# Introduction to Linguistics: Final exam practice questions

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# 1 **PHONETICS**

- (1) Review the homework and the in-class exercises.
- (2) Why do we need IPA (International Phonetic Alphabet) to study speech sounds? What is the problem of English orthography? Explain it with the following words: *pneumonia* and *ghoti*. Use the phrase "*one-to-one correspondence between sounds and symbols*" in your description. The IPA (International Phonetic Alphabet) is a phonetic alphabet that maintains one-to-one correspondence between sound and symbols. There is no such a correspondence in English (and many other languages') orthography. For example, [p] in *pneumonia* is not pronounced and there are two pronunciations for *ghoti* (either [got1] or [fif])
- (3) Consonants can be defined in terms of the three articulatory factors. What are they? Define [p], [n], [ð], [ŋ], and [k]. [p] = voiceless bilabial stop, [n] = (voiced) alveolar nasal, [ŋ] = voiced velar nasal, [k] = voiceless velar stop
- (4) Write the phonetic symbol representing each of the following sound (don't forget to use square brackets). An answer to the question is given as an example.
  - a) Example: voiced palatal glide: [j]
  - b) voiceless palatal affricate = [tf]
  - c) voiced velar nasal =  $[\eta]$
  - d) voiceless glottal fricative = [h]
  - e) voiced labiodental fricative = [v]
  - f) voiceless labiodental fricative = [f]
  - g) voiced interdental fricative =  $[\delta]$
  - h) voiced palatal fricative = [3]
  - i) voiced alveolar lateral liquid = [l]

(5) Write the phonetic symbol (IPA) for the first sound in each of the following words according to the way you pronounce it.

<i>Examples</i> : ooze	[u]	psycho	[s]
judge	[dʒ]	thought	[ <del>0</del> ]
Thomas	[t]	contact	[k]
though	[ð]	phone	[ <b>f</b> ]
easy	[ <b>i</b> ]	civic	[ <mark>s</mark> ]
pneumonia	[ <b>n</b> ]	usual	[j]

(6) Write the phonetic symbol (IPA) for the last sound in each of the following words.

Examples: boy	[əj]		
fleece	[s]	cow	[ <mark>0</mark> ]
neigh	[eɪ]	rough	[ <b>f</b> ]
long	[ŋ]	cheese	[ <b>z</b> ]
health	[ <del>0</del> ]	bleached	[ <b>t</b> ]
watch	[ʧ]	rags	[z]

(7) The following are all English words written in phonemic transcription. Write the words using normal English orthography.

a) /hit/ = heat

b) /strovk/ = stroke

- c) /feiz/ = phase
- d) /ton/ = *tone*
- e) /boni/ = bony
- f) /skrim/ = *stream*
- g) /frut/ = fruit
- h) /pritfər/ = preacher

i) /krak/ = crock

- (8) Write the symbol that corresponds to each of the following phonetic descriptions, then give an English word that contains this sound.
  - a) Example: voiced alveolar stop [d] dough, door, hugged
  - b) voiceless bilabial (unaspirated) stop = [p]
  - c) lateral liquid = []]
  - d) voiced velar stop = [g]
  - e) voiceless alveolar fricative = [s]
  - f) voiced bilabial stop = [b]
  - g) voiced labiodental fricative =  $\begin{bmatrix} v \end{bmatrix}$
  - h) retroflex liquid = [r]
  - i) (voiced) velar nasal = [n]
  - j) voiced (inter)dental fricative =  $[\delta]$
  - k) voiceless (palatal) affricate = [tf]
  - l) palatal glide = [j]
  - m) mid lax front vowel =  $[\varepsilon]$
  - n) high back tense vowel =  $\begin{bmatrix} u \end{bmatrix}$
  - o) voiceless aspirated alveolar stop =  $[t^h]$
- (9) In each of the following pairs of words, the bold italicized sounds differ by one or more phonetic properties (features). Give the symbol for each italicized sound, state their differences.
  - a) Example: silence -ship[s] and [[], the different place of articulation ([s] is alveolar and [[] is palatal)
  - b)  $bath bathe = [\theta]/[\delta]$
  - c) reduce reduction = [s]/[k]
  - d) cool cold = [u]/[ov]
  - e) wife wives = [f]/[v]
  - f)  $\operatorname{cat} s \operatorname{dog} s = [s]/[z]$
  - g) impolite indecent = [m]/[n]
- (10) For each group of sounds listed, state the phonetic feature(s) they all share.
  - a) Example: [p] [b] [m] they are all bilabial sounds & they are all stop sounds
  - b) [g] [p] [t] [d] [k] [b] (all sounds are stop sounds)
  - c) [u] [v] [o] [ɔ] [a] (back vowels)
  - d)  $[i] [I] [e] [\varepsilon] [æ] (front vowels)$
  - e) [t] [s] [ʃ] [p] [k] [tʃ] [f] [h] (voiceless)
  - f) [v] [z] [ʒ] [dʒ] [n] [g] [d] [b] [l] [r] [w] [j] (voiced)
  - g) [p] [t] [k] [s] [f] (voiceless stop or fricative sounds)
  - h) [b] [d] [g] [z] [v] (voiced stop or fricative sounds)
  - i) [p] [b] [m] (bilabial)
  - j) [f] [v] [s] [z] [ʃ] [ʒ] (fricative)

