
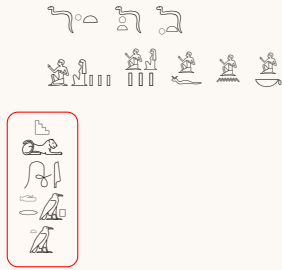
 AxByCz 

ABC tabular a/b/c par/space/ DEF stack d/e/f big/med/small kern Gg  
smaller Hh reflect Ii fbox Jj cframe (blue) Kk rndframe (red) Ll raise Mm lower  
Nn phantomh Oo phantomv Rr larger UEV bottom stack u/v thin vspace/  $\bar{A}\bar{a}$   
bottom left  $\tilde{A}\tilde{a}$  top right

This version uses adjustbox environments for layout. x



# Transliteration Scheme

=m = <b>m</b>	a012 =	a041 =	b001 =
=n = <b>n</b>	a013 =	a042 =	b002 =
=A = <b>A</b>	a014 =	a042a =	b003 =
=B = <b>B</b>	a014a =	a043 =	b004 =
=C = <b>C</b>	a015 =	a043a =	b005 =
=D = <b>D</b>	a016 =	a044 =	b005a =
=E = <b>E</b>	a017 =	a045 =	b006 =
=F = <b>F</b>	a017a =	a045a =	b007 =
=G = <b>G</b>	a018 =	a046 =	b008 =
=H = <b>H</b>	a019 =	a047 =	b009 =
=I = <b>I</b>	a020 =	a048 =	c001 =
=J = <b>J</b>	a021 =	a049 =	c002 =
=K = <b>K</b>	a022 =	a050 =	c002a =
=L = <b>L</b>	a023 =	a051 =	c002b =
=M = <b>M</b>	a024 =	a052 =	c002c =
=N = <b>N</b>	a025 =	a053 =	c003 =
=O = <b>O</b>	a026 =	a054 =	c004 =
=P = <b>P</b>	a027 =	a055 =	c005 =
=Q = <b>Q</b>	a028 =	a056 =	c006 =
=R = <b>R</b>	a029 =	a057 =	c007 =
=S = <b>S</b>	a030 =	a058 =	c008 =
=T = <b>T</b>	a031 =	a059 =	c009 =
=U = <b>U</b>	a032 =	a060 =	c010 =
=V = <b>V</b>	a032a =	a061 =	c010a =
=W = <b>W</b>	a033 =	a062 =	c011 =
=X = <b>X</b>	a034 =	a063 =	c012 =
=Y = <b>Y</b>	a035 =	a064 =	c013 =
=Z = <b>Z</b>	a036 =	a065 =	c014 =
=a = <b>a</b>	a037 =	a066 =	c015 =
=b = <b>b</b>	a038 =	a067 =	c016 =
=c = <b>c</b>	a039 =	a068 =	c017 =
=d = <b>d</b>	a040 =	a069 =	c018 =
=e = <b>e</b>	a040a =	a070 =	c019 =
=f = <b>f</b>			
=g = <b>g</b>			
=h = <b>h</b>			
=i = <b>i</b>			
=j = <b>j</b>			
=k = <b>k</b>			
=l = <b>l</b>			
=macron = <b>̄</b>			
=breve = <b>˘</b>			
=ogonek = <b>˛</b>			
=ehnop = <b>ǹ</b>			
=ehexclam = <b>⚡</b>			
=eharrow = <b>↩</b>			
a001 =			
a002 =			
a003 =			
a004 =			
a005 =			
a005a =			
a006 =			
a006a =			
a006b =			
a007 =			
a008 =			
a009 =			
a010 =			
a011 =			

