

## PART IV: HOW TO APPROACH A HIEROGLYPHIC INSCRIPTION

Over the years we have developed an "algorithm," a set of steps to take when you look at an inscription for the first time. It turns out to be very difficult just to read your way through a new inscription glyph by glyph. We find it works much better to back off, survey the territory, and establish some landmarks before attempting to enter the new terrain.

The basic principle of this technique is to move from the easily known to the unknown. That is, without trying to understand the inscription at first, you move through it and identify the things that are easiest to identify, and mark them. The easiest place to start is the chronological framework of the inscription, first the Initial Series and the Calendar Rounds (you need to recognize only the day and month names and the numbers), then the Distance Numbers that connect them. Having these landmarks that divide the text into smaller units, you then proceed to look for other categories of information (verbs, names, titles, and other things fairly easy to recognize). Finally, you clean up the messy stuff that is left, if you can. Work out the chronology—find the Long Count dates for all the Calendar Rounds and make sure you know how the Distance Numbers connect them. Now, and only now, you can go back and read your way through the inscription and begin to appreciate the art of the scribes.

### The Color Conventions

A key part of this technique is the use of colored pencils to mark categories of information. The glyphs can either be lightly colored in or simply outlined in color, but doing one or the other will make the text ever so much easier to navigate. Colored pencils are preferred to marker pens and other media because they do not obscure the underlying glyphs (and they can be erased!). This is not an extensive set of conventions but is limited to a small set of colors and categories:

Calendar Rounds:	Yellow
Initial Series, Distance Numbers:	Orange
Verbs:	Green
Names and Titles:	Royal Purple (lightly applied) or Blank

Beyond that, for purposes of discourse analysis we also mark a couple of function glyphs: Blue for Background (T126), Red for Focus (T679). It really isn't necessary to mark all the glyphs in a text; what you want to do is establish a framework of known glyphs as landmarks.

### The Algorithm

(1) Make a copy of the inscription that leaves the glyphs large enough to see clearly, a copy that you won't mind messing up. Shoot, make several of them! Leave one copy intact, for reference. Cut another copy into double columns, paste each double column in the middle of a sheet of paper, and rule off lines on either side for note-taking (again, make a master and work on copies of it).

(2) Just to warm up, work on the Initial Series and the Supplementary Series. Since this is relatively known territory, you don't even have to color here. Just write in the values in the side boxes formed by the lines.

(3) Now go through the text glyph by glyph, but don't try to read anything. OK, you can read if you want to, but don't get distracted. Your goal is to find and mark all the Calendar Rounds in the text. Color them yellow.

(4) Go back over the text and mark all the Distance Numbers that connect the Calendar Rounds. Color them orange. Write their values in the spaces for notes. For good measure, now that you are a little acquainted with the text, look for other chronological markers like Period Endings, and color them. The goal is to get all the "merely" chronological stuff out of the way. Of course chronology isn't ever "mere," and sooner or later you'll have to work out the chronology. But make that "later." Sit back and have another cup of coffee...

(5) Now sit back and admire what you have just done. The text is now segmented into smaller pieces, the stretches of text between Calendar Rounds. (This is the transformation that old time glyphers call turning a plate full of spaghetti into doggie biscuits, changing an amorphous mass into discrete pieces.)

(6) Next big step: What comes after a date? A verb. Look at the glyphs that follow the Calendar Rounds and see if they don't have the trappings of verbs. Check your inventory of common verbs, and look for the common verb endings. Color them green ("green for go," "verde para verbo").

(7) What comes after a verb ought to be a name, and that is usually followed by titles. The Emblem Glyph is especially easy to spot, so look for EGs; they will be at the end of long name-title phrases.

(8) If you still have long strings of unidentified glyphs between the verbs and the next chronological break, look for Relationship Glyphs. You might have a Parentage Statement, for instance.

(9) By now the text should have been reduced to a handfull of knotty problems. You may not in fact be able to solve all of them. In some inscriptions, nobody can. So don't feel bad about it.

