

STUDY OF THE SEE-ALSO REFERENCE STRUCTURE IN RELATION TO THE SUBJECT OF INTERNATIONAL LAW

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INTRODUCTION

Library catalogs have two principal functions: first, they bring together all the works by an author as well as all the works on a subject, which are available in the library's collections (bibliographic function); second, they are a finding tool, making it possible for the user to locate the material which he needs. With respect to the first function, catalogs are in competition with printed bibliographies; with respect to the second, they have no rival. The research worker will find it a fruitless and exasperating experience to browse through miles of shelves in order to find the book for which he is looking. The catalog alone provides a key to the collection and a valuable shortcut to its contents; by consulting it, the research worker will locate quickly the material on the subject of his interest.

That is the theory. It will be the purpose of this study to evaluate, within the limits of one subject field, the effectiveness of the catalog as a finding tool.

The need for this report developed from the author's practical experience with the public catalog at the Library of Congress. Too often the direct approach of the card catalog, through subject headings, seemed to yield very poor results; the user could never be certain that the heading consulted was the most appropriate one and he was haunted by the persistent fear that much more valuable material was hiding under some other term which failed to come to his mind. It became quickly apparent that one of the key factors of the catalog's practical value is its cross-reference structure.

The situation is perhaps still less satisfac-

tory in other libraries, especially those which rely on L.C. printed cards. These are usually handled by non-professional help, and filed in the catalog without adequate revision. The Library of Congress might have made a number of *see-also* references, but since no indication appears on the printed card itself, the clerical assistants in other libraries may fail to see the need for them. The subject headings may thus become overlapping, inconsistent, or isolated. These have been some of the conclusions reached during a recent survey of the catalogs of the Catholic University of America in Washington, D.C.

The present study is limited to one subject field, that of the international law of peace. More general conclusions could have been drawn perhaps, from a survey of the *see-also* reference structure in the central public catalog of Columbia University, as was planned originally. But, since a large dictionary catalog, such as that at Columbia, is extremely complex and geographically separated from the collection itself, our study would have necessarily remained superficial and have evinced the character of an inconclusive spot-check rather than being a true analysis.

Even the field of political science, with which we experimented, proved too broad for our purposes.¹ Therefore, we have concentrated our efforts on the special collection of international law on the second floor of the Kent Library, one of Columbia University's departmental collections.

The field of international law is relatively limited, and it has only a few points of contact with other disciplines (international relations, law, political theory, government). Its termi-

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¹An attempt to rationalize subject headings and references in political science by conceptual categories was made by Hilda Steiweg: "Thoughts on Subject Headings," *Journal of Cataloging and Classification*, VI (1950), 40-50.

nology is well developed and standardized; its literature is compact and not too voluminous. There is general agreement by the authorities in the field respecting the principal topics into which the field is subdivided.

Furthermore, the Kent Library has an excellent, and relatively small, catalog, located in the immediate vicinity of the open-shelf collection. The library uses a modified L.C. classification system and its own specialized list of subject headings, compiled under the direction of Columbia University's Law Librarian, Miles O. Price.² Composite works are closely analyzed by subject; *see-also* reference cards are generously distributed throughout the catalog.

Thus, both the subject matter and the library itself appeared to be a promising testing ground for our investigation.

PART ONE

TESTING THE SUBJECT APPROACH TO THE CATALOG

The subject structure of a catalog may be tested in several ways. The research worker may select at random a few topics and search through the catalog to see how much material can be located by using various subject headings, connected or unconnected by *see-also* references. Or he may analyze closely all the cards under a few related headings and try to determine the logic and effectiveness of the catalog as a finding tool.

The method selected for the purposes of this study may, perhaps, appear slow and heavy-handed; but it has the advantages of thoroughness, since it covers evenly the entire field under scrutiny, and of practical application, since it virtually duplicates the search patterns of the catalog user.

The procedure consists of the following three steps:

First, the field of international law of peace was subdivided into its component parts, each representing a well-defined area of study, self-contained but logically related to the others. Three outstanding treatises of international law were particularly helpful in this task:

Briggs, Herbert W. *The law of nations*. New York: Appleton, 1952. (A collection of cases in international law.)

²Miles O. Price (comp.). *Subject Headings in Anglo-American and International Law*. New York: Columbia University School of Library Service, 1949.

Hyde, Charles C. *International law*. 2d. ed. Boston: Little, Brown, 1945. (For the American point of view.)

Oppenheim, Lassa F. L. *International law*. 7th ed. Ed. by H. Lauterpacht. London: Longmans, Green, 1948-1952. (For the British point of view.)

Second, an extensive bibliography of monographs on international law was compiled from standard bibliographic tools and from general works covering the whole field. Oppenheim's treatise, generally considered one of the basic works on the subject, was again of great assistance because its bibliographies, which are appended to each chapter, are divided by topics.

Only those books which dealt primarily with a single and well-defined subdivision of the field were included. The subject content was often obvious from the title or the heading under which the works were cited in the bibliography; in case of doubt, the books themselves were consulted and their exact coverage determined.

The titles were then arranged systematically under the proper subject subdivision.

Third, the resulting list, in effect a classified bibliography of international law, was checked against the Kent Library holdings. Of the 921 titles, 720 (or 78 percent) were found listed in the library catalog.

The investigation then proceeded under the following assumption: A reader, eager to locate all the available material on a given topic, would begin by consulting the corresponding subject heading. If not fully satisfied, he would examine the *see-also* reference card and look under the related headings listed there. At this point, assuming that the catalog fulfills its function as a finding tool, the reader should have successfully reached his objective, unless he had begun with the wrong subject heading altogether. In particular, he should have located all the titles of our sample, grouped under the topic he was investigating.

Table I shows what would have been the results of such a search in the Kent Library for each subdivision of the field of international law, with respect to the 720 works listed in our classified bibliography. The topic is given in the first column, the number of titles of our sample in the second; the third column indicates the corresponding subject heading, as it

TABLE I

DISTRIBUTION OF TITLES BY SUBJECT CATEGORY

Topic	No. of titles	Subject heading	No. of titles under it	No. reached through <i>see-also</i> ref.	TOTAL no. reached	No. reached through classif.
<u>I. INTERNATIONAL LAW: FOUNDATIONS AND HISTORY</u>						
Legal nature of I.L.	6	International Law	4	1	5	4
Sources	7	I.L. - Sources	2	--	2	2
I.L. & general law	16	International Law	8	5	13	7
Codification	3	I.L. - Codification	2	--	2	2
History	12	I.L. - History	4	--	4	7
I.L. as a science	2	International Law	2	--	2	2
Treatises	13	International Law	11	--	11	10
Collections of treaties	6	Treaties - Collect.	3	--	3	3
Bibliographies	1	I.L. - Bibliogr.	1	--	1	1
Periodicals	9	I.L. - Periodicals	2	--	2	4
SUB-TOTAL	75		39	6	45	42
			52%	8%	60%	55%
<u>II. SUBJECTS OF INTERNATIONAL LAW</u>						
Sovereign States	6	Sovereignty	1	5	6	2
Recognition of States	9	Recognition (I.L.)	8	1	9	6
Succession of States	10	State succession	4	4	8	3
Composite States	6	Federations	3	2	5	1
Vassal States	3	Semi-sovereign St.	1	1	2	1
St. under Protectorate	4	Protectorates	4	--	4	4
British Commonwealth	8	Imperial Federation	3	4	7	2
Mandated Areas	11	Mandates (I.L.)	9	--	9	7
Trusteeships	2	International Trust.	1	1	2	1
Neutralized States	12	Neutralized States	8	--	8	5
Holy See	16	Vatican (City)	3	6	9	5
SUB-TOTAL	87		45	24	69	37
			52%	28%	80%	43%
<u>III. RIGHTS AND DUTIES OF STATES</u>						
International personality	1	Sovereignty	1	--	1	1
Equality	13	Equality of States	4	7	11	3
Self-preservation	3	Self-help	1	1	2	1
Intervention	3	Intervention (I.L.)	2	--	2	1
Jurisdiction	1	Jurisdiction (I.L.)	--	--	--	--
Responsibility of States	17	Responsibility (I.L.)	6	4	10	4
----- for acts of indiv.	2	Responsib. (I.L.)	1	--	1	1
SUB-TOTAL	40		15	12	27	11
			38%	30%	68%	28%
<u>IV. INTERNATIONAL ORGANIZATIONS</u>						
Principles	13	Int. Organization	4	3	7	4
League of Nations	12	League of Nations	5	3	8	5
United Nations	9	United Nations	1	1	2	7
SUB-TOTAL	34		10	7	17	16
			29%	21%	50%	47%

TABLE I (continued)

