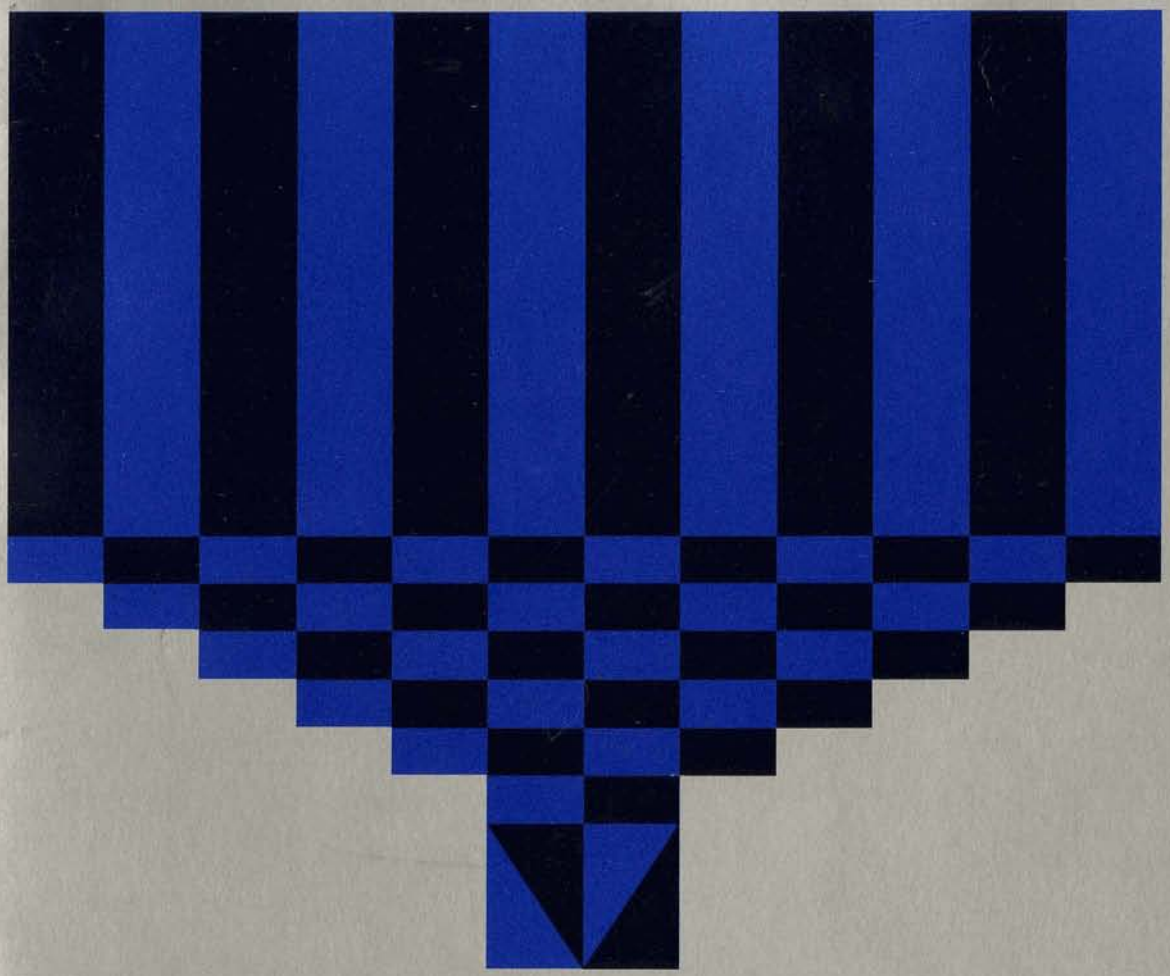
DATRIX

XEROX
EDUCATION DIVISION



Direct Access to Reference Information . . .

DATRIX, a Xerox Service

The potential usefulness of doctoral dissertations to scholars and industrial researchers is very great. Stimulative effects of shared basic research, the avoidance of duplicating work already done . . . these are among the benefits.