- k) [tʃ] [dʒ] (affricate) l) [m] [n] [ŋ] (nasal) m)  $\left[ \int \left[ z \right] \left[ t \right] \left[ dz \right] \left[ palatal \right] \right]$ n)  $\left[\int\right] [s] [k] [p] (voiceless)$ o) [n] [v] [m] [ŋ] [g] (voiced) p) [k] [g] [ŋ] (velar) q)  $[\theta] [\delta]$  (interdental) r) [f] [v] (labiodental)
- s) [l] [r] (liquid)
- t) [t] [l] [s] [r] (alveolar)
- (11) Write the following sentences in regular English spelling.
  - a) [intrnl nAθiŋnes iz ovkei æz lon æz jr drest fr it] "Internal nothingness is okay as long as you're dressed for it"
  - b) [If ju ar sıkstin ər Andr trai nat tə gov bald] "If you are sixteen or under try not to go bald"
  - c) [mʌni iz nɑt ɛvriθiŋ bʌt it iz bɛrr ðæn hæviŋ wʌnz hɛlθ] "Money is not everything but it is better than having one's health"
  - d) [nom tfamski iz e lingwist hu titfəz æt ɛm ai ti] "Noam Chomsky is a linguist who teaches at MIT"
  - e) [fonetiks iz ðə stadi əv spitf sawndz] "Phonetics is the study of speech sounds"
  - f) [ol spoken længwickez juz sawndz predust bai ðe aper resperetori sistem] "All spoken languages use sounds produced by upper respiratory system"
  - g) [In whn daralekt av ingli kat da nawn æand kot da varb ar pronawnst da sem] "In one dialect of English, cot the noun and caught the verb are pronounced the same."

- h) [snm pipəl θιŋk fonətıks ız veri intərestiŋ] "Some people thing phonetics is very interesting"
- (12) Identify each of the following works of fiction.
  - a) [mɪdnait in ðəgardən əv gud ænd ivəl] "Midnight in garden of good and evil"
  - b) [a tel av tu sitiz] "A tale of two cities"
  - c) [ðə bluəst aɪ] "The bluest eye"
  - d) [ðə dʒen əstən buk klʌb] "The Jane Austen book club"
  - e) [Intərpretər əv mælədiz] "Interpreter of maladies"
  - f) [wʌðərɪŋ haɪts] "Wuthering Heights"
  - g) [ə kənfɛdərasi əv dʌnsəs] "A Confederacy of Dunces"
  - h) [ðə kʌlər pərpəl] "The color purple"
  - i) [ðə dəvintfi kod] "The Da Vinci code"
  - j) [θıŋz fal apart] "Things fall apart"
  - k) [laɪf əv paɪ] "Life of Pi"

# 2 Phonology

- (13) Review the homework and the in-class exercises.
- (14) What are *phone*, *phoneme*, and *allophone*? Define them with the following sound pairs:
  - a) [p] and [p<sup>h</sup>] (English and Hindi) In English [p] and [p<sup>h</sup>] are allophone, but they are phonemes in Hindi
  - b) [p] and [b] (English and Arabic) In English [p] and [b] are phonemes, but they are allophones in Arabic
- (15) What is *aspiration*? Explain the phenomenon with reference to the following experiment.

