

Notes for Linguistics 181

Introductory Linguistics for Language Revitalization

with a focus on Nuuchahnulth

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2010–2018

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Notes for Linguistics 181: Introductory Linguistics for Language Revitalization, with a focus on Nuuchahnulth

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These notes were written by Janet Leonard and Adam Werle in 2010 for University of Victoria Linguistics 181, focusing on SENĆOTEN (Saanich), and were later adapted by Adam for Kwakwaka'wakw in 2010, and for Nuuchahnulth during 2013–2018.

We thank our colleagues and fellow learners for their encouragement and feedback, which have helped to improve these notes.

Gilakas'la. • HÍSWKE. • ʔuuš'akšičeʔicuu. • ʔuuš'akšič'asuw.

Handout 1. What is linguistics?

Terms

- ▶ *anthropology*: the study of human beings, including human culture, languages, physiology, and the origin of our species.
- ▶ *linguistics*: the study of natural human language, and all aspects of human behavior, physiology, and culture that interact with language.

Notes

Linguistics is concerned with the patterns that are found in human language, and with all aspects of human behavior that interact with human beings' ability to use language.

The modern science of linguistics has its origins in the philology and anthropology of the 1800s, but is now distinct from these related fields (see handout 2).

Linguistics includes many subfields. These core fields are collectively called *grammar*:

(1) Grammar

- ▶ *phonology*: the study of the organization of speech sounds.
- ▶ *morphology*: the study of the structure of words.
- ▶ *syntax*: the study of the structure of sentences.
- ▶ *semantics*: the study of language meaning.

These subfields fall outside grammar, and have to do with physiology and behaviour:

- ▶ *phonetics*: the study of the physics of sounds, and the organs of speech and hearing.
- ▶ *pragmatics*: the study of how abstract meaning relates to real language use.
- ▶ *sociolinguistics*: the study of the role and uses of language in human society.
- ▶ *anthropological linguistics*: the study of language as human behavior, especially its relation to culture, and how language and culture influence each other.
- ▶ *historical linguistics*: the study of how languages change through time.
- ▶ *language acquisition*: the study of language learning by children and adults.
- ▶ *psycholinguistics* (or *neurolinguistics*): the study of how the brain processes language.
- ▶ *computational linguistics*: the study of how computers can process natural language.
- ▶ *applied linguistics*: applications of linguistics to education, law, and other fields.

∞ **Exercise 1.** What do you find interesting about language? Are you interested in any particular subfield of linguistics?

A common misconception about linguists is that they speak more than one language. In fact, while some linguists are *polyglots*, we often study languages that we cannot speak.

- *linguist*: studies the structure of human languages.
- *polyglot*: speaks many languages.
- *translator*: translates one language into another, carefully and usually in writing.
- *interpreter*: translates one language into another, immediately and without writing.

In this course, we will be interested mainly in the subfields of language acquisition, phonetics, phonology, morphology, syntax, and historical linguistics.

∞ **Exercise 2.** Why are these six subfields important for language revitalization?¹

Research on Nuuchahnulth has focused mainly on its grammar, and on its historical relationship to other Wakashan languages. There is so far little research on other aspects of Nuuchahnulth, such as its acquisition, semantics, or processing.

∞ **Exercise 3.** Different languages do not use all the same sounds. What sounds do Nuuchahnulth and English share? What sounds are found only in one or the other?

∞ **Exercise 4.** How are the following words related? Can you identify any parts that are smaller than a word, but meaningful? What do these parts mean?

(2)	čiyaa	cutting (fish)	maḥtii	house
	čiiṇuḷ, čiiṇiḷ	totem pole	maʔas	home, village, tribe
	nučii	mountain	maatmaas	families, tribes
	nuučaaṇuḷ, nuučaanḷ	mountain range	maaṇuḷ	Maa-nulth Nations

∞ **Exercise 5.** Consider the following sentences in Nuuchahnulth and English. Where in the sentence is the verb (*hear, miss, push, marry*)? Is it ever elsewhere? (The abbreviations *B, C, T, Q* refer to Nuuchahnulth dialects.)

(3)	Q	naʔaaš maʔiḷqci nani. naʔaa-š maʔiḷqc-i nani hear -he boy -the Grandma The boy hears Grandma.	(5)	C	čatšiʔatʔick ṇaas. čatšiʔat-ʔick ṇaas pushed -you Creator The Creator has nudged you.
(4)	T	wiiʔiiciḷs suutiḷ. wiiʔiiciḷ-s suutiḷ miss -I you I miss you.	(6)	B	ʔuchinḷaḷ huufiiʔaḥ. ʔuchinḷ-aḷ huufiiʔaḥ marry -I Huu-ay-aht I married a Huuayaht man.

Handout 2. A history of linguistics

Terms

- ▶ *philology*: the study of classical (old) languages and literatures.
- ▶ *grammar*: the patterns that one must know in order to use a language. In a narrow sense, grammar is about how words and sentences are built from smaller parts (morphology and syntax). In a broader sense, it includes phonology and semantics.
- ▶ *prescriptive grammar*: says (prescribes) how to speak or write correctly.
- ▶ *descriptive grammar*: says how a language is used, without reference to correctness.

Notes

Grammar has been studied for at least 2,500 years, for several purposes.

- To prescribe so-called correct ways of speaking and writing.
- To make laws, culture, and holy books available in other languages.
- To promote the use of one language over another.
- To help scholars, officials, missionaries, and travellers learn new languages.

Some of the earliest studies of grammar described Sanskrit, Tamil, Greek, and Latin. The study of grammar seems to have been encouraged where a language was an important tool for sharing literature or religion. It was also helped by the availability of writing, though some early grammars may have been composed orally.

- Around 400 BCE, the East Indian scholar Pāṇini composed the *Aṣṭādhyāyī* ('eight chapters'), a detailed and systematic grammar of Classical Sanskrit.
- Possibly around the 200s BCE, unknown authors began composing the *Tolkāppiyam*, a grammar of Tamil, which is a language of southern India and Sri Lanka.
- Around the 200s BCE, Greek scholars began to describe grammar in order to help common Greek speakers understand older Greek writers. The oldest surviving example is the *Art of Grammar* (*tekhnē grammatikē*) by Dionysius Thrax.
- Beginning in the first century BCE, Romans wrote about Latin grammar, following the Greek tradition. They prescribed correct speech and writing, studied older writers, and taught Greek to Latin speakers. Greek and Latin continued to be the main languages of formal study in Europe until around 1200 to 1600.
- Possibly beginning in the 600s, unknown authors wrote *Auraicept n-Éces* ('the scholars' primer'), describing the Irish language, and promoting its use over Latin.
- In the 1100s, an unknown Icelander wrote the *First Grammatical Treatise* (*Fyrsta Málfræðiritgerðin*), describing Icelandic vowels and consonants.
- In 1586, William Bullokar wrote *Pamphlet for Grammar*, and *A Bref Grammar for English*, which are the oldest English grammars that still survive today.

William Jones (1746–1794) was an English polyglot and philologist who lived in India. In 1786, he observed that Sanskrit, Greek, Latin, Gothic, Celtic, and Persian are so similar that they might come from a common source. From this idea grew the study of the Indo-European language family, and the field of *comparative linguistics*.

