

Greek language cataloguing in libraries outside Greece

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Part of the work of Projekt Helen has been to examine the cataloguing practices of Libraries which hold Greek material. The Project has tried to identify the main issues involved and to see if there are any common practices which Libraries adopt in their treatment of Greek bibliographic records.

Obviously what makes the cataloguing of Greek material different from that of, say, English, French or German, is the existence of the Greek alphabet. Most libraries outside Greece do not possess the equipment to cope with an alternative alphabet to the Latin alphabet used by most West European languages. They are, therefore, forced to adopt 1 (or more) of 3 main strategies to deal with this material. The strategies used by both publishers and libraries outside Greece can be summarised under the 3 headings of Translation, Transcription and Transliteration.

Translation

An effective way of handling Classical Greek material was devised by publishers outside Greece at an early stage of printing. This was to provide a title page in the Latin language. The translation ensured there would be no problem in the handling of an alternative script. This tradition has continued down through the ages to the extent that it is very rare to find a title page of the text of a Classical Greek author published outside Greece that is NOT printed in either the Latin language or a language which uses the Latin script. For this reason some of the Libraries we contacted as part of Projekt Helen, failed to see any problem in cataloguing Greek material since they believed their holdings all had Latin title pages.

The Latin and ancient Greek languages have often been seen as complementary to one another. Classical studies include both Latin and Greek culture and there has been a long tradition of teaching both ancient Greek and Latin in British public schools. This tradition is not as strong as it once was, but the two languages are still very closely linked in many people's minds.

The translation of ancient Greek has caused problems, however, in the matter of the names of Classical Greek authors. The Latin form of name has often become better known than the Greek eg. *Homerus* rather than *Homeros*.

Or again an anglicised version may be even more popular—thus most reference books will refer to the writer as Homer.

Anglo-American cataloguing rules set out strict guidelines on how to choose a form of name for cataloguing purposes. The rules favour the form of name that has become well-established in English-language reference sources, hence in the case of Ὅμηρος most UK libraries will choose the form Homer as their preferred heading.

The prevalence of the AACR2 rules and the growth of large databases such as the OCLC database in Dublin, Ohio has ensured some degree of uniformity in the cataloguing of ancient Greek writers in the UK and USA. English language versions of both authors and titles have become standardised over the years. It is likely that this standardisation will become even more complete amongst English speaking libraries, since the Library of Congress, British Library and National Library of Canada now have a goal of a common Anglo-American authority file for names and subject authorities.¹ This standardisation will make it easier to search databases for bibliographic records, since there should be only 1 form of name used. However this form of name will not be Greek, so it will be necessary to find out the translated form of name before searching.

Each country tends to choose its own form of name for classical and Byzantine Greek authors. As part of Project Helen, a brief search of English, French, German and Spanish 'Books in Print' and other key reference sources was carried out for a few selected ancient Greek authors. (see fig. 1 for just 3 egs.). The survey found that while there was broad agreement among the English language reference sources, there were many differences between the European sources.

Translation into the Latin language may have served a useful purpose for ancient Greek writers published outside Greece, but it is clearly unsuitable for Modern Greek writers published inside Greece. However equipment problems still remain for non-Greek libraries. As part of the survey carried out by Project Helen we found 32 libraries known to have Greek material (22 Academic and 5 Public libraries in the UK and 5 National libraries of the E.U.). Of these 32 libraries only 10 (6 Academic and 4 National) had any Greek bibliographic records printed in Greek and only 3 (2 academic and 1

greek

French Books in print
= Editions du Cercle de la Librairie
Livres disponibles 1993

German Books in Print
= Verzeichnis lieferbarer Bücher 92/93
Verlag der Buchhändler Vereinigung GmbH

MINISTERIO DE CULTURA
- Libros Espanoles en Venta. Agencia Espanola

Whitaker's British books in print: on microfiche. London: Writaker

BRITISH LIBRARY

LIBRARY OF CONGRESS

J

Αισχύλος
Αριστοτελης
Ιωάννης ο Χρυσόστομος

Eschyle

Aristote
Jean Chrysostome, Saint

Aeschylus

Aristoteles
Johannes Chrysostomos

Esquilo
ISBN Aristoteles
Juan Chrisostomo, Santo
Aeschylus
Aristotle
John, Chrysostom, Saint

Aeschylus
Aristotle 384-322 B.C.
John, Chrysostom,
Saint, d407
Aeschylus
Aristotle
ohn Chrysostom, Saint,
d407

National) had any kind of computerised record in Greek. All 32 Libraries relied on records held in Latin alphabetical format for their current cataloguing.

These records are not translated, of course, but are transcribed.