(10) Time to do the math. Now work out the chronology and assign Long Count dates to all of the Calendar Rounds. Look for breaks in the chronology (where the next date doesn't follow the last one in chronological order). These mark major divisions of the text. Within each division there should be a common Topic, and the sentences will probably have parallel structures.

(11) You can now move to the next stage, a Structural Analysis. This consists of cutting up the glyph columns and arranging the glyph strings in horizontal lines. Usually, each line will begin with a Calendar Round, or with a Distance Number and Calendar Round. The purpose of this exercise is to look across the lines for parallel constructions. You may want to use a clean copy for this layout.

(12) Get a glass of wine, sit back, and admire the skill of the scribe in the manipulation of the text for dramatic purposes. Heck, admire your own skill for having gotten to this point! Look back at the original drawing to see if there are any interesting plays of text against image.

So there you are, a twelve-step program! Enjoy!!

## A Sample Inscription

To illustrate the methodology just presented, let's take a sample inscription. One we have always found interesting is Piedras Negras Stela 36. This is a stela with no image, all text. It's one of five stelae (Stelae 32-37) that were lined up in front of a building on the west side of the South Group Court, the area of oldest occupation in Piedras Negras, and it features the king known as Ruler 2. The text appears at first glance to be straight-forward, an Initial Series date and event, a Distance Number to another Calendar Round, and so on. But appearances can be deceiving, and this text is a good lesson in the tactics of reading a monumental inscription.

(1) Cut the drawing into two double columns (A-B and C-D), and paste each on a page, drawing lines at the sides to write notes on.

(2) There is an ISIG, so there is an Initial Series, so go ahead and work it. It clearly states 9 b'ak'tuns, 10 k'atuns, 6 tuns, 5 winals, and 9 k'ins: 9.10.6.5.9. This is not a Period Ending, so the event is probably historical. The day number is 8, but the day name (in the cartouche) is eroded. However, we can reconstruct it by referring to the last digit of the Long Count. That coefficient was 9, so this is the 9<sup>th</sup> day after Ahau: Muluc, so B4 is 8 Muluc.

The glyph at B5 is recognizable as Glyph F, so A5 is the Lord of the Night. A6-B7 is a Lunar Series: A6, the moon is 4 days old; B6, it is the 4<sup>th</sup> lunation; A7, this is the name of the moon; B7, this lunation is counted as 29 days long. The next glyph, A8, is a number and month name: 2 Uo. So this is 9.10.6.5.9, 8 Muluc 2 Uo.

(3) Now scan the text looking for more Calendar Rounds, using the cartouches as your guide. There is a CR at C4-D4, and another at D7-C8: 6 Something 19 Zotz', and 4 Ahau 13 Mol.

(4) Now look for the Distance Numbers. The only one is C3-D3, and it is (reversing the order to put the numbers in the sequence of the Long Count) 2 k'atuns, 1 tun, 13 winals, 19 k'in: 2.1.13.19.

The text ends with 4 Ahau 13 Mol and something else at D8. Texts often end with Period Endings. Look on your chart of Period Endings and you will see 9.11.15.0.0, the only PE that has this Calendar Round. In fact, the glyph at D8 is called "five tuns lacking," meaning it refers to a Period Ending of the form x.x.15.0.0. So the text begins at 9.10.6.5.9 8 Muluc 2 Uo, and ends at 9.11.15.0.0 4 Ahau 13 Mol.

(5) Now we have three text segments. First, A1-D2; then, C3-D7 (or maybe C7). We just have to figure out what the events are and who they pertain to. There are three dates, and the last one pertains to the Period Ending, so we only have to figure out the first two.

(6) What comes after a date? A verb. So B8 ought to be a verb, and C5 ought to be a verb. You should be able to recognize C5 as Thompson's "up-ended frog," identified by Proskouriakoff as a birth verb. B8 is harder, but this is a Piedras Negras specialty, the glyph that Thompson called the "toothache" glyph. Proskouriakoff identified it as accession to office.

It is a very compacted glyph block. The central element is the head with the "toothache" bandage around a vulture's head. To the left is a partly eroded **t̄i**, above the vulture head are the two balls of **ajaw**, and below the syllable sign **le**. The wrap around the vulture head is a reference to tying on the headband of a king, so the whole thing, unpacked, reads "he took the headband of rulership." So, we have an accession date, a birth date, and a Period Ending.

