ENQUETE SUR LE SYSTEME DES EMPREINTES/ PRELIMINARY ANALYSIS OF THE FINGERPRINT QUESTIONNAIRE, SUMMER 1984

1. Introduction

We are most grateful to all those who have taken the trouble to complete and return the questionnaire circulated earlier this summer. We are aware that not much time was given for completing the questionnaire, and would like to encourage those who have not yet done so to let us have their replies whenever they can; we hope to establish a clear picture of the use of bibliographical fingerprints all over the world, and the results we have so far obtained, while already of considerable interest, must necessarily be tentative until we have a larger and more representative response.

In sending out the questionnaire we had two aims: to discover the extent and scope of present and foreseeable uses of the fingerprint, and to ascertain how far it satisfied the requirements of those who had some experience of using it. The questionnaire was circulated in three languages: in English to destinations in the United Kingdom, the United States and the Commonwealth; in French to France, Belgium and some other parts of the Continent; and in Italian to libraries taking part in the Census of 16th-century Italian books promoted by the Istituto Centrale per il Catalogo Unico delle Biblioteche Italiane. As was perhaps to be expected, the use of fingerprints in a particular linguistic area depends to a considerable extent on the context; the replies so far received confirm that libraries are influenced by a wide variety of factors in deciding whether or not to fingerprint. In Italy, where the fingerprint has been officially adopted in a major project of national importance, there are signs that fingerprinting has already achieved a degree of acceptance which makes it a likely choice for other projects and purposes. In France, where it has been used for a number of smaller projects and purposes for some years, it has recently been decided by the Ministère de la Culture to use it in connexion with more major projects, and this decision in turn can be expected to lead to more universal acceptance of the technique, especially at the Bibliothèque Nationale. In the English-speaking world, the only project of major importance to consider using fingerprinting was the ESTC, and it decided against doing so. Other libraries, particularly at a time when most are suffering from serious staff shortages, are therefore extremely cautious about embarking on a new procedure which, for books in the English language, has not been taken up by any major body. In view of these differences, I have therefore decided not to add together statistics derived from all the replies to the questionnaire, but to keep replies from the three linguistic areas separate.

2. Tabular summary of statistics extracted from the Questionnaire

The questionnaire was divided into six sections, not all of which were applicable to every library. In the following tables, the figures refer to the number of replies; figures given in replies are in round brackets after the number of replies.

A. GENERAL QUESTIONS	English	French	Italian
Number of replies received, 1/9/1984	17	17	22
Replies on behalf of an institution	16	13	22
Replies on behalf of an individual	1	4	-
Those now using fingerprints	3	9	22
Those who may use them in the future Those who have ceased recording	7	6	-
fingerprints	1	3	-
Number of replies divided up to show how many fingerprints have been			
recorded so far	1(1-1000) 2(1001-2000)	9(1-1000)	15(1-1000) 4(1001-2000)
	1(2001+)	1(2001+)	3(2001+)
Those who record fingerprints as part			
of a catalogue entry	1	7	10
Those who record fingerprints in connexion with a project involving			
one person or library	2	4	2
Those who record fingerprints in connexion with a project involving			
more than one person or library	-	3	16

B. FINGERPRINTS USED AS PART OF A CATALOGUE ENTRY

C. SPECIAL PROJECTS INVOLVING ONE INSTITUTION OR SCHOLAR ONLY

D. SPECIAL PROJECTS INVOLVING MORE THAN ONE INSTITUTION OR SCHOLAR

Replies to these sections cannot be conveniently expressed in tabular form, and are discussed in section 3 of this analysis.

