Essays on Language Function and Language Type

Dedicated to T. Givón

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OFFPRINT
Lexical Affixes and Morphological Typology

Marianne Mithun
University of California, Santa Barbara

Much of the initial work on linguistic typology was concentrated in the area of morphology, and indeed typologies of morphological structure have remained a basic part of the discipline to the present. Languages have been and still are routinely classified as isolating or polysynthetic, as agglutinating or fusional. Such typologies take as a point of departure a fundamental opposition: that between roots and affixes. It has generally been assumed that these two notions are theoretical primes in a sense, with predictable formal and functional properties. While roots generally serve as the bases of words and carry their central semantic content, affixes are structurally and functionally dependent, never constituting words on their own and conveying meanings that are somehow subordinate as well. We expect roots to carry such meanings as ‘rock’, ‘mouth’, or ‘catch’, and affixes to indicate such features as causation, tense, or gender.

A number of languages of northwestern North America, however, contain formal affixes with what appear to be root-like functions. Among the affixes of Bella Coola, for example, a language of the Salishan family spoken on the central coast of British Columbia, are -lst ‘rock’, -uc ‘mouth’, -hp ‘tree’ tix- ‘bring back’, ?it- ‘wear’, and ?us- ‘crave’. Eskimoan, Tsimshian, and Wakashan languages show similar root-like affixes. If the functions of affixes can differ so profoundly across languages, the validity of morphological typologies is certainly open to question. In what follows, it will be shown that these markers, which clearly qualify as affixes on formal grounds, qualify as affixes on functional grounds as well, once their precise ranges of meaning and use are examined. The markers in question, traditionally termed lexical affixes, will be illustrated primarily with examples from Bella Coola or Nuxalk. The material is drawn from texts collected by Davis and Saunders (1980), a grammar and
A special value of typologies is their potential for suggesting avenues of inquiry that might help us to understand why languages take the shapes they do, by delineating the kinds of systems that exist and by identifying sets of co-occurring properties. The kind of affixes under discussion here share certain properties cross-linguistically, properties that indicate a particular diachronic origin and subsequent path of development. Once the histories of these affixes are determined, their special characteristics are easily understood.

1. Lexical Suffixes

Bella Coola shows a clear formal distinction between stems (including simple roots) on the one hand and affixes on the other. Stems may function as words alone, while affixes only occur attached to stems. If we look at the Bella Coola lexicon as a whole, we see that the vast majority of stems show meanings similar to stems in other languages. Many designate objects or persons: ?asxʷ ‘seal’, ?at ‘herring roe’, cap ‘bone’, can ‘spear’, čix ‘sand’, čla ‘basket’, kikya ‘grandmother’, ķmsta ‘person’. Many describe actions: ?atps ‘eat’, ?ay ‘do, happen’, cim ‘talk’, ċq ‘gather’, ?ip ‘take’, ?issut ‘row’, kaw ‘carry’, ķm ‘stand up’. Others indicate states: mucalxʷ ‘be confusing’, nic ‘be alive, live’, pik ‘be shiny’. Similarly, the Bella Coola inventory of affixes contains markers with functions typical of affixes cross-linguistically, including a nominalizer, iterative, distributive, medio-passive, reflexive, reciprocal, inchoative, perfective, usitative, distant past, optative, dubitative, diminutive, plural, quotative, and others. In addition to affixes of this kind, however, the language contains a large set of suffixes with what appear to be noun-like meanings.

(1) Some Bella Coola (Nuxalk) lexical suffixes: Davis and Saunders (1973, 1980); Saunders and Davis (1975a, b, c); Nater (1984, 1990).

- i-xʷ ‘head’  - an ‘ear’
- us ‘face’  - aqʷ’s ‘eye’
- lx ‘nose’  - uc ‘mouth’
- alic ‘tooth’  - ak ‘hand’
- at ‘foot’  - ank ‘side’
- ax ‘bottom’  - ič ‘feather’
- lns ‘tail’  - li-c ‘skin’
- ant ‘covering’  - tp ‘tree’
Beside such suffixes, the language contains stems with quite similar meanings.

