Modern Syntax: A coursebook

Exercises based on chapters 1 and 2 (Units 1—10)

निरंजन[*]

Department of Linguistics

University of Mumbai

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Chapter 1

Unit 1

Question 1: *Identify which of the following sentences are yes/no questions, which are declarative sentences and which are neither.*

	Y/N	Decl.	Neither
John hasn't eaten anything.	✗	✓	✗
Does Bill really prefer meatballs?	✓	✗	✗
Has Peter eaten his smoked salmon yet?	✓	✗	✗
What has Peter done now?	✗	✗	✓
Heather smokes too much.	✗	✓	✗
John did WHAT?	✗	✗	✓

Question 2: *Are sentences (7-8) consistent with hypothesis 1?*

Yes.

Question 3: *Are these two sentences consistent with hypothesis 1?*

No.

Question 4: *Instead of (10), what sentence does hypothesis 1 actually predict to be the grammatical yes/no question equivalent to (9)?*

Little the hobbit will eat the magic beans.

Question 5: *Try to come up with a hypothesis that accounts for the grammaticality of (10).*

*Hint 1: words such as will are called **auxiliaries**.*

Hint 2: use as much of the language in hypothesis 1 as you can, making only minimal changes.

Yes/no questions are formed by moving the auxiliary in the equivalent declarative sentence to the front.

Question 6: *Does hypothesis 2 predict that sentence (13) will be grammatical?*

Yes.

Question 7: *Does hypothesis 2 predict that sentence (14) will be grammatical?*

No.

Question 8: *Try to come up with a hypothesis that accounts for the grammaticality of (12) and (14).*

Hint: you should refer to whether the auxiliary is embedded inside of a relative clause or appears in the main clause.

Yes/no questions are formed by moving the auxiliary of the matching tense of the verb from it's own clause (i.e., not from the embedded one).

Question 9: *{yellow, singing, a, the, elephant, mouse, sniffed}*

Using each word only once and using every word, try to come up with as many grammatical sentences as possible (there are at least eight; more may be possible).

1. A yellow elephant sniffed the singing mouse.
2. The singing elephant sniffed a yellow mouse.
3. The yellow elephant sniffed a singing mouse.
4. A singing mouse sniffed the yellow elephant.
5. A yellow mouse sniffed the singing elephant.
6. The singing mouse sniffed a yellow elephant.
7. The yellow mouse sniffed a singing elephant.
8. A yellow singing mouse sniffed the elephant.
9. A mouse sniffed the yellow singing elephant.
10. The mouse sniffed a yellow singing elephant.
11. A yellow singing elephant sniffed the mouse.

12. The yellow singing elephant sniffed a mouse.

Question 10: *Do these sentences mean the same thing?*

No.

Question 11: *Is syntax like addition, in the sense that order is irrelevant?*

No.

Unit 2

Question 1: *Fill in the blanks for the meanings of the words without word-by-word interlinear glosses. For the moment ignore the -ga, -o and -ni particles.*[1]

(1) taroː-ga mieko-o mita
    Taro   Mieko   saw

    Taro saw Mieko.

(2) taroː-ga mieko-o senseː-ni shuːkaisata
    Taro   Mieko   teacher   introduced

    Taro introduced Mieko to the teacher.

(3) mieko-ga senseː-o mita
    Mieko   teacher   saw

    Mieko saw the teacher.

(4) taroː-ga tuita.
    Taro   arrived

    Taro arrived.

(5) taroː-ga isu-ni   suwatːa
    Taro   on the chair sat

    Taro sat on the chair.

Question 2: *Using the above terms and looking at sentences (3–7), define the Japanese suffixes:*

-o Accusative

-ga Nominative

-ni Dative

Question 3: *What is the order of words in Japanese?*

Subject + Object + Direct Object + Verb

Question 4: *Do verbs (words like was, ran, thought, saw) come before or after their subjects?*

Before.

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[1] While writing linguistic data, I have changed the Latinized scheme of writing to IPA for a consistent and unambiguous writing scheme. The reader should make themselves familiar with it.

Question 5: *How do you form a yes/no question in Irish?*

It seems that Irish has a separate word for marking yes/no questions.

Question 6: *Does Irish put prepositions like to, from etc. before or after the noun they are attached to?*

Before.

Question 7: *Where do objects normally appear: before or after the subject?*

After.

Question 8: *How many forms of the verb translated as "was" can you find in the data? Can you guess which form appears where?*

There are two forms of the verb 'was', i.e., bhí[2] and raibh.

It seems like the bhí comes only with the singular masculine third person pronoun (i.e., 'he' in English).

Question 9: *How many sentences in this data are declarative sentences?*

How many are questions?

Five declaratives, two questions.

Question 10: *Look again at sentences (8)–(14). Can you tell if objects and subjects ever can precede the verb? Can you tell if a preposition ever follows the noun? Is there enough evidence to answer these questions?*

Since in given data, there is no counter example to the above mentioned generalizations, we can say that there is sufficient evidence to expect the discussed patterns. To check whether it is an actual robust pattern in Irish, we will need more data, but for the given data, the answer to both the questions is negative.