- *comparative linguistics*: the comparison of related languages, and the reconstruction of the older, parent languages from which they are thought to have developed.

The first known use of the English word *linguistics* was in 1847.²

From about 1900 to 1950, thinking in linguistics was dominated by *structuralism*. A leading figure in way of thinking was Ferdinand de Saussure (1857–1913).

- *structural linguistics*: understands sounds, words, and other parts of language by how they correspond to and oppose each other within the system of a language.
- ∞ **Exercise 5.** Saussure observed that the association of words to meanings is arbitrary. Think of two words from English and in Nuuchahnulth that mean the same thing. Do the words sound similar? How do speakers know what they mean?

The formal study of North American languages began around 1900. The diversity of aboriginal American languages, and their differences from European, Asian, and Middle Eastern languages, motivated new grammatical models and theories. Some leading figures in early North American linguistics were Franz Boas (1858–1942), Edward Sapir (1884–1939), and Leonard Bloomfield (1887–1949).

Noam Chomsky (born 1928) published *Syntactic Structures* in 1957. This introduced the *generative* approach, which is still the main way of thinking about grammar today.

- *generative linguistics*: an approach that tries to identify a few simple rules of grammar that generate all the complex patterns in sounds, words, and sentences.
- ∞ **Exercise 6.** Consider these words from Nuuchahnulth and English. Which words are opposed to each other in each language? How are these two systems different?

(1)	čakup	man, husband	quuʔas	person, man, Indian
	huucsma*	woman, wife	čims*, naani	bear
	haak ^w aaʔ	young woman, daughter	tiq ^w iʔ, tiq ^w aas	sit
	haawilaʔ*	young man, son	naas	day, Creator

- ∞ **Exercise 7.** What systems of opposing sounds do these words reveal?³

(2)	wik	not, no	caqiic	twenty	kaniʔ	kneel indoors
	wikaʔs	empty vessel	caqiicʔs	twenty in vessel	kaʔaʔs	kneel in vessel

Handout 3. Language families of British Columbia

Terms

- ▶ *language*: a natural, human system of communication that includes sounds, words, and rules for combining these to express a variety of meanings.
- ▶ *native language, first language*: a language that one speaks from a very young age.
- ▶ *indigenous, aboriginal*: these terms refer to people or languages that live in or are associated with a particular place, are the first or among the first to be associated with that place, and have historical and cultural roots from that place.
- ▶ *dialect*: a regional or social variety of a language. Every language is a dialect.
- ▶ *idiolect*: the dialect of a single person. A person's individual dialect.
- ▶ *jargon*: vocabulary associated with a particular job, activity, or way of life.
- ▶ *pidgin*: a simple language used by speakers of different languages to communicate. For example, Chinuk Wawa. No one's native language.
- ▶ *creole*: a pidgin that has developed into a language. For example, Hawaiian Creole.
- ▶ *language family*: a group of languages whose similarities indicate that they come from a common parent language. Such languages are said to be *genetically related* (whether or not the speakers of these languages are related by blood).
- ▶ *language area*: a group of languages whose similarities result from geographical contact (whether or not the languages are genetically related).

Notes

The aboriginal languages of British Columbia belong to seven different language families. Nuuchahnulth is a member of the Wakashan family.

(1)	Language family	Some languages belonging to this family
▶	Algonquian	Blackfoot, Cree, Ojibwe, Arapaho, Mi'kmaq
▶	Haida	Haida
▶	Kutenai	Ktunaxa
▶	Na-Dene	Tlingit, Dogrib, Carrier, Chilcotin, Hupa, Navajo
▶	Salishan	Nuxalk, Halkomelem, SENĆOŦEN, Squamish, Lillooet
▶	Tsimshianic	S'malgyax, Gitksan, Nisga'a, Sgüüxs
▶	Wakashan	Haisla, Kwakwaka, Nuuchahnulth, Ditidaht, Makah

The Wakashan family is small, containing only seven languages. By contrast, the neighbouring Salish family is large and diverse, containing about 23 languages. Haida and Ktunaxa are *isolates*. They are not known to be related to any other language.

Wakashan, Salish, and other language families of the Northwest Coast of North America form a *language area*. They share many characteristics through contact with each other, independently of any similarities that may result from genetic relatedness.

- ∞ **Exercise 8.** Compare these data from Ditidaht (D), Kwakwala (K), and SENĆOTEN (S). What similarities and differences do you see? Which similarities are due to genetic relatedness, which to language contact, and which to coincidence?

- | | |
|--|---|
| <p>(2) K $\acute{K}widz\acute{a}kwida$ na'ange.
 $\acute{k}^{w}idz-\acute{a}k^{w}$ -ida naʔənge
 snow-topped-the mountains
 The mountains are snow-topped.</p> | <p>(4) D $\acute{k}^{w}isqeeʔsa$ dučʔibadxaq.
 $\acute{k}^{w}is$ -qeeʔs -!a dučʔibadx -!aq
 snow-topped-is mountains-the
 The mountains are snow-topped.</p> |
| <p>(3) S NEĆIM TFE XIWE.
 nək^wim tθə xix^wə
 red the sea urchin
 The sea urchin is red.⁴</p> | <p>(5) D $\acute{\lambda}ix\acute{k}^{w}a$ šačkaapxaq.
 $\acute{\lambda}ixuk$-!a šačkaapx -!aq
 red -is sea urchin-the
 The sea urchin is red.</p> |

Because it has been spoken for a long time, and over a broad area, Nuuchahnulth includes several dialects. Yet these are similar enough to be considered one language.

- ∞ **Exercise 9.** Compare the following sentences from different Nuuchahnulth dialects. How are they different? Imagine that all these dialects were once identical. If that is so, then which forms are *conservative* (old), and which are *innovative* (new)?

- | | | |
|---|--|--|
| <p>(6) Q $\acute{h}aaʔa\acute{h}k^{w}ic$ nuwiiqs.
 N $\acute{h}aaʔa\acute{h}akʔic$ nuwiiqsu.
 C $\acute{h}aaʔa\acute{h}akʔick$ nuwiiqsu.
 B $yaa\acute{h}uk^{w}eʔic$ nuwiiqsu.

 There is your father.</p> | <p>$\acute{\lambda}ulʔim$ waʔič.
 $\acute{\lambda}ulʔum$ waʔič.
 $\acute{\lambda}ulʔim$ waʔič.
 $\acute{\lambda}ulʔim$ weʔič.

 Sleep well.</p> | <p>kukumss suutił.
 wiwikaps suutił.
 wiwikaps suutił.
 wiwikapamaḥ suwa.