E. COMPUTER HANDLING OF FINGERPRINTS	English	French	Italian
Those whose fingerprint records have been entered in a computerized			
database	3	3	11
Those who experienced problems in keyboarding fingerprints	1	2	_
Those who have manipulated their computer records	-	2	-
F. EVALUATION OF THE FINGERPRINT			
Those who think the system is useful	5	9	21
Those who think the use of the finger- print saves them time	1(10%)	2(10%) 1(30-40%) 1(50+%)	1(10%) 1(30%)
Those who think the use of the finger- print adds to their total cataloguing		1(30.4)	
time		1(10-%)	
	3(10%) 1(20%)	3(10%)	9(10%) 6(20%)
		1(30-40%)	1(30%)
Those who have experienced problems in			
understanding the rules	2	1	3
Those who have experienced problems in applying the rules	2	7	14
Those who think the Fingerprint Newsletter serves a useful purpose	5	12	14

Details of projects and analysis of users' reactions

The tables in section 2 summarise those parts of the data we have received which can be conveniently expressed in numerical form. However, as has already been explained in the introduction to this analysis, fingerprints are being used for different purposes in the three linguistic areas, and the experience and views of users differ widely. They are therefore examined separately below.

3a. English-speaking countries

Replies were received, both in returned questionnaires and in letters, from 30 institutions or individuals. Of these, 26 have not so far used fingerprinting, although some schools of librarianship teach the system. One reply, from the Special Collections and Archives Department of an American college, stated that a number of fingerprints had been recorded on an experimental basis, but that fingerprinting would not be used in future unless it became a more widely required and demonstrably useful technique: "it is redundant, duplicating in function other, more readily understandable information in a bibliographic record; it does not provide distinctions in some critical cases (reissues; line for line reprints); its accuracy is not easily verifiable".

These replies relate to current use of fingerprints. Details are as follows:-

i. The British Library has recorded approximately 1500 fingerprints in connexion with the Supplement, due to appear early in 1985, to the Short Title Catalogue of Books Printed in France and of French Books Printed in Other Countries from 1470 to 1600 now in the British Museum (London, 1924). It is hoped that they will provide additional information on books in the British Library's collections for other

institutions and individuals; they are also transmitted to the IRHT (Institut de Recherche et d'Histoire des Textes) for inclusion in their database of French imprints pre-1810. Mr Dethan, the Curator of the French Section, thinks the system useful for the following reasons: "Speedy identification of duplicates, reprints, defective or inadequately catalogued books, particularly in correspondence with overseas institutions and scholars". His main criticism is that the rules "are too complex to be applied by junior clerical staff, which would prevent their use on major projects".

- ii. Dr D J Shaw, Director of the Bibliographical Studies Research Group at the University of Kent at Canterbury, has recorded approximately 1500 fingerprints in connexion with two projects, a bibliography of the Parisian 16th-century printer Pierre Vidoue for the Bibliotheque Nationale, Paris, and a catalogue of typefaces in French books, 1501-1520, for the British Library. He uses fingerprints to identify imperfect copies, and "for distinguishing between copies of the same date (or undated) without needing always to fetch the volumes from the shelf". He finds that the fingerprint is "a useful adjunct to the collation formula", quicker to record and often distinguishing between different cases, and considers that it offers the advantages of speed of recording, compactness of notation, and reasonable distinguishing power. He hopes that it may be used as the basis for "an early printed books 'ISBN'".
- iii. The National Library of Scotland has for the last 10 years been recording fingerprints, which appear in the library's general catalogues, for all pre-1820 accessions. They have not to date been used in connexion with any particular project, nor has any work been done on computer matching or sorting. With effect from the beginning of 1985, the Library is now recording fingerprints only for books published abroad up to 1700; the possibility of recording fingerprints for other categories of books will be considered if the need arises.

It will be noted that, with the exception of the fingerprints recorded by the National Library of Scotland which have not so far been tested in any way, all those which are currently being recorded are for use in projects connected with French books. Requests for any further information should be addressed to:

- Mr L le R Dethan, French Section, Department of Printed Books, The British Library, Great Russell Street, London WClB 3DG, U.K.
- Dr D J Shaw, Bibliographical Studies Research Group, Darwin College, The University, Canterbury, Kent CT2 7NY, U.K.
- Miss A E Harvey Wood, Department of Printed Books, National Library of Scotland, George IV Bridge, Edinburgh EH1 1EW, U.K.

