1. Alice and a Wonderbook

Alice found a notebook. She opened it. Page 1 read:

"*There is at least one false statement in this notebook…*"

She opened page 2. It read:

"*There are at least two false statements in this notebook…*"

She looked through the whole notebook. Every page read similarly:

"*There are at least K false statements in this notebook*", where *K* was the number of the respective page.

The notebook contained 100 pages, starting from page 1.

a) Which statements in the notebook are true and which are false? (all possibilities)

b) Mad Hatter tore page 100 out of the notebook when Alice was not looking. Which statements in the notebook are true and which are false now?

2. There were mills on the hill, but I never saw them spinning...

In EC languages, a special structure of spatial forms is observed, in which a nominal form carries two suffixes. The first suffix determines the relation of a spatial area with respect to the ground*; this category is conventionally defined as **localization**. The second suffix designates the motion of the figure* with respect to this spatial area; this category is traditionally called **orientation**.

> * A note on terminology: In the typology of spatial forms, **figure** is the term for the object whose location is described, and **ground** is the term for the object with respect to which the figure's location is described. Thus, in *Strangers on a train* (a movie by Alfred Hitchcok), strangers are the figure and train is the ground. In *His house is in the village, though* (from a poem by Robert Frost), his house is the figure, and the village is the ground; etc.

Cf. English – *through under the bridge*; *under* designates the spatial area under the bridge (localization), and *through* designates the motion through this area (orientation). Another example – *from behind the wall*; *behind* expresses localization and *from* expresses orientation. The typologically peculiar property of EC is that both these categories are expressed morphologically, by separate affixes. Orientation suffixes appear not only on nouns, but also on words of other parts of speech, e.g. spatial adverbs. Cf. the following table:

Table 1. Spatial paradigms in MD, an EC language

		Ess	Lat	El	Trans
		(Class)	(ø)	-la	-di
Sup	-če	-če-b	-če	-če-la	-če-di
Ad	-šu	- šu-b	-šu	-šu-la	-šu-di
Apud	-ʕe	-ʕe-b	-ʕe	-ʕe-la	-ʕe-di
In	-ħe	-ħe-b	-ħe	-ħe-la	-ħe-di
Inter	-ʒe	-ʒe-b	-ʒe	-ʒe-la	-ʒe-di
Adverb	heč'e	-b	ø	-la	-di

The meanings of the labels in the tables are as follows:

Localizations: Sup 'on the surface of' (*on*), Apud and Ad both 'near' (with very close semantics), In 'inside', Inter 'inside liquid'. Lat(ive) means motion to (e.g. 'onto the table'), El(ative) means motion from (e.g. 'from under the bridge'), Trans(lative) means motion through (e.g. 'through the wood'). Essive means absence of motion (e.g. 'behind the wall'). In MD, the essive meaning is conveyed by a form containing a class agreement slot*. Lative form is zero marked. Elative and translative meanings are conveyed by two suffixes, *-la* and *-di*. For instance, The form *heč'e* thus means 'to there' (direction), *heč'e-b* (adverb plus neuter agreement) 'there' (static location) etc.

> *A note on terminology: Class agreement is another term for gender agreement. MD, for instance, has three genders in the singular (Masculine *-w*, Feminine *-r* and Neuter *-b*) and two in the plural (Human Plural *-b* and Non-Human Plural *–r*).

Cf. the following examples. As suggested by Table 1 above, in the first, the adverb designates static location (essive) and contains the agreement marker. In the second, agreement marking is absent, and the same adverb designates direction (lative).

(1) *heč'e-w*   *adam*   *le-w*   (2) *heč'e*   *adam*   *ar-aq-un*
there-M   man   be-M   there   man   away-M.go.Pfv-Aor
'The man is there'   'The man went there'

The following examples are however peculiar.

(3) *wallah* *heč'e* *bek'a-li-če-r*   *d-aq'-i-le*   *ʔaˤχ,*
by.god there hill-Obl-Sup-NPl   NPl-do.Pfv-Pst-Cvb well

heč'e *aqu-r*   *bek'a-li-če-r*   *d-u-es*   *ʔaˤχ-il,*
there on.top-NPl hill-Obl-Sup-NPl   NPl-be-Inf   well-Atr

meseduk'a-j-če-r   *d-u-es*   *ʔaˤχ-il* *šinq'a*
Meseduka-Obl-Sup-NPl NPl-be-Inf   well-Atr mill

ile   *le-b* *ʔaj* *ca-li-ni*
say.Aor-Cvb be-N Ptcl one-Obl-Erg

'By god, up there on the hill would be good to build it, it would be good up on top there, on the hill, on Meseduka it would be good for a mill to be, one of them said.'
(note that the mill is a non-human pluralia tantum)

(4) *di-šu*   *quli-w*   *le-w*
   I.Obl-Ad house.In-M be-M
'He's at my place.'

> *List of abbreviations: Atr – attributivizer, Cvb – converb, Erg – ergative, In – localization In, Inf – infinitive, Lat – lative, M – masculine, N – neuter, NPl – non-human plural, Obl – oblique stem, Pfv – perfective stem, Ptcl – particle, Sup – localization super.

1. Explain what is peculiar about these contexts, indicate the unexpected forms.

2. Suggest an explanation (theoretical interpretation) of the uses of these forms.

3. Suggest some tests that could support or falsify your interpretation and that you would use if you had an opportunity to work on MD in the field (modifications of the above examples, English stimuli for translation etc.)