DISTRIBUTION OF TITLES BY SUBJECT CATEGORY

Topic	No. of titles	Subject heading	No. of titles under it	No. reached through <i>see-also</i> ref.	TOTAL no. reached	No. reached through <i>classif.</i>
<u>V. STATE TERRITORY</u>						
General	4	Territory - State	2	--	2	1
Rivers	14	Rivers - Internat.	6	4	10	6
Lakes & Inland Seas	3	Waters	1	--	1	1
Canals	7	Canals - Interoceanic	3	2	5	2
Maritime Belt	17	Territorial Waters	8	1	9	4
Straits	4	Straits (I.L.)	2	--	2	1
Air & Aerial Navigation	10	Aeronautics (I.L.)	6	2	8	6
Boundaries	11	Boundaries	6	--	6	4
State Servitudes	5	Servitudes (I.L.)	5	--	5	4
Acquisition of Territory	4	Territorial expansion	1	1	2	1
Cession	2	Annexation	--	1	1	1
Occupation	14	Occupation - Territ.	5	1	6	6
Subjugation	3	Conquest	2	1	3	2
SUB-TOTAL	98		47	13	60	41
			48%	13%	61%	42%
<u>VI. OPEN SEA</u>						
Freedom of the O.S.	10	Freedom of the Seas	3	5	8	3
Jurisdiction	2	Maritime Law	1	--	1	1
Piracy	2	Piracy	2	--	2	1
Fisheries	5	Fisheries	2	1	3	3
Telegraph Cables	2	Cables - Submarine	2	--	2	2
Wireless Communications	9	Radio	6	--	6	5
SUB-TOTAL	30		16	6	22	15
			53%	20%	73%	50%
<u>VII. INDIVIDUALS IN INTERNATIONAL LAW</u>						
Position of Individuals	7	Persons (I.L.)	2	--	2	2
Nationality	9	Nationality	5	--	5	5
Acquisition & Loss of Nat.	14	Nationality	5	--	5	6
Naturalization	6	Naturalization	2	--	2	3
Statelessness	6	Statelessness	4	2	6	2
Reception of Aliens	4	Aliens	1	1	2	1
Position of Aliens	17	Aliens	3	3	6	5
Expulsion of aliens	5	Deportation	3	--	3	2
Extradition	10	Extradition	6	3	9	5
Political Criminals	2	Asylum, Right of	1	1	2	1
Protection of Minorities	13	Minorities - Racial	7	--	7	4
Labor	14	Labor (I.L.)	6	6	12	4
Slavery & Slave Traffic	3	Slavery	1	1	2	1
Rights of Man	8	Personal Rights	4	2	6	3
SUB-TOTAL	118		50	19	69	44
			42%	16%	58%	37%
<u>VIII. STATE ORGANS FOR INTERNATIONAL RELATIONS</u>						
Foreign Ministries	1	Foreign Relations	--	1	1	1
Diplomatic representatives	16	Ambassadors	4	2	6	5

TABLE I (continued)

DISTRIBUTION OF TITLES BY SUBJECT CATEGORY

Topic	No. of titles	Subject heading	No. of titles under it	No. reached through <i>see-also</i> ref.	TOTAL no. reached	No. reached through <i>classif.</i>
VIII. STATE ORGANS FOR INTERNATIONAL RELATIONS (continued)						
Exterritoriality	8	Exterritoriality	3	3	6	4
Position as regards Third States	1	Dipl. Service-Immun.	1	--	1	1
Non-diplomatic Persons	6	Dipl. Serv.-Immun.	2	1	3	1
Consuls	6	Consular Service	4	--	4	2
Consular Organization	2	Consular Service	1	1	2	1
Functions of Consuls	2	Consular Jurisdict.	1	--	1	1
Consular Privileges	3	Cons.Serv.-Immun.	1	1	2	1
Consuls in the Orient	10	Consular Jurisdict.	4	2	6	3
SUB-TOTAL	55		21	11	32	20
			38%	20%	58%	36%
<u>IX. MISCELLANEOUS INTERNATIONAL AGENCIES</u>						
State Ships in Foreign Waters	13	Government Vessels	2	2	4	1
Non-diplomatic Agents	4	Espionage	1	1	2	1
International Administration	21	Int. Administration	3	11	14	3
Communications Agencies	12	Communic. & Traffic	1	6	7	4
Economic Agencies	13	Trade-marks - Int.	3	2	5	4
Humanitarian Agencies	14	Drugs	5	--	5	2
Unification of Laws	6	Int. Law - Priv.-Cod.	1	--	1	1
Regional Unions	14	Pan American Union	3	--	3	4
SUB-TOTAL	97		19	22	41	20
			20%	23%	43%	21%
<u>X. INTERNATIONAL TRANSACTIONS</u>						
Negotiation	3	Int. Cooperation	1	1	2	1
Congresses & Conferences	13	Int. Congresses	7	6	13	5
Executive Agreements, etc.	2	Juristic Acts	1	--	1	1
Treaties	10	Treaties	7	2	9	7
Parties to Treaties	5	Treaty Power	3	1	4	3
Ratification of Treaties	7	T. - Ratification	5	--	5	4
Registration of Treaties	3	T. - Registration	2	--	2	1
Effect of Treaties	3	T. - Third Parties	2	--	2	1
Enforcement of Treaties	2	Sanctions (I.L.)	1	--	1	1
Participation of Third States	1	T. - Third Parties	--	--	--	--
Expiration & Termination	12	T. - Termination	1	4	5	5
Interpretation of Treaties	3	T. - Interpretation	3	--	3	3
Alliance Treaties	3	Alliances	1	--	1	2
Treaties of Guarantee	12	Guaranty - T.	8	1	9	6
Commercial Treaties	7	Commercial T.	2	4	6	4
SUB-TOTAL	86		44	19	63	44
			51%	22%	73%	51%
GRAND TOTAL	720		306	139	445	290
			42%	19%	61%	40%

appears in the catalog, the fourth column the number of titles of the sample entered under that subject heading by the Library; the fifth column shows the number of additional titles located under related subject headings connected by *see-also* references, and the sixth column the total number of titles thus reached. The last column, added for purposes of comparison, lists the number of titles of the sample which the reader would be able to locate by referring to the classification schedules and the shelf-list, in other words the titles which had been assigned the same, or a contiguous category.

The topics are grouped in broader categories; totals, including percentages, are indicated for each category, as well as for the table as a whole. Only three of these categories are reproduced here in full.

A glance at the results leads to the following four general conclusions:

(1) The reader who consulted only one subject heading in each group would have missed sixty percent of the titles.

(2) The use of *see-also* references would have increased the number of titles found to over sixty percent of the total sample; *see-also* references are thus an indispensable feature of the catalog.

One should note that the relative proportion of titles reached by consulting one subject heading and by using *see-also* reference depends entirely on the proper selection of the subject heading first consulted. In our sample, a conscious attempt was made to ascertain the heading which included the largest number of titles, in order to create an *optimum* situation. In some cases, the reader would have little difficulty in determining the correct subject heading. However, could he be reasonably expected to look under TREATY POWER for material on parties to treaties, under IMPERIAL FEDERATION for material on the British Commonwealth, or under PERSONS for works on the position of individuals in international law?³

The results of our test must therefore be characterized as extremely conservative; in actual practice, the number of titles reached would be still smaller and the relative importance of the cross-reference structure of the catalog (both *see-* and *see-also* references) considerably greater.

(3) The use of the classification to locate material on a topic is in no way superior to the use of subject headings. It is extremely interesting to observe the analogy between the proportion of titles found through one subject heading and titles found through the classification. This striking parallel is not confined to the grand total, but runs throughout the entire sample. It would be, of course, incorrect to conclude that the classification duplicates the subject analysis; a close scrutiny of the results would show that the titles disclosed by the two methods are not identical.

It appears that the classification scheme can serve as a useful finding tool only when: (a) all series are carefully analyzed (in our sample, a relatively large number of titles were classified as society publications, League of Nations series, or simply in the general class of International Law, JX 2000); (b) the scheme is provided with a systematic *see-also* reference structure; (c) books dealing with several topics are assigned more than one classification number, and tracing cards are filed in the shelf-list.

In other words, the shelf-list cannot replace subject analysis unless it is made into a detailed classified catalog.

(4) Even by taking advantage of *see-also* reference cards (plentiful in the Kent Library), our hypothetical reader missed between thirty and sixty percent of the titles in individual categories and almost forty percent in the entire sample. Thus the subject heading structure of the catalog is obviously far from perfect. Some of the reasons for its deficiencies will be discussed in the next section of this study and the following section will outline a tentative proposal for a systematic subject analysis of the field of international law, which should bring the reader's "batting average" much closer to 100 percent.

PART TWO

ANALYSIS OF THE SUBJECT HEADING AND CROSS-REFERENCE STRUCTURE OF THE CATALOG

In an effort to gain some insight into the subject structure of the catalog, and to identify

³The irrational and unpredictable approach of the reader was illustrated by an interesting experiment with entering library school students by Oliver L. Lilley, "Evaluation of the Subject Catalog," *American Documentation*, V (1954), 51-60.

some of its inherent weaknesses, we have listed and analyzed all the headings assigned to the 720 titles of the sample. Often it was necessary to consult the books themselves; in other instances, the catalog card was sufficiently revealing. Corresponding cross-reference cards (especially *see-also* references) have been subjected to the same scrutiny.