3b. French-speaking countries and Spain

In the French-speaking countries there are several projects currently under way for which fingerprints are used, and these cover a wider range of date and of subject-matter. Details are as follows:-

i. The Centre National d'Histoire et d'Archéologie du Livre of the Bibliothèque Royale, Brussels, has recorded 6000 fingerprints for a short-title catalogue of 16th-century books in all languages within the present borders of Belgium. The fingerprints are used to facilitate the work by making comparison of copies in different libraries easier, and by detecting variant issues. They have been found useful, but not infallible, in detecting variant issues and different editions with identical dates, and helpful in reducing working time by bringing together identical copies so that the catalogue entry does not have to be compiled more than once. The main criticism from the Centre National is that unless the technique is used very regularly the rules are easy to forget, and this can lead to errors.

- ii. The Institut de Recherche et d'Histoire des Textes (IRHT) is creating a database to which five institutions are already contributing; this number is expected to rise to 100. They also expect to use fingerprints for a union catalogue of early books in French libraries. They see the fingerprint as the nearest equivalent possible so far to an ISBN, and find it useful in detecting multiple copies of the same book, and for its value to the historical bibliographer (in distinguishing between different issues, for example). They expect it to lead to a saving of time when the database is large enough to make a substantial contribution to the reduction of cataloguing, as described above.
- iii. The Bibliotheque Nationale, Paris, thinks of using the fingerprint for the Catalogue des Anonymes Anciens de la Bibliothèque Nationale (1501-1800), covering book production in all countries, in order to enable users of the catalogue to compare their copies of books with those of the Bibliothèque Nationale. They also expect it to be of value as an access point to databases of early books for purposes of comparison, and feel that it offers additional reassurance to the cataloguer.
- iv. The Ministère de la Culture, Paris, has recorded some hundreds of fingerprints in connexion with a photographic inventory of early French collections of books, confiscated during the Revolution, and now scattered in small town libraries which do not have enough trained staff to catalogue them. All books printed up to 1800 will be included; pages which enable the volumes to be identified will be microfilmed, and fingerprints recorded for all volumes. So far only tests have been carried out: work will start on the first collection in autumn 1984. The fingerprints will be used to bring together multiple copies dispersed in different libraries. The Ministère considers the speed with which fingerprints can be recorded ideal for use with microfilming techniques.
- v. The Centre International Blaise Pascal, which is connected with the University of Clermont-Ferrand and with the Centre National de Recherche Scientifique, is recording fingerprints of 17th and 18th-century works which are of interest for Pascal studies. The fingerprints, of which about 300 have so far been recorded, are entered in the Centre's catalogue, and it is hoped that they will prove of value in national and international exchanges of information in this field. They are not thought of as supplanting traditional bibliographic techniques, but as a useful supplement to them, which should eventually speed up exchanges of information on particular editions of works. If ISBD(A) format catalogue entries are used, the Centre thinks the fingerprint essential.
- vi. The Centre Informatique et Bible in Belgium has experimented with fingerprints in connexion with the creation of an automated system, called 'Debora', to serve libraries dealing with Bible studies. The idea of fingerprinting seemed useful to them, and they found fingerprints helpful in distinguishing between different editions or issues. They feel, however, that the possibilities of computerisation are not sufficiently taken into account, and that it might be possible to develop an "electronic fingerprint".
- vii. The Bibliothèque de l'Université de Poitiers has recorded 210 fingerprints of sixteenth-century books for its own general catalogue. They use the fingerprint to reduce the amount of bibliographical detail in their catalogue entry, thereby saving cataloguing time, and hope that in the future it will facilitate exchanges of information on early books between libraries.
- viii. Two replies have been received from libraries which are intending to start using fingerprints in the future, and one from an individual bibliographer. They are the Bibliothèque Cantonale et Universitaire, Lausannne, which says only that it is considering the use of fingerprints, but without further details; the Bibliothèque Royale Albert I, Brussels, which will record fingerprints for all books printed during the hand-printing era as part of an ISBD(A) catalogue entry

which will be input in a data-base, and used later for the production of specialist bibliographies; and M. Michel Simonin in Rennes is starting work, with a group of students, on an inventory of sixteenth-century books in the Bibliothèque Universitaire de Rennes and later, possibly, the Bibliothèque Municipale. His intention is to input details, including fingerprints, in a data-base, and eventually to use them for the production of catalogues.

ix. One answer was received from Spain, from the Secció del Patrimoni
Bibliogràfic, Departament de Cultura de la Generalitat de Catalunya in Barcelona.
Work has just begun on recording fingerprints for the Cataleg Col.lectiu de
Catalunya (Antiquari), which will include all printed books of the 15th to 18th
centuries in Catalan libraries. Fingerprints are being used to identify multiple
copies and to assist in the identification of imperfect copies, and although not
enough fingerprints have been recorded yet for the Departament de Cultura to
evaluate the system in depth they are satisfied so far, and believe that the use of
fingerprints will lead to a considerable saving of time.

