MHD Reference Materials 1: Preliminary Revised Glyph Catalog

Matthew Looper
Department of Art and Art History, California State University Chico

Martha J. Macri
Professor Emerita, Department of Native American Studies
Research Professor in Linguistics
University of California, Davis

Yuriy Polyukhovych
Faculty of History, Taras Shevchenko National University of Kyiv

Gabrielle Vail
Department of Anthropology, University of North Carolina, Chapel Hill

In this report, we provide a preliminary list of graphemes used in the Maya script, revising the codes and drawings found in previous editions of the *New Catalog of Maya Hieroglyphs* (Macri and Looper 2003; Macri and Vail 2009). The grapheme drawings appear with their corresponding codes as used in the Maya Hieroglyphic Database (MHD) online (see mayadatabase.org). As in previous publications, codical grapheme drawings are by Martha J. Macri, while all other drawings are by Matthew Looper. Appended is a list of grapheme codes with the sign numbers used by J. Eric S. Thompson in his *Catalog of Maya Hieroglyphs* (Thompson 1962).

Some grapheme codes presented here differ from those for the same signs that appeared in previous editions of the *New Catalog*, even though overall, the three-letter code system devised for the *New Catalog* remains in place. More details concerning these reclassifications will be found in the revised edition of the *New Catalog*, in preparation. Some sign designations were changed based on new

research, while others had to be reassigned because of limitations of space within the classification system.

As in previous editions of the *New Catalog*, the fundamental grapheme codes consist of three characters (letters+numbers), which encode unique graphic-functional units in the script. For example, XQ1 designates the cruciform "k'an sign." In the Catalog component of the MHD online, the field that can be queried using these three-letter codes is *catcode*. However, because many signs are polyvalent–that is, they may be used to express more than one meaning or function–we have added a fourth letter to many of the codes. In the case of XQ1, for example, this grapheme is often used to indicate the word *k'an*, meaning "yellow" or "ripe," but it is also sometimes used to indicate the word *k'ahn*, meaning "flat (stone)" or "stairway." Thus, in the MHD, a modified grapheme code XQ1a is used for the first logographic function, while XQ1b is used for the second. The fourth letter is usually arbitrary (e.g. a, b, c, etc), with the exception of the letter 's', which indicates a syllabic function. For example, AA1s is the code for the familiar fish or fish-fin grapheme when it is used as syllabic /ka/, while AA1a is used for the logographic function CHAY/KAY 'fish'. The final 's' is not added to all syllabic graphemes, but only designates a syllabic function for polyvalent signs. These modified codes are employed in the Catalog online in the field *catecodem*, and in the Texts database in two fields: *blcodes* and *graphcode*. Plain three-digit codes can also be queried in these fields as well as the Catalog field: *catcode*.

This system groups graphemes based roughly on visual appearance or form. The first digit indicates the main category, while the second gives a subcategory. The third digit of the code is usually arbitrary. For more details, see previous editions of the *New Catalog*:

A   **Animals (fauna except birds and humans)**

subcategories: A (fish, amphibian), B (supernatural/skeletal snake), C (snake), D (serpent/reptile pattern), K (turtle), L (lizard), M (monkey), P (dog, rodent), R (rabbit), S (elongated snout), T (jaguar), V (deer), W (bat), X (unidentified)

B   **Birds**

subcategories: M (miscellaneous), P (parrot), T (owl), V (vulture), X (unidentified)

H   **Body parts (body parts, except heads and hands)**

subcategories: B (bound hair), E (eye), H (bone), J (jaw), L (leg, foot), M (male genitals), T (torso)

M   **Hands (human or monkey hands)**

subcategories: A (open), B (both), R (right), Z (left)

P   **Human faces (faces that have human characteristics)**

subcategories: A (aged), C (mixed), D ('percentage' motif), E (decoration of eye), G (droplets), H

(hidden eye), J (Ajaw-type), L ('IL' motif), M (object in mouth), N (darkening), T (headdress), X (facing right, upward, or front), Y ('xib'-type)

S   Supernatural faces, skulls (faces with enlarged eyes and other exaggerated or mixed human and animal characteristics)

subcategories: B (bird), C (skull), D (skull, compound), E (skull with elaborated eye), G (God C-related), J (jawless skull), M (skull with mirror/'shiny' marking), N (human nose), R (Chahk-related), S (non-human nose), T (jaguar)

X   Square symmetrical signs

subcategories: D (design or pattern), E (Imix-type), F (floral, rosette), G (droplets), H (horizontal division), N ('black'-related), Q (quadripartite), S (spiral or curved), V (vertical division)

Y   Square asymmetrical signs

subcategories: G (droplets), M (mirror/'shiny'), S (spiral or curved)

Z   Signs with irregular shapes

subcategories: A ('Ajaw-face'-related), B (bundle), C ('kawak'), D (design or pattern), E ('elbow' shape), F (foliation), G (droplets), H (horizontal division), K ('k'in'-related), L (Kaban-related), M (mirror/'shiny' marking), P (contrastive pair), Q (quadripartite), R (rolled/curled), S (spiral, twisted), T (gourd), U (U-shaped, crescent), V (vase, urn), W (plate), X (compound), Y (notched), Z (cartouche, multiple notches)

0   (followed by two numbers): Bar/dot numerals [000 = 'eroded']

1   Elongated, single element

subcategories: B (bundle), C ('kawak'), G (droplets), M (mirror/'shiny'), S (S-shape, curved), X (miscellaneous)

2   Elongated, two elements

subcategories: 2 (2 identical components), G (droplets), M (mixed), S (S-shape, curved)

3   Elongated, three or more elements

subcategories: 2 (2 identical components), 3 (3 identical components), M (mixed)

References

Macri, Martha J., and Matthew G. Looper
     2003   *The New Catalog of Maya Hieroglyphs, Volume One: The Classic Period Inscriptions.* Norman: University of Oklahoma Press.

Macri, Martha J., and Gabrielle Vail
     2009   *The New Catalog of Maya Hieroglyphs, Volume 2: The Codical Texts.* Norman: University of Oklahoma Press.

Thompson, J. Eric S.
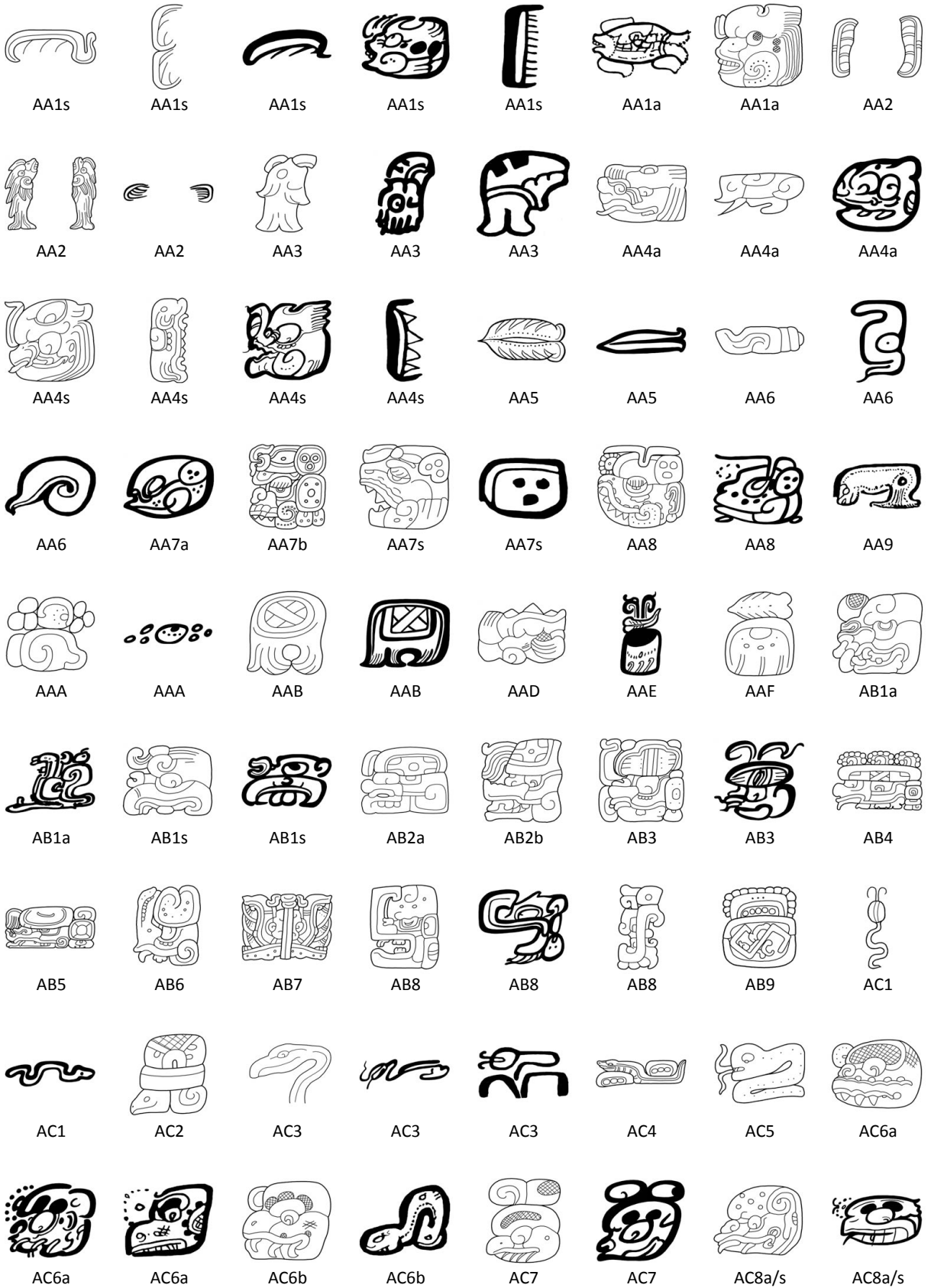   1962   *A Catalog of Maya Hieroglyphs*. Norman: University of Oklahoma Press.

