IT'S THE FINAL COUNTDOWN!

The final exam is approaching fast, so let's shake the panic off while having some fun with linguistics together! No panic! ☺

Exercise #1: Semantic translation

Check for each English expression below whether it is a correct or incorrect translation of the formula in C.

A = {x: x is a fish}   B = {x: x has stripes}   C = {x: x ∈ A & x ∉ B}

C =	a fish that has stripes	CORRECT	INCORRECT
C =	a fish without stripes	CORRECT	INCORRECT
C =	all fish with stripes	CORRECT	INCORRECT
C =	all fish without stripes	CORRECT	INCORRECT
C =	the fish that don't have stripes	CORRECT	INCORRECT

Exercise #2: Compositional semantics

Assume the following individuals and their relation to the following activities:

> Abby acts, yodels, and called Chloe, Maggie, and Walter.
> Chloe dances, yodels, and acts, and called Jeremy, Maggie, and Tim.
> Tim yodels and called Chloe.

For each of the following sentences, draw a tree diagram representing the semantic values of <u>all</u> the S, NP, VP, and V nodes. State which rules need to be applied to correctly compute the meaning at each step. Note: To get the full points, you must use the correct notation in all your trees (do not leave out 〚 〛 , { }!).

a.	*Chloe yodels.*		b.	*Tim called Walter.*
c.	*Abby called Chloe.*		d.	*Chloe called Abby.*

Exercise #3: Intersentential relations

Each of the following examples consists of three lines: lines a. and b. contain English example sentences; line c. states which relation holds or should hold between the sentences in lines a. and b. In each example, one of the lines is left blank. Complete those lines by constructing appropriate English sentences (lines a., b.), or by stating what relation, if any, holds between the sentences in lines a. and b (line c.).

(1) a.   *He ate 5 cookies.*
     b.   *He ate 3 cookies.*
     c.   Relation: _____

(2) a.   *John said that he ate 5 cookies.*
     b.   *John didn't eat more than 5 cookies.*
     c.   Relation: _____

(3) a.   *Mary hasn't been to Europe more than four times; she always visits exactly one country per trip.*
     b.   *Mary hasn't been to Germany five times.*

     c.   Relation: _____

(4) a.   _____
     b.   *Her pet turtle ran away.*
     c.   Relation: a. entails b.

(5) a. _____
     b. *John called Peter.*
     c. Relation: a. and b. are synonymous.

(6) a. Speaker A: "Was there a fiddler at the bar last night?"
         Speaker B: "Well, there was a man scraping a bow across a violin."
     b. The performance was not very good.
     c. Relation: _____

(7) a. *Exactly half of the students came to the party.*
     b. *Not all students came to the party.*
     c. Relation: _____

(8) a. _____
     b. *John didn't buy beer yesterday.*
     c. Relation: a. entails b.

(9) a. *John didn't buy beer yesterday.*
     b. _____
     c. Relation: a. entails b.

(10) a. _____
     b. *John didn't buy beer yesterday.*
     c. Relation: a. and b. are contradictory

(11) a. I love it when you make me wait for you outside in the cold weather.
     b. _____
     c. Relation: b. is a pragmatic implicature of a.

Exercise #4: Semantic notation

A = {x: x is an Austrian}   A = {Anna, Gertrud, Karin, Leo, Michael, Susi, Walter, Zoe}
B = {x: x drinks beer}   B = {Gertrud, Jonathan, Richard, Walter}
C = {x: x is a child}   C = {Bob, Leo, Michael, Zoe}

Give a grammatical English expression corresponding to the following formulae:

   i.   Zoe   A ∩ C   ....
   ii. Zoe   A ∩ B ∩ C   ....
   iii. | A ∩ C | = 3   ....
   iv. B   A = false   ....
   v. {Gertrud Walter} = A ∩ B ....
   vi. {Leo, Zoe}   A ∩ C   ....

Give a semantic formula that corresponds to each of the following sentences:

   vii. Leo is an Austrian child.   ....
   viii. Leo is not an Austrian beer drinker.   ....
   ix. There is no beer-drinking child.   ....
   x. There are as many beer-drinkers as there are children. ....
   xi. There are 8 Austrians.   ....
   xii. It's not true that all Austrians drink beer.   ....

