

II. Plan for a General Bibliography of Papyrology on Microfiche

(Roger S. BAGNALL)

The proposal to create a systematic bibliography of papyrology began with the suggestion — made to me in 1975 by a friend who was at that time a student in Library Science at Columbia University — that papyrological bibliography might be able to benefit from the use of a computer. It was at once apparent to me that the *Bibliographie Papyrologique* formed a natural subject for a systematic treatment by automatic data processing, for reasons which are certainly known to all of you: most of the *Bibliographie Papyrologique* is no longer available on cards, and few institutions — let alone individuals — have complete files; the labor of maintaining even an alphabetic file by author is so burdensome that many libraries simply will not keep their files current; and the file has no subject classification. Since one cannot in many cases judge the contents of an article accurately from its title — as many cryptic titles on the program of this congress show — any scholar who wanted to maintain a file with classification by subject had to examine each item personally to assign it to a subject area. For every papyrologist to do such a thing, of course, is exceedingly wasteful of time.

The published bibliography runs to perhaps 25,000 cards. Early in my pursuit of this project, however, I learned that Professor Hombert has a file in his possession of a largely complete bibliography of the field for the period before cards began to be published in 1932. What is more, this entire file, as far as 1960, existed in a classified version, organized essentially according to a modified version of the decimal system used in the *Bibliografia Metodica* of Aegyptus. In short, the basis for a classified version of the *Bibliographie Papyrologique* already existed; the work did not need to be done from the foundations.

With a file of perhaps 40,000 cards, the task nonetheless remained large. The file as it exists includes thousands of handwritten entries, additions and corrections; a direct reproduction of it was therefore out of the question. Furthermore, all cards from 1960 had to be integrated into the file, a matter of 10,000 cards to be classified. Finally, we agreed that we should not lose sight of the goal of computerizing the bibliography, for only computerization of the file can permit the addition of future years to the general file without great trouble and expense. Our ultimate aim, therefore, is to convert the entire file into a computerized data bank which once on tape can be used for various purposes by computer programs. Each new year's cards would then be entered as issued and integrated automatically with the existing file, with the result that the general file would always be up to date. Perhaps equally interesting, from an edited tape it will be possible to produce a bibliography which can be typeset entirely automatically

by computerized photocomposition units and reproduced by offset printing. Such a publication would have significantly lower costs than any conventional method. We expect, further, that the adaptation of existing computer programs will make it possible to provide such services as key word indices to the bibliography.

Between the present reality and this final goal lie many obstacles, some of which have already been mentioned. Some of these consist of aspects of the nature of the card file, and others in mastering the computer methodology. About the card file, something has already been said; but beyond adding the work of the last 17 years, it will be necessary in a general bibliography to introduce abbreviations for journal titles and to consolidate cards listing reviews of a given work. Still more, despite Professor Hombert's well-known passion for system and the very high accuracy of the *Bibliographie Papyrologique*, much needs still to be checked, standardized, or revised. Finally, the existing file simply cannot be turned over to computer key-punch operators for typing, for the handwritten entries, the corrections, and editorial markings would only confuse a typist. All of this imposes much work of two sorts: (1) the revision and final classification of the file by Marcel Hombert and Georges Nachtergaele, and (2) the systematic retyping of the entire file in one format and style, so that it will be intelligible to key-punch operators. Part 1 began in earnest during the spring of 1977 and will continue for some time to come; part 2 will begin this fall, by the work of my assistant in the office of the American Society of Papyrologists in New York, whenever a first section of the file is ready. It is impossible at present to offer any date for the completion of this work, which depends on the efforts of several people, all on different schedules.

On the computer side too there are numerous problems to be solved. My colleague in library science, Linda Sundwall, has done extensive work. Her major accomplishment has been the creation of a system for entering the bibliographic material in such a way that its various elements can be individually identified and manipulated by the computer. She has also worked on adapting existing programs for manipulating and indexing the material. But she has moved away from New York this summer, and I shall have to pursue the further development of these programs this fall without her aid. It is already clear that the greatest task will be the creation of the program for instructing the photocomposition unit to take the material on the tape and print it as we want it. The programming which remains to be done, in fact, will require the services of a professional computer programmer. This, in turn, requires substantial funding.

Because it is not clear when the final computerized version of the bibliography — if final is the proper term for anything connected to something we all regard as a permanently continuing institution of papyrology — can be produced, we have decided to publish an interim version from the sheets on

which the bibliography will be typed by my assistant. In this way, the bibliography will be made available much sooner, and the final version will be able to benefit from corrections and additions which users of the interim version will be able to propose. I had at first thought of publishing this interim version in book form, by photo-offset from the typescript. It became clear, however, that such a work would probably run to 1,500-2,000 pages at least, and cost a great deal to print; moreover, that it would have to be sold at a price which would discourage most individuals from acquiring it, something which seemed self-defeating in an interim edition, to say the least.

We have therefore decided to issue the work on microfiche, at about one-fifth the price. We have taken this decision well aware that at present few scholars in papyrology, or the other fields which make use of papyrologists' findings, own microfiche readers. But by the time that the *Bibliographie Papyrologique* on microfiche is issued, a large amount of papyrological material — and not only papyrological — will be available cheaply on microfiche, and I anticipate confidently that ownership of readers will be very widespread.

In conclusion, we would put forth two requests. First, to the editor of *Aegyptus*, that this journal adopt the minor revisions to their system which we have made, thus establishing a universal standard in papyrological bibliography; and secondly, to the future users of the *Bibliographie Papyrologique* in the interim version I have described, that they send to Marcel Hombert and Georges Nachtergaeel all corrections and additions which they find, in order to make the ultimate computerized bibliography as complete and useful to all as possible.

New York

Roger S. BAGNALL

ADDENDA

Parmi les interventions qui ont suivi les deux communications, on retiendra surtout celle de Mademoiselle Orsolina Montevvecchi, qui a annoncé qu'à partir de 1978 la *Bibliografia Metodica* adoptera le plan présenté au Congrès.

Monsieur Joseph Méléze-Modrzejewski, qui présidait la séance, a proposé quelques corrections au « Plan », que les auteurs ont volontiers acceptées. Ils en ont tenu compte dans le « Plan de la Bibliographie Papyrologique » publié, peu après le Congrès, dans la *Chronique d'Égypte* 52 (1977) N° 103, pp. 156-163. Depuis cette publication, quelques menues additions y ont encore été apportées; elles sont incorporées dans le « Plan » qu'on a pu lire ci-dessus.

Quelques Congressistes ont souhaité que, dans certaines sections, le « Plan » pousse plus loin la répartition des matières. Les auteurs ont admis que, selon toute vraisemblance, telle ou telle recherche serait ainsi facilitée. Mais l'indexation des fiches — et donc aussi leur consultation — risque de devenir plus compliquée à mesure que les subdivisions se multiplient. Compte tenu de la souplesse du système décimal, qui offre à chacun toute possibilité d'introduire des rubriques supplémentaires, il a semblé qu'il fallait résister à cette tendance.

Enfin, pour répondre à un vœu plusieurs fois exprimé, les auteurs indexent les fiches de la *Bibliographie Papyrologique* courante depuis le premier envoi de 1977, de manière à assurer une parfaite continuité avec la *Bibliographie Générale*, qui s'arrêtera à 1976.