I. Morphological Analysis

From the following data sets, identify the strings of sounds which correspond to the morphemes in each language.

Swahili

Swahili is a Bantu language which is spoken primarily in East Africa. There are approximately 800,000 native speakers of Swahili, and some 30,000,000 people (!) worldwide speak Swahili as a second language.

anapenda	'he likes'	alimona	'he saw him'
atapenda	'he will like'	alimsaidia	'he helped him'
alipenda	'he liked'	alimpiga	'he hit him'
amependa	'he has liked'	alimchukua	'he carried him'
alinipenda	'he liked me'	alimua	'he killed him'
alikupenda	'he liked you'	ananitazama	'he looks at me'
alimpenda	'he liked him'	atakusikia	'he will hear you'
alitupenda	'he liked us'	alitupanya	'he cured us'
aliwapenda	'he liked them'	ninakupenda	'I like you'
nitampenda	'I will like him'	nitawapenda	'I will like them'

Pronouns	Tenses	Verbs
he:	[present]:	see:
me:	[future]:	help:
you:	[past]:	hit:
him:	[past part.]:	carry:
us:		kill:
them:		look:
I:		hear:
		cure:
		like:

Translate the following English sentences into Swahili:

i. He has hit me.

ii. He helps us.

iii. I will look at you.

Czech

Czech is a Slavic language which is spoken by about 10 million people, primarily in the Czech Republic.

nesu	'I carry'	yedu	'I drive'
ponese	'He will carry'	ponesu	'I will carry'
povedete	'You (pl) will lead'	yede	'He drives'
poplavu	'I will swim'	nese	'He carries'
priplavesh	'You will swim here'	odnesou	'They will carry away'
priyedou	'They will drive here'	odplavete	'You (pl.) will swim away'
odvedeme	'We will lead away'	poplaveme	'We will swim'
odyede	'He will drive away'	prineseme	'We will bring here'
poyede	'He will drive'	prinese	'He will bring here'
nesou	'They carry'	odvedu	'I will lead away'
plavou	'They swim'	odnesesh	'You carry away'
vedeme	'We lead'		

A. Identify the Czech morphemes which correspond to the following English translations:

Verbs	Pronouns	Tense, Location
carry:	I:	here:
bring:	he:	away:
lead:	we:	will:
drive:	you:	
swim:	you (pl.):	
	they:	

B. What is the order of these morphemes in Czech (in terms of verbs, pronouns, tense, location)?

C. Provide Czech translations for the following English sentences:

1. He will swim.

2. They drive away.

3. You lead away.

4. I will bring here.

II. Phonetic Analysis
Kalaba Dialect BA

Kalaba	English	Kalaba	English
[bazuf]	"tree"	[mavat]	"stick"
[givas]	"view"	[nimiN]	"rain"
[zavup]	"fox"	[maŋU]	"hut"
[vaniM]	"dirt"	[gizus]	"mat"
[mazuf]	"angry"	[dubA]	"wary"
[zaŋI]	"easy"	[bugiN]	"to look at"
[duzik]	"palate"	[zanI]	"fog"
[duvA]	"cane"	[vunuf]	"waterfall"
[vadiM]	"ball"	[ŋavus]	"to sell"
[zani givas nudaM]		"the fog obscured the view"	
[daŋaf duvA]		"the chair is made of cane"	
[zavup maŋu bavat nimin gizas]		"the fox came into the hut out of the rain"	

Study the sound patterns for this data and provide your inferences. You have to write down the suspicious pairs, then for each pair observe whether they are contrastive/complementary or nether of it. A sample is given below(it is just a sample. Don't consider anything right or wrong):

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Suspicious pairs:
1. [a1] [b1]
2. [a2] [b2]
..
..

1. For [a1] and [b1]:

<Here you must point out the phonetic difference between these two, basically you have to write down the phonetic features of each, then the most similar environment(environmental difference) followed by your hypothesis/evidences or straightaway conclusions, as necessary>

Phonetic difference:
[a1]: voiceless, plosive, bilabial
[b1]: voiced, plosive bilabial

OR (if say all other features are same as mentioned in above example)

[a1] is voiceless whereas [b1] is voiced

<For possible allophones>
<u>Environmental difference:</u> [a1] occurs before voiceless consonants whereas [b1] occurs before voiced
Hypothesis: Voicing plays a major role with respect to coarticualtion, devoicing of consonant takes place before a voiceless consonant, etc etc
Evidence: …
Conclusion: ...

OR

<for possible phonemes>
<u>Environmental difference:</u> They occur in a very similar environment like [a1xyz] and [b1xyz]
Conclusion(with reason): …

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Similarly thing should be done for every suspicious pairs.

At last you have to sum up which phones are part of the phonemes and which are allophones. You can do this pictorially like:

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        /a1/
       /    \            …………………...
    [a1]    [a2]
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