Exercise #5: Syntax

Use the following PS-rules to create two tree diagrams for the sentence *Emma scared the child with the lion*.

S	⟶	NP VP		P	⟶	*with*
NP	⟶	N		V	⟶	*scared*
NP	⟶	Det CN		N	⟶	*Emma*
CN	⟶	CN PP		CN	⟶	*child*
PP	⟶	P NP		CN	⟶	*lion*
VP	⟶	V NP		Det	⟶	*the*
VP	⟶	VP PP				

For each tree diagram give a pronoun replacement test for the object, and give <u>all</u> *do so* replacement tests possible for each tree diagram.

Exercise #6: Phonology

In the following words from Turkish, [ɸ] is a voiceless bilabial fricative, [œ] is a front, mid, lax, rounded vowel.

a.	[kʊm]	'sand'		i.	[takam]	'my boat'
b.	[far]	'headlight'		j.	[tamam]	'allright'
c.	[masa]	'table'		k.	[mʊm]	'candle'
d.	[tak]	'wear'		l.	[tam]	'complete'
e.	[kasa]	'hanger'		m.	[ʊɸʊk]	'horizon'
f.	[kʰoɸ]	'weak'		n.	[kaɬ fa]	'foreman'
g.	[tʰef]	'tambourine'		o.	[œɸcʰe]	'anger'
h.	[kat]	'flat'				

A.   Which sounds are contrastive? Motivate your answer.

B.   Summarize the distribution of the sounds [ɸ] and [f] in Finish: contrastive or non-contrastive; complementary or overlapping; predictable or non-predictable; allophones of the same phoneme or different phonemes.

Exercise #7: Phonology

The following words are from Florentine Italian. [x] is a voiceless velar fricative.

a.	[laxasa]	'the house'	g.	[fixi]	'figs'
b.	[kwando]	'when'	h.	[blaŋko]	'white'
c.	[poxo]	'little'	i.	[kwuoxo]	'cook'
d.	[bixa]	'stack'	j.	[makkina]	'machine'
e.	[amixo]	'friend'	k.	[kabina]	'booth'
f.	[kapella]	'chapel'			

A. Are there any minimal pairs involving the sounds [x] and [k]? If yes, list them? If no, state what we can conclude from the lack of minimal pairs.

B. State the phonological environments in which [x] and [k] occur in the data given above. Try to provide a generalization stated in terms of natural classes.

D. Summarize the distribution of the sounds [x] and [k]: contrastive or non-contrastive; complementary or overlapping; predictable or non-predictable; allophones of the same phoneme or different phonemes.

Exercise #8: Morphology

Examine the following data from Inuktitut and answer the questions that follow.

igluga	'my house'	uiga	'my husband'
igluŋa	'her house'	uiŋa	'her husband'
iglutut	'like a house'	uitut	'like a husband'
iglumi	'in a house'	uilik	'someone with a husband'
nunaga	'my land'	umialik	'someone with a boat'
nunait	'your land'	iglurjuaq	'big house'
nunakkut	'across the land'	umiarjuaq	'big boat'

A. Give the Inuktitut morpheme that corresponds to each of the following translations (ignore the determiners *a, the* in the English translations).

_____	'house'	_____	'my'	_____	'like'
_____	'husband'	_____	'her'	_____	'in'
_____	'land'	_____	'your'	_____	'someone with'
_____	'boat'	_____	'big'	_____	'across'

B. How would you say the following expressions in Inuktitut?

'like a boat'	_____	'your boat'	_____
'big husband'	_____	'someone with a house'	_____

Exercise #9: Morphology

Match the linguistic terms in the third colum to the <u>underlined</u> parts of the English words in i. to vi.

English words		Answer	Linguistic terms
i.	<u>un</u>tie	i.	inflectional suffix
ii.	<u>un</u>ite	ii.	derivational prefix
iii.	<u>over</u>book	iii.	derivational suffix
iv.	whit<u>en</u>	iv.	no morpheme
v.	funni<u>er</u>	v.	root (N)
vi.	<u>hope</u>less	vi.	root (V)