Access to relevant dissertations presents a problem, however. With the number of published dissertations well past the 200,000 mark and increasing by over 8% annually, sheer volume is a major obstacle. Costs of publication and storage have been eased by the use of microfilm (beginning in 1938) and xerographic reproduction from microfilm (1957), but classifying and retrieving dissertations has become increasingly difficult and costly. Libraries have been hard-pressed to provide assistance to doctoral candidates; progress toward degrees has been slowed because bibliographies took many months to complete or thoroughness of research was compromised to the pressure of time. Further, these advisors, researchers, scholars, and others found it difficult to keep up-to-date in their field of interest.

Computers now lift these burdens by □ performing a *thorough* search of the data base □ retrieving, with great speed, desired bibliographic references □ providing a printed listing with cross-references to *Dissertation Abstracts*, a monthly service of University Microfilms Library Services which publishes, arranged by subject, abstracts of recently completed dissertations.

These services, together with the supplying of microfilm or xerographically-reproduced bound copies of complete dissertations, are the important role filled by DATRIX (Direct Access To Reference Information: a Xerox service), a service of University Microfilms, an activity of Xerox Corporation.

DATRIX will be in full operation July 1, 1967, its users communicating directly by mail with DATRIX. Technical libraries provide advice and assistance to users, referring them to DATRIX and introducing them to its procedures. The primary role of DATRIX is to address itself *directly* to the needs of the individual.

Highlights of DATRIX

Data Base—over 126,000 doctoral dissertations, comprising the majority of all dissertations published since 1938 to the current month, covering all of the major fields of inquiry, written at over 160 participating universities in the United States and Canada. Monthly, the data base is increased by the addition of more than 90% of the doctoral dissertations currently being written.

Indexing—an "enriched" set of key words, drawn from dissertation titles, subject headings, and additional word descriptors.

Method of Inquiry—simple order form completed by the searcher, using key words from list supplied at no cost by DATRIX.

Services Offered—computer search and listing of relevant references (including reference by page and volume to *Dissertation Abstracts*); complete microfilm or xerographically-reproduced copies of requested dissertations.

Delivery Time—you can expect a response to an inquiry within a few working days of its receipt.

Costs—up-dated Key Word Lists and order forms: no charge ☐ computer search and listing of references: $5.00 per inquiry including the first 10 references: 10¢ for each additional reference. ☐ complete catalog of dissertation references, comprising one or more desired academic fields: special order (write University Microfilms Library Services for pricing information.) ☐ choice of 35mm positive microfilm (1¼¢ per page, $3.00 minimum) or paper copy reproduced xerographically from microfilm, bound with soft paper cover and including an author/title label on the cover (4½¢ per page, $3.00 minimum).

Note: Key Word Lists, listing of references, and dissertation copies become your property.

Benefit to the Library ☐ relieves the library staff of burdensome search tasks.

Benefits to the Searcher ☐ direct and prompt access to data source ☐ dramatic decrease in search time, from weeks to a few days ☐ all references are property of searcher ☐ modest cost; services are "pay-as-you-go," searcher controls costs ☐ complete retrospective search capability results in relevant, timely data.

How You Use DATRIX

Key Word Lists—You need not be concerned with how to phrase questions in computer command language; that is done automatically by DATRIX. You use English words common to your field of interest. Key Word Lists, compiled by DATRIX are an open-ended vocabulary or dictionary of such words, arranged alphabetically and cross-referenced to suggest synonyms and related terms. The lists are divided into broad subject fields (to take into account interdisciplinary basic research projects): Chemistry/Life Sciences; Engineering/Physical Sciences; Humanities/Social Sciences.

Key Word Lists are drawn (and up-dated frequently to include new words) from several sources: titles of dissertations; subject headings; additional descriptive words.

The vocabulary of the Key Word Lists is free of any rigid, pigeon-hole system of classification; the words are presented out of context so that you can form an almost infinite number of questions through *your* selection of words.

Phrasing the Question—Asking DATRIX a question is simple and straightforward. Simply scan the Key Word List (in your broad subject field) and select one or more words that define the limits of your interest.

