
Book Reviews

IYER, Hemalata: **Classificatory Structures: Concepts, Relations, and Representation.**

Frankfurt/Main: INDEKS Verlag 1995. II, 232p., 62 figs. ISBN 3-88672-501-4 = Textbooks for Knowledge Organization, Vol.2

Like the other book in this series (Fugmann, R.: Subject Analysis and Indexing: Theoretical Foundation and Practical Advice, 1993) the author has filled a need for a text which should cover an important subject taught in library and information science schools. Texts by Foskett, Olding, and Langridge could never replace W.C.B. Sayers' Manual of Classification (4th ed., 1967) or S. R. Ranganathan's Elements of Library Classification (1959 now reprinted by Advent in 1990), but Dr. Iyer has brought the work forward by concentrating on the formation of categories as represented in current information handling tools such as classification schemes, thesauri, indexing systems, and knowledge bases with their semantic networks. She begins with disciplinary/interdisciplinary approaches, covers classificatory principles, faceted structures and ends with conceptual layers and other universals. In between she covers and illustrates vocabulary development in thesauri and other authority control tools, faceted and non-faceted classification structures like LCC, DDC, UDC, BC, and CC, with references and exercises for the students which could keep them busy for more than the normal classtime.

If I had one major criticism of the text it would be with Chapter 9 (Computers and Bibliographic Classification Schemes) and Chapter 10 (Artificial Intelligence and Classification). These two chapters should have been integrated into the other chapters. Also, the use of classification on Internet webpages, should have been covered. Research in this area is interesting, but the reality of the Internet's chaotic structure for organization and access serves as a shining example of the continuing need for newcomers in the field of library and information science to understand classificatory structures.

This book should fill a need for a time but the text will soon need revision to cover the fast-growing areas mentioned in Chapters 9 and 10. I will lead by example and report that I will use this as a text in a seminar on Classification Systems for the Organization of Knowledge at the University of Illinois at Urbana-Champaign in the fall of 1996.

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VARET, Gilbert, VARET, Marie-Madeleine: **Maitriser l'Information à Travers sa Terminologie** (Mastering information via its terminology). **Manuel-Dictionnaire.- Annales Littéraires de l'Université de Besançon**, volume 559. Paris: les Belles Lettres, 709 p.

Aims and limits of the book. In a copious introduction of 26 pages, the authors precisely describe the aims and limits of their project: 1) Derived from their university teaching, this „handbook-dictionary“ is chiefly dedicated to researchers and advanced students. 2) It does not deal with the whole field of information, but only with scientific and technical information (in French IST), that is “the different functions by which the scientific community makes knowledge available to scholars“. 3) It deliberately excludes the problems of information retrieval processing (which are - according to the authors - sufficiently covered) and focusses on a typology of information tools. 4) It particularly focusses on the terminology of information and computer sciences, so that a lot of definitions, though integrated into the text, can be referred to separately.

Structure of the book: The tools of scientific information are divided into four parts, which go from the whole to the elements:

1. *The main information sources* (100 p.) This part describes archives, museums, libraries, that is, the traditional sources of information.

2. *The computerized bases of knowledge: metamorphoses of the text* (130 p.) This part, to which four chapters are devoted, deals with the new ways in which knowledge can be accessed through computers. (a) „New technological processing or new objects?“ reviews new technologies such as hypertext or electronic publishing. (b) „The universe of databases“ shows the advantages of electronic information through the example of law data bases. (c) „The cycle of data“ deepens the concept of data, above and inside the computer. (d) „The data and the world“ deals with servers, expert systems and the man/machine dialog.

3. *Information units* (270p). This long part reviews the different types of primary and secondary documents. Like the first part, it is a thorough survey of these classic subjects.

4. *The elementary structures* (150p). This last part and the conclusion („Prospective information“) deal with different subjects such as visual documents, ordering, book indexing, abstracting, coding.

The handbook itself is followed by two indexes (one for concepts and another for bibliographical sources).

Attractive Features: The most noteworthy feature of this book is the amount of information it contains; it is a *comprehensive survey of all sources of scientific knowledge*, whether classic or modern, according to their location, document type, and technological processes.

It's not an encyclopaedia, - the actual systems which are cited (libraries, dictionaries, data bases...) are only used as illustrations of the text - but a typology which aims at explaining in depth the relationships and the characteristics of this wide range of tools.

As stressed in the title, the questions of *terminology* are considered of first importance, and every term is abundantly

defined and commented. The linguistic definition (which is generally brief) is supplemented with comments on the specific use of the word, examples, and sometimes with etymological and historical data. More than three hundred terms are incorporated into the texture of the book at their first appearance. Thanks to the back-of-the-book index, they can also be referred to separately as in a dictionary. But unlike systematic terminologies (e.g. UNESCO's 'Terminology of documentation') the semantic relationships between terms are not indicated.