 I don't understand you.</p> |
|---|--|--|

Compare these data from several Wakashan languages:

- | (7) | 'red' | 'weep' | 'mountain' | | 'path, door' | |
|--------------|---------------------------------|--------------------------------|--------------------------|---|----------------------------------|----------------------------------|
| Haisla | $\acute{t}h\acute{a}q^{\circ}a$ | $\acute{q}^{\circ}\acute{a}sa$ | $waw\grave{e}s$ | $waw\grave{e}s$ | $\acute{t}xls$ | $\acute{t}ax\grave{x}ls$ |
| Heiltsuk | $\acute{\lambda}\acute{a}qva$ | $\acute{q}v\acute{a}sa$ | $\acute{q}v\acute{u}qvs$ | $\acute{q}^{w}\acute{u}q^{w}\acute{a}s$ | $\acute{t}x$ | $\acute{t}\acute{x}$ |
| Wuikala | $\acute{\lambda}aqva$ | $\acute{q}vasa$ | $\acute{q}vuqvs$ | $\acute{q}^{w}uq^{w}s$ | $\acute{t}x$ | $\acute{t}\acute{x}$ |
| Kwakwala | $\acute{t}\acute{a}kwa$ | $\acute{k}wasa$ | $n\acute{a}ge$ | $n\acute{a}ge$ | $\acute{t}\acute{a}x\acute{a}la$ | $\acute{t}\acute{a}x\acute{a}la$ |
| Nuuchahnulth | $\acute{\lambda}i\acute{h}uk$ | $\acute{\lambda}i\acute{h}ak$ | $nu\acute{c}ii$ | $nu\acute{c}i:$ | $\acute{t}\acute{a}šii$ | $\acute{t}\acute{a}šii$ |
| Ditidaht | $\acute{\lambda}ixuk$ | $\acute{\lambda}axak$ | $du\acute{c}iʔ$ | $du\acute{c}iʔ$ | $\acute{t}\acute{a}šii$ | $\acute{t}\acute{a}šii$ |
| Makah | $\acute{\lambda}i\acute{x}uk$ | $\acute{q}i\acute{x}ak$ | $du\acute{c}iʔi$ | $du\acute{c}iʔi:$ | $\acute{t}\acute{a}ši$ | $\acute{t}\acute{a}ši$ |

- ∞ **Exercise 10.** Guess how the above words were pronounced in Proto-Wakashan, the hypothetical parent language of the modern Wakashan languages.

Handout 4. Language learning

Terms

- ▶ *language acquisition*: the process of learning a language. Some theories use the terms *acquire* and *learn* interchangeably, while others consider them to be different.
- ▶ *target language*: a language that one is learning, or trying to learn.
- ▶ *first language* (L1): one's native language, learned from a very young age. Some people have more than one first language.
- ▶ *second language* (L2): a language learned later in life than one's first language.
- ▶ *language immersion*: to hear and experience only one language.

Notes

Children and adults learn languages differently. In other words, we all *acquired* our first language in the same way, but we *learn* second languages in a variety of ways.

- Everyone acquires a first language.
- L1 acquisition is almost completely *subconscious*.
- L1 acquisition happens during a *critical period*, when we are very young. We learn L1 sounds, for example, in our first six months of life (Kuhl and others 1992).
- L1 acquisition involves several regular *stages*, such as babbling, one-word utterances, two-word utterances, and so on.
- At the end of L1 acquisition, we speak *fluently*, with perfect pronunciation.

Compare L2 learning.

- Not everyone learns a second language.
- L2 learning is usually *conscious*.
- L2 learning does not happen during a critical period, nor in regular stages. It can happen at any time in one's life, and in many different ways.
- Adults who learn a second language rarely speak it perfectly fluently. Rather, they show various effects of their first language, such as speaking with an accent.

There are many approaches to the teaching of second languages, and to overcoming the difficulties faced by L2 learners.

The *Natural Approach* (Krashen and Terrell 1983):

- L2 learners must be *comfortable*.
- L2 acquisition happens in *stages* similar to L1 acquisition.
- L2 learners must be presented with L2 input that they can *understand*.
- L2 learners should be challenged with structures *one stage beyond* their current level.

Total Physical Response (TPR) (Asher 2000):⁵

- L2 acquisition is made automatic and subconscious by being combined with *actions*.
- L2 learners perform actions, following commands given in the target language.
- The combination of L2 input and movement aids memory and acquisition.

The *Language Nest* approach (King 2001):

- This approach reintroduces an endangered language as a first language.
- Very young children are exposed to fluent speech in a daycare-like environment.
- It originated in New Zealand in the 1980s, for teaching the Māori language.

The *Mentor-Apprentice* approach (Hinton 2001, Hinton and others 2002):

- A fluent speaker (*master* or *mentor*) teaches an L2 learner (*apprentice*).
- The mentor and apprentice spend many hours together, engaging in everyday activities, and speaking only the target language.
- It was developed in the 1990s for teaching indigenous Californian languages.

Accelerated Second-Language Acquisition (ASLA) (Stephen Neyooxet Greymorning):⁶

- It was developed for teaching Arapaho.
- The method puts more focus on quickly developing learners' ability to understand and produce simple sentences of two or three words.
- It puts less focus on vocabulary and action-related learning activities.
- When instructors see that learners are on the verge of acquiring particular vocabulary and grammar points, they prompt them to grasp them on their own.

The *Shared Stories* method (this is Adam's name for it):

- Learners share personal stories, then record native speakers retelling these stories.
- Learners practise using *active listening* (speaking along) and *passive listening*.
- They use pictures or comics as visual aids, but no writing.
- This is based on methods and input from Greg Thomson and Stan Anonby (SIL).⁷

∞ **Exercise 11.** Which of these language-learning strategies are immersion strategies? Which ones imitate the pattern of natural L1 acquisition?

∞ **Exercise 12.** When learning a language, is it helpful to read and write? Why?

∞ **Exercise 13.** When learning a language, is it helpful to have a conscious understanding of the grammar? How about when teaching a language? Why?

Handout 5. Vowels

Terms

- ▶ *phonetics*: the study of language sounds as a physical, measurable phenomenon.
- ▶ *articulatory phonetics*: the study of how people produce language sounds.
- ▶ *acoustic phonetics*: the study of language sounds as pure sound waves.
- ▶ *auditory phonetics*: the study of how people perceive language sounds.
- ▶ *International Phonetic Alphabet (IPA)*: a system of phonetic writing, established in 1888, designed to be adequate to represent the sounds of all human languages.

Notes

- ▶ *vocal tract*: the organs through which language sounds pass, including the *larynx* (voicebox), *pharynx* (throat), *oral cavity* (mouth), and *nasal cavity* (sinuses).
- ▶ *articulators*: the movable parts of the vocal tract (the lips, tongue, jaw, and velum).

Two important classes of sounds are vowels and consonants.

- | (1) Vowels | Consonants |
|--|--|
| • more singable | • less singable |
| • involve very little obstruction of the vocal tract | • involve partial or complete obstruction of the vocal tract |
| • distinguished mainly by tongue and jaw position | • distinguished by gestures made all along the vocal tract |
| • found at the centres of syllables | • found at the edges of syllables |
- ▶ *monophthong*: a single vowel sound. The centre of a syllable.
 - ▶ *diphthong*: two vowel sounds that are pronounced as the centre of one syllable.

The following words illustrate English vowels as they are pronounced on the west coast of North America. It is customary to put phonetic transcriptions in square brackets.

