

A SIMPLE MEANS FOR INPUT AND OUTPUT OF GREEK TEXTS ON A SMALL IBM 1130 OUTPUT

Although there are shorter ways of printing Greek texts on large computer systems, it might be useful to see how it can be done on a small one. At my disposition there is an IBM 1131 central processing unit with a core capacity of 8 k and single disk drive, 1442 card read punch and 1132 printer. For the input on punched cards I use a transliteration shown (fig. 1) by the image of the keyboard of the IBM key punch 26. Fig. 2 shows a test output of the first verses of Sophocles' Electra. For the purpose of demonstration, each line is read in from a punched card and put out as it has been read in on the console printer using the normal computer selectric ball, then the array in core is converted by a special subroutine, called "Greek", finally the selectric ball is replaced by the usual commercial Greek selectric ball, and the same line is put out again in Greek. The transliteration symbols for accents, spiritus, and iota subscriptum cause a back space automatically. 'G' makes the next character a capital. Please read \$ for U and apostrophe for Ö as actually put in. It is the German selectric ball that causes the trouble. One sees that the accentus gravis with or without combination with spiritus does not appear in the output. Reason : My selectric ball does not have it, but it is considered in

the program. As soon as a selectric ball with accentus gravis is available, the program is easily changed so that it comes out properly. For the convenience of the reader I enclose the FORTRAN test program. If anyone is interested I shall be glad to let him have a deck of binary cards that can be entered into the monitor version 1 or 2 of his IBM 1130 system. The monitor will handle any other problem as well as before, and the additional core requirements are small. I am much obliged to Mr. Zimmermann, dipl. ing., Hannover, for his help and advice.

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// FORTRAN
*IOCS (CARD, TYPEWRITER, 1132 PRINTER )
*ONE WORD INTEGERS
*LIST SOURCE PROGRAM
** SEM KL PHILOL GOETTINGEN TEST GREEK OUTPUT
*NAME GRAEC
*EXTENDED PRECISION
  DIMENSION KTEXT(80),KGRAE(100)
  1704 DO 1000 IREP=1,8
  1   FORMAT(80A1)
     READ(2,1)KTEXT
     WRITE(1,5)KTEXT
  5   FORMAT(/,20X,80A1)
     PAUSE 8000
C   LATIN BEING REPLACED BY GREEK BALL
     CALL GREEK(KTEXT,10,80,KGRAE,KONEZ)
     WRITE(1,3)(KGRAE(L),L=10,KONEZ)
  3   FORMAT(29X,100A1)
     PAUSE 1
C   GREEK BEING REPLACED BY LATIN BALL
  1000 CONTINUE
     PAUSE 9999
     CALL DATSW(0,KONEZ)
     IF(KONEZ-1)1704,1130,1704
  1130 CALL EXIT
     END

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FEATURES SUPPORTED
ONE WORD INTEGERS
EXTENDED PRECISION
IOCS

CORE REQUIREMENTS FOR GRAEC
COMMON 0 VARIABLES 184 PROGRAM 114

END OF COMPILATION

Image of the IBM card puncher 26 keyboard.

=	,	\$:			7	0		
	,	5	:			7	/		
'	(*)						
		5				1	2	3	4
Q	W	E	R	T	Y	U	I	O	P
θ	ω	ε	ρ	τ	ψ	υ	ι	ο	π
						4	5	6	
A	S	D	F	G	H	J	K	L	
α	σ	δ	φ	↗	η		κ	λ	
				Shift to capital		7	8	9	
Z	X	C	V	B	N	M			
ζ	χ	γ	ν	β	ν	μ			

Fig. 1

-GW T09U STRATHC3HSANTOÜ IEN GTRO3IJA POT3E
 Ὡ τοῦ στρατηγήσαντος ἐν Τροίᾳ ποτέ

1GACAM3EMNONOÜ PA9I , N9UN 1EKE9INÖ 4E*EST3I SOI
 Ἄγαμέμνωνος παῖ , νῦν ἐκεῖν' ἔξεστί σοι

PAR3ONTI 1E3USSEIN , &WN PR3OQUMOÜ -HSQÖ 1AE3I .
 παρόντι λεύσσειν , ὧν πρόθυμος ἦσθ' ἀεὶ .

GT60 C6AR PALAI6ON 4GARCOÜ O2UP3OQEIÜ T3ODE ,
 Τό γάρ παλαιόν Ἄργος οὐπόθεις τόδε ,

T9HÜ O1ISTROPL9HCOÜ 4ALSOÜ 1GIN3AXOU K3ORHÜ .
 τῆς οἰστροπλήγος ἄλλος Ἰνάχου κόρης .

GA5UTH DÖ , 1GOR3ESTA , T09U LUKOKT3ONOU QE09U
 Αὕτη δ' , Ὀρέστα , τοῦ λυκοκτόνου θεοῦ

1ACOR6A GL3UKEIÖÜ . GO2U* 1ARISTER9AÜ DÖ 5ODE
 ἀγορά Λύκειος . οὐξ ἀριστερᾶς δ' ὄδε

5GHRAÜ 20 KLEIN6OÜ NA3OÜ . GO&I DÖ 2IK3ANOMEN ,
 Ἥρας ὁ κλεινός ναός . οἷ δ' ἰκάνομεν ,

Fig. 2