The lack of a logical policy both in assigning subject headings and in making cross-reference cards has become quickly apparent. The best intentions of the cataloger certainly cannot be doubted; but he has not been provided with a concrete set of rules for subject analysis as has been devised for descriptive cataloging, and his work necessarily reflects this serious handicap. Inconsistency is the gravest single defect of the subject catalog.

Some of the findings are briefly summarized in the following paragraphs.

(1) *Broad subject headings.* The Kent Library catalog, although relatively small in size, contains 314 cards under INTERNATIONAL

ORGANIZATION, 514 under INTERNATIONAL COOPERATION, 167 under TREATIES, 153 under STATE, THE, 150 under SOVEREIGNTY, and 1271 cards under INTERNATIONAL LAW.

Are all these cards really necessary? Would not another, more specific, heading be more practicable in some cases? Or could some cards be discarded altogether? The following sample list of titles with their assigned subject headings (Table II) is believed to be self-explanatory.

All headings marked with an asterisk can be disposed of as non-expressive (12 out of 22); only in item (x) the substitute heading INTERNATIONAL LAW — SOURCES may be added. In the majority of cases, *see-also* references would call the reader's attention to the broad subject just as effectively as the eliminated subject cards, without cluttering the catalog with unnecessary entries. The heading INTERNATIONAL LAW should be reserved exclusively for general treatises covering the whole field; otherwise, the entire specialized collec-

TABLE II
TITLES AND SUBJECT HEADINGS — TEN SELECTED WORKS

Title	Subject headings
i. Cavaglieri. La Consuetudine giuridica internazionale	* International Law Usage and Custom
ii. -----, Stato di necessità nel diritto internazionale	* International Law Self-help
iii. Dickinson. Equality of states in international law	* International Law Equality of States
iv. Kaufmann. Das Wesen des Voelkerrechts und die Clusula "Rebus sic stantibus"	* International Law * Treaties Rebus sic stantibus
v. Keith. Theory of state succession	* International Law * Sovereignty State Succession
vi. Kunz. Staatenverbindungen	* State, The Federation
vii. Lauterpacht. An international Bill of the Rights of Man	* International Law Personal Rights
viii. Margolith. International mandates	* Sovereignty Mandates
ix. Nippold. Der voelkerrechtliche Vertrag	* International Law Treaties
x. Sørensen. Les sources de droit international	* International Law League of Nations. Permanent Court of International Justice

tion of the Kent Library subject headings, embracing not only treaties, but also negotiations, consultations, conferences, executive agreements is desirable. In addition to STATE TERRITORY, we need a subject heading for works on the many modes of acquisition, loss, and transfer of territory. To break down the general, and always glutted, STATE, THE, we need a more specific heading for the rights and duties of states.

An excellent illustration of the absurd extremes to which an overzealous cataloger may go is the list of subject headings assigned, on L.C. cards, to Marinoni's *La responsabilità degli stati per gli atti dei loro rappresentanti*: "1. State, The. 2. Ambassadors. 3. Responsibility. 4. International Law. 5. Political Science." The third heading, possibly also the second, would be quite sufficient; headings 1, 4, and 5 are so general that they would fit almost any book in an international law collection.

Let us take again a few examples (Table III). The three selected titles all deal with a single topic, the acquisition of state territory; however, there is no common subject heading

to any two of them. ANNEXATION is too narrow, being only one of several ways of acquiring territory; SOVEREIGNTY and TERRITORY, STATE are too general. Only TERRITORIAL EXPANSION comes close to the actual need.

The subject matter of these six works is again identical and specific; however, the only heading which brings together a significant portion of them is the broad INTERNATIONAL LAW AND RELATIONS on L.C. cards and

TABLE III

COMPARISON OF L.C. AND KENT LIBRARY SUBJECT HEADINGS (Sec. A.)

Title	Subject headings	
	L.C.	Kent
Heimburger. Der Erwerb der Gebietshoheit	Sovereignty	Annexation
Jerusalem. Ueber voelkerrechtliche Erwerbssgruende	(not available)	Territorial Expansion Sovereignty
Schaetzel. Voelkerbund und Gebietserwerb	Territory, State	Territory - State

(2) *Intermediate subject headings.* In other instances, a broader subject heading appears preferable to an enumerative list of its components. The classic example of DOMESTIC ANIMALS instead of DOGS. CATS. RABBITS. ... has its equivalents in the field of international law. We may need headings for books discussing the various types of subjects of international law, of sovereign states, and of treaties. A broader heading for international

TABLE III (Sec. B.)

Title	Subject headings	
	L.C.	Kent
Alfaro. Derechos y deberes de los estados	(not available)	State, The
American Institute of International Law. Declaration of the rights and duties of nations	International law and Relations	State, The
Fontenay. Des droits et des devoirs des états entre eux	Sovereignty	Sovereignty International Law
Graf. Die Grundrechte der Staaten im Voelkerrecht	(not available)	State, The International Law
Pan American Union. Draft declaration of the rights and duties of American states	International Law	State, The Responsibility
Root. The declaration of the rights and duties of nations	International Law and Relations	State, The International Law

STATE, THE in the Kent catalog. RIGHTS AND DUTIES OF STATES would be an immediate and logical solution; furthermore, it would save four out of ten subject cards in the Kent Library sample list.

(3) *Enumerative subject headings.* Books dealing with a broad topic are often given not only the comprehensive subject heading, but also one or several of the more specific partial headings, logically included in the general term.

Examples:

TABLE IV

TITLES WITH RESPECTIVE ENUMERATIVE HEADINGS

Title	Subject headings (Kent)
Boghitchévitch. Halbsouveraenitaet	Autonomy Sovereignty Semi-sovereign States
Bynkershoek. De dominio maris	Freedom of the Seas Territorial Waters Sea Power
Schulthess. Das internationale Wasserrecht	Waters Rivers - International
Visscher, de. Le droit international des communications	Communication and Traffic Rivers - International Railroads Electricity Transportation Aeronautics - Military
Whittuck. International canals	Canals - Interoceanic Suez Canal Panama Canal

In this example, thirteen out of eighteen subject cards could be eliminated and the reader guided from the broad to the more specific term by *see-also* references.

(4) *Inadequate terminology.* De Visscher's work cited in the preceding example also illustrates another common weakness of our subject headings — overlapping terminology. It is indeed difficult, without an elaborate guide card, to see the difference between COMMUNICATION AND TRAFFIC and TRANSPORTATION. To decide which to use must cause even the cataloger himself serious concern; that is, perhaps, why both headings have been used in the example above. It must be still more confusing to the reader who, if he attempts to locate material on the subject treated by de Visscher (and Schulthess), must choose from among the following headings: WATERS; RIV-

ERS; RIVERS — INTERNATIONAL; MARITIME LAW; INLAND NAVIGATION; COMMUNICATION AND TRAFFIC; TRANSPORTATION; FREEDOM OF THE SEAS; NAVIGATION; SHIPS AND SHIPPING; FREIGHT AND FREIGHTAGE; TERRITORIAL WATERS; TIDEWATERS; CONTINENTAL SHELF; and many others. Can he be blamed for not knowing where to begin?

Cross-references, both of the *see* and *see-also* type, again offer a simple solution: reduce

the number of analogous or synonymous subject headings to the minimum, refer from the terms rejected, and relate the used headings by means of *see-also* references.

This rule will weed out from the catalogs many "eternal couples" of subject headings. Virtually every collection of treaties, for example, is at the same time a source of international law and appears both under TREATIES — COLLECTIONS and INTERNATIONAL LAW — SOURCES; cards under IMPERIAL FEDERATION are often duplicated under COLONIES — GREAT BRITAIN. Other examples are shown.

Items d, f, g, and h on this list could be taken care of, once and for all, by *see-also* references, the other three preferably by a *see from* reference.

Too often, the terminology used in the subject heading list is plainly inadequate and the

TABLE V

DUPLICATION OF SUBJECT HEADINGS

a. DIPLOMACY	and	DIPLOMATIC SERVICE
b. INTERNATIONAL COOPERATION -		
c. CONGRESSES	and	INTERNATIONAL CONGRESSES
d. LATERAN, TREATY OF	and	VATICAN (CITY)
e. NATIONALITY	and	CITIZENSHIP
f. NATURALIZATION	and	NATIONALITY
g. NEUTRALIZED STATES	and	NEUTRALITY
h. TERRITORIAL WATERS	and	MARITIME LAW

cataloger must struggle with a number of terms, none of which is accurately descriptive.

It must be a rather startling discovery for the reader to find books on immunities of non-diplomats under DIPLOMATIC SERVICE - IMMUNITIES, books on the British Commonwealth under IMPERIAL FEDERATION, books on the British dominions under COLONIES - GREAT BRITAIN.

Works on the position of the Vatican State in international law are entered under a particularly confusing array of subjects. Although dealing with a well-defined and specific topic, they are scattered under one or several of the following headings: CATHOLIC CHURCH - FOREIGN RELATIONS; CATHOLIC CHURCH - POPE; CHURCH AND STATE - HISTORY; CONCORDAT OF 1929; LATERAN, TREATY OF, 1929; VATICAN (CITY). Would it not be simpler to agree on one of these headings, perhaps VATICAN (CITY), or adopt the official term Holy See, in order to keep the literature on the Vatican State together?