- | | | |
|-------------------------|---------------------|-----------------------|
| (2) i <i>beet</i> [bit] | u <i>boot</i> [but] | oi <i>boy</i> [boi] |
| ɪ <i>bit</i> [bɪt] | ʊ <i>book</i> [bʊk] | ou <i>boat</i> [bout] |
| eɪ <i>bait</i> [beɪt] | ʌ <i>but</i> [bʌt] | aɪ <i>bite</i> [baɪt] |
| ɛ <i>bet</i> [bet] | æ <i>bat</i> [bæt] | aʊ <i>bout</i> [baʊt] |

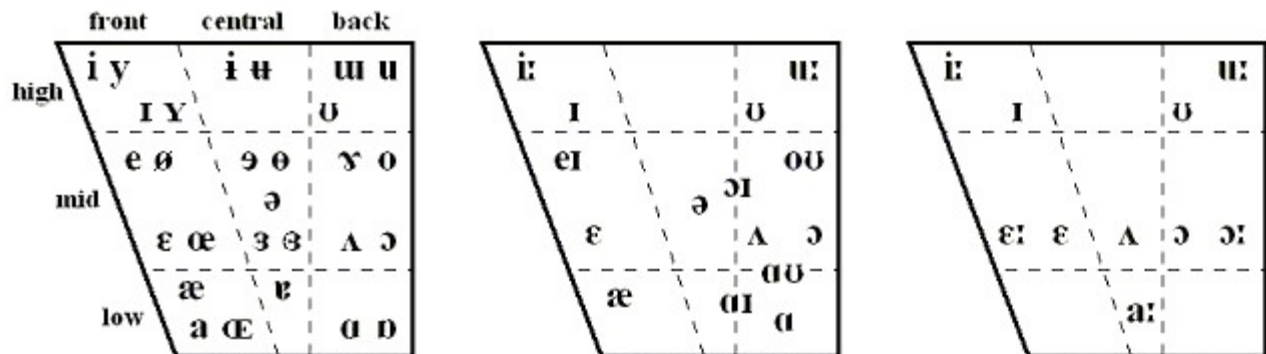
∞ **Exercise 14.** Which English vowels are diphthongs? Which are monophthongs?

∞ **Exercise 15.** Transcribe the vowels in these English words, using IPA symbols.

- | | | | | | | | |
|----------|------|------|--------|-------|--------|-------|--------|
| (3) buzz | dune | slow | raft | shrub | great | voice | bought |
| gift | send | far | shop | put | shears | how | rough |
| mind | grey | war | snooze | dunk | death | sigh | laugh |

This is one way to write the vowels of English and Nuuchahnulth, using IPA symbols:

(4) IPA vowel symbols (5) English vowels (6) Nuuchahnulth vowels



Differences among vowels are described in terms of *quality*, *quantity*, and *rounding*.

- ▶ *vowel quality* (or *place*): the position of the tongue and jaw during a vowel.
 - ▶ *vowel height*: the height of the tongue relative to the roof of the mouth.
 - ▶ *high*: made with jaw high, and tongue close to the roof of the mouth.
 - ▶ *mid*: made with jaw and tongue between high and low positions.
 - ▶ *low*: made with jaw low, and tongue far from the roof of the mouth.
 - ▶ *vowel backness*: the position of the tongue relative to the hard and soft palates.
 - ▶ *front*: made with the tongue closer to the hard palate.
 - ▶ *central*: made with the tongue between the hard and soft palates.
 - ▶ *back*: made with the tongue closer to the soft palate.
- ▶ *vowel quantity*: the duration (length) of a vowel.
- ▶ *rounded*: made with rounded lips—that is, with the lips in an O shape.
- ▶ *unrounded*: made with open, unrounded lips.

∞ **Exercise 16.** Transcribe the vowels in these Nuuchahnulth words, using IPA symbols. Which vowels are monophthongs, and which are diphthongs?

(7)	patpat	inboard motorboat	Q	ʔaakoo	thank you
	naani	grizzly bear		ʔeekoo	thank you
B	naana	grizzly bear	Q	hišk ^w eeth	Hesquiaht
	tupkak	black		hišk ^{wii} ?ath	Hesquiaht
Q	čuuʔčuu	washing		?aya	many
	čuuʔčuu	washing		waykaaš	Praise!
B	te?ił	sick	Q	maakuukhaaws	store
	ta?ił	sick	Q	?um?iiqs	mother
Q	hinkoos	dog salmon		?um?iiqsu	mother
	hinkuu?as	dog salmon		?iihtuup	whale

Handout 6. Consonants

Terms

- ▶ *consonant place*: where in the vocal tract a consonant is made.
- ▶ *consonant manner*: how airflow is used during a consonant.
- ▶ *consonant phonation*: what the vocal folds are doing during a consonant.

Notes

Consonant *manner* refers to what sort of obstruction a consonant sound involves.

- ▶ *obstruents*: consonants made with a lot of vocal tract obstruction.
 - ▶ *spirant (fricative)*: involves continuous, noisy airflow through an obstruction.
 - ▶ *stop (plosive)*: involves total obstruction, followed by a noisy release.
 - ▶ *affricate (plosive)*: begins as a plosive, then is released into a spirant.
- ▶ *resonants (sonorants)*: consonants made with little vocal tract obstruction.
 - ▶ *nasal*: involves full obstruction in the mouth, but free airflow through the nose.
 - ▶ *approximant*: a consonant made with very little obstruction.
 - ▶ *liquid*: an *r*-like or *l*-like sound.
 - ▶ *glide*: a vowel-like consonant (usually, a *w* or *y* sound).

These English and Nuuchahnulth words begin with consonants of various manners:

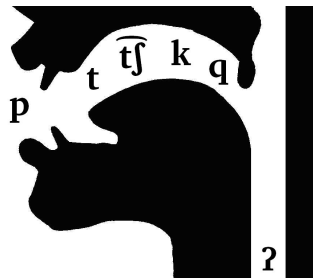
(1)	Manner	English examples	Nuuchahnulth examples
	stops	<i>tubby, purity, collect</i>	<i>puu</i> ‘gun’, <i>ṭatuuṣ</i> ‘star’, <i>ʔiiḥ</i> ‘big’
	fricatives	<i>shine, feel, honey, so</i>	<i>sačk</i> ‘sharp’, <i>ṭačĩḷ</i> ‘let go’, <i>ḥawil</i> ‘chief’
	affricates	<i>challenge, justice</i>	<i>čup</i> ‘tongue’, <i>čaʔak</i> ‘river’, <i>ḷanat</i> ‘wedge’
	nasals	<i>needy, mermaid</i>	<i>maamaati</i> ‘bird’, <i>nunuuk</i> ‘sing’
	liquids	<i>lucky, rubber</i>	<i>luu luu</i> (interjection)
	glides	<i>yummy, Wilbur</i>	<i>wawaa</i> ‘saying’, <i>yačaa</i> ‘dogfish’

Consonant *place* refers to where in the vocal tract a consonant is made.

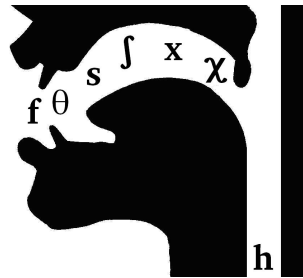
- ▶ *bilabial*: made by bringing the lips together.
- ▶ *labiodental*: made by bringing the lower lip against the upper teeth.
- ▶ *interdental*: made with the tongue tip between the teeth.
- ▶ *alveolar*: made with the tongue tip against the *alveolar ridge*, behind the upper teeth.
- ▶ *postalveolar*: made by pressing the tongue just behind the alveolar ridge.
- ▶ *palatal*: made by pressing the tongue against the *hard palate*.
- ▶ *velar*: made by pressing the tongue against the *velum*, or *soft palate*.
- ▶ *uvular*: made by pressing the tongue against the *uvula*, a dangling flap of skin.
- ▶ *glottal*: made by closing the *glottis*—that is, the opening between the vocal folds.