If you hold a piece of tissue loosely in front of your mouth and say the word *pie*, the tissue flutters at the beginning of the word (when you say [p].) However, the fluttering of the tissue does not happen with [p] in *spy* or [b] in *buy*.

The voiceless stop at the beginning of a syllable (often at the beginning of the word) is accompanied with a stronger release of the air.

- (16) Define *minimal pair* with a few examples in English.
  (1) there is a meaning difference between two words and (2) one (and only one) sound difference between two words. For example, *buy-pie*, *shy-pie*, *pit-bit* etc.
- (17) What is *deletion*? Define it with the following sentence:
  - a) He handed her his hat

Deletion is omission of sound segments. In the example above, some [h] sounds are omitted in a natural speech.

- (18) What is *insertion (epenthesis)*? Explain it with the following example:
  - a) strength /stren $\theta$ /  $\rightarrow$  [strenk $\theta$ ]

Insertion (or epenthesis) is addition of sound segments. In the example above, some [k] sound is inserted (among some speakers of English).

- (19) What is *assimilation*? Explain it with the following sentences:
  - a) I can see. [ai kæn si]
  - b) I can play. [aɪ kæm pleɪ]
  - c) I can come. [ai kæŋ kʌm]

Assimilation is a process in which neighboring sounds changes so as to share the same feature of the sounds (e.g., place, manner, voicing etc.) In the example above, [n] in [kæn] becomes a bilabial nasal [m] when it is followed by a bilabial consonant [p] and becomes a velar sound  $[\eta]$  when it's followed by a velar consonant [k]

- (20) Name the phonological process responsible for the change from standard Spanish to the dialectal variant in each item below.
  - a)  $[po\beta re] \rightarrow [pro\beta e]$  "poor" (in US southeastern Spanish) methathesis
  - b) [gatito]  $\rightarrow$  [gatiko] "kitty" (Costa Rican Spanish) dissimilation
  - c)  $[pesos] \rightarrow [pesos]$  "pesos" (Mexican Spanish) assimilation
  - d) [estomaxo]  $\rightarrow$  [estoxamao] "stomach" (US southwestern Spanish) methathesis
  - e)  $[al\beta risjas] \rightarrow [a\beta risjas]$  "gift" (US southwestern Spanish) deletion

# 3 Morphology

- (21) Review the homework and the in-class exercises.
- (22) Define *morpheme*. The minimal meaning-bearing unit in language
- (23) Define *free morpheme* and *bound morpheme*. Use the following examples: *atypical*, *a man*, and *apple*
- (24) Define *inflectional morpheme* and *derivational morpheme*. Use the following words as examples: *citizens, enlarge, assignments, winner,* and *tighter*.
  Inflectional morphemes usually indicate a different aspect of one word (i.e., there is no significant change in the meaning) while derivational morphemes occur with a significant change of the word (typically with a change in the part-of-speech of the word) *citizen-s -s* is an inflectional morpheme; *en-large en-* is a derivational morpheme; *assign-ment-s ment* is a derivational morpheme; *-s* is an inflectional morpheme; *win-ner (n)er* is a derivational morpheme; *tight-er -er* is an inflectional
  - morpheme
- (25) The following words are made up of either one or two morphemes. Isolate the morphemes and decide for each if it is free or bound, what kind of affix is involved (if any), and (where applicable) if the affix is inflectional or derivational.: *rejoin, hateful, greedy, spacious, comfortable, senseless, unspeakably, unidirectional, magnetic, temperature, selective, bilingual, trilingual, monolingual*

re-join (derivational-free), hate-ful (free-derivational), greed-y (free-derivational), spac-ious (free-derivational), comfortable (free-derivational), sense-less (free-derivational), un-speak-able-ly (derivational-free-derivational-derivational), unidirect-ion-al (derivational-free-derivational-derivational), magnet-ic (free-derivational), temperature (free), select-ive (freederivational), bi-ling-ual (derivational-free-derivational), tri-ling-ual (derivational-free-derivational), mono-ling-ual (derivationalfree-derivational)

