

# Objective Subjectivity: Four-Year Report on Starred Subject Cards

IN THE WAKE of the Columbia Institute on Subject Analysis in 1952 and the discussion there of catalog use studies and the desirability of devising qualitative studies,<sup>1</sup> Yale has been collecting data for four years that would show use in terms of specific books.

Under certain subject headings, a star was added to the call number on each card. The circulation desk saved the call slips with stars each day and these were photocopied. This routine provided a record of books selected by subject and by academic status of the persons who made the selections.

The subjects under which all cards were starred were for the most part arbitrarily chosen by the Subject Experiment Committee, subject catalogers, and reference librarians. Care was taken to include subjects varying in number of cards from under ten to over a thousand and to have representation in all major subject areas. The cards starred, however, do not constitute a statistical sam-

ple. The observations cannot with reliability and validity be projected throughout the catalog nor to other libraries.

There were in the experiment 396 subjects and 32,897 starred call numbers. The total number of subject cards in the catalog was estimated at 1,110,000 when the experiment was started.

The virtue of the star technique is that it does not disturb the patron in his normal course of action. The stars provided a robot interview mechanism or automatic transcribing device, so to speak—an objective record of subjective performance. The process of netting stars, however, was deadly slow.

## FOREIGN LANGUAGE MATERIAL

Merritt's study has provided a quantitative approach for a qualitative investigation of the use of foreign language material:

Although 50 per cent of all titles currently being cataloged are in foreign languages, only 6.2 per cent of all books loaned through the subject catalog were written in foreign languages. . . . Thus the subject-cataloging load could be reduced by 50 per cent while reducing the efficiency of the subject catalog by only 6.2 per cent, on a purely quantitative basis.<sup>2</sup>

Yale's figure for foreign language books was 5.3 per cent, 89 out of 1,694 call slips. The foreign language percentages for total number of call slips within

<sup>1</sup> Carlyle J. Frarey, "Studies of Use of the Subject Catalog: Summary and Evaluation" in Maurice F. Tauber, ed. *The Subject Analysis of Library Materials* (New York, School of Library Service, Columbia University, 1953), p. 154: "That none [qualitative studies of catalog use] have been made thus far only underlines the difficulties in devising methodologies which might yield reliable results. Perhaps no suitable method can be found. But until serious attempts have been made, and until the whole problem of qualitative use has been explored more minutely, we cannot rule out such studies as impracticable or unnecessary. Neither can we proceed unquestioningly to propose extensive modifications in the subject catalog based solely upon the evidence of quantity use."

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<sup>2</sup> LeRoy C. Merritt, *The Use of the Subject Catalog in the University of California Library*. (University of California Publications in Librarianship, 1951, No. 1), p. 15.

TABLE I  
 PERCENTAGES OF ENGLISH LANGUAGE MATERIAL: THREE-YEAR ANALYSIS  
 FOR FIFTEEN SUBJECTS

SUBJECT	TITLES IN CATALOG		CALL SLIPS	
	TOTAL NO.	% ENGLISH	TOTAL NO.	% ENGLISH
Acculturation	67	89	19	89
Behaviorism	81	92	13	100
Dreams	117	53	25	100
Existentialism	126	26	85	83
Geometry, Non-Euclidean	73	25	23	100
Gestalt (Psychology)	48	67	22	100
Hypnotism	75	56	81	100
Impressionism (Art)	64	50	20	80
Isotopes	72	85	32	97
Man—Origin	101	70	29	100
Quantum theory	185	54	33	85
Rorschach test	33	82	20	100
Semantics (Philosophy)	23	82	11	100
Short story	87	92	15	100
Time	133	44	24	96

each broad category of patrons is as follows: Undergraduates, 2.7; Graduates, 14.4; Faculty, 15.2; and other, 2.5. This breakdown indicates that the faculty and graduate students would be the patrons penalized by curtailment of subject entries for foreign language material—but not to an alarming extent.

What would the faculty (alleged in library circles never to use subject headings) lose in terms of specific books? Within the starred sample, over the four-year period, nine faculty men used eight subject headings in filling out call slips for twenty-two foreign language books.

An assistant professor in Italian selected from under EXISTENTIALISM six out of twelve Italian titles, one French work of an Italian author, and one English translation of an Italian work along with three other English works. An instructor in Russian took out twelve books on EXISTENTIALISM: four in French, the others in English.

An assistant professor in French selected from SEMANTICS two French works on the same day with four in English

and from SEMANTICS (PHILOSOPHY) one in Spanish.