Question 11:

(6) a. *John said that Bill loved peanuts.*

    b. *John said   Bill loved peanuts.*

    c. *What did John say that Bill loved?*

    d. *What did John say   Bill loved?*

    e. *Who did John say   loved peanuts?*

Given just these five sentences, what hypothesis can you make about the word 'that'?

The word *'that'* introduces a new and embedded clause, but it is not compulsory and can be dropped.

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[2]Since I don't know orthographic conventions of Irish, I have no reliable information on how this is read. I am just reproducing what I found in the text.

Question 12: *Does this sentence cause any problems for the hypothesis you stated in Q11? What is the problem? Does your hypothesis in Q11 predict the unacceptability of (20)?*

Yes, it does. I had predicted that the word *'that'* is freely droppable, but it doesn't capture the fact that it is obligatory to drop it when the subject of the embedded clause is questioned. My hypothesis doesn't predict this unacceptability.

Question 13: *Were you ever taught by a teacher that you can't say a sentence like (20)?*

No.

Question 14: *Is an unacceptable sentence like (20) likely to appear in a corpus?*

No.

Question 15: *Take the following sentences and mark them with your own judgements of syntactic or semantic unacceptability.*

(7) a. ∗The book was arrived by John.

   b. ?Susan taught Tom mathematics.

   c. ∗Michael thought that mathematics bored himself.

   d. ∗Susan said that Bill books read.

   e. #The stone ate a carrot.

   f. ∗Tom learned Susan chemistry.

   g. I think Louis bought a syntax book.

   h. I wonder who bought what.

   i. ∗Who do you think bought a syntax book?

   j. What do you think Louis bought?

   k. ∗What do you wonder who bought?

   l. ∗Who do you wonder who read a book by?

   m.?John's sister is not his sibling.

   n. ∗Who do you think that saw Bill?

   o. William gave a book to Marian.

   p. William gave Marian a book.

   q. William donated a book to the charity.

   r. ∗William donated the charity a book.

Unit 3

Question 1: *On the basis of this limited data, state the restriction on which case form can appear where relative to the tensed verb (kissed, loves, ate). In other words, which forms appear before the verb and which appear after it.*

> **Rule 1:** Use the nominative case when the pronoun appears <u>before</u> the verb.
>
> **Rule 2:** Use the accusative case when the pronoun appears <u>after</u> the verb.

Question 2: *Translate rules 1 and 2 from Q1 into two constraints.*

> **Constraint 1:** If a pronoun appears before a verb it can't be in the accusative case.
>
> **Constraint 2:** If a pronoun appears after a verb it can't be in the nominative case.

Question 3: *Using your native-speaker judgement, decide which of the 'ungrammatical' sentences above (in A-F) truly sound 'strange' or unacceptable. Is there any possibility that you yourself might say any of these? Or might you hear one of these sentences said by someone you know?*

These sentences sound acceptable and I might say most of these very naturally.

Question 4: *Consider now the following five sentences of English. Grade their acceptability using your own native-speaker intuitions.*

> (8) a. The apple, which we found in the garbage can, was a tasty treat.
>
>   b. The apple, that we found in the garbage can, was a tasty treat.
>
>   c. The theory that Bill proposed was wrong.
>
>   d. The theory which Bill proposed was wrong.

Question 5: *Recall that syntax is supposed to be a science. How should we evaluate these traditional rules (both the one discussed here and in A—F on page 22), given what I have asserted about corpora and native-speaker judgements here?*

If the grammatical rules of any kind fail to incorporate speaker-judgements, then essentially the rules are either outdated or exclusive to some speech-community. Hence these rules aren't adequately descriptive of the variety they intend to describe.

Question 6: *Prescriptive rules aren't scientific; often they don't even correctly reflect our judgements about our native language. Yet they are an important part of society today. For example, in writing this book, I am expected*

to follow prescriptive rules, even though I know that they are unscientific. Speculate on why prescriptive rules are so important to us and why they continue to be taught in schools and used in publishing.

The linguistic exchange happens when more than one individuals understand each other and for this to happen conventions which the society largely agrees upon are necessary to be followed. The nature of languages is very arbitrary and therefore these conventions need to be learnt in a prescriptive method. Therefore these grammars are important part of the society.

Question 7: *Below, you will find the description of several different linguists' work. Determine what levels of adequacy apply to each case.*

> Roman Lubwicz has been working on reducing the number of grammatical constraints necessary for accounting for the frequency of passive constructions in a corpus of Polish telephone conversations. His goal is to come up with a single precise constraint to capture these facts.

Observational adequacy.

> Juan Martínez has been working with speakers of Chicano English in the barrios of Los Angeles. He has been both looking at corpora (rap music, recorded snatches of speech) and working with adult native speakers.

Observational adequacy.

> Fredrike Schwarz has been looking at the structure of sentences in eleventh-century Welsh poems. She has been working at the national archives of Wales in Cardiff.

Observational adequacy.

> Boris Dimitrov has been working with adults and corpora on the formation of questions in Rhodopian Bulgarian. He is also conducting a longitudinal study of some two-year-old children learning the language to test his hypotheses.

Descriptive adequacy.

Chapter 2

Unit 4

Question 1: *Does assassination refer to a thing (i.e. a noun) or an action (i.e. a verb)? Can you tell?*

Semantically an action, but syntactically a noun.