These *mid-sagittal diagrams* illustrate various consonant places, using IPA symbols:

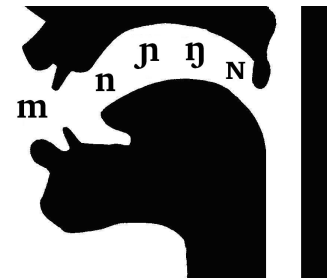
(2) Plosives



(3) Spirants



(4) Nasals



Consonants are also distinguished by *phonation*—that is, what the *larynx* is doing.

- ▶ *larynx*: the organ that protects the windpipe, and contains the vocal folds.
- ▶ *vocal folds* (or *vocal cords*): flaps of skin at the larynx that produce *phonation*.
- ▶ *glottis*: the space between the vocal folds.
- ▶ *phonation* (or *state of the glottis*): how the vocal folds affect a sound.
 - ▶ *voiceless*: made with the vocal folds at rest.
 - ▶ *voiced*: made with the vocal folds vibrating, as in singing.
 - ▶ *aspirated*: made with the vocal folds stiff and apart, as in [h].
 - ▶ *glottalized*: made by bringing the vocal folds together, as in [ʔ].
 - ▶ *ejective*: a stop consonant whose glottalization causes a stronger release.
 - ▶ *creaky voice*: a type of phonation in which the vocal folds are brought together, but not fully closed, resulting in a creaky sound.

In English, plosives and fricatives can be voiceless or voiced.

(5) Phonation	Plosives	Spirants
voiceless	p t tʃ k	f θ s ʃ
voiced	b d dʒ g	v ð z ʒ

In Nuuchahnulth, plosives and resonants can be plain or glottalized. Glottalized plosives are ejective. Glottalized resonants have a glottal stop [ʔ], or creaky voice.

(6) Phonation	Plosives	Resonants
plain	p t ʔ c č k	m n y w
glottalized	p̰ t̰ ʔ̰ c̰ č̰ k̰	m̰ n̰ y̰ w̰
glottalized (IPA)	p' t' t̰ʔ t̰s̰ t̰ʃ̰ k'	ʔm ʔn ʔj ʔw

- ∞ **Exercise 17.** For each consonant at the beginning of a Nuuchahnulth word in example (1), identify the consonant's place, manner, and phonation.

Handout 7. Alphabets

Terms

- ▶ *segment*: a single unit of sound in a language. A consonant or vowel.
- ▶ *alphabet*: a set of symbols for representing language sounds.
- ▶ *orthography*: a standardized, approved, or official way of writing a language.
- ▶ *transcribe*: to convert speech or writing into a particular writing system.
- ▶ *transliterate*: to convert symbols of one alphabet into symbols of another alphabet.

Notes

English *orthography* (or *spelling*) consists of an alphabet of twenty-six letters, plus rules for using them to spell English words. These are the letters in alphabetical order.

- (1) A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z

The English alphabet is almost identical to the classical Latin alphabet of the first century BCE. The letters *W*, *J*, and *U* were added in the Middle Ages.

English orthography does not accurately represent English pronunciation. In order to write accurately and phonetically, we require another writing system. These are the *segments* of English in the IPA, arranged according to their *place* and *manner*.

- (2) English consonants
- | | | | | |
|------------|---|---|----|---|
| plosives | p | t | tʃ | k |
| | b | d | dʒ | g |
| fricatives | f | θ | s | ʃ |
| | v | ð | z | ʒ |
| resonants | m | n | | ŋ |
| | w | ɹ | l | j |
- (3) English vowels
- | | | | | |
|------|----|---|----|----|
| high | i | ɪ | u | u |
| mid | eɪ | | oʊ | |
| | ɛ | ʌ | ɔ | ɔɪ |
| low | æ | ɑ | ɑʊ | ɑɪ |

Similarly, the sounds of Nuuchahnulth can be written in several ways. These are the segments of Nuuchahnulth in an alphabetical order, and in three alphabets.

- (4) Nuuchahnulth a aa c ċ č ċ̣ e ee h ʱ i ii k kʷ ḳ ḳʷ ł ʎ ʎ̣
IPA ʌ a: ts̥ t̥s̥ t̥ʃ t̥ʃ̣ ɛ ɛ: h ʰ ɪ i: k kʷ k' k'ʷ ł t̥ t̥ʃ̣
*The Rival Whalers*⁸ a a' ts t's tc t'c ɛ ɛ' h ʱ ɪ i' k kw k' k'w ł t̥ t̥ʃ̣

m ṃ n ṇ o oo p p̣ q qʷ s š t t̥ u uu w ẉ x xʷ ɣ ɣʷ y ỵ ? ʃ
m ʔm n ʔn ɔ ɔ: p p' q qʷ s ʃ t t' u u: w ʔw x xʷ ɣ ɣʷ j ʔj ? ʃ
m 'm n 'n ɔ ɔ' p p' q qw s c t t' o o' w 'w x xw ɣ ɣw y 'y ' ?

Here is another way of arranging the segments of Nuuchahnulth.

(5) Nuuchahnulth consonants										(6) Vowels			
plosives	p	t	ʔ	c	č	k	k ^w	q	q ^w		high	i	ii
	p̰	t̰	ʔ̰	c̰	č̰	k̰	k̰ ^w			ɿ ʔ	mid	e	ee
fricatives			ɬ	s	š	x	x ^w	ɣ	ɣ ^w	h̥ h	low		o oo
resonants	m	n			y		w					a	aa
	m̰	n̰			y̰		w̰						

This arrangement of Nuuchahnulth letters clarifies, for example, that only plosives and resonants can be glottalized, and that only tongue back sounds can be round.

The Nuuchahnulth alphabet is an *Americanist* alphabet. Unlike the IPA, Americanist alphabets are not standardized. They vary across languages, and among scholars.

∞ **Exercise 18.** Are the English and Nuuchahnulth alphabets orthographies?

∞ **Exercise 19.** Why isn't the IPA used to write Nuuchahnulth?

Today's Nuuchahnulth alphabet dates from *Nootka Texts* (Sapir and Swadesh 1939), informed by Edward Sapir's work with Alex Thomas (Sapir 1933, 1949), and *Some Orthographic Recommendations* (Herzog and others 1934). Some changes were introduced in Sapir and Swadesh (1955), and in *Taataaqsapa* (Powell 1991).⁹

The central proposal of *Some Orthographic Recommendations* was that every sound of a language should be written with one letter, and every letter should signify one sound.

Sapir learned from Thomas that the glottalized resonants *m̰ n̰ w̰ y̰* behave as single sounds, similarly to the glottalized plosives *p̰ t̰ ʔ̰ c̰ č̰ k̰ k̰^w* (Sapir 1933, 1949).¹⁰

(7)	early Sapir	t!sa'ak	Thomas	t!sa'ak	čaʔak	river
	early Sapir	'mā'mīqsu	Thomas	m!ām!īqsu	maamīqsu	older sibling

∞ **Exercise 20.** These transcriptions are from *The Rival Whalers* (Sapir 1924). Transliterate each word into the Nuuchahnulth alphabet, and give an English translation.