The period covered by these projects is very wide (15th to 18th centuries), and a number of them cover books from several countries (the <u>Catalogue des Anonymes</u> <u>Anciens</u> and the <u>Catalog Col·lectiu de Catalunya</u>, for example). Requests for further information should be addressed to:-

- Geneviève Glorieux, Centre National d'Histoire et d'Archéologie du Livre, Bibliothèque Royale, 1000 Brussels, Belgium.
- Mlle Edith Bayle, Institut de Recherche et d'Histoire des Textes, Centre National de la Recherche Scientifique, 40 Avenue d'Iéna, 75116 Paris, France.
- iii. Odile Gantier, Bibliothèque Nationale, 58 rue Richelieu, 75084 Paris, France.
- iv. M Dominique Varry, Direction du Livre et de la Lecture, Ministère de la Culture, 27 Avenue de l'Opéra, 75002 Paris, France.
- v. Caroline Durand, Centre International Blaise Pascal, Bibliothèque Municipale et InterUniversitaire, 1 Boulevard Lafayette, 63000 Clermont-Ferrand, France.
- vi. Father R-Ferdinand Poswick, Centre Informatique et Bible, Abbaye de Maredsous, B-5642 Denée, Belgium.
 - vii. Jean-Pierre Bonnet, Service du Livre Ancien, Bibliothèque de l'Université de Poitiers, 93 avenue du Recteur Pineau, B.P. 605, 86022 Poitiers, France.
- viii. Hélène Piccard, Bibliothèque Cantonale et Universitaire, CH-1015 Lausanne-Dorigny, Switzerland. Elly Cockx-Indestege, Bibliothèque Royale Albert I, 4 Boulevard de 1'Empereur, B-1000 Brussels, Belgium. Michel Simonin, 16 rue le Bastard, 35000 Rennes, France.
 - ix. Agustí Estrader, Secció del Patrimoni Bibliografic, Departament de Cultura de la Generalitat de Catalunya, c/Portaferrissa 1, 08002 Barcelona, Spain.

3c. Italy

- i. All but two of the replies received from Italy are from libraries which are contributing to the census of 16th-century Italian books and books in Italian published abroad promoted by ICCUBI (the Istituto Centrale per il Catalogo Unico delle Biblioteche Italiane). According to ICCUBI's own reply, there are at present about 850 libraries taking part in the project, and this number is expected to rise to 1000. The fingerprint is used as a control mechanism for comulating data from different libraries, in order to identify editions. ICCUBI prepares a listing of books whose catalogue entries have headings beginning with a particular letter of the alphabet (the letters A and B have already been done), and these lists are sent out to contributing libraries, which can then compare their own holdings with those listed by ICCUBI. If their holdings appear on the lists they add their own location and return them; if they have relevant holdings which are not listed these are catalogued according to the rules used by ICCUBI and sent in. ICCUBI finds the fingerprint helpful in identifying incomplete volumes and catalogue entries for identical editions but with headings which differ from each other, and believes it will also be of value for historical bibliography. Other contributing libraries emphasize its usefulness for bringing together multiple copies of a single book, and for distinguishing between different editions or variants, and several have found that fingerprinting imperfect books and comparing these fingerprints with those in ICCUBI's lists has enabled them to identify the book. They expect the creation of a database of 16th-century Italian books to increase the speed and certainty with which particular editions and issues can be identified; a number, however, feel that the fingerprint is taken from too small a section of the book.
- ii. A census of all 16th-century printed books in the libraries of the Emilia-Romagna region of Italy is under way, with 40 libraries taking part so far; this number is expected to rise to 100. Of the replies received to the questionnaire, one related entirely to the Emilia-Romagna project, and three others dealt both with the ICCUBI project and with the Emilia-Romagna census. As in the ICCUBI census, the fingerprint is being used to bring together data from different libraries relating to the same edition.
- iii. Four libraries taking part in the ICCUBI census are also using fingerprints in their own catalogues. The Biblioteca Labronica F.D. Guerrazzi in Livorno records the fingerprints of all its 16th-century holdings, in the hope that the establishment of databases on a national and international level with data on early and rare books will eventually lead to further and more rapid research. The Biblioteca Casanatense in Rome has recorded fingerprints for 4000 16th-century books from all countries. The Biblioteca Universitaria di Bologna, which is taking part in both censuses, is also recording fingerprints of books which were in the collection of Ulisse Aldrovandi: Italian and foreign, and from the fifteenth to the seventeenth centuries. The Biblioteca Universitaria di Pisa is entering fingerprints for all sixteenth-century books, both Italian and foreign, in its catalogue and intends to produce a special catalogue of its sixteenth-century editions. Finally, the Biblioteca Nazionale Centrale Vittorio Emanuele II in Rome, which is not yet contributing to the ICCUBI census but will do so in the future, is including fingerprints for all its sixteeth-century books in ISBD(A) type entries in its own catalogue.