Besides this large amount of information, I think the most original feature of the book consists in *its philosophical insights* on information sources and information science, which lead us beyond the limits of a mere technical handbook. This specificity gives the text some unity in the tone and in the vocabulary insofar as this perspective is apparently - along with terminology - the main motivation of the authors. Gilbert Varet, whose cultural background includes philosophy, humanities and Greco-Roman thinkers, writes as a scientist addressing other scientists, and what chiefly affects him in the information tools - particularly in computer-aided information - is how much they can promote the heuristic powers of researchers and the reliability of results (the technical data, on the contrary, are generally given in small cases).

As it is difficult to review this set of philosophical remarks, we shall simply give an account of the recurrent themes:

- (a) today, information and information tools are so intimately involved in scientific research that science practically creates by itself its own doctrine of information.
- (b) the intrusion of computers results in a qualitative mutation of scientific results. The main effects of computers are: b1) world-wide applications, b2) decompartmentalization of basic subjects and b3) evidencing of data.
- (c) information is never provided as a gift, it is always half-built by the researcher himself.

On the whole, Varet shows a youthful enthusiasm regarding the influence of computer science. He thinks a new age has arrived for scientific research because this digital machine is a universal machine, able to control all other machines. In the field of information tools, he states that hypertext creates a new concept, that of virtual documents, and he has great confidence in the future of autoindexing and autoabstracting. Here is, for example, how he demonstrates the ability of the computer to help man explore the real world (p 262): man reflects the world through his brain. And the computer reflects man's brain. It can therefore be concluded that the computer reflects the world.

Of course, Varet's opinions on computers, research and information science are subject to discussion, but it is impossible to examine them within the framework of a short review. Let us stress only his solid faith in the value of scientific research, qualified as „the quest for truth“.

A last interesting point is the *bibliographical data*, which unfortunately are limited to the chapters related to traditional information tools.

In short the book can be read on three levels: a technical level (description of information tools); a scientific level (typological and terminological analysis of these tools); a philosophical level (reflection on their value for scientific research).

Some Critical Remarks: As every rose has its thorns, this multilevel texture endangers the unity of the work. And though the authors make sure that the general divisions as well as the partial expositions are carefully justified in the introductory chapter, the reader experiences a feeling of disparity between the detailed description of some technical tools and the subtly elaborated style of the philosophical comments. To name but one instance of the former, is it useful for the users of computer aided information retrieval to know the list of the different 'object oriented' programming languages? And, as an example of the latter, is it essential to define the common concept of 'document type' through the pretentious apparatus of two theorems?

In fact it seems as if the book's composition has suffered from the fact it is the work of two different - though closely related - sources: the lectures and seminars of Gilbert Varet (philosophical bibliography) and the lessons of Marie-Madeleine Varet Pietri (who is an engineer in computer science).

The work is presented as a 'handbook-dictionary'. As a matter of fact it is somewhere between a handbook and a philosophical dissertation. As for the claim of its being used as a dictionary it seems somewhat exaggerated. It is true that it has a lot of precise terminological data, but it is a pity that at the end of the book the 'general index' groups together the acronyms (e.g. ADA), the common words (e.g. rainbow), some famous proper names (e.g. Aristotle) and the specific terms of information science (abstract, analogical, etc.).

A last criticism should be made regarding the title. In a well-chosen phrase, Varet reminds the reader (p. 107) that the title is subjected to 'un pacte de bonne foi' (a bona fide contract) between the author and the reader, that is the relationship between the contents of the book and the common meaning of the title should be as close as possible. Paradoxically that is not exactly the case for Varet's book. Clearly, the book deals with „the terminology of information“. But which kind of information is it? Common information? Scientific information? Information science? Information technology? It is true that from the first pages of the introduction, the aims of the authors are precisely stated. But many a reader may feel frustrated that the viewpoint they have chosen is so restrictive, and particularly for the readers specializing in knowledge organization. Probably this choice is not fortuitous. Varet is neither unaware nor disdainful of semantic problems in information retrieval, but he is likely to think that any researcher is able to solve better those pertaining to his field than anybody else, and that he should - as a priority control the modern information tools ... through their terminology.

Conclusion: As a conclusion, and in spite of the above reservations, this handbook should be recommended to French-reading information specialists for the richness, relevance and up-to-dateness of its technical and termino-

logical data. It will be a good reference book pertaining to the state of the art in information sources in the last years of our century.

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LERAT, Pierre: **Les Langues Spécialisées**. Linguistique nouvelle. (Special languages. New Linguistics) Dir. par Guy Serbat. Paris: P.U.F. 1995. 201p.

Une fois de plus, Pierre Lerat (Univ. Paris XIII - Villetaneuse, Paris-Nord) a publié une étude fouillée, dont le sommaire, avec ses 17 chapitres et quelque 120 sous-divisions, donne immédiatement une idée de la façon détaillée et systématique dont a été traitée cette matière vaste.

Essayons d'analyser les différents chapitres. Dans le 1er, l'auteur souligne l'importance de la linguistique pour les nombreuses facettes des langues spécialisées; un thème qui sera plus d'une fois repris. En préférant „langue spécialisée“ à „langue de spécialité“, il précise qu'une „langue spécialisée“ n'est pas une sorte de langue et certainement pas une sous-langue, telle que Rostislav Kocourek l'appelle (*La Langue française de la Technique et de la Science*), Wiesbaden, 1982, 2me éd. 1991). Pierre Lerat explique également qu'une langue spécialisée est plus large qu'une terminologie, car elle contient également des dénominations non-linguistiques, des abréviations, des sigles, etc.