c020 =		d039 =		d065 =		e028 =		f030 =	
c021 =		d040 =		d066 =		e028a =		f031 =	
c022 =		d041 =		d067 =		e029 =		f031a =	
c023 =		d042 =		d067a =		e030 =		f032 =	
c024 =		d043 =		d067b =		e031 =		f033 =	
d001 =		d044 =		d067c =		e032 =		f034 =	
d002 =		d045 =		d067d =		e033 =		f035 =	
d003 =		d046 =		d067e =		e034 =		f036 =	
d004 =		-d =		d067f =		e034a =		f037 =	
d005 =		d046a =		d067g =		e036 =		f037a =	
d006 =		d047 =		d067h =		e037 =		f038 =	
d007 =		d048 =		e001 =		e038 =		f038a =	
d008 =		d048a =		e002 =		f001 =		f039 =	
d008a =		d049 =		e003 =		f001a =		f040 =	
d009 =		d050 =		e004 =		f002 =		f041 =	
d010 =		d050a =		e005 =		f003 =		f042 =	
d011 =		d050b =		e006 =		f004 =		f043 =	
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d013 =		d050d =		e008 =		f006 =		f045 =	
d014 =		d050e =		e008a =		f007 =		f045a =	
d015 =		d050f =		e009 =		f008 =		f046 =	
d016 =		d050g =		e009a =		f009 =		f046a =	
d017 =		d050h =		e010 =		f010 =		f047 =	
d018 =		d050i =		e011 =		f011 =		f047a =	
d019 =		d051 =		e012 =		f012 =		f048 =	
d020 =		d052 =		e013 =		f013 =		f049 =	
d021 =		d052a =		e014 =		f013a =		f050 =	
-r =		d053 =		e015 =		f014 =		f051 =	
d022 =		d054 =		e016 =		f015 =		f051a =	
d023 =		d054a =		e016a =		f016 =		f051b =	
d024 =		d055 =		e017 =		f017 =		f051c =	
d025 =		d056 =		e017a =		f018 =		f052 =	
d026 =		d057 =		e018 =		f019 =		f053 =	
d027 =		d058 =		e019 =		f020 =		g001 =	
d027a =		d059 =		e020 =		f021 =		-a =	
d028 =		d060 =		e020a =		f021a =		g002 =	
d029 =		d061 =		e021 =		f022 =		g003 =	
d030 =		d062 =		e022 =		f023 =		g004 =	
d031 =		d063 =		e023 =		f024 =		g005 =	
d031a =		d064 =		-l =		f025 =		g006 =	
d032 =				e024 =		f026 =		g006a =	
d033 =				e025 =		f027 =		g007 =	
d034 =				e026 =		f028 =		g007a =	
d034a =				e027 =		f029 =		g007b =	
d035 =									
d036 =									
d037 =									
d038 =									

g008 =	g041 =	i013 =	m012f =	m041 =
g009 =	g042 =	i014 =	m012g =	m042 =
g010 =	g043 =	i015 =	m012h =	m043 =
g011 =	g043a =	k001 =	m013 =	m044 =
g011a =	g044 =	k002 =	m014 =	n001 =
g012 =	g045 =	k003 =	m015 =	n002 =
g013 =	g045a =	k004 =	m015a =	n003 =
g014 =	g046 =	k005 =	m016 =	n004 =
g015 =	g047 =	k006 =	m016a =	n005 =
g016 =	g048 =	k007 =	m017 =	n006 =
g017 =	g049 =	k008 =	-i =	n007 =
g018 =	g050 =	l001 =	m017a =	n008 =
g019 =	g051 =	l002 =	m018 =	n009 =
g020 =	g052 =	l002a =	m019 =	n010 =
g020a =	g053 =	l003 =	m020 =	n011 =
g021 =	g054 =	l004 =	m021 =	n012 =
g022 =	h001 =	l005 =	m022 =	n013 =
g023 =	h002 =	l006 =	m022a =	n014 =
g024 =	h003 =	l006a =	m023 =	n015 =
g025 =	h004 =	l007 =	m024 =	n016 =
g026 =	h005 =	l008 =	m024a =	n017 =
g026a =	h006 =	m001 =	m025 =	n018 =
g027 =	h006a =	m001a =	m026 =	n018a =
g028 =	h007 =	m001b =	m027 =	n018b =
g029 =	h008 =	m002 =	m028 =	n019 =
g030 =	i001 =	m003 =	m028a =	n020 =
g031 =	i002 =	m003a =	m029 =	n021 =
g032 =	i003 =	m004 =	m030 =	n022 =
g033 =	i004 =	m005 =	m031 =	n023 =
g034 =	i005 =	m006 =	m031a =	n024 =
g035 =	i005a =	m007 =	m032 =	n025 =
g036 =	i006 =	m008 =	m033 =	n025a =
g036a =	i007 =	m009 =	m033a =	n026 =
g037 =	i008 =	m010 =	m033b =	n027 =
g037a =	i009 =	m010a =	m034 =	n028 =
g038 =	i009a =	m011 =	m035 =	n029 =
g039 =	i010 =	m012 =	m036 =	n030 =
g040 =	i010a =	m012a =	m037 =	n031 =
	i011 =	m012b =	m038 =	n032 =
	i011a =	m012c =	m039 =	n033 =
	i012 =	m012d =	m040 =	n033a =
		m012e =	m040a =	n034 =
				n034a =
				n035 =
				n035a =
				n036 =
				n037 =