Animals

AA1s	AA1s	AA1s	AA1s	AA1s	AA1a	AA1a	AA2
AA2	AA2	AA3	AA3	AA3	AA4a	AA4a	AA4a
AA4s	AA4s	AA4s	AA4s	AA5	AA5	AA6	AA6
AA6	AA7a	AA7b	AA7s	AA7s	AA8	AA8	AA9
AAA	AAA	AAB	AAB	AAD	AAE	AAF	AB1a
AB1a	AB1s	AB1s	AB2a	AB2b	AB3	AB3	AB4
AB5	AB6	AB7	AB8	AB8	AB8	AB9	AC1
AC1	AC2	AC3	AC3	AC3	AC4	AC5	AC6a
AC6a	AC6a	AC6b	AC6b	AC7	AC7	AC8a/s	AC8a/s

Animals

AC9	AC9	ACAa	ACAa
ACAb	ACB	ACC	ACDa
ACDa	ACDa	ACDb	ACE
ACE	ACF	ACG	AD1
AD1	AD1	AD2	AD3a
AD3a	AD3b	AD3b	AD4
AD5	AD6	AD6	AD7
AK1	AK1	AK1	AK2s
AK2s	AK2s	AK2a	AK2a
AK2a/s	AK2a	AK3	AK3
AK3	AK4	AK4	AK5
AK6	AK6	AK7	AK7
AL1	AL1	AL1	AL2s
AL2s	AL2a	AL3	AL3
AL4	AL5	AL6	AL7
AL7	AL7	AL7	AL8
AL9	AL9	AL9	AL9
AL9	ALA	ALB	ALB
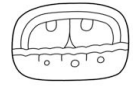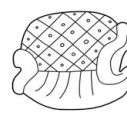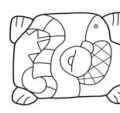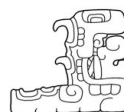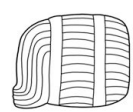
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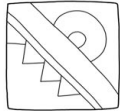
ALB	ALC	ALD	ALD	ALD	ALD	ALE	ALE
ALE	ALE	ALF	ALG	ALH	ALH	AM1	AM1
AM1	AM2	AM2	AM3a	AM3s	AM3s	AM4	AM5a
AM5a	AM5b	AM5b	AM5c	AM5c	AM5d	AM5d	AM5d
AM6	AM7	AM8	AM9	AMA	AP1a	AP1a	AP1a
AP1b	AP1b	AP1b	AP2a	AP2a	AP2b	AP3	AP3
AP4	AP5	AP5	AP5	AP5	AP6	AP7	AP8a
AP8b	AP9a/s	AP9a/s	AP9a	AP9b	AP9b	AP9c	AP9d
AP9s	APA	APA	APB	APB	APB	APB	APC
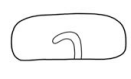
Animals

APC	APC	APD	APE	APF	APG	AR1a	AR1a
AR1s	AR1s	AR1s	AR2	AR2	AR3	AR4	AR4
AR5	AS1a	AS1a	AS1s	AS2a	AS2a	AS2b	AS2b
AS3	AS3	AS3	AS4	AS4	AS5	AS6	AS7
AS7	AS8	AS8	AS8	AS9	AS9	ASA	AT1a/s
AT1a/s	AT1a	AT2	AT2	AT3	AT3	AT4	AT4
AT5	AT6	AT6	AT7	AT7	AT7	AT7	AT7
AT8	AT8	AT9	AT9	AT9	ATA	ATB	ATB
ATC	ATD	ATE	ATE	ATF	ATF	ATG	ATH

Animals

ATJ	ATK	ATK	ATK	ATK	ATK	AV1a/s	AV1a/s
AV1a/s	AV1a/s	AV2	AV3	AV4	AV4	AV5	AV6
AV7	AV8	AV8	AV9	AVA	AVA	AVB	AVB
AVC	AVD	AVE	AVE	AW1a	AW1a	AW1a	AW1s
AW1s	AW2	AW2	AW2	AW2	AW3	AW4	AW4
AW5	AW6	AW6	AW7	AW8	AW9	AWA	AX1
AX1	AX1	AX1	AX2	AX3	AX4	AX5	AX6
AX7	AX7	AX8	AX9	AXA	AXB	AXC	AXD
AXE	AXE	AXF	AXG	AXH	AXJ		

Birds

BM1	BM1	BM2	BM2	BM3	BM4a	BM4b	BM4c
BM6	BM7	BM7	BM8	BP1	BP1	BP1	BP2a/s
BP2a	BP3	BP3	BP3	BP4	BP5a/s	BP5a/s	BP5a
BP5a/s	BP5a/s	BP5a/s	BP6	BT1a/s	BT1a/s	BT1s	BT1s
BT1a/s	BT1s	BT1s	BT2	BT2	BT2	BT3	BT4
BT4	BT4	BT4	BT5	BT5	BT6	BT6	BT7
BT8	BT8	BT8	BT9	BTA	BTB	BTC	BTC
BTD	BTE	BTF	BTGa/s	BTGa/s	BV1	BV1	BV2
BV3	BV3	BV3	BV4	BV4	BV5	BV5	BV6

Birds

BV7	BV8	BV8	BV9	BVAa/s	BVAa/s	BVB	BVC
BVD	BVD	BVE	BVFa	BVFa	BVFa	BVFb	BVG
BVH	BVJ	BVK	BX1	BX1	BX1	BX2	BX2
BX2	BX2	BX2	BX2	BX2	BX3	BX4	BX5a
BX5b	BX6	BX6	BX7	BX8	BX9	BXA	BXB
BXB	BXC	BXC	BXD				

Body parts

HB1	HB1	HB2	HB2	HB3	HB3	HB4	HB5
HE1	HE1	HE2	HE3	HE3	HE4	HE5	HE5
HE5	HE6	HE6	HE6	HE6	HE6	HE7	HE7
HE7	HE8	HE8	HE9	HEB	HEC	HED	HH1a
HH1a	HH1a	HH1b	HH2	HH2	HH3	HH3	HH3
HH3	HH4	HH4	HH5	HH5	HH5	HH6	HH7
HJ1	HJ1	HJ1	HJ2	HL1a/s	HL1a/s	HL1a/s	HL2
HL3	HL4	HL5	HL6	HL7	HL8	HL8	HL8
HL9	HL9	HLA	HM1	HM1	HM1	HM2	HM2
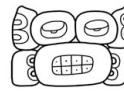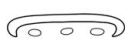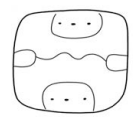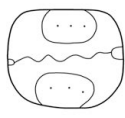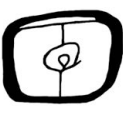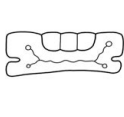
Body parts

HT1	HT1	HT2	HT2	HT2	HT3	HT4	HT4
HT5	HT5	HT6	HT7	HT7	HT8	HT9	HT9
HTA	HTA	HTA	HTBa	HTBb	HTC	HTC	HTD
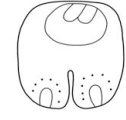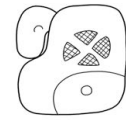
Hands

MA1	MA1	MA1	MA2a	MA2a	MA2a	MA2a	MA2a
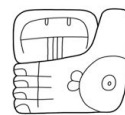
MA2a	MA2b	MA2b	MA2c	MA2c	MA3	MA3	MA3
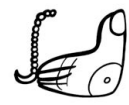
MA4	MA5	MA6	MA6	MA7	MB1	MB2	MB2

