(a) Find useful groupings of concepts.
(b) Find a pattern of subdivision of the set of documents into non-overlapping classes.

There are two main methods to perform these tasks:

(1) Clustering methods.
(2) Graph theoretical methods.

To some extent these methods overlap; one might even say that the clustering method is a special case of methods based on graph theory.

4.1 Automatic derivation of classification schemes by clustering methods

The basic idea is to define a nearness measure in the set of concepts (such as the nearness measure defined in Section 3.0) or in the set of documents, respectively, and then derive clusters of near concepts or near documents, respectively. A cluster of concepts can be defined roughly as a set of concepts that tend to be nearer to each other than to concepts outside the cluster. Various cluster definitions and various clustering procedures are used.

4.2 Automatic derivation of classification schemes by graph-theoretical methods

These methods are probably more appropriate to the relational nature of thesaurus data. In this approach one starts with a set of concepts (the nodes of the graph), and relationships between the concepts (the connections between the nodes called the arcs of the graph). Thus, the input consists of "local" information, namely, terms and pairwise relationships between them (the terms and the interrelationships may have been derived by the automatic methods discussed in Sections 2 and 3). Algorithms derived from graph theory make it possible to put together the over-all structure, the total graph, as in a jigsaw puzzle. One example of this is computer-assisted hierarchy construction by "chaining" BT-NT cross-references. Application of graph theory might lead to more efficient procedures for this purpose. In this case the graph is based on hierarchical relationships. It is also possible to use RT relationships as the base for the graph. In either case one might look for relatively close (strongly connected) subgraphs; these would then correspond to subdivisions of the classification scheme to be developed.

A simple-minded method, based on RT relationships, is as follows: pick any term A. R $(1, A)$ is the set of all terms related to A. R $(2, A)$ is the set of all terms that are related to any term in R $(1, A)$. If R (n, A) = R $(n + 1, A)$, then clearly R $(n + 1, A)$ = R $(n + 2, A)$ and R (n, A) is a closed subset. If the difference between the number of elements in R $(n + 1, A)$ and the number of elements in R (n, A) reaches a minimum then R (n, A) is relatively closed, the closure being sharper as the minimum is smaller.

REPORTS AND COMMUNICATIONS

Classification Research and Development in India, 1968–1974

FID/CR Report 14, to be published in the first half of 1974, will highlight some of the researches in the field of classification carried out in India, since 1968. The present note mentions some of the topics covered in the report.

1. Interdisciplinary Subjects

Interdisciplinary subjects, resulting from multidisciplinary and interdisciplinary research, are emerging at an accelerated pace, particularly during the past two decades. The coextensive representation, either as a subject heading or as a class number, of subjects falling in such interdisciplinary fields has posed problems to designers of schemes for classification and systems of subject headings. Subject specialists have, from time to time, examined and commented upon the pattern of organization of research which produce such interdisciplinary associations and on the types of hybrid subjects generated. A study of these observations and analysis and classification of a number of interdisciplinary subjects have led to a typology of the modes of combination of ideas and of subjects and formation of interdisciplinary subjects. The modes of formation recognized are: Fission, fusion, distillation, lamination 1, lamination 2, clustering, and agglomeration. This typology, together with a few guiding principles for recognition of the core entity of study in a subject-field, has facilitated the formulation of some guiding principles for the representation, classification, and helpful arrangement of inter-disciplinary subjects and subject-fields.

2. Absolute Syntax

The use of a natural language for representing a subject raises, among other things, the problem of linguistic syntax which varies from one language to another. However, at a deeper level – close to or at the plane of formation of ideas and combination of ideas, that is, at the level of thinking – it may be possible to discern a more stable and consistent structure of subjects less constrained by language and culture. The sequence in which component ideas of subjects usually arrange themselves in the minds of the majority of normal intellectuals while thinking about or formulating a subject is called the Absolute Syntax of Ideas among intellectuals. It is conjectured that such a syntax of ideas exists. It may not coincide with linguistic syntax. Findings in the field of linguistics and psycholinguistics, developmental psychology, neurophysiology, biocybernetics, and general systems theory appear to lend support to the postulate of absolute syntax. It is proposed that the sequence of component ideas in a subject – that is facet syntax – should parrallel the absolute syntax such that it would be of maximal acceptability to a wide range of users. The helpfulness of this

approach in designing schemes for classification and in classifying is considerable. The principles of helpful sequence which appear to give a facet syntax parallel to the absolute syntax have also been examined.

