Chapter 1

 1. *Sound sequences*. Any word that conforms to the sound pattern of English is a correct answer. For example:

*Bliting*: *bl* as in *blood*, *iting* as in *biting*

*Krame*: *kr* as in *cream*, *ame* as in *aim*

*Swirler*: *sw* as in *swim*, *irl* as in *girl*, *er* as in *rider*

*Kristclean*: *kr* as in *cream*, *i* as in *pit*, *st* as in *street*, *clean* as in *clean*

*Atla*: as in *atlas*

*Oxfo*: *ox* as in *ox*, *fo* as in *foe*

 Existing English words as names of new products are also acceptable: for example, *Kleen* or *Clean* as the name of a laundry soap.

 2. *Grammaticality judgments.* The following sentences are ungrammatical, but note that some judgments may vary across dialects:

a. \**Robin forced the sheriff go.*

The word *to* is missing in front of the verb *go*. The verb *force* requires a *to* infinitive in the embedded clause.

f. \**He drove my house by.*

Particles are preposition-like words that occur with verbs such as *look*, as in *look up the number* or *look over the data*. Particles can occur after their direct object: *look the number up*; *look the data over*. True prepositions do not behave this way. *He ran up the stairs* is grammatical, but \**He ran the stairs* up is not. The *by* in *He drove by my house* functions as a preposition and may not occur after the direct object.

g. \**Did in a corner little Jack Horner sit?*

You cannot turn a statement that begins with a prepositional phrase into a question. While you can form a question from *Little Jack Horner sat in a* corner with *Did little Jack Horner sit in a corner*, you cannot question the sentence *In a corner little Jack Horner sat*.

h. \**Elizabeth is resembled by Charles.*

The verb *resemble* does not occur in passive sentences.

k. \**It is eager to love a kitten.*

If the pronoun *it* refers to an animate (nonhuman) thing (e.g., a dog), the sentence is grammatical. If the word *it* is a “dummy subject,” as in *It’s easy to love a kitten*, the sentence is ungrammatical because the adjective *eager* must have a referential subject.

l. \**That birds can fly flabbergasts.*

*Flabbergast* is a transitive verb: it requires a direct object. Compare *That birds can fly flabbergasts John.*

n. \**Has the nurse slept the baby yet?*

The verb *sleep* is intransitive: it cannot take a direct object (in this case, *the baby*).

o. \**I was surprised for you to get married.*

The passive participle *surprise* cannot be followed by a “for . . . to” complementizer. This is true for a whole set of verbs (emotive verbs), including *amuse, annoy,* and *bewilder*. The sentence could be corrected in a number of ways, including changing *for* to *that* and changing *to get* into *got*: *I was surprised that you got married*.

p. \**I wonder who and Mary went swimming.*

This “question” is derived from the more basic sentence *Someone and Mary went swimming*. The coordinate structure constraint (see Chapter 3 for mention, but not a complete description) requires coordinate structures to be treated as a whole, not in part. So, it is ungrammatical in most, but not all dialects of English, to ask \**Who and Mary went swimming?* because there is an attempt to question one part, but not the other part, of the coordinate structure. This also explains the ungrammatical nature of \**I wonder who and Mary went swimming* with similar caveats about dialectal and idiolectal variation.

q. \**Myself bit John.*

Reflexive pronouns like *myself*, *yourself*, *herself*, *themselves*, and so on. do not occur as subjects of sentences but only as objects, for example, *John hurt himself.*

s. \**What did Alice eat the toadstool and?*

A *wh-* phrase cannot be moved from inside a coordinate structure (e.g., *the toadstool and the fungi*) to form a *wh-* question.

 3. *Onomatopoeic words.* Sample answers:

*swish*—what you do when you ski

*thunk*—the sound of a baseball hitting a mitt

*scrunge*—the sound of a sponge wiping a table

*glup*—the sound made when you swallow

*squeeng*—the sound made when you pluck a taut elastic band

 4. *Nonarbitrary and arbitrary signs.* Sample answers:

a. Nonarbitrary signs:

a picture of a knife and fork indicating a restaurant

the wheelchair sign that indicates disabled persons such as is used to reserve parking

“No Smoking” sign with a slash through a burning cigarette

“Do not Iron” sign on clothes depicting an iron with an X through it

b. Arbitrary signs:

some gestures (e.g., a thumbs-up or a thumbs-down)

stripes on military uniforms to represent different ranks

a black armband for someone in mourning

the U.S. zip code system

some mathematical symbols (e.g., 1, 2, 5)

 5. *Learning.* The first statement (*I learned a new word today*) is quite probable. We constantly add to our vocabulary. In reading this book, for example, you may learn many new words. The second statement (*I learned a new sentence today)* is not very likely, since most sentences are not learned or memorized but rather constructed freely. Some sentences, such as slogans or sentences from a foreign language, may be learned as whole entities.