- (26) The television show *The Simpsons* coined many new words by using morphology in novel ways. Two examples are *embiggens*, as in "A noble spirit embiggens the smallest man," and *introubleating*, as in "One Springfield man is treating his wife to an extra special Valentine's Day this year, and introubleating the rest of us." Note that although these are novel words, they are similar to other words of English: *embiggens* is similar to *emboldens*, and *introubleating* is similar to *infuriating*. For each of these two words, perform the following task:
  - a) Break it up into its component morphemes. em-bold-en / em-big(g)-en & in-fur(y)-iat-ing / in-troble-ate-ing
  - b) Provide the meaning of each morpheme and state whether it is free or bound. *em-* means to change into a state (e.g., *em-bold* means to change into a state of boldness) and *-en* means to cause something to change (e.g., *wid(e)-en* means to make something wide). The same analysis can be done with *introubleating*.
- (27) Define allomorpheme. Use the following words as examples: dogs, Charlie's, Queens, and sheep. Allomopheme refers to a set of morphemes that serve for the same function or meaning. For example, -s in dogs and  $\phi$  in sheep (plural) are the allomorphemes because they both indicate "plural" (in spite of their superficial differences). -'s in Charlie's and -s in Queens are not allomorphes because they convey different functions in spite of their superficial similarity.
- (28) Consider the following data from Bontoc. These data show an example of derivational morphology in which an adjectival root is turned into a verb. What type of affix is used to form the verb? Describe its placement in the word.

[fikas]	'strong'	[fumikas]	'he is becoming strong'	
[kilad]	'red'	[kumilad]	'he is becoming red'	
[bato]	'stone'	[bumiato]	'he is becoming stone'	
[fusul]	'enemy'	[fumiusul]	'he is becoming an enemy'	

In Bontoc, adjectives are converted into verbs by an infix -umi-

(29) In Hebrew, the following pattern is found in the derivation of color terms. Which morphological process is this an example of? How do you know?

[lavan]	'white'	[lvanvan]	'whitish'
[kaxol]	'blue'	[kxalxal]	'bluish'
[ja¥ok]	'green'	[j¥ak¥ak]	'greenish'
[tahov]	'yellow'	[thavhav]	'yellowish'
[va¥od]	'pink'	[v¥ad¥ad]	'pinkish'
[∫axor]	'black'	[∫xarxar]	'blakish'

In Hebrew, color nouns are converted into color adjectives by the process of *reduplication* (repeating the last syllable of the word).

- (30) From the examples given for each of the following suffix, determine (i) the part of speech of the word whose stem the suffix combines with, and (ii) the part of speech of the words resulting from the addition of the suffix.
  - a) -ify: solidify, intensify, purify, clarify, rarefy adjective  $\rightarrow$  verb
  - b) -ity: rigidity, stupidity, hostility, intensity, responsibility adjective  $\rightarrow$  noun
  - c) -ize: unionize, terrorize, hospitalize, crystalize, magnetize noun  $\rightarrow$  verb
  - d) -ive: repressive, active, disruptive, abusive, explosive verb  $\rightarrow$  adjective
  - e) -ion: invention, injection, narration, expression, pollution verb  $\rightarrow$  noun
  - f) -less: nameless, penniless, useless, heartless, mindless noun  $\rightarrow$  adjective

