SPECIAL READING: BOAS AND WHORF ON LANGUAGE AND CULTURE

1. LINGUISTIC FIELDWORK

Much of nineteenth century linguistics focused on languages with a long history of grammatical study and dictionary compilation that facilitated data collection. This was not to say that their phonology, morphology, syntax, and so forth were already fully understood, but whenever linguists wanted to find out something new about English, French, German, etc., they could start with reference works, build on other's studies, examine a huge body (or CORPUS) of written samples, interview native speakers easily, and even draw on their own intuitions as speakers of these well-known languages.

Beginning about 1900, there was a shift towards the investigation of the thousands of lesser-known languages in the Americas, Africa, and Asia, a shift that accelerated during the twentieth century But how does one go about discovering the linguistic structure of a language one does not know and which has no written documentation to study? Or even a writing system to record data for analysis? The answer lay in direct fieldwork with native speakers. The initial, pace-setting efforts were carried out by specialists in both linguistics and anthropology such as Franz Boas (more on him later). Through practical experience, linguists evolved a series of DISCOVERY PROCEDURES to elicit a corpus of data and start analyzing it, and trained their students in practical "field methods" courses.

Ideally, one would begin with phonology, eliciting data from a native speaker and recording it in phonetic transcription. After analyzing these data and determining the language's phonemes (and therefore a way to record data without having to discern every little allophone), one would proceed to investigate the morphology, syntax, vocabulary system, and pragmatics, and finish with an ETHNOGRAPHY, a description of the group's cultural practices and oral literature, all through scientific methods. In reality, fieldwork was as much "art" (talent, experience, knack, intuitions, hunches, interpersonal skills) as "method." Moreover, the process turned out to be long and arduous, and to complete it (beyond, say, just a sketch of the phonology or basic vocabulary) could take years of work dedicated to living with the people, gaining their confidence, and learning their ways.

Optimally, the fieldworker's informant(s) were bilingual in a language the fieldworker already knew and the language being described, so that he/she could ask "How do say 'rock'?" or "How do you tell someone to follow you?", "How do you ask for someone's name?" or "What do you say in greeting the chief?" This of course was not always possible, so that the linguist often had to learn the language even while analyzing it, just to communicate. One first step that many took was to elicit the "Swadesh List" of 100 words for things that were fairly concrete, could be pointed at or demonstrated, and were presumably universal (not culture-specific).¹ This list is as follows:

Ι	one	dog	bone	nose	breasts	die	say	smoke	black
you	two	louse	grease	mouth	heart	kill	sun	fire	night
we	big	tree	egg	tooth	liver	swim	moon	ash	hot
this	long	seed	horn	tongue	drink	fly	star	burn	cold
that	small	leaf	tail	claw	eat	walk	water	path	full
who	woman	root	feather	foot	bite	come	rain	mountain	new
what	man	bark	hair	knee	see	lie	stone	red	good
not	person	skin	head	hand	hear	sit	sand	green	round
all	fish	flesh	ear	belly	know	stand	earth	yellow	dry
many	bird	blood	eye	neck	sleep	give	cloud	white	name

Of course, there are no guarantees of comprehension: when the fieldworker points quizzically in the direction of a nearby upright plant to elicit 'tree', the informant may actually reply 'that's a diseased coconut palm' or 'tall' or 'pretty, isn't it? or 'yes, go ahead and climb it' or 'that's northeast' and it may be a while

¹The list was originally 200 items, and Swadesh did not offer it for fieldwork, but for comparing related languages to see how much of their shared vocabulary was still present. As it turns out, with different cultures, some of the entries are *not* universal (even in Swadesh's later "short version" of 100). But it was a place to start.

before the fieldworker realizes the mistake. And even if there's full comprehension of what the fieldworker is asking, he/she can count on transcriptional goofs and analytical false leads. It is often necessary to reelicit items to make sure of a consonant, vowel, tone, stress, meaning, part of speech, etc.

The discovery procedures that American linguists followed in the first half of the century are illustrated below for the phonological stage of the process.



This phonological stage could take a few days or weeks, depending on one's luck in hearing phones accurately, finding minimal pairs, and accounting for suspicious distributional patterns.

