On the Paired Variants of TZ'AK

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Students of Maya glyphs have long known of several unusual and imaginative forms of the logogram **TZ'AK** ("whole, complete") where, in place of the conventional single sign T573, scribes used various paired sets, each seemingly representing some binary relationship or opposition. These occur mostly in the "Distance Number Introducing Glyph" (DNIG) although they may appear in other known settings of **TZ'AK**. In a recent study Knowlton (2002) illustrates many of the paired signs, but a complete list has not been presented before now. The list below offers eleven such pairings (see Figure 1a-k), some commonplace and others obscure:

a.	yax/k'an	unripe/ripe
b.	k'in/ak'ab'	day/night
c.	chan/kab'	sky/earth
d.	ik'/ha'(al)	wind/rain
e.	muyal/ha'(al)	cloud/rain
f	waj/ha'	food/water
g	?/ch'ich'?	stingray spine/blood
h	?/?	?/?
i.	ixik/xib'	female/male
j	ek'/uh	star/moon
k.	k'in/uh	sun/moon

The grouping "day/night" is by far the most frequent (Riese 1984), but many of the others (such as "unripe/ripe" or "cloud/rain") are unique and have received little attention among epigraphers. Notably, some individual elements such as "sun" or "day" (*k'in*), "rain" (*ha'[al]*), and "moon" (*uh*) occur within different pairings.

It is important to stress that the two elements are not read as separate signs, but instead stand together as a single unit representing the word **TZ'AK**. There is a natural temptation to read them as distinct logograms (as in the sequence **K'IN-AK'AB'**, for example), and one recent study relies on such an analysis (Knowlton 2002). Yet the **TZ'AK** value is strongly indicated by examples of the DNIG on Yaxchilan Hieroglyphic Stairway 4, where the paired elements take the suffix **–ka** (**U-TZ'AK-ka-a**) (Figure 2). In this way the paired elements operate as a substitution for the more common T573 **TZ'AK** logogram, which also takes the **–ka** suffix on many occasions. No other Mayan word was spelled with such graphic flexibility.

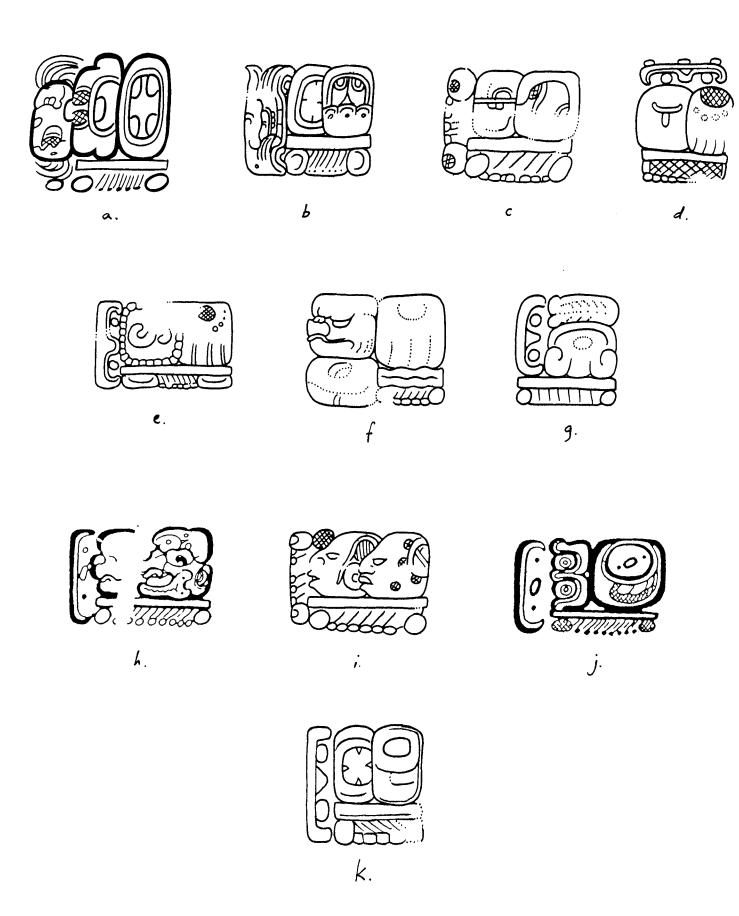


Figure 1. Variant **TZ'AK** forms, showing pairings of elements. (a) PAL:T.XIX platform, west, D4, (b) PAL:Bodega no. 208, (c) COP:T.XI, E. door, S. panel, B4, (d) COP:HS1, Step 53 (e) COP:T.XI, E. door, N. panel, C1, (f) COP: HS1, Step 42, (g) TNA:M.20, block D1, (h) PAL:96 Glyphs, D8, (i) COP:T.XI, E. door, S. panel, A1, (j) PAL:96 Glyphs, E7, (k) ZCP:Alt.1, A1. All drawings by the author except for (h) and (j) by Linda Schele.