MB3	MB3	MB4	MB5	MB5	MB6	MB7	MB7

MB8	MB9	MBA	MBA	MBB	MBB	MR1a	MR1a

MR1b	MR1c	MR2	MR2	MR2	MR3	MR4a/s	MR4s

MR4a/s	MR4a/s	MR5	MR5	MR5	MR5	MR5	MR6
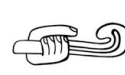
MR6	MR6	MR6	MR7	MR8	MR8	MR9	MRA

MRA	MRB	MRC	MRC	MRD	MRD	MRE	MRF

Hands

MRF	MRG	MRH	MRJ	MRK	MZ1	MZ1	MZ1
MZ1	MZ1	MZ2	MZ2	MZ2	MZ3	MZ3	MZ4
MZ4	MZ5	MZ5	MZ5	MZ6	MZ6	MZ6	MZ7
MZ8	MZ8	MZ8	MZ9	MZ9	MZ9	MZA	MZB
MZC	MZC	MZC	MZD	MZE	MZF	MZG	MZG
MZG	MZH	MZH	MZH	MZH	MZJ	MZJ	MZK
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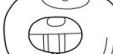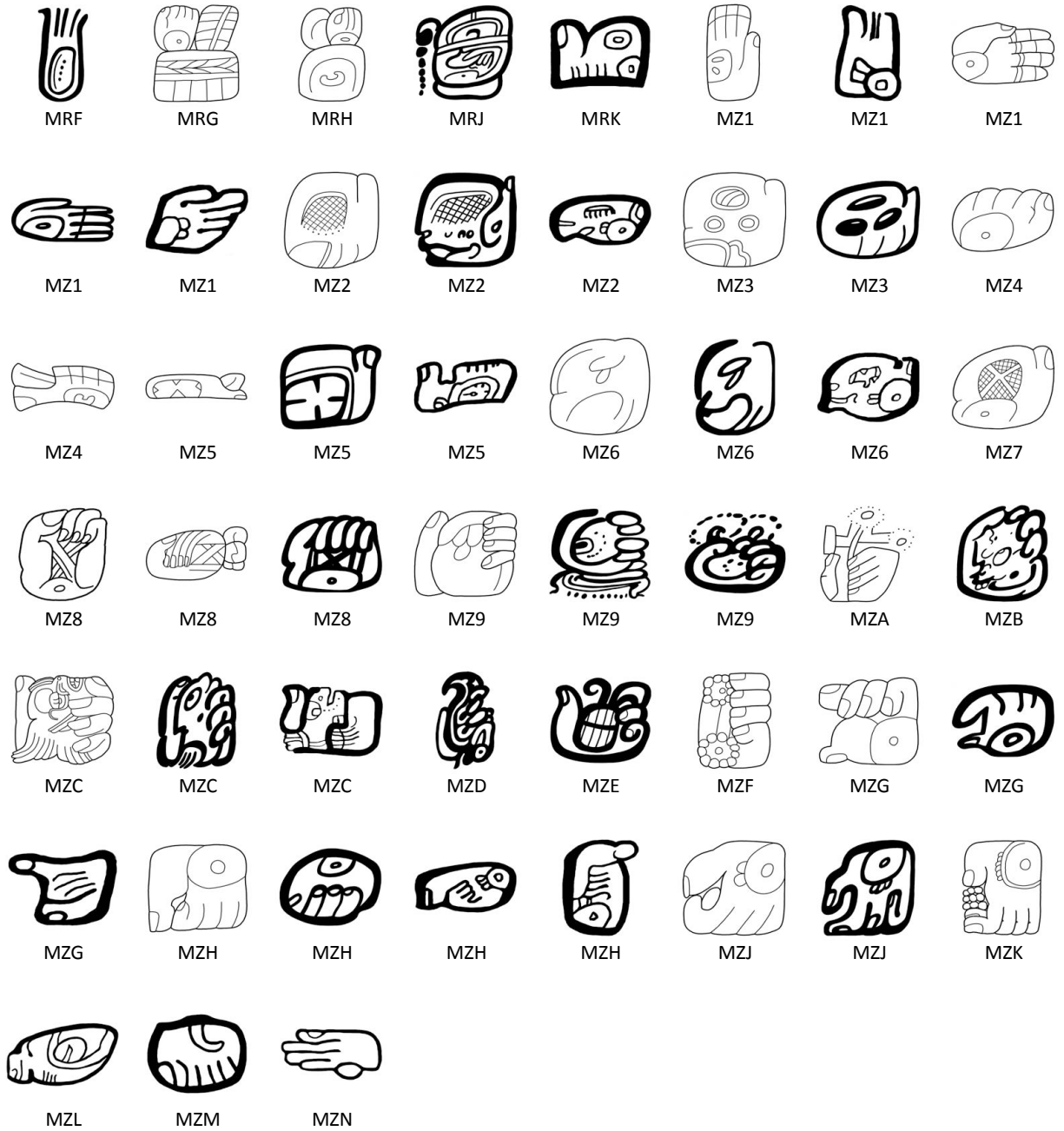
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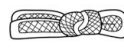
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PA3	PA4	PA5	PA5	PA6	PA7	PA7	PA7
PA8	PA8	PA9	PAA	PAB	PAB	PAC	PAC
PAC	PAC	PAD	PAE	PAF	PAG	PAH	PAJ
PAK	PAL	PC1	PC1	PC2	PC3	PC4	PC5
PC6	PC7	PC8	PC9	PCA	PCB	PCC	PD1
PD1	PD1	PD1	PD2	PD3	PD4	PD5	PE1
PE1	PE2	PE3	PE4	PE4	PE5	PE6	PE7
PG1	PG2	PG3	PG4	PG4	PG5	PG6	PG7

Human faces

PG8	PG9	PH1	PH2	PH3	PH4	PH5	PH6
PH6	PH7	PH8	PH9	PHA	PHB	PHC	PHD
PHEa/s	PHF	PHG	PHH	PHJ	PHK	PHL	PHM
PHN	PHP	PJ1	PJ1	PJ1	PJ1	PJ2	PJ2
PJ2	PJ3	PJ4	PJ5	PJ6	PJ7	PJ8	PJ9
PJA	PJB	PJC	PJD	PJE	PJF	PJF	PJG
PJG	PJH	PL1a/s	PL1a/s	PL1b	PL1b	PL1c	PL1c
PL1d	PL1e	PL2a	PL2a	PL2b	PL2b	PL2b	PL2b
PL3a	PL3a	PL3a	PL3b	PL3b	PL3b	PL3c	PL3c
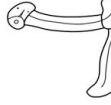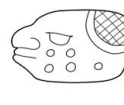
Human faces

PL3c	PL3c	PL4	PL4	PL5	PL6	PL7	PL7
PL8a	PL8a	PL8a	PL8b	PL8b	PL8c	PL8c	PL8c
PL9	PL9	PLA	PLB	PLB	PLB	PLB	PLB
PLC	PLD	PLD	PLE	PLF	PLG	PLH	PLH
PLH	PM1	PM1	PM1	PM2	PM2	PM3	PM4
PM4	PM5	PM5	PM6	PM7	PM8	PM9	PMA
PMB	PMC	PMD	PME	PMF	PMG	PMH	PMJ
PMK	PN1	PN1	PN1	PN2	PN2	PN3a	PN3b
PN3b	PN3b	PN4	PN5	PN5	PN6	PN6	PN7

Human faces

PN8	PN9	PNA	PNB	PT1	PT1	PT2	PT3
PT4	PT5	PT6	PT7	PT8	PT9	PTA	PX1
PX1	PX2	PX3	PX3	PX4	PX4	PX4	PX4
PX4	PX5	PX6	PX7	PX8	PX9	PXA	PXA
PXA	PXA	PXA	PXB	PXB	PXB	PXC	PXC
PXC	PXD	PXE	PY1	PY1	PY1	PY2	PY2
PY3	PY3	PY3	PY3	PY3	PY4	PY4	PY4
PY5	PY5	PY5	PY6	PY6	PY7	PY8a/s	PY8a/s
PY9a	PY9a	PY9a	PY9b	PY9c	PY9c	PY9s	PYA

