

Name: _____
Section: _____

Linguistics 001
Spring 2009
Homework 9
Due: MONDAY, April 27 (10 points)
DO NOT FORGET IT IS DUE MONDAY

Part I: Animal Communication

1. Describe the sorts of mental abilities that each of these two animals must use to succeed at the tests they were given. **1pt**

Rico: word recall + mutual exclusivity bias / Alex: single response to multiple stimuli at once (intersection)

2. How may these mental abilities be related to Universal Grammar and the language faculty? **.5pt**

While these are essential to human language, they are clearly not the only ingredients in the human-specific endowment for language.

3. Does Alex show evidence for the use of language structure (i.e. principles governing the order of symbols, like human syntax) in production or generation? **.5pt**

He seems to be able to comprehend at least some part of question structure, but his productions aren't very "syntactic": they're mere mimicry (note his use of "want some water" to interrupt)

4. Rico is capable, like human infants, of "fast-mapping": learning a word which he has not heard before. When asked to fetch a new toy, he chooses one which has not been named yet. Which of the following is supported by this fact? Explain. **1pt**
 - Rico has a "mutual exclusivity bias", a bias to assume things only have one name
 - Rico has a near-unlimited signal set: i.e. his command of language shows the ability to refer to nearly anything

We see no evidence for that latter; can Rico "find the liberty?" Or know that he couldn't?

Part II: Morphophonology review

Consider the following data from Turkish. The vowels you haven't seen are:

- <u> is a high back unrounded vowel
- <y> is a high front rounded vowel
- <œ> is a mid front rounded vowel

alet 'tool'	sehir 'city'	elma 'apple'	gemi 'ship'
aleti 'his/her tool'	sehiri 'his/her city'	elmasi 'his/her apple'	gemisi 'his/her ship'

- There are two allomorphs of the 3rd.sg. possessive (“his/hers/its”) suffix. What are they? **1pt**

/-si, -i/

- Write out a similar rule to explain the distribution of the two allomorphs in Turkish. **1pt**

*3sg.pos → -si / V __
→ -i / elsewhere*

Now consider this data:

bebek 'baby'	ekmek 'bread'
bebei 'his/her baby' (*bebeki, *bebesi)	ekmei 'his/her bread' (*ekmeki, *ekmesi)

- Write a phonological rule to explain the distribution of /k/. Which rule applies first: the /k/-rule, or the insertion of the possessive suffix? **2pt**

*k → Ø / V __ V (also accept __ #)
The /k/-rule must apply later, otherwise you'd derive *bebesi.*

Lastly, consider some more instances of the same suffix, with different shapes.

gemi 'ship'	göl 'lake'	at 'horse'	kol 'arm'
gemisi 'his ship'	göly 'his/her lake'	atı 'his/her horse'	kolu 'his/her arm'

- What natural class (hint: look at an IPA chart) do all the suffixal vowels belong to? **1pt**

high vowels

- This is more phonologically-conditioned allomorphy. Explain how the other features (frontness/backness, roundness/unroundness) get chosen for this vowel. **1pt**

Their frontness and roundness are determined by the vowel in the root (i.e., the -y in 'lake' is front and round because the root's /æ/ is front and round)