The position of individuals in international law presents another difficult problem:

Balladore Paglieri's *Potestà dello stato sugli individui* is entered under SOVEREIGNTY, Meier's *Der Staatsangehoerige und seine Rechte* under CITIZENSHIP, Segal's *L'individu en droit international positif* under PERSONS, and Spiropoulos' *L'individu et le droit international* under INTERNATIONAL LAW - PRIVATE.

Nothing connects these four works though they treat essentially the same subject matter. Is there any reason for the cataloger's apparent reluctance to say simply INDIVIDUALS?

(5) *Suggestive titles.* In a number of instances, the cataloger has apparently simplified his task by dividing the title of a work into two or more subject headings. The resulting "catch-word" unfortunately fails to describe the true scope and content of the book and contributes to an even greater and more useless concentration of cards under broad, non-expressive headings. Examples (Table VI).

Actually, Masters' volume should have been given a heading expressing the relations of international law to municipal (or domestic) legislation; as for Kelsen's work, the cataloger might have logically added PROBLEM and THEORY!

TABLE VI

SELECTED TITLES WITH BROAD SUBJECT HEADINGS

Title	Subject headings
Dickinson. Equality of states in international law	International law Equality of States
Kelsen. Das Problem der Souverainetaet und die Theorie des Voelkerrechts	Sovereignty International Law
Masters. International law in national courts	International Law Jurisdiction
Mowat. Diplomacy and peace	Diplomacy Peace
Pfluger. Einseitige Rechtsgeschaefte im Voelkerrecht	International Law Juristic Acts

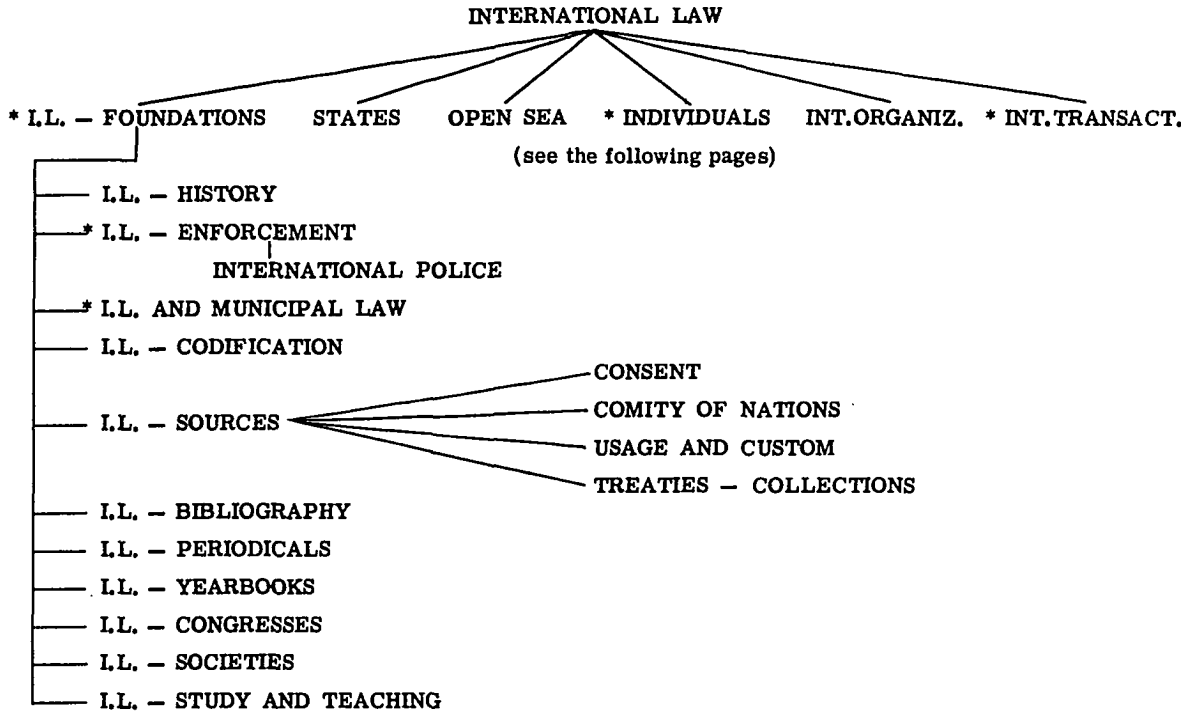


Fig. 1

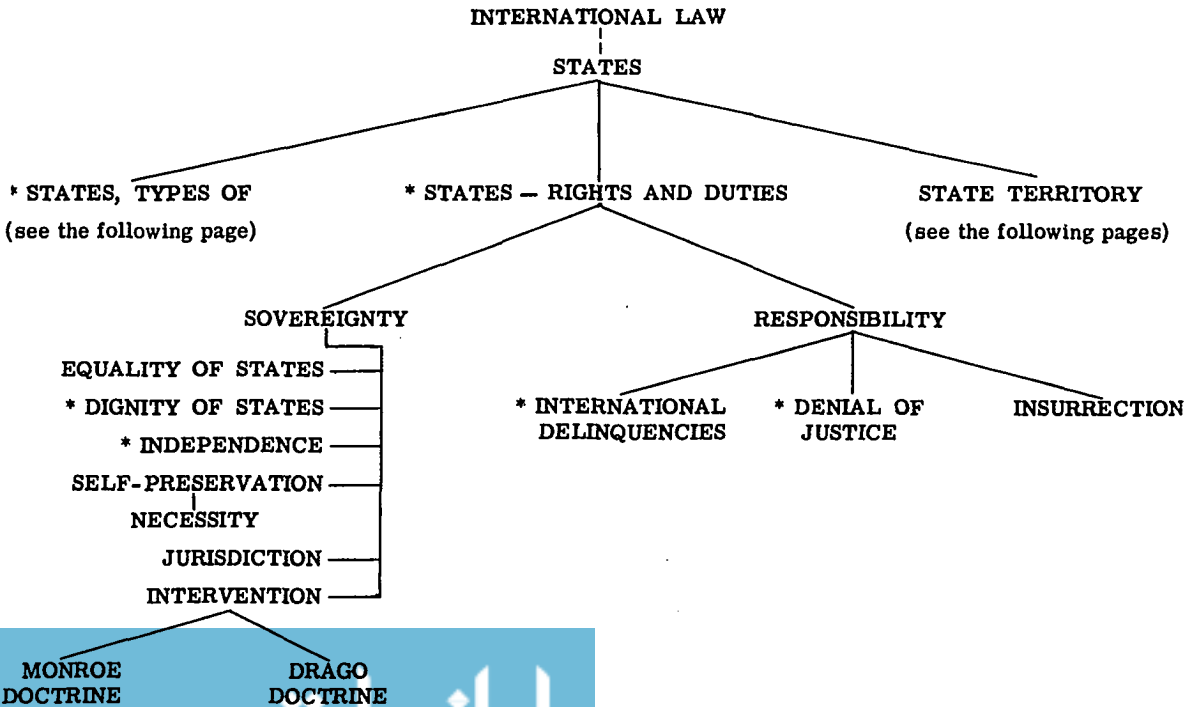


Fig. 1 (cont.)

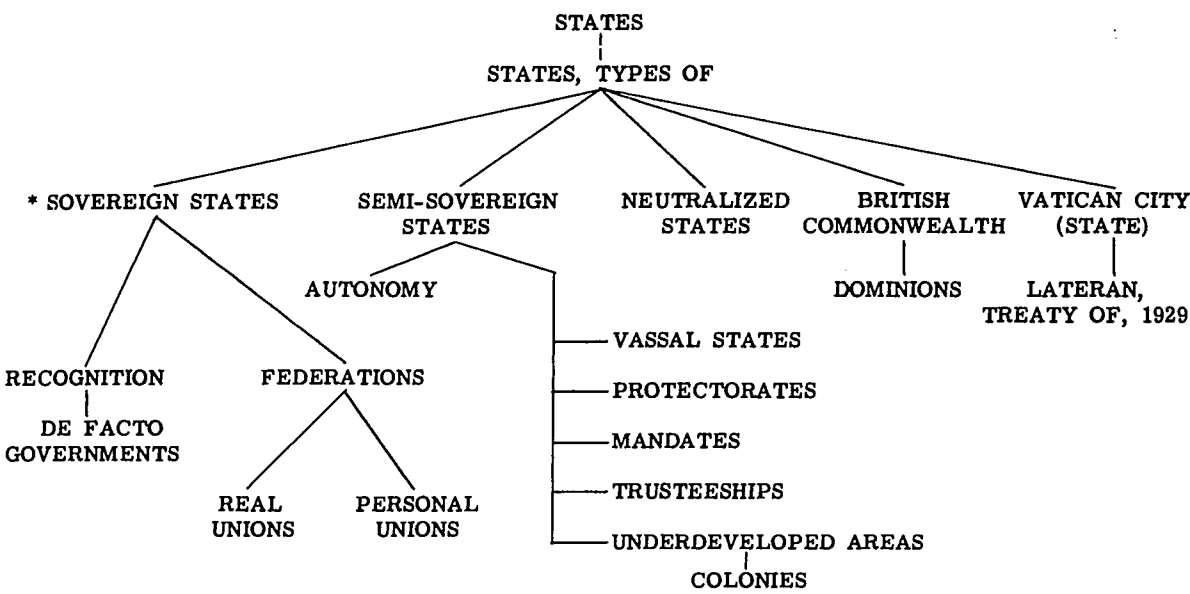


Fig. 1 (cont.)