Question 2: *Does sincerity describe a thing (i.e. a noun) or a quality (i.e. an adjective)? Explain your answer.*

Semantically a quality, but syntactically a noun. Semantic criteria don't always tell us the parts of speech of words. We need several tests for recognizing them.

Question 3: *The following sentence has a number of nonsense words in it. Can you tell what part of speech they are?*

(9)   *The yinkish dripner blorked quastofically into the nindin with the pidibs.*

Words	N	V	Adj	Adv
yinkish	✗	✗	✓	✗
drinper	✓	✗	✗	✗
blorked	✗	✓	✗	✗
quastofically	✗	✗	✗	✓
nindin	✓	✗	✗	✗
pibids	✓	✗	✗	✗

Question 4: *Underline all the nouns in the following passage:*

"If you'll watch my feet, you'll see how I do it," said she and lifting her skirt above her dainty ankles, glided across the floor on tiptoe, as lightly as a fawn at play. But Sidney Trove was not a graceful creature. The muscles on his lithe form, developed in the school of work or in feats of strength at which he had met no equal, were untrained in all graceful trickery. He loved dancing and music and everything that increased the beauty and delight of life, but they filled him with a deep regret of his ignorance.

Question 5: *Go back to the passage in Q4 above and circle all the verbs.*

"If you'll (watch) my feet, you'll (see) how I (do) it", (said) she and (lifting) her skirt above her dainty ankles, (glided) across the floor on tiptoe, as lightly as a fawn at play. But Sidney Trove (was) not a graceful creature. The muscles on his lithe form, (developed) in the school of work or in feats of strength at which he had (met) no equal, (were) untrained in all graceful trickery. He (loved) dancing and music and everything that (increased) the beauty and delight of life, but they (filled) him with a deep regret of his ignorance.

Question 6: *Go back to the passage in Q4 above and put a box around all the adjectives and a dotted underline under any adverbs.*

"If you'll watch my feet, you'll see how I do it", said she and lifting her skirt above her dainty ankles, glided across the floor on tiptoe, as [lightly] as a

fawn at play. But Sidney Trove was not a graceful creature. The muscles on his lithe form, developed in the school of work or in feats of strength at which he had met no equal, were untrained in all graceful trickery. He loved dancing and music and everything that increased the beauty and delight of life, but they filled him with a deep regret of his ignorance.

Question 7: *Identify the main parts of speech (i.e. Nouns, Verbs, Adjectives/Adverb) in the following sentences.*

I will use the same scheme that was prescribed for the earlier question and mark the word categories.

1. The old rusty stove (exploded) in the house │quickly│ │yesterday│.

2. The brainy assistant │often│ (put) vital files through the new efficient shredder.

3. The large evil leathery tiger (complained) to his aging keeper about his unappetizing snacks.

Question 8: *Consider the following data from Lummi (Straits Salish), assume that (a) t'iləm=lə=sxʷ is a verb. What part of speech are the (b) and (c) forms?*

(a) t'iləm=lə=sxʷ
     sing=past=2SG.NOM
     You sang.   *Verb*

(b) si'em=lə=sxʷ
     chief=past=2SG.NOM
     You were a chief.   *Verb*

(c) si'em=lə=sxʷ
     afraid=past=2SG.NOM
     You were afraid.   *Verb*

Question 9: *What does the data from Lummi tell us about the value of semantic definitions of parts of speech?*

Since the forms in the given data bear the tense marking, it looks like all the forms are verbs only, but since the language is a polysynthetic language, we don't clearly see the parts of speech distinction like we do in languages like English and hence merely looking at the English meanings of words won't tell us in which category does a word from a language fall.

Question 10: *Consider the following selection from Jabberwocky, a poem by Lewis Carroll (from Through the Looking-Glass and What Alice Found There, 1872). Identify the parts of speech of the underlined words. Indicate what criteria you used for determining their part of speech.*

gimble: *Verb.* I think it is a verb, because it can be replaced with a regular verb of English in the particular frame where it has occurred, e.g., instead of 'Did gyre and gimble in the wabe', one can have 'I swim and dance in the pool'.

wabe: *Noun.* I think it is a noun, because it can be replaced with a regular noun of English in the particular frame where it has occurred, e.g., instead of 'Did gyre and gimble in the wabe', one can have 'I swim and dance in the pool'.

outgrabe: *Verb.* I think this is a verb, because it suits the tense marking of English in both the present (assuming 'raths' is a plural form of 'rath') and past tense (assuming the verb belongs to give-type verbs which don't take the '-ed' marker, e.g., 'And the enthusiast divers dive' for present tense or 'And the enthusiast divers dove' for past tense.

frumious: *Adjective.* It looks like an adjective because of the productive adjectival morpheme of English '-ous'.

bandersnatch: *Noun.* Considering the previous hypothesis which assumes 'frumious' to be an adjective, this should be a noun.

vorpal: *Adjective.* Again, '-al' is a productive morpheme of English which mostly produces adjectives, e.g., procedural, palatal, which makes me believe that this is an adjective.

manxome: *Noun.* Typically *the* is followed by a noun and hence I feel this is a noun.

tumtum: *Noun/Adjective.* In English it is allowed to form compounds by adding a noun immediately after a noun, e.g., the cake shop, so this way 'tumtum' can be considered a noun, but otherwise it looks like a typical adjective preceding a noun, e.g., the big shop.

uffish: *Adjective.* Because of the productive adjectival morpheme '-ish', this looks like an adjective. Also it precedes a noun, i.e., 'thought'.

