

Since the difference between unaccusatives and unergatives may have been discussed too briefly, we have lowered the maximum score to 46. If you have answered the question and received points, they were added (so it was still possible to score 50 points).

Total number of points: /50

Question 1. (6 Points)

Describe in your own words the meaning of the following thematic relations: AGENT, THEME, IN, GOAL and BENEFACTIVE.

Answer: We were quite generous here. Anything that came close was considered correct. However, terms such as *subject* or *objects* are grammatical categories and do not tell us about the meanings. If you wrote just *subject*, that was considered false. If you wrote *is usually subject* that was considered correct where appropriate. Some phrase elucidating the meaning was needed.

Notice that the relations are relation between events and things. So, AGENT is *the agent of the event*, not just *an event* or *an action*.

Question 2. (4 Points)

What is the difference between an *unaccusative* and an *unergative* verb?

Answer: Look at the text.

Question 3. (4 Points)

Classify the verbs of the following sentences as to whether they stand for states or events; in the latter case, classify them into activity (= process) or telic verbs.

1. Pedro owned a donkey. state
2. Kim is sad. state
3. Paul filed a complaint. event; telic
4. The kite is flying in the air. event; activity

Question 4. (10 Points)

Consider the following sentences:

- ① Jack drove his car.

② Jack drove to school yesterday.

③ Jack drove his car to school yesterday.

(a) Give the LFs for all three sentences. (b) Explain why ③ does not follow from ① and ②. Name a situation where ① and ② are true and ③ is false. (c) Does ① or ② follow from ③?

Answer: For (a):

- ① **his** x {**car** x } $(\exists e)[e < u \ \& \ \text{AGT}(e) = \mathbf{jack} \ \& \ \mathbf{drive} \ e \ \& \ \text{THM}(e) = x]$
- ② $(\exists e)[e < u \ \& \ \text{AGT}(e) = \mathbf{jack} \ \& \ \mathbf{drive} \ e \ \& \ \text{GOAL}(e) = \mathbf{the \ school} \ \& \ e \ \mathbf{one-day-before} \ u]$
- ③ **his** x {**car** x } $(\exists e)[e < u \ \& \ \text{AGT}(e) = \mathbf{jack} \ \& \ \mathbf{drive} \ e \ \& \ \text{THM}(e) = x \ \& \ \text{GOAL}(e) = \mathbf{the \ school} \ \& \ e \ \mathbf{one-day-before} \ u]$

Many alternatives were accepted. Basically, ‘his car’ or ‘school’ may either be treated like a name or as a generalised quantifier. One answer was even trying to analyse ‘his’ as ‘he’ (viz. Jack) ‘owns’. Nice!

For (b): Consider Jack driving his car on Nov 2. Consider Jack driving a humvee to school on Nov 23. Assume that on Nov 23 he did not drive his car. Then ① and ② are true on Nov 24. But ③ is false.

For (c): Yes. (This answer alone was considered sufficient.) The reason is that the general argument is this: Given $(\exists e)(\varphi \ \& \ \chi)$ we may infer both $(\exists e)\varphi$ and $(\exists e)\chi$.

Question 5. (2 Points)

In the following logical form we use u and e :

$$e \approx u \ \& \ \text{AGT}(e) = \mathbf{maria} \ \& \ \mathbf{run}(e)$$

What does u stand for? Is it a variable like e ? Explain.

Answer: u stands for the utterance of that sentence. It is not a variable. Crucially, one point was awarded for saying that it stands for an utterance (though

this is still short of saying that it stands for an utterance of the sentence). One point was awarded for saying that it is not a variable. It is not sufficient to say that it is not a variable *like e*. The answer is either yes or no, nothing in between.

Question 6. (4 Points)

Give a logical form for each of the following sentences:

Pedro will see a donkey.

Everybody will be happy.