Human faces

PYB	PYC	PYD	PYD

Supernatural faces, skulls

SB1a	SB1a	SB1a	SB1b	SB1c	SB1s	SB2	SB3
SB3	SB4	SB4	SB4	SB5	SB5	SB6	SB7
SB8	SB8	SB9	SBB	SBC	SBC	SBC	SBD
SC1a	SC1a	SC1a	SC1a	SC1b	SC1b	SC2	SC3
SC3	SC4	SC4	SC4	SC5	SC6	SC8	SC8
SC9	SC9	SCA	SCB	SCC	SCD	SCD	SCE
SCF	SCF	SCG	SCH	SCJ	SCK	SCL	SCL
SCMa	SCMb	SCN	SD1	SD1	SD2	SD3	SD4
SD5	SD6	SD7	SD7	SD8	SD9	SDA	SDB
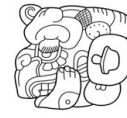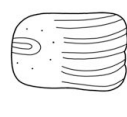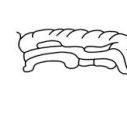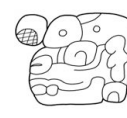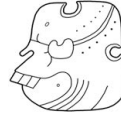
Supernatural faces, skulls

SDC	SDC	SDD	SDD	SDD	SDE	SDF	SDG
SE1	SE1	SE1	SE1	SE1	SE1	SE2	SE2
SE2	SE3	SE4	SE5	SE6	SE7	SE8	SE9
SG1	SG1	SG1	SG1	SG1	SG1	SG1	SG1
SG1	SG1	SG1	SG2	SG2	SG3	SG4	SG5
SG5	SG6	SG7	SJ1a	SJ1b	SJ1c	SJ1c	SJ1s
SJ2a/s	SJ3	SJ3	SJ4	SJ4	SJ5	SJ6	SM1
SM1	SM2	SM3	SM3	SM3	SM4	SM5	SM5
SM6	SM7	SM7	SM8	SM9a	SM9a	SM9a	SM9b
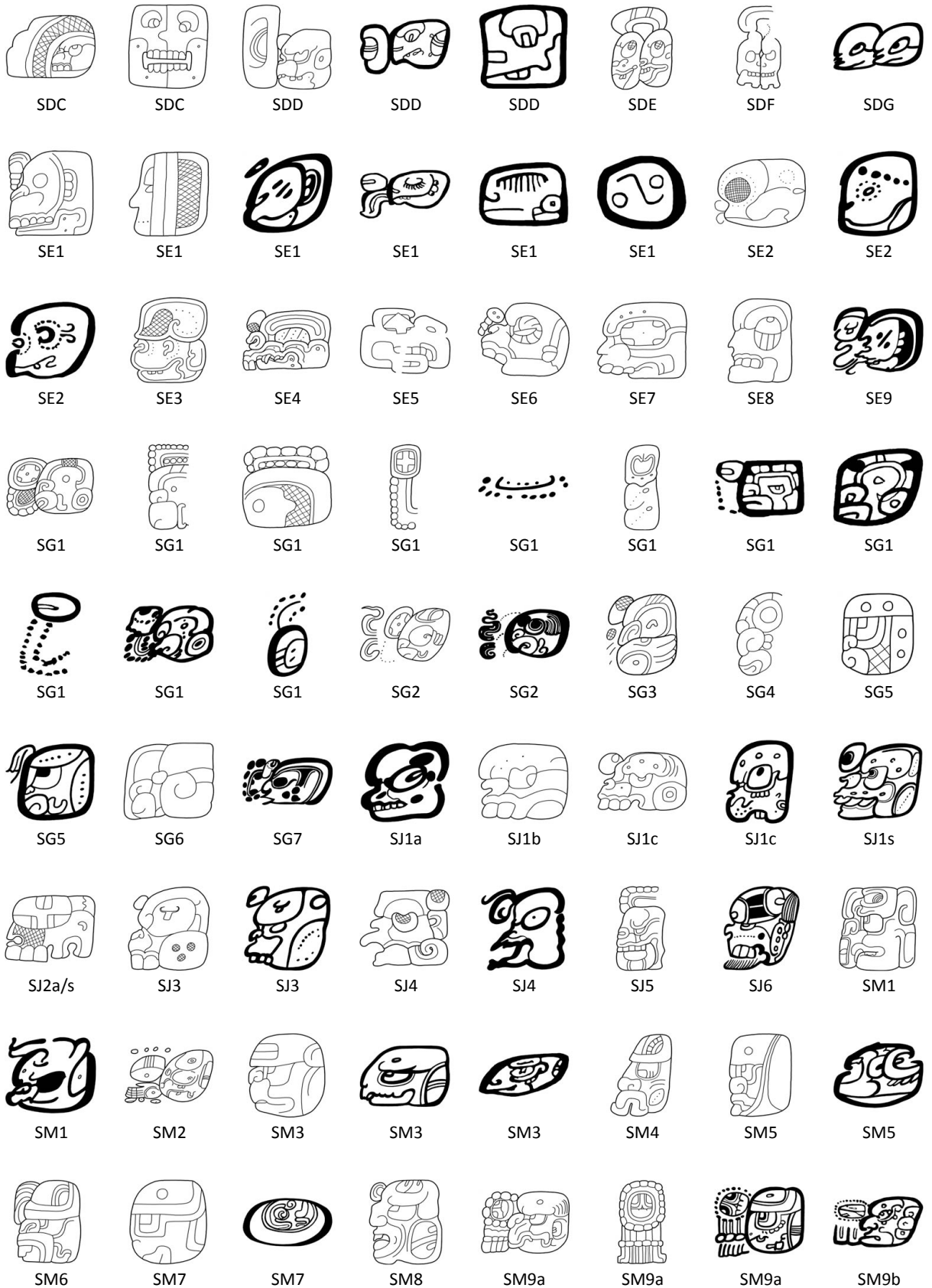
Supernatural faces, skulls

SMA	SMA	SMA	SMB	SMB	SMD	SME	SMF
SN1a	SN1a	SN1b	SN1b	SN2	SN3	SN3	SN3
SN4a	SN4a	SN4b	SN4b	SN4b	SN5	SN6	SN7
SN7	SN8	SN8	SN9	SNA	SNB	SNCa/s	SNCa/s
SND	SND	SNE	SNF	SR1a	SR1a	SR1b	SR1s
SR1s	SR2a	SR2a	SR2s	SR2s	SR3	SR3	SR3
SR3	SR4	SR5	SR5	SR5	SR6	SR7a	SR7a
SR7a	SR7b	SR7c	SR7s	SR8	SR8	SR9	SR9
SRA	SS1a	SS1b	SS1b	SS2a	SS2a	SS2b	SS2c
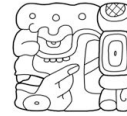
Supernatural faces, skulls

SS2c	SS3a	SS3b	SS3b	SS4a	SS4b	SS5	SS6
SS7	SS8	SS9	SSA	SSB	SSD	SSD	SSE
SSF	SSG	SSH	SSJ	SSK	SSL	SSM	SSN
ST1	ST2a	ST2a	ST2b	ST2b	ST2b	ST3	ST4
ST5	ST6a	ST6a	ST6a	ST6a	ST6b	ST7	ST7
ST8	ST8	ST9	STA	STB	STB		

Square and irregular signs

XD1	XD1	XD1	XD1	XD2	XD3	XD3	XD4
XD5	XD6	XD7	XE1s	XE1s	XE1s	XE1s	XE1a
XE1a	XE2	XE2	XE2	XE3	XE3	XE3	XE3
XE3	XE4	XE4	XE4	XE5	XE5	XE6	XE7
XE7	XE7	XE8	XF1	XF1	XF2	XF2	XF2
XF3	XF4	XF4	XF5	XG1a	XG1a	XG1a	XG1b
XG1b	XG2	XG2	XG3	XG4	XG4	XG4	XG5
XG6	XG7	XG8	XG8	XG9	XGA	XGB	XGC
XGD	XGE	XGF	XH1	XH1	XH1	XH1	XH2a

Square and irregular signs

XH2a	XH2a	XH2b	XH3a	XH3a	XH3a	XH3b	XH3b
XH3b	XH3c	XH3c	XH4	XH4	XH5a	XH5a	XH5a
XH5b	XH5b	XH5b	XH5c/s	XH5c/s	XH5c	XH6	XH7
XH8	XH8	XH8	XH9s	XH9s	XH9s	XH9a	XHA
XHA	XHB	XHB	XHB	XHB	XHC	XHC	XHC
XHDa	XHDa	XHDb	XHE	XHF	XHG	XHG	XHG
XHG	XHG	XHH	XHJ	XN1	XN1	XN1	XN2a
XN2a	XN2a	XN2s	XN2s	XN2s	XN3	XN3	XN3
XN3	XN4	XN5	XN6	XN6	XN6	XQ1a	XQ1a
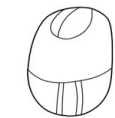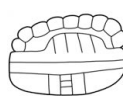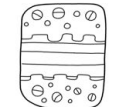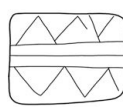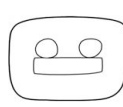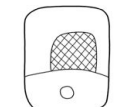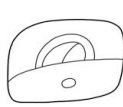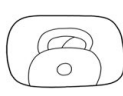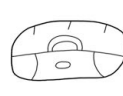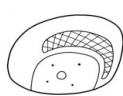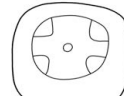
Square and irregular signs

