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AN APPROACH TO THE LATIN PAPYRI FROM HERCULANEUM*

Why are the Latin papyri so few?

The bulk of the 62 papyrus scrolls found in the Papyrus Villa in Herculaneum represents about 10% of the Greek ones. This percentage corresponds to the relation between Latin and Greek texts from antiquity in general. The relatively few Latin papyri from Herculaneum, then, do not necessarily indicate a lesser interest in Latin than in Greek literature in the Villa. There may simply not have been so many Latin papyri available.

Earlier work and Gigante's theory on PHerc. 817

Nearly all the Latin papyri have been hearly damaged, by mud and water which washed out most of the text, and L, carbonization. The difficult state of the papyri is the reason why they have remained almost unknown to this day.

An exception is PHerc. 817 which is fairly well preserved and contains the so called *Bellum Actiacum*, a hexameter poem which deals the Egyptian war of Octavianus and the suicide of Cleopatra². If G

^{*} This article is built upon a lecture given in Copenhagen at the 20th International Congress of Papyrologists, August 1992. The text is not identical with the one which will be published in the proceedings of the congress. The congress text had to be written on diskette and so could not, among other things, contain drawings of the scripts used in the papyri.

¹ This information has kindly been given by my colleague, Professor E. Kraggerud.

² See G. GARUTI (ed.), *C. Rabirius, Bellum Actiacum, PHerc.* 817, Bologna 1958; R.I. BONAVOLONTÀ, «Per una nuova edizione del PHerc. 817», in *Atti del XVII Congresso Internazionale di Papirologia*, Napoli 1984, vol. II, 583-90; E. KRAGGERUD, «Some notes on the so called Carmen de Bello Actiaco (Pap. Herc. 817)», in *SO* LXV, 79-92; G. ZECCHINI, *Il carmen de bello Actiaco*, Stuttgart 1987, with KRAGGERUD'S rec. *Gnomon* (1991),

gante's theory is right, that Varius and not Rabirius is the author³, the poem must have been written between 31 and 14 B.C.⁴ This theory agrees with the type of writing, which may be called a Pre-Classical Capital script, a forerunner to the Classical Capital script which appears in the first century A.D. (see below).

The Oxford (O) and Naples disegni (N)⁵ were drawn in the last century from 30 of the 62 Latin papyri and were an important contribution for their time. On the basis of 20 Oxford disegni Lindsay made his survey of the Latin papyri in 1890⁶. He was able to show that the papyri contained remains of hexameter poems, speeches, panegyrics and dialogues⁷.

It is, however, quite arbitrary what has been drawn and what not. There is far more text preserved in the papyri than shown in the disegni. The disegni are further made freehand and give no reliable picture of the real handwriting. If we want to compare the size of the letters, the disegni are quite useless.

Use of photos and microscope

A new method for micro photographing and microscope drawing has made it possible to decipher fragments from Lucretius and Ennius. These methods are now used on the Latin papyri at large.

168-9. Further bibliography in M. GIGANTE (ed.), Catalogo dei Papiri Ercolanesi, Napoli 1979. 188-9.

- ³ M. GIGANTE, «Virgilio e i suoi amici tra Napoli e Ercolano», in Accademia Nazionale Virgiliana di Scienze Lettere e Arti. Mantova 1991, 87-125.
 - ⁴ See R. HAHN, «L. Varius Rufus», in RE, Zweite Reihe VIII, Band A. 410-3.
- ⁵ N and O (in copies) are kept in the Officina dei Papiri, Biblioteca Nazionale, Naples. N can also be seen in *Herculanensium Voluminum quae supersunt Collectio Altera*, XI vols., Napoli 1862-1876. O can be seen on microfilm in Mssrs. Kingsbury and Notcutt (45, St. Georges Place, Knightsbridge, London), *Herculaneum Papyri photographed for the Oxford Philological Society* (without year), and partly in W. Scott, *Fragmenta Herculanensia*, Oxf. 1885.
- ⁶ W.M. LINDSAY, «The Bodeleian facsimiles of Latin papyri from Herculaneum», in CR IV (1890), 441-5.
- ⁷ Hexameter poems: PHerc. 397, 399, 817, speech: PHerc. 1484, panegyrics: PHerc. 215, 394, dialogue: PHerc. 413. On PHerc. 1067 and 1475 (speeches) see below with note 14.
- ⁸ K. KLEVE et al., «Three technical guides to the papyri of Herculaneum: how to unroll, how to remove sovrapposti, how to take pictures», in *CErc* XXI (1991), 111-24, esp. 117 ff.
- ⁹ K. Kleve, «Lucretius in Herculaneum», in CErc XIX (1989), 5-27; Id., «Ennius in Herculaneum», in CErc XX (1990), 5-16; Id., «Phoenix from the ashes: Lucre-