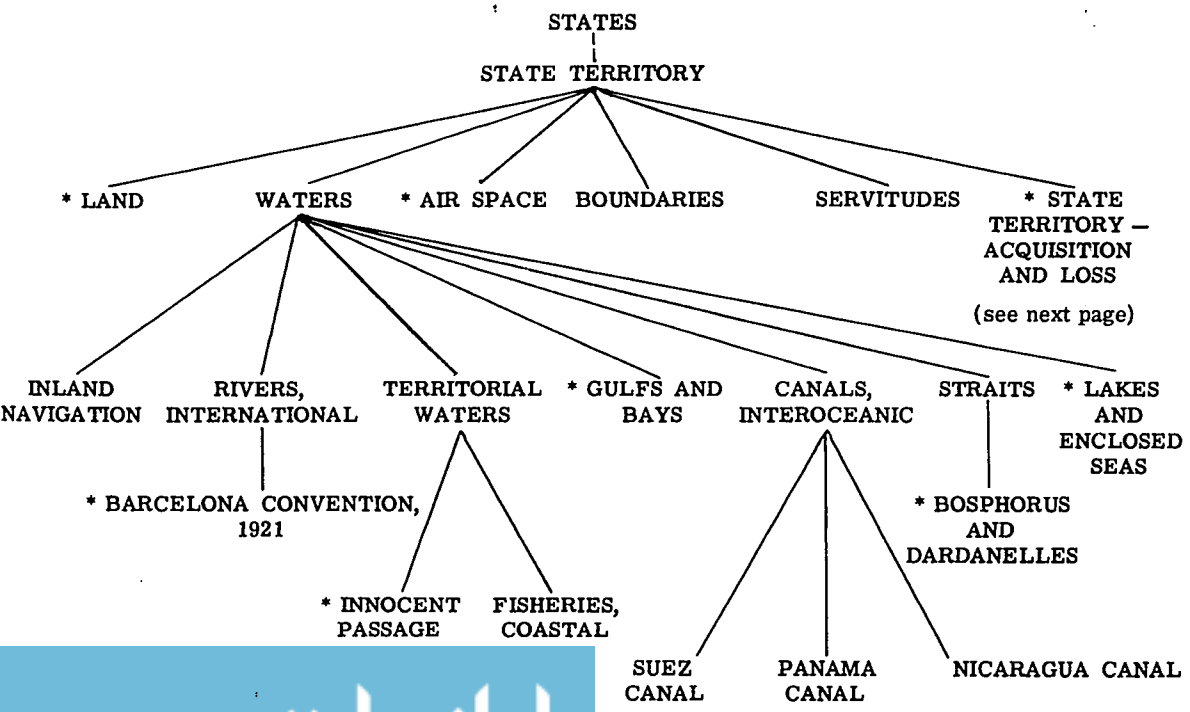


Fig. 1 (cont.)



(6) *The non-existent see-also references structure.* Throughout the preceding discussion, we have emphasized the importance of cross-references as a means of tightening the subject catalog and providing the reader with a guide to the maze of individual headings. We shall now try to analyze the *see-also* references in the Kent Library catalog.

It is hardly possible to detect any conscious attempt on the part of the catalogers to devise a policy for *see-also* references. The number of *see-also* references is certainly startling: from INTERNATIONAL LAW alone, one is referred to no less than 116 other headings, crowded on six two-column cards. The reader is reminded of such topics as ARMED MERCHANT SHIPS; CONTINUOUS VOYAGES; DE FACTO GOVERNMENTS; DEPORTATION; COPYRIGHT -- but not PATENTS or TRADE MARKS; CONSULAR JURISDICTION -- but not

CONSULS; DIPLOMATIC SERVICE -- IMMUNITIES -- but not AMBASSADORS. Also missing, to mention but a few, are the important terms of SANCTIONS; INTERNATIONAL COOPERATION; REBUS SIC STANTIBUS.

The printed list of subject headings⁴ is far less generous and includes only: ARBITRATION -- INTERNATIONAL; DIPLOMACY; EXTERRITORIALITY; GEOPOLITICS; HAGUE CONFERENCES; INTERNATIONAL LAW -- PRIVATE; NEUTRALITY; SOVEREIGNTY; TREATIES; and WAR. It is difficult to see why EXTERRITORIALITY is listed, but not NATIONALITY, PERSONAL RIGHTS, or TERRITORY -- STATE; why the Hague Conferences are given preference over the Geneva Conferences and the League of Nations; why the broad fields of International Administration and Maritime Law have been omitted altogether.

From RECOGNITION, the reader is re-

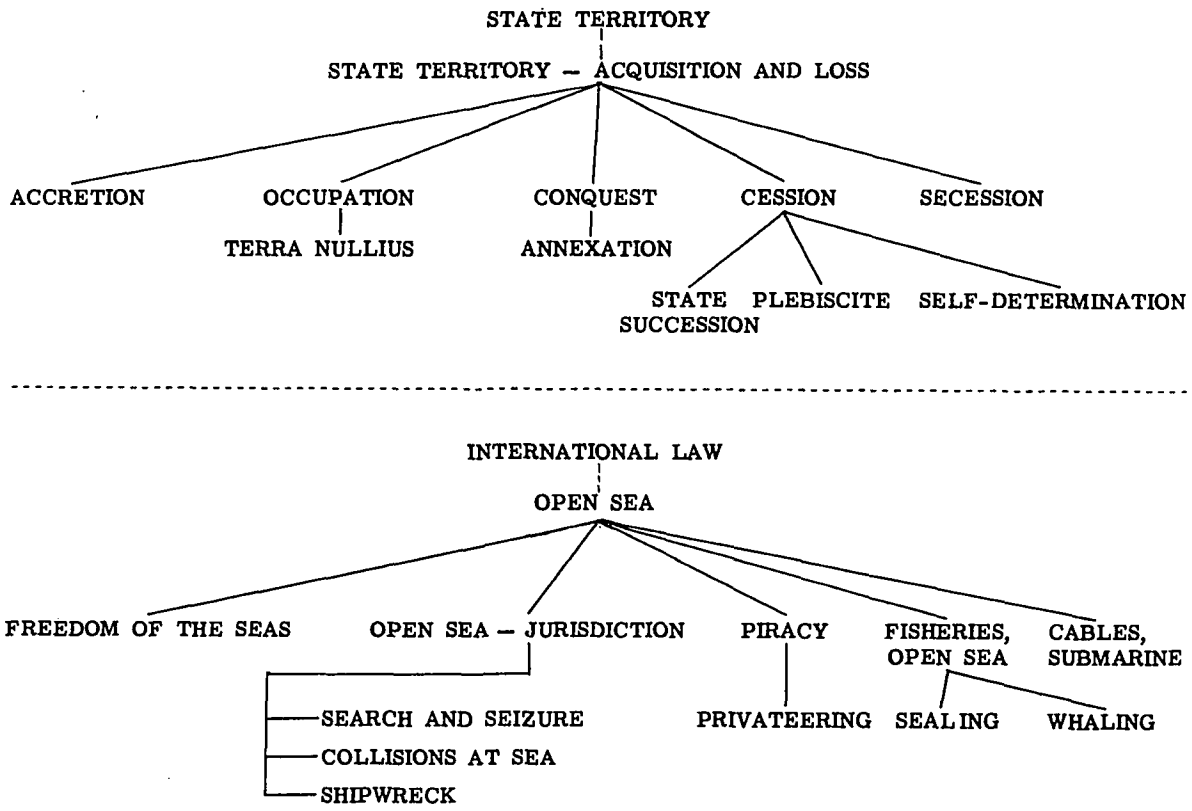


Fig. 1 (cont.)