EXAMPLE: A doctoral candidate wishes to know what dissertations have been completed concerning gas lasers for illumination. The candidate is interested only in research done from 1960 to 1967, and wishes to exclude from the listing any dissertations dealing with argon gas.

The searcher might, in this case, select "Gas," "Illumination," and "Laser" as the key words used in his question. He notes, from the Key Word List, that "Gas" has a frequency count of 60; that is, there are 60 references in the engineering sciences data base that contain the word "Gas." Likewise, "Illumination" has a frequency of 10, and "Laser" 30.

If every dissertation of interest must be described by *all three* of these key words, he specifies this condition. The answer from DATRIX in this case will have a maximum of about 10 references—the smallest frequency count—although the actual number is likely to be smaller. If, however, the searcher decides that a dissertation described by *any one* of the three key words ("Gas" *or* "Illumination" *or* "Laser") will satisfy his needs, he specifies that condition. The answer from

DATRIX will then be much lengthier—a maximum of about 100, the *sum* of the frequency counts.

Further, the time range to be considered in the search can be indicated by the searcher, establishing another limit. Finally, since he is not interested in papers dealing with argon, he specifies that "Argon" is to be excluded from the search and from any listing of references.

Thus, control can be exerted over the extent of search—the size, relevance, and cost of the answer.

Flexibility of Inquiry—The extent of control over the data requested is not limited to the example just given.

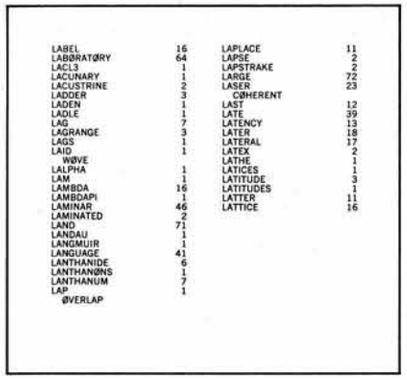
A question can be *broadened* by: □ listing synonyms for the significant key words (such as "Light" for "Illumination") or related terms (such as "Coherent" for "Laser"). The cross-references in the Key Word Lists are helpful in this process □ listing a key word *root* to indicate that *all* variations of that root should be included in the search. For example, *micro* is the root for microcyte, microbiology, microform, microscope, microphage, microphotography, etc.

A question can be *limited* by: □ indicating time range (e.g., 1960 to 1967) □ indicating specific key words to be excluded (e.g., "Argon") or specific variations of the key word (root and suffix). For example, select the root "Micro" but specifically exclude from the search microform, microphotography, etc. □ including in the search dissertations written only at specified universities.

Application—Search can be made sufficiently broad that the answer from DATRIX will constitute a *catalog* of references of all research in a wide area of inquiry. For example, a corporation might request a listing of all dissertations from 1938 to the present dealing in any way with halogen gases, to form a research catalog for their technical library. Write University Microfilms for special pricing information.

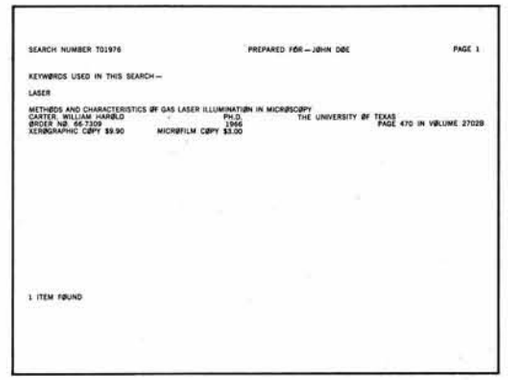
Or, the search can be made so limited that it can ferret out a single dissertation which a researcher cannot otherwise locate without extensive private correspondence. An English professor remembers, for example, that a dissertation on George Bernard Shaw's religious philosophy was written at Columbia University within the last five years. He can pinpoint this dissertation precisely by using DATRIX. The answer will be in his hands within a few days.