Definition of transcription

'Bibliographic transcription is the operation of converting the phonemes and/or morphemes of a source language, recorded in the script of its writing system, as nearly as possible into the script of the writing system of a target language.' (Wellisch 1978)²

In other words transcription uses 1 alphabet to represent the sound of the other alphabet. This solves the problem of the lack of equipment capable of producing greek script. However it leads to an additional set of problems. The Latin alphabet is used to represent a large number of European languages and the same letters will be pronounced in many different ways in each language. Conversion from 1 script to another will not, necessarily, give the correct pronunciation of any Greek word, since it

is necessary to know who will be reading the transcription. The point was made by Spalding in 1977 when he wrote:

'... the phonetic values of the letters of the roman alphabet have about as much firmness as sponge rubber and are as riddled with ambiguities as Swiss cheese in with holes.'³

It is important to know who will be reading the results of transcription, since each nationality may pronounce the same Latin characters in a different way each nationality may pronounce the same Latin characters in a different way (and this may not sound like Greek).

An alternative to transcription is transliteration.

Definition of transliteration

'Bibliographic transliteration is the operation of converting the characters of a source script into the characters of a target script. In principle there is a one-to-one transformation in which one character of the source script is converted to one (and only one) specific character of the target script'²

Transliteration takes no account of the pronunciation of any words - it is concerned only with consistent substitution of 1 letter with another. As such it is preferable to transcription for the storage of bibliographic records, since it is universal. French and English librarians can use the same scheme.

Neither would be able to pronounce the words in the correct Greek manner by looking at the Latin alphabet version, but it can be easily converted back to the Greek for Greek readers to understand. Transliteration also enables automatic conversion between scripts to be made by computer.

Librarians outside tend to claim that they transliterate their Greek material using standard transliteration schemes. In fact, using Wellisch's definitions these schemes are not transliteration but transcription tables, since most make some attempt to show the pronunciation of words and none uses 1 to 1 conversion.

The chart of romanisation tables prepared as part of Project Helen (fig. 2) shows the main schemes in use in libraries outside Greece. The only one which comes near to being a true transliteration scheme is ISO R843 since this is consistent in conversion and although the letter e is used for both epsilon and ita, the use of a macron diacritical mark differentiates between the two letters.

Similarly the letter o is used for omicron and o with a macron is used for omega. It is only the fact that combinations of letters (th for theta and ps for psi) are used that stops this scheme from being a true transliteration scheme according to Wellisch's definition.

Although the ISO R843 scheme is the most consistent of all the tables, it does pose some equipment problems of its own. This is in the use of the macron to differentiate between letters. Many systems do not support this non-spacing accent and an alternative mark (such as a circumflex) may have to be used. This immediately causes problems for the automatic conversion scripts. Similar problems occur with the Library of Congress table which uses both macrons and a underline. Again many systems cannot produce a non-spacing underline. I was interested to see a Committee draft for Hellenic Standard ELOT 743.1 which uses an underline to differentiate between ita and iota and between omicron and omega and allows the underline to appear before the letter as well as underneath. This would solve the problem that many systems have of not being able to produce the correct non-spacing accents.

ROPMANISATION TABLES

Greek	ELOT 743	L of C	ISO R843	BL pre 75	IT	RAK
α	a	a	a	a	a	a
αυ	av, af	au				au
αῦ						ay
β	v	b,v ¹	b	b	b	b
γ	g	g	g	g	g	g
γγ	ng	ng ⁴		ng ⁴	ng	ng
γκ	gk	nk ⁴		g ⁵ , nk ⁴	nk	gk,n
γξ	nx	nx ⁴		nx ⁴	nx	nx
γχ	nch	nch ⁴		nch ⁴	nch	nch
Greek	ELOT 743	L of C	ISO R843	BL pre 75	IT	RAK
δ	d	d	d	d	d	d
ε	e	e	e	e	e	e
ευ	ev,ef					eu
ζ	z	z	z	z	z	z
η	i	e	e	e	e	e
ηυ	iv,if					eu
θ	th	th	th	th	th	th
ι	i	i	i	i	i	i
κ	k	k	k	k	k	k
κχ						cch
λ	l	l	l	l	l	l
μ	m	m	m	m	m	m
μπ	b, mp	b ⁵			b ⁵	mp
ν	n	n	n	n	n	n
ντ	nt	d ⁵		d ⁵		nt
ξ	x	x	x	x	x	x
ο	o	o	o	o	o	o
ου	ou	ou				u
οῦ						oy
π	p	p	p	p	p	p

ρ	r	r	r	r	r	r
ρ		rh2		rh		r
σ	σ	σ	σ	σ	σ	σ
τ	t	t	t	t	t	t
υ	y	y ^a	u	u	y ^a	y
υι	yi					
φ	f	ph	f	ph	ph	ph
χ	ch	ch	h	ch	ch	ch
ψ	ps	ps	ps	ps	ps	ps
ω	o	o	o	o	o	o
·		h		h		h

Notes

- 1) b for Classical Greek, v for Modern Greek (post 1453)
- 2) h is included, whether or not the mark appears in the Greek.
- 3) u in diphthongs.
- 4) Medial.
- 5) Initial only.