⁴Miles O. Price. *Op. cit.*

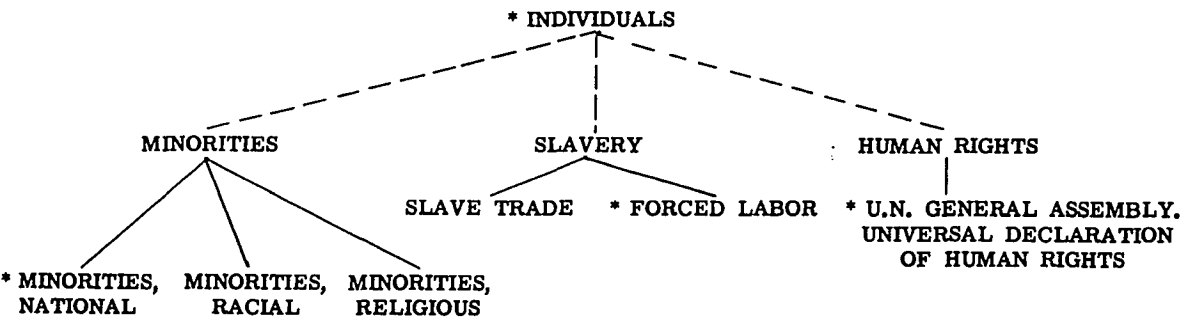
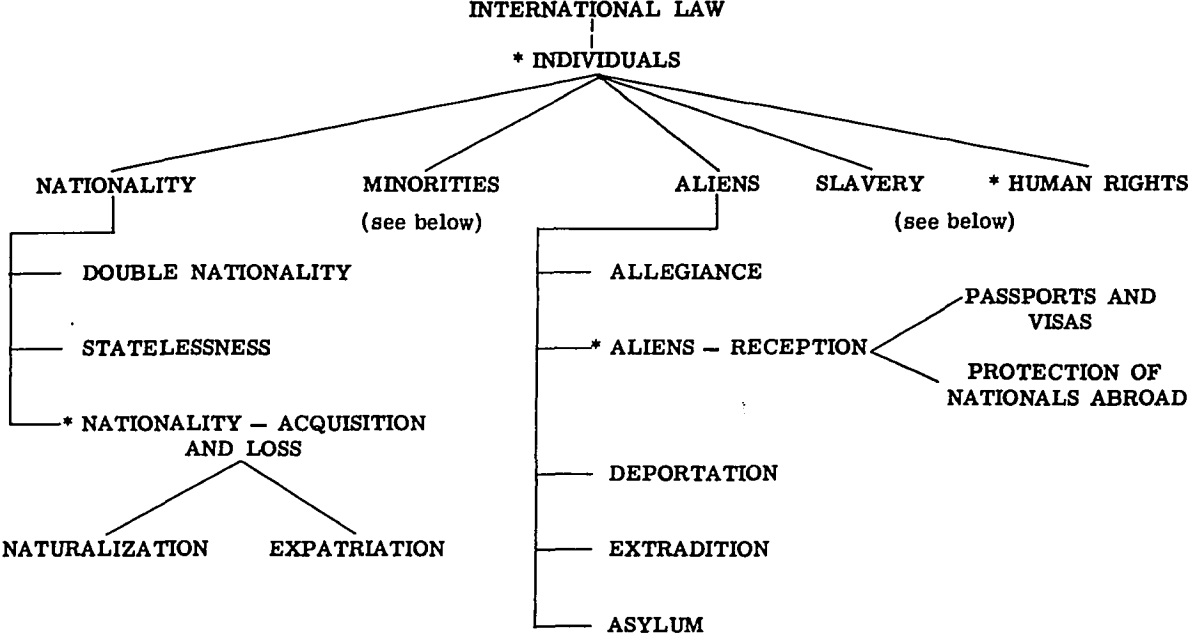


Fig. 1 (cont.)

ferred to **ESTRADA DOCTRINE**; however, the heading **DE FACTO GOVERNMENTS** is allowed to escape his attention. No reference is indicated under **TREATIES - TERMINATION**; the reader is apparently expected to turn automatically to the letter "R" and consult entries for **REBUS SIC STANTIBUS**, which is one of the major reasons for the extinction of treaties.

Under **TREATIES**, the following *see-also* references are listed: **ALLIANCES**; **CAPITULATIONS**; **ECCLESIASTICAL LAW - CONCORDATES**; **EXTRADITION**; **FAVORED NA-**

TION CLAUSE; **POSTAL CONVENTIONS**; **REBUS SIC STANTIBUS**; **TREATY POWER**; **UTI POSSIDETIS**. Five out of the nine terms represent specific types of treaties (alliances, capitulations, concordates, extradition treaties, and postal conventions). But the list is far from complete: commercial treaties, telegraph conventions, radio conventions, opium conventions, treaties of guarantee -- to mention only a few (all appearing in various disguises in the catalog) -- are all wanting.

Since this study is restricted to the survey

INTERNATIONAL LAW

INTERNATIONAL ORGANIZATION

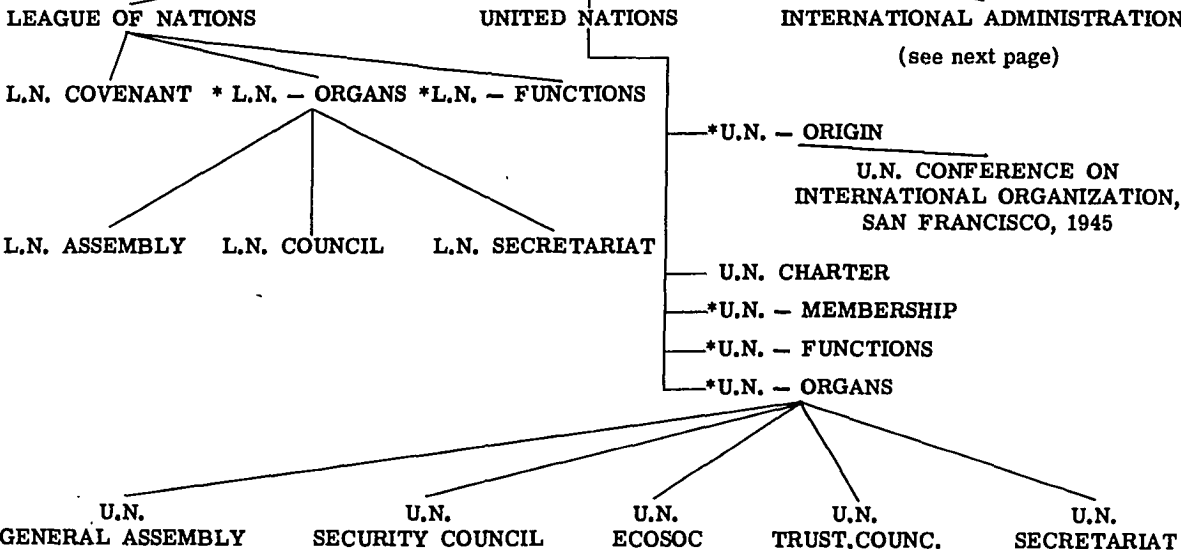


Fig. 1 (cont.)

INTERNATIONAL ORGANIZATION
INTERNATIONAL ADMINISTRATION

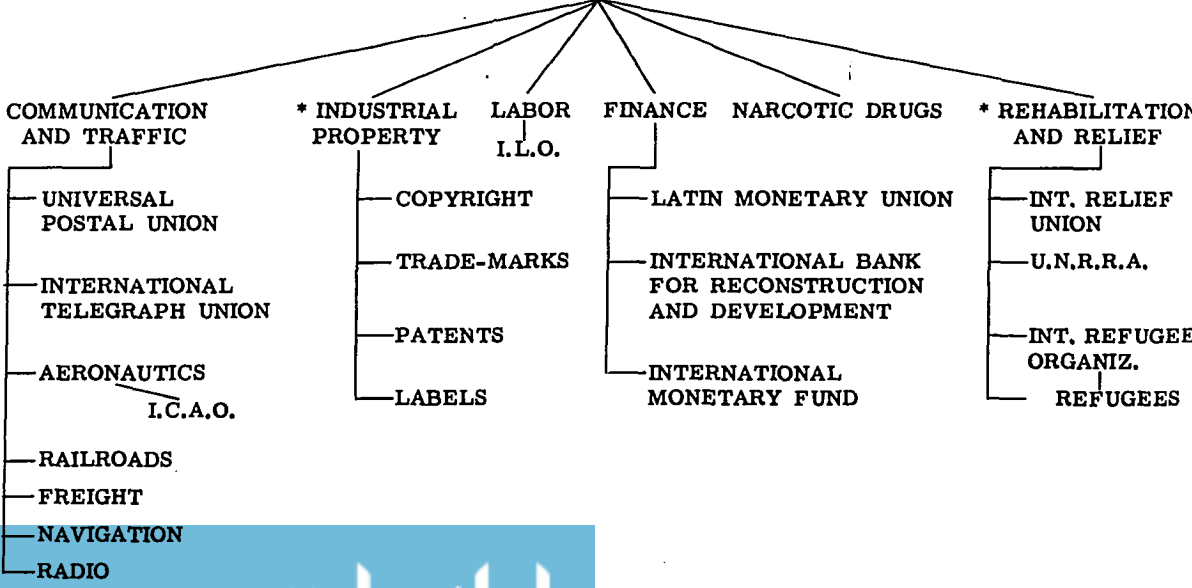


Fig. 1 (cont.)



