zu verstehen ist. Echte Antonyme können zum Teil in den Wörtern bestimmter Relationen genau übereinstimmen, z.B.: „wer wem was innerhalb welchen Zeitraumes wie oft" erlaubt/ verbietet - in anderen Relationen erfordern sie gegensätzliche Begriffe (z.B.: etwas als „harmlos" erlauben, als „schlimm" verbieten).

Aufbauend auf diesen Untersuchungen ist im gleichen Jahr, 1994, in dem die Dissertation von G. Ruge fertiggestellt wurde, ein Buch erschienen (M. Th. Rolland: Sprachverarbeitung durch Logotechnik. Sprachtheorie, Methodik, Anwendungen. Bonn: Dümmler 1994), in dem umfassend die Grundlagen über den Aufbau der Sprache und damit über die semantischen Zusammenhänge zwischen den Wörtern (über die Verbbeziehungen hinaus) erarbeitet sind, und zwar als Basis für die Erstellung spezieller natürlichsprachlicher Computersysteme. Hierin ist u.a. der Weg zum Aufbau der sprachimmanenten Klassifikation der Wörter einer Sprache aufgezeigt. Wenn man daher, statt von einem Korpus auszugehen, dessen Relationen nie vollständig sein können, an der Sprache selbst ansetzt und pro Ausgangswort (Head) die abhängigen Wörter (Modifier) - und das ist das Entscheidende - in der entsprechenden Relation feststellt, erhält man darin auch die für das Information Retrieval erforderlichen semantisch verwandten Wörter in der möglichen Beziehung zum Ausgangswort - von synonym bis assoziativ.

Es ist nicht verwunderlich, daß G. Ruge durch die Betrachtung von Heads und Modifiers, also durch eine rein syntaktische Vorgehensweise, zu Ergebnissen semantischer Natur gekommen ist; denn die Head-Modifier-Relation beinhaltet über die Relationen zwischen Satzgliedern auch Beziehungen zwischen Wörtern - und erst der Inhalt der Wörter ermöglicht Relationen zwischen Satzgliedern. Auch die Syntax, der Satzbau, ist, da vom Wortinhalt bedingt, etwas Semantisches.

Es hat sich also gezeigt, daß die grundlegende Arbeitshypothese von G. Ruge, insofern sie Ausgangswörter und abhängige Wörter berücksichtigt, im Prinzip in die richtige Richtung weist, daß aber durch die Undifferenziertheit der Relationen und damit nur die Einbeziehung von Heads und Modifiers als solchen, und zwar aus Korpora, die angestrebten Terme zur Verbesserung der Benutzeranfrage im Information Retrieval nur schwer exakt und nicht systematisch und wohl kaum vollständig ermittelt werden können. Weitere Forschungen auf dem Gebiet der Relationen werden sicherlich zu fruchtbaren Ergebnissen führen.

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UNION OF INTERNATIONAL ASSOCIATIONS: **Actions - Strategies - Solutions. Vol.3 of Encyclopedia of World Problems and Human Potential.** München etc.: K.G. Saur Verlag 1995. 974p. ISBN 3-598-22227-0

A third world treasure! After volumes 1 & 2 (see our book review of this Encyclopedia in KO 95-1) already existent in their 4th edition of 1994, the addition of a volume 3 on 'Strategies' had only been decided upon late in the editorial cycle of the 4th edition of Vols.1 & 2 and is now -1995 - already with us in book form and on CD-ROM - a wonderful surprise!

Considering the multitude of decisions which had to be made and taken in order to produce the 974 pages in A4 size and tiniest type faces, it looks like a miracle what A.J.N. JUDGE and his team of 10 for the Editorial Staff and 4 for the Computer Support accomplished!

Now, what are strategies, action proposals? We find a kind of **definition** on p.849 under 2.1 Introduction: Approach: "*A mode of action becomes strategic when it is perceived as governing a global transformation*". The text goes on: "*It is also the place given to the mode of action in a pattern of action which determines its strategic significance. The grand strategy of one group may in this way be perceived as defensive tactics by some other group*". The approach proposed for a definition of 'mode of action' is described as "*identify the ways in which organizations are acting (or planning or claiming to act), especially when such action might have been conceived as the keystone to some development breakthrough - removing the key log which would unlock a development log-jam. In this light, any mode of action, including non-action, may acquire strategic characteristics*".

Regarding the **background** of this volume it is said in Chapter 2.3 Introduction: Background and Acknowledgments (p.851) that the current UIA interest in strategies dates from its involvement in the United Nations University project on *Goals, Processes and Indicators of Development* (1978-1982), and subprojects. Other initiatives are mentioned, such as Agenda 21 of the United Nations Conference on Environment and Development, Rio de Janeiro 1992 and publications such as the *Book of Visions: An Encyclopedia of Social Innovations* from the Institute of Social Inventions, London 1992. Also the good collaboration with the Institute of Cultural Affairs (ISA), Brussels, is being described. The main source was of course the database of the Yearbook of International Organizations, now already in its 32nd edition describing some 20,000 international organizations. A special mentioning of Robert JUNGK's enthusiastic valuing of the Encyclopedia in his International Futures Library, Salzburg and his interest in 'solutions' is made here too. As he died unfortunately in 1994 he could not see the fruit of his brilliant suggestion.