(2) Some Bella Coola stems and suffixes (Davis and Saunders 1980, Nater 1984)

<table>
<thead>
<tr>
<th>Stem</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>suxa</td>
<td>-ak</td>
</tr>
<tr>
<td>lxt</td>
<td>-lt</td>
</tr>
<tr>
<td>cuca</td>
<td>-uc</td>
</tr>
</tbody>
</table>

Most stems and suffixes with related meanings have distinct shapes, though within some stems, suffixes or portions of them can sometimes be perceived. The stem suxa 'hand', for example, has little formal relation to the suffix -ak, but the stem cuca 'mouth' can be seen to contain what resembles the suffix -uc of the same meaning.

A formal difference often cited between stems and affixes is the fact that major stem classes like nouns and verbs are typically open. New terms may be borrowed into the language easily without upsetting the system, like tak'wta 'medical doctor' and ta-la 'money' (from dollar). Affixes, by contrast, comprise relatively closed classes into which new members are not easily borrowed.

Functional differences between stems and the lexical suffices are more subtle. The meanings associated with individual suffices tend to be more diffuse and/or disparate than those of corresponding stems, as can be seen in (3).

(3) Meanings of a Bella Coola stem and suffix

<table>
<thead>
<tr>
<th>Stem</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>cuca</td>
<td>-uc</td>
</tr>
</tbody>
</table>

Overall the meanings of the suffices tend to be more general than those of stems, but semantic relations between the two categories are not straightforward. Describing Saanich, another Salishan language, Montler (1986: 66) concludes that "each lexical suffix can probably best be viewed as representing a complex network of associations rather than a concrete or abstract base from which metaphorical extentsions are made". Bella Coola lexical suffices show similar patterns.
The suffixes are not categorically specific in their distribution. An interesting issue in Salishan linguistics is the status of the distinction between nouns and verbs (Kuipers 1968; Jelinek and Demers 1982, 1984, 1994; Kinkade 1983; Van Eijk and Hess 1986; Thompson and Thompson 1992; N. Mattina 1996). Most roots can form the basis of either a syntactic nominal or a syntactic predicate. The Bella Coola root *qi*-*qti*, for example, can be used to mean either ‘child’ or ‘be a child’. The lexical suffixes appear both in words functioning as nominals and in those functioning as predicates. (The suffix -uc takes the form -u-c after some roots.)

(4) Bella Coola suffixes in nominals

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-uc</td>
<td>‘mouth’</td>
</tr>
<tr>
<td>skiy-uc</td>
<td>‘lips’</td>
</tr>
<tr>
<td>sqal-uc</td>
<td>‘fruit’</td>
</tr>
<tr>
<td>čikmik-u.c</td>
<td>‘ring around bathtub or strip of debris on beach’</td>
</tr>
<tr>
<td>squp-uc</td>
<td>‘beard’</td>
</tr>
<tr>
<td>?amat-u-c</td>
<td>‘plate’</td>
</tr>
</tbody>
</table>

(5) Bella Coola suffixes in predicates

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-uc</td>
<td>‘mouth’</td>
</tr>
<tr>
<td>atpusm-uc</td>
<td>‘have a swollen mouth’</td>
</tr>
<tr>
<td>?u-lx-uc</td>
<td>‘steal one’s food’</td>
</tr>
<tr>
<td>namile-uc</td>
<td>‘channel opens up’</td>
</tr>
<tr>
<td>alq-uc</td>
<td>‘punch in mouth’</td>
</tr>
<tr>
<td>čulas-u-c</td>
<td>‘tide comes in’</td>
</tr>
<tr>
<td>pul-u.c</td>
<td>‘river rises’</td>
</tr>
</tbody>
</table>

