Lexical Semantics
Final Exam

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Submission deadline: February 4, 2020, 23:59pm

This is a hard deadline. Late exams will ONLY be accepted in case of an emergency.

You may submit your assignment by email to `prerna.nadathur@phil.hhu.de`, or turn in a paper copy to the Lexical Semantics box in the Linguistics department office (24.53.00.86). **Please alert me by email if you hand in a paper copy.** Your answers should be in English unless you have made prior arrangements with me.

Reminders:

- Your final exam solutions should be typed.
- You may NOT work with any other students on the final exam.
- You may refer to any of the class handouts, readings, or previous assignments.
- You may consult any additional resources (web pages, journal articles, books) that you wish, as long as you cite these materials.
- You will NOT be penalised for mistakes related to English grammar.

Additional instructions:

The questions on this exam are very similar to the questions on the homework assignments, and will be marked according to a similar scheme. You must receive 60% of the available points in order to pass the exam. There are 150 available points.

The exam is divided into sections, each of which covers different topics from the course. Note that questions may require you to bring together more than one topic from different parts of the course. For example, while the questions in Part III deal mainly with lexical aspect, you will also need to think about semantic roles and gradability.

You must complete the specified number of questions from each section. If you complete more than the required number of questions, your score will be calculated based on those questions for which you received the most points (in other words, doing more questions can only improve your score).

Part I: Inference and implication types.

Answer two of the following three questions. [25 points each]

Question 1: Types of implication

Spell out three implications of each of the following sentences. For each implication, specify what type of implication it is (entailment, presupposition, or Gricean implicature) and give a brief explanation for your designation. Your explanation should include which words, morphemes, or phrases are responsible for any given implication. One sentence is marked as ambiguous. For that sentence, you must identify one source of ambiguity and spell out the possible readings. Then indicate which of the three implications you provide are shared by all the readings, and which ones are specific to a particular reading.

(1) a. Mary forgot that John was happy that Sue had the opportunity to participate in the race.
b. It is significant that John failed to remember to straighten the tablecloth.
c. If they managed to open the entrance to the cave again, they had shelter for the night. **ambiguous**
d. It doesn't bother Mary that John criticized Bill for writing the letter.
e. Mary regretted that John didn't have the sense to shorten the rope.

Question 2: Factives and implicatives

Classify the verbs and constructions marked in bold in the following sentences as factive, implicative, or neither. Explain your answers. Your explanation should include tests for different kinds of inferences.

(2) a. A full investigation **revealed that** the company's CEO was stealing money.
b. Jeremy **was afraid to** go skiing for the first time.
c. Morgan **made an attempt to** solve the riddle.
d. Masha's boss **took credit for** her work on the project.
e. Remy **took the opportunity to** finish his short story.
f. Nima **was lucky to** get a ticket to the concert.
g. It **is strange that** no one came to school today.
h. Tammo **happened to** be in Boston on the day of the marathon.

Question 3: Implication propagation

(a) The sentence in (3) contains four verbs, and each verb is responsible for at least one implication, due to its primary meaning or to a presupposition. Spell out four inferences associated with (3), one for each verb. In each case, specify what kind of inference it is (entailment, presupposition, etc), and identify the responsible verb as factive, implicative, or neither.

(3) Mary regrets that Ed did not forget to force Dave to leave Athens.

(b) Provide the implicational signatures of the relevant lexical items (the relevant verbs and *not*) and show step by step how the projection of implications that are based on the unembedded clauses can be calculated.

Part II: Ambiguity and polysemy.

Answer one of the following two questions. [20 points each]

Question 4: Adjective polysemy

Consider the adjective *empty* in the examples in (4):

(4)
a. The road was empty.
b. The car was empty.
c. The vase was empty.
d. The house was empty.
e. The classroom was empty.

(a) Spell out potential implications of all of the examples in (4). The implications should be based on the adjective *empty* and can be of the form *there were no X in N*, where *N* is the head noun of the subject noun phrase.

(b) Can you identify a unique sense for the adjective *empty* in all the examples in (4)? If not, how many senses are needed, and how can they be characterized?

Question 5: Ambiguities with *almost*

(a) Identify two distinct readings of (5) and spell out what they are. You can do so either by describing situations with incompatible properties which can be truthfully described by (5), or by indicating the implications of (5) on each reading.

(5) They almost emptied the tank.