XQ1a	XQ1b	XQ1b	XQ2	XQ3	XQ3	XQ3	XQ4
XQ5	XQ6a/s	XQ6a/s	XQ6a/s	XQ7	XQ7	XQ8	XQ8
XQ8	XQ9	XQ9	XQA	XQBa	XQBa	XQBa	XQBs
XQBs	XQC	XQC	XQC	XQD	XQE	XQF	XQG
XS1	XS1	XS2	XS3a	XS3a	XS3a	XS3s	XS3s
XS3s	XS4	XS4	XV1	XV1	XV1	XV3	XV4
XV4	XV4	XV5	XV6	YG1	YG2a	YG2a	YG2a
YG2b/s	YG2s	YG2s	YG3	YG3	YG4	YG5	YG6
YG7	YG7	YM1	YM1	YM1	YM1	YM2	YM2

Square and irregular signs

YM2	YM2	YM2	YM3	YM3	YM4	YS1a	YS1a
YS1a	YS1b	YS2	YS2	YS3	YS4	YS4	YS4
YS4	YS5	YS5	YS5	YS5	YS5	YS5	YS6
YS7	ZA1a	ZA1a	ZA1a	ZA1b	ZA1b	ZA1b	ZA2
ZA2	ZA2	ZA2	ZA2	ZA3	ZA3	ZA4	ZA5
ZA6	ZA6	ZA6	ZA7	ZA8	ZA9	ZA9	ZA9
ZAA	ZAB	ZACa	ZACb	ZAD	ZAD	ZAD	ZAE
ZAFa	ZAFb	ZAG	ZAG	ZB1	ZB1	ZB1	ZB1
ZB1	ZB1	ZB2	ZB4	ZB4	ZB5	ZB6	ZB7
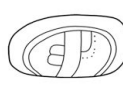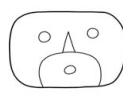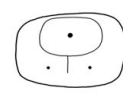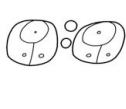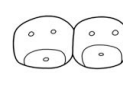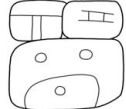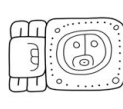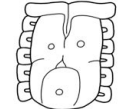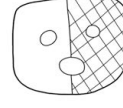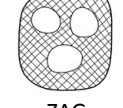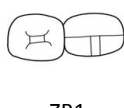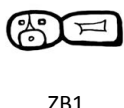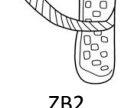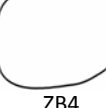
Square and irregular signs

ZB8	ZB8	ZB9	ZBA	ZBBa	ZBBa	ZBBa	ZBBa/s
ZBBa	ZBBa	ZBC	ZBC	ZBC	ZBC	ZBD	ZBE
ZBF	ZBF	ZBF	ZBF	ZBF	ZC1a	ZC1a	ZC1a
ZC1b	ZC1b	ZC1b	ZC1s	ZC1s	ZC1s	ZC1s	ZC2
ZC2	ZC3a	ZC3a	ZC3a	ZC3b	ZC3b	ZC4	ZC4
ZC5	ZC5	ZC5	ZC5	ZC5	ZC6	ZC6	ZC6
ZC7	ZC7	ZC8	ZC9	ZC9	ZCA	ZCB	ZCCa
ZCCa	ZCCa	ZCCs	ZCCs	ZCCs	ZCDa	ZCDb	ZCDs
ZCE	ZCF	ZCF	ZCF	ZCG	ZCG	ZCH	ZCJ
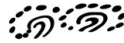
Square and irregular signs

ZCJ	ZCK	ZCK	ZCL	ZCM	ZCN	ZCP	ZD1
ZD2a	ZD2s	ZD2s	ZD2s	ZD2s	ZD2s	ZD4	ZD4
ZD5	ZD6	ZD6	ZD7	ZD8	ZE1	ZE1	ZE1
ZE1	ZE2	ZE2	ZE3	ZE4	ZE4	ZE5a/s	ZE5a/s
ZE6	ZE7	ZE8	ZE9	ZEA	ZF1a	ZF1a	ZF1a
ZF1b	ZF1b	ZF1b	ZF1c	ZF2	ZF2	ZF2	ZF3
ZF4	ZF5	ZF5	ZF6	ZF6	ZF6	ZF6	ZF6
ZF7	ZF7	ZF7	ZF7	ZF7	ZF8a	ZF8b	ZF9
ZFA	ZFB	ZFCa	ZFCa	ZFCb	ZFCb	ZFD	ZFD
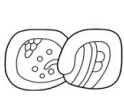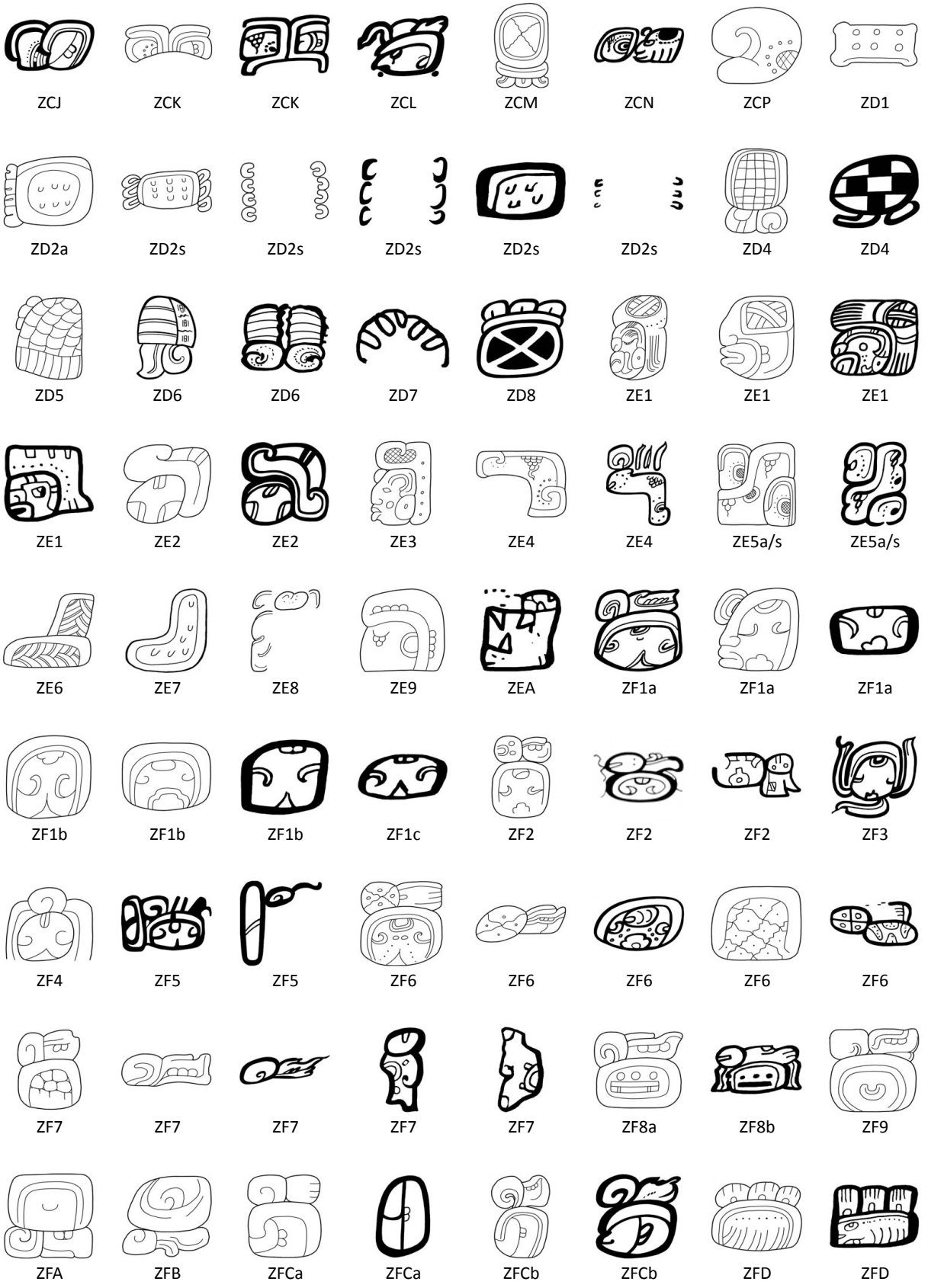
Square and irregular signs