About 10.000 micro photos have so far been taken. They cover one half of the papyri. Care has been taken to spread the photos so that they give an impression of the papyri as a whole. The goal is to have a photo collection where every square millimetre of the papyri is recorded.

315

Three Latin scripts

There are three main types of scripts in the Latin papyri. They are presented in Table I: Early Roman, Pre-Classical Capital and Classical Capital. The terms have been borrowed from J.O. Tjäder ¹⁰ and give a better instrument for identification than the older lump designation of *capitalis rustica*. The letters presented have been drawn through a microscope from photos, all in the same measure ¹¹.

Early Roman script is found in the Ennius and Lucretius papyri, PHerc. 21 and 1829-31. The Lucretius papyri presumably are from the middle of the first century B.C., the Ennius papyrus (actually *Annales*, book 6¹²) may be much older. Note that the Lucretius letters are bigger and take more space than the other types of letters. This speaks for the importance allotted to the *De rerum natura* in the Papyrus Villa¹³.

Pre-Classical Capital script is found in the *Bellum Actiacum*, PHerc. 817, which probably was written between 31 and 14 B.C. (see above), early imperial time. Classical Capital script is found in PHerc. 1475 which seems to be some public speech (*oratio*) ¹⁴. It is the same

tius and Ennius in Herculaneum», in *The Norwegian Institute at Athens* (1991), 57-64. Cf. W. Suerbaum, «Zum Umfang der Bücher in der archaischen lateinischen Dichtung: Naevius, Ennius, Lukrez und Livius Andronicus auf Papyrus-Rollen», in *ZPE* XCII (1992), 153-73, esp. 163-7.

¹⁰ J.O. TJÄDER, «Skrift, skrivande och skrivkunnighet i det romerska världsriket», in Kungl. Humanistiske Vetenskaps-Samfundet i Uppsala, Arsbok 1981-82, 83-127, esp. 110-3 (its Italian equivalent is «Considerazioni e proposte sulla scrittura latina nell'età romana». Palaeographica diplomatica et archivistica, Studi Battelli I, Roma 1977, 31-60).

- ¹¹ K. Kleve, *CErc* XXI (1991), 121-4 (op. cit. note 8).
- ¹² K. Kleve, CErc XX (1990), 5-16 (op. cit. note 9).
- ¹³ K. Kleve, *CErc* XIX (1989), 5 f. (op. cit. note 9). For the impact of this discovery on Lucretian scholarship cf. Kleve, op. cit., 5, and on the question of the length of a papyrus scroll cf. Kleve, op. cit., 7, and Suerbaum, *ZPE* XCII (1992), 163-4 (op. cit. note 9).
- ¹⁴ R. Seider, *Paläographie der lateinischen Papyri*, Vol. II, 1, Stuttgart 1978, 35 f. (with plates); F. Costabile, «Opere di oratoria politica e giudiziaria nella biblioteca della Villa dei Papiri: i PHerc. Latini 1067 e 1475», in *Atti del XVII Congresso Internazionale di Papirologia*, Vol. II, Napoli 1984, 591-606.

Table I - Latin scripts in Herculaneum

e Classical 817 ell. Act.)	Classical 1475 (Orat.)		ly Roi		Capit Pre Classical	Classical
en. Act.)			1829		817	1475
	(Oral.)	(Enr	1.) (Lı	ıcr.)	(Bell. Act.)	(Orat.)
A,	Λ	R	7	7	R	R
B	8	S	,5	5	5	9
C	C	T	7	T	Ţ	ı
٥	1)	V	J	75	\sim	V
E	£	X	X	7	X	X
, , , , , , , , , ,		Z		2		
G		INT		•	Letter om k om te	. ,
H	H	DIS	7			
1	L		1			
1	L	1100				
M	M	PAR	>		· ئ	-
N	N	COR	~		0.5	cm
۵	0	DEL	E.	1,4 - 1,44		•
	r		-5 Cm			
2	Q			14.4 14.4 1		
	C Ø £ F G H	C C C D D D D D D D D D D D D D D D D D	B B S C T D V E E X F Z C INT H DIS L ACC L PAR N COR D DEL	B B S J C T T D V U E L X X F Z G INT H DIS 1 ACC 1 L PAR X N COR	B B S J J C C T T T D V G Z E X X J F Z Z INT H DIS J I ACC I I ACC I I ACC I O DEL T	B B S S S S S C C T T T J B D D V G C V V E X X X X X F Z Z G INT H DIS J J ACC I ACC I PAR X PAR X O DEL T