(7) What follows a verb ought to be a name-and-title string. The first string would be C1-D2. Notice that D2 is an Emblem Glyph, the EG of Piedras Negras. That makes it very likely that everything else is a name string, maybe a name and another title. The second string is D5-D6 or C7. Note that glyphs C1-C2 are the same as glyphs D5-D6. This is the name phrase of the protagonist, Ruler 2.

(8-9) What is left is the resolution of C7. It's not an Emblem Glyph, so it probably doesn't go with the name phrase. This is another Piedras Negras specialty. It shows the sun (in the middle) peeking out from between the sky (on top) and the earth (on the bottom), and it almost has to mean something like "dawn." Piedras Negras uses this glyph where other sites would say "and then, it came to be (such-and-such a date)." So it introduces the Period Ending; effectively, it's the verb for the last sentence: It dawned on 4 Ahau 13 Mol, the 15-tun Period Ending."

We also have to reconstruct the date at C4-D4.

(10) Time to do the math. We have three dates and one Distance Number. One of the dates (C4-D4) is partly eroded, so we also have to figure out what it is. What does the Distance Number connect? Let's just make some quick checks. The Distance Number ends in 19 k'in, 19 days. If it goes from the Initial Series date that ends in 9, then the resulting day would be a day number 28-20 = 8, or a day named *Lamat*. *Lamat* can't fall on the 19th of a month, so C4 can't be *Lamat*.

If the DN connects the eroded date at C4-D4 to the PE 9.11.15.0.0, then subtracting the DN 2.1.13.19 from the PE we get 9.9.13.4.1, which would be a day named *Imix*, and *Imix* can fall on the 19th of a month. (A computer check tells us that the LC is 6 *Imix* 19 *Zotz'*; computers are good for something!) So, the DN at C3-D3 connects the CR at C4-D4 to the Period Ending at D7-C8.

We could have saved ourselves all that by knowing a little grammar. The use of T126 ("loop-drip-loop") tells you which way to count from a Distance Number. The time period glyphs at C3-D3 all have T126 suffixed to their bottoms. The next event glyph also has T126 on its bottom. This tells us the DN is to be counted from that date.

(11) We can now do a structural analysis, or just construct the text. We have two sentences:

- (a) On... 8 *Muluc* 2 *Uo*, acceded to office Ruler 2 of Piedras Negras.
- (b) It was 2.1.13.19 from the birth of Ruler 2 to the Period Ending 4 Ahau 13 Mol.

Putting the dates in chronological order, the chronology is:

- 9.9.13.4.1, 6 *Imix* 19 *Zotz'*, Ruler 2 was born
- 9.10.6.5.9, 8 *Muluc* 2 *Uo*, Ruler 2 took office.
- 9.11.15.0.0, it was the Period Ending 9.11.15.0.0, 4 Ahau 13 Mol.

The scribe didn't tell us this, but we can now calculate that Ruler 2 was only 13 when he acceded to office (13.1.8, to be exact)! By the time this stela rolled around, he was about 42 (2.1.13.19).

(12) Now admire the text. The Background (A-B) faces the Foreground (C-D), with the accession glyph at B8 the turning point. Those compressed glyphs at B8 allow the scribe to place the ruler's name in the "hot corner," the upper right-hand corner, the most prominent spot on a monument (as it is on a newspaper front page).

If we consult Proskouriakoff's list of monuments and dates, we find that Ruler 2 has the following monuments:

Stela 33. 9.10.10.0.0, the first PE after accession on 9.10.6.5.9, therefore his "niche" stela.

Stela 32. 9.10.15.0.0, the next Period Ending.

Stela 34. 9.11.0.0.0.

Stela 46. 9.11.5.0.0.

Stela 35. 9.11.10.0.0.

Stela 36. 9.11.15.0.0, this stela.