(b) Provide a decompositional representation of the verb *empty*. Does this decomposition explain how the two readings you identified in part (a) arise?

Part III: Lexical aspect and aspectual class features

Answer one of the following two questions. [30 points each]

Question 6: Aspect and agentivity

Perhaps because states by their very nature involve no change, descriptions of states typically do not involve an AGENT semantic role. As a consequence, there is some debate over whether certain linguistic phenomena are best explained in terms of stativity or agentivity. In this question, you will be asked to examine one such phenomenon and decide how best to characterize it.

Contrasts like those in (6) and (7) have led some researchers to claim that stative predicates cannot be found in what are known as "bare infinitival" sentential complements to the verb *see* – the type of sentential complement found in (6) and (7).[1]

(6) a. *Kim saw Lee know French.
b. *Kim saw Lee resemble Pat.
c. *Kim saw Lee be tall.

(7) a. Kim saw Lee skate on the pond.
b. Kim saw Lee carve a whistle.
c. Kim saw Lee miss the target.
d. Kim saw Lee wink at Terry.

In this question, you will assess whether this claim is an accurate characterization of the restrictions on the complement of *see.* That is, the goal is to determine whether the restrictions on the sentential complement are aspectual in nature, as the data in (6) and (7) suggest, or whether they can receive an alternative explanation in terms of agentivity.

(a) Explain why the examples in (6) and (7) appear to confirm the claim that the sentential complements are not stative. Be sure to give independent evidence for the aspectual classification of each sentential complement in (6) and (7) as it occurs in isolation (i.e., *Lee knows French, Lee skates on the pond*, etc.) by making reference to appropriate aspectual diagnostics.

(b) As mentioned above, certain "contexts" that are claimed to be sensitive to stativity have instead turned out to be sensitive to agentivity. Could the pattern of data in (6) and (7) be attributed to the (non)agentivity of the subject of the sentential complement rather than to the sentential complement's stativity? Explain, giving

[1] **Note:** The verb *see* also takes other types of sentential complements, such as the *that*-complement in *Kim saw that Lee had built a tree house.* For this question, you should consider only bare infinitival complements, which are those where the verb in the complement does *not* agree for person and number with the subject – e.g., the infinitival form *know* in (9a), instead of the 3rd person singular form *knows*, which would agree with *Lee.*

independent evidence concerning whether the subject of each of the sentential complements in (6) and (7) (i.e., *Lee*) is or is not an agent when these complements occur in isolation by making reference to an appropriate diagnostic.

(c) Explain how the data in (8) can be used to settle the matter of whether the sentential complement of *see* is restricted to non-stative sentences or to sentences with an agent argument. Be sure to indicate which way the matter is resolved! Again, give independent evidence for the aspectual classification and (non-)agentivity of all relevant sentential complements.

(8) a. *Clara saw the Golden Gate Bridge be long.
b. Clara saw the boulder roll into the stream.
c. Clara saw the aspen leaves flutter in the wind.
d. Clara saw the rising water reach the window sill.
e. Clara saw the light flash.

Question 7: Verbs derived from gradable adjectives

English verbs derived from gradable adjectives by the addition of the suffix *-en*, such as *broaden, deepen, flatten, shorten, straighten, sweeten, thicken, widen,* or by a zero suffix, such as *clean, cool, dim, dry, narrow, steady, warm,* have long intrigued linguists investigating lexical aspect. A variety of factors affect the aspectual classification of sentences with such verbs and some of these will be investigated in this question.

(a) Deadjectival verbs do not display uniform behavior with respect to the various tests for (a)telicity. For example, some, including *dim, deepen, shorten, thicken*, and *warm* appear to be atelic with respect to the progressive-implies-perfect test (diagnostic test 5, from the top of p.8 of the Week 11 handout), while others, including *dry, empty, flatten, steady,* and *straighten,* appear to be telic with respect to this test.

(9) a. The cook is thickening the sauce.
$\rightarrow$ The cook has thickened the sauce.
b. The stagehand is dimming the lights.
$\rightarrow$ The stagehand has dimmed the lights.
c. The workers are deepening the trench.
$\rightarrow$ The workers have deepened the trench.

(10) a. The smith is flattening the metal.
$\not\rightarrow$ The smith has flattened the metal.
b. The sun is drying the dress.
$\not\rightarrow$ The sun has dried the dress.
c. Smith is emptying the bucket.
$\not\rightarrow$ Smith has emptied the bucket.