(8)	tca'kop	'v'h ^a to'p'	'yo'qwa'	'i'n ⁱ k'v'	t'ɔ'h ^a t'sut'	tlu'p'k'citl
	hun'v'p'	su'kwitl	lo'ts'mε'v'	'ah ^a 'a'	'o'sum'itc	ɔ'v'y'

∞ **Exercise 21.** Read *Some Orthographic Recommendations* (Herzog and others 1934). Which of the symbols proposed in the article are relevant for Nuuchahnulth? How do these improve on the symbols used in *The Rival Whalers*?

Handout 8. Phonemes

Terms

- ▶ *phonology*: the study of how language sounds combine to form words.
- ▶ *phoneme*: a sound that contrasts meaningfully with other sounds.
- ▶ *allophones*: two or more sounds that are perceived as the same phoneme.
- ▶ *minimal pair*: a pair of words that differ in a single sound.
- ▶ *phonological rule*: a pattern where one sound changes into another.
- ▶ *assimilation*: when one sound becomes similar to another sound.
- ▶ *neutralization*: when two sounds are pronounced the same in some context.

Notes

When it is useful, slash brackets are used for *phonemic* transcriptions of meaningful sounds, and square brackets for *phonetic* transcriptions of actual pronunciations.

- (1) phonemic transcription: / ðə pɔɪ tami kɪti kæt mjaʊd æt ðə dɔɪ /
 phonetic transcription: [ðə p^hɔɪ t^hami k^hɪɾi k^hæʔ mjaʊɾ əʔ ðə dɔɪ]

A well designed writing system is precise enough to represent all of the meaningful sounds in a language, but omits unnecessary detail. In other words, a good writing system represents only the *phonemes* of a language.

The following *minimal pairs* show that the sounds /p b t d k g/ are different *phonemes* in English. English speakers perceive them as different sounds.

- (2) pit [pɪt] appy [æpi] tome [tɔʊm] crime [kɹaɪm] irk [ɪk]
 bit [bɪt] Abby [æbi] dome [doʊm] grime [ɡɹaɪm] erg [ɪɡ]

Now compare [p] and [p^h] in English. At the beginnings of stressed syllables, /p t k/ are said with a puff of air called *aspiration*, but after /s/ they are not aspirated. As a result, [p p^h] do not make minimal pairs, and are perceived as the same sound.

- (3) pit [p^hɪt] pork [p^hɔɪk] top [t^hɑp] ton [t^hʌn] kid [k^hɪd]
 spit [spɪt] spork [spɔɪk] stop [stɑp] stun [stʌn] skid [skɪd]

In other words, [p p^h] are *allophones* of the phoneme /p/ in English. This is why they are written with the same letter in this language.

- ∞ **Exercise 22.** Compare [p p'] in SENĆOŦEN. Are they two phonemes, or allophones of one phoneme? Do SENĆOŦEN speakers perceive them as different?

- (4) ŠPOKES [ʃpaq^wəs] drop off KPET q'pət gather it
 ŠBOKEN [ʃp'aq^wəŋ] foam WKBET x^wq'p'ət patch it

Minimal pairs show that /s/ and /z/ are different phonemes in English.

- (5) sip sæp su ɬeɪsɪ fɬasi lusɪ ɬas sis læwis
 zip zæp zu ɬeɪzɪ fɬazi luzɪ ɬaz siz læwiz

But in some contexts, minimal pairs for /s z/ are not found, and only one of these sounds is possible. While /s/ occurs next to voiceless sounds, /z/ occurs next to voiced sounds. These are examples of *assimilation*, and of *neutralization*.

- (6) ʃaps kæts buks oufs bæθs lɪsp sist fɪkst
 tɒbz hʊdz dɑgz wɪmz beɪðz spæzm sizd ɛgzɪt

∞ **Exercise 23.** In most North American English dialects, [t] and [d] alternate with the sound [ɾ], which called a *flap*. How many phonemes do [t d ɾ] represent?

- (7) bet [bɛt] betting [bɛtɪŋ] debt [dɛt] debtor [dɛɾɪ]
 bed [bɛd] bedding [bɛdɪŋ] dead [dɛd] deader [dɛɾɪ]

The Nuuchahnulth high vowels /i i: u u:/ are pronounced lower next to the back consonants /q qʷ χ χʷ ʰ ʔ/. However, the back consonants do not affect the low vowels /a a:/, and other, nearby consonants like /k x h ʔ/ do not cause vowel lowering.

- (8) ʔiisaak respect qii long time ʔiitʔiita lying
 hiʃuk all ʰiʃkʷii Hesquiaht ʔiih big
 kuuna gold ʰuuλʰuuya bailing quuʔas person
 ʔuyi at the time of ʔuyi medicine qaaqaawis Kakawis
 muksʔi rock muχʷaa boiling ʔaanis heron
 xaaʃxiip blue jay kiiλkiiλa breaking ʔaama loon

∞ **Exercise 24.** How many phonemes do the Nuuchahnulth vowels [ɪ i i:] represent? Explain why they are written as they are, using the concept of *allophone*.

- (9) ʔuyi [ʔɔji] at the time of hinii [hɪni:] give
 ʔuyii [ʔɔji:] give ʃiyaa [tʃija:] cutting
 tiič [ti:tʃ] alive ʰiɪmaqsti [ʰiʔmaqsti] spirit
 naani [na:ni] grizzly bear pipickuk [pɪpɪtskʰuk] orange (coloured)
 saasin [sa:sɪn] hummingbird kuʔaʔiya [kuʔaʔija] in the morning

These data help to illustrate that in Nuuchahnulth, vowel *quantity* (length) is precise and significant, while vowel *quality* is less so. English is the opposite—that is, vowel quality is precise and significant, while quantity is not. This difference can make it difficult for English speakers to properly recognize Nuuchahnulth vowels.

Handout 9. Word-building

Terms

- ▶ *morphology*: the study of word structure.
- ▶ *morpheme*: a minimal meaningful part of a word.
 - ▶ *root*: the most important, or central morpheme of a word.
- ▶ *stem*: one or more morphemes to which more morphemes can be added.
- ▶ *word*: one or more morphemes that are pronounced as a stand-alone unit.
- ▶ *free*: describes a morpheme that can stand alone as a word.
- ▶ *bound*: describes a morpheme that can appear only with other morphemes.
- ▶ *morphological process*: a change in a word's shape that changes its meaning.
 - ▶ *compounding*: making a new word by combining two roots.
 - ▶ *ablaut*: making a new word by changing one or more of its vowels.
 - ▶ *reduplication*: making a new word by doubling all or part of the word.
 - ▶ *affixation*: making a new word by adding an affix.
 - ▶ *affix*: a morpheme that is added to a stem.
 - ▶ *prefix*: an affix that appears at the beginning of its stem.
 - ▶ *suffix*: an affix that appears at the end of its stem.
 - ▶ *infix*: an affix that appears inside of its stem.

Notes

Morphology is the study of how languages build words. The meaningful parts of words are called *morphemes*. Some morphemes are *free*, and some are *bound*.