Jabberwock: *Noun.* It follows an article, i.e., 'the'.

tulgey: *Adjective.* It follows an article, i.e., 'the' and precedes a noun, i.e., 'wood'.

Unit 5

Question 2: *In the last unit you saw the following passage and identified some words as nouns, others as verbs, adjectives and adverbs. Go through the passage and see if you can tell what words are functional words. Underline them.*

'If you'll watch my feet, you'll see how I do it,' said she; and lifting her skirt above her dainty ankles, glided across the floor on tiptoe, as lightly as a fawn at play. But Sidney Trove was not a graceful creature. The muscles

<u>on</u> his lithe form, developed <u>in</u> the school <u>of</u> work <u>or</u> <u>in</u> feats <u>of</u> strength <u>at</u> <u>which</u> he <u>had</u> met <u>no</u> equal, <u>were</u> untrained <u>in</u> <u>all</u> graceful <u>trickery</u>. He <u>loved</u> dancing <u>and</u> music <u>and</u> everything <u>that</u> increased <u>the</u> beauty <u>and</u> delight <u>of</u> life, <u>but</u> they <u>filled</u> him <u>with</u> <u>a</u> deep regret <u>of</u> his ignorance.

Question 3: *In the passage given above in Q2, we can find examples of the prepositions across, above and at but there are also four other prepositions not listed in (1). Identify what they are and give the sentence that contains them below.*

as, on, in, with, of

Question 4: *Go back to the passage given above in Q2. How many articles, quantifiers, deictic markers can you find?*

Articles: *the*: 4, *a*: 3

Quantifiers: 0

Deictic markers: 0

Question 5: *In each of the following sentences there is a blank. Fill in the appropriate conjunction or complementizer. More than one form is possible for many of the sentences. Indicate whether the form you used is a conjunction (Conj) or complementizer (C).*

Mark <u>and</u> Susan cut down the tree.	Conj.
I wonder <u>why/if/whether</u> Mark cut down the tree.	C
I'm sure <u>that</u> Mark cut down the tree.	C
Bill asked <u>if/whether</u> Mark cut down the tree.	C
<u>If</u> Mark cut down the tree <u>then</u> I'll be really angry.	Conj.

Unit 6

Question 1: *John, Susan, Frank, George are all nouns. What does the data in (1)—(4) tell us about the part of speech of* he, *her,* them *and* his*?*

Forms like *he*, *her*, *them* and *his* stand for the nouns which are mentioned in the question. They are replaceable in the contexts where nouns of matching person, number and gender are used, e.g., in (3b), we can see the use of pronoun *they* and not he/she. The reason for this is since there are two nouns to be referred to, we need a pronoun which itself is plural in third person the only plural pronoun available in English is *they*. It is worth noticing that the selection of pronoun is affected by its position in the sentence too, e.g., when they are placed before the verb they are in nominative case, whereas when they are placed after the verb they are in the accusative case.

Question 2: *Are any of the following examples acceptable?*

1. *the him
2. *big him
3. *hims

Question 3: *Do nouns that aren't pronouns show overt signs of case in English?*

No.

Question 4: *Fill in the blank feature values for each of the following pronouns.*

$$
\textbf{him}: \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \text{SUBCAT: } +\text{D} \end{bmatrix} \\ \text{CASE:} & \text{ACC} \\ \text{AGR-}\varphi: & \begin{bmatrix} \text{P: } 3 \\ \text{N: SG} \\ \text{G: M} \end{bmatrix} \end{bmatrix}
$$

$$
\textbf{she}: \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \text{SUBCAT: } +\text{D} \end{bmatrix} \\ \text{CASE:} & \text{NOM} \\ \text{AGR-}\varphi: & \begin{bmatrix} \text{P: } 3 \\ \text{N: SG} \\ \text{G: F} \end{bmatrix} \end{bmatrix}
$$

I:

$$
\begin{bmatrix}
\text{CATEGORY:} & \begin{bmatrix} \text{N} \\[6pt] \text{SUBCAT: } +\text{D} \end{bmatrix} \\[18pt]
\text{CASE:} & \text{NOM} \\[12pt]
\text{AGR-}\varphi\text{:} & \begin{bmatrix} \text{P: I} \\[6pt] \text{N: SG} \\[6pt] \text{G: } \varnothing \end{bmatrix}
\end{bmatrix}
$$

our:

$$
\begin{bmatrix}
\text{CATEGORY:} & \begin{bmatrix} \text{N} \\[6pt] \text{SUBCAT: } +\text{D} \end{bmatrix} \\[18pt]
\text{CASE:} & \text{GEN} \\[12pt]
\text{AGR-}\varphi\text{:} & \begin{bmatrix} \text{P: I} \\[6pt] \text{N: PL} \\[6pt] \text{G: } \varnothing \end{bmatrix}
\end{bmatrix}
$$