In noun-like stems, those usually used to refer to entities, the suffixes tend to contribute meanings along the lines of ‘pertaining to or characterized by X’. The result can be a kind of classification, marking entities that share a particular feature. The suffix -uc ‘mouth, food, opening, edge’, for example, appears in stems for ‘lips’, ‘beard’, ‘fruit’, ‘plate’, ‘shore’, and many others, as was seen in (4). The suffix -als ‘pertaining to the cheek or walls of containers, hollow structures, and mountains’, appears in skw-c-als ‘cheek’, stp-als ‘freckle on cheek’, xu-m-als ‘water flowing down a wall or mountainside’, kic-als ‘crooked wall’, plt-als ‘thick wall’, sis-als ‘bottle’, qum-als ‘big round bottle’, six-als ‘new pot’, and ?at?ixm-als ‘barrel’.

In verb-like stems, those usually used to predicate events and states, the functions of the lexical suffixes are grammatically diffuse as well. They do not refer to grammatical arguments. Instead, they simply indicate the involvement of entities, without overtly specifying the nature of the involvement. The suffix -ak
in the verbs in (6) below, for example, indicates the involvement of a hand or hands, but in (6a) the hand functions as a semantic patient, in (6b) a semantic instrument, and (6c) a semantic location.

(6) Semantic roles: Davis and Saunders (1973: 246, 244, 240)

a. \( cp-ak-m-c. \) (semantic patient)
\( \text{wipe-hand-MEDIo-PASSIVE-I} \)
'I am wiping my hand(s).'

b. \( ip-ak-m-tic. \) (semantic instrument)
\( \text{grab-hand-MEDIo-PASSIVE-I/Them} \)
'I'm grabbing them with my hand.'

c. \( pusm-ak-c. \) (semantic location)
\( \text{swell-hand-I} \)
'My hand is swelling.'

The fact that the suffixes do not refer to grammatical arguments can be seen in the pronominal suffixes on verbs that mark core arguments. The sentence in (6a) 'I am wiping my hands' is intransitive: 'I am hand-wiping'. The sentence in (6b) 'I'm grabbing them with my hand' is transitive, but the second argument is the people grabbed, rather than the hand: 'I am hand-grabbing them'. The sentence in (6c) 'My hand is swelling' is intransitive, but the single core argument is me, not the hand: 'I am hand-swelling' or 'I am swelling on the hand'. No grammatical or semantic role is specified by the structure. The suffixes simply qualify the meaning of the stem in a general way.

The suffixes may actually cooccur in sentences with independent nominals overtly identifying an argument only implied by a suffix. The suffix -\( ul \), for example, can indicate the involvement of a body or some kind of round object. In (7), a verb containing the suffix appears in a sentence also containing an independent word for 'ball'.

(7) Bella Coola suffix and independent nominal: Davis and Saunders (1973: 231)

\( cp-u't-ic \)
\( \text{ti-yalk-u't-tx.} \)
\( \text{wipe-round-1/3} \)
\( \text{PROX-ball-round-ARTICLE} \)
'I'm wiping the ball.'

The suffixes also show a certain categorial diffuseness. The suffix -\( uc \) 'pertaining to the mouth' is used not only for the mouth and associated objects, but also
for a variety of events and states, particularly eating, speaking, and other oral activities.

(8) Categorial diffuseness of suffixes

-uc  ‘pertaining to mouth, eating, speaking, and other oral functions’

?inax-uc  ‘have breakfast’

t-uc-m  ‘quit eating’

nomy-uc  ‘to gossip’

kisck-u-c  ‘mispronounce’

?unq-uc  ‘to yawn’

numyamt-u-c  ‘to hum’

Although the suffixes seem quite root-like in meaning, they do not in fact convey a random subset of root meanings. As a group, they are characterized by the fact that they express semantic elements that are frequently combined with others to represent single significant ideas. They do this in two kinds of ways.