* INTERNATIONAL TRANSACTIONS

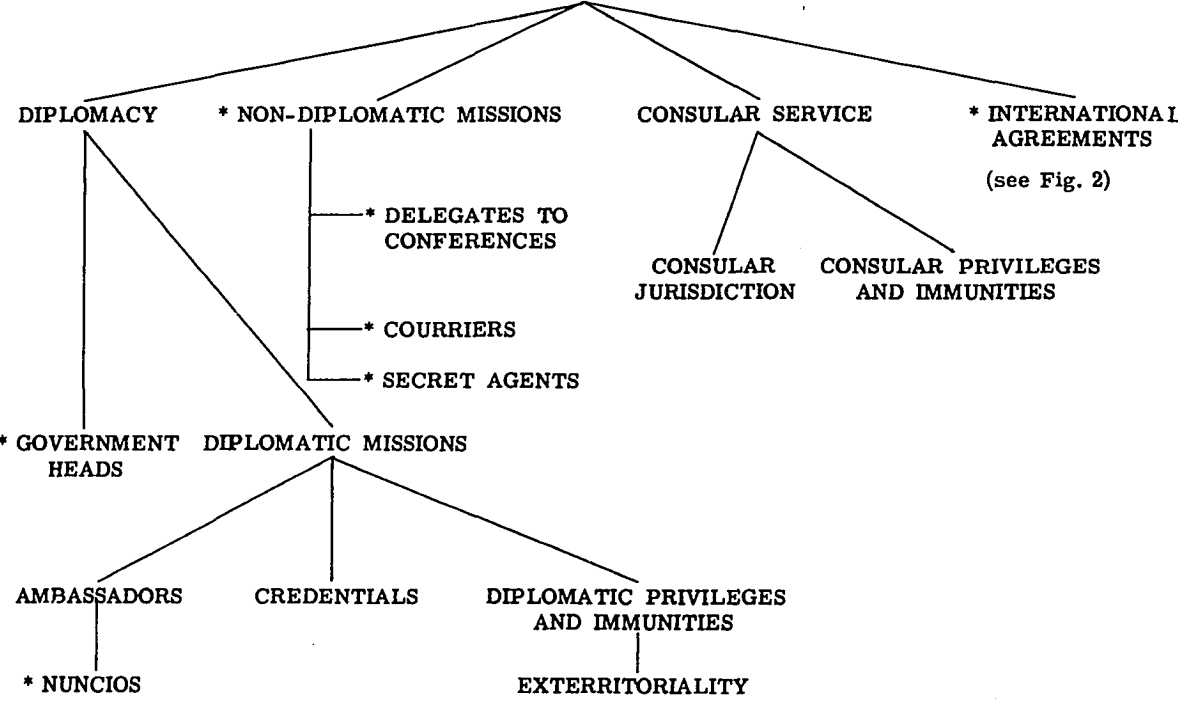


Fig. 1 (cont.)

of one particular subject area, the examples have been purposely limited to internal references within the field of international law. An analysis of references directing the reader to related fields would undoubtedly introduce other puzzling problems, but they would be beyond the proper scope of this paper.

The few examples cited above demonstrate that cataloging theory and practice have failed to develop a rational and systematic approach to the problem of *see-also* references. It seems that the question is left to the individual cataloger who, guided by his momentary disposition, selects a more or less generous number of headings, and types them on the guide card. He is little concerned with the logic of his selection, or with the completeness, or overlappings, of his list. Since our survey has been concerned with a specialized library of the highest professional standards, our conclusions should have a general application. The few

studies made of the *see-also* references in the Library of Congress catalogs seem to indicate that the situation there is also far from ideal.⁵

PART THREE

TENTATIVE PROPOSAL FOR A CLASSIFIED SUBJECT HEADING LIST

The principal advantage of alphabetical subject headings is their alphabetical arrangement, which is familiar to every user. Their main drawback is the lack of internal logic in the arrangement. The alphabetical principle scatters related topics throughout the catalog. The present study has tried to demonstrate that the *see-also* references suffer from the same deficiency — the absence of a rational system. We shall attempt, in this concluding section, to suggest a possible remedy and to outline a

⁵See, for example, Alex Ladenson, "Application and Limitations of Subject Headings; the Social Sciences," in Tauber, Maurice F. (ed.). *The Subject Analysis of Library Materials*. New York: Columbia University Press, 1953, p. 70.

method for the development of a systematic list of subject headings in the field of international law.⁶

The procedure consists of the following five steps:

(1) First, the discipline of international law must be divided into its component parts, proceeding from the general to the special, or specific. Writings of outstanding authorities and specialists may serve as basis for this classification. Our example follows the general arrangement of Oppenheim's *International Law*, amended from the outline of Hyde's treatise. The resulting list is not a hierarchical classification, but a logical map of the field.

(2) Agreement must be reached on terminology and a decision made on the use of such technical expressions as "Open Sea" vs. "High Seas"; "Territorial Waters" vs. "Marginal Seas"; "Holy See" vs. "Vatican (State)"; "Nationality" vs. "Citizenship"; "Human Rights" vs. "Freedom," "Liberty," "Personal Rights," or "Rights of Man." Again, the consensus of specialists, preferably American authorities, will be the basis for decision for the final choice. All confusing synonyms will be eliminated and *see* references made from the rejected terms to the one which has been adopted.

(3) Since most terms have been taken from book outlines, tables of contents, and indexes,⁷ many will be descriptive in form and unsuitable for use as subject headings. The necessary editorial adjustments will have to be made and a general policy formulated on the use of direct vs. indirect headings, inverted headings, and qualifying sub-headings. In our example, direct headings have been given preference whenever possible.

(4) The final list will actually be a balanced and systematic analysis of the field of international law, presented in the form of subject headings, descending from the most general to the more specialized terms. The degree of analysis will, of course, depend entirely on the size and nature of the collection. A small library may stop at the first level and satisfy its users with the broadest subject headings of INTERNATIONAL LAW; STATES; INDIVIDUALS; OPEN SEA; INTERNATIONAL ORGANIZA-

TION; and INTERNATIONAL TRANSACTIONS. A specialized library, on the other hand, may want to employ such fine distinctions as AM-BASSADORS; ATTACHES; NUNCIOS; DELEGATES TO CONFERENCES; COURRIERS; SECRET AGENTS. However, the narrow headings can be added only after the broader terms have been adopted. It is essential that the intermediate links be preserved since their omission would ruin the logical structure of the system.

(5) Finally, *see-also* references will be introduced at all levels throughout the system, both to the nearest broad heading and to the nearest specific or narrow terms. This procedure will correct most of the faults which have been found in the present practice. No subject heading will be left isolated and without connection to its related terms. On the other hand, references from the broadest heading to specialized terms (for example, INTERNATIONAL LAW *see-also* REBUS SIC STANTIBUS) will be eliminated. The reader will be guided systematically, step-by-step, from one subject heading to its nearest logically related term.

Of course the necessary references to other areas of international law and to other fields must be added.

There are two ways in which the resulting arrangement of subject headings may be presented: either (1.) as a simple running list with varying indentions indicating the degree of relationship of the individual headings, or (2.) as a chart.⁸ Both should, be provided with an alphabetical index, similar to the standard subject heading lists, or the "relative index" of the Dewey Decimal Classification. Such indexes may well be provided with simple summaries.

The two methods are illustrated in Figure I and Table VII. The chart covers the field of international law of peace in its entirety while the list is limited to a single topic.

The terminology and the form of subject headings used in this example follow the practice of the Kent Library; however, a certain number of headings (marked by asterisks) were, necessarily, added to preserve the logical structure of the system.

⁶ Attempts at a rationalization of subject headings have been often reported in professional literature, beginning with C. A. Cutter. The Armed Forces Medical Library system is particularly interesting. See articles by Taine and Rogers cited in the bibliography at the end of this paper.

⁷ Hyde's *International Law* contains a very helpful list of specialized terms in an appendix.

⁸ Graphic presentation was used in a discussion of overlapping terminology in the field of economics by Julia Pettee. (*Subject Headings*. New York: Wilson, 1946, p. 75).

