Mayan Glyphs

1-Line Summary

This demo is about the different types of writing systems that can be used to represent language; it focuses on the ancient Mayan writing system, a logosyllabic system that uses symbols to represent words and/or syllables.

Background:

The ancient Mayans developed a logosyllabic writing system around 300 BC that was in use until the Spanish conquest in the 1400s. The system consists of complex symbols, stylized in boxes, which could represent either whole words or syllables that, when combined, made up whole words. Mayan logograms were both painted and carved, but much of what remains today consists of carvings by elites on their monuments, temples, and palaces. The symbols themselves had an artistic element, and scribes could manipulate elements to alter the word's meanings or add artistic flair.

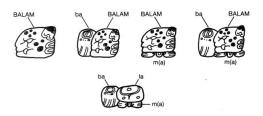
There are many ways to write languages, including alphabetic systems such as the one we use and logosyllabic systems such as ancient Mayans used. Logosyllabic writing systems have symbols that represent both whole words and single syllables. Each syllable unit is typically comprised of a consonant followed by a vowel. These symbols are often interchangeable and can by mixed and matched to create new or more complex words and phrases.

Mayan hieroglyphs specifically are made up of glyphs, basic units that correspond with a meaning or sound. They can be assembled into a compound, a distinct block equivalent to a word. Compounds can be made up of anywhere from 1-5 glyphs which are read top to bottom,



2 1 3 5 4

left to right. With all of the potential combinations the Mayan's logosyllabic system provides, the same words can be written many different ways. Mayan scholars loved to be creative and used symbols interchangeably, as shown by the jaguar glyph.



Readings

Introductory -

http://www.ancientscripts.com/maya.html

Advanced -

Houston, S.D. (1988). The Phonetic Decipherment of Mayan Glyphs. *Antiquity, 62* (234), 126-135.

Materials:

For this demo you will need:

- Jaguar glyph card
- 7 additional glyph cards: mountain, wind, shield, hat, it happened, high king,
 Dresden Codex page

- Glyph flashcards
- Whiteboard
- Expo marker
- Expo eraser

The Interaction:

The pitch – Want to learn some Mayan hieroglyphs?

Using the materials -

You will need a cart for this activity. Set up the cart by spreading out the glyph flashcards so that they are all visible. Set out the jaguar card and the whiteboard, but keep the extra glyph cards to the side until they are needed.

Start by showing the visitors the flashcards and explaining that they are "letters" from the ancient Mayan language. If visitors are unfamiliar with the Maya this is a great time to give them a little bit of background on the culture.

Using the whiteboard, write out the word "COSI." Ask visitors how many letters are in COSI, followed by how many syllables. Then explain that while in English we use letters (each standing for a distinct sound) to create our words, the Mayans did things a little bit differently by using syllables (each standing for a more complex consonant and vowel sound) to create their words. Ask them how many "letters" the Mayans would use if they were to write the word COSI – correct answer, 2!

Then, to get into the glyph decoding, show visitors the jaguar glyph card. Explain that they will be using the glyph flashcards to figure out what the ancient Mayan word for jaguar was by assembling the 3 different glyphs and the syllables they stand for. Visitors can search through the glyph cards to find "ba," "la," and "m" to assemble the glyph. Then have them sound out the word, *balam*. Turn over the jaguar card to reveal the translation. On the bottom of the page is the pictograph for jaguar and glyphs that use both the pictograph and syllables. Use these to talk about how the Mayans didn't just write with syllables, but pictures too, and that they could combine syllable glyphs with pictographs to make more creative and complex glyphs.

If visitors are interested and want to continue, you can let them chose more glyphs to translate in the same fashion.

Easy level: mountain, bird Medium level: shield, hat

Hard level: it happened, high king, Dresden Codex page (glyph in the red box)*

*Use this glyph to talk about how handwriting differs between writers in Mayan and other writing styles just as it does in English. This can make translation more complicated when the writing doesn't always look just like the "standard" for each letter/syllable.

Messages:

Critical take home: There are ways to write language other than alphabets. Alphabets, like the one we use in English, are made up of letters that stand for the most basic sounds, or units of speech. We string these together to form the more complex sounds we know as words. Syllabaries, like the Mayan writing system, are made up of slightly more complex units – entire syllables. These syllables are combined in much the same way to create words. Though they are fundamentally different, these writing systems both allow people to write down the language they speak.

But wait, there's more: Alphabets and syllabaries aren't the only ways to make up words. There are also logographic systems, which are comprised of thousands of symbols that represent words or parts of words. These symbols can be combined and manipulated to form new words and sentences. Being literate in a logographic system requires knowledge of thousands of symbols that stand for the thousands of syllables and/or words used in speech. A modern day example of this is Chinese. To be fluent in Chinese a person must know over 3,000 characters! Ancient Egyptian hieroglyphics were highly complex and changed over the course of their use. Ultimately they contained a mix of all three types of writing systems.

And still more: The decipherment of Mayan glyphs occurred only recently, in the mid 20th century. Mayan glyphs were initially thought to be logographic based on their level of detail; however, later scholars began to question this theory. Comparing the glyphs they saw on Maya monuments with a rudimentary translation of the Mayan "alphabet" created by the Spanish explorers who first encountered the Maya, they began to see some similarities. They cross-referenced glyphs with this "alphabet" and with each other and quickly began to see patterns emerge. They discovered that Mayan writing was in fact phonetic and developed the syllabary charts used in this activity.

And one more thing: Some pictographic systems such as Egyptian hieroglyphs evolved over time to become more abstract and logographic as they became more widely used for everyday affairs. However, Mayan glyphs remained similarly complex throughout the history of their use.

Homework:

Ask visitors to think about how speech is represented around them in their everyday lives. Do they see mostly alphabets with symbols that represent sounds, or do they notice some pictographic symbols that are meant to represent words?

Make the Link:

IPA Nametags: if the visitors are interested in other writing systems this is a good one to suggest because they can see their name in the phonetic alphabet.

OSU Link: The metal tiles throughout Thompson Library inscribed with different symbols represent nearly 100 different historical and modern languages from around the world, showing just how diverse writing systems can be.

Target Audience:

This demo is geared toward upper elementary school visitors or older. Younger visitors can still have fun using the flashcards to decode the glyph, but without an understanding of syllables it can be hard for them to get the main takeaway of the demo.

Tips From the Field:

Feel free to make it personal! If visitors are interested in using the glyphs to spell their own words you can help them to assemble the flashcard glyphs into words – writing their name in glyphs has been something several visitors have been interested in.

Ohio students typically learn about the Maya in 5th grade. For kids in 5th grade or higher this provides them with a great frame of reference for the activity. However, for younger kids giving them a little background on the Mayans is helpful, such as that they lived in South America and that this writing system was used by them centuries ago.

If visitors are struggling to find the glyphs amongst the flashcards a good way to help is to describe the shape of the glyph, such as "m" looks like a bowtie or "la" has a triangle shape in the middle. This can help them to find familiar shapes amongst the sea of other glyphs.