The suffixes serve an important local lexical function as a device for creating labels for nameworthy concepts, both entities and events. Such labels can be seen in words above for ‘lips’, ‘fruit’, ‘beard’, ‘plate’, ‘beach’, ‘punch in the mouth’, ‘come in (of tide)’, ‘rise (of rivers)’, ‘have breakfast’, ‘gossip’, ‘yawn’, ‘mispronounce’, and ‘hum’. As would be expected, such combinations tend to be lexicalized: remembered, used, and understood as units. They easily take on a semantic life of their own, expressing meanings that are both less and more than the sum of their parts. The derived stem 2ulx-uc ‘act. irrationally-mouth’ is used to mean ‘tease’; ?ay-t, literally ‘do-foot’, has both a basic meaning ‘walk’ and a less predictable meaning ‘give up’; tayamk-i-x”, literally ‘throw-head’, is used to mean ‘throw someone’s hat away’ or, more idiomatically, ‘put the blame on someone’. Markers with more general meanings, such as -uc ‘orally, verbally’, will of course be more useful as classifiers than ones with very specific meanings.

The Salishan lexical suffixes are also used to serve a more dynamic pragmatic function, allowing speakers to shape the flow of information in connected speech. They are used, for example, to manipulate argument structure, allowing speakers to control the selection of core arguments. Such an effect can be seen in a line from the account of a rescue raid described by Dan Nelson, a Bella Coola speaker. A raider was trying to enter a house when he suddenly found himself looking directly into the face of a man with a gun. Instead of casting the face as a core argument of ‘see’, Mr. Nelson chose to represent it with just a suffix, so that the core arguments were the raider and the gunman (9). The gunman was of course more important to the narrative than the face: ‘He face-saw the gunman’ rather than ‘He saw the gunman’s face’. 
Manipulation of argument structure: Dan Nelson in Davis and Saunders (1980: 218.127)

?al-kt-us-is ta-as-tka-tm-ak-tx.

RES-see-face-he/him PROX-LOC-shoot-INST-hand-DIST

‘He looked at the face of the one who was holding the gun.’

The role of the lexical suffixes in controlling the flow of information dynamically through discourse can be seen by comparing their alternation with stems of similar meaning. After their mission, the raiders in the narrative returned home and unloaded scalps they had taken from their enemies. The scalps were brought into the discourse at this point with the full stem \(tn\_w\) ‘head’. In the following line, the now familiar scalps were carried along only with the suffix \(-i\_x\_w\).

Stem \(tn\_w\) ‘head’ and suffix \(-i\_x\_w\): Dan Nelson in Davis and Saunders (1980: 224.196)

?um-tutim-k"-c ta-inx"-H-ix".

unload-C.PASS-QUOT-PFV PROX-head-DP-DIST

‘The heads were unloaded.’

\(q^wuc\-i\_x\w\-tim-k"-c\) (suffix)

wash-head-PASSIVE-QUOT-PFV

They were washed.’

(9) Manipulation of argument structure: Dan Nelson in Davis and Saunders (1980: 218.127)

(10) Stem \(tn\_w\) ‘head’ and suffix \(-i\_x\_w\): Dan Nelson in Davis and Saunders (1980: 224.196)

Lexical suffixes indicating actions show similar alternations with stems. Another Bella Coola speaker, Agnes Edgar, told about a famine. She noted that the old people used to warn her that it was best to prepare food whenever it was available and to store it for bad times. In the first line in (11) below, she used a full stem \(cut\) ‘say’ as a predicate to describe the telling. In the following line the now established action was carried along simply with the suffix \(-uc\) ‘orally’, while the new information, ‘many times’, was presented with a stem.

(11) Stem \(cut\) ‘say’ and suffix \(-uc\) ‘orally’: Agnes Edgar in Davis and Saunders (1980: 66)

\(cut-aw-k"\) ?ut-nc ?at-ix".

say-they-USIT PREP-me PREP-then

‘They told me then.’
A similar alternation between stem and suffix can be seen in (12). The first mention of speaking is with the stem cut 'say', and the second, reiterating established information, is with the suffix -uc 'orally'.