her:

$$
\begin{bmatrix}
\text{CATEGORY:} & \begin{bmatrix} \text{N} \\[6pt] \text{SUBCAT: } +\text{D} \end{bmatrix} \\[18pt]
\text{CASE:} & \text{GEN/ACC} \\[12pt]
\text{AGR-}\varphi\text{:} & \begin{bmatrix} \text{P: 3} \\[6pt] \text{N: SG} \\[6pt] \text{G: F} \end{bmatrix}
\end{bmatrix}
$$

$$
\textbf{girl}: \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \text{SUBCAT: } +\text{D} \end{bmatrix} \\ \text{CASE:} & \text{NOM} \\ \text{AGR-}\varphi: & \begin{bmatrix} \text{P: 3} \\ \text{N: SG} \\ \text{G: F} \end{bmatrix} \end{bmatrix}
$$

Question 5: *Can both a determiner (like* the *or* every*) and an adjective (*big*) occur together before suitcase?*

Yes.

Question 6: *Can a possessive pronoun (like* my*) and an adjective occur together before suitcase?*

Yes.

Question 7: *Can two determiners (like* the *or* every*) occur together before suitcase?*

No.

Question 8: *Can a determiner and a possessive pronoun occur together before suitcase?*

Overtly this isn't possible, but maybe covertly it still is possible to have a different determiner for the possessee, e.g., *the book's page* can mean either *a page of the book* or *the page of the book*.

Question 9: What does the distribution described by questions 5–8 tell us about the distribution of possessive pronouns? Are they in any way like Adjectives or Determiners?

Especially looking at the response to question number 8, it feels that extending the possessives to determiners is not really a good idea, because their meanings are drastically different. It needs to be independently probed and confirmed.

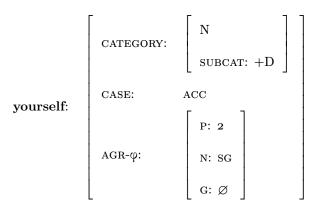**Question 10:** *What does the data in (13) tell us about the part of speech of pronouns?*

The pronouns in these sentences behave like determiners which don't allow other determiners to come along. The position also seems to be exactly the same.

Question 11: *Describe in your own words the pattern that explains why (a)–(g) are acceptable, but (h)–(j) are not.*

The featural makeup of the reflexives used in (h)—(j) doesn't match with the respective nouns they refer back to. I.e., in (h), the reflexive selected has a different person value than that of the noun it refers back to. The former is 3 and the latter is 1. In (i), also the difference is of person, but here the reflexive is of the value 1 and the referee noun has the value 2. In (j), the number value is different. For the reflexive it is PL, whereas for the referee noun, it is SG.

Question 12: *Fill in the feature structure for yourself.*

$$
\textbf{yourself:} \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \text{SUBCAT: } +\text{D} \end{bmatrix} \\ \text{CASE:} & \text{ACC} \\ \text{AGR-}\varphi\text{:} & \begin{bmatrix} \text{P: 2} \\ \text{N: SG} \\ \text{G: } \varnothing \end{bmatrix} \end{bmatrix}
$$

Unit 7

Question 1: *What is the distribution of proper nouns relative to determiners and adjectives? How is the distribution of proper names different from that of pronouns?*

It seems from the given data that English doesn't allow determiners with proper nouns, but using adjectives with them is accepted. On the other hand, pronouns don't accept both of these.

Question 2: *What does the evidence from Italian tell us about whether the distribution of proper nouns overlaps with that of determiners?*

It proves that the constraint that we observe in English regarding the use of proper nouns and determiners is not universal.

Question 3: *Start by evaluating the acceptability of the following sentences.*

(10) a. Peter sent an email to Dave.

b. Peter sent Dave an email.

c. *?*Peter sent a letter to Detroit.

d. *?*Peter sent Detroit a letter.

e. Susan bought some flowers for her mother.

f. Susan bought her mother some flowers.

g. Susan bought some flowers for her birthday.

h. *Susan bought her birthday some flowers.

Question 4: *For each of the words below indicate whether it can occur with the quantifier much or the quantifier many.*

Words	much	many
Apples	✗	✓
Sincerity	✓	✗
Air	✓	✗
Cats	✗	✓
Water	✓	✗
Sugar	✓	✗

Question 5: *What is the rule or pattern that determines the co-occurrence of count nouns with determiners? What about mass nouns?*

Count nouns which have SG as the value to their number feature *must* co-occur with determiners. No such rule for mass nouns.