HISTORY-PHILOSOPHY was used by an instructor in German for two titles in German and one in English. A professor in economics used ECONOMICS-PERIODICALS as the approach for "any recent issue" of two Italian journals. An associate professor emeritus in engineering drawing used the catalog for a French book on BRIDGES-PARIS. A Bonn inaugural dissertation in German was found under KOREAN WAR, 1950- by an associate professor of economics. A French work was charged out for an associate professor of city planning from under CITY PLANNING-FRANCE. And an associate professor of harpsichord playing took one of seven Spanish titles from the total of eight cards for SPAIN-NOBILITY.

Without enumerating the thirty-two books used by graduate students, the twenty-three by undergraduates, and the twelve by other persons, conditional uses are herewith generalized. Foreign language material may be selected, irrespective of status of the patron: (1) If

the language is easily read by the patron (e.g., Japanese books on EXISTENTIALISM by a Japanese undergraduate); (2) If the language is significant for the subject (e.g., French for IMPRESSIONISM (ART) or German for QUANTUM THEORY); (3) If there is little material in English available (e.g., all three books under THEOPHILANTROPY used by one patron, two in French and one in English).

On the other hand, by comparing selections as shown by the call slips with cards in catalog (a study made for subjects that had more than fifty cards and more than ten call slip requests), it was very apparent that foreign language titles usually were bypassed before the patron made his selections. This is indicated in Table I, but the card-by-card comparison was even more convincing.

#### LARGE VS. SMALL SUBJECTS

Yale's special interest in a qualitative technique was to derive criteria for assigning material to compact storage. There is fairly general satisfaction now that books in foreign languages, when

not significant as primary source material, are very good candidates for storage; but that subject heading assignment should be on the same basis as that for material in the stacks.

This still leaves the million-plus subject cards in the catalog, occupying a thousand increasingly expensive catalog trays. Proceeding on the assumption that large subjects occupying a tray or more take up more space than warranted—and constitute through bulk a difficult hurdle for the patron—particular attention was given to large subjects *vs.* small subjects.

At the beginning of the experiment, a quota of 15,000 starred cards was allotted for a "main sample," set up on the basis of an estimated 9:13 ratio for cards under such large subjects to cards under other subjects (450,000: 660,000). This main sample contained 288 of the 396 subjects in the experiment. It was organized for tallying results by listing the subjects according to the number of cards under each subject. Table II shows the percentages for the starred

TABLE II

MAIN SAMPLE, ALL SUBJECTS: PERCENTAGES OF MATERIAL USED

SIZE GROUP	YEAR I	YEAR II	YEAR III
Over 400	0.9	1.8	0.6
101-400	3.6	4.5	1.7
51-100	9.1	4.7	3.1
11- 50	5.5	3.4	1.9
1- 10	4.3	3.0	2.3

TABLE III

PSYCHOLOGY SAMPLE, ALL SUBJECTS: PERCENTAGES OF MATERIAL USED

SIZE GROUP	YEAR I	YEAR II	YEAR III
Over 400	0.9	0.6	0.4
101-400	2.5	2.2	2.0
51-100	8.8	5.6	6.7
11- 50	9.6	11.1	5.1
1- 10	—	—	—

TABLE IV

MAIN SAMPLE, SUBJECTS USED: PERCENTAGES OF MATERIAL USED

SIZE GROUP	YEAR I	YEAR II	YEAR III
Over 400	1.1	1.2	0.7
101-400	6.2	6.6	2.9
51-100	13.1	6.7	5.7
11- 50	11.7	11.2	9.4
1- 10	41.4	37.9	33.3

call slips received with respect to the total number of starred cards.

A sample confined to headings in a single subject field, psychology, (4,120 cards) gave comparable results, as shown in Table III. These two tables show that the greatest amount of material used (small though the amount seems to be) was in the subjects with fifty or a hundred cards.

The percentages when restricted to those subjects which actually produced call slips (Table IV) show that the most material used per card in the catalog is in the smallest subjects. As assumed, there is demonstrated in Table IV a dead-weight of cards under the largest subjects—and a most discouraging dead-weight of subject cards in general. If no more use was made of the million cards than the 32,000 in the experiment, then the expense of housing these cards is largely for purposes other than consult-

ing them at the catalog for charging out books—or for no justifiable reason at all.