#### 4 Syntax

- (31) Review the homework and the in-class exercises.
- (32) Define *noun* in terms of its morphological behavior and distributional properties.
- (33) Define verb in terms of its morphological behavior and distributional properties.
- (34) Define *adjective* in terms of its morphological behavior and distributional properties.
- (35) Define *adverb* in terms of its morphological behavior and distributional properties.
- (36) What is the difference between *lexical class* and *functional class*?
- (37) What are the difference between prescriptive grammar and descriptive grammar? Compare and contrast two different perspectives using the following sentence pairs.
  - a) If I were you, I would study hard for the final exam. descriptively and prescriptively grammatical
  - b) If I was you, I would study hard for the final exam. descriptively grammatical
  - c) If I am you, I would study hard for the final exam. ungrammatical
  - a) Me and my family went to Europe last summer. descriptively grammatical
  - b) My family and I went to Europe last summer. descriptively and prescriptively grammatical
  - a) Who did you speak to? descriptively grammatical
  - b) To whom did you speak? descriptively and prescriptively grammatical
- (38) Identify the lexical category (part-of-speech) of the underlined words in the following sentences. (also review the home-work and in-class exercises).
  - a) The zoo owns some very funny lions. N
  - b) The lion cubs are fierce for their age. A
  - c) They broke the gate to their cage from its hinges. P
  - d) The cage was empty. A
  - e) Can you guess where the lions went? N
  - f) They left the zoo and went into Central Park. Conj
  - g) The lions eagerly chased the pigeons. Adv
  - h) The pigeons flew into the trees. P
  - i) An angry lion never chases a pigeon. V
  - j) The happy lions <u>love</u> to chase pigeons. V
  - k) Their love of pigeons is greater than my love of peanut butter. N
  - l) The zookeepers should fix the lions' cage. Aux
  - m) Oil companies will have to pass on all of the benefits of tax reform to the consumer. N/Aux/V/P/N/P/D/N/P
  - n) Attached to the plastic frame is a mesh covering that will prevent a child from rolling off of the bed onto the floor. P/A/N/Aux/D/Aux/N/P/P/D

- o) That young child in the <u>corner probably will</u> fall off <u>his</u> bed <u>onto</u> the <u>cold</u>, <u>hard</u> floor <u>early</u> in <u>the</u> <u>morning</u>. A/N/Adv/Aux/D/P/A/A/N/D/N
- (39) Write trees for the following sentences.
  - a) Pat loves Robin.



d) Robin yelled at the manager from Ohio.



g) Josh and Sarah went to the club in Manhattan.



h) Kay sent a letter to her mother.

i) Joshua gave a note to his friend.



- (40) What is the difference between *argument* and *adjunct*? Explain the distinction using the following sentence pairs.
  - a) My dog devoured his meal.
  - b) My dog ate his meal in the bowl.
  - c) My little brother eats with his spoon.

Argument is required by the lexical head (e.g., verb or noun) whereas adjunct is extra-information to the meaning of the predicate (not required by the lexical head. In the examples above, *his meal* is an argument, but *in the bowl* and *with his spoon* are adjuncts.

(41) What is **structural ambiguity**? What is the relationship between the ambiguity (multiple interpretations) and the syntactic structure? Explain it with the following sentences (the tree structures for the first example are provided for your help).

- a) Annie whacked a man with an umbrella.
- b) Marsha ate ice cream with a friend.
- c) Marsha ate ice cream with a cherry.
- d) Marsha ate ice cream with a spoon.
- e) Marsha ate ice cream with pleasure.
- f) sleepy men and boys (note: this is a noun phrase)
- g) the old women's shoes (note: this is a noun phrase)
- h) You can enjoy a gourmet meal in your sweat pants.

Syntactic ambiguity is based on the idea that one syntactic tree corresponds to one (and only one) interpretation. Some sentences allow more than one legal phrase structures (i.e., trees). In such a case, there must be more than two interpretations associated with the sentence.



- (42) What is **recursion**? What is the relationship between the recursive sentence and the phrase structure rules? Explain it with the following sentences.
  - a) The gun was on the table.
  - b) The gun was on the table near the window.
  - c) The gun was on the table near the window in the bed room.
- (43) What is deep structure and surface structure? What is transformation? Explain it with the following sentences.
  - a) A dog bit a boy.
  - b) A boy was bitten by a dog.
  - a) Susan opened the door.
  - b) The door was opened by Susan.
  - c) The door opened.