Question 6: *Determine whether the following nouns are mass nouns, plural count nouns or singular count nouns.*

Words	SG count	PL count	Mass
Cow	✓	✗	✗
People	✗	✓	✗
Corn	✓	✗	✗
Dogs	✗	✓	✗
Cattle	✗	✗	✓

Question 7: *Draw two feature structures for the word water. One is for its normal mass noun usage (e.g. The lake didn't have much water in it); the other will be for its count usage (e.g. I drank the water).*

$$\textbf{water}_1: \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \\ \text{SUBCAT:} & \begin{bmatrix} -\text{ANIMATE} \\ \\ -\text{COUNT} \end{bmatrix} \end{bmatrix} \\ \\ \text{CASE:} & \text{NOM/ACC} \\ \\ \text{AGR-}\varphi: & \begin{bmatrix} \text{P: } 3 \\ \\ \text{N: } \varnothing \\ \\ \text{G: N} \end{bmatrix} \end{bmatrix}$$

$$\textbf{water}_2: \begin{bmatrix} \text{CATEGORY:} & \begin{bmatrix} \text{N} \\ \\ \text{SUBCAT:} & \begin{bmatrix} -\text{ANIMATE} \\ \\ +\text{COUNT} \end{bmatrix} \end{bmatrix} \\ \\ \text{CASE:} & \text{NOM/ACC} \\ \\ \text{AGR-}\varphi: & \begin{bmatrix} \text{P: } 3 \\ \\ \text{N: SG} \\ \\ \text{G: N} \end{bmatrix} \end{bmatrix}$$

Unit 8

Question 1: *Identify the predicates, the arguments and the adjuncts in the following sentences.*

- I smiled.

  Predicate: smile; **argument:** I.
- Susan kissed Calvin with too much lipstick.

  Predicate: kiss; **arguments:** Susan, Calvin; **adjunct:** with too much lipstick.
- Pangur hit Art with the cat toy.

  Predicate: hit; **arguments:** Pangur, Art; **adjunct:** lipstick (instrument).

- I passed Dave the beef waffles last week.

  Predicate: pass; **arguments:** I, Dave, beef waffles; **adjunct:** last week.

Question 2: *Identify if the following verbs are intransitive, transitive or ditransitive based on the sentences given there.*

smile: intransitive

kiss: transitive

hit: transitive

pass: ditransitive

Question 3: arrive:

$$\left[\text{CATEGORY:} \quad \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:[EXTERNAL DP]} \end{array} \right] \right]$$

Question 4: rub:

$$\left[\text{CATEGORY:} \quad \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \\ \text{INTERNAL} & \text{DP} \end{array} \right] \end{array} \right] \right]$$

Question 5: kiss:

$$\left[\text{CATEGORY:} \quad \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \\ \text{INTERNAL} & \text{DP} \end{array} \right] \end{array} \right] \right]$$

Question 6: kill:

$$\left[\text{CATEGORY:} \quad \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \text{DP} \\ \\ \text{INTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \end{array} \right] \end{array} \right] \right]$$

Question 7: ask:

$$\left[\text{CATEGORY:} \quad \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \\ \text{INTERNAL} & \left\{ \begin{array}{c} \text{DP} \\ \text{CP} \end{array} \right\} \end{array} \right] \end{array} \right] \right]$$

Question 8: think:

$$\left[\text{CATEGORY:} \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \text{INTERNAL} & \left\{ \begin{array}{c} \text{DP} \\ \text{CP} \end{array} \right\} \end{array} \right] \end{array} \right] \right]$$

Question 9: send:

$$\left[\text{CATEGORY:} \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \text{INTERNAL} & \left\{ \begin{array}{c} < \text{DP, PP}> \\ {\scriptstyle \pm\text{ANIMATE}} \\ < \text{DP, DP}> \\ {\scriptstyle +\text{ANIMATE}} \end{array} \right\} \end{array} \right] \end{array} \right] \right]$$

Question 10: spray:

$$\left[\text{CATEGORY:} \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \text{INTERNAL} & <\text{DP,PP}> \end{array} \right] \end{array} \right] \right]$$

Question 11: tell:

$$\left[\text{CATEGORY:} \left[\begin{array}{l} \text{V} \\ \text{SUBCAT:} \left[\begin{array}{ll} \text{EXTERNAL} & \begin{array}{c} \text{DP} \\ \text{+ANIMATE} \end{array} \\ \text{INTERNAL} & \left\{ \begin{array}{c} < \text{DP, PP}> \\ {\scriptstyle +\text{ANIMATE}} \\ < \text{DP, DP}> \\ {\scriptstyle +\text{ANIMATE}} \\ < \text{DP, CP}> \\ {\scriptstyle +\text{ANIMATE}} \end{array} \right\} \end{array} \right] \end{array} \right] \right]$$

Unit 9

Question 1: *Identify whether the following sentences are in the past, present or future tense.*

Sentences	PRS	PST	FUT
The parakeet flew home.	✗	✓	✗
Calvin loves snow cones.	✓	✗	✗
Otto drank the tuna juice.	✗	✓	✗
Reggie will wake everyone up.	✗	✗	✓
Andrew brushed the cat.	✗	✓	✗
I drink too much.	✓	✗	✗

Question 2: *The following paragraph contains three sentences in the perfect aspect. What are they?*

I was driving into Tucson to buy some tortillas, when I noticed that my car was nearly out of gas. I was surprised because I had filled the tank yesterday. I had driven all over town. However, I hadn't gone that far.

