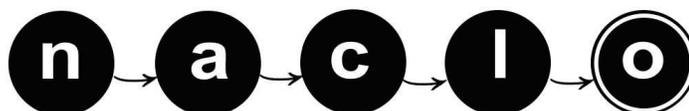


2009 Solutions

(J) HypoHmongdriac

1. ___ be lost
2. ___ beef
3. ___ beverage
4. ___ bovine* livestock
5. ___ chicken (the animal)
6. ___ dog (the animal)
7. ___ filthy animals; filth
8. ___ filthy language
9. ___ flesh; meat
10. ___ hurt
11. ___ internal organs; soul
12. ___ language
13. ___ liver (the organ)
14. ___ livestock
15. ___ lose heart ("liver"); lose one's wits; panic
16. ___ lose life to water; drown
17. ___ lose money ("silver")
18. ___ lungs
19. ___ money
20. ___ small, non-bovine livestock
21. ___ pig (the animal)
22. ___ poetic genre ("money-language")
23. ___ silver
24. ___ suffer from a headache ("brain-ache")
25. ___ suffer from grief ("liver-ache")
26. ___ suffer from lung disease ("lung-ache")
27. ___ water
28. ___ water-buffalo liver
29. ___ wealth
30. ___ whisky
31. ___ young female
32. ___ young sow



2009 Solutions

(J) HypoHmongdriac

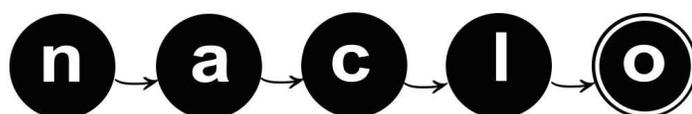
Solution:

28, be lost; 17, beef; 6, beverage; 15, bovine livestock; 13, chicken; 10, dog; 12, fifty animals; 23, filthy language; 18, flesh; 32, hurt; 3, internal organs; 24, language; 1, liver; 16, livestock; 25, lose heart; 27, lose life to water; 26, lose money; 2, lungs; 8, money; 14, small livestock; 11, pig; 22, poetic genre; 7, silver; 30, suffer from a headache; 29, suffer from grief; 31, suffer from lung disease; 4, water; 21, water-buffalo liver; 9, wealth; 5, whisky; 20, young female; 19, young sow

To solve this problem, it is important to realize that both of the two collections of words can be seen as networks, where words are connected by hyponymy relationships, and that these two networks must have equivalent shapes. However since “matching up” a whole network (or “graph”) of this kind with another is difficult even for a computer, solving this problem requires noting that the graphs are largely composed of smaller graphs with a tree-like shape. These are much simpler to deal with.

For example, you might observe that there are exactly two components of the graph where three words are hyponymns of a single word (like a tree with three branches) for both the Hmong and English collections. This allows you to infer that 25-28 and 29-32 must be either ‘be lost’ and the ‘lose’ words or ‘hurt’ and the ‘suffer’ words. You can determine how to match them by noting that only one of the roots in the Hmong words does not occur elsewhere (*hlwb*) and that only one of the English meanings does not occur elsewhere (‘brain’). This suggests that 29-32 must be the ‘hurt/suffer’ group and 25-28 must be the ‘lost/lose’ group. Furthermore, since *sab* occurs in both of these groups, and since ‘liver’ occurs in both groups, *sab* must be ‘liver’, *sab-twm* must be ‘water-buffalo liver’ and *twm* must mean ‘water buffalo’.

For example, you might observe that there are exactly two components of the graph where three words are hyponymns of a single word (like a tree with three branches) for both the Hmong and English collections. This allows you to infer that 25-28 and 29-32 must be either ‘be lost’ and the ‘lose’ words or ‘hurt’ and the ‘suffer’ words.



2009 Solutions

(J) HypoHmongdriac

You can determine how to match them by noting that only one of the roots in the Hmong words does not occur elsewhere (*hlwb*) and that only one of the English meanings does not occur elsewhere ('brain'). This suggests that 29-32 must be the 'hurt/suffer' group and 25-28 must be the 'lost/lose' group. Furthermore, since *sab* occurs in both of these groups, and since 'liver' occurs in both groups, *sab* must be 'liver', *sab-twm* must be 'water-buffalo liver' and *twm* must mean 'water buffalo'.

This will lead you to the livestock tree in 12-16 and the realization that Hmong compounds are of at least two types. In one type, the meaning of the whole is the meaning of the first part modified by the second part (as in *sab-twm*). In the second type, the meaning of the whole is a general category including the meaning of both parts (that is, both parts are hyponymns of the whole). Knowing that *twm* is 'water buffalo' should allow you to guess that *nyuj-twm* is 'bovine livestock' since 'water buffalo' is a hyponym of only 'livestock' and 'bovine livestock', 'bovine livestock' is a hyponymn of 'livestock' and *nyuj-twm* is a hyponymn of *qab-npua-nyuj-twm*. We can now see that 3, 6, 9, and 12 are all compounds of the second type, and reason from what is known about their parts that 3 and 6 must be 'internal organs; soul' and 'beverage'. We see that 12 must be 'filthy animal; filth' since it occurs embedded inside of a type one compound that can only mean 'filthy language' (23). Therefore, 14 must be 'small, non-bovine livestock'.

By applying similar logic to the remaining cases, you will arrive at the answer given above.