- | | |
|--|--|
| (1) yaaʔakukʰak siʔa.
yaaʔak-uk = ʰa = k siʔa.
pain -have = MOOD = you me
Do you love me? | (2) yaaʔakuk ^w aʰ suʔa.
yaaʔak-uk = (m)a = ʰ suʔa.
pain -have = MOOD = I you
I love you. |
|--|--|

The most common way of building words is by combining *stems* with *affixes*.

∞ **Exercise 25.** Use dashes to divide these English and Nuuchahnulth words into morphemes. Identify which morphemes are roots, prefixes, and suffixes.

- | | | | | | | |
|-----|-----------|----------|---------------|---------------|-------|--------|
| (3) | happy | fasten | modern | sleep | put | open |
| | happiness | unfasten | postmodernism | sleeplessness | input | reopen |
-
- | | | | | | | |
|-----|----------------------|-----------|-------------------------|---------------|------------------------|--------------|
| (4) | ʔučqak | foggy | ʔučqmis | fog | ʔučqšiʔ | get foggy |
| | ʰiʔaʰak | cloudy | ʰiʔaʰmis | cloud | ʰiʔaʰšiʔ | get cloudy |
| | taʔiʔ | sick | tamis | sickness | tapiʔ | get sick |
| | tii | tea | tiinaq | like tea | tiiʔiic | drink tea |
| | q ^w išaa | cigarette | q ^w išnaq | like to smoke | q ^w išʔiic | smoke |
| | k ^w aapii | coffee | k ^w aapiqnaq | like coffee | k ^w aapišic | drink coffee |

The only prefixes in Nuuchahnulth involve *reduplication*.

- (5) nuuk song ʔatiq-šiʔ thank supic-mis sand
 nuuk-nuuk songs ʔaa-ʔaatiq-a thanking su-supic-kuk sugar

Any sequence of morphemes to which more morphemes can be added is a *stem*.

∞ **Exercise 26.** How many stems are in each of these words?

- (6) ʔuyaqh-mis-nak = ʔa = k. Do you have news?
 (7) qic-as-witas = ʔaʔ = e = ʔic. You're going to go to school now.

English builds new words by *compounding*, but Nuuchahnulth does not.

- (8) weekday snowman takeout daycare shut-in well-worn
 pigpen milkshake seafood slowdance speakeasy well-wisher

Nuuchahnulth builds some words just by changes in vowel length.

- (9) waʔšiʔ go home miʔšiʔ start raining tuʔaqsuʔ get dark
 waaʔšiʔ going home miiʔšiʔ starting to rain tuuʔaqsuʔ getting dark

∞ **Exercise 27.** Both English and Nuuchahnulth build words by ablaut. Which of these past tense verbs and plural nouns are formed by affixation, and which by ablaut?

- (10) sing stare break warn girl man foot idea
 sang stared broke warned girls men feet ideas

∞ **Exercise 28.** Nuuchahnulth forms plurals by affixation, reduplication, and changes in vowel length. For each of these plurals, say which of these processes is used.

- (11) meʔiʔqac meʔiʔqacminh boy ʔaʔa ʔaatʔa child
 ʔucsac ʔucsacminh girl maʔas maatmaas tribe
 quuʔas quutquuʔas person ʔiih ʔeʔiih big
 quuʔassa quuʔassaminh Indian naniiqsu nananiqsu grandparent
 ʔuučmup ʔuʔuučmup sister kaaʔuuc kakuuc grandchild
 ʔawil ʔawiih chief ʔaawilaʔ ʔaawiihaʔ young man
 ʔakum ʔatkmiih queen ʔaak^waaʔ ʔaathaak^waʔ young woman
 čakup čakupiih man ʔuucsma ʔuucsaamiih woman

Handout 10. Interlinear analysis

Terms

- ▶ *analysis*: taking something apart, breaking a complex idea into simpler ideas.
- ▶ *interlinear analysis*: a breakdown of a word or sentence into its parts.

Notes

A three-line interlinear analysis.

- | | | |
|-----|----------------------------|--------------------------|
| (1) | 1. analyzed example | wik-tum = yiis ?ay -iip. |
| | 2. interlinear translation | not-have = I much-catch |
| | 3. natural translation | I didn't catch a lot. |

A four-line interlinear analysis.

- | | | |
|-----|----------------------------|---|
| (2) | 1. natural example | čuu, ʔuʔukum tuupšiik. |
| | 2. interlinear analysis | čuu ʔuʔ = uk = !im tuupšiʔ = !iik. |
| | 3. interlinear translation | okay good = POSSESSIVE = you evening = FUTURE |
| | 4. natural translation | Have a good evening. |

These are some of the most common endings that are used to make Nuuchahnulth sentences. They are listed here roughly in the order that they appear in words.

- | | |
|---------------------------------------|--------------------|
| ▶ -aa, -(?)ak, -(?)uk, -hii | continuous aspect |
| ▶ -šiʔ, -čiʔ, -kʷiʔ, -iʔ, -uʔ | complete aspect |
| ▶ -miḥsa, -maḥsa, -maʔqʔ | 'want to' |
| ▶ -wʔitas, -wʔits | future, 'going to' |
| ▶ = ?aaqʔ, = ?aqʔ | future, 'will' |
| ▶ = !ap | causative |
| ▶ = !aʔ | 'now, and then' |
| ▶ = !at | passive |
| ▶ = ?ak, = uk | possessive |
| ▶ = (m)it, = mit, = imt, = umt, = int | past tense |
| ▶ = ?aaʔa, = ?aaʔ, = ?inʔ | 'habitually' |
| ▶ = ʔaa | 'also' |

Handout 11. Sentence structure

Terms

- ▶ *sentence*: one or more clauses that form a single utterance.
- ▶ *clause*: a single predicate, plus its participants and modifiers.
- ▶ *predicate*: an event in which entities participate, or a description of an entity.
- ▶ *participant*: an entity (person or thing) that is described by a predicate.
 - ▶ *subject*: the main participant.
 - ▶ *object*: a participant that is not the subject.
- ▶ *lexical word*: a word that can mean something by itself.
 - ▶ *verb*: a word that refers to an action or event.
 - ▶ *noun*: a word that refers to an *entity* (person or thing).
 - ▶ *adjective*: a word that describes a noun.
- ▶ *function word*: a word with abstract meaning that contributes to sentence structure.
 - ▶ *pronoun*: a word that stands in for a noun or noun phrase.

Notes

Read the grammar reference §6 *Sentence structure*.

(1) Nuuchahnulth sentence structure

sentence		
clause		
predicate	mood = person	(participants)

In Nuuchahnulth, all verbs, nouns, adjectives, and location words can be predicates. In English, predicates must be headed by a verb.

		predicate	mood	participants	
(2)	C	waʔič	–ʔiš	naʔaqakʔi.	The baby is sleeping.
(3)	C	čims	–ʔiış	ḥuuʔaḥi.	That's a bear over there.
(4)	C	ḡišaq	–ʔiš	ḥaa ʕiniiʕʔi.	That dog is bad.
(5)	C	sayaa	–ʔiš	čaʔakʔi.	The island is far away.
(6)	C	hitinqis	–ʔiš	nani.	Grandma is at the beach.