Answer:

some $x\{\mathbf{donkey}\ x\}\exists e[u \approx e \ \& \ \exists e'[e < e' \ \& \ \text{IN}(e') = \mathbf{pedro} \ \& \ \mathbf{see}\ e$
 $\ \& \ \text{THM}(e') = x]]$

every $x\{\mathbf{person}\ x\}\exists e[e \approx u \ \& \ \exists e'[e < e' \ \& \ \text{IN}(e') = x \ \& \ \mathbf{happy}(e')]]$

Many wrote ‘AGT(e')’ in place of ‘IN(e')’ but the subject of ‘see’ is not an agent. No penalty for this mistake, but make sure you do not make the same mistake in the final! Many have squeezed in an event of being-happy, but this out of place here. The quantifier ‘everybody’ has not been introduced before. Most people appropriately dissected it into ‘every+body’ (and we considered this correct). The best solution (which we found once) is given above: it is ‘every’ plus ‘person’: translate **everybody** φ is best rendered as **every** $x\{\mathbf{person}\ x\}\varphi$.

Question 7. (10 Points)

Let the following sentences be given:

Pedro had owned a donkey yesterday.

Yesterday, Pedro had owned a donkey.

(a) Give LFs for the sentences. (b) Draw the tree for one QR for the first sentence. (c) Explain the difference in meaning between the two sentences. (d) Express the difference between these sentences in terms of c-command.

Answer: (a)

some $x\{\text{donkey } x\}\exists e[e < u \ \& \ \exists e'[e = \text{PERF}(e') \ \& \ \text{IN}(e') = \text{pedro}$
 $\ \& \ \text{own}e' \ \& \ \text{THM}(e') = x \ \& \ e' \ \text{one-day-before } u]]$
some $x\{\text{donkey } x\}\exists e[e < u \ \& \ e \ \text{one-day-before } u \ \& \ \exists e'[e = \text{PERF}(e')$
 $\ \& \ \text{IN}(e') = \text{pedro} \ \& \ \text{own}e' \ \& \ \text{THM}(e') = x]]$

(b) Should be clear. (The question should have read ‘LF’ rather than ‘QR’.)

(c) This proved to be difficult. We have to state the facts very carefully. In the first sentence, the owning event takes place a day before now. Whether or not Pedro owns a donkey now is neither said nor relevant for the purpose at hand. In the second sentence, it is the fact of Pedro having owned a donkey which is true a day before now. So, suppose that Pedro owns a donkey two days before now, but sells it at that day. Assume also that one day before now he owns no donkey. Then the second sentence is true and the first is false. Quite often, one forgets to add the condition that Pedro does not own any other donkey at the day before utterance. This is a common mistake; we have not awarded penalties for it, but you should take that seriously. Typically, it results from the assumption that what we have not stated to be the case actually is assumed not to be the case. However, since for any given fact φ either it or its negation is true, we cannot refrain from saying which one is true.

(d) The crucial difference is the c-command relation between the occurrence of ‘yesterday’ and ‘perf’. If ‘yesterday’ c-commands ‘perf’ it states of a different event that it happened a day before the utterance than if ‘perf’ c-commands ‘yesterday’. This is because ‘perf’ introduces a new variable e and quantifies it away. Thus above ‘perf’ (in c-commanding position, for example), e is invisible.

Most people wrote about the relation between ‘yesterday’ and the VP, but this is irrelevant. One has to realise that there are scope differences which make no semantic difference, and whether or not the adverbial c-commands the VP is among them. (Another one is the difference between $\exists x\exists y\varphi$ and $\exists y\exists x\varphi$, where the scope difference has no semantic impact.) Some declared that the adverbial does not c-command anything when it is adjoined to V' . This is not true.

Some people express caution by saying ‘can c-command’ or ‘may c-command’. In a given structure such phrases are inappropriate and hence we consider them incorrect.

Question 8. (10 Points)

Let the following sentence be given:

Maria will have been singing a song.

- ① Display the surface structure
- ② Perform QR
- ③ Give the logical form.

Answer: Most people got this one right. We shall only give the LF.

$$\begin{aligned} & \text{some } x\{\text{song } x\}\exists e[e \approx u \ \& \ \exists e'[e < e' \ \& \ \exists e''[e' = \text{PERF}(e'') \\ & \ \& \ \exists e'''[e'' = \text{PROG}(e''') \ \& \ \text{AGT}(e''') = \text{maria} \ \& \ \text{sing}(e''') \\ & \ \& \ \text{THM}(e''') = x]]]] \end{aligned}$$