Next would come morphology, following similar principles and many of the procedures of analysis we have studied in this course. First, one had to determine the words (since word boundaries are not apparent in speech), then note "chunks" (morphs) in the words that might either contrast as morphemes (e.g. tense endings of verbs) or be allomorphs (and therefore in complementary distribution, one variant for one kind of stem and another for a different kind). The eventual list of morphemes would be classified according to whether they were affixes or stems. Then came syntax: the words and morphemes were studied in whole utterances for their distribution, and classified according to syntactic category, ordering, function, and constituent structure (member of noun phrases, of verb phrases, etc.). Sentence patterns and variants would be itemized, and to test the emerging grammar, the linguist would create sentences to see if the informant accepted them, and with the intended meaning). Proceeding to discourse analysis, the linguist studied the strategies and organization that the informant(s) and their group typically adopted for narratives, for initiating conversation, for common cultural rituals, etc. Finally, all words that had been isolated would be listed as a lexicon, and their meanings (semantics) continued to be investigated against the background culture: what kinds of things were apt to be described as "bliükám" and why.

In the 1960's, generative linguists led by Noam Chomsky criticized discovery procedures, because in characterizing native speaker competence, it didn't matter whether the linguist followed a special program or proceeded by hit-and-miss. They also pointed out that in practice it is impossible to separate the levels of analysis as previously assumed: many aspects of phonology depend on morphology, morphology can only be understood in terms of overall syntactic function, and neither morphology nor syntax makes sense without reference to meaning (semantics and pragmatics). Language, after all, is an integrated whole. Still, any linguist today who investigates a language he/she does not know must follow some kind of procedure for elicitation and analysis in fieldwork in order not to be overwhelmed by tons of linguistic machinery all at once, and the traditional discovery procedures are still useful.

2. LANGUAGE AND CULTURE: THE SAPIR-WHORF HYPOTHESIS

At the end of the nineteenth century, the American Indians (Amerindians) were broken and defeated. Their hunting grounds had been grabbed up, they were forcibly removed from their homelands to reservations, their population was decreasing, and their young had begun to assimilate to the surrounding society. Many of their unique languages, folklore, and customs seemed to be doomed to extinction. Concerned about this potential loss, linguists and anthropologists started an all-out interdisciplinary effort to study Indian cultures and languages and to record them before it was too late.

Initial Impressions

Linguists were originally trained for studying European languages. When they turned to Amerindian languages, they were struck by the differences in syntax, lexical setup, morphological categories, and phonology. At least as a first step, many linguists tried to impose the traditional system of grammatical analysis they had inherited from classical grammar, looking for the usual (European) phone types, tenses, cases, etc. -- but with more frustration than success. Some examples of the differences:

- Europeans took for granted a phonemic distinction between /l/, /r/, /n/, and /d/ (whatever their allophones may be), but in Pawnee [l r n d] are all allophones of one phoneme, /l/. On the other hand, Pawnee distinguishes this /l/ from two other lateral phonemes, /ɬ/ (voiceless lateral fricative) and /tɬ/ (corresponding affricate).
- Europeans were used to a [±voice] distinction, as in /p/ vs. /b/; numerous Amerindian languages instead distinguish plain /p/ from ejective /p'/ (made with a simultaneous glottal stop). Likewise, while European languages typically use stress to distinguish syllables in a word, many Amerindian languages are tonal.
- European languages largely distinguish two numbers, singular and plural. Some Amerindian languages have no number distinction, while others distinguish singular/dual/plural or even singular/dual/trial/plural. Likewise, the nouns of European languages are classified according to gender and count/mass; those of some Indian languages show *shape* gender.
- European pronouns distinguish 3 persons, 2 numbers, and 2 or 3 genders. Many Amerindian languages instead distinguish animate and nonanimate, or inclusive (= including addressee) and exclusive (=excluding) first person, or near vs. far third persons.
- European languages use distinct noun or pronoun words marked with case or prepositions for function: "He (subj.) cuts them (obj.) with a knife (instrument)". Many Amerindian languages incorporate such information into one complex verb form and then add the nouns (if necessary) as if "*Hethemwithitcut* man things knife."
- European languages inflect verbs for tense = time. In many Amerindian languages, the "tenses" instead show reliability of report, i.e. personal observation vs. hearsay vs. inference vs. speculation vs. hypothesis.
- European languages have a single general term for 'snow' (differentiating it from sleet, hail, and other kinds of precipitation); types of snow can be distinguished phrasally by adding modifiers (packed snow, wet snow, blowing snow), but they're still all 'snow'. Eskimo languages were believed to distinguish 4 to 7 kinds of snow as distinct simple words, with no general term (hypernym) for all of them: *aput* 'snow on the ground,' *qana* 'falling snow', *piqsirpoq* 'drifting snow', *qimsuqsuq* 'snow drift', etc. Similarly, Tolowa (a language in northwestern California) has a multitude of words for different kinds of fish, but no general word for 'fish'.
- The determiner systems of European languages allow the expression of a noun in general (generic reference): "The eye is an organ of sight". In Kwakiutl, nouns are possessed, bound to possessive prefixes, so that one must say "Hiseye is hisorgan of hissight" or "Myeye is myorgan of mysight". Bewildered by the unfamiliar, some scholars concluded that Amerindian languages were "primitive" or

even "uncivilized" because they failed to generalize beyond particulars, and vice-versa, failed to make certain "logical" or "natural" distinctions:



Boas

Franz Boas (1858-1942) was a linguist trained in Germany who developed a love of Amerindian languages and cultures and carried out extensive fieldwork for the Smithsonian. After examining them carefully, he rejected the above reasoning and argued that each language is different because it reflects the different cultural needs and outlooks of its speakers. No one language or group of languages can be regarded as superior or inferior; instead, each uses categories and principles that are sufficient for its speakers' particular cultural background and world-views. Thus, a speaker of English and a speaker of Arapaho may phrase the same thought in very different ways, or refer to different things prominent in their respective cultures, but neither language will be better or more logical than the other. What will be singled out for phonemic, lexico-semantic, or morphological distinctions will depend on, or be <u>relative to</u>, the language. Therefore, the linguist must approach each language on its own terms, relative to itself, and empirically discover its own structure instead of trying to impose the systems and categories of another language on it and then judging it "deficient" when this results in distortion. Boas's view, LINGUISTIC RELATIVITY, is still accepted today as basically valid, although linguists have also discovered valid universals.²

Some especially important quotes from Boas (<u>Handbook of American Indian Languages</u>, 1911): (1) "Grammarians who have studied the languages of Europe and western Asia have developed a system of categories which we are inclined to look for in every language. It seems desirable to show here in how far the system with which we are familiar is characteristic only of certain groups of languages, and in how far other systems may be substituted for it."

(2) "It seems very questionable in how far the restriction of the use of certain grammatical forms can really be conceived as a hindrance in the formulation of generalized ideas. It seems much more likely that the lack of these forms is due to the lack of their need... The fact that generalized forms of expression are not used does not prove inability to form them; that they would, however, develop just as soon as needed."

(3) "The selection of such simple terms must to a certain extent depend upon the chief interests of a people; and where it is necessary to distinguish a certain phenomenon in many aspects, which in the life of the people play each an independent role, many independent words may develop, while in other cases modifications of a single term may suffice. ... Thus it happens that each language, from the point of view of another language, may be arbitrary in its classifications; that what appears as a single simple idea in one language may be characterized by a series of distinct phonetic groups in another."

(4) "It does not seem likely, therefore, that there is any direct relation between the culture of a tribe and the language they speak, except insofar as the form of the language will be molded by the state of culture, but not insofar as a certain state of culture is conditioned by morphological traits of the language."

Sapir and Whorf

Edward Sapir (1884-1939) was one of the many American linguists influenced by Boas's pioneering work. Like Boas, he taught that differences do not mean inferiority, and that each language must be described in terms of its own unique setup; he in fact was said to dazzle his university students with his ability to elicit and analyze data. But sometimes he wondered whether these differences, however

²In the history of science, it is interesting that similar images, terms, models, and metaphors sweep across distinct disciplines as part of the "spirit of the time" (*Zeitgeist*). At the same time that Boas was arguing for linguistic relativity, anthropologists were developing "cultural relativity" -- which was no accident, given the collaboration between linguists and anthropologists, but also, in Switzerland, a certain young postal clerk named Einstein was beginning to reason out the consequences of a relativity in a theory physics.

arbitrarily they may have arisen, might not have an impact on how the learner thinks. If (he assumes) thought is amorphous, unstructured by anything innate, then it must be the language one learns that imposes structure and "logic" on it. Some quotes:

(1) "Not until we own the symbol do we feel that we hold a key to the immediate knowledge or understanding of the concept. Would we be so ready to die for 'liberty,' to struggle for 'ideals,' if the words themselves were not ringing within us? And the word, as we know, is not only a key; it may also be a fetter. ...Language, as a structure, is on its inner face the mold of thought." (Language: an Introduction to the Study of Speech, 1921)

(2) "The fact of the matter is that the 'real world' is to a large extent unconsciously built up on the linguistic habits of the group. No two languages are ever sufficiently similar to be considered as representing the same social reality. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached." ("The Status of Linguistics as a Science," Language 5, 1929).