#### 5 SEMANTICS

- (44) Review the homework and the in-class exercises.
- (45) Identify each of the following statements as being either mostly about **lexical semantics** or mostly about **compositional semantics**.
  - a) The phrase *purple books* describes a group of objects (*books*) that have a certain property (being *purple*.) compositional
  - b) The words *couch* and *sofa* mean roughly the same thing. lexical
  - c) *Water under the bridge* means something different than *bridge under the water*.
  - d) The sentence *John ate a bagel for breakfast* is true just in case an individual by the name of *John* consumed a rounded bread product with a hole in the middle for his morning meal. compositional
  - e) The opposite of open is shut. lexical
  - f) Paris is a word that refers to a particular city in France. compositional/lexical
  - g) If the sentence *Harold likes checkers and backgammon* is true, then the sentence *Harold likes backgammon* must be true as well. compositional

- h) Bird means something like 'warm-blooded, egg-laying animal with feathers, wings, two legs, and a beak. lexical
- i) When most people hear the word *bird* out of the blue, they are more likely to think of a songbird than a penguin, flamingo, duck, or vulture; however, penguins, flamingos, ducks, and vultures are also kinds of bird. lexical
- j) Jelly beans that are lemon flavored has the same meaning as lemon-flavored jelly beans. compositional
- (46) Which sentence paris are in the *entailment* relationship? Also, which sentence pairs do *mutually entail* (i.e., entail each other)?
  - a) Mike danced on the stage.
  - b) Mike danced with his girlfriend.

#### no entailment

- a) Mike can sing.
- b) Mike sang a song with his friends.

#### b entails a

- a) Mike danced.
- b) Mike can dance.

#### a entails b

- a) Mike sings a song.
- b) Mike sings a song with his friends.

#### b entails a

- a) The door was opened by Mike.
- b) Mike opened the door.
- c) The door opened.

# a and b mutually entail each other. a and b entail c

- (47) What is the distinction between *inclusive or* and *exclusive or*? Explain it using the following examples.
  - a) He must be a surgeon or a gynecologist.
  - b) Kathy will come to see me or call me today.
  - c) Dead or alive.
  - d) You must have gone crazy or you are suicidal.
- (48) Define the *lexical decomposition*. What features do the following words share? *mare, stallion, hen,* and *rooster. Lexical decomposition* argues that words can be decomposed into a small set of meaning elements (meaning primitives). For example, *mare* is FEMALE + HORSE, *stallion* is MALE + HORSE, *hen* is FEMALE + CHICKEN, and *rooster* is MALE + CHICKEN.
- (49) Define and give examples of *synonymy*. What is the synonym of *happy*? same meaning. *elated*
- (50) Define and give examples of *antonymy*. What is the antonym of *happy* and *married*. opposite meaning. *sad* and *unhappy*
- (51) What is the difference among *complimentary antonyms*, *gradable antonym*, *reverse*, *converse*, and *scalar antonym*? Explain it with the following words: *male*, *female*, *boy*, *girl*, *pack*, *unpack*, *lend*, *borrow*, *hot*, *cold* see the lecture slides
- (52) Identify the lexical relationship of the following word pairs. If it's an antonym, indicate whether it is *complementary* or *grad-able*: good bad, expensive cheap, parent off-spring, beautiful ugly, false true, lessor lessee, pass fail, hot cold, legal il-legal, larger smaller, poor rich, fast slow, asleep awake, husband wife, rude polite AG/AG/AC/AC/AC/AC/AC/AC/AG/AG/AC/R/A
- (53) What is *hyponym*? Also, what is *hypernym*? Explain them with *hammer*, *T-shirt*, *pink*, *fish* (hypernym) and *appliance*, *musical instrument*, *furniture*, *fish* (hyponym). The hypernym (superset) of *hammer* is *tools*, *T-shirt clothe*, *pink color*, and *fish living thing*. The hyponym (subset) of *appliance* is *refrigerator*, *musical instrument guitar*, *furniture desk*, and *fish cat fish*.
- (54) What is *ontology*? Explain it with some examples. the most general hypernyms in language
- (55) What is homohpone and homonyms? Explain it with witch and plant
- (56) What is *collocation*? Explain it with some examples.
- (57) What is prototype? Explain it with furniture, bird, animal, building, fish, sport, car, tree.
- (58) Pick out all of the verbs in the following list whose subject is an AGENT.: *hit, buy, lose, see, trip, receive, hallucinate, rain, explode, destroy hit, buy, lose,* and *destroy*
- (59) Pick out all of the verbs in the following list which occur with OBJECT (PATIENT) NP.: *hit, buy, see, receive, destroy, discuss, paint, erase, enter, remember hit, buy, see,* and *remember*

- (60) What is *semantic ambiguity*? Explain it with the following sentences
  - a) Three boys danced with two girls.
  - b) Everyone loves someone.