ZFE	ZFE	ZFE	ZFF	ZFF	ZFG	ZG1	ZG1
ZG1	ZG1	ZG1	ZG1	ZG2	ZG2	ZG2	ZG2
ZG2	ZG3a	ZG3a	ZG3a	ZG3b	ZG4	ZG4	ZG5
ZG5	ZG6	ZG6	ZG6	ZG7	ZG8	ZG9	ZG9
ZGA	ZGB	ZH1	ZH1	ZH1	ZH2	ZH2	ZH2
ZH3	ZH3	ZH4	ZH5	ZH5	ZH6	ZH6	ZH7
ZH8	ZH9	ZHA	ZHA	ZHA	ZHB	ZHB	ZHB
ZHC	ZHC	ZHD	ZHE	ZHE	ZHE	ZHE	ZHE
ZHE	ZHF	ZHF	ZHF	ZHG	ZHG	ZHH	ZHH
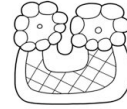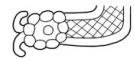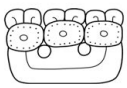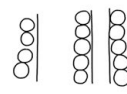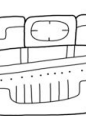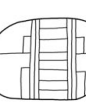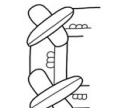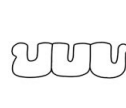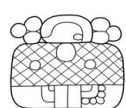
Square and irregular signs

ZHH	ZHH	ZHJ	ZHK	ZHK	ZHK	ZHL	ZHM
ZK1	ZK1	ZK1	ZK2	ZK2	ZK3	ZK4	ZK5
ZL1	ZL1	ZL2	ZL2	ZL2	ZL3	ZL4	ZL5
ZL6	ZL7	ZM1	ZM1	ZM1	ZM1	ZM1	ZM1
ZM1	ZM1	ZM2	ZM3	ZM5	ZM6	ZM6	ZM7
ZM8	ZP1a	ZP1b	ZP2	ZP3	ZP4	ZP5	ZP6
ZP7	ZP8	ZP9	ZPA	ZPB	ZPC	ZPD	ZPE
ZPF	ZQ1a/s	ZQ1a/s	ZQ1a/s	ZQ2	ZQ3	ZQ3	ZQ4
ZQ4	ZQ4	ZQ5	ZQ6	ZQ6	ZQ7	ZQ8	ZQ8
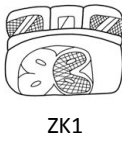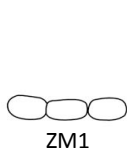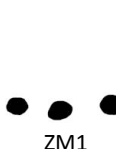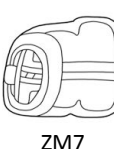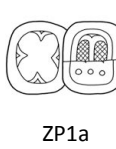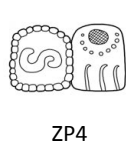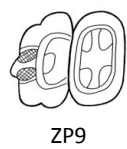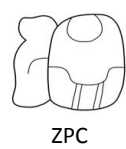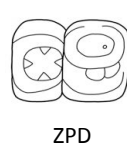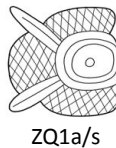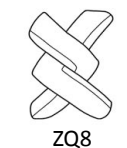
Square and irregular signs
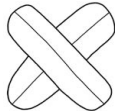
ZQ8	ZQ9	ZQ9	ZQ9	ZQA	ZQB	ZQB	ZQC
ZQD	ZQD	ZQD	ZQD	ZQD	ZQE	ZQE	ZQF
ZQG	ZQH	ZQJ	ZR1	ZR1	ZR1	ZR1	ZR2
ZR2	ZR2	ZR2	ZR2	ZR3	ZR3	ZR4	ZR5
ZR6	ZR7	ZR7	ZR8	ZR8	ZR8	ZR9	ZRA
ZRB	ZRC	ZRC	ZRC	ZRD	ZRE	ZRF	ZRF
ZRG	ZRH	ZRJ	ZRJ	ZRJ	ZRK	ZRL	ZRM
ZRN	ZRP	ZRQ	ZS1	ZS1	ZS2	ZS2	ZS3
ZS4	ZS5	ZT1s	ZT1s	ZT1s	ZT1s	ZT1a	ZT1a
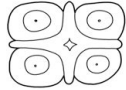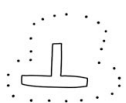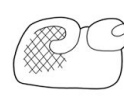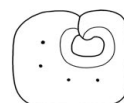
Square and irregular signs

ZT2	ZT2	ZT2	ZT3	ZT3	ZT3	ZT4	ZT5

ZT6	ZT7	ZT7	ZT7	ZT8	ZT8	ZT9	ZTA
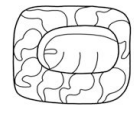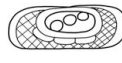
ZTA	ZTB	ZTC	ZTD	ZU1a	ZU1a	ZU1a	ZU1s

ZU1s	ZU1s	ZU1s	ZU2a	ZU2a	ZU2a	ZU2b	ZU2b

ZU3	ZU3	ZU4	ZU5	ZU6	ZU7	ZU8	ZU9
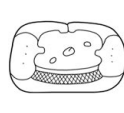
ZUA	ZUA	ZUB	ZUB	ZUB	ZUB	ZUC	ZUD

ZUE	ZV1	ZV1	ZV1	ZV2	ZV2	ZV3	ZV4
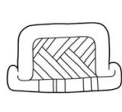
ZV5	ZV6	ZV7	ZV8	ZV8	ZV9	ZVA	ZVB
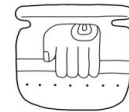
ZVC	ZVD	ZVE	ZVF	ZW1	ZW1	ZW2a	ZW2a

Square and irregular signs

ZW2b	ZW3	ZW3	ZW3	ZW4	ZW4	ZW5	ZW6
ZW7	ZW8	ZWA	ZWA	ZWB	ZWB	ZX1	ZX1
ZX2	ZX2	ZX3	ZX4	ZX5	ZX6	ZX7	ZX8
ZX9	ZXA	ZXB	ZXC	ZXD	ZXF	ZY1	ZY1
ZY2	ZY2	ZY3	ZY4	ZY5	ZY5	ZY5	ZY6
ZY7	ZY7	ZY7	ZY7	ZY7	ZY8	ZY8	ZY9
ZYA	ZYA	ZYA	ZYA	ZYB	ZYC	ZYC	ZYD
ZYE	ZYF	ZYF	ZYF	ZYG	ZYG	ZYG	ZYH
ZYJ	ZZ1	ZZ1	ZZ2	ZZ2	ZZ3	ZZ3	ZZ4
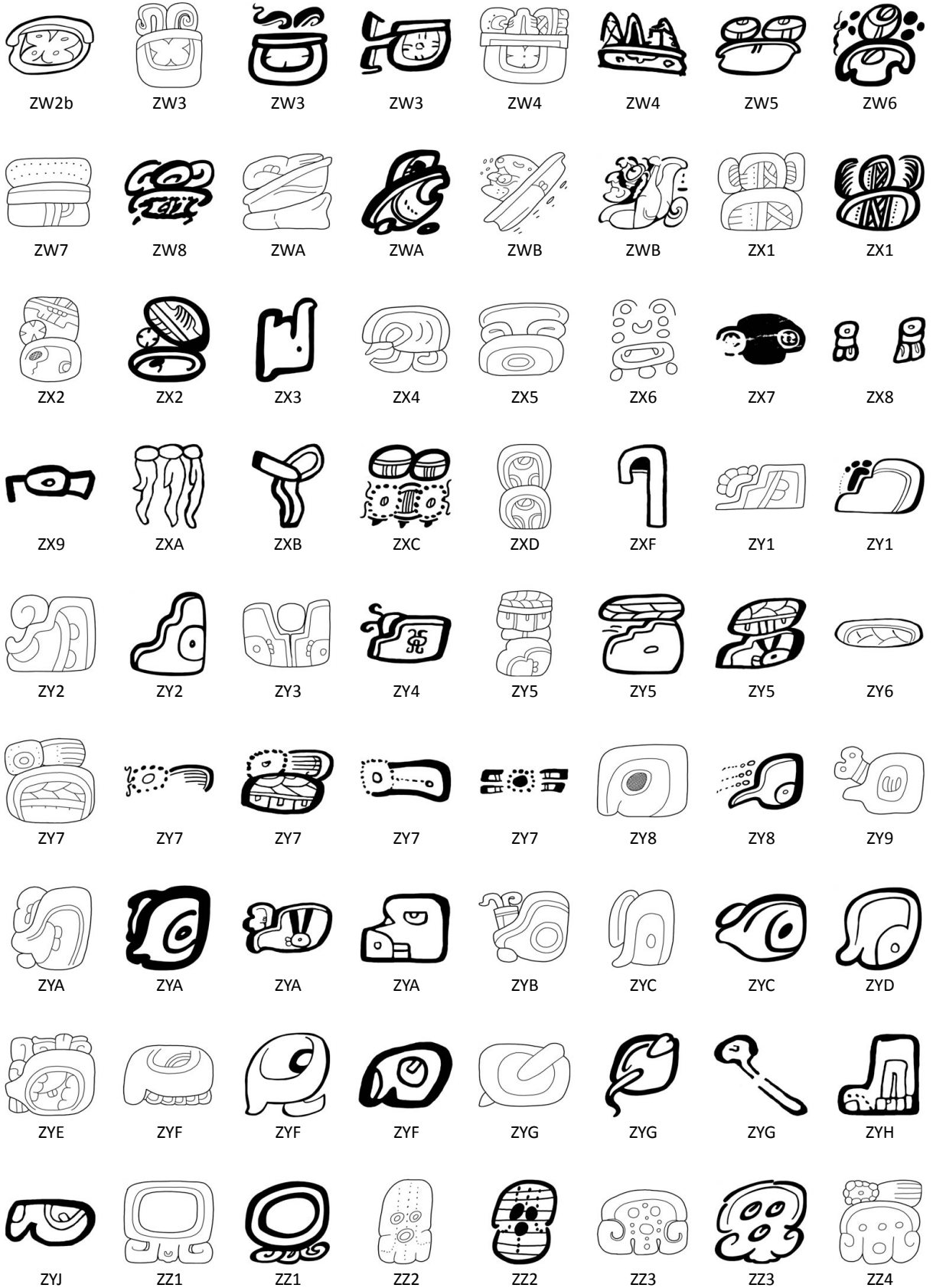
Square and irregular signs