Meanwhile, an insurance investigator named Benjamin Lee Whorf (1897-1941) developed an avocational interest in the effect of language on thought. He studied linguistics with Sapir, and spent his vacations doing fieldwork on Amerindian languages, particularly among the Hopi. He began to reason as follows: let's grant (with Boas) that differences in language "correspond" in some way to differences in culture; now, which comes first, the chicken or the egg? That is, do cultural differences cause linguistic ones, or (vice-versa) do linguistic differences cause cultural ones? If a Navaho and a Frenchman see the world differently as adults, is this purely because of their distinct cultural upbringing (in religion, socialization, education, traditions, customs...), or did their languages *point* them in different directions from infancy onward?

Whorf pushed this idea much further than Sapir, and marshaled more evidence for it. He decided that the relationship between language and culture is largely one-way: linguistic differences cause or "determine" cultural (and cognitive) differences. Whorf's hypothesis is therefore called LINGUISTIC DETERMINISM.³ For Whorf, it is language that, from the beginning in one's development, organizes, classifies, and shapes cognition, and one's behavior is constructed on that linguistic grid. What the lexicon cuts up into words will be the "things" the speaker will see in the world; what the grammar sets up as structures, sequences, groupings, and processes will be the "logic" the speaker applies in his/her thinking about those things. If two languages do not see "eye-to-eye" (i.e. have matching systems, categories, rules, units, classifications, lexical distinctions), then neither will the speakers. Therefore, LANGUAGE \rightarrow CULTURE⁴

Following are some intriguing quotes from Whorf (the collection of essays posthumously published as <u>Language</u>, <u>Thought</u>, and <u>Reality</u>, 1956). Note, in quote #8, that Whorf believes that we are not inevitably trapped within our own linguistic prison: there is a "corrective."

(1) "Users of markedly different grammars are pointed by their grammar toward different types of

⁴Careful with this formula. The arrow does *not* mean that in human evolution language came first and somehow created culture secondarily. Historically, the two developed together, a fact so obvious that Whorf never bothered to address it. Whorf is referring to the cognitive development of the individual, not the species or tribe: however the language may have evolved, a child who learns it will develop the "worldview" embedded in it.

³This has also been called the "Whorf Hypothesis" or the "Sapir-Whorf Hypothesis," but it was not the first time linguists had proposed a relation between language, culture, and thought. The German Wilhelm von Humboldt (1767-1835) had posed a similar question to nineteenth-century linguists, after investigating a number of non-European languages, in his *Über die Verschiedenheit des menschlichen Sprachbaues and ihrem Einfluß auf die geistige Entwicklung des Menschengeschlechts* ("On the Diversity of Human Language Construction and its Influence on the Intellectual Development of Mankind" -- titles were long back then). Von Humboldt's central idea was that each people has its own "Volksgeist" (national character) uniquely embodied in the "Sprachgeist" (linguistic spirit) of their language. That language -- as the "organ" of thought (organ and organism were the big images of the nineteenth century) -- shapes or "organizes" a group's thinking and perception. Von Humboldt worked tirelessly to promote the distinctive worth of each people, culture, and language, and was a passionate Romanticist who hailed the French Revolution --until Napoleon overran Germany.

observations and different evaluations of externally similar acts of observation, and hence are not equivalent as observers but must arrive at somewhat different views of the world."

(2) "We are thus introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated."

(3) "We cut up and organize the spread and flow of events as we do, largely because through our mother tongue, we are parties to an agreement to do so, not because nature itself is segmented in exactly that way for all to see. Languages differ not only in how they build their sentences, but also in how they break down nature to secure the elements to put in those sentences. This breakdown gives units of the lexicon. ... By these more or less distinct terms we ascribe a semifictitious isolation to parts of experience. English terms like 'sky, hill, swamp' persuade us to regard some elusive aspect of nature's endless variety as a distinct thing, almost like a table or chair. Thus English and similar tongues lead us to think of the universe as a collection of rather distinct objects and events corresponding to words."

(4) "English pattern treats 'I hold it' exactly like 'I strike it, I tear it' and myriads of other propositions that refer to actions effecting changes in matter. Yet 'hold' in plain fact is no action, but a state of relative positions. But we think of it, even see it, as an action because language sets up the proposition in the same way as it sets up a much more common class of propositions dealing with movements and changes. We <u>ascribe</u> action to what we call 'hold' because the formula *substantive* + *verb* = *actor* + *his action* is fundamental in our sentences... We have to say 'it flashed' or 'a light flashed', setting up an actor 'it' or 'light' to perform what we call an action. Yet the flashing and the light are one and the same! The Hopi language reports the flash with a simple verb, *rehpi* 'flash'."