Abbreviations

ELOT 743	ΕΛΛΗΝΙΚΟΣ ΟΡΓΑΝΙΣΜΟΣ ΤΥΠΟΠΟΙΗΣΕΩΣ 743 (Hellenic Standard 743)
L of C	Library of Congress
ISO R843	International Standards Organization R843
BL pre 75	British Library pre 1975 IT Regole Italiane di Catalogazione per autori
RAK	Regeln für die alphabetische Katalogisierung

All schemes (other than ISO R843) shown on the table are really transcription schemes, since the conversion of letters such as gamma depend upon their relative position to other letters. Thus gamma could be the letter g or n and epsilon could be u or y depending on the scheme used and the position of the original letter. Even the draft Hellenic Standard ELOT 743.1 in its present form becomes a transcription rather than a transliteration when it differentiates between epsilon used with alpha or epsilon or epsilon with a consonant.

The distinction between transcription and transliteration are important when considering the automatic conversion of bibliographic records between scripts. At King's College, London we made a conscious decision to use the ISO R843 scheme when we began to convert our card catalogue of Greek records to our automated system, since we knew that this was the only system at the time which would allow a simple automatic conversion back to the Greek script. Our long-term aim is to provide our Greek

readers with Greek bibliographic records in Greek script, since this is the only way to abolish ambiguities.

Part of the work of Project Helen has been to identify the main romanisation schemes used by libraries outside Greece. From the statistics (fig³) it can be seen that only 3 libraries (1 Academic & 2 National) use the ISO R843 scheme. By far the most popular scheme is the library of Congress (18 of a total of 32). A survey of 146 world libraries in 1974 found that the Library of Congress scheme was used by more libraries than the next 2 romanisation schemes together (25 libraries were American, 66 European, 9 African, 40 Asian, 2 from Oceania and 4 USSR)⁴ So twenty years later the Library of Congress scheme is still dominant and likely to remain so while libraries are content to have Greek records in the Latin alphabet.

However use of the same scheme does not ensure uniformity. Many libraries admit to adapting the Library of Congress scheme to suit their own needs. For example the Greek letter veta should be shown as b for ancient Greek but v of Modern Greek (after 1453). Some librarians feel that 1453 is too early to be considered modern so continue to use b for veta. An even bigger problem is the rule which states that the letter h should be used to signify a rough breathing mark, whether or not the mark appears in the original Greek. This rule is ignored by many librarians thus causing problems of inconsistency within a database. An example of this can be seen by doing a title word search for ελληνική. Any library using the Library of Congress scheme should enter this as hellenike using the letter h to signify a rough breathing mark regardless to when the book was printed. However the word ellenike can often be found. Inconsistencies like this become important when searching databases which make charges.

Results from Project Helen Questionnaire

Romanisation schemes used

a) Academic Libraries	
15 (of 22) use Library of Congress	
1	British Library pre 75
1	Oxford for pre 1850 publications and British Library pre 75 for post 1850 publications
1	International Standard or rganisation R843
1	Journal of Modern Greek style sheet
1	own scheme
1	what is found on the SLS database

(mainly LC and ISO).

b) Public Libraries

2 (of 5) use Library of Congress

1	Permanent Committee on Geographical Names for British Official Use
1	Own scheme
1	Unknown

c) National Libraries

1 (of 5) uses International Standard Organisation R843

1	ISO R843 and Hellenic Standard 743
1	Library of Congress and British Library pre 1975
1	Regeln für die alphabetische Katalogisierung
1	Regole Italiane di Catalogazione per Autori

(Many Libraries 'modify' their use to the tables).

Treatment of Names - Modern Greek

Anglo American cataloguing rules state that authors of works in non-roman script should be entered under a romanized form of name using a romanization table. Alternatively one can choose the form of name that has become well-established in English-language reference sources (Rule 22.3C2). This means that the more well-known a Greek author becomes, the more likely it is that there will be many forms of the name found. It is likely that records will be found under different romanization schemes and, especially if the writer's works have been translated into English, under translated versions of the name. Results from the Project Helen survey showed that most Libraries will use a Name Authority file (either British Library or Library of Congress) for their first choice of name and then romanise where the name is not found. Many Modern Greek names do not appear in either file, so romanisation has to take place. It is ironic that bibliographic records of the less well-known Greek writers are often easier to find, since there are fewer versions of their names available.

Equipment issues

It has always been possible to buy Greek typewriters and computers can display Greek characters as well as Latin characters, providing the right character set is used. So why have all these problems of translation, transcription and transliteration arisen?

One reason is, probably, the proportion of Greek material held by each Library. Usually the proportion of Greek language material held will be small so there is little

incentive to try to solve specific Greek problems. Dual script computers are not standard in the UK. and Library systems are designed to handle Latin script only. Hence there is, at present, no standard solution of how to handle more than one script in a Library catalogue outside Greece. Transliteration is really only an interim solution to the problem of dual scripts. It creates an additional barrier to readers in their search for information. What is really needed are library automated systems which will use character sets that can cope with more than one alphabet in a standard manner.

In the future it is possible that the new 32-bit iso 10646 standard (or at least the subset of this - Unicode) may be accepted as the standard character set for all computers. This would allow for much easier communication between computers and (provided the producers of Library automated systems used it) allow the easier handling of dual scripts.

Hopefully it will not be too long before the translation, transcription and transliteration of Greek bibliographic records will be a thing of the past and we will all be able to exchange dual script records in a standard format.

Evelyn Cornell
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