Question 3: *Identify the aspect and tense of each of the following sentences.*

1. Susan has danced already: Present (T), Perfect (A)
2. Calvin will have slept all day: Future (T), Perfect (A)
3. Heidi danced yesterday: Past (T), Imperfect (A)
4. Art had danced already: Past (T), Perfect (A)
5. Calvin will sleep all day: Future (T), Imperfect (A)
6. Art drinks whisky sours: Present (T), Imperfect (A)
7. Dave will drink a whisky sour: Future (T), Imperfect (A)
8. Dan had drunk a whisky sour: Past (T), Perfect (A)
9. I have never eaten beef waffles: Past (T), Perfect (A)

Question 4: *Identify the tense and aspect of each of the following sentences.*

1. Calvin is sleeping on top of the fridge: Present (T), Progressive (A)
2. Otto grabbed at the passing stick: Past (T), Imperfect (A)
3. Heidi will be grading her papers: Future (T), Progressive (A)
4. Art has pulled down the outer wall: Present (T), Perfect (A)
5. Andrew will eat the beef waffles: Future (T), Imperfect (A)
6. Jean was driving to her daughter's house: Past (T), Progressive (A)

Question 5: *Identify the active and passive sentences below:*

1. Calvin caught the mouse: Active
2. The retaining wall was torn down: Passive
3. Otto drank the tuna juice: Active
4. Dave played the game: Active
5. Art tore down the retaining wall: Active
6. The game will be played: Passive

Question 6: *What order do tense, perfect, progressive and passive appear in?*

Tense -> Perfect -> Progressive -> Passive

Question 7: Keeping all tense, aspect and passive markers in the sentence, is any other order of these elements possible?

No.

Question 8: *For each of the following sentences identify its tense, if it is perfect or imperfect, if it is progressive or non-progressive and whether it is active or passive voice.*

1. Pangur was being massaged: Past (T), Imperfect (A1), Progressive (A2), Passive (V)

2. Surrey will have been adopted: Future (T), Perfect (A1), Passive (V)

3. Calvin is eating the tuna: Present (T), Imperfect (A1), Progressive (A2), Active (V)

4. The tuna has been eaten: Present (T), Perfect (A1), Non-progressive (A2), Passive (V)

5. Calvin has been eating the tuna: Present (T), Perfect (A1), Progressive (A2), Active (V)

6. The wall had been torn down: Past (T), Imperfect (A1), Non-progressive (A2), Passive (V)

Question 9: *Construct sentences combining various modals with the various aspects and voices. Where does the modal verb always appear?*

Here are a few examples:

1. She *could* be winning the race.

2. He *might* not attend the lecture.

3. They *might* have been fired.

4. You would not even look at me.

It seems that modals always come prior to all other verbal entities.

Unit 10

Question 1: *In terms of the meaning of the word have/has/had, what do the sentences in (1) have in common? In (1) is the verb have followed by another verb? Compare the sentences in (1) to the sentences in (2). Does the verb* have *have the same meaning in (2) as it does in the sentences in (1)?*

The *has/have/had* from the sentences in group (1) comes as the main verb, because all of those sentences can have another *has/have/had*. E.g., 'Calvin *has had* a peanut' in perfective aspect. This isn't the case with the sentences from group (2). They have these words as auxiliaries expressing perfective aspect.

Question 2: *Sentence (4a) is the use of be (was/is) as part of a progressive sentence. Sentence (4b) is the use of be as part of a passive. Do either of the sentences in (3) describe a passive or progressive action? In terms*

of syntactic categories, what is the difference between the sentences in (3) and (4) with respect to the elements that follow be?

Similar to the nature of *has/have/had* from question 1, here too we see that the group (3) has the forms of *be* verb as the main verb, whereas the group (4) has it as an auxiliary. Unlike in the first question, here we can't add another be form in the third group, because the reason why it appears in the fourth group is to represent the tense of the event which is already expressed. Since it is not an aspect auxiliary, we can't add it in a finite sentence, but we can do that only if we extract the tense out of it, e.g., *'John does like apples'* instead of *'John likes apples'*.

Question 3: *The distinction between (5) and (6) is a little more delicate and harder to describe, so don't panic if you have trouble explaining it; you can look at the answer to this question for more details. Describe at least the difference in category of the elements that follow do in each group of sentences. Can you also see a difference in meaning? Note that in sentence (6b) there are two do verbs. What does this tell us about do in English?*

A lot of times English tenses are extracted out from the verbs and with the help of the *do* verb they are represented. This can be for various purposes. E.g., this is done when one wants to emphasize on something, like in, *'John did eat this apple!'*. Here the meaning of action of doing is missing. It's just a functional strategy to emphasize the truth of the event. There are other such cases too. In 6a and 6b, we see that the *do* is coming along with negation. There is no way to keep the tense with the verb and negate it. E.g., *'∗ John not ate an apple.'* or *'∗ John ate not an apple.'*. So the sentences from the second group have a functional *do*, which shows a function rather than some meaning, whereas we see that in the first group the *do* has a lexical meaning. In fact one can use both of them together in a sentence like *'I* did *not* do *this.'*.

Question 4: *Can main verbs in English undergo Subject/Aux Inversion?*

No.

Question 5: *Can auxiliary verbs undergo Subject/Aux Inversion?*

Yes.

Question 6: *What generalization can we make about the behavior of main and auxiliary verbs and Subject/Aux Inversion?*

The auxiliaries which are *'inverted'*, necessarily carry the tense with them and the main verbs are left tense-less.

