familiar with the strange world of these class numbers, that appear as mere codes. Much as this can be regretted, their lengths make them useful in large collections, in bibliographies, or in bibliographical databases to keep together similar subjects and to separate subjects that are not fully identical. So far DDC has abstained from the use of such visual facet indicators as would separate the elements of the classification numbers, and make the searching of single facets easier in an online retrieval system.

I find this new book very satisfactory as an instrument to teach and to learn the art of Dewey number building. The examples are many, well differentiated, and the conclusions - what did you learn? - carefully done. The final summarizing exercises give the student ample opportunities to look back and remember. Like the other volumes in the Satija/Comaromi series this new one should be welcomed as much as its predecessors: ideal for library school students, interesting for many a librarian.   Jens B. Friis-Hansen

HOLLEY, Robert P. (Ed.): **Subject control in online catalogs.** New York: Haworth Press 1989. 251p. ISBN 0-86656-793-3. (Also published as 'Cataloging & Classification Quarterly 10(1989)Nos. 1/2)

Given the fact that the book under review is available both as a double issue of the journal *Cataloging and Classification Quarterly* and now also as an independent monograph, the question suggests itself whether we are dealing here with a standard work that can be consulted whenever one wishes to occupy oneself with questions of the online catalog and its design, such in particular with a view to subject searching possibilities. After reading the book one will have to conclude, however, that it cannot meet such expectations.

The chief objection would be that the book does not furnish a full or comprehensive impression of the possibilities (both in theoretical planning and in practical realization), for providing subject searching facilities in online catalogs, nor of the problems occurring in retrieval with all its complex individual factors; it is too much in the nature of a compilation of individual punctual contributions on partly quite specific problems which, in the manner as assembled here, are not representative of the problems of subject analysis of documents in online public-access catalogs. This point of view