3. Subject viewed as a System

A subject is a set of interrelated component ideas, each component being related directly or indirectly to every other component idea of the subject; the purpose of such a representation of subject is to facilitate communication and grasping the meaning and message conveyed by the set of ideas forming a subject. Looked at in this way a subject can be conveniently considered as a system. This, in turn, helps the application of general systems approach to the study of the structure and development of subjects. For example, facet structure and absolute syntax, component relations such as transitivity, connexity, symmetry, commutation, dependence, wholeness, centrality, coherence, independence, progressive segragation, progressive systematisation, hierarchy, growth and rate of growth, isometry in the growth of components, etc can be helpfully examined with respect to subjects in diverse fields. Such studies are helpful in improving the design of schemes for classification, in the representation of subjects, etc.

4. Chain and Chain Indexing

The concept of "chain" with particular reference to classification and formulation of subject headings has been examined in some depth and detail. The intimate relation of chain indexing to the postulates about structure of subjects has been elaborated. A subject heading formulated on the basis of the postulates and principles of the general theory of library classification can form the base for generating, according to prescribed rules, several other types of index headings, such as those of KWIC, KWAC, Postulate-based Permuted Subject Index (POPSI), and PRECIS.

5. Classification in Computer-based Information Retrieval System

An integrated computer-based information retrieval system incorporating a freely faceted classification has been developed. The system, capable of current awareness, SDI, and retrospective search facilities, provides for the systhesis of class number or subject heading according to the preferred pattern given the kernel terms of the subject, and the generation of different types of indexes – KWIC, KWAC, POPSI. Provision is also made for reader-computer dialogue for specifying the subject of reader's query using display of either the appropriate parts of the classification scheme, or the alphabetical index to the scheme, or the alphabetical index to the appropriate classified part of the computer-readable catalogue.

6. Chemical Notation System

A new chemical notation system – ALWIN – for organic compounds which has as its base the Wiswesser Line Notation, has been reported. In arriving at its notation and its computer implementation, concepts from the theory of algorithms, theory of graphs and networks, theory of programming languages, and theory of formal languages have been used. The encoding of a picture graph of a chemical structure directly into ALWIN and vice versa are being studied.

7. Design of Depth Versions of Colon Classification

Several depth versions of CC for micro-subjects in different subject-fields have been developed. The experience has helped in improving the methodology of design of classification schemes, formulation of new guiding principles for work in the idea plane, and improving the versatility and resilience of the notational system with particular reference to CC. An attempt has been made towards an integrated theory of notational language of library classification systems.

8. Presentation of Ideas in a Text

The principles for helpful sequence of the general theory of library classification have been applied in the arrangement of ideas in the text of a document, such as an article in a periodical, a technical report, a monograph. The helpfulness of the resulting pattern of arrangement of ideas in the text has been supported by the experience of specialists in different subject-fields, both in writing the text as well as reading through a text.

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Automatic Classification and Indexing

Classification is one of the fundamental objectives in science, since it makes possible the ordering of knowledge and the recognition of the interrelationship of facts.

To achieve classification the subjects need to be well described, usually on the basis of the properties they possess.

This description of properties must be as complete as possible, in order that discriminations can be made between subjects.

The properties are usually assembled in a classification scheme. Thus classification and classification scheme building are strictly related. Since the description cannot always be absolutely complete – this is not even always necessary if classification is not required beyond a certain level – reclassification often becomes necessary. Automatic classification techniques are therefore often preferable.

In a document exchange process, classification is used to discriminate between documents. For this an artificial meta-language (thesaurus) is frequently introduced as classification scheme to describe the messages contained in a document.

The "translation" of the messages into the artificial meta-language is equivalent to assigning properties to objects and is called indexing. The indexing of documents and the construction of classification schemes (thesaurus construction) is still considered an intellectual prerogative in the document exchange process.

However, there are serious drawbacks to intellectual indexing and thesaurus construction the most important of which are

– low interindexer consistency and
– high cost.