In fact, the telicity of a sentence with a deadjectival verb can be predicted from a property of its base gradable adjective. Identify this property and explain why it should have the effect it does on the telicity of a sentence with the related verb.

(b) The deadjectival verbs that are atelic, according to the results of the progressive-implies-perfect test, may appear with measure phrases, such as the italicized phrases in (11); these phrases are sometimes introduced with the preposition *by*. What effect, if any, does the addition of a measure phrase have on the aspectual classification of sentences with atelic deadjectival verbs and why?

(11) a. Lee shortened the speech *by 5 minutes*.
b. The chemist warmed the mixture *by 15 degrees*.
c. The engineer deepened the well *by three feet*.

(c) We have observed that verbs such as *eat* are telic when their object is a singular count noun, but atelic when it is a mass noun. In this question we have seen that the telicity of certain deadjectival verbs depends on the nature of the base adjective. Explain, in your own words, why adjectives like *flatten* and *empty* pattern with singular count nouns in giving rise to telic sentences, while adjectives like *deep* and *thick* pattern like mass nouns in giving rise to atelic sentences? To answer this question you need to think conceptually.

Part IV: Denominal verbs and the manner/result dichotomy

Answer the following question. [30 points]

Question 8: Verbs of removal

English has a large set of verbs that could be labeled "verbs of removal" since they describe an agent removing stuff from a location; several of these verbs are listed in (12). This characterization of these verbs receives support from the fact that they are all found in the syntactic frame "NP V NP *from/off of/out of* NP", as in (13a); in this frame the location is indicated by prepositions that indicate sources – the location an entity moves from – with verbs of motion (e.g., *Alex jumped from/off of/out of the bed*). Verbs of removal are also all found in the frame "NP V NP", as in (13b); in this frame, the location follows the verb and the stuff is left unexpressed.

(12) clear, rinse, swab, sponge, sweep, empty, shovel, wipe, vacuum, clean, mop, scrub, rake, scour, hose, wring.

(13) a. Robin cleared/shoveled the snow from/off of the sidewalk.
b. Robin cleared/shoveled the sidewalk.

(a) A closer look at the list of verbs of removal suggest that this class of verbs, like many others, can be split into a subclass of means/manner verbs and a subclass of result verbs. Which verbs in (13) are means/manner verbs and which are result verbs? You need not explicitly justify your classification of every verb in (13) as a means/manner verb or as a result verb, but you should do this for one verb of each type. Justifying your classification means explaining why the meanings of the two verbs you choose conform to the general kind of meaning of verbs of the relevant type; see class handout from Week 13.

(b) The list of verbs of removal contains three verbs derived from adjectives, *clean, clear,* and *empty,* as well as a number of denominal verbs (i.e., verbs derived from nouns, including *mop* and *shovel.* Which subclass are the deadjectival verbs found in, the means/manner subclass or the result subclass? Which subclass are the denominal verbs found in? Why are these verbs found in the particular subclasses you just identified?

(c) In "The Grammar of Hitting and Breaking", Fillmore argues that the objects of *break* and *hit* do not bear the same semantic roles. Do you think *the sidewalk* should be assigned the same semantic role in both *Robin cleared the sidewalk* and *Robin shoveled the sidewalk*? As part of your answer, address whether either or both uses of *the sidewalk*should be assigned the PATIENT role. Give evidence that supports your conclusion.

Part V: Properties and the mass/count distinction

Answer the following question. [20 points]

Question 9: Adjectives modifying mass nouns

(a) The examples in (14) show that only some of the semantic classes of adjectives can modify mass nouns. Which classes of adjectives are and aren't found before mass nouns, according to the examples below? Why might these differences in types of modifiers be found between mass and count nouns?

(14) a. Chinese jade, clear water, Danish butter, fresh cream, good coffee, gray stone, Greek honey, hot cider, Indian tea, Italian leather, old glass, pink granite, purple ink, red clay, soft butter, Spanish oil, tasty mustard, white chocolate

b. *big marble, *hexagonal copper, *large mud, *long silk, *narrow sand, *oval gold, *rectangular chocolate, *round jam, *tiny ruby

(b) Some English mass nouns can be found with the kinds of adjectives that the mass nouns in part (a) cannot co-occur with: *big jewelry, miniscule cutlery, triangular furniture, large clothing.* Why are these nouns different from those in (14)?