By way of evaluating the low figures, in the summer of 1955, date-due slips in the books were checked for total charges for some subjects of the sample. Table V not only shows variation in subject use among the subject headings, but also high percentages of no use at all. When the percentages of Tables II-IV are uplifted by subtracting books with no charges at all, they reach the more impressive levels for subject-derived charges shown in Table V. In view of Merritt's figure of 26.2 per cent for subject-derived charges,<sup>3</sup> the subjects in the total sample for the Yale experiment may be considered below average in use. Attempts to project the call slips received from the sample with the total circulation and total number of cards in the catalog

<sup>3</sup> *Ibid.*, p. 4.

TABLE V

DATE DUE SLIP CHECKING

SUBJECT	% WITHOUT CHARGES	TOTAL CHARGES	SUBJECT CHARGES	% SUBJECT CHARGES
Office management	80	7	2	29
Geometry, Non-Euclidean	75	35	14	40
Korean War, 1950-	41	50	6	12
Geopolitics	76	47	2	4.3
88 new subjects (ten cards or less)	53	241	15	6.2
Television	58	31	13	42
Hypnotism	69	49	30	61
Political parties—U.S.	48	138	26	19

not only were statistically unsound but did not get far beyond a 10 per cent level. Yale's experiment included serials; Merritt's did not.

All this is grist for the mills of proposals for publishing union subject catalogs and unwieldy sections of large card catalogs. But it does not give any good guide for determining which specific books will not be used.

#### SELECTION OF SUBJECTS AND BOOKS

There seems to be but little basis for deciding which particular subject headings may be of interest. It cannot be said that the largest subjects are not used, but only that the least amount of material under them is used, relatively speaking. It had been speculated that nobody uses a large general subject like *ECONOMICS*. It was almost a year before a call slip appeared in *ECONOMICS* but it eventually piled up eighteen readers. The interest among the five large general subjects of the experiment varied as shown in Table VI, which gives use in terms of readers rather than number of call slips. It is not a large number of cards *per se* that acts as a deterring force; nor on the other hand, is a greater number of readers to be expected because there is a large amount of published material. No call slips were received in any of the four years for *EUROPEAN WAR-CAUSES* (483 cards), *HYPNOTISM* (79 cards and 39 readers) and *EXISTENTIALISM* (132 cards and 38 readers) together with *PHILOSOPHY* pulled the greatest number of readers.

Nor is large size a disastrous hurdle for anyone who really goes after what he wants. More readers used subdivisions than general works in *PHILOSOPHY* (seventeen readers for the single subdivision *HISTORY* against fourteen for general works) and also in *PSYCHOLOGY* and *SOCIOLOGY*. These readers were not intimidated by more than one tray nor guided filing arrangements.

TABLE VI  
NUMBER OF READERS IN  
LARGE GENERAL SUBJECTS

SUBJECT	NUMBER OF CARDS	NUMBER OF READERS (4 YRS)
Chemistry	1,347	22
Economics	2,388	18
Philosophy	1,771	48
Psychology	1,292	23
Sociology	ca.980	16

A small number of cards does apparently mean less readers interested in the subject. Call slips were received for 112 out of 172 subjects which had more than ten cards; that is, for two out of three subjects. But for subjects which had ten cards or less, call slips were received for only 36 out of 221, one out of six subjects.

The particular subjects that may be used are still considered unpredictable after four years. It was with some dismay that we watched the experiment open with stars for *VAUDEVILLE* (10 cards) and *CONJURING* (39 cards). Yet a whole year went by before a star came in for *WORLD POLITICS* with its handsome array of 797 cards in the catalog. It seemed highly unlikely that anyone would use *ABNAKI LANGUAGE* or *ORGANISTS* or *LUXEMBURG (GRAND DUCHY)—DESCRIPTION AND TRAVEL*, but someone and somebody did. But why in four years did no one request any book by subject under *INTERNATIONAL EDUCATION*, *MEDICAL SOCIAL WORK*, or *RADIOCHEMISTRY*? Quite possibly, because of loopholes in the star technique. The data collected really can be used only in a positive way. Thus it may be said that each year more subjects appeared on the list of those that had been used. It is not impossible to believe that when the life of the surveyors reaches infinity, all subjects in the catalog will have been used.