The effectiveness of any IR-System is considerably dependent upon the quality of the indexing. It is commonly agreed that the best possible index is needed in the long-term range, since the prospective user of information will have more sophisticated requirements, so indexing should be as good as possible. However, the better index is more expensive. Thus the two drawbacks are correlated, in the sense that the quality of indexing is limited by the funds available for running the system.

During the last decade an intensive research activity has been devoted to automatic text processing, in particular, to indexing with a view to overcoming the above mentioned drawbacks.

The indexing quality achieved by some automatic methods was very encouraging. Unfortunately the methods developed never became operational. The reason for this was most probably that the texts to be classified had to be converted into machine readable form, which was at that time an extremely expensive operation.

Now a trend towards automatic type-setting techniques can be observed; other automatic techniques to transfer textual information into machine-readable form without re-writing or coding are also already within the state-of-the-art. Thus many texts needing classification can be made available in machine-readable form in the near future.

On the other hand the cost of automatic processing has come down considerably during the past years and powerful new programming languages and appropriate software have been developed.

Besides these, there are still more advantages attached to automatic indexing techniques. These can be summarized as follows:

- consistency is obtained as the computer assigns index terms directly from the natural language text of the document, applying the same algorithm for each document; (in human indexing the indexer makes a separate judgement for each document);
- simplicity of re-indexing, which is important, because a scientific library is a living thing and classification schemes must always change according to either the aims of the library, or developments in science;
- accuracy, which is guaranteed by the ability of the computer to select, transfer and re-arrange data reliability without making typographical errors;
- economy, achieved by large-scale processing and computing speed;
- editing facility.

However a considerable amount of research is still required before the machine will be able to do it well and more efficiently, especially in fully automatic text processing such as linguistic text analysis. Most approaches apply statistical analysis in order to overcome lack of knowledge in linguistics.

The author has participated in the development of automatic indexing and automatic thesaurus construction techniques which could be used in operational systems. The retrieval effectiveness of the methods has proved to be on the same level as purely intellectual indexing, at least in a production environment.

These are – in short – the conclusions from a state-of-the-art report on semi-automatic indexing to be published as an AGARD report, in 1974.

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Ordnungssysteme für Warendaten

Den Herausgebern ist zu danken, daß bereits in der ersten Ausgabe dieser Zeitschrift das Gebiet der Waren, des mißverständnisfreien Austausches von Warendaten und der Warenordnungssysteme vierfach aufgegriffen wird.

Dies geschieht in den Hinweisen auf die deutsche Leitstudie „Warenkatalogisierung und Kommunikation über die Ware" und der Studie „Commodity Classification an Naming" des National Computing Centre in Manchester, mit dem Beitrag „Systeme der Waren- und Aktivitätsklassifikation" sowie mit der nachstehenden Erklärung des deutsch-französisch-britischen Ausschusses für die Harmonisierung der Normen zur Material- und Warenkatalogisierung. In der Tat handelt es sich hier um ein Vorhaben, das

- Wissenschaft, Wirtschaft und Verwaltung in gleicher Weise angeht
- in der Praxis zu den wenigen Gebieten gehört, die noch in voller Breite der Rationalisierung zugänglich sind
- auf der Landkarte der Wissenschaften noch zahlreiche, wenig erforschte „weiße Flecke" aufweist
- in allen Ländern der Erde und im grenzüberschreitenden Informationsaustausch dringlich ist und
- eine durchaus glückliche – und notwendig erscheinende – Ergänzung zum Thema Literaturklassifikation darstellt.

Dr. Karl Ostarhild
Ministerialrat im Bundesministerium für Wirtschaft

Explanatory Note on Commodity Coding

I. The present situation

1. All parties concerned with commodities and commodity data in government, industry, trade and scientific circles are endeavouring to surmount the difficulties that increasingly arise in dealing with commodities and in commodity management.

These difficulties apply both to *internal* procedures within each particular sector (commercial undertakings, governmental, scientific and other organisations) and also to the trade in commodities and the exchange of information *between* sectors.

2. Even within a sector, in its own individual organisations, commodity management is frequently carried out in differing and unco-ordinated ways.