SAMPLE SYSTEMATIC CHART OF SUBJECT HEADINGS
IN THE FIELD OF INTERNATIONAL LAW

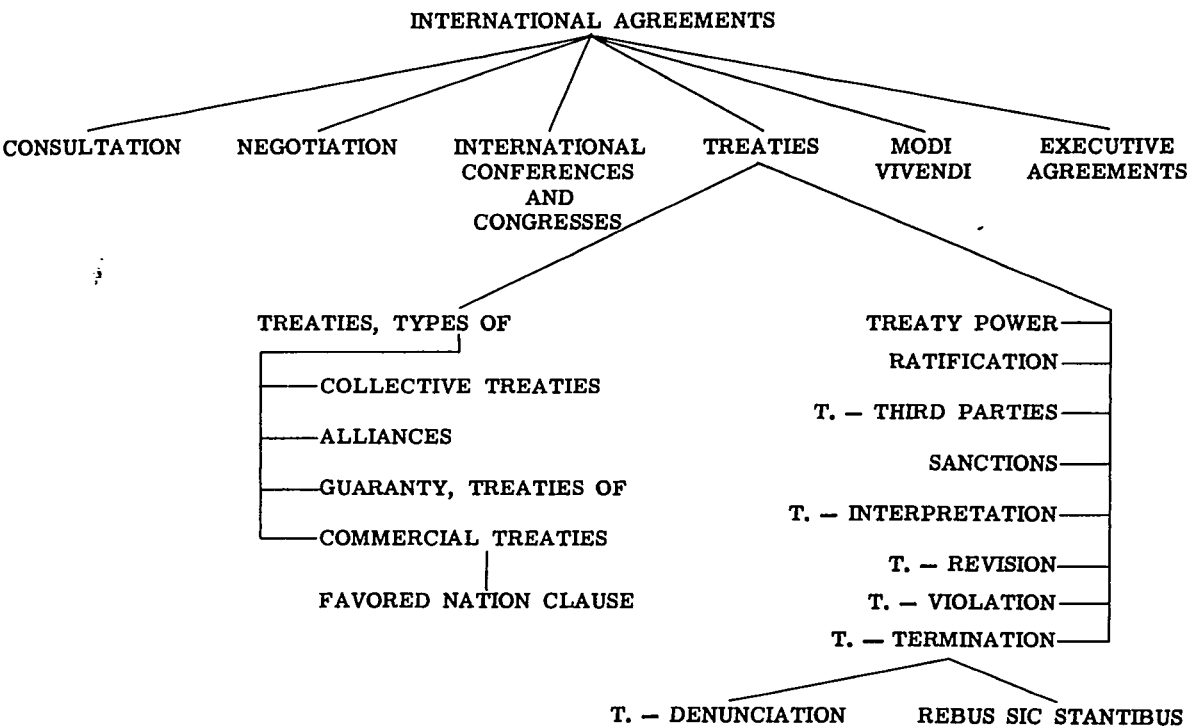


Fig. 2

Since it has not been our objective to compile an actual subject heading list for international law, but merely to describe and to suggest a workable method for its preparation, both the terminology and the divisions of the field are only tentative and by no means perfect; they are intended for purposes of illustration only.

Advantages of the proposed system.

(1) *To the cataloger.* At present, the cataloger has very few tools at his disposal to assist him in assigning subject headings. The alphabetical list is of little help since it often fails to link related topics together, primarily because of its poor *see-also* reference structure. Provided with the suggested systematically arranged list, the cataloger should find his work considerably easier, more rewarding, and more scientific. He will abide by the following simple rules:

(a) First, he must decide on the subject field covered by the book, determine the area with which it deals specifically, and choose, from the terms given on the list, the one which describes the subject matter most adequately.

(b) If the book deals with several topics, all related to a broader term, only the more general subject heading will be assigned. For example, ACQUISITION OF TERRITORY will sufficiently describe a book discussing the various modes of acquiring territory; there is no need to enumerate ANNEXATION; OCCUPATION; and CONQUEST.

(c) If, on the other hand, the book treats of a particular aspect of the subject, the cataloger should select the specific heading only; relations to broader topics will be indicated on the *see-also* reference card. For example, if the book discusses the clause *rebus sic stantibus*, it will not be necessary to add TREATIES or INTERNATIONAL LAW to the tracings.

(d) Only if the book touches upon two or

more subject areas which are not directly related will the cataloger have to assign several subject headings.

(2) *To the reader.* The reader should be on much firmer ground when consulting the catalog. In particular, he should be reasonably certain that he has not overlooked important material by starting with the wrong subject heading.

(a) *See-also* references from the specific to the broader term, although unorthodox in current practice, are believed to be especially important in this respect. Under **CREDENTIALS**, the library may have only one or two

TABLE VII

SAMPLE LIST OF SUBJECT HEADINGS
IN CLASSIFIED FORM

INTERNATIONAL LAW

OPEN SEA

sa Navigation, Waters

x *Mare liberum*, High seas, Maritime law

FREEDOM OF THE SEAS

OPEN SEA - JURISDICTION

SEARCH AND SEIZURE

COLLISIONS AT SEA

SHIPWRECK

x Salvage

PIRACY

PRIVATEERING

FISHERIES, OPEN SEA

sa Fisheries, Coastal

SEALING

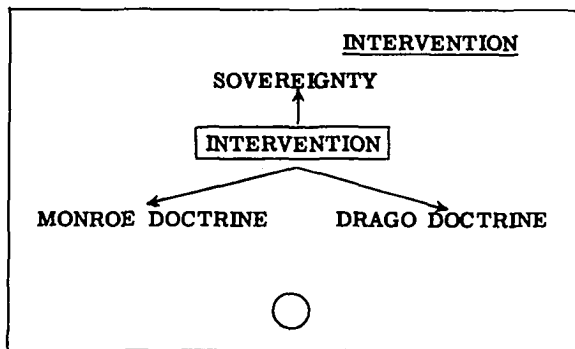
WHALING

CABLES, SUBMARINE

entries; however, the topic is discussed thoroughly and perhaps more authoritatively by virtually every book on **AMBASSADORS**; **DIPLOMATIC SERVICE**; and **DIPLOMACY**. A *see-also* reference to the nearest broader heading will make it unnecessary to include additional subject cards for each of the three broader terms.

(b) By referring to the proposed systematically arranged list of subject headings (which should be made available to the public), the reader should be in a much better position to decide which term corresponds the closest to

See-also reference cards may be prepared in the following form:



Or:

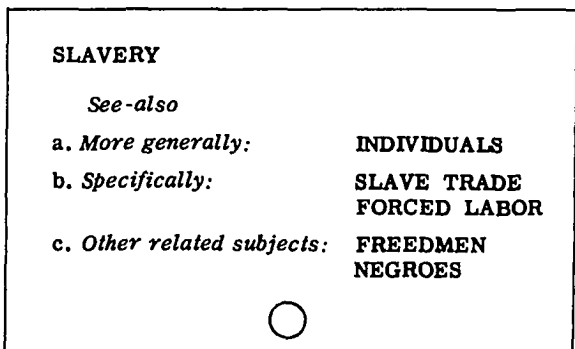


Fig. 3

the topic he is investigating. Much of the present guess-work will be eliminated and the wide differences in the readers' approach to the catalog, demonstrated by Mr. Lilley's control group mentioned earlier, should be reduced, if not entirely eliminated.

(c) Last but not least, the adoption of a consistent and rationally developed terminology, free from the confusion of vague, non-expressive, and synonymous terms, will make the catalog a more dependable finding tool and restore the confidence of the reader.

(3) *Reduction in the size of the catalog.* The preceding discussion has emphasized repeatedly that a logically developed system of subject headings coupled with a rational *see-also* reference structure will result in a considerable reduction in the number of required subject cards, and thus reduce the size of the catalog itself.

The 720 titles of our original sample had

been assigned a total of 1,198 subject headings in the Kent Library (or 1.6 headings per title). If the rules suggested above had been followed, only 891 subject headings (or 1.2 per title) would have been needed. This would represent a saving of 307 subject cards, or 27 percent.

It is obvious that the rapidly growing size of the catalog considerably reduces its efficiency as a finding tool. Whenever the number of cards filed under one entry exceeds 500, the patience of the reader is put to a severe test. The librarian should make every effort to reduce the number to a workable proportion either by eliminating unnecessary entries or by dividing broad headings into narrower subdivisions. It has been pointed out that the Kent Library has 1,271 cards under INTERNATIONAL LAW. By the application of our rules, no less than 508 of these (or 40 percent) could be removed. The remaining 763 cards, representing general works on international law, could be arranged by language (the collection contains a high percentage of books in Spanish, Italian, French, and German, which are probably consulted only infrequently) or by date, to emphasize the recent, up-to-date literature, which is, understandably, in greater demand. A more radical solution might be to eliminate the older cards altogether and refer the reader to bibliographies appended to current works. Oppenheim's *International law* alone carries an excellent and extensive list of general treatises which could be easily located by consulting the corresponding author entries in the catalog.

Comparable savings would be achieved in other broad headings. In the course of our survey, eight such headings have been investigated. Of the 2,708 cards filed under them, 995 (or 37 percent) could be safely eliminated.

CONCLUSION

It is interesting to note that books, which are generally considered easy to consult, nevertheless provide the reader with guides to their contents: tables of contents and indexes have become standard features of modern works. It would appear only logical that libraries would provide their public with systematic guides to their catalogs which, again by general agreement, are infinitely more complex and intricate.

The plan outlined in the concluding section of this study would not only rationalize the

subject heading structure of the catalog; it would also equip the reader — as well as the cataloger — with a key to its arrangement. The practice of alphabetical filing of subject entry cards separates topics which logically should be related. That is why so many critics have been calling, with increasing vigor, for the replacement of the dictionary catalog with a classified catalog. Our proposal is actually an attempt to combine the best features of the former, particularly its alphabetical principle, with the main advantage of the latter, its internal logic.

Since our discussion has been limited to one well-defined subject field, and no attempt at generalization has been made, our task has been relatively easy. However, in dealing with the catalog of a large general library these difficulties would certainly be multiplied many times. But they have been solved by our major classification systems, in spite of the handicaps inherent in the restrictive notation. A systematic list of subject headings would not have to be compressed into a pre-determined number of classes, and there would always be room for expansion. Its outstanding features — simplicity, flexibility, and inherent logic — seem to provide an incentive for a further investigation.

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