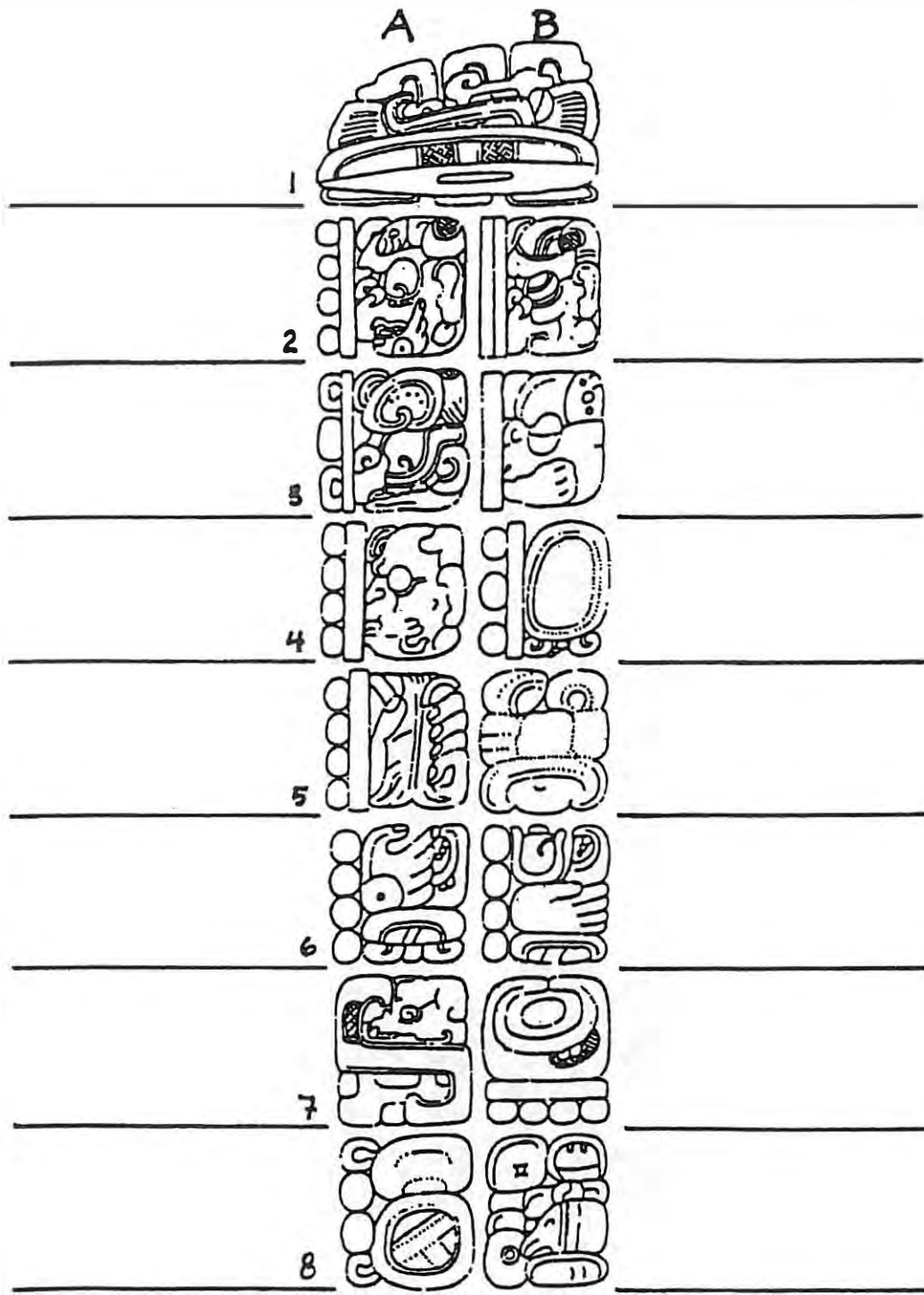
Stela 37. 9.12.0.0.0. His last stela.

So, by the time they got to Stela 36, Ruler 2 had celebrated five Period Endings with five stelae, and they had the liberty to do something a little unusual with the text!