(5) "In English we divide most of our words into two classes, which have different grammatical and logical properties. Class 1 we call nouns, e.g. 'house, man'; class 2, verbs, e.g. 'hit, run'...Our language thus gives us a bipolar division of nature. But nature herself is not thus polarized. If it be said that 'strike, turn, run' are verbs because they denote temporary or short-lasting events, i.e. actions, why then is 'fist' a noun? It also is a temporary event. Why are 'lightning, spark, wave, eddy, pulsation, flame, storm, phase, cycle, spasm, noise, emotion' nouns? They are temporary events. ... It will be found that an 'event' to *us* means 'what our language classes as a verb, or something analogized therefrom. In the Hopi language, 'lightning, wave, flame, meteor, puff of smoke, pulsation' are verbs -- events of necessarily brief duration cannot be anything but verbs. 'Cloud' and 'storm' are at about the lower limit of duration for nouns. Hopi, you see, has a classification of events by duration type, something strange to our modes of thought."

(6) "Newtonian space, time, and matter are not intuitions. They are recepts from culture and language. That is where Newton got them."

(7) "Just as we conceive our objectified time as extending in the future in the same way that it extends in the past, so we set down our estimates of the future in the same shape as our records of the past, producing programs, schedules, budgets."

(8) "Western culture has made, through language, a provisional analysis of reality and, without correctives, holds resolutely to that analysis as final. The only correctives lie in all those other tongues which, by eons of independent evolution, have arrived at different, but equally logical, provisional analyses."

Here are some of Whorf's other examples:

- The English lexicon distinguishes *airplane*, *aviator*, and *insect*, and the English speaker sees little in common for these concepts, except flying. Hopi uses *masa'ytaka* for all three (but this word does *not* include birds).
- English has a single word for *water*, used for its liquid state (as opposed to *steam* and *ice*); Hopi distinguishes *pāhe* (water in its natural state, as when in a stream or lake) from *kēyi* (trapped, as in a container).
- An English speaker says "He invites people to a feast"; when analyzed for its sentential meaning, this denotes the proposition "he issues an invitation, the invitation is received by people, who are to proceed towards the destination of a feast". A Nootka speaker says "tl?imš-ya ?is-ita ?itl-ma", literally 'boiling-result eater-ers go-for he-does', seemingly a wholly different conception of what is occurring.
- The English speaker would see little connection between "I pull the branch aside" and "I have an extra

toe on my foot"; they are not "logically" related. But according to Whorf, the Shawnee would perceive similar events, only the last morpheme differing: "ni-l $^{9}\theta$ awa- 9 ko-na" ('I forked-outline branch by-hand-movement') and "ni-l $^{9}\theta$ awa- 9 ko- θ ite" ('I forked-outline branch with-toes').

• English --like other languages that Whorf calls "Standard Average European" -- has an obligatory tense system (based on time) for the verb: to use a verb, one must choose a tense for it. This guarantees, for Whorf, a cultural world view based on a linear flow of past into present into future, and he notes that SAE culture places great emphasis on looking back into the past and looking forward into the future: timekeeping, records, budgets, diaries, schedules, planning, weather forecasts, etc. There are even recognized disciplines for studying past and future time: history and futurology. The Hopi language, according to Whorf, has no time-based tenses; its tenses focus on "reportive" vs. "expective", and these are *not* equivalent to past and future (since the English present could be either a report or an expectation):



He correlates the Hopi "tenses" to the Hopi world view: the realm of "manifested" (already given, revealed, and objective truth) vs. "manifesting" (active, dynamic, emerging, things with "heart"). As he describes the culture, the Hopi does not record each event of the past as something distinct, because what *is* at present is simply what's already manifested, immutable; nor does one plan for the future, but instead participates in tribal rites with events currently manifesting themselves to ensure their continuation, their return.