In dealings between particular sectors, due to a lack of co-operation, generally usable methods and schemes for

a common commodity language, as a pre-requisite for effective communication have not been developed, nor have agreements been reached which would provide a basis for reducing the existing handicaps.

3. Isolated efforts, in which particular sectors of the various industrial nations expend some hundreds of millions of pounds annually on commodity management systems, lead to the development of new, mutually incompatible commodity handling and management systems, and thus make agreement more difficult. With the increasing use of data-processing equipment the lack of generally usable and accepted methods becomes even more apparent.

4. All international efforts to remove barriers to trade, and to construct information systems extending beyond national frontiers, are also affected by the same problem.

5. Under force of circumstances, individual sectors are making greater efforts towards rationalisation, standardisation and the establishment of common rules. This has led to increased recognition that the naming, definition and specification of commodities according to objective criteria (elements of identification) are as much part of the nucleus of commodity language and of the exchange of information as the hitherto more prominent elements of classification and numbering. These latter are not sufficient, taken either together or singly, to cover all essential needs for information on commodities.

6. It may be stated that executive and supervisory bodies are by no means sufficiently aware of the extent and importance of the potential benefits of rationalisation in this field, both for internal management and for trade between sectors.

7. It may also be stated that scientific and methodological principles for the elements of identification are in a very early stage of development, while the methods of identification pragmatically developed in the "NATO Codification System", and applied to advantage by its users, have to date attracted limited interest elsewhere.

II. General Recommendations

1. Executive and supervisory bodies in the sectors should be made aware of the high cost of the present impediments to rational, modern commodity management.

2. Joint action should be taken by sectors to deal with problems which concern them collectively, as a common task, with the aim of reaching agreement on the use of identical methods and systems for similar processes.

3. Advantage should be taken of the preparatory work and practical experience which has gone into large international systems.

4. Further basic studies should be encouraged.

III. Specific Recommendations

These will be given by the Member States according to their own particular needs.

Tripartite Working Group on Commodity Coding

Warenkatalogisierung und Kommunikation über die Ware (Commodity Cataloguing and Communication)

Über dieses Thema war bereits Ende 1970 eine vom Ausschuß für Wirtschaftliche Verwaltung e.V. (AWV) und dem Bundesministerium für Wirtschaft (BMWi) geförderte „Leitstudie" erschienen. Sie galt der Klärung der Frage, ob und wie Grundlagen geschaffen werden können für einen möglichst mißverständnisfreien, unbehinderten und flüssigen Austausch von Wareninformationen zugunsten aller über die Ware verflochtenen Partner, so Wirtschaft, öffentliche Hand, Wissenschaft, private Endverbraucher.

Die zunehmend ins Blickfeld tretende Aktualität des Themas, viele in Staat und Wirtschaft in Gang gekommene Aktivitäten und die von der Leitstudie ausgelösten lebhaften Diskussionen haben einige Mitglieder der Studiengruppe ermutigt, die Studie im Einvernehmen mit dem AWV und dem BMWi zu aktualisieren und zu erweitern. Vor allem erschienen Fragen der Harmonisierung von warenbezogenen Sprachsystemen wichtig, da deren mannigfache Inkompatibilitäten (z.B. bei der Benennung, bei statistischen oder sonstigen Zwecken dienenden Waren-Klassifikationen und -Beschreibungen und bei der Benummerung) dem Informationsaustausch zwischen den Kommunikationspartnern im Wege stehen.

Aus dem Inhalt:

- Problemcharakterisierung (Definitionen, Voraussetzungen für Kommunikation, Warenfluß/Kommunikation), „Sprachsysteme" (Benennungen, Klassifikationen, Beschreibung, Nummerung), Kommunikationsbedürfnis, Kommunikationsmittel;
- Charakterisierung vieler in- und ausländischer warenbezogener Sprach- und Informationssysteme aus Wirtschaft, Technik, Logistik, Normenwesen, Statistik (z.B. ban-L, Universal Product Code, GENCOD, NIDA-SIDA, Produkt-Informationsdienste und Bezugsquellen-Nachweise, Kompass, UCS, Produktinformation im Bauwesen, EXACT, TÜVIS, ESRO-Bauteil-Datenbank, britischer Normenentwurf zur Vereinheitlichung von Warennummern, einheitliche Materialkatalogisierung in den Staatsverwaltungen)
- Wirtschaftlichkeitsüberlegungen
- Zukunftsperspektiven
- Folgerungen, Vorschläge