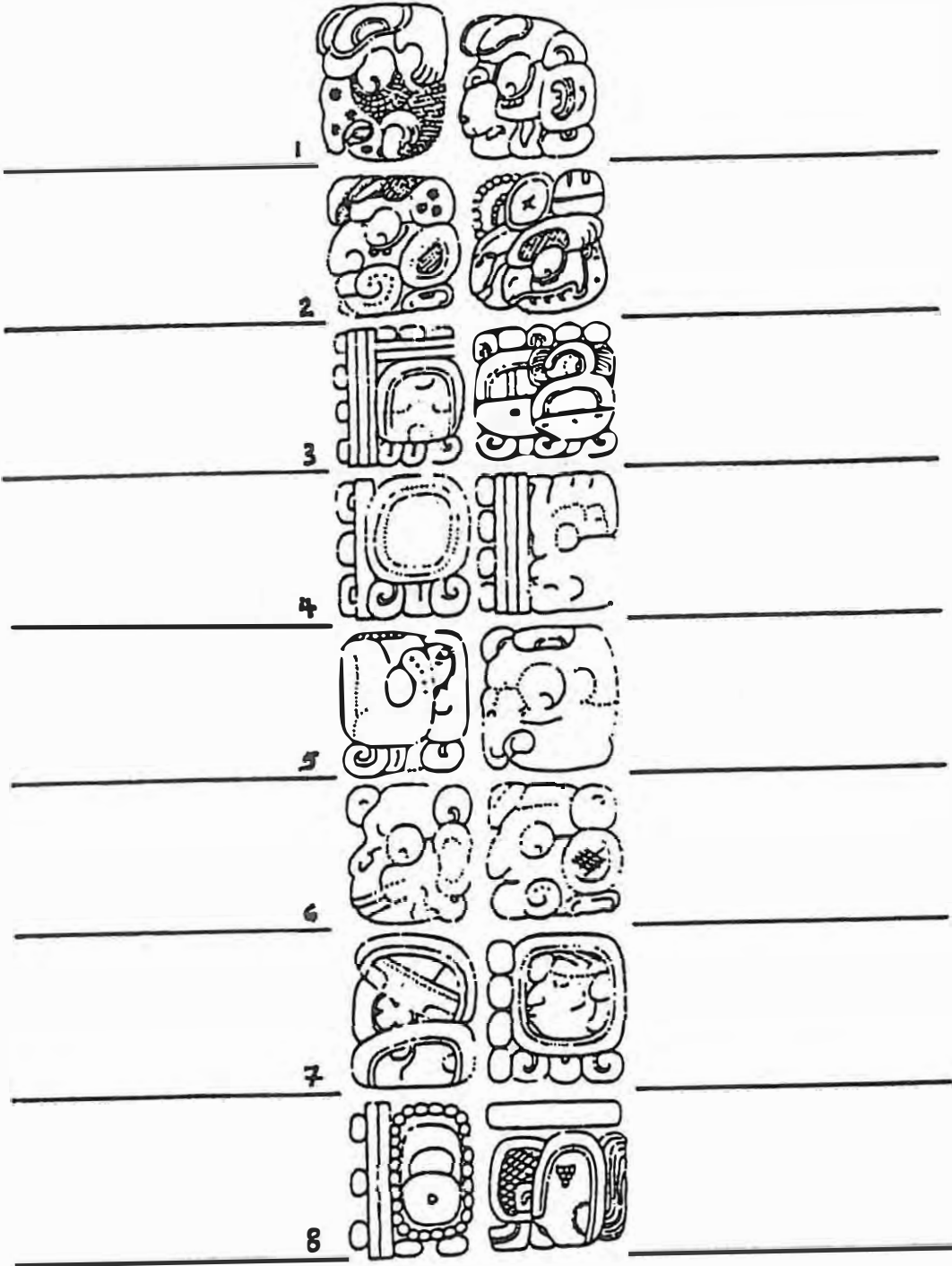
**IV-2. Piedras Negras Stela 33 (John Montgomery). Ruler 2's Niche Stela, celebrating his first Period Ending after accession, in the presence of his mother (after all, he was only 13!).**



IV-3. Layout, Piedras Negras Stela 36



C D



*Che' tza' ujtyi b'ajche' jiñi!*

"That's the way it ended!"

(the traditional ending to a Chol folktale)