

ty kept at bay by the application of a formula whose complexities are but the necessary reflection of the complexities of the cases to be dealt with. But the difficulty is entirely of the manual's own making: it is only because subject cataloguing is reduced to the level of minute physical analysis that the many variations in the format of an index or table of contents pose such threats to order. If those variations are seen for what they are, as trivial, then the triviality of this manual at once becomes clear.

Perhaps I am unduly dismissive. If only we can accept the redefinition of subject cataloguing as a technique of counting pages, then a different assessment is possible. The problem of how to work out the number of pages referred to by each chapter heading or index entry is admirably and clearly (if not concisely) dealt with:

"A range of pages is designated by two numbers separated by a hyphen. '22-27', '13-14', '105-176' are all page ranges. The *length* of a range is determined by counting the beginning and ending pages, and pages between. Thus, '22-27' is actually a range of six pages - 22, 23, 24, 25, 26, 27 - and not five - 27 minus 22. To count the ranges quickly and easily, subtract the lower number from the higher number and add one. Thus 27 minus 22 equals 5 plus one equals six."

As a manual of procedures for counting pages this work deserves serious consideration.

H. D. Brazier

WELLISCH, Hans H. (Ed.): *International PRECIS Workshop*. University of Maryland, 1976: The PRECIS Index System. New York: Wilson 1977. VII, 211 p., ISBN 0-8242-0611-8; LC 77-1932.

There is so much to applaud about PRECIS and about this book that I hope I can be critical of many details without keeping those who need to read it from doing so - and those who need to are

- teachers of subject cataloging,
- practicing subject catalogers, and
- administrative types who are considering or might be wise to consider comparison between various available subject cataloging systems, either in terms of choice of change -, as well, of course, as
- anyone interested in keeping current about where subject cataloging is going in the last quarter of the century (and that includes almost anyone who reads *I.C.*).

But there is cause for some serious criticism, and it relates not merely to this presentation of the system, but, by implication, to the system itself.

What is overwhelmingly to be applauded about PRECIS as a system is that it is a set of rules *for* creating subject headings, rather than merely a system *of* subject headings (85, 172). This terminology is consciously analogous to that by which Ranganathan characterized an analytico-synthetic classification as against an enu-

merative, and fits the case well for Derek Austin and his associates in the design and development of PRECIS: they have dissected what goes on in the use of a system of subject headings so as to determine what is necessary to build a new one up. What is different, even at this juncture (since, after all, the construction of new indexing systems is something taught in library schools and done every day in practical documentation work), is that the PRECIS program for construction of an indexing system does *not* begin with the classical compilation, analysis, and structuring of the vocabulary of the subject, but instead allows the system to begin anywhere - which makes sense in so far as compilation, analysis, and structuring of the vocabulary of a delimited subject is possible, whereas the same operations for a general system, i.e., the vocabulary of *everything*, is hardly possible beforehand-. This feat is made possible by a well- and carefully devised set of rules governing both semantic relationships (thesaurus construction) and syntactic relationships (subject heading construction). These rules are discussed in this volume, though not in detail sufficient to learn the system without study of more thorough and more didactic documents.

The focal interest of this volume, instead, lies in its *comparisons* between PRECIS and other indexing systems, and in its description of *applications*. And I find in the comparisons the locus of what needs to be criticized:

Besides what I have already said about PRECIS, it is also a system intended for manipulation by computer. The subject-heading system to which PRECIS is compared is Library of Congress Subject Headings (LCSH) (and, in Phyllis Richmond's paper, KWIC); LCSH is most emphatically *not* a system intended for manipulation by computer: it can of course be printed etc. by computer, but this does not by any stretch of the imagination extend to the sort of manipulation possible on PRECIS. Because of PRECIS's deep involvement with computers, two more-or-less unconscious judgments arise (especially in the minds of users and prospective users, but even to some extent in the minds of originators and purveyors), namely

- that it is the subject-heading system of the future (because of its intimate association with the tool of the future), and
- that it is not to be tampered with as far as users (who do not clearly know what effect such tampering might have on the computer that is to manipulate the system) are concerned.