Die Arbeit bringt über 60 Schaubilder und enthält 9 Anlagen (z.B. Aufbau der staatlich-logistischen Materialkatalogisierung in der Bundesrepublik und in Frankreich, britische Aktivitäten). Sie gipfelt in der Empfehlung, daß insbesondere die großen Systeme aufeinander abgestimmt werden sollen, um Doppelarbeiten zu vermeiden und Informations- und Kommunikationsverluste mit ihren Folgewirkungen zu reduzieren.

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Commodity Classification and Naming, their role in information systems

The UK National Computing Centre Manchester, UK has carried out a series of investigations in commodity information systems, the most recent of which is into the use of classification and naming. These two disciplines play an important part in the day-to-day communications between trading partners, for instance in marketing and procurement, and in the movement of goods; and are a vital part in the collection of statistics to control company, local and national activity.

The survey concentrated on the practical problems of Commodity Communication rather than on purely theoretical questions, and in particular on harmonisation of systems to remove present barriers. (For example: an export item may have to be classified up to nine times in order to satisfy formalities.)

The book (ISBN 0 85012 100 0) to be published in March is based on the survey, and on feedbacks from the many European organisations who commented on the draft report. The main aspects covered are: general aspects; application areas; techniques; harmonisation; the way ahead.

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Symposium on Multilingual Thesauri

Through the initiative of the Working Group 5 "Guidelines for Thesauri" of ISO/TC 46 and sponsored by UNESCO, about 70 participants from a number of countries joined in West-Berlin on Oct. 8–10, 1973 for an International Scientific Symposium devoted to the problems of multilingual thesauri for information retrieval.

The following papers and documents were presented:

A. Avramescu: Objective design of vocabularies and thesauri
A. Avramescu: Some definitions on thesauri and vocabularies. Proposals to improve Unesco Guidelines
G. Beling, H. J. Schuck, G. Wersig: Procedural guide for the translation of foreign language thesauri into German
I. Bellert, O. A. Wojtasiewicz: On a definition of a thesaurus system and thesaurus structures
R. Colbach, L. Rolling: Computerized management of multilingual thesauri.
B. Crofts: Methodology for updating multilingual thesauri.
R. Jansen: Terminologische Kontrolle und Begriffsrelationen bei der Erstellung mehrsprachiger Thesauri
J. J. Lloyd: Concept relations in a multilingual thesaurus
J. Iung: Contrôle términologique d'un thésaurus plurilingue
H. H. Neville: Aspects of indexing incompatibility
D. Varga: Toward a new generation of thesauri building
M. Wolff-Terroine: Quelques expériences françaises de thésaurus multilingues: conclusions méthodologiques
Netherlands Study Committee: The thesaurus as a tool for information retrieval
ISO/INFCO/GT 1 No. 111: Problems met with when searching for linguistic equivalents
Unesco: Guidelines for the establishment and development of monolingual thesauri
Unesco: Guidelines for establishment and development of multilingual scientific and technical thesauri for information retrieval
Unesco: General scheme for testing the establishment of multilingual thesauri

The papers will be published in a proceedings volume.

The general theme of the symposium "Multilingual thesauri" was more precisely defined as "methodology for (1) establishing compatible monolingual thesauri in different languages, (2) establishing multilingual thesauri and (3) updating multilingual thesauri". Thus the problem of the multilingual thesaurus was seen from a bi-lateral point of view. A good example of this approach was the excellent paper of Beling, Schuck and Wersig: "Procedural Guide for the Translation of Foreign-language Thesauri into German."

However, in order to avoid the multiplicity of problems of the $\frac{1}{2}$ n(n-1) bi-lingual concordances of a thesaurus in n-languages, the problem can also be approached multilaterally. In this approach we deal with a new type of thesaurus in which also a new descriptor-relationship is used, namely the relation of equivalence of terms in different languages. As a proper example for this thesaurus-type the EUDISED thesaurus of the Council of Europe was mentioned.

