**Linguistic Theory and Language Description**
**180 minutes**

Task 1. **Scientia potentia**

In a language L, the following is true:

a) there are regular and irregular verbs;
b) no irregular verb ends in -*ks*;
c) if a word has stress on the ultimate syllable and does not end in -*ks*, it is not a verb;

Is it true that not all verbs in L have stress on the ultimate syllable?


**Solution**: Let us draw a table of possible cases as follows, and fill in the possibilities for verbs, according to the rules (b) and (c):

|  | does not ends in -ks | ends in –ks |
|---|---|---|
| stress not on the ultimate | irr/reg | reg |
| stress on the ultimate | none | reg |


Note that, even if the box shows **irr** or **reg**,  that such verbs do exist does not follow from (b)&(c). Thus, regular verbs ending in -ks may, but do not have, to exist. However, (a) states that both regular and irregular verbs do exist. If irregular verbs exist at all, they must carry the stress not on the ultimate but elsewhere. Hence, there are (at least) some verbs that do not carry stress on the ultimate syllables – all irregular verbs.

An alternative solution that was suggested by one participant is as follows. The question itself - Is it true that not all verbs in L have stress on the ultimate syllable? – from the semantic point of view seems to contain an assumption (presupposition) that there are verbs in L that have their stress not on the ultimate; and this is not supported by the rules given. As the author disagreed with the presupposition of the question, (s)he refused to answer it. (Cf. *Давно ли вы перестали пить коньяк по утрам?*) Although this argument is something very different from what was expected to be taken on purely logical grounds, as it is impeccable form the linguistic semantic point of view, the task was considered to be solved.


Both solutions were rated with full points. However, any non-explicitness in the argument reduced the points. Especially failing to notice that the implications in (b) and (c) only predict possibility but not the existence of the implied class of objects were rated as half-points.

Task 2. **Hummus**

(based on Hajek 2005, Maddieson 2015; sources Heath 1999 and Jones and Jones 1991)
In a phonetic inventory of a language, nasal vowels may count from few (one – [ũ] – in Maba, Nilo-Saharan) to many (ten in Apuriña, Arawakan). How rich the nasal vowel inventory is is usually considered as compared to the number of oral (i.e. non-nasal) vowels. E.g., in Maba, there are 12 oral vowels vs. one nasal vowel; while in Apuriña the number of nasal vowels is exactly the same as the number of oral vowels, which is not infrequent in South America in general. Compare vowel inventories from Barasano (Tucanoan, Colombia; nasal to vowel ratio 6:6) and Koyra Chiini Songhai (Africa; nasal to oral vowel ratio 9:10). The inventories are followed by examples.

Fig. 1

Vocalic inventories of Koyra Chiini and Barasano

| Koyra Chiini Songhai | | | | Barasano | | |
|---|---|---|---|---|---|---|
| short | | long | | | | |
| i ĩ | u ũ | iː ĩː | uː | i ĩ | ʉ ʉ̃ | u ũ |
| e ẽ | o õ | eː | oː õː | e ẽ | | o õ |
| æ̃  a ã | | aː ãː | | | a ã | |

Koyra Chiini examples:
(1)    *saahĩ* 'be solid'          (2)    *fusũ* 'blow'
(3)    *tẽfer* 'a worn-out mat'    (4)    *hãwhãw* 'barking'

Barasano examples:

(1)    *sũkã-ãkã*                     (2)    *yãgõ-bʉ̃*          *yʉ*
       baby-Dim                             talk-Pst            I
       'a little baby'                      'I spoke'
(3)    *ãbĩ-sẽ-rẽ*                    (4)    *ahi-a-ti*          *bʉ̃*
       pick.up-Nmlz-Obj                     hear-Prs-Intrg    you
       'what he picked up'                  'Do you understand?'

Explain the difference between the systems observed in Barasano and Koyra Chiini Songhai and their consequences on the oral/nasal ratio. Are the high ratios in the two languages directly comparable?

Glosses: Dim – diminutive, Nmlz – nominalization, Obj – object form (DO), Pst – past, Prs – present, Intrg – interrogative.

**Solution.** It is easily seen that all vowels in any of the Barasano wordforms shown in the examples are either consistently nasal or consistently oral. In other words, there exists vowel harmony / synharmonism in nasality/orality. (Note that, against what was suggested by many participants, we can not claim whether it is progressive or regressive, or defined by the root or by the affix.) If the nasality / orality of a vowel is determined by the nasality / orality of the whole wordform, then the phonemic status of the opposition becomes at least controversial. It is at least partly prosodic (even though not straightforwardly non-phonemic, as suggested by some participants). Therefore, it would not be justified to compare the ratio of the nasals to orals in Barasano vs. Koyra Chiini directly; that the ratio equals one in Barasano is not an indication of the richness of the nasal inventory in the same sense as a very close value 0.9 for Koyra Chiini. In a sense, Koyra Chiini is richer in nasals in that the opposition between nasals

and orals seems to be fully phonemic. As one of the participants put it, the potential number of phonemic opposition involving nasality in Koyra Chiini is higher than in Barasano