Semantic ambiguity is ambiguity caused by (1) either polysemous words (words that have two meanings) or (2) scope of (numerical) quantifiers. In the examples above, sentence a. could mean there are *two girls* or *six girls*. Sentence b. can be interpreted such that all people are paired each other or all people love one specific person.

### 6 FIRST AND SECOND LANGUAGE ACQUISITION

- (61) Review the homework and the in-class exercises.
- (62) What is *neurolinguistics*? How is it related to *language acquisition*? Neurolinguistics is a study of relationships between brain and language. The research suggests that plasticity of the brain functions contribute to the acquisition of language process.
- (63) What is aphasia? Aphasia is a partial dysfunction of the brain that results in the loss of some aspects of language ability.
- (64) What is *Broca's area*? What is its function? Broca's area is located in the cortex of the dominant frontal lobe (i.e., in front of the left ear) and is believed to be responsible for the speech production (or broadly syntax).
- (65) What is *Wernicke's area*? What is its function? Wernicke's area is located in the cortex of the dominant temporal lobe (i.e., in back of the left ear) and is believed to be responsible for the speech comprehension (or broadly semantics).
- (66) Which type of aphasia is characterized by speech like this: ... *two times* ... *read* ... *wr* ... *ripe*, *er*, *rike*, *er*, *write* ....? Broca's aphasia
- (67) How do the researchers know the connection between the brain and the language functions? What are the typical techniques used in the neurolinguistic research? Various methods are employed to probe into the brain functions (e.g., PET scanning, the dichotic listening test (the right-ear advantage), MRI and fMRI etc.; see the handout for more details of those methods), but all of they are indirect methods and no evidence for a direct relationship between the specific location of the brain and the language functions has been found yet.
- (68) What is the *Critical Period Hypothesis*? Critical Period Hypothesis is a clam by Lenneberg (1967) who argued that the language acquisition must take place before children lose plasticity of the brain (i.e., before their brain functions are localized into different parts of the brain). The localization of the brain functions is called *lateralization* and is believed to happen before puberty
- (69) What is the difference between *first language acquisition* and *second language acquisition*? What is the difference between *language acquisition* and *language learning*? First Language Acquisition (FLA) is used for language acquisition process by children (thus, bilingual children might have two first languages) and Second Language Acquisition (SLA) is used for adults who learn a language (usually in a classroom setting). The term *acquire* usually indicates FLA whereas *learn* is used for SLA.
- (70) Some stages of first language acquisition are highly predictable. What are the milestones of children's lexical development (development of vocabulary, especially up to age 2-3)? Discuss the following stages in the lexical acquisition:
  - a) babbling stage
  - b) one-word stage
  - c) two-word stage
  - d) telegraphic stage

see the handout

(71) Some stages of first language acquisition are highly predictable. What are the milestones of children's syntactic development (development of grammar, especially up to age 2-3)? Discuss them in terms of *question* forming and *negative* forming by young children.

see the handout

- (72) Which of the following statement do you agree with? What reasons would you give to support your opinions?
  - a) People with high IQs are good (first) language learner.
  - b) Most mistakes in the second language are due to the interference from the first language.
  - c) The second language learners should not be allowed to hear mistakes or they will learn the erroneous sentences.
  - d) Teachers should teach simple grammar before complex one.
  - e) Teacher should teach only one grammar rule in the second language at a time and practice it throughly before introducing the next rule.

The answers vary. Make sure that you can rationalize your choice (e.g., why do you think IQ matters or does not matter?).