The **arrangement** is in a similar way as in the first two volumes: We find '*strategies*' listed under the following five section headings: Basic General Strategies, Cross Sectoral -, Detailed -, Emanations of other -, and Fuzzy Exceptional Strategies, altogether amounting to almost 9000 entries.

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Three further sections are mentioned in the Contents List, named: Very specific -, Insufficiently cross-referenced - and Uncross-referenced Strategies. They make up some 20,340 entries in the database, however, they are not included in this volume. Two further sections are given in addition: Strategy polarities and Vicious problem loops. The last section - after Bibliography and Index - is devoted to 'Notes' and constitutes the main section for the understanding of the whole problem area (p.847-974) - a book by itself!

Some **examples of entries** in the main part should help in understanding: Under Section 1 *'Basic general strategies'* we found e.g. 'Eliminating discrimination', 'Sustaining relief with development', 'Organizing knowledge' (!) - note that the gerund was used in most cases for naming the action term - ; under Section 2: 'Organizing study groups'; under Section 3: 'Informing on agricultural developments'; under Section 4: 'Improving quality of health policy and planning'; and under Section 5: 'Establishing quality of life indicators'. All **entries** start with their unique number and their name. In most of the cases the entry is structured as follows: A rephrasing of the entry concept, Context, Description, Implementation, Claim, Counter-Claim, References, Organization (i.e. which international organization takes care of a certain strategy). Thereafter follow a number of relationships to other entries, e.g. Broader, Narrower, Problems, Constrained by, Facilitated by, Facilitates, each with the number and name of the Strategy in other sections of the volume or the database. By this way the phantastic number of some 84,900 relationships were established. Detailed statistics are provided on p.847-8.

The **Index** contains 27,802 entries. It is said, *"unless essential it does not start with the activity term but with the substantive keyword"*. We find, c.g., 67 entries under 'Knowledge' among which also 'Knowledge - organizing' (SB 1402 - our entry). 'Knowledge - restructuring' leads us to the entry under SC2768 from where we are further guided to find the reference to the Broader concept 'Organizing knowledge' and the Narrower one: 'Extending knowledge access' (SC8287) as well as further references.

The **Bibliography** section (p.833-844) with some 1200 entries in three columns refers only to the information provided in this volume.

The **Notes** section mentioned above includes the following 17 chapters: Statistics - Introduction - Method - Patterning strategies - Strategic ecosystem - Governance - Strategic denial - Post-crisis opportunities - Collective strategy making: designing a strategic array - Strategic appropriateness - Embodying discontinuity - Epistemological challenges - Embracing difference - Comprehension - Pattern learning - Patterns of alternation - Action implications.

In Chapter 4, *'Patterning strategies: Classification and section attribution'* we found an explanation of the difficulty to classify strategies as there are just too many aspects under which they may be seen. We learn here that the strategies have also been related to the ca. 2000 categories (excluding geographical names) which were used and 'fine-tuned' in the subject index to the earlier 2 volumes, entitled *Global Action Network* with the result, that at any time *"strategies can be accessed via words, via specific subject category, via subject group, or via various Boolean combinations of these elements"* (p.866). And also *"the same keywords will access 'Problem' entries, 'Organizations' or any other UIA databases on the same basis"*. Further subchapters of Chapter 4 are concerned with the 'Concept refinement process', 'Language games', 'Patterning the resolutique' and are of immediate relevance to our problems in knowledge organization.

The **computer-assisted generation of strategies** treated in chapter 3.8 (p.864) has been very successfully accomplished, but it would need too much space to go here into any details of ist intelligent handling. For the strategy relationships attained by computer assistance we found two most interesting tables on p.865 in the chapter 3.9 'Method: Conceptual processes summarized'. One table provides a survey on *'Strategy entries: conceptual processes'* with a juxtaposition of 6 positive and 6 negative kinds of conceptual processes (such as Sharpening names/keywords vs Broadening/balancing) for strategy entries, the other table shows this in 7 juxtapositions for *strategy relationships* (such as Forming hierarchy vs. Distinguishing hierachies; Inserting implicit relationships vs. Eliminating erroneous relationships).

In **summarizing**, this 3rd volume, a really extraordinary help for mankind, could be of tremendous help for decision makers, if it only was known to those responsible, esp. in politics and education. Chapter 1.7 gives an Overview of the intended **uses of the entire Encyclopedia**; I will list here again only the headings: 1. Commerical enterprises and entrepreneurs, 2. Education, 3. Integrative studies, 4. Policy development, 5. Management sciences, 6. Forsight and future research, 7. Government, 8. Briefings, 9. Law and treaty preparation, 10. International organizations, 11. Information sciences, 12. Expert systems, 13. Values and ethics research, 14. International relations, 15. Security, 16. Challenge to creativity, 17. Foundations and funding agencies, 18. Media, 19. Human development programme design, 20. Imaginative responses to intractable problems, 21. Interactive access: CD-ROM and World Wide Web.

The **intended uses of vol.3** are described under the following 8 headings (p.850): 1. Complement to existing information, 2. Networking and reference tool, 3. Solution-oriented sourcebook, 4. Communication within the government sector. 5. Increasing effectiveness of the NGO sector, 6. Supporting inter-sectoral dialogue, 7. Decoding sustainable development, 8. Ensuring involvement of all organizational resources.

May it happen that all persons working in these activity areas get to know these volumes! The price of DM 548.- for the printed version of vol.3 is truly low enough for such a treasure!                                        Ingetraut Dahlberg

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