647.94 continues to be in place for general information about hotels.

A common practice in previous editions, that is full class or extensive revisions (phoenix schedules), appear to have been discontinued in the preparation of DDC22. But minor changes are numerous. There are more than one thousand relocations and discontiuations of class numbers. Some 40 numbers have been reused. Routine revisions involving expansions, reductions, deletions and relocations are outlined in the table below:

004-006	Data processing and computer science. New topics accommodated, but general structure the same.
200	Further work on the removal of Christian bias and expansion of 296 and 297. Contents of 291 Comparative religion distributed to 200-209 with obviously brief numbers, and more space for expansions. For example, 291 has been shifted to 200, and so 291.1 becomes 201. There are more than sixty relocations in religion of which more than half are from 291 to 201-209. As a result, standard subdivisions of 200 have been shifted to 200.1-.9. Advantages for the representation of non-Christian religions are obvious.
340	Law. 341 International law has become Law of nations with new numbers for human rights and inter governmental organizations. Major relocations in 341.7 International economic and social laws.
510	Mathematics (completely revised in DDC18 [1971]) substantially updated. Numerical analysis, formerly a part of 515, upgraded and shifted to 518, a vacant section.
543	All aspects of Analytical chemistry, formerly dispersed, have been brought back to 543.1-543.8.
610	Reworded as "Medicine and health". Improved indexing of medical topics.
640	Now titled "Home and family management" with some topics transferred to 910 Travel.
930-990	Historical periods updated. About 280 relocations in this section alone.
T2	Area table updated for geographic areas, historical periods and persons. About 280 relocations in this table alone.
T5 and T6	Table 5 renamed "National and ethnic groups". Tables expanded to make provisions for American native people and languages.

However, all these changes are not those projected as slated changes for DDC22 in the DDC21 (1996), namely in 520 Astronomy, 355-359 Military science, 636-639 Animal husbandry and 690 Buildings. Obviously the switch over to the DDC 22 will put less strain on libraries.

There has been considerable improvement in the manual, now shifted to volume 1 of the print edition (pp. 1-182). Notes in the manual have been shortened by removing redundant information and by dividing them into smaller sections. Some information from the manual has been transferred to the schedules and tables, in the form of notes. The manual is now clearer and easier to read. Flow charts, built-in numbers, and *see also* references should help classifiers achieve greater consistency.

The relative index has been beefed up. With its 928 pages, it is 333 pages longer than the previous one, including new built-in numbers and many additional terms. The entry vocabulary is wide-based and current.

DDC 22, the first edition of this millennium, has kept pace with the fast changing information environment to map and organize it squarely. To quote our friends at OCLC: knowledge is a big world, and they have organized it.

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JÖRGENSEN, Corinne. **Image retrieval: theory and research**. Lanham, MD : Scarecrow Press, 2003. xii, 340 p. ISBN 0-8108-4734-5.

Professor Corinne Jörgensen's book will be useful to researchers, practitioners, and graduate students working in the area of the management of collections of still images. The book is a fine piece of scholarship that is thoroughly researched and nicely written. It integrates information from a number of perspectives, including cognitive psychology and computer science, into an information science text. This work is timely, since images and other nontextual information are forming an ever larger part of the mass of information available to us. Indeed, in the long history of recorded information on our planet, images "were

the *only* form of written communication for 25,000 out of the 30,000 years of human recorded experience ... we are, it appears, on the hinge of an important historical swing back towards what may be called the primacy of the image" (p. ix). The book will be valued for the richness of the information it gathers and for the intelligent discussion it offers.

There are six chapters to the work: 1. Why images, and what do we know about them? 2. Cognitive foundations for image processing; 3. Organizing and providing access to images; 4. Machine processing of images; 5. Image attributes: the research framework; 6. Towards the future. In addition, there is an excellent bibliography of over forty pages, which is valuable because it provides so many good leads into the literatures of information science and of related disciplines that contribute to the discussions of image retrieval presented in the book. There are separate subject and author indexes. The author index is considerably longer than the subject index, an indication of how much published literature is discussed in the text. Finally, a list of figures and a list of tables provide additional finding aids.

The inclusion of discussions of issues from disciplines other than information science reflects the changing reality of information systems for managing picture collections. Throughout the time such collections have been built, there has never been much coordination of approaches, methods, or practices, even within the discipline of information science. Since the arrival about ten years ago of the World Wide Web, major changes have taken place in the way information is organised, stored, and retrieved. The new networked environment requires a great deal of coordination, common standards, and much more uniform practices than managers of collections of pictures have been used to in the past. Jörgensen's extensive research into the work accomplished by a number of contributing disciplines and her presentation of it in relation to the problem of managing collections of images indicates a deep understanding of the issues and a remarkable capacity to relate them to issues in information science. Accomplishing such a feat so successfully makes this work a valuable contribution to the ongoing discussion of how collections need to be managed in the networked environment. The interdisciplinary nature of the problem has never before been presented so clearly, nor so thoroughly.

The discussion of available tools is excellent and quite comprehensive. This will prove very helpful to practitioners and students setting out to learn about the world of storage, retrieval, and indexing of images. The author's simple, straightforward writing style is praiseworthy, since it will help those just starting out in the field to grasp the material quickly. It will also contribute to understanding on the part of readers from other language communities who have English as a second language. Although this book discusses a number of complex topics, the author has succeeded in making the treatment of them eminently understandable.

Chapter 6 will prove particularly useful to researchers in the area, many more of whom are needed, and especially to graduate students thinking about undertaking a doctoral programme in the area of image management. The author provides a research agenda which describes a number of areas in which research is needed, including a number of research questions to work on. She also includes her wish list, which "represents a personal perspective, and is offered ... as food for thought and future discussion" (p. 267).

Jörgensen feels her book will soon be out of date, and indeed, that in writing the book she has been "pursuing a moving target" (p. 4). Since there is so much work going on in the broad field of image retrieval (although not enough in the area of information science), new discoveries will be made, new issues we hadn't thought about before will come to light, new methods and standards for managing picture databases will be developed, and new approaches will surely come along. However, I'm not so sure this book will be out of date any time soon, since it serves as a record of arriving at a plateau, a point at which the knowledge accumulated to date has been gathered, recorded, and presented as a portrait of what has been achieved and of where we are now. At the very least, then, Jörgensen's book will remain as a solid record of the research to date. More immediately, it will serve as a guide to what we should be doing now, and to the next steps that need to be taken.

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