Noticing vowel harmony alone was not enough to get full points for this task (50%). Only explaining the impact of this fact into the 'non-phonemic' nature of the opposition was awarded full points (100%). Nice additional points that brought bonuses whenever the solution was not 100% included:

- it might be that there are some 'weak' morphemes not shown in the examples that disobey vowel harmony – and indeed there are, see (Jones and Jones 1991).
- Koyra Chiini has nasal vowels that have no direct match in the oral system, which additionally shows that the two subsystems are less dependent
- the only consistently nasal word given for Koyra Chiini is onomatopoeia

Task 3. *Veni, vidi, vici*.
In some languages – e.g. Romance – the basic verb for 'come' essentially means 'come here', and is used when the goal of motion is associated with the speech act location. Cf. e.g. (1) and (2):

(1) Portuguese
*Ele  vem       um pouco  mais   tarde*.
he   come.3Sg  a.bit          more   late
'He will come a bit later'
(to where I am now)

(2) Portuguese
\**O   seu       marido  vem       a   casa    sempre  mais   tarde*.
DEF  his/her  husband  come.3Sg  at  house   always   more   late
'Her husband comes home later every day.'

Similarly, in French (3) is only possible when the locutor is a co-worker of the person (s)he refers to):

(3) French
*Ces    jours-ci,    il    vient      tard   au       travail*.
these   days=here   he   come.3Sg   late    to.Def   work
'He comes to work late these days.'

Thus, French and Portuguese, as well as Italian and Spanish, all have the same verb of coming that is sometimes termed 'ventive' or 'venitive'. However, Italian and French also allow the following contexts, which apparently deviate from this rule and seem to be impossible Portuguese:

(4) French
*Je  viens      demain     / te         chercher   tout de suite.*
I   come.1Sg  tomorrow   / you.Obj   seek        at.once
'I am coming tomorrow / for you at once'
(when speaking on the phone, not being at the Goal location)

(5) Italian
*Vengo       subito!*
come.1Sg   at.once
'I am coming!'
(as when yelling from one room to another, again the location of the Goal is different from the location of the speaker)

Do you think French and Italian do or do not have a special 'ventive' verb of motion? How do you explain the difference between French vs. Portuguese? Explain your opinion by dealing with the special uses in French and Italian.

**Solution**. As it turned when reading the participants' works, in addition to the one intended, the task could be solved in at least one, and probably even two, additional ways, consistent

with the data presented. All three solutions will be given, the intended one, the second most popular and the third, exotic but non controversial.

As the definition of the ven(i)tive goes, the goal must be associated with the speech act location – the deictic center. Indeed, both Portuguese and French allow using the (cognate) ven(i)tive verb whenever the goal of motion is identified with the speaker (whether as a usual or current location). However, examples (5) and (6) allow the use of the same verb, in French and Italian, when the speaker is not at the goal of motion; in fact, it is him or her who is moving.

a. The first – and arguably correct – solution is that French and Italian allow to include the addressee into the deictic center, or to extend the deictic center to the addressee (probably, as some of the participants indicated, basing on the prototype of the deictic center which, under regular circumstances, includes the speaker and the addressee).

b. The popular alternative solution was as follows. In both (5) and (6), there is a meaning of imminence of the speaker's reaching the goal of motion. The speaker thus imagines himself already being at the goal, and thus her goal becomes, by this extension, her deictic center. Witty, but false. In the first place, the immediateness of movement becomes a bit too flexible notion, if one considers the variant of (5) with 'tomorrow'. Providing additional examples, like 'I am going to the door, and you stay here', would falsify this solution completely; but such examples were unfortunately not included. Therefore, this solution was rated as fully correct.

c. The last solution is only present once. According to the participant, what is common between different French/Italian examples is that they all involve the decrease between the speaker and something else. Either someone moves to the speaker's location or the speaker herself moves towards something or someone. Although this solution apparently corresponds to the data presented, it is both less elegant than (a) and (b), and false just as (b). Its problem is that, unlike (a) and (b), it moves away from the definition of the category of ven(i)tive to force French/Italian data into it. For both (a) and (b), French and Italian 'come' are a type of ven(i)tive; for (c), it is something slightly different. And it is just as false as (b) because we expect in examples like 'Wait, he is coming to where you are' to have venir(e) even though the motion of the speaker is not implied. Again, such examples were unfortunately not included, so this solution was rated highly.

All intermediate solutions that went into one of these directions but were not explicit enough were rated with partial marks. Some obviously wrong or unclear statements may have decreased the points.