PRECIS comes off as something rigorous and elegant and modern, attributes that could be applied to LCSH only after the suppression of many doubts, or even of some inner laughter.

LCSH is a mess, but it can produce reasonably good results when embodied fully and utilized thoroughly. LCSH is not modern, though it once was; it has become what we know (often to our regret) because of its lack of rigor. LCSH is vast, which is almost a corollary of its non-modernity. LCSH is often used in far-from-full form, even without the syndetics called for right in the authority documents, and almost never with the syndetics that are implied in the Library of Congress' own practice. PRECIS may become a mess, too, in time, just as (if it lives long enough) it will also become vast. The real point, though, is whether, when PRECIS has be-

come vast and a bit more messy and less modern, it will still be used in its full form ... The answer is taken, by originators and purveyors and users, to be *yes*, though no one can really be sure today. But the presumption in favor of the affirmative is strong today because of the two points made earlier, particularly the second. Since we are unsure what might become of this eminently good idea were we to tamper with it (and that includes leaving out anything that has been prescribed in its design), we *must* commit ourselves in advance to a perpetual fullness in its use. But if just this attitude had characterized users of LCSH, how much less there would have been to criticize in it, how much less strong the comparisons would have been!<sup>1</sup>

Ms Richmond calls the comparison of PRECIS and KWIC a "delusion" (101), and attempts to prove her point by giving the entries that would be derived from the titles studied (each of 78 more or less randomly chosen titles are shown with indexing by the three systems); but the point of the initial comparison, the point that Richmond calls a delusion, namely that PRECIS is "just another form of KWIC indexing", is clearly both wrong and right on the face of it: it is wrong in that PRECIS, unlike KWIC, uses a controlled vocabulary that results by syntactical rules in structured headings; it is right in that PRECIS 'shunts' the terms in the heading, KWIC rotates the words in the title – in both cases resulting in a contextual entry for each significant term/word. But in another sense the comparison of KWIC to PRECIS is unfair (let no one imagine that this defense of KWIC against an unfair comparison means that I in any sense endorse it): the terms chosen to represent the KWIC indexing of such a title as *Political violence under the Swastika: 581 early Nazis* (107–8) are 'Political', 'Swastika', and 'violence', but *not* 'Nazis'. Again, the terms chosen to represent KWIC indexing of such a title as *The clinic and information flow: educating the family planning client in four Latin American countries* (127) are 'clinic', 'flow', and 'information', but not 'family planning', 'Latin American countries', nor any of the words constituent of these phrases. Why this studied avoidance of subtitles, which are obviously used in working up the LCSH and PRECIS headings? (This is all the more to be taken as a critical issue because whereas the LCSH and PRECIS headings were taken from actual LC and BNB practice, the KWIC indexing was home-made and could thus be done without consideration for institutional vagary, which last does account for some of the less-than-helpful PRECIS and LCSH headings.)

The comparison between PRECIS and LCSH is based on the indexing that the parent institutions in each case bestows on the studied titles. It is *not*, then, a comparison of the two systems, in two senses, but of the *use* of the two systems. The two senses are

(1) The more obvious one, that a studied title is given LCSHs at LC and a PRECIS string at BNB, and that in so small a sample indexer error on either side can skew the result. On 109–110 we see *Austro-German relations in the Anschluss era* getting no LCSH of the obviously appropriate 'foreign relations' sort; but on 117 we see *Social inequality, stratification, and mobility* getting only the PRECIS string 'Social classes. United States.', and on 130 we see *Jesus, the son of God: encounter and confession of faith* getting the PRECIS

string 'Son of man. Names. Christ.', which seems quite at odds with the title.<sup>2</sup>

(2) The other sense is less obvious, that whereas on the one hand the PRECIS string consists of all the terms necessary to capture the title's sense, and that these terms, however many in number, will almost all each result in a heading, on the other hand the LCSH heading(s) consist(s) of the terms necessary to capture the title's sense, and that leads to these headings' non-leading-position elements are the result of see-also references *which are not taken as part of the comparison* because they are not part of the headings as such. This, together with the tendency of many LCSH users to ignore such syndetics, largely invalidates the comparison: for this negative fact of practice, see (right in this volume!) Valentina de Bruin's paper, which compares LCSH and PRECIS in a milieu in which "our card catalog [organized by LCSH] ... has never had "see also" references" (144).