n037a =		nu010a =		o011 =		o040 =		r008 =	
n038 =		nu011 =		o012 =		-q =		r009 =	
n039 =		nu011a =		o013 =		o041 =		r010 =	
n040 =		nu012 =		o014 =		o042 =		r010a =	
n041 =		nu013 =		o015 =		o043 =		r011 =	
n042 =		nu014 =		o016 =		o044 =		r012 =	
nl001 =		nu015 =		o017 =		o045 =		r013 =	
nl002 =		nu016 =		o018 =		o046 =		r014 =	
nl003 =		nu017 =		o019 =		o047 =		r015 =	
nl004 =		nu018 =		o019a =		o048 =		r016 =	
nl005 =		nu018a =		o020 =		o049 =		r016a =	
nl005a =		nu019 =		o020a =		o050 =		r017 =	
nl006 =		nu020 =		o021 =		o050a =		r018 =	
nl007 =		nu021 =		o022 =		o051 =		r019 =	
nl008 =		nu022 =		o023 =		p001 =		r020 =	
nl009 =		nu022a =		o024 =		p001a =		r021 =	
nl010 =		o001 =		o024a =		p002 =		r022 =	
nl011 =		o001a =		o025 =		p003 =		r023 =	
nl012 =		o002 =		o025a =		p003a =		r024 =	
nl013 =		o003 =		o026 =		p004 =		r025 =	
nl014 =		o004 =		o027 =		p005 =		r026 =	
nl015 =		o005 =		o028 =		p006 =		r027 =	
nl016 =		o005a =		o029 =		p007 =		r028 =	
nl017 =		o006 =		o029a =		p008 =		r029 =	
nl017a =		o006a =		o030 =		p009 =		s001 =	
nl018 =		o006b =		o030a =		p010 =		s002 =	
nl019 =		o006c =		o031 =		p011 =		s002a =	
nl020 =		o006d =		o032 =		p007 =		s003 =	
nu001 =		o006e =		o033 =		p008 =		s004 =	
nu002 =		o006f =		o033a =		p009 =		s005 =	
nu003 =		o007 =		o034 =		p010 =		s006 =	
nu004 =		o008 =		o035 =		p011 =		s006a =	
nu005 =		o009 =		o036 =		q001 =		s007 =	
nu006 =		o010 =		o036a =		q002 =		s008 =	
nu007 =		o010a =		o036b =		q003 =		s009 =	
nu008 =		o010b =		o036c =		-p =		s010 =	
nu009 =		o010c =		o036d =		q004 =		s011 =	
nu010 =				o037 =		q005 =		s012 =	
				o038 =		q006 =			
				o039 =		r001 =			
						r002 =			
						r002a =			
						r003 =			
						r003a =			
						r003b =			
						r004 =			
						r005 =			
						r006 =			
						r007 =			

s013 =		t002 =		u001 =		u039 =		v020d =	
s014 =		t003 =		u002 =		u040 =		v020e =	
s014a =		t003a =		u003 =		u041 =		v020f =	
s014b =		t004 =		u004 =		u042 =		v020g =	
s015 =		t005 =		u005 =		v001 =		v020h =	
s016 =		t006 =		u006 =		v001a =		v020i =	
s017 =		t007 =		u006a =		v001b =		v020j =	
s017a =		t007a =		u006b =		v001c =		v020k =	
s018 =		t008 =		u007 =		v001d =		v020l =	
s019 =		t008a =		u008 =		v001e =		v021 =	
s020 =		t009 =		u009 =		v001f =		v022 =	
s021 =		t009a =		u010 =		v001g =		v023 =	
s022 =		t010 =		u011 =		v001h =		v023a =	
s023 =		t011 =		u012 =		v001i =		v024 =	
s024 =		t011a =		u013 =		v002 =		v025 =	
s025 =		t012 =		u014 =		v002a =		v026 =	
s026 =		t013 =		u015 =		v003 =		v027 =	
s026a =		t014 =		u016 =		v004 =		v028 =	
s026b =		t015 =		u017 =		-o =		v028a =	
s027 =		t016 =		u018 =		v005 =		v029 =	
s028 =		t016a =		u019 =		v006 =		v029a =	
s029 =		t017 =		u020 =		v007 =		v030 =	
s030 =		t018 =		u021 =		v007a =		v030a =	
s031 =		t019 =		u022 =		v007b =		v031 =	
s032 =		t020 =		u023 =		v008 =		v031a =	
s033 =		t021 =		u023a =		v009 =		v032 =	
s034 =		t022 =		u024 =		v010 =		v033 =	
s035 =		t023 =		u025 =		v011 =		v033a =	
s035a =		t024 =		u026 =		v011a =		v034 =	
s036 =		t025 =		u027 =		v011b =		v035 =	
s037 =		t026 =		u028 =		v011c =		v036 =	
s038 =		t027 =		u029 =		v012 =		v037 =	
s039 =		t028 =		u029a =		v012a =		v037a =	
s040 =		t029 =		u030 =		v012b =		v038 =	
s041 =		t030 =		u031 =		v013 =		v039 =	
s042 =		t031 =		u032 =		v014 =		v040 =	
s043 =		t032 =		u032a =		v015 =		v040a =	
s044 =		t032a =		u033 =		v016 =		w001 =	
s045 =		t033 =		u034 =		v017 =		w002 =	
s046 =		t033a =		u035 =		v018 =		w003 =	
t001 =		t034 =		u036 =		v019 =		w003a =	
		t035 =		u037 =		v020 =		w004 =	
		t036 =		u038 =		v020a =		w005 =	
						v020b =		w006 =	
						v020c =			