A discussion of Whorf's Hypothesis

some of whorf's examples	
A. Lexicon	
1. Eng. snow	Eskimo ⁵ aput 'snow on the ground' <i>qana</i> 'falling snow' <i>piqsirpoq</i> 'drifting snow' <i>qimsuqsuq</i> 'drift/mound of snow'
2. Eng. airplane vs. aviator vs. insect	Hopi masa [?] ytaka (does not include 'bird')
3. Eng. <i>water</i>	Hopi <i>pāhe</i> (in its natural state)
	$k\bar{e}yi$ (trapped/confined in a container)
B. Grammar	
1. Eng. He invites people to a feast.	Nootka tl ⁹ imš - ya - ⁹ is- ita - ⁹ itl - ma
	(boiling-result -eat-ers- go for- he does)
2. Eng. I pull the branch aside.	Shawnee ni-l?@awa-?ko-na
I have an extra toe on my foot.	ni-l ?
	(<u>ni</u> = 'I'; $l^2\theta awa$ = 'forked outline'; $?ko$ = branching
	off'; $na =$ 'hand movement', $\theta ite =$ 'toes')

⁵ Whorf cited this example from Boas, who (contrarily) used it to show how environment affects lexical differentiation rather than how the latter affects perception. See Laura Martin ("Eskimo Words for Snow," *American Anthropologist* 88:2, 1986) for a critique of the example, its "Eskimo" citation, and its spread into popular folklore.

 3. Eng. I stayed five days. 4. Eng. John is dying. 5. Eng. lightning, wave, flame = nouns 			Hopi <i>I left fifth day.</i> Hopi: 'Death occurs to John' Hopi: =verbs									
							6. Eng. verb shows $tense = time$			Hopi: verb shows <i>aspect</i> = reliability of report		
							7. <u>En</u> pas	<u>g. lang.</u> it (occurred)	Eng. culture record-keeping	<u>Hopi lang.</u> reportive	<u>Hopi cultur</u> <i>e</i> the manifested: already given, manifested, revealed, part of objective reality	
pre fut	sent (occurring) ure (will occur)	schedules planning	expective	the manifesting: potent, active, emerging, dynamic, with 'heart'								
thus: <i>he ran</i> <i>he's running</i> <i>he'll run</i>		reportive, <i>wari</i> reportive <i>wari</i> vs. expective <i>warikni</i> expective <i>warikni</i>										

Some other examples to ponder (not mentioned by Whorf)

1. Eng. I forgot the key	Span. Se me olvidó la llave (lit., 'forgot itself to me the key')
2. Eng. spend money/time	Span. gastar dinero, pasar tiempo
3. Eng. green vs. blue	Russ. zelyony 'green' vs. goluboy 'light blue' vs. siniy 'navy'
4. Eng.: X	Ger. gemütlich (adj.), Gemütlichkeit (noun) 'warm, easy ambiance for
interaction'	
5. Eng.: X	Jap. shibui (adj.), shibuka (noun), applied to (1) taste of an unripe
persimmon, (2)	
	Jap. gardens (as opposed to Western ones), (3) certain kinds of actors
1 .	

and acting.

A TENTATIVE REPORT ON AN ANGLO TRIBE by Dr. Waiting-Star, Hopi University

data

- 1. a. She grasped (seized, stole, digested, stole) the idea.
 - b. She considered his actions (paintings, drawings, thinking)
- 2. He gave the philodendron some plant-food.
- 3. a. pig, sheep, cow, deer
 - b. pork, mutton, beef, venison
 - c. fish, chicken, turkey, duck
- 4. a. Mother Earth, Father Time
 - b. The sun came up (rose) at 7am and went down (set) at 6pm.
- 5. a. The doctor said her menstrual cycle was normal. (<'moon')
 - b. That driver's a lunatic (<'moon')
 - c. His life was a disaster (<'bad star')
 - d. She's an <u>epileptic</u> (<'seized'), and she had a bad <u>attack</u> (seizure) today.
- 6. <u>It</u> didn't <u>rain</u> today; <u>it</u> <u>snowed</u>, and then <u>it</u> started to <u>sleet</u>. (Interviewer: "Why don't you just say 'Watered today'?) No, THIS (pointing) is water. When it gets cold outside, the water turns into ice; if you boil it, it changes into steam.
- 7. a. They go to sleep at midnight.
 - b. Do you have to go to the bathroom?
- 8. So yesterday he <u>comes up</u> and <u>says</u>, "Enough's enough. <u>I'm leaving</u> tomorrow!"
- 9. a. John wrote a letter.
 - b. John received a letter.
 - c. John saw a letter.
 - d. John held a letter.
 - e. John missed a letter.
- 9. The bus/the road:...goes west, passes under a bridge, descends into a valley, and turns abruptly to enter the village.
- 10. My boat's kind of old, but she'll get us there.
- 11. a. I was just pulling your leg. (=teasing)
 - b. I was just pulling your wagon.