On the same point, the numerical comparison (for the 78 documents studied LCSH yielded 97 headings, PRECIS 173) is misleading, since by definition most significant terms in each original PRECIS string get 'shunted' into leading position: a string yields one heading only when it contains a single significant term. If LCSHs were subjected to the same manipulation they might well also yield 173 from the original 78 quasi-strings. But that LCSH does yield more than 78 headings (one per document) is *not* a virtue, *not* an accomplishment that is at least one step towards equalling the accomplishment of PRECIS; it is rather a defect engendered by LCSH's inability to crack out of the encrusting rules that disallow certain complexities of structure within headings, thus forcing the use of multiple headings for a single (non-multi-thematic) document. Therefore, any numerical comparison is invalid on yet another ground, namely that it might seem that LCSH might 'win' if it could lower the number of headings yielded per document to 1 ( $X 78 = 78$ ), whereas *per contra* PRECIS might 'win' if it yielded more and more headings per document; but even this would be illusory, because no single scale can be set up to compare these contrary strivings. What would have to be done, to be really meaningful, would be to compare *access points, whether in the headings or in references* to non-leading-position elements: for PRECIS, do as Richmond does; for LCSH, count the 97 headings *plus* all the references to non-leading-position elements (e.g., Short stories—American,  $x$  American fiction = 2 [120, item 2]; Skin—Diseases—Therapy<sup>3</sup>,  $xx$  Therapeutics = 2 [121, item 3]; etc.).

Though there are other aspects of PRECIS besides its self-generatedness-according-to-rule that merit applause, one at least as stated in this volume leads to a raised eyebrow: while it is implied (48) that every term must be linked into the system (good!), A. C. Foskett (*The Subject approach to information*, 3d ed. [London: C. Bingley, 1977], 68–9) reports the same proportion of 'orphans' in PRECIS as in LCSH, and reports this as having been stated by Austin himself, without precise source. Another good trick performed by PRECIS (and not contradicted elsewhere) is the collocation of isolates and isolate-pairs (23). But some matters other than external comparisons deserve objective examination:

(a) The controversial idea of thesaurus construction

'from the bottom up' rather than deductively, with the explicit aid of facet analysis, would be well to defend or at least elucidate.

(b) The appearance of being (at least occasionally) a sort of alphabetic-classed (rather than, as most expect, alphabetic-direct) indexing system (e.g., 140, item 15; 128, item 6), and of so appearing to users (178, 181), should be thematically accepted, explained away, or (if possible) denied.

(c) Anomalies such as – (p)Skilled personnel – (6 ff) and – (p)Personnel \$h unskilled – (21) need explanation: is PRECIS as consistently applied as we have been told, even by its principal designer? (cf. 122, item 6, with 131–2, item 17).

(d) The use of operator (5), "study region", seems possibly to lead into dangerous waters, not merely because place can occur as operator (1) and (even more commonly) as operator (0), but because, while it can prevent over-special placements such as often occur with LC classification (e.g., when a study in industrial anthropology that could better be placed at such a general topic, if it existed in the LC schedules – which is not always the case, of course – is classed under the company where the study was conducted), it remains true that in many cases the contrary PRECIS decision may be no more valid, since "study region" seems sometimes to be used just because it is a (new) tool within the (new) system in use – and new is better –. But subject analysis (as against system construction) is never a matter of principle but *of fact*: in item 1 (120) the BNB decision focusses not on the country of the company involved (the title is *The Standard-Vacuum Oil Company and United States East Asian policy, 1933–1941*, and does not mention the precise country), which is probably (as indicated by the LCSH analysis) in Indonesia, but on the whole region, the Far East. Both systems also enter under the company itself. The difference in subject headings produced by the two systems is not overwhelming, given the different natures of the systems. But the title seems to have exerted too much influence on the BNB indexer, seemingly tempting him/her to apply the new tool in the way the system normally does, namely to places. But a better application of the same idea (analogous, by the way, to SYNTOL indexing of relationships at the discipline level rather than the topic level) would have been to treat the company itself as the "study region" within the actual topic: 'commercial relations as affecting governmental relations, namely those between the U.S. and Indonesia' – but *neither* system attempts this –.