#### 7 PRAGMATICS

- (73) What is *pragmatics*? The study of language in actuarial conversation or in context.
- (74) What are the two different types of contexts? *Linguistic context* is actual utterances that precede a particular utterance in a discourse and *physical/social/situational context* is a (non-linguistic) situation in which a sentence is uttered (e.g., social distance between the speaker and the listener).
- (75) What is *Grice's Principle*? Grice's Cooperative Principle is a set of assumptions that speakers undertake without any specific context.
- (76) What are the four types of Grice's Cooperative Maxim? The maxims of quality, relevance, quantity, and manner
- (77) What is *the maxim of quality*? Any example? (1) do not say what you believe to be false, and (2) do not say that for which you lack adequate evidence.
- (78) What is the maxim of relevance? Any example? (1) be relevant.
- (79) What is *the maxim of quantity*? Any example? (1) make your contribution as informative as is required, and (2) do not make your contribution more informative than is required.
- (80) What is *the maxim of manner*? Any example? (1) avoid obscurity of expression, (2) avoid ambiguity, (3) be brief, and (4) be orderly.
- (81) What is *deixis*? *Deixs* is a word that cannot be interpreted without context. For example, *here, there, this, that, now, then, yesterday, you, me, she, he* etc.
- (82) What is the difference between *anaphora* and *antecedent*? *Anaphora* is a deictic expression that is employed as a subsequence reference to any already introduced entity and *antecedent* is the referent of the anaphora.
- (83) What is the *speech act*? What are the speech acts of the following sentences?
  - a) A little more salt will make this salad yummy. (declarative) The speech act is **REQUEST**
  - b) Could you pass me the salt? (interrogative) The speech act is **REQUEST**
  - c) Give me the salt! (imperative) The speech act is **REQUEST**

#### 8 Sociolinguistics

- (84) What is sociolinguistics? The study of the relation between language and society.
- (85) List a few major dialects of the US English. Eastern New England, New York, Middle Atlantic, West Pennsylvania, Appalachian, Southern, North Central, Central Midland, Northwest, Southwest
- (86) Give some examples of sociolinguistic influence on the lexicon (vocabulary). *soda* vs. *pop*, *paper bag* vs. *paper sack*, *pail* vs. *bucket* etc.
- (87) What is *Isogloss*? *Isogloss* represents a boundary between different uses of one particular linguistic item.
- (88) What are the two major factors that influence the usage of language in society? Geographical factor and socioeconomic factor
- (89) Provide one example of *the regional influence* on language use (e.g., different vowel pronunciations between Northeastern (New York) English and Inland (Pennsylvania) English, difference in vocabulary *soda* vs *pop* etc.)
- (90) Provide one example of *the socio-economic influence* on language use. For example, how age, economic status, or gender influences the use of language?
- (91) What are the controversies surrounding the debate about *Standard English* or *English as an official language*? What is *English-only* movement? What is *Lau v. Nichols? The standard language* is a language most commonly used in a specific society (e.g., English in the U.S.). *The official language* is a language determined by the legislation.
- (92) What is *Pidgin*? How is it different from *Creole*? *Pidgin* is a dialect developed for practical purposes among people who have a lot of contact but do not share the same language. *Creole* develops among the children of Pidgin speakers and is equipped with much more sophisticated grammar and vocabulary than Pidgin.
- (93) What is *AAVE*? There is a large amount of research conducted on this language how is it related to sociolinguistics? AAVE is an African American Vernacular English.

#### **9** Computational linguistics

- (94) What is *Turning test*? Why is it important in computational linguistics?
- (95) Briefly discuss Noam Chomsky's refutation against the data-driven, statistical approach to language? Use these two sentences as an example: *Colorless green ideas sleep furiously*. vs. *Furiously sleep ideas green colorless*.
- (96) What do we mean by the rationalist or rule-based approach to computational linguistics?
- (97) One of the challenges in computational linguistics is speed of speech. Discuss this problem.
- (98) One of the challenges in computational linguistics is *creativity of speech*. Discuss this problem.
- (99) One of the challenges in computational linguistics is *flexibility of speech*. Discuss this problem.
- (100) One of the challenges in computational linguistics is *rationality of speech*. Discuss this problem.