Question 7: *How does this data support the idea that there are two verbs* do*, and two verbs* have*?*

As seen in my earlier explanation, both 9a and 9b lack the main verb *do* and *have*. It should be added in order to make them grammatical. Since in

one sentence both of them can appear with different meanings, one must conclude that they are not the same.

Question 8: *Can main verbs come before* not*?*

No.

Question 9: *Can auxiliary verbs come before not?*

Yes.

Question 10: *Making reference to the feature* [SUBCAT: +AUX]*, make a generalization about the sentences in (10).*

Only verbs with [SUBCAT: +AUX] feature can come before *not* in English.

Question 11: *How does the data in (11) support the hypothesis that there are different auxiliary and main verb uses of* have *and* do.

The data in (11) shows that even though these two verbs are present, the sentence is ungrammatical because it lacks a main verb. So both of these sentences require the same respective verbs for the sentences to become complete. This proves that there are two uses of these verbs.

Question 12 and 13: *Are auxiliaries like* be, have *and modals like* can, should *verbs?*

Morphologically yes, but syntactically no. Auxiliaries and modals take the same morphemes that verbs the respective verbs do, but they have different syntactic distributions. Semantically also they show some variation. E.g., In sentences like *'Can I come to the party?'* or *'May I come to the party?'* the modals seek permission, but on the other hand in *'I can come to the party'* and *'I may come to the party.'*, they show ability and possibility respectively.

Question 14: *Can you construct a sentence with more than one modal?*

No.

Question 15: Can you construct a sentence with more than one auxiliaries?

Yes, e.g., I *have been* waiting for you.

Question 16: *Can modal verbs appear before* not*?*

Yes.

Question 17: *Can auxiliary verbs appear before* not*?*

Yes.

Question 18: *Can modal verbs appear after* not*?*

No.

Question 19: *Can auxiliary verbs appear after* not*?*

Yes.

Question 20: *Turning back to Subject/Auxiliary Inversion, do modals like* should *behave like auxiliaries or like main verbs?*

Auxiliaries.

Question 21: *Turning back to the data about the position of not given above in (12), can you make a generalization about which items can appear before not, and which items may never appear before not?*

Modals and auxiliaries can, but main verbs cannot appear before *not*.

Question 22: *Does* will *pattern with modals or with be and have with respect to its positioning relative to the word* not*?*

Modals.

Question 23: *Can you construct a sentence in English that uses both a modal and the future tense marker will? What might this tell us about the category of the future tense marker?*

We can't have a sentence in English which has a modal and *will*. This tells us that the future tense marker itself is a modal.

Question 24: If there is a modal present do any of the other auxiliaries or verbs in a sentence bear tense affixes?

No.

Question 25: *Draw the feature structure for* can*.*

$$
\left[\begin{array}{ll} \text{CATEGORY:} & \left[\begin{array}{l} \text{V} \\ \text{SUBCAT: } +modal \end{array} \right] \\[2ex] \text{SEMANTIC:} & \left[\text{MOOD: } ability \right] \end{array} \right]
$$

Question 26: Draw the feature structure for be$_{\text{PROG}}$.

$$
\left[\begin{array}{ll} \text{CATEGORY:} & \left[\begin{array}{l} \text{V} \\ \text{SUBCAT: } +auxiliary \end{array} \right] \\[2ex] \text{SEMANTIC:} & \left[\text{ASPECT: } progressive \right] \end{array} \right]
$$

Question 27: *When there is no negation, present and past tense is marked on the verb. When negation is present where does it appear?*

On auxiliaries and modals. Auxiliaries are added to the sentence if not present and they carry the tense of the verb making the verb tense-less.

Question 28: *Now think carefully about the relative position of tense and negation and compare it to the relative position of modals with respect to negation.*

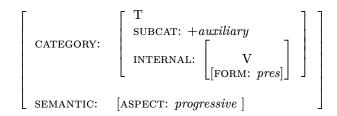Negation always follows the auxiliary bearing the tense of the sentence.

Question 29: *What's the abstract structure of the sentence* 'Calvin eats the beef waffles'*?*

Calvin $\varnothing_{\text{present}}$ eats the beef waffles.

Question 30: *Is there anything in our system so far that predicts the ungrammaticality of the abstract forms where we have a mismatch between the abstract T particle and the form of the verb?*

No.

Question 31: *What's the feature structure for* $\varnothing_{pres}$*?*

$$
\begin{bmatrix}
\text{CATEGORY:} & \begin{bmatrix}
\text{T} \\
\text{SUBCAT: } +auxiliary \\
\text{INTERNAL: } \begin{bmatrix} \text{V} \\ [\text{FORM: } pres] \end{bmatrix}
\end{bmatrix} \\
\text{SEMANTIC:} & [\text{ASPECT: } progressive]
\end{bmatrix}
$$

Abbreviations

I	First person 13, 15	**M**	Masculine 12
2	Second person 9, 15	**N**	Neuter 17
3	Third person 12–15, 17	**NOM**	Nominative 9, 12–14, 17
ACC	Accusative 12, 13, 15, 17	**PL**	Plural 13, 15, 16
F	Feminine 12–14	**PRS**	Present 19
FUT	Future 19	**PST**	Past 19
GEN	Genitive 13	**SG**	Singular 9, 12–17