Generally the discussions were concerned with the problems of the bi-lingual thesaurus. The papers presented can be grouped into 1) guidelines, 2) studies and 3) reports of practical experience. Among the studies the paper of Avramescu aroused keen interest, the topic being probabilistic criteria for the objective design of descriptor languages, thus it centered around the mathematics of information retrieval.

On the basis of the usefulness of the practical experience reported the WG5 members decided at their follow-up meeting, Oct. 11–12, to elaborate in four groups – according to the following problem areas – guidelines for the preparation of multilingual thesauri:

1) administration of multilingual thesauri (organizational and financial questions, etc.).
2) presentation in the thesaurus
3) principles, e. g. language of documents and language of users, hegemonial languages in certain fields, size of documents
4) translation procedures.

A first draft of such guidelines is expected to be discussed at the next meeting of ISO/TC 46 WG5 in Helsinki, May 1974.

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INER Kolloquium No. VIII

At the 8th Colloquy of the Institut für Informationswissenschaft, Erfindungswesen und Recht der Technischen Hochschule Ilmenau (INER) in Oberhof, Thüringen, 28–30 Nov. 1973, one of the four parallel running sections was concerned with "uniform concepts as communication tools in international cooperation" and another one with problems of compatibility of methods and instruments. The following 8 papers bear relevance for the field of classification the last three of which have already been published in No. 25 of the INER-Schriftenreihe:

J. Koblitz: Standardisierung der Terminologie als Voraussetzung für die Formierung der Informations- und Dokumentationswissenschaft. – A. Merta: Einheitliche Begriffe als Verständigungsmittel bei der internationalen Kooperation. – H. D. Rosenbaum: Zur Methode des Aufbaus mehrsprachiger Thesauren. – G. Brendler: Probleme beim Aufbau von Thesauri Deutsch-Russisch. – J. Pilz: Methodische Aspekte bei der Aufstellung und Benutzung mehrdimensionaler Strukturen im Thesaurus. – I. Dahlberg: Informationswissenschaftliche Grundlagen eines universalen Klassifikationssystems. – W. Feitscher: Kompatibilität beim automatischen Indexieren und Recherchieren. – E. Mater: Elementarbegriffe als Grundlage maschineller Indexierung und Konvertierung.

I. D.

Symposium über den Wissenschaftsbegriff in Hannover

Zu einem zweitägigen Symposium über den Wissenschaftsbegriff in den Natur- und in den Geisteswissenschaften hatte vom 23.–24.11.1973 die Gottfried-Wilhelm-Leibniz-Gesellschaft in Verbindung mit einer Reihe wissenschaftlicher Institute und unterstützt durch die Volkswagenstiftung eingeladen. Die 12 Vorträge behandelten – mit Ausnahme des einführenden (von A. Diemer, Düsseldorf, zum Symposiumthema) – jeweils den Wissenschaftsbegriff in einer der anerkannten Disziplinen. So referierte H. Poser (Berlin) über den Wissenschaftsbegriff der Mathematik, P. Mittelstaedt (Köln) – Physik; F. Hartmann (Hannover) – Medizin; Th. Herrmann (Marburg) – Psychologie; H. Lenk (Karlsruhe) – Soziologie; H. Schnädelbach (Frankfurt) – Philosophie; O. Weinberger (Graz) – Rechtswissenschaft; G. Sauter (Mainz) – Theologie; J. S. Petöfi (Bielefeld) – Linguistik; S. J. Schmidt (Bielefeld) – Literaturwissenschaft; K. Acham (Graz) – Geschichtswissenschaft.