 6. *Alex, the African grey parrot.* Answers will vary. Students may point out that Alex’s ability to mimic human speech and the size of his vocabulary are quite impressive. They may further point out, however, that the ability to make human-like sounds and to memorize even a large number of words is not, in itself, language. The real question is not whether Alex can use human-like sounds to communicate, which he clearly can, but whether he has human language-like capabilities. Human language is an infinitely creative system made up of discrete, meaningful parts that may be combined in various ways. While Alex’s talents are impressive, he can communicate only a small set of messages, while human language is infinitely creative in both the number and kinds of messages transmitted. There is no data demonstrating that Alex has any understanding or use of syntax. Without syntax, the communication system cannot be anything more than a communication system.

 7. *Communication system of a wolf.* While a wolf’s communication system is quite large and complex, it is finite and restricted to a limited set of messages within a single domain (the wolf’s current emotions). Human language, on the other hand, is capable of expressing an infinite number of messages on any topic. Moreover, a wolf is unable to produce new messages using a different combination of independently meaningful gestures the way humans can.

 8. *A dog’s understanding of speech.* No. Even if the dog learned to respond to given cues to heel, sit up, beg, roll over, play dead, stay, jump, and bark in the correct way, it would not be learning language since its response would be driven solely by those cues. Such responses are stimulus-controlled  behavior. There is no creative aspect to the system: the dog could not associate a novel combination of cues with a complex action.

 9. *“Correct” rules of grammar.* Here are some rules, often taught in English classes, which seem unnatural to many speakers:

a. “Never end a sentence with a preposition.” Yet *What are you putting those marbles into?* is more common and natural for the majority of English speakers (including teachers of English) than *Into what are you putting those marbles?* English grammar permits the splitting of prepositional phrases.

b. “Don’t split infinitives” (i.e., don’t insert anything between the infinitive marker to and the verb). However, a sentence such as *He was the first one to successfully climb Mount Everest* is grammatical.

c. “Use *whom* rather than *who* when the pronoun is the object of a verb or preposition,” for example, *Whom* (rather than who) *did you meet yesterday*? While this may have been part of the mental grammar of English speakers in the past, for most dialects the syntax has changed and *Who did you meet yesterday?* is the grammatical or “acceptable” structure.

The essay may point out that a descriptive grammar describes speakers’ basic linguistic knowledge while a prescriptive grammar postulates a set of rules that are considered “correct.” Prescriptive grammarians often misunderstand the nature of language change and ignore the fact that all dialects are rule-governed and capable of expressing thought of any complexity.

 10. *Comments on Chomsky’s remark.* Chomsky believes that if apes were endowed with the ability to acquire language they would do so. The answer to this question should reflect an understanding of the studies presented in the chapter, which purport to show that the acquisition of language follows a pattern of development analogous to other kinds of biological development and is a result of a biological endowment specific to humans. The basis of the remark is in the fact that humans acquire language without instruction, while apes do not. (In fact, apes do not do so even with instruction.) The remark is also based on the assumption that the communication system used by apes is qualitatively different from human language; by “language ability” Chomsky means “human language ability.” The analogy to flightless birds implies that learning to speak a language is like learning to fly—it is a property of the species. A species of birds that does not fly simply does not have the biological endowment to do so. An excellent expansion of this answer may be found in some of the works listed the references for Chapter 1, including Anderson (2008) and Bickerton (1990).

 11. *Song titles.* Answers will vary. Some examples are:

“Somethin’ ‘Bout a Truck”—Kip Moore

“Why Ya Wanna”—Jana Kramer

“Lemme See”—Usher

“(I Can’t Get No) Satisfaction”—The Rolling Stones

“Gonna Make You Sweat”—C & C Music Factory

“We Gotta Get Out of This Place”—The Animals

“Ain’t Too Proud to Beg”—The Temptations

“The Times They Are a-Changin’”—Bob Dylan

 12. *Understanding the reality of a person’s grammar.* Answerswill vary. The essay might be along the lines of the following: Linguists who want to understand the reality of a person’s grammar can learn by observing the utterances people make, and by deducing, perhaps by asking speakers, what  kinds of utterances would not be made. The internal grammar must work so that it can produce all the possible sentences but none of the impossible ones. Linguists can hypothesize possible internal grammars, then see how well they perform at generating only the possible sentences. If the proposed grammar generates impossible sentences, or fails to generate possible ones, then it can be revised. In this way, linguists can develop increasingly sophisticated models of the internal grammars which speakers use. Linguists  must take competence and performance into account so they distinguish between the possible *The very, very, very, very, very, very, very, very, very old man arrived late*, which is possible but nonoccurring, and \**They swimmed in the pool*, which may occur as a slip of the tongue but is nonetheless not possible as a well-formed sentence.