type of script which we can see in the Gallus papyrus from Egypt ¹⁵. The script stems from the first century A.D., later imperial times, but, of course, before 79 A.D.

The three types of script will be used for a relative dating of the papyri in Table II: papyri with Early Roman script presumably belong to republican times, first century B.C. or earlier, papyri with Pre-Classical Capital to early imperial times after 31 B.C., and papyri with Classical Capital to later imperial times, first century A.D., before 79 A.D. This dating cannot, of course, be watertight. Early Roman script may still have been used parallel with the Capital in the first century A.D., as we can observe in the Pompeian graffiti, and Capital script may have been used in the first century B.C., as we can observe in contemporary inscriptions. But as a first and rough approach to a dating of the papyri our scheme may do.

The Early Roman script in the papyri has hitherto remained more or less undetected. The photographic material in the palaeographical works of Seider (see note 14) and Nicolaj 16 shows only the Capital scripts. Lindsay, however (see note 6), has been aware that such a «semicursive» script existed, and if we consult the *disegni*, we can also see it.

The Early Roman script is a rugged handwriting with an affinity to Pompeian graffiti. Some letters are high and big, others low and small, some lean to the right, others to the left. This ruggedness disappears in the Capital scripts. The writing becomes regular, smooth and even. Early Roman script also uses several of «our» lower case letters: a, b, d, h (Lucr.), p, q, r. The widespread theory, then, that the low case letters developed from the fifth century uncials and ninth century Carolingian minuscles can hardly be right. The «small» letters are already there in our papyri from the first century B.C. and must afterwards have lived their lives alongside the capitals for centuries.

The forms of the v are also characteristic: It starts with the rounded u in early Roman, which changes to the pointed v in the Capital scripts.

The two Capital scripts use only upper case letters (A, B, C, etc.). The most important difference between them is that the Pre-Classical is a simple and elegant writing without adornment, whereas the Classical

¹⁵ R.D. Anderson et al., «Elegiacs by Gallus from Qasr Ibrim», in *JRS* LXIX, 125-55, esp. 135-7 with plates IV-VI.

¹⁶ C.P. NICOLAJ, «Osservazioni sul canone della capitale libraria romana fra I e III secolo», in *Miscellanea in mem. G. Cencetti*, Torino 1973, 3-28, Tav. I-VI.

LATIN PAPYRI

Table II - Latin scripts clusters in Herculaneum

Early Roman (1st cent. B.C.)	Pre Classical Capital (after 31 B.C.)	Classical Capital (1st cent. A.D.)		
21 hex	76	32		
78	90 hex	40		
215	153	342		
217	372	359		
218	O 399 hex	371 hex		
219	412	393		
279	817 hex	506 hex		
394 hex	1057	1059 hex		
395	1472	1066 Gr		
396	1644	1067		
O 397 hex	1774	1070		
413		1254		
502	11 papyri	1475		
513	3 hex(ameters)	1484		
514	1 O(xford disegno)	1535		
766 Gr		1558		
876 hex		(1806)		
904				
1208				
1257		17 papyri		
1463		3 hex(ameters)		
1491 Gr		1 Gr(eek words)		
1620		1 (outside the Papyrus Villa)		
1624 hex				
1665 hex				
1751 hex				
1763 hex				
1829 hex				
1830 hex				
1831 hex				
30 papyri				
11 hex(ameters)				
2 Gr(eek words) 1 O(xford <i>disegno</i>)				

letters have been furnished with extra «heads» and «feet», which make them somewhat heavy (cf. the forms of A, E, F [no form of Classical Capital G has so far appeared in the photos], H, I, M, N, P, R, X). It is not unreasonable to assume that the more complex letters have develop-

ed from the simpler ones, and so that what we have called Pre-Classical Capital, must be older than the Classical Capital.

