

2010 Solutions

(G) Tangkhul Tangle (1/2)

Note that all but one of the Tangkhul sentences (sentence g) consist of two words. The two words consist of recurring components. For the first word, these are i, na, ā, ni, and thum. For the second word, these are masik, thāi, rā, ser, ngāi, ngarok, hāira, ei, lā, and ra. The word in the one word sentence (g) is drawn from components in the second set. In exactly one of the English sentences (sentence 5), the pronoun standing for the person doing the action of the verb is enclosed in parenthesis, showing that it is not present in the Tangkhul original. From this we may infer that:

1. sentences g and 5 match.
2. the final word in each Tangkhul sentence is the verb.
3. The first words in each two-word Tangkhul sentence must be a pronoun.

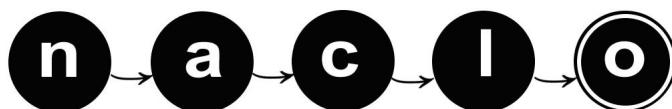
The pronouns vary in person and number. First person includes the speaker (I, we), second person includes the one being addressed (you), and third person refers to some other entity (he, she, it, they).

	sg	dl	pl	tot
1st	0	I	I	2
2nd	I	0	I	2
3rd	I	2	I	4
tot	2	3	3	8

Exactly one of the Tangkhul pronouns occurs twice (āni, in b and h). This must be 3rd dual. Therefore, these sentences must match sentences 6 and 7. The component ā occurs four times, like third person; the component ni occurs three times, like dual. Working in this direction, it is possible to establish the following equivalences:

1st i
2nd na
3rd ā

sg (unmarked)
dl ni
pl thum



2010 Solutions

(G) Tangkhul Tangle (2/2)

This establishes the following matches between the Tangkhul and English: a=4, c=1, d=9, e=2, f=8, i=3.

Tangkhul sentences a and c both contain masik; the English equivalents both contain "pinch/pinched". d, e, and f all contain thāi; the English equivalents all contain "see/saw." Tangkhul sentences i and g both contain "rā"; the English equivalents both contain "come". Thus, the first part of the final word in the Tangkhul sentences is the verb root ("pinch", "see", or "come"). It follows that b=6 and h=7. Now that the sentences are matched, it is possible to determine the meanings of the verb suffixes:

ser	all
ngarok	reciprocal (X one another)
ngāi	desiderative (want to X)
hāira	perfective (have Xed)
ei	past
ra	future
lā	interrogative

These are not problematic, except for ser. Transitive verbs are verbs which take object and intransitive verbs are verbs which do not. If ser is suffixed to the transitive verb masik "pinch", we get to "pinch all". That is, it quantifies over the object. However, if it is suffixed to the intransitive verb rā "see", we get "call come". That is, it quantifies over the subject. Given this observation, and the above equivalences, it is possible to provide the correct translations for G2 and G3.