Handout 12. Aspect, tense, and mood

Terms

- ▶ *inflection*: a system of obligatory functional categories that help to make complete words and sentences in a language.
- ▶ *aspect*: the shape and timing of events. For example, aspect can describe whether events contain other events, are complete or ongoing, or scattered or repetitive.
 - ▶ *perfective*: an aspect that portrays events as whole and complete.
 - ▶ *imperfective*: an aspect that portrays events as incomplete, ongoing, or complex.
- ▶ *tense*: describes whether events happen in the past, present, or future.
- ▶ *mood*: describes the purpose of clauses, and the quality of their information.

Notes

Aspect, *tense*, and *mood* are three fundamental categories of *inflection* in Nuuchahnulth. We can picture these in terms of a four-slot model of word structure.

(1) The four-slot model of Nuuchahnulth word structure

slot 1	slot 2	slot 3	slot 4
root	aspect	tense	mood

C	haw-	-iičił	-it	-ʔiš.	He became wealthy.
C	mač-	-inu	-∅	-ʔi.	Come indoors!
C	čiiq-	-aa	-ʔaqł	-ʔick.	You will chant.

The full structure of words in Nuuchahnulth involves many more slots than these, but the four-slot model is a good place to start.

Aspect refers to the shape of an event in time, and how it relates to other events. We can see that aspect is different from tense, because all three English aspects can be combined with past, present, or future tense.

(2) English aspect categories

- | | | |
|---------------|------------------|-------------------|
| ▶ plain | We speak. | We spoke. |
| ▶ progressive | We are speaking. | We were speaking. |
| ▶ perfect | We have spoken. | We had spoken. |

There are at least four, and perhaps up to seven, productive aspects in Nuuchahnulth. The *complete* aspect is *perfective*. All other Nuuchahnulth aspects are *imperfective*.

(3) Nuuchahnulth aspect categories

	take, hold	turn, rotate	
► complete	suk ^w iʔ	mitxšiʔ	‘...once, and be done’
► ongoing	suuk ^w iʔ	miitxšiʔ	‘...in the process of...’
► continuous	suu	mitx ^w aa	‘...without beginning or end’
► repetitive	suuʔsuuya	miitxmiitx ^w a	‘...repeatedly’
► off-and-on	suʔsuk	mitxmitxš	‘...from time to time’

Like English, Nuuchahnulth has past, present, and future tenses. Unlike aspect, tense says nothing about the shape of events, but only when events happen.

- (4) B ʔukʔaa-mit-a qeeʔas. Her name was Keas.
 (5) B hiiʔʔaʔ-Ø-ma ʔiiʔatisʔath. The Ehattesahs are present.
 (6) B ʔiiʔ-ʔaaqʔ-ma ʔuʔʔat ʔimaqsti. She will be greatly pleased.

Mood is an important and complex category in Nuuchahnulth. Mood endings convey several kinds of information. These are, first, whether the speaker is making a statement, question, or command. Second, whether the information is true, or in doubt. Third, whether the clause is the main clause of the sentence, or embedded. Last, most mood endings also say something about who is being talked about.

- (7) B wee-ʔii! Say it!
 (8) B qiʔii-či. Go away.
 (9) B ʔaaqin-hak q^waa ʔahʔaa. Why are you like that?
 (10) B ʔuhʔaaqʔ-ma čaani yaqči-qas. My wife will do it for a while.
 (11) B ʔaacsaaʔ-qača ʔawit-ʔi. I think the chief sees it now.
 (12) B wik-haa yaqwii-wuusi huupačasʔath. Are those not ancient Hupacasaths?
 (13) B ʔapxtaaʔaʔ-quu-weʔin. (His prey) would die immediately.

Whereas mood has very little function in English, Nuuchahnulth has around twenty different moods. Nuuchahnulth requires a mood ending in order to make a complete sentence. Therefore, to learn the language, one must master the mood system.

References

- James J. Asher. 2000. *Learning Another Language Through Actions* (6th edition). Los Gatos: Sky Oaks Productions, Inc.
- First Peoples' Language Map of British Columbia. maps.fpcc.ca.
- FirstVoices. www.firstvoices.com.
- George Herzog, Stanley S. Newman, Edward Sapir, Mary Haas Swadesh, Morris Swadesh, and Charles F. Voegelin. 1934. Some orthographic recommendations. *American Anthropologist*, New Series 36:4. 629-631.
- Leanne Hinton. 2001. The Master-Apprentice Language Learning Program. Leanne Hinton and Ken Hale, eds. *The Green Book of Language Revitalization in Practice*. San Diego: Academic Press. 119-128.
- Leanne Hinton, with Matt Vera and Nancy Steele. 2002. *How to Keep Your Language Alive: A Commonsense Approach to One-on-One Language Learning*. Berkeley: Heyday Books.
- International Phonetic Association. internationalphoneticassociation.org.
- Jeanette King. 2001. Te Kohanga Reo: Maori Language Revitalization. Leanne Hinton and Ken Hale, eds. *The Green Book of Language Revitalization in Practice*. San Diego: Academic Press. 119-128.
- S.D. Krashen and T.D. Terrell. 1983. *The Natural Approach: Language Acquisition in the Classroom*. London: Prentice Hall Europe.
- P.K. Kuhl, K.A. Williams, F. Lacerda, K.N. Stevens, B. Lindblom. 1992. Linguistic experience alters phonetic perception in infants by 6 months of age. *Science* 255.
- Jay Powell, ed. 1991. *Our world our ways: ȚaȚaaqsapa cultural dictionary*. Port Alberni: Nuuchahnulth Tribal Council.
- Edward Sapir. 1924. The Rival Whalers: A Nitinat Story (Nootka Text with Translation and Grammatical Analysis). *International Journal of American Linguistics* 3:1. 76-102.
- Edward Sapir. 1933, 1949. The Psychological Reality of Phonemes. David G. Mandelbaum, ed. *Edward Sapir: Selected Writings in Language, Culture and Personality*. Berkeley: University of California Press. 46-60.
- Edward Sapir and Morris Swadesh. 1939. *Nootka Texts: Tales and Ethnological Narratives: With Grammatical Notes and Lexical Materials*. Philadelphia: LSA.
- Edward Sapir and Morris Swadesh. 1955. Native Accounts of Nootka Ethnography. Publications of the Indiana University Research Center in Anthropology, Folklore, and Linguistics 1. *International Journal of American Linguistics* 21:4, part 2.
- A. Thomas and E.Y. Arima. 1970. *t'a:t'a:qsapa: A Practical Orthography for Nootka*. National Museum of Man Publications in Ethnology 1. Ottawa: National Museums of Canada.

Endnotes

¹ Linguistics is useful in language revitalization because: 1. it can help language learners to understand a target language. 2. it provides tools for language teachers to explain language to their students. 3. it can provide language activists with arguments for their activism (see kwistuup.net/_/sources.html).

² Online Etymological Dictionary, www.etymonline.com

³ Sapir (1949:57)

⁴ SENĆOTEN *FirstVoices* archive, www.firstvoices.com/en/SENCOTEN

⁵ www.tpr-world.com

⁶ Strengthening Indigenous Languages and Cultures, www.nsilc.org

⁷ The Summer Institute of Linguistics, www.sil.org

⁸ Sapir (1924)

⁹ Other Nuuchahnulth alphabets include the practical systems developed by Randy Bouchard, Alex Thomas and Eugene Arima (1970), and Terry Klokeid.

¹⁰ Sapir (1949:54-58, sections III-IV)