



Вопрос **Инфо**
в.2 (последняя)

Уважаемые участники!

Олимпиадное задание по этому направлению состоит только из инвариантной части. Это означает, что вам нужно постараться решить все задачи и ответить на все вопросы, чтобы претендовать на призовые места.

Все задания выполняются в этой системе: решения вносите в специальное поле для ответов.

Использование сторонних ресурсов и справочных материалов строго запрещено.

Верим в ваш успех!

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в.2 (последняя)

Welcome to the contest! You will have two tasks: one to test your reasoning and one to analyze language data. Read the instructions carefully and provide clear answers.

The tasks are in English, but you can answer in **Russian** if you prefer.

Take your time and do your best. Good luck!

Вопрос **1**
Балл: 40,00
в.5 (последняя)

Lingvistika---teoriya-yazyka

Children of Babel



В полдневный жар в долине Дагестана

Я умирал, а люди речь вели

О хитрости какого-то Гасана,

О выходках какого-то Али.

Расул Гамзатов

In the region where you are doing your fieldwork, four village communities speak four genealogically unrelated languages. Each community is patrilocal but exogamous, so that a husband remains in his village of origins, but takes a wife from any other village but his own. As a result, their children fluently speak two languages, that of their father and that of their mother. They do not speak any other but these two languages.

In order to study the effect of language contact, you have sampled consultants in such a way that you have combinations of any two of the four languages in one and only one of the consultants. You have parallel word lists from the four languages. Each word list has at least one word that exists only in this language. However, you lost your records of who speaks which languages. You need to restore these records. You communicate with the consultant in English. You may ask a speaker to translate a word from the word list into English and check the translation in your wordlist. One question – one word.

1. How many consultants are in your sample?
2. Give a theoretical lower bound on the number of questions that are necessary in the worst case to reconstruct the lost table.
3. Describe a questioning strategy that always reconstructs the table.
4. Show that the number of questions used by your strategy differs from your lower bound by at most one question.

Partial credit may be awarded even if you do not provide the lower bound, or if your strategy differs from the lower bound by more than one question.

NB: You are allowed to answer in English or Russian

Вопрос 2

Балл: 60,00

в.4 (последняя)

Upside Down



*Je vous prévien, cher Myrmidon,
Qu'à la fin de l'envoi, je touche !*

*Предупреждаю честно вас,
что попаду в конце посылки!*

Cyrano de Bergerac, par Edmond Rostan

Перевод Т.Л. Щепкиной-Куперник

The main linguistic distinction in the domain of demonstratives is that of *distance* from the speaker. More often than not, languages of the world feature a system with two demonstratives, as English *this* 'close to the speaker and the addressee' and *that* 'away from the speaker and the addressee'; a similar contrast is encoded by the two main demonstrative pronouns in modern Russian. In the narratives, their use changes. If these are not first person narratives, i.e. narratives about events in which the narrator has participated, the use of the demonstratives presumably becomes anaphoric. Of course, there are more complex systems, with three or more degrees of distance (see Task 1).

A minority of the languages of the world makes use of *elevational demonstratives*. These are demonstrative pronouns that encode the position of the object with respect to the speaker, conveying meanings such as 'this / that above / on / below the speaker's level on the vertical axis'. Explain how these elements are different from gravitational spatial adverbs such as 'above' and 'below' (see Task 2).

It has been observed that non-first person narratives may employ elevational demonstratives. This is totally unexpected. It is unobvious how the elevational demonstratives translate into anaphoric uses; on the other hand, it is unobvious what other uses can we find in non-first person narratives. Nevertheless, it turns out that elevational demonstratives may indeed develop into anaphoric means (see Task 3). Even more interestingly, there are non-anaphoric uses of the elevational demonstratives. Cf. the following examples from Pear Stories in M, an unwritten minority language of the Caucasus featuring elevational demonstratives. In the episode, a man is standing on a ladder leaned against a tree collecting pears. A boy comes with a bicycle under the tree. Two speakers have recounted this episode - shown on Fig. 1 - differently (see Task 4).



Fig. 1. The boy stops his bike; you see the man's feet on the ladder in the background.

(a) *it adami le-w-re=ʔa ʃ ɬʷet'-içe aq-i-le , iti-ze*
that man be-m-pst=ptcl tree- super(lat) raise:pfv-aor-cvb that- inter(lat)
ħa-gu-b iχ iχe w-ak'-ib-i ,
neg-see:pfv-aor that.below there.low(lat) m -come-aor-ptcp

'... That man, having climbed up on the tree, did not see (the boy) when he came down there (i.e. to the foot of the tree).'

(b) *ič' adami qʷa ʔr-be d-iq'-uwe le-w-re.*
that.above man pear-pl npl-take:ipfv-cvb be-m -pst
[... When the boy stopped the bike ...] 'that man was picking pears.'

Task 1a. (First Warm-Up). What can other, more complex systems of demonstratives look like? What additional distinctions can they make?

Task 1b. (Second Warm-Up). Describe how distance demonstratives may be used anaphorically, i.e. how real world distance may "translate into the space of narration". This is a warm up task that might not be evaluated.

Task 1c. (Third Warm-Up). Interestingly, languages with elevational demonstratives show a very clear asymmetry between different distance meanings - many languages only distinguish elevation in one but not the other distance category. If a language expresses elevation in the first place, out of the two demonstratives 'this near the speaker' and 'that away from the speaker and the addressee', where do you think languages tend to make and where they tend not to make the distinction? Explain why you think so (provide a motivation).

Lingvistika---teoriya-yazyka

Task 2. Many if not all languages have means to express the position of an object on the vertical scale, such as English gravitational adverbs *high* and *low* or *above* and *below*, or otherwise involve verticality (e.g. motion adverbs *up* and *down*). Relatively few, however, have elevational demonstratives. Explain the difference between gravitational adverbs and elevational demonstratives. Suggest tests that prove that a specific element is indeed an elevational demonstrative and not a gravitational adverb.

Task 3. Contra expectations, elevational demonstratives may develop anaphoric uses. Make a guess, which of the elevational demonstratives is anaphoric in the language quoted in examples (a) and (b). Why do you think it is so?

Task 4. Contra expectations, in non-first person narratives, elevational demonstratives may also be used in their primary elevational meanings. Provide a model that accounts for such uses in (a) and (b).

Task 5. In non-first person narratives, we usually interpret the use of distance demonstratives in terms of anaphoric functions. How the evidence discussed in Task 4 might lead us to reconsider this approach?

(Touché?)

NB: You are allowed to answer in English or Russian