How DATRIX Answers the Question



LABEL	16	LAPLACE	11
LABØRATØRY	64	LAPSE	2
LACL3	1	LAPSTRAKE	2
LACUNARY	1	LARGE	72
LACUSTRINE	2	LASER	23
LADDER	3	CØHERENT	
LADEN	1	LAST	12
LADLE	1	LATE	39
LAG	7	LATENCY	13
LAGRANGE	3	LATER	18
LAGS	1	LATERAL	17
LAID	1	LATEX	2
WØVE		LATHE	1
LALPHA	1	LATICES	1
LAM	1	LATITUDE	3
LAMBDA	16	LATITUDES	1
LAMBDAPI	1	LATTER	11
LAMINAR	46	LATTICE	16
LAMINATED	2		
LAND	71		
LANDAU	1		
LANGMUIR	1		
LANGUAGE	41		
LANTHANIDE	6		
LANTHANØNS	1		
LANTHANUM	7		
LAP	1		
ØVERLAP			

From Key Word List



SEARCH NUMBER T01976 PREPARED FØR—JØHN DØE PAGE 1

KEYWØRDS USED IN THIS SEARCH—

LASER

METHØDS AND CHARACTERISTICS ØF GAS LASER ILLUMINATIØN IN MICRØSCØPY
CARTER, WILLIAM HARØLD Ph.D. THE UNIVERSITY ØF TEXAS
ØRDER NØ. 66-7309 1966 PAGE 470 IN VØLUME 27028
XERØGRAPHIC CØPY $9.90 MICRØFILM CØPY $3.00

1 ITEM FØUND

A typical answer from DATRIX

Listing of Dissertations—Following the limits defined in your question, DATRIX initiates a computer search of the data base. The computer memory is so structured that no time is lost searching in unproductive areas. Related key words are internally cross-referenced to reduce searching time. The reduced computer time is passed along to you in the form of lower costs per inquiry.

The results of the search—references that are relevant to your question—are published in list form and mailed directly to you. Each reference in the listing contains the following information: □ complete title of the dissertation □ author's name, university, degree □ date of publication □ page and volume of *Dissertation Abstracts* in which the abstract is found □ cost of the complete dissertation in 35mm positive microfilm and as a xerographically-reproduced paper copy □ order number to use.

Copies of the Complete Dissertation—An order blank is enclosed with each listing of references from DATRIX. You decide which dissertations you would like, and place your order directly with DATRIX.

What the Future Holds

The body of basic research is not only growing, but is accelerating in its growth. In 1966, the number of dissertations—cumulative total from 1938—increased by about 20%. It is very likely that the cumulative total of doctoral dissertations a decade from now will exceed a *half million*. Thus, the role played by DATRIX becomes more and more important and useful.

The DATRIX data base will be expanded by the inclusion of dissertation references from 1851 to 1938—more than 100,000 dissertations. Further, references to dissertations written between 1938 and the present which are not now included in the DATRIX data base also will be included.

XEROX
EDUCATION DIVISION

X—1136/467

DATRIX

Direct Access To Reference Information: a Xerox service

PLEASE PROCESS MY ORDER FOR A DATRIX SEARCH BASED ON THE FOLLOWING KEY WORDS: (please print) **DATE**

PUBLICATION DATES **FROM** _____ **TO** _____

KEY WORDS	AND	AND	AND	AND	EXCLUDED KEY WORDS

WHICH KEY WORD LIST DID YOU USE?

- ☐ Chemistry/Life Sciences
- ☐ Engineering/Physical Sciences
- ☐ Humanities/Social Sciences

CHECK LIST

1. Alternate key words in *Columns;* compound key words in *Rows.*
2. If you choose not to specify publication dates or university preferences, DATRIX will perform a complete retrospective search.
3. After completing the form, mail it to University Microfilms, Xerox Corporation, Ann Arbor, Michigan, 48106.

UNIVERSITY PREFERENCES

_____

_____

_____

_____

BRIEFLY PARAPHRASE YOUR DATRIX SEARCH GOAL.

_____

_____

_____

_____

MAILING INFORMATION

NAME _____

ADDRESS _____

_____

CITY _____ STATE _____ ZIP _____

BILLING ADDRESS (if different)

_____

_____

_____

_____