(12) Stem cut and suffix -uc: Agnes Edgar in Davis and Saunders (1980: 168.95-96)

[“...”] cut-k’-i-çı-k  
say-QUOT-CONTR-PFV that.one  
[“Don’t be gone long.”], he said.’

?awt-tx’-uc-m-tis-k’-č.  
follow-distant-mouth-MED.PASS-he/them-QUOT-PFV  
‘He shouted after them.’

The Bella Coola lexical suffixes thus differ from stems in a number of ways. They never serve as words themselves or as the bases of words. They constitute a relatively closed class of items. Their meanings tend to be more general and diffuse than those of their stem counterparts. They do not specify core arguments of clauses, but simply qualify the stems with which they are associated in a general way, contributing meanings along the lines of ‘pertaining to X’. In particular, they convey elements of meaning that are frequently combined with others into single lexical items representing unitary concepts. They are attached to stems either to derive labels for nameworthy entities or activities, or because they carry relatively little new significant information of their own.

Still, the suffixes are in many ways more root-like than other affixes. While never as numerous as roots, they do constitute large classes. Dale Kinkade has isolated over 200 such suffixes in Upper Chehalis, another Salish language (p.c. 1996). Furthermore, while not completely open, the classes are not entirely impermeable either. Kinkade reports that the Interior Salishan languages contain a suffix for ‘horse, domesticated animal’ that is clearly cognate with Coast Salishan stems for ‘dog’ (p.c. 1996). The root for ‘dog’ in Upper Chehalis, for example, a Coast language, is qâxʔ. The word for ‘horse’ in Columbian, an Interior language, is swípsqaʔaʔ, literally suyápi-sqaʔaʔ ‘Whiteman-dog’. (The suffix -sqaʔaʔ contains an initial nominalizer s- as well as the original root.) While typically more general in meaning than roots, the suffixes do have strikingly concrete meanings, meanings we normally expect of roots, such as -uc ‘mouth/eat’ or -lst ‘rock’.
A likely explanation for their root- or stem-like properties is a diachronic origin in stems. Stem-suffix combinations functioning as nominals, such as the Bella Coola *squb-uc* 'hair-mouth' = 'beard', resemble in many ways the nominal compounds of other languages. The relationship of the second member to the first is neither semantically nor grammatically constrained; it need only provide a useful qualification or classification, along the lines described in Downing (1977) for English compounds. Those combinations functioning as predicates, like the Bella Coola *quf-uc* 'punch-mouth' = 'punch in the mouth', share many properties of the kind of Verb + Noun compounds of other languages known as noun incorporation. Like incorporated nouns, the suffixes carry no inflection for definiteness, number, or case, and do not serve to specify core arguments of the clause. Like incorporated nouns, they show a preponderance of items pertaining to body parts. Also like incorporated nouns, they may cooccur with independent nominals referring to the same kind of entity they invoke. They are used to derive new lexical items, to manipulate the selection of core arguments, and to regulate the flow of information, backgrounding elements that are incidental or already established within the discourse, while at the same time able to carry them along as part of the scene (Mithun 1984).

Interestingly, the fact that productive noun incorporation is one of the first constructions to wither under circumstances of language obsolescence (Mithun 1989) is mirrored in a corresponding diminution of productive use of the lexical suffixes of Salishan languages under the same conditions (Thompson 1974: 220).

An important characteristic of their [Salish languages] late evolution, as they have declined from rich vehicles of communication in a cultural pattern now totally altered, is the disappearance of precisely these elements — the lexical suffixes — from the complex morphological constructions that were formerly common, replaced by full words in syntactic strings more similar to the English that is now dominant through the whole area.