Einleitend hatte W. Totok auf den interdisziplinären Charakter in der Aufgabenstellung der 1966 gegründeten Gottfried-Wilhelm-Leibniz-Gesellschaft hingewiesen. Die genannten Themen wurden in diesem Sinne unterschwellig immer auch danach befragt, ob der Wissenschaftsbegriff (also der Begriff von der Wissenschaftlichkeit eines gegebenen Wissensgebietes) ein je spezifischer sei, oder ob es Anlaß dafür gebe, einen einheitlichen Wissenschaftsbegriff für alle Disziplinen anzunehmen, insbesondere, nachdem A. Diemer in seinem Einleitungsreferat und in zahlreichen Diskussionsbemerkungen immer wieder auf diese Frage hingewiesen hatte. Er unterscheidet drei leitende Wissenschaftsbegriffe, einen Kulturbegriff von Wissenschaft, einen anthropologischen und einen propositionalen, also Wissenschaft als ein Gesamt von Aussagen über einen spezifischen Bereich. Es ging ihm darum, Kriterien zu finden, die einem Aussagesystem zukommen müssen, damit sinnvollerweise von Wissenschaft gesprochen werden könne. P. Mittelstaedt wollte dagegen wissen, woher man die Kriterien für die Wissenschaftlichkeit von Aussagen gewinnen können, vor allem dann, wenn sich das begriffliche Instrumentarium im Laufe der Zeiten so erheblich ändern könne, wie beispielsweise in der Physik. F. Hartmann stellte schlicht fest, die Medizin habe keinen Wissenschaftsbegriff, sie müsse immer auf den einmaligen Menschen eingehen.

Die ausgezeichnet geführten Diskussionen erbrachten viele neue Aspekte, aber eine Lösung des Problems eines möglichen gemeinsamen Wissenschaftsbegriffs konnte nicht gefunden werden. H. Schepers schlug daher abschließend vor, sich nach Vorlage der Vorträge und Diskussionen nochmals zu einem ähnlichen Symposium zusammenzufinden.

Es sei in diesem Zusammenhang auf einige vorangegangene Symposien hingewiesen, die sich einer ähnlichen Thematik widmeten und in den „Studien zur Wissenschaftstheorie" (Hrsg. v. A. Diemer), Bd. 1 und Bd. 4 erschienen sind.

I. D.

Wissenschaftssprache – Umgangssprache

Im Rahmen ihrer Aufgaben zur Erleichterung der interdisziplinären Verständigung hat die Werner-Reimers-Stiftung in Bad Homburg Wissenschaftstheoretiker, Sprachphilosophen, Linguisten, Informationswissenschaftler, Juristen und Theologen zu einem Kolloqium (17.–20. Jan. 1974) über die Problematik „Fachsprachliche Texte – umgangssprachliche Kommunikation" eingeladen. 35 Teilnehmer diskutierten die 12 Vorträge und Korreferate der folgenden vier Themenkreise: 1) Zur Rolle von fachsprachlichen Informationssystemen, 2) Sprache der Theologie und 3) – der Rechtswissenschaft sowie 4) Sprachtheoretische Ansätze zum Verhältnis von Fachsprache und Umgangssprache.

Die Vorträge im einzelnen: F. W. Lancaster: Problems of communication in the operation of information storage and retrieval systems. (Korreferent D. Metzing); D. Soergel: Theoretical problems of thesaurus building with particular reference to concept formation. (Korr. W. Köck); Pater R. Busa: Computer in theological research. (Korr. W. Abraham); Ch. Taber: Problems in the translation of biblical texts. (Korr. H. Peukert); G. Hornig: Sprachanalyse und Sprachkritik als Aufgabe der Theologie und Religionswissenschaft. (Korr. F. Wagner); E. Güttgemanns: Theologie als Textwissenschaft. A.G. Conte: Experimente mit der Fachsprache der Deontik – Kritisches zur Sprache der Semantik der normativen Sprache. (Korr. W. Opfermann); A. Podlech: Die juristische Fachsprache und die Umgangssprache. (Korr. H. Garstka); H. Brinckmann: Rechtshandlungen und Sprechhandlungen – umgangssprachliche Äußerungen und fachsprachliche Konventionen bei Rechtsgeschäften. (Korr. K. Adomeit); E. v. Savigny: Inwiefern ist die Umgangssprache grundle-

gend für die Fachsprache? (Korr. P. Janich); H. Rieser: Umgangssprache, Fachsprache und das Problem der Interpretation fachsprachlicher Texte (Korr. W. Spohn); S. J. Petöfi: Texttypology and text analysis on the basis of a partial texttheory. (Korr. W. Thümmel).