ZZ5	ZZ6	ZZ7	ZZ7	ZZ8	ZZ9	ZZ9	ZZA

ZZA	ZZB	ZZC	ZZC	ZZC	ZZC	ZZC	ZZD
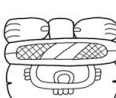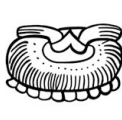
ZZD	ZZE	ZZE	ZZF	ZZG

Numerals and elongated signs

001	001	001	002	002	002	003	003
003	004a	004a	004a	004b	004b	004c	005
005	005	006	006	006	007	007	007
008	008	008	009	009	009	010	010
010	1B1	1B1	1B1	1B1	1B1	1B2	1B2
1B2	1B2	1B3	1B3	1B3	1B3	1B4	1B5a
1B5a	1B5a	1B5b	1B5c	1B6	1B6	1B6	1B7
1B7	1B8	1B8	1B8	1B8	1B9	1B9	1B9
1B9	1B9	1BAa	1BAa	1BAa	1BAb	1BAb	1BAb

Numerals and elongated signs

1BB	1BB	1BB	1BC	1BD	1BE	1C1	1C1
1C1	1C2	1C2	1C3	1C4	1C4	1C5	1C6
1C6	1G1	1G1	1G1	1G2a	1G2a	1G2b	1G2b
1G2b	1G2s	1G3	1G4a/s	1G4a/s	1G4a/s	1G5	1G5
1G5	1G5	1G6	1G6	1G6	1G7	1G8	1G8
1G8	1G8	1G9	1GA	1GB	1GC	1GC	1GD
1GD	1GE	1GE	1GF	1GF	1GF	1GH	1GJ
1M1	1M1	1M1	1M2	1M2	1M2	1M3	1M3
1M3	1M3	1M4	1M4	1M4	1M4	1M5	1M6

Numerals and elongated signs

1M7	1M7	1M8	1M8	1S1	1S1	1S1	1S2
1S2	1S2	1S2	1S3	1S4	1S5	1S6	1S7
1S8	1S9	1SA	1SA	1SA	1SB	1SC	1SC
1SC	1SC	1SD	1SE	1SF	1SF	1SG	1SH
1SJ	1SJ	1SJ	1SK	1X1	1X2	1X3	1X4
1X5	1X6	1X7	22A	22A	22B	22C	22D
22D	22E	22E	22F	22F	22F	22F	22G
22H	22J	22K	22L	22M	22N	2G1a	2G1a
2G1a	2G1b	2G1b	2G1b	2G2	2G3	2G3	2G4

2G5	2G6	2M1	2M1	2M1	2M2	2M3	2M4
2M4	2M5	2M6	2M7	2M8	2S1	2S2	2S2
2S2	2S2	2S2	2S2	2S2	2S3	2S4	2S4
2S5	2S5	2S6	2S7a/s	2S7a/s	2S7a	2S8	2S9
2SAa	2SAa	2SAs	2SAs	2SB	2SB	2SB	32A
32A	32A	32A	32B	32C	32D	32D	32E
32F	32F	32G	32H	32J	32K	32L	32Ma
32Ms	32Ms	32Ms	32N	32N	32P	32Q	33A
33A	33B	33D	33E	33F	33F	33F	33G

33H	33H	3M1	3M1	3M1	3M1	3M2	3M2

3M2	3M3	3M3	3M3	3M3	3M4	3M4	3M4

3M4	3M5	3M6	3M6	3M6	3M7	3M7	3M7

3M7	3M8	3M9	3M9	3MA	3MB	3MB	3MB

3MC	3MD	3MD	3MD	3MD	3ME	3MF

Table 2. Thompson Number, Grapheme Code

0001	HE6		0072	BX2
0004	1G2		0073	22B
0005	ATA		0074	ZM1
0006	1M6		0077	BX2
0008	1M4		0078d	2S3
0010	AA4		0079	ZY7
0011a	HE6		0080b	2M7
0011b	1G3		0082	1G5
0012	1G4		0083	1G5
0013	HE7		0084	ZF2
0014	SG1		0085	ZF7
0015a	AK2		0086	ZF7
0016	1BA		0087	2G1
0018	1B9		0088	1M1
0019	ALE		0089	3M4
0019v	2S2		0090	3M4
0020	32P		0091	3M4
0021	ALD		0093a-d	ZG1
0023	1G1		0095	XN1
0024	1M4		0096	1B1
0025	AA1		0097	2G6
0028	ZH1		0098	YS5
0029	ZX1		0098	ZS2
0030	3MB		0099	BT1
0031	3MB		0102	1B2
0036	SG1		0103a-f	1B1
0037	SG1		0104	32M
0038	SG1		0106	22F
0041	SG1		0108	AC7
0042	1G8		0109	1B8
0043	SG1		0110	1BB
0044	ZBC		0112	1C1
0045	MR5		0113	1B1
0047	32A		0114	1GF
0048	1G2		0115	1SA
0049	ZBC		0116	1S2
0050	3M1		0117	1S1
0051	3M3		0118a	AB8
0053	3M3		0120a	1S4
0057	3M6		0120bc	1S3
0058	3M1		0120bc	2SB
0059	3M2		0121	1M2
0060abdef	1B5		0122	ZBB
0060c	ZCC		0123	32J
0061	ZBF		0124	ZHE
0062	ZBF		0126	32A
0063	PA1		0128	PXA
0064	PA1		0130	2S2
0066	32H		0134	ZD2
0067	1SF		0135acd	32G
0068	3M7		0136	33F
0069	ZFE		0137	XE3
0070	ZM1		0140	ZA2

Table 2. Thompson Number, Grapheme Code

0142bc	ZM1	0201	HTB
0143	XE3	0203a	AA3
0144abd	002	0204	AA4
0144c	001	0206	AC1
0145abc	1B6	0207	ACD
0145f	1B9	0208	SDB
0146	3M6	0210a	ZR8
0147	PL3	0210b	AA6
0148	1B6	0211	HE9
0149abcd	22F	0212	AA5
0149ef	ZG2	0214	ZFF
0150a	2SA	0216	1B3
0150bc	1B7	0217b	MRA
0151	3M9	0217c	MZ1
0152	SM9	0218abc	MR6
0153	ZQ9	0218d	MZ4
0154	HE1	0220ab	MZJ
0155abcd	1SJ	0221a	MZH
0155e	MA3	0221b	MZ4
0156	1GD	0221c	MZ5
0157b	ZUB	0222	MRG
0158	ZG3	0223	HL3
0159	AV8	0224	MBB
0161	1GB	0227a	HT5
0162	PXB	0227bc	HT2
0163	ZQ1	0229	AK2
0164	XE3	0231	AM7
0165a	2M4	0232	HE8
0166	MR5	0233	MB5
0168	ZB1	0236	BM1
0170	22C	0237	BV8
0171	PLB	0238	BP3
0172	1SB	0239	PY2
0173abc	ZQ1	0240a	BVE
0173d	ZQ3	0240b	MB2
0174	ZCF	0241	32K
0175	MB4	0242	XHH
0176	ZC6	0243	1S7
0177	ZC5	0244	ZF6
0178	ZA2	0245de	1M5
0181	ZU1	0249	ZL2
0182	ZV1	0250	1GD
0184	SN3	0251	33A
0186	ZCC	0252	33A
0187	ZE1	0255	ZM1
0188	1SC	0256	2S2
0190	2M1	0257	1C1
0192ab	XD7	0266a	1G6
0193	ZHC	0267	3MB
0194	2M5	0268	1C6
0197	ZY9	0271	32E
0198	2SB	0272	ZW4
0200	ZC3	0273	22L