These and other observations have led Egesdal (1981), A. Mattina (1987), and Carlson (1990) to propose a diachronic origin for the lexical suffix constructions in compounds. Their proposals are convincing, and they provide just the kind of scenario typical of processes of grammaticization. As they point out, compounding processes persist in many of the daughter languages, though their productivity varies across the family. The order of elements within the constructions ('hair-mouth', 'punch-mouth') is consistent with the predicate-initial order of the Salish languages. Some of the suffixes or portions of them are sometimes discernible within related stems, a fact that in some instances suggests an original stem origin for the suffix. (The initial -l of so many of the lexical suffixes might be the remnant of an original stem joiner.) As Egesdal, A.
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Mattina, and Carlson have each noted, however, along with Sapir (1911: 251–254), Newman (1960), and Hagège (1978), the modern lexical suffixes are clearly distinct from incorporated nouns. The modern suffixes are not generally cognate with their stem counterparts. In most cases, the similarity between stems and suffixes is due to the fact that the stems have been built up from roots plus the lexical suffixes, as in yak-u-t ‘ball’, which contains the suffix -ut ‘round’.

2. Lexical Prefixes

The evolution of the original noun incorporation construction provides an especially interesting example of the power of function in shaping form. The same compound construction appears to have yielded a set of lexical prefixes as well. Bella Coola, like other Salishan languages, contains a set of prefixes with meanings quite similar to those expressed by verb roots in other languages.


<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*kat-</td>
<td>‘gather, collect, pursue, hunt’</td>
</tr>
<tr>
<td>*?it-</td>
<td>‘speak language of’</td>
</tr>
<tr>
<td>*?is-</td>
<td>‘gather, take in, consume’</td>
</tr>
<tr>
<td>*tix-</td>
<td>‘bring back’</td>
</tr>
<tr>
<td>*tutu-</td>
<td>‘prepare, work on’</td>
</tr>
<tr>
<td>*?it-</td>
<td>‘wear’</td>
</tr>
<tr>
<td>*?as-</td>
<td>‘have, contain, use’</td>
</tr>
<tr>
<td>*kit-</td>
<td>‘lack’</td>
</tr>
<tr>
<td>*?asi-</td>
<td>‘consider taste of’</td>
</tr>
<tr>
<td>*?us-</td>
<td>‘crave’</td>
</tr>
<tr>
<td>*tam-</td>
<td>‘make, construct’</td>
</tr>
<tr>
<td>*?us-</td>
<td>‘don, put on’</td>
</tr>
<tr>
<td>*kut-</td>
<td>‘have much’</td>
</tr>
<tr>
<td>*?anus-</td>
<td>‘be deprived of’</td>
</tr>
</tbody>
</table>

The formal status of the markers as prefixes is clear. They cannot occur independently as words in their own right, nor can they constitute the basis of words. They must be attached to full stems. Their use is illustrated in (14) with the prefix tam- ‘make’. As can be seen, each of the elements it precedes is an independent stem, capable of serving as a word alone.

(14) Bella Coola lexical prefix tam- ‘make’ Independent stems

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tam-saplin</td>
<td>‘make-bread’</td>
</tr>
<tr>
<td>tam-su:t</td>
<td>‘build-house’</td>
</tr>
<tr>
<td>tam-*cla</td>
<td>‘make-basket’</td>
</tr>
<tr>
<td>tam-<em>ak</em>na</td>
<td>‘make-war canoe’</td>
</tr>
<tr>
<td>saplin</td>
<td>‘flour, bread’</td>
</tr>
<tr>
<td>su:t</td>
<td>‘house’</td>
</tr>
<tr>
<td>*cla</td>
<td>‘basket’</td>
</tr>
<tr>
<td><em>ak</em>na</td>
<td>‘war canoe’</td>
</tr>
</tbody>
</table>

Like the lexical suffixes, these prefixes are relatively general in meaning. The prefix *kat-, for example, is translated variously as ‘acquire, hunt for, seek, gather, collect, pursue’. Much of their meaning comes from the stems to which
they are attached. The actions involved in baking bread, for example, are considerably different from those involved in building a house.