 13. *My Fair Lady.* One example is “The rain in Spain stays mainly in the plain,” which is an attempt to get Eliza to pronounce the “long a” sound (indicated with the *ai* in *rain*) the way the upper classes pronounce it.

 14. *Bilingualism.* Parts (a) and (b) are open-ended. For part (a), a student might observe that if the strong version of the Sapir-Whorf hypothesis is true, then a bilingual person might have multiple personality disorder by having a dual world view forced on her by the two languages she knows. For part (b) a student might observe that an idiom such as the French *mariage de convenance* suggests that French speakers take marriage lightly. Students should consider both the strong and the weak versions of the Sapir-Whorf hypothesis in answering.

Part (c) should be “no”; that is, you can always translate, even if it means a lot of circumlocution. But there may be connotations, or shades of meaning that are not easy to translate, so translating *le mot juste* from French into “the right word” doesn’t capture the connotation of it being the *perfectly* right word for the occasion.

 15. *Pirahã.* Answers will vary. Readings will show that the Pirahã people do have difficulties doing quantitative comparisons with numbers larger than 6 or 8. However, in their culture there is little need for dealing with quantities in a precisely discrete manner, so it is questionable whether the language is influencing the culture, or vice versa. The same is true for color terms, and the student reader may also learn that there are few (if any) kinship relation terms. However, in this case as well, there may be a cultural explanation in that the people are so heavily intermarried that such terms probably wouldn’t make much sense.

 16. *British English words for woods and woodlands.*

a. Answers will vary.

b. Answers will vary. Students may discuss the meaning differences freely. The following definitions were found on dictionary.reference.com, except for the one marked with \* which was found on www.merriam-webster.com/dictionary:

bosky “covered with bushes, shrubs, and small trees; woody”

bosquet “a grove; thicket”

brush “a dense growth of bushes, shrubs, etc.; scrub; thicket”

bush “a large uncleared area thickly covered with mixed plant growth, trees, etc., as a jungle”

carr “fen; low land that is covered wholly or partly with water unless artificially drained and that usually has peaty alkaline soil and characteristic flora (as of sedges and reeds)”\*

coppice “a thicket of small trees or bushes; a small wood”

copse “a thicket of small trees or bushes; a small wood”

fen “low land covered wholly or partially with water; boggy land; a marsh”

firth “a long, narrow indentation of the seacoast”

forest “a large tract of land covered with trees and underbrush; woodland”

grove “a small wood or forested area, usually with no undergrowth”

heath “a tract of open and uncultivated land; wasteland overgrown with shrubs”

holt “a wood or grove; a wooded hill”

lea “a tract of open ground, esp. grassland; meadow”

moor “a tract of open, peaty, wasteland, often overgrown with heath, common in high latitudes and altitudes where drainage is poor; heath”

scrub “a large area covered with low trees and shrubs”

shaw “a small wood or thicket”

spinney “a small wood or thicket”

stand “the growing trees, or those of a particular species or grade, in a given area”

thicket “a thick or dense growth of shrubs, bushes, or small trees; a thick coppice”

timberland “land covered with timber-producing forests”

weald “wooded or uncultivated country”

wold “an elevated tract of open country”

woodlot “a tract, esp. on a farm, set aside for trees”

c. Answers will vary. An answer supporting the idea that English speakers have a richer concept of woodlands than speakers whose language has fewer words might argue that the plethora of words itself is evidence that the speakers have a rich concept of woodlands. An argument against this might say that a speaker’s concept of woodlands probably had more to do with that speaker’s personal experience with different types of woodlands, perhaps due to the geography of the area in which he lives, and less to the words available to describe those woodlands in his language. Following this argument, if a group of speakers of a language without many words for woodlands moved to a new area and were suddenly experiencing different types of woodlands on a daily basis and needing to distinguish between the varying types, these people would probably create new words in their language to fill that need, or perhaps “borrow” needed words from a local language.

 17. *English* dge *words*. Answers will vary. A sample list of *dge* words follows. Neutral: *edge*, *wedge*, *sledge*, *pledge*, *budge*, *fudge*, and *smidgeon*. Unfavorable: *curmudgeon*, *sludge*, *hodge-podge*, and *smudge*. Students should discuss the meaning of *budget*. One possible observation is that *budget* is not necessarily unfavorable, although it does consist of limits. For example, if I had a budget of $10,000 for my birthday party, I would find nothing unfavorable about that. Other potentially neutral *dge* words also include limits, like *edge*. Others could potentially have an unfavorable connotation like *wedge*, *sledge*, and *budge*, which suggest a certain amount of force was used. But again, depending on the situation, that may be favorable or unfavorable. For example, *I really wanted to get the book out from under the car’s tire but it wouldn’t budge* seems negative, but *I’ve decided to give you $100 and my mind is made up; I won’t budge* could be positive. (Use a Google search for “words beginning with” or “words ending in” to see lists of such words: e.g., search for “words ending in *dge*.”)