Undoubtedly the contrasted pairings serve as semantic illustrations of the word *tz'ak*, and a discussion of the term should help elucidate the scribal motivations behind their use. Riese (1984:283) noted that the paired signs were "of complementary or contrasting" meaning, and Schele similarly described them as "paired oppositions." Some obviously are opposed terms

in some sense (day/night, sky/earth), but others seem less obviously so (star/moon, wind/rain, stingray spine/blood). I opt for a more nuanced interpretation of these forms, based on the complex array of meanings of the root *tz'ak*, which is now established as a firm phonetic value.

A review of the **TZ'AK** reading is important as background for our discussion. Riese (1984) was the first to propose the value, although in a very indirect way. He drew attention to the striking parallel between numbered sequence titles for rulers and the similar expressions in colonial Chontal, where –tz'ak is a numerical classifier for things in a sequence or order. Riese also noted that the presence of the –ka suffix on many of the so-called "hel" signs may



Figure 2. A paired form of **TZ'AK** with the **-ka** suffix, from YAX:HS5, 164. Drawing by Ian Graham (from Graham 1982:131).

indicate a **TZ'AK** value (see also Schele 1992), but he and others also opted for other possible readings, including Thompson's original **JEL** value (see Justeson 1984:345).

Only in the early 1990s did **TZ'AK** gradually emerge as the established value for the sign, as well as the variants now under discussion. In addition to the common –**ka** suffix noted by Riese, evidence for the **TZ'AK** value can be traced to two settings where the logogram appears to alternate with the syllabic sequence **tz'a-ka**. One such case comes from the so-called "Randall Stela" where we find the sequence **18-tz'a-ka** b'u-li in an apparent spelling of a numbered sequence title customarily spelled **U-#-TZ'AK-b'u-li**, in this instance for a *sajal* (Figure 3a, b). The syllables **tz'a-ka** also substitute for the logogram in spellings of the unusual transitive verb *u-tz'ak(aw) te'*, the meaning of which is not completely clear. At Tonina and Naranjo we find the verb spelled **U-TZ'AK-(wa)-TE'**, but at Piedras Negras we find **U-tz'a-ka-TE'** (Figure 3c-e). Today there is no question that **TZ'AK** is the exclusive value for the sign and its two-part variants.

We can now consider just how the juxtaposed elements convey the semantic qualities of tz'ak. The root is reconstructed in proto-Ch'olan with the meaning "complete, whole; enough" (Kaufman and Norman 1984). Another commonly attested gloss is "cure" or "medicine," and this is clearly a semantic extension on the more fundamental notion of "whole." That is, it reflects the basic idea in Mesoamerican thought that illness signals a missing aspect of one's soul. Medicine cures by making one's body "complete." Within the context of the Distance Number Introducing Glyph, the tz'ak root indicates that the elapsed time of the Distance Number establishes a temporal whole, suggesting that time is "complete" once it has reached its end-point (Riese 1984). The paired signs that stand for TZ'AK represent a fascinating array of juxtapositions illustrating similar concepts of "wholeness" and "completeness." They show that certain things or substances cannot naturally exist without their respective partners. In this sense the signs do not simply represent Levi-Straussian "binary oppositions" in nature, as is often supposed, but rather paired and complementary illustrations of a conceptual whole. Two

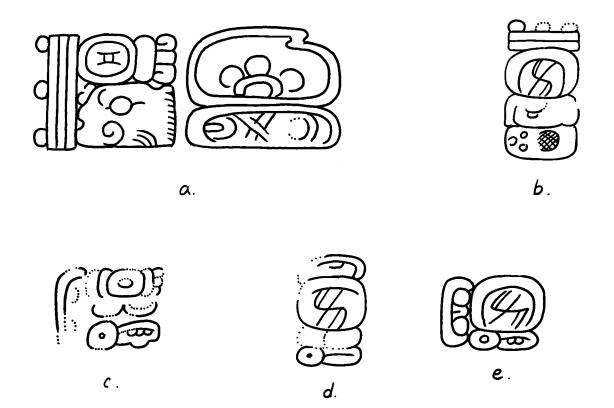


Figure 3. Substitutions between **tz'a-ka** and **TZ'AK** (T573). (a) COL:Randall Stela, (b) COP:St. B, B11a, (c) PNG: St.12, H2, (d) NAR:St.32, Z4a, (e) TNA:F.35, C

good illustrations of this subtle difference are the pairings cloud/rain and wind/rain, which in no way represent opposed phenomena; they are part-and-parcel of the one another. Another very recently deciphered form is stingray spine/blood (based on my own recent study of the "blood" logogram, probably read **K'IK'** or **CH'ICH'** when operating alone) where one can even sense a cause-and-effect relationship at work: one thing (stingray spine) leads to the other (blood), thus forming a "complete" (tz 'ak) if painful package. Cloud/rain, wind/rain, unripe/ripe and other pairings may well illustrate a similar linear principal.

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