## **2010 Solutions**

## (B) Say it in Abma (1/2)

In order to work out which word in the above sentences encodes the meaning associated with the individual words in the English translation we need to compare sentences with common meanings. For example 'water' appears in the translation of a., b., i., and k. Since 'runs' appears in e., j., and k. we can conclude that *sileng* = 'water' and *mworob* = 'runs'. This then allows us to conclude that *mwamni* (a. & b.) = 'drink', *mwabma* (e. & i) = 'here', *mwelebte* (i) = 'carry (as one carries water)', *mwesak* (h. & j.) = 'up'. We can deduce from these examples that the word order is virtually the same as in English.

A comparison of c. and d. shows us that *nutsu* = 'child'. A comparison of f. and g. shows us that *mwisib* = 'down' and also 'go down' or 'move downwards'. Since we know that f. is literally 'pulls + 'Mabontare' + 'down', we can deduce that *tela* (h.) = 'axe' and *mweselkani* (h.) = 'carry (as one does an axe)'. An analysis of i. shows us that the meaning encoded by English 'bring' is expressed by two words in Abma: *mwelebte* 'carry as one does water' (since it is not the same verb as in h. which involves carrying an axe) followed by the word *mwabma* translated as 'here' in e. We can analyse the meaning of English 'bring' as being made up of the meaning of 'carry' plus the idea of 'moving towards speaker's location', i.e., 'here'.

A comparison of b. and d. shows that *mwatbo* = 'keep doing something', and that (as in English) it immediately precedes the other verb in the same sentence.

The words/verbs which express directional meanings, 'up', 'down', 'here' follow the other verb (d.) or the verb+Object noun (b.)

Having worked out the meaning of each word and the order in which words must combine in sentences, we can accurately translate the English sentences in I and the Abma sentences in 2.

While analysing the data it is very useful to create a dictionary as one goes along. Our analysis of sentences a. to k. above gives us the following results:

mwamni	drink	mwisib	(go) down
mwatbo	keep (doing)	mwesak	(go) up
mwerava	pull	mweselkani	carry (of axe)
mworob	run	mwelebte	carry (of water)
mwegau	grow	sileng	water
mwegalgal	crawl	nutsu	child
mwabma	(go) here, approach	tela	axe

We can now refer to this word list plus the words given in the table below when constructing our answers to Questions I and 2.



## **2010 Solutions**

## (B) Say it in Abma (2/2)

	ENGLISH	ABMA
1.	The teacher carries the water down.	Sesesrakan mweselkani sileng mwisib.
2.	The child keeps eating.	Nutsu mwatbo mwegani.
3.	Mabontare eats taro.	Mabontare mwegani bwet.
4.	The child crawls here.	Nutsu mwegalgal mwabma.
5.	The teacher walks uphill.	Sesesrakan muhural mwesak.
6.	The palm-tree keeps growing downwards.	Butsukul mwatbo mwegau mwisib.
7.	He goes up.	Mwesak.

	ABMA	ENGLISH
1	Sesesrakan mweselkani bwet mwabma.	The teacher carries the taro here/in this direction.
2	Sileng mworob mwisib.	The water runs down.
3.	Mwelebte bwet mwesak.	He brings the taro up.