All these projects concern 16th-century books, with the exception of the Biblioteca Universitaria di Bologna, and there is no suggestion that the use of fingerprinting is contemplated in the near future for books of any later period. Requests for further information should be addressed to:-

- Dottoressa Maria Sicco, Istituto Centrale per il Catalogo Unico delle Biblioteche Italiane e per le Informazioni Bibliografiche, viale del Castro Pretorio, 00185 Rome, Italy.
- Dottoressa Rosaria Campioni, Assessorato alla cultura della Regione Emilia-Romagna, viale Silvani 6, 40122 Bologna, Italy.
- iii. Dottoressa Marcella Previti, Biblioteca Labronica F.D. Guerrazzi, viale Libertà 30, 57100 Livorno, Italy. Dottoressa Ada Corongiu, Biblioteca Casanatense, via S. Ignazio 52, 00187 Rome, Italy. C. Bacchi, Biblioteca Universitaria di Bologna, Via Zamboni 35, 40100 Bologna, Italy Dottoressa Giovanna Bosco, Biblioteca Universitaria di Pisa, Via Curtatone e Montanara, 56100 Pisa, Italy. Dottore Paolo Veneziani, Biblioteca Nazionale Centrale Vittorio Emanuele II, Viale Castro Pretorio, 00100 Rome, Italy.

4. Computer handling of fingerprints

Information on the computer applications of fingerprints is, unfortunately, still rather meagre. The IRHT does enter fingerprints in a database, and has done some computer sorting (on each group and on the date). The Centre Informatique et Bible has also entered fingerprints in a database, and used it to produce alphabetical listings. Entries for the Cataleg Col.lectiu de Catalunya are being input, and sorting will be possible on each group; not enough fingerprints have been recorded yet for any satisfactory tests to be carried out.

ICCUBI has not yet input fingerprints into a database, but the information sent in by contributing libraries is being recorded in a form which should enable it to be input later. It is hoped to use a computer both for checking the results obtained by manual comparison of data coming from different libraries, and to produce indexes.

In the English-speaking countries, fingerprints have been input by Dr Shaw and by the National Library of Scotland, but the resulting records have not been manipulated in either case.

Problems encountered in inputting fingerprints are the following:transliteration of Greek characters (the IRHT); this has not been a problem for the
National Library of Scotland, whose computer accepts Greek characters;
restricted character set (diphthongs, etc) (Centre Informatique et Bible);
inaccurate inputting (the National Library of Scotland, where inputting is done at
present by keyboard operators).

5. Comments on the rules and on the Fingerprint Newsletter

It was emphasized in several replies that the rules must be stabilized as soon as possible, and a number of libraries, while greeting the publication of examples with pleasure, felt that even more examples, incorporated if possible in the text of the rules, might be desirable. It was also suggested that an introductory statement, defining the purpose of the fingerprint, might be a good idea, and one

library suggested adding a glossary, defining terms used in the rules. It was generally felt that the <u>Fingerprint Newsletter</u> served a useful purpose, and that it should include detailed information concerning work in progress, with the names and addresses of people involved in each project who can be contacted; that it should publish examples of difficult cases, with detailed answers; and that it should come out more regularly.