It is less easy to believe that all cards

TABLE VII  
POSITION IN THE ALPHABET: THREE-YEAR ANALYSIS\*

SUBJECT	TOTAL NO. CALL SLIPS	NUMBER OF CALL SLIPS BY QUARTER OF THE ALPHABET				NUMBER OF READERS
		1ST	2ND	3RD	4TH	
Acculturation	19	6	4	7	2	4
Behaviorism	13	4	1	1	7	6
Dreams	25	11	9	5	0	6
Existentialism	85	31	24	8	22	30
Geometry, Non-Euclidean	23	9	0	6	8	10
Gestalt (Psychology)	22	7	7	2	6	10
Hypnotism	81	53	12	6	10	32
Impressionism (Art)	20	6	3	8	3	11
Isotopes	32	9	10	8	5	12
Man—Origin	29	15	7	5	2	5
Quantum theory	33	5	10	7	11	16
Rorschach test	20	7	5	5	3	7
Semantics (Philosophy)	11	4	4	0	3	7
Short story	15	5	1	7	2	6
Time	24	9	5	6	4	11

\* Based on call slips and cards in "general works" only. Alphabet quartered by dividing total of stack and non-stack titles; call slips for stack titles only.

under all subjects will ever be used within one large library. So again comes the question of what specific books could be omitted from subject display in the catalog. The scrutiny of selections made in fifteen subjects, as mentioned in Table I, showed that foreign language material was usually bypassed. There was a pattern of selection taking place in the first portion of the alphabet; but this pattern was not clear cut in all subjects. It was marred by selections at the X-Y-Z end, selections sometimes made on the basis of recent publication date or a well-known author—but sometimes for no perceivable reason. The distribution of call slips by the quarter of the alphabet in which the main entry is filed under the subject heading is shown in Table VII.

The analyses were far from conclusive, and the *Catalog Use Study*<sup>4</sup> now has data

<sup>4</sup> American Library Association, Resources and Technical Services Division, Cataloging and Classification Section, *Catalog Use Study*, director's report by Sidney L. Jackson, ed. by Vaclav Mostecky (Chicago: ALA, 1958), pp. 33-38.

which far eclipse those gathered by the star technique. We can say that some readers found their Watson at the end of eighty-three cards under BEHAVIORISM. We speculate that the readers knew his surname only and could not find him by author card. We speculate whether other readers missed this good author because they stopped before the middle of the file even and wonder if it would be a kindness to separate recent works in English and those by prominent authors behind a separate guide card. But our deductions are subject to variables of the nature of the subject, the status of the reader, the available material, and so on. The variables seem, in the case of selection by imprint date, to have carried great weight.

#### RANDOM OBSERVATIONS

The average number of call slips per reader was two and one-half, as calculated at the end of three years. Five or

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more charges at one time were not uncommon. The interesting observation here is that for these mass charges, undergraduates were in the minority whereas they were in the majority for the total charges. The highest number of call slips at one time was thirty-one, for a varsity debate. A Law School student took out twenty-two books in one day for REGIONAL PLANNING. From the faculty, who apocryphally never use subjects unless possibly outside of their subject area, a professor of political science called for seven books at once in POLITICAL PARTIES-U.S.

There was frequent use of the subdivision PERIODICALS (e.g., SOCIOLOGY-PERIODICALS) to request "any recent issue" of a periodical and to call for known volumes and years instead of the main entry approach. This may reflect on the filing arrangement and the difficulty of finding a title that has the same filing word as a long file of subject cards.

Readers work diligently to find an "author" for the author line on the call slip form. This was noticed in the procedure for checking against the master file of the experiment to determine the subject headings consulted by the readers. The number of instances when the catalog entry was a corporate body or

title and the reader had supplied a personal author was not slight. This could be taken as reader's preference, by those occupied with revision of descriptive cataloging rules.

## THE STAR TECHNIQUE

Scrutiny of the call slips as they came in provided many conversation pieces during the long months of the experiment—too many and too speculative to be recorded herein. Such individual observations and speculations were not much different from the reminiscences of reference librarians or a diary technique of catalog use study. But sifting and sorting of the accumulated call slips produced objectively based inductions, as have been included above, not always preenvisioned and not constrained by the artificiality of a questionnaire or bias of an interview.

The experiment may be considered an experiment in qualitative methodology rather than an experiment that has produced catalog-shaking results. The technique was objective; but the arduous labor of sifting and sorting slips, plus insufficient control of variables that reintroduced subjectivity in the interpretation of some data, has nullified efforts that could have added even more results to the increments of catalog use studies.

THEY ARE WISE PARENTS—who, shopping around for a college to try to get son or daughter into, make their first campus call at the college or university library. A campus library is by sheer necessity the hub of the educational wheel in any American higher learning institution. A well stocked library, directed by an accomplished librarian and served by a competent staff, sets the stage for further investigation at least.

—Holyoke (Mass.) *Transcript-Telegram*, October 25, 1958