Again, then, however many quibbles this volume arouses, it is (in particular Richmond's paper) one that needs to be seriously pondered. My own attitude (both operational and in print) toward LCSH (and LC classification) is far from positive; it is therefore not from an attitude of partisanship but of caution that I urge all who are interested in keeping current about subject cataloging to read the proceedings of this symposium: whether PRECIS can, by multi-lingual application, become the "interlingual switching language" (81) that is called for by UNISIST; whether it musters even more support and eventually comes to a position not merely of innovation but of dominance – it will, to maintain such levels of excellence and to rise beyond them (and

to avoid the situation in which we now find Mr. Cutter's good ideas), need careful readers and thorough critics.

Jean M. Perreault

- 1 One user asks a perceptive question, as part of a reported comparison: "Would ... the logic of relational structure, based on mixture of modern and outmoded terminology ... become a problem for [PRECIS] at a later date?" (145)
- 2 KWIC entries for this title *do* include terms from the subtitle; what is the rationale for the different practice? We are not told.
- 3 Note the misprint in the LCSH heading as given in the volume under review.

Comunission of the European Communities: **Overcoming the Language Barrier**. Third European Congress on Information Systems and Networks. Luxemburg, 3–6 May 1977. München: Verl. Dokumentation 1977. Vols. I and II. ISBN 3-7940-5184-X.

Der Band 1 (674 Seiten) enthält alle Vortragsmanuskripte, die vor der Tagung vorlagen. Der Band 2 (213 Seiten) enthält die nachgereichten Manuskripte, die Zusammenfassung von Vorträgen und Diskussion nach Themengruppen, eine Auswertung der an die Teilnehmer verteilten Fragebögen und die Teilnehmerliste.

Unterricht in und Gebrauch von Fremdsprachen in der Gemeinschaft war das Thema der 1. Sitzung. Die Auswertung der Fragebögen zeigte hierfür mit 51% das geringste Interesse. Die Vorträge sind aber nicht nur als Bericht zur Lage interessant. An dem durch Abstimmung zum Ausdruck gebrachten Desinteresse der Teilnehmer, die Sprachbarriere durch Esperanto zu überspringen, wurde besonders deutlich, daß 'Sprachstürmerei' keine Anhänger findet; im Gegenteil, man ist sich der 'Humanität' historisch gewachsener Sprache als 'Gefäß' von erhaltenswerten Kulturen bewußter denn je. Die 'Esperanto-Jünger' haben offenbar nicht bemerkt, daß sich ein 'Esperanto' neuer Art entwickelt hat. Die einheitliche EDV-interne Nummerierung fremdsprachlicher Synonyme wird in der Sekundär-Konununikation schmerzloser, ja elegant, das erreichen, was mit Esperanto nie zu erreichen wäre. Das Votum der übrigen Teilnehmer zur Dringlichkeit dieses Themenkomplexes muß deshalb verwundern, weil mehrsprachige Datenbanken die Wirkung moderner Sprachlabors vielfach verstärken würden. Die Verständigung unter Menschen unterschiedlicher Muttersprache ist ja nicht in erster Linie ein Übersetzungsproblem; sie ist primär ein Problem des Zuganges zum Denken des Anderen, den man nur durch die Beherrschung seiner Sprache erreicht. So ist die KEG zu ermutigen, trotz des schwachen Votums das Thema auf dem Tisch zu halten.

Die Sitzungen 2 (Mehrsprachige Terminologie) und 4 (Mehrsprachige Thesauri) sind bereits durch die Tatsache ihrer Trennung aufschlußreich; hinzu kommt, daß die 3. Sitzung Übersetzungsproblemen gewidmet war. Der alte Gegensatz, oder besser, das alte Unverständnis, zwischen Informationswissenschaftlern und Dokumentaren besteht fort. Das haben vor allem die Diskussionen und die Gruppenbildungen unter den Teilnehmern gezeigt; um der Vollständigkeit willen, muß hinzugefügt werden, daß die gleichen Gräben auch zwischen den