Table 2. Thompson Number, Grapheme Code

0274	YS5		0507	ZHE
0275	1BA		0508	XG4
0277	1S1		0509	SE1
0278	32M		0510a	AL9
0279	BT1		0510b	ZQD
0280	BT1		0510cd	ZC4
0281	XQ1		0511	XG1
0282	3MD		0512	ZY8
0283	XV4		0513	YG2
0284	2M3		0514	ZZ7
0285	ZHA		0515	ZYA
0287	HE5		0516ab	YG3
0291ab	AV9		0516c	YG2
0291c	1S5		0518ab	ZB1
0294	AVB		0519	HM1
0295	22H		0520	XS3
0296	BT1		0521	ZF1
0297	22E		0523	XS3
0298	HTA		0524	AT7
0299	2S7		0525	XH8
0300	ZB1		0526	YS1
0301	HL1		0527	XQ8
0304	XQB		0528	ZC1
0307	1X2		0529	ZC2
0309	1X3		0533	ZA1
0316	ZE4		0534	ZA2
0319	1SG		0535	ZA3
0325	ZQE		0536	ZA9
0326	ZK2		0537	PX4
0327	AC3		0538	XF1
0329	MBA		0539	ZAD
0333	2M1		0540	ZAE
0335	2S2		0541	ZAG
0336	22G		0542a	AA7
0339	2G3		0542ab	PX4
0346	2G5		0543	ZZ2
0348	3M5		0544	XQ3
0351	ZCK		0545	ZK1
0353	BT8		0546	ZW2
0355	ZP1		0547	ZT3
0358	HL6		0548	XH2
0361	MR8		0549	ZH2
0366	3M7		0550	ZH3
0367	32N		0551	ZQ8
0368	HT6		0552	XQB
0369	AC4		0553b	ZQ4
0370	ZT1		0554	AC2
0501	XE1		0555	AA5
0502	XE4		0557	XE4
0503	XHG		0558	XE1
0504	AD1		0559	ZT2
0505	AD2		0560	ZTB
0506	XH5		0561	XH3

Table 2. Thompson Number, Grapheme Code

0563a	XV1		0623	XQD
0563b	XV3		0624b	XQC
0563b	ZBC		0625	ZF6
0564	1B3		0626	AK3
0565	YM2		0627	XF3
0566	AD3		0628	ZZ3
0567	AP1		0630	XV4
0568	ZR2		0632	XF2
0569	HB1		0634	ZG1
0570	HH1		0638	AL9
0571	HH2		0643	HT9
0572	XF5		0645	ZS5
0573	YS4		0646	ZG6
0574	ZR7		0647	ZF7
0576	ZRJ		0648	BTG
0577	ZRJ		0653	ZYG
0579	ZRF		0656	XD3
0580	XN2		0657	HT3
0582	BP5		0659	XD4
0583	ZG5		0662	XV5
0584	XH1		0663	HH3
0585a	XQ6		0665	XS1
0586	XD1		0667	MZL
0588	AX1		0668	MZ6
0589	ZR1		0669	MZ2
0590	HJ1		0670	MA1
0591	ZUB		0671	MR4
0592	XQ9		0672	MZ3
0593	XQ7		0673	MZ8
0594	XD2		0674	ZZA
0595	ZD2		0675	ZHF
0596	ZD1		0676	YS5
0597	ZR3		0678	ZD5
0598	HH3		0679	YM1
0599	HH3		0680	ST6
0600	ZQB		0681	ZRE
0601	ZYA		0682	ZU2
0602	XD1		0683a	ZU2
0603	ZG1		0683b	ZU1
0604	ZG2		0684	BVF
0606	YM3		0685	ZHB
0607	ZR1		0686a	ZV7
0608	AA3		0686b	ZVC
0609a	XHB		0686c	ZVF
0609b	XHD		0687a	XHC
0610	ZFD		0694	BT1
0611	ZF8		0696	XH1
0612	1SC		0699	ZZD
0613	SMF		0700	HLA
0614	ZY5		0701	HL9
0617	1M3		0702	HL8
0618	HE3		0703	HT2
0622	XHA		0704	HT8

Table 2. Thompson Number, Grapheme Code

0705	HT1		0764	AC6
0709	ZHG		0765ab	AP1
0710	MZK		0765d	AV3
0711	MZG		0766	AR5
0712	ZYF		0767	ZT8
0713a	MR1		0768b	HL5
0713b	MR5		0769	ZUB
0714	MZC		0772	HTA
0715	XD1		0774	XH5
0716	ALB		0776	ZRQ
0717	ZB9		0778	ALB
0718	YG7		0779	ZHE
0721a	XQF		0780	MZM
0724	XGC		0782	SE2
0725	1B4		0788	AP9
0726	PHG		0789	AR3
0727	XQ4		0790	AL3
0728	ZUC		0791a	AW2
0729	ZS3		0791b	AP9
0730	XN4		0791c	AW2
0731	PCB		0792a	AL7
0733	ZUA		0793a	BM7
0734	AP5		0794	ASA
0735	AP5		0795	AVA
0736	SE1		0796	AV1
0737	AC6		0797	ZGB
0738ab	AA1		0798	ZUE
0738c	AA4		0799	AL2
0739	SMB		0800	AT1
0740	AL1		0801	AP2
0741a	AK1		0802	APE
0742	AL4		0803	AX7
0743	BP1		0804	XN3
0744a	BP2		0806	ZY4
0745	AK2		0807	MR2
0746	SB3		0808	XGE
0747a	BV1		0809	ZX7
0747b	BV3		0812	AL1
0748	BT2		0815	ZM1
0749	BT9		0819	AK6
0750	BT8		0824	ZTC
0751	AT1		0827	BV5
0752	AP3		0828	BVC
0753	AP7		0829	APF
0754	AS1		0830	ZQ7
0755	AM5		0831	ZTA
0756ab	AW1		0832	AT6
0757	AP9		0834	ATB
0758a	APB		0835	ZXA
0758b	AR4		0836	ZW4
0759	AR1		0837	XGD
0761	HM2		0839	BM4
0763	SR3		0840	MB9

Table 2. Thompson Number, Grapheme Code

0843	ZY1	1034	SB5
0844	AL7	1035	AB3
0846	SJ2	1036b	BVB
0852	SM3	1036c	AXH
0854	XH9	1037	PY1
0855	XHF	1038a	PD1
0856	ZRH	1038b	PYB
0857	ZYA	1039	SMD
1000a	PL1	1040	SJ1
1000cgi	PJ1	1042	SD1
1002b	PLB	1044	PD1
1003a	PY9	1045	SCM
1003b	PJ7	1046	SC8
1003c	PY9	1047	SDD
1004	PM1	1048	SE2
1005	PN3	1049	SCJ
1006	PL8	1050	PE4
1007	PJF	1051	SE8
1008	PY4	1052	PC4
1009a	SM8	1053a	PY4
1009b	SN7	1054	PAG
1009cd	SM9	1055	PE5
1010	SN4	1056	PT7
1011	SN1	1057	SME
1013	ST8	1058a	ST8
1014ac	PA3	1058b	ST2
1014b	SNB	1059	PL3
1016	SG1	1060a	ZE1
1017	SM6	1060b	PH6
1018bc	ST6	1063	PHM
1019	1S2	1064	PCC
1020	SMA	1065	PN8
1021	AB8	1066	BT1
1022	PHE	1067	ALH
1023	PN1	1068	AL5
1024	PD1	1070	PXB
1025a	PL4	1071	ST2
1026	PLB	1073b	PAB
1027	PAK	1073c	PJC
1028c	PAH	1074	PXA
1028d	PLB	1075	PT5
1029	AC8	1077	STB
1030adeh	SMA	1078	PE1
1030ijk	SR9	1079	SCL
1030lmn	SR8	1080	PN7
1030o	SM1	1081	SE1
1030p	SR1	1082	PL3
1030q	SR7	1084	SSG
1031a	SS2	1086	PL2
1031b	SS1	1087	PH6
1031cd	SS8		
1032	SS3		
1033	SB1		