Vorträge und Korreferate werden als Proceedings im Verlag V. Klostermann, Frankfurt erscheinen. Die meisten Vorträge können als relevant für die begriffsorientierte Thesaurus- und Klassifikationsarbeit bezeichnet werden. Dem größten Teil der Teilnehmer des Kolloquiums waren die Bemühungen des Deutschen Normenausschuß, speziell des Ausschuß für Terminologie und seine Normen, z.B. DIN 2330 „Begriffe und Benennungen", Berlin 1961 und Entwurf April 1973, nicht bekannt.

I. D.

The Classification Society

The Classification Society was founded in 1964 as an international body to promote co-operation and interchange of views arising from the interdisciplinary interest in the principles and practice of classification. The Society is composed of members from such widely separated disciplines as biology, librarianship, mathematics, information retrieval, soil science, anthropology, computer science, linguistics and many others. Opportunities for joint discussion about the several aspects of classification are provided. Attention is given to the use of computers for the classification, storage and subsequent retrieval of information of all kinds.

In 1968, two branches within the Classification Society were established, namely the European Branch and the North American Branch. Members from other parts of the world can choose to which branch they wish to join.

The Society publishers *The Classification Society Bulletin* each year, and organises symposia and discussion meetings. *This Bulletin* contains original papers, bibliographies, lists of available computer programs and other features of interest to members. The editor, Prof. P.H.A. Sneath of the Microbial Systematics Research Unit at the University of Leicester would be grateful for offers of future contributions.

The annual subscription to the Society for individual members is £1 (or $3), payable on 1 June each year, entitling members to receive *The Bulletin* free of charge, and to attend and vote at meetings. Institutions may become 'Library subscribers' to *The Bulletin* for an annual subscription of £1 (or $3).

Several numbers of *The Bulletin* have already appeared. Back issues of *The Bulletin* can be obtained from the Secretary at the price of 15/6 (or $2) each, to members and £1 (or $3) each to Library subscribers. The prices include postage.

Applications for membership should be sent to the Secretary (or to the North American Branch Secretary) together with the annual subscription of £1 (one pound sterling) or U. S. $3 (three dollars).

(From the announcement of the Society, European Branch, England)

NEWS – NACHRICHTEN

Subject-Field Reference Code

At its fourth and last meeting of 1973 (10–12 October), the Working Group FID/SRC "Subject-field Reference Code" reviewed the results achieved at the three earlier meetings in January, March and June (see FID News Bull., 1973, Vol. 23, Nos. 2, 4 and 7) and through much interim homework by the members, for presentation as a first annual progress report to Unesco and to the FID Council.

The main results to be recorded include:

a) agreement on guidelines and criteria for establishing 'candidate SRC subject-fields';
b) investigation of some potential uses, and possible structures, notations and forms of display for the SRC;
c) a first provisional listing of about 100 main subject-fields in English, arranged alphabetically for the report, and (tentatively, for internal use only) also in a few broad thematic groupings;
d) a second more detailed listing with some 600 subject-headings additional to those of the first main-listing (c) – still very tentative and in alphabetical order only, but with German equivalents added to almost all the English terms for further checking and comparison.

Plans were made for the 1974 work programme, and it was agreed – as a first task division among members for discussion at the next meeting (11–13 February 1974) – to try and compile as complete a list as possible of candidate SRC subject-fields hierarchically arranged under the thematically grouped main subject-field terms mentioned under (c) by extending and amending the more detailed list (d).

(from FID News Bull. 23(1973) No. 11, p. 142)

FID/CCC Meeting in Berlin

Sixteen members from fourteen countries participated in the meeting of FID/CCC (Central Classification Committee) held at DNA, Berlin, on 17–21 September 1973.

Membership elections included the election of Mr. L. Kofnovec (Czechoslovakia) as Vice-Chairman and two new coopted members. The Subcommittee FID/CCC/D (Development of UDC) was split into two independent subcommitteess: FID/CCC/DD "Drastic development of UDC" and FID/CCC/RG "Rules and guidelines for UDC" with respectively Mr. A.-F. Schmidt (Germany) and Mr. G. Lorphèvre (Belgium) as chairmen.

The publication programme of medium editions of the UDC and their relationship to full and abridged editions was fully discussed; in particular the need for a Basic Medium Edition in English was emphasized. Recommenda-