6. General conclusions

As I said in the introduction, we had two aims in sending out the questionnaire: to discover the extent and scope of present and foreseeable uses of the fingerprint, and to ascertain how satisfactory an instrument it was proving. From what has already been said, it is clear that the present usage of the fingerprint system covers a wide range of projects and that the reasons for which it is being used also vary.

The fingerprint was originally designed for use in matching records in a machinereadable union catalogue of pre-1801 books in Oxford, Cambridge and the British Museum (Project LOC). In the introduction to the printed report of this project, which unfortunately proved abortive, no exaggerated claims are made for fingerprinting. "It cannot, of course, differentiate between two books of which one is a line-by-line reprint of the other; nor does ordinary cataloguing, however conscientious. The rigorous bibliographer who wishes to differentiate between line-by-line reprints, will, when a union list has been made, need, as he needs now, to see all copies of the work he is studying. The union list will enable him to find them." (Computers and Early Books, London, 1974). In other words, it was never suggested that a serious bibliographer would have all his work done for him by the fingerprint. It was designed as an aid to the compilation of union catalogues; its purpose is to make computer matching of data easier and quicker; and, by drawing attention to differences between books which might otherwise appear, from their catalogue records, to be identical, it helps to distinguish between different editions or issues.

The replies we received to our questionnaire should, therefore, be seen in this context. Those we received from Italy, where fingerprints are being used exactly as they were designed to be used in Project LOC, suggest that they are already proving their value in differentiating between different editions and issues, in enabling multiple copies to be brought together, and in identifying some imperfect volumes. It will be interesting to see the results when ICCUBI is able to start using a computer. When the census is complete it will not have done historical bibliographers out of a job, but it will have done some preliminary work for them, and should therefore play a major part in stimulating further study of sixteenth-century books in Italy.

The publication in France of the Bibliothèque Nationale's Catalogue des Anonymes Anciens, and the growth of the IRHT's database, should serve similar purposes in France, as should the census in Emilia-Romagna, the Catalan catalogue, and the Belgian 16th-century STC. All these projects are in their early stages, and should continue to provide us with interesting data on the usefulness of fingerprinting; but all of them are so far enthusiastic. The most critical comments came from users who possibly expected too much, as in the case of the American college I quoted at the beginning of section 3a ("it does not provide distinctions in some critical cases [reissues; line-for-line reprints]" ...) and the three Italian libraries which would have liked the fingerprint to cover more of the book for greater security in identifying variants; or from users on a fairly small scale, who find the rules too complex. Generally speaking, the greater the number of fingerprints already recorded by a library, the more confident it sounds in the questionnaire.

The Biblioteca Nazionale Centrale Vittorio Emanuele II, which is not taking part yet in the ICCUBI census, agrees with the American college that the fingerprint does not provide an accurate means of discriminating between issues, and Denise Hillard, now working at the Bibliothèque Mazarine but whose experience of fingerprinting was gained while working in another library, makes the same comment. She sees it as being of use above all as a kind of ISBN, which would provide a useful access point in the future to major union catalogues of early books. The Biblioteca Nazionale Marciana in Venice expresses the hope that international adoption of the fingerprint might eventually lead to greater standardization of bibliographical data.

There are, of course, cases in which fingerprints are being used, with satisfactory results, in connexion with smaller projects. Dr Shaw, who is using them in two bibliographies, is satisfied that they are a useful working tool; this has also been found to be the case in working on the Belgian 16th-century STC, as well as in the larger cooperative projects. The main conclusion to be drawn from those answers we have have received so far to the questionnaire is that those users of fingerprints who have a clear idea of the fingerprint's limitations as well as of the advantages it offers, and who are therefore making realistic use of it, are on the whole satisfied. We will, however, know a lot more when some of the projects which have just started, and which will be using the fingerprint as it was originally designed to be used, have reached a more advanced stage.

Alison E Harvey Wood, National Library of Scotland