L'importance de la *linguistique* est encore mise en évidence dans le chapitre suivant, où l'on trouve e.a. une critique - non dépourvue d'humour - sur la question de la féminisation des noms de fonctions.

Dans le 3me chapitre, on trouve e.a. une discussion sur le „triangle sémiotique“ (objet, concept, signe), adopté par les terminologues de Vienne.

Dans le chapitre sur les *unités linguistiques*, Pierre Lerat souligne une vérité indéniable: les noms des notions seraient transparents si les termes étaient monosémiques et sans synonymes et s'ils étaient strictement équivalents d'une langue à une autre.

Le 5me chapitre, qui traite de la langue spécialisée comme *langue écrite*, donne des exemples remarquables à propos de l'oralisation de l'écrit spécialisé (au fait, il y a plusieurs façons de lire des abréviations). L'auteur examine également la notion et le terme „terminographie“, qu'il caractérise comme „lexicographie terminologique“ et comme „terminologie professionnelle“.

Plus d'une fois ce livre se profile comme un cours précis de principes de linguistique, en particulier dans les chap. 6, 7 et 8. Il s'agit successivement de la *morphologie*, e.a. du caractère particulier des langues spécialisées (avec de temps à autre une petite pointe contre le français), de la *syntaxe* (où est mentionné le danger des phrases assez lourdes qui ne sont pas obscures, mais syntaxiquement denses), enfin de la *sémantique*: Pierre Lerat souligne, sur les traces de Louis Guilbert, l'opposition entre la terminologie technique qui doit rechercher la monosémie, et la polysémie généralisée

des termes du lexique général. Le 9me chap. „*Langue spécialisée et traduction*“ est une suite logique des trois précédents. Il s'agit évidemment des problèmes terminologiques des traducteurs et des difficultés éventuelles lorsque l'on consulte des dictionnaires multilingues. On ne doit pas s'étonner que Pierre Lerat puise souvent ses exemples dans la *langue juridique*, vu ses publications dans ce domaine, encore récemment son *Dictionnaire juridique* (en collaboration avec J.-L. Sourieux). Notons à ce propos S. Nielsen, *The Bilingual LSP Dictionary. Principles and Practice for Language*, Tübingen (concernant un projet de dictionnaire bilingue) et un excellent dictionnaire juridique (danois, français, anglais, allemand) de S. Hjelmblink, *Retspleje Ordbog*, Copenhague, 1991.

Parlant de la *documentation* (chap.10) Pierre Lerat insiste sur le caractère plutôt logique que linguistique de cette activité; il trace nettement la différence entre „thesaurus“ et „terminologie“. Un chap. très important est celui sur la *normalisation*, en particulier sur la normalisation terminologique, avec tout ce qu'elle peut amener: e.a. l'aspect juridique, l'harmonisation terminologique et évidemment les banques de données (à ce propos les appréciations de Pierre Lerat sur EUROCAUTOM), CD-ROM et TERMIUM méritent d'être lues).

Dans le 12me chap. concernant l'*aménagement linguistique*, l'auteur attire l'attention sur le fait que ce nom d'origine québécoise ne paraît pas être inventé pour éviter le calque de „language planning“. À ce propos l'auteur signale que dans la francophonie (avec le Québec comme pionnier) on porte un grand intérêt à la néologie.

Le chap. suivant comporte beaucoup d'informations pratiques pour la rédaction technique; en particulier la mise en forme textuelle. Le 14me chap. traite d'un sujet d'actualité: *l'ingénierie de la connaissance* (le plus souvent connu sous son nom anglais), auquel plusieurs congrès ont été consacrés: les TKE, *Terminology and Knowledge Engineering* (Pierre Lerat mentionne seulement celui de 1990.) Dans le chap. suivant, l'auteur prend la place de l'utilisateur qui se demande quel dictionnaire de langue il doit consulter: un de langue générale, un de langue spécialisée? Comparant les façons de définir un terme il met en lumière les qualités des trois meilleurs dictionnaires de la langue française en plusieurs volumes: *Trésor de la langue française* éditée par le CNRS (Paul Imbs, puis Bernard Quemada), *Le Grand Larousse* (Louis Guilbert) et *Le Grand Robert* (Alain Rey). On aime connaître l'opinion de notre auteur à propos des dictionnaires électroniques.

Il n'est pas surprenant que le chap. sur la *terminographie* (le 16me) ait comme point de départ le *Dictionnaire multilingue de la machine-outil* d'Eugen Wüster. En insistant une fois de plus sur la différence entre la lexicographie et la terminographie, notre auteur invite ses lecteurs à méditer la phrase suivante: (p.184): „On ne devrait pas avoir des responsabilités dans ce secteur (c.à.d. la terminographie) sans avoir fait ses preuves en lexicographie et on ne peut accéder à une compétence professionnelle de lexicographe qu'après de solides études de langue et de linguistique“.

Le dernier chap. est consacré aux „langues spécialisées et