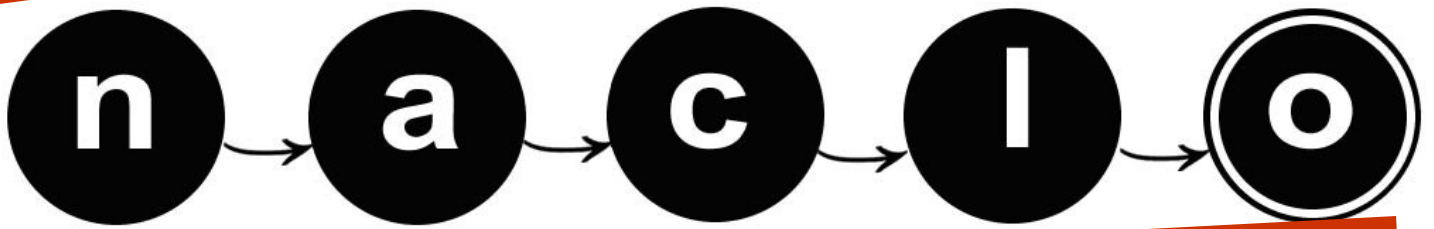


Announcing: The 2011 North American Computational Linguistics Olympiad!



Attention all High School Students

The **Columbia University Computer Science Department** is proud to announce the 2011 North American Computational Linguistics Olympiad! The Open Competition will be held on Wednesday, February 2nd. Register now at www.naclo.cs.cmu.edu.

NACLO is an educational competition in Linguistics -- the Science of Language. It challenges you to develop your own strategies for solving problems in fascinating real languages and formal symbolic systems. Do you have a knack for languages, logic and "computational thinking"? Would you like to try your hand at deciphering an ancient script or deducing the logical patterns of Swahili, Hawaiian or Finite State Transducers? Maybe the Computational Linguistics Olympiad is the right challenge for you! Try the problem on the other side of this flyer! If you enjoy that one, try some more on the website:

www.naclo.cs.cmu.edu

Can you be a Linguist or a Computational Linguist?

Give it a try! Ask your language arts or second language teacher how you can participate in NACLO 2011. Please check the Columbia website at <http://www.cs.columbia.edu/NACLO>.

For more information, email: NACLO@lists.cs.columbia.edu

NACLO is an academic competition jointly sponsored by the US National Science Foundation, the North American Chapter of the Association for Computational Linguistics (NAACL), D.E. Shaw, Carnegie Mellon University, The University of Michigan, and The University of Pittsburgh Intelligent Systems Program. Top scorers in the Open Competition on February 2nd will be eligible to compete in an Invitational Competition on March 10th, 2010! Winners of the Invitational competition will be eligible to represent North America at the International Linguistic Olympiad in July (US location to be determined). Thanks to the generosity of our sponsors, there is no participation fee for any NACLO event. More details about the event can be found on the national website at www.naclo.cs.cmu.edu.

Try your hand at this sample problem. More problems at www.naclo.cs.cmu.edu.
 (This problem was graciously provided by Ivan Derzhanski, and first appeared at the 33rd Traditional Olympiad in Linguistics and Mathematics held in Moscow in 2002).

Hmong

Hmong Daw (which belongs to the Hmong Mien language family, along with several other Hmong languages) is spoken by approximately 165 thousand people in south-eastern China, Laos, Thailand, Vietnam, and some other countries.

In the 1960s Shong Lue Yang, a peasant from the Hmong Daw nation (also known as White Miao), invented an original writing system for his native language. This writing system is still in use alongside a Roman-based alphabet created by Christian missionaries.

Here are several words and phrases in the Hmong Daw language written in Shong Lue Yang's script and the missionaries' alphabet, as well as their English translations:

1.	᠊ᠠᠮᠤᠠᠨᠤᠰᠤᠠᠨᠠᠨᠠᠨ	kev ntsuas no	degree
2.	᠊ᠠᠨᠠᠨᠠᠨ	hauv	inside
3.	᠊ᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨ	raug raws cai	legal
4.	᠊ᠠᠨᠠᠨᠠᠨᠠᠨ	hloov mus	transfer
5.	᠊ᠠᠨᠠᠨ	qhua	guest
6.	᠊ᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨ	yog los nag	it is raining
7.	᠊ᠠᠨᠠᠨ	kvv yees	guess
8.	᠊ᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨ	ris ceg luv	Bermuda shorts

In the missionaries' alphabet the letter **w** stands for a specific vowel. The letters **g**, **s** and **v** at the ends of the syllables aren't consonants; instead, they denote the so-called tones (specific ways of pronouncing the vowels).

1. Write in the missionaries' alphabet (and explain):

2. Write in Shong Lue Yang's script (and explain):

- 9. ᠊ᠠᠨᠠᠨ bird
- 10. ᠊ᠠᠨᠠᠨ lobster
- 11. ᠊ᠠᠨᠠᠨᠠᠨ speak
- 12. ᠊ᠠᠨᠠᠨᠠᠨᠠᠨ dizzy

- 13. **hluav** ash
- 14. **li cas** how?
- 15. **neeg ntse** smart, wise
- 16. **yawg** grandfather