 18. *Euphemisms.* Answers will vary. Below are three possible examples:

toilet → bathroom → restroom

arse → butt → bottom / backside

negro → black → African American

 19. *Cratylus dialogue.* Answers will vary. Those who find that Socrates’ point of view was sufficiently well argued to support the thesis that the relationship between form and meaning is indeed arbitrary might point out Hermogenes’ argument that “in different cities and countries there are different names for the same things; Hellenes differ from barbarians in their use of names, and the several Hellenic tribes from one another.” In other words, we can say that objects in the world are called different things in different languages and sometimes even in different dialects of the same language. On the other hand, answers that find that Socrates’ point of view was not sufficiently well argued to support the thesis of arbitrariness might point out his summary of Protagoras’ argument that “things are not relative to individuals, and all things do not equally belong to all at the same moment and always, they must be supposed to have their own proper and permanent essence: they are not in relation to us, or influenced by us, fluctuating according to our fancy, but they are independent, and maintain to their own essence the relation prescribed by nature.” Put another way, this argument says that each item in the world has its own essence, and presumable name, independently of whether humans speaking any particular language call it by that name or not.

 20. *Pirahã.* Answers will vary. Linguist Daniel Everett claims that Pirahã violates some of the universal principles hypothesized by linguists (especially Noam Chomsky). In particular, he claims in his article in the journal *Current Anthropology*, Volume 46, Number 4, August–October 2005 that Pirahã lacks embedding, and therefore lacks recursion, which Chomsky predicts is a universal of all languages. Everett also claims that Pirahã has a dearth of terms for number, numerals, and quantification, an absence of color terms, an extremely simple pronominal system, no way to mark the perfect tense, and a simple kinship system. He also mentions other nonlinguistic features of the culture such as the absence of creation myths, the lack of individual or collective memory of more than two generations past, and the absence of most types of drawing. Everett makes the strong claim that the language of the Pirahã people is such as it is because of the culture of the Pirahã people. He claims his data show “striking evidence for the influence of culture on major grammatical structures, contradicting Newmeyer’s (2002:361) assertion . . . that ‘there is no hope of correlating a language’s gross grammatical properties with socio-cultural facts about its speakers.’” Students should discuss how convincing they find the data and arguments Everett presents and may refer to the fact that Everett (2005) began a debate that is still ongoing. A retort to Everett (2005) by Nevins, Pesetsky, and Rodrigues may be found in the journal *Language*, Volume 85, Number 2, June 2009, and Everett’s response to their retort may be found in the same volume.

 21. *The lexicon of the English language.* Answers will vary. Those who argue that the lexicon of English should be counted as all the words in English, past and present, may point out that even if a word is no longer in use, it could be brought into use again if it were needed. Furthermore, although the word is no longer used, it still is an English word that has fallen into disuse, and not, for example, a French word. Thus, it should be counted as part of the English lexicon. Those who argue instead that the lexicon of English should only be counted as the words currently in use may point out that it would be absurd to count words that are no longer used by any English speaker as part of the English lexicon, and if this faulty methodology were taken to its extreme we may count words from Proto-Indo-European as belonging to the English lexicon! Obviously, that would be ridiculous, but the line must be drawn somewhere. One logical place to draw that line could be that only those words currently used by any native speaker of English should be counted as being part of the (current) English lexicon.

22. *Nameless concepts.* We know that unnamed concepts can exist: we have feelings that we can’t quite put into words; we can see a physical item that we don’t know the name for and understand it nonetheless; we can invent terms for new philosophical theories or for new categories; children learn names for objects and concepts that they previously had no name for. We see the same play out in Orwell’s novel. While the Ministry of Truth believes it can control people’s thoughts by limiting the words and concepts the people are presented with, members of the resistance continue to think and write about these forbidden topics in secret. The notion of unnamed concepts being unthinkable is not limited to *1984*. We see similar philosophy employed in the dystopian government of Gilead in Margaret Atwood’s novel—and now TV series—*The Handmaid’s Tale*. Here, too, certain words like *infertile* are forbidden, and nonetheless, the concepts exist.

23. Arrival *and the Sapir-Whorf hypothesis.* The Sapir-Whorf hypothesis is critical to the plot of *Arrival*. The hypothesis states that the structure and categories of a language can shape the thoughts of speakers of that language. As Banks learns Heptapod B, she begins to be able to “see into the future,” or perhaps realize that time isn’t linear, because the language Heptapod B isn’t linear. It is written in a circle and can be read in any direction. Thus, her knowledge of this language and the nonlinearity of time as expressed in this language allows her to think differently about time and experience time differently.