In addition to the letters all the script types use interpuncts (INT) between words, a Roman invention which is also found in inscriptions, but not in the Greek papyri. Distinction signs (DIS) are placed at the end of hexameters, accent signs (ACC) to mark the ictus ¹⁷, and paragraph signs (PAR) under a line or verse on the left side of the column to mark a pause. Only the paragraph occurs in the Greek papyri.

In the Ennius papyrus (PHerc. 21) one also finds the *coronis* sign (COR) which marks the end of a book, a sign well known from the Greek papyri. It is further possible that there once occurs a *deleatur*-sign (DEL): a t with a cross (x) over it 18. In that case our habit of «crossing out» a letter is very old. In the Greek papyri letters are deleted by putting a dot above them or with a horizontal stroke.

What can we expect to find?

With the script clusters shown in table II we have tried to determine how the three types of script are distributed over the papyri.

30 of the Latin papyri are written in Early Roman script and so probably belong to the first century B.C. 11 papyri are written in Pre-Classical Capital script and so probably belong to the last part of the first century B.C. (from 31 B.C.). 17 papyri are written in Classical Capital script and so probably belong to the first century A.D. (until 79 A.D.) 19.

The distribution of the scripts indicates that the library in the Papyrus Villa has been an active library, kept up to date to the bitter end.

The papyri with Early Roman script from republican times outnumber the papyri with Capital scripts from imperial times: 30 against 28. We thus have a fair chance of regaining some old Latin literature.

At least 11 of the papyri with Early Roman script contain hex-

¹⁷ The extensive use of accents in the *Bellum Actiacum* (PHerc. 817) poses a problem as one should think that the Augustan Romans were so well versed in hexameter scanning that they had no need of such extra help. The papyrus may be an edition for beginners or for a public recitation where all precautions had to be taken.

¹⁸ An idea of Suerbaum (op. cit. note 9, 167). I have thought that what Suerbaum means is a cross, really is an e which has been forgotten and afterwards placed under the «roof» of the t.

¹⁹ The lists in Table II contain only 58 papyri, four less than the 62 we started up with. One of the papyri is so damaged that it has been impossible to determine the script. Three papyri have disappeared.

320 K. KLEVE

ameters, as can be seen from the occurrence of distinction signs. One papyrus now only exists as an Oxford *disegno*. Lindsay (op. cit. note 6, 443) has shown that it is written in hexameters. Four of them are Ennius (PHerc. 21) and Lucretius (PHerc. 1829-31). Two of the papyri also contain Greek script, possibly terms or citations like them we know from Cicero.

Of the papyri which are written in Pre-Classical script from early imperial times, three papyri contain hexameters (one of them is *Bellum Actiacum* [PHerc. 817]). Of the papyri which are written in Classical Capital script from late imperial times, three papyri contain hexameters and one Greek script.

An extra assistance

Decipherment is time consuming: taking photos, drawing pictures, reconstructing letters, restoring texts. To make things easier and quicker, computer program are being developed for producing word lists, search for words, search for letter combinations, graphics for reconstructing letter fragments, enhancement of photos²⁰. As soon as the programs become practicable, they will be announced in the «Cronache Ercolanesi».

When Lindsay wrote his article more than hundred years ago, he had not seen the papyri himself, but knew only a limited amount of the *disegni*. All the same he strongly recommended a further study of the Latin papyri: «It would be a long and laborious business, but quite worth doing» (op. cit. note 6, 445).

Today, with better technique, equipment and methods, I want to make Lindsay's words my own. It still is a long and laborious business, but quite worth doing.

²⁰ Algorithms for programs in K. KLEVE et al., «Informatica papyrologica», in *Patyrologica Florentina* XIX, Firenze 1990, 77-100. Cf. also E.S. ORE, «Pictures, computers and storage space», in *Humanistiske data* I, University of Bergen 1991, 165-6; J. BAIMA, 4 base for CD-Rom, The language database, Software for Scholars, «Silver Mountain Software», Dallas 1990. A concordance program together with the Philodemus texts is seing implemented by K.Q. Vo (University of Oslo) in the computer system of the Dipartimento di Filologia Classica, Università di Napoli.