

Problem #3

We break the Georgian words into their components. We derive the suffixes -e and -ob by comparing vinadire and nadirob, and the suffix -eb by contrasting visadileb and vsadilob. We can't tell if -ob is contained in ambob, -eb in vigoreb, or -e in (v)itavmGdomareve, because we have nothing to compare these forms to. Also we don't know if the word izam-t contains a suffix. We shall assume that all initial v- and i- are prefixes.

We analyse the translations as well.

I	\leftarrow	say
you	\leftarrow	say
you	\circ	say
I	\leftarrow	do
you (pl.)	\leftarrow	do
you (pl.)	\rightarrow	do
I	\rightarrow	roll
we	\circ	dine
I	\rightarrow	dine
you (pl.)	\leftarrow	hunt
I	\leftarrow	hunt
you	\circ	hunt
I	\leftarrow	preside
you	\leftarrow	preside
we	\rightarrow	walk

There are 9 Georgian roots but only 7 English ones, meaning that some Georgian verbs have two or even three different roots (cf. *go* and *went* in English).

How are the person/number of the subject expressed? Let us count: 'I' occurs 6 times, 'you' 4 times, 'we' 2 times, 'you (pl.)' 3 times. This must correspond to some combination of prefixes and suffixes. It turns out that the combination of the first prefix and the last suffix serves our purpose: v+0, 0+0, v+t, 0+t occur exactly that many times. (From this it follows that in Georgian the subject person/number markers are constructed of markers of 1st/2nd person and singular/plural number.) So the problem is divided into four smaller ones. We can identify two pairs instantly: vigoreb 'I will roll', vivlit 'we will walk'; hence vsadilobt 'we dine' and visadileb

'I will dine' follow also. We are done with 'we'.

We have forms with the root nadir in all three remaining persons/numbers; this must be 'hunt'. The roots keni and zam mean 'do', consequently vkeni is 'I did'. Assuming that tense is marked in the same way in different persons/numbers, we also compute kenit 'you (pl.) did' and izamt 'you (pl.) will do'.

Most likely the form ambob, which bears the least similarity to the others, means 'you say', since no other present tense forms remain. We are left with (v)-tkvi and (v)-i-tavmGdomarev-e for 'I/you presided' and 'I/you said'. We can't be sure what is what, but common sense suggests that the more common concept should be expressed in a more compact way. The problem has been solved.

vtkvi	'I said'	nadirob	'you hunt'
kenit	'you (pl.) did'	visadileb	'I will dine'
inadiret	'you (pl.) hunted'	vinadire	'I hunted'
itavmGdomareve	'you chaired'	ambob	'you say'
vsadilobt	'we dine'	vitavmGdomareve	'I chaired'
tkvi	'you said'	izamt	'you (pl.) will do'
vigoreb	'I will roll'	vivlit	'we will walk'
vkeni	'I did'		

What did we learn about the tense markers? Let us make another table:

	do	say	walk	roll	dine	hunt	preside
\leftarrow	keni	tkvi				i-nadir-e	i-tavmGdomarev-e
\circ		amb-ob			sadil-ob	nadir-ob	
\rightarrow	i-zam		i-vli	i-gor-eb	i-sadil-eb		