w007 =	w025 =	z002 =	z015e =	aa011 =
w008 =	x001 =	z002a =	z015f =	aa012 =
w009 =	-t =	z002b =	z015g =	aa013 =
w009a =	x002 =	z002c =	z015h =	aa014 =
w010 =	x003 =	z002d =	z015i =	aa015 =
w010a =	x004 =	z003 =	z016 =	aa016 =
w011 =	x004a =	z003a =	z016a =	aa017 =
w012 =	x004b =	z003b =	z016b =	aa018 =
w013 =	x005 =	z004 =	z016c =	aa019 =
w014 =	x006 =	z004a =	z016d =	aa020 =
w014a =	x006a =	z005 =	z016e =	aa021 =
w015 =	x007 =	z005a =	z016f =	aa022 =
w016 =	x008 =	z006 =	z016g =	aa023 =
w017 =	x008a =	z007 =	z016h =	aa024 =
w017a =	y001 =	z008 =	aa001 =	aa025 =
w018 =	y001a =	z009 =	aa002 =	aa026 =
w018a =	y002 =	z010 =	aa003 =	aa027 =
w019 =	y003 =	z011 =	aa004 =	aa028 =
w020 =	y004 =	z012 =	aa005 =	aa029 =
w021 =	y005 =	z013 =	aa006 =	aa030 =
w022 =	y006 =	z014 =	aa007 =	aa031 =
w023 =	y007 =	z015 =	aa007a =	aa032 =
w024 =	y008 =	z015a =	aa007b =	
w024a =	z001 =	z015b =	aa008 =	
		z015c =	aa009 =	
		z015d =	aa010 =	

FS ns [ancient] TS ns [ancient] TS (egytran) bsn [egyptianhieroglyphs] fn [Noto Sans Egyptian Hieroglyphs]

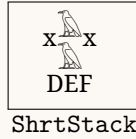
## Basic Layout Metacommands

**Stacking** Tabulation can be done by stacking (when in horizontal runs), or by placing glyphs horizontally adjacent to each other (when in vertical runs).

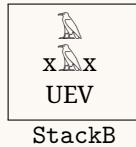


Tabular

A one-column centre-aligned tabular, with column specification of  $\langle ehatabcolspec \rangle$ , initially  $c$ , stacks items row by row. The  $A$  metacommand begins the tabular, and  $C$  ends it, while  $B$  marks the end of each row:  $\overline{\square}$  (An001Bx001C). The environment is `ehatabular`.

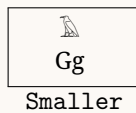


A vertically and horizontally centre-aligned short stack, with column specification hard-coded as cc, stacks items row by row. The D metacommmand begins the short stack, and F ends it, while E marks the end of each row:  $\overline{\Delta}$ (Dn001Ex001F). The environment is **ehabstack**.

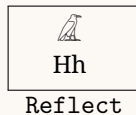


A vertically bottom-aligned and horizontally centre-aligned short stack, with column specification hard-coded as cb, stacks items row by row. The U metacommmand begins the short stack, and V ends it, while E marks the end of each row:  $\ominus$ (Un001Ex001V). The environment is **ehabstackb**.

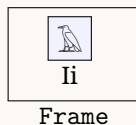
**Transformations** Scaling, mirroring and position-shifts are transformations that can be done with metacommmands.



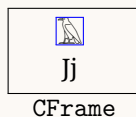
Scales the contents down to  $\langle ehabscale \rangle$ , initially 80%. The environment is **ehabscale**.



Reflects the contents horizontally, like a mirror. The environment is **ehabreflect**.

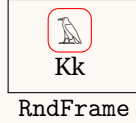


Frames the contents with an fbox with background colour of  $\langle ehabframebg \rangle$ , initially blue!5. The environment is **ehabframe**.

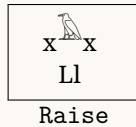


Tightly frames the contents with a frame of colour  $\langle ehabcframecol \rangle$ , initially blue. The environment is **ehabcframe**.

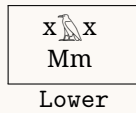




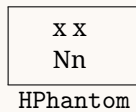
In emulation of a cartouche, frames its contents with a frame of colour  $\langle ehabrndframecol \rangle$ , initially red; margin of  $\langle ehabrndframesep \rangle$ , initially 3pt; rounded corners of factor  $\langle ehabrndframern \rangle$ , initially 4; and background colour of  $\langle ehabrndframebg \rangle$ , initially yellow!21!red!3. The environment is **ehabrndframe**.



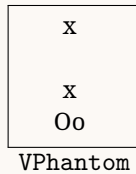
Raises its contents by  $\langle ehraiseamount \rangle$ , initially 0.8ex. The environment is **ehabraise**.



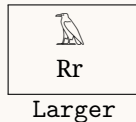
Lowers its contents by  $\langle ehloweramount \rangle$ , initially -0.4ex. The environment is **ehablowner**.



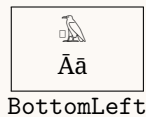
Converts its contents to a horizontal phantom. Intended for incremental spacing purposes, for example with  $\text{z015}$ . The environment is **ehabphantomh**.



Converts its contents to a vertical phantom. Intended for incremental spacing purposes, for example with  $\text{z015}$ . The environment is **ehabphantomv**.



Scales the contents up to  $\langle ehablargersc \rangle$ , initially 1.2 times. The environment is **ehablarger**.



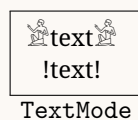
Positions a glyph,  $\langle a \rangle$ , with scale of  $\langle ehablsc \rangle$ , initially 0.72, and raising it by  $\langle ehablraise \rangle$ , initially 0.32ex. The following glyph,  $\langle B \rangle$ , outside the environment, is kerned by  $\langle ehablkern \rangle$  amount, initially -0.4ex:  $\mathfrak{B}$ . The environment is **ehabbottomleft**.



Positions a glyph,  $\langle b \rangle$ , with scale of  $\langle ehabtrsc \rangle$ , initially 0.42, and raising it by  $\langle ehabtrraise \rangle$ , initially 1.2ex and kerns the environment onto the preceding glyph,  $\langle A \rangle$ , by  $\langle ehabtrkern \rangle$  amount, initially -0.6ex:  $\mathfrak{A}$ . The environment is **ehabtopright**.



Colours its contents with `<ehtextcolourspec>`, initially set to blue. The environment is `ehabtextcolour`.



Displays non-glyph text inline in a glyph stream in font `<ehtranslitfont>`, initially Noto Serif, small. To print an exclamation mark in text mode, use `<ehexclam>`: `!text!(!ehexclamtextehexclam!)`. The environment is `ehtranslit`.

**Nesting** Within a `quadrat` string, items may be nested.

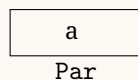


Double frame

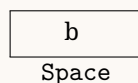


Cartouche, frame, larger, larger, reflected.

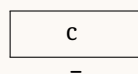
## Adjustments x



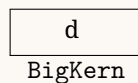
New paragraph: ¶¶  
¶¶



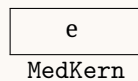
Insert a space: ¶¶ ¶¶



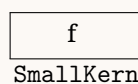
Unassigned





Insert a bigkern (-0.8em): ¶ ◌ > ¶










Insert a medkern (-0.5em): ¶ ◌ > ¶









Insert a smallkern (-0.2em): ¶ ◌ > ¶




u
 Insert a thinvspace (0.2em):  
 ThinV       >  (Ag001Bx001Cb!>!bAg001uBx001C)




v
 Insert a negthinvspace (-0.2em):  
 NegThinV       >  (Ag001Bx001Cb!>!bAg001vBx001C)



**Example**       becomes  



Shrink (GG..gg) both  and : .....  .



Put them into a table (A..B..C): .....  .

Attach the table to  as bottom left (Ā..ā): .....  .

Raise  a touch (L..l): .....  .

Kern into the table (..d..): .....  .

Lower the attached table a touch (M..m): .....  .

Put the attached table into its own table (A..C) for some tiny spacing:  .

**Vocabulary**     (dfn)     (walk)

   (**utchef: to tarry, to delay**) =  (-u)+ (-tchef)+ (-walk)

.heru-.teshr Red Horus the planet Mars   \*;   \*