Like the suffixes, the prefixes represent elements of meaning that are frequently combined with others to create lexical items, names for recognizable, recurring activities.

(15) Bella Coola lexical prefixes in labels for nameworthy activities

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tam-saplin</td>
<td>‘bake-bread’</td>
</tr>
<tr>
<td>tam-sut</td>
<td>‘build-house’</td>
</tr>
<tr>
<td>ka-smtk</td>
<td>‘hunt-fish’ = ‘to fish’</td>
</tr>
<tr>
<td>kal-namtk</td>
<td>‘hunt-animal’ = ‘to hunt’</td>
</tr>
<tr>
<td>?is-?at</td>
<td>‘eat-herring.roe’</td>
</tr>
<tr>
<td>?is-qa-x</td>
<td>‘go.for-salmonberries’</td>
</tr>
</tbody>
</table>

The combinations are lexicalized, often showing unpredictable meanings, such as kal-k”ps ‘acquire-order’ = ‘make the bed’. Many such terms are of course culture-specific, like ‘eat herring roe’ and ‘go for salmonberries’. Speakers have created names for the concepts they have discussed the most.

As can be seen in the list in (13), a good proportion of the lexical prefixes simply indicate the presence or absence of entities, their coming into being, their appearance on the scene. They contribute relatively little information of their own, serving primarily to support the mention of referents. They are in this sense subordinate semantically or pragmatically as well as formally.

(16) Pragmatic subordination: presence or absence

<table>
<thead>
<tr>
<th>Stem</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-la</td>
<td>‘money’ (dollars)</td>
</tr>
<tr>
<td>papink</td>
<td>‘snake’</td>
</tr>
<tr>
<td>ta-la</td>
<td>‘money’</td>
</tr>
<tr>
<td>qlamta</td>
<td>‘pity’</td>
</tr>
<tr>
<td>suliàc</td>
<td>‘food-to-go’</td>
</tr>
<tr>
<td>mna</td>
<td>‘child’</td>
</tr>
</tbody>
</table>

Like the lexical suffixes, these prefixes also function dynamically in connected speech to shape the flow of information. Their special functions can be appreciated by comparing their alternation with stems of similar meaning. The idea of ‘catching’ for example, can be expressed by either a stem such as pak” or the prefix kal-. In a story told by Mrs. Edgar, a young girl was being given advice on how to elude a man who was chasing her. Here the catching, a highly significant element of the story, was introduced with the stem.
The prefix *ka*-, on the other hand, can be used either to derive labels for nameworthy concepts, such as *ka-t-smtk* ‘to fish’ seen above, or to introduce an important referent, as in (18) below. Mrs. Edgar described a mother and daughter who, in order to make their home more inviting, decided to spread fresh sand on the floor. The sand was brought onto the scene with the sentence in (18). The most significant element of this sentence was the sand, not the trip to get it.

(18) Prefix *kat*- ‘catch’: Agnes Edgar in Davis and Saunders (1980: 112)
\[
\text{lap-liwa-na-kw} \quad \text{lu} \quad \text{s-} \quad \text{ka} \quad \text{ka} \quad \text{sqe-} \quad \text{aw} \quad \text{(prefix)}
\]
\[
go-\text{SIM-they-QUOT-EXPV-PRF NOM-IRREALIS-seek-sand-they}
\]
\[
\text{They went to go get fresh sand.}
\]

The sentence that followed picked up the referent ‘sand’, but the act of obtaining it was not mentioned again: ‘They really rushed then to get their houses spread with sand.’

Just as traces of the origin of some noun-like lexical suffixes can be found in roots still existing in the languages, so too can traces of some of the verb-like lexical prefixes. The Bella Coola prefix *tix* ‘bring back’, for example, appears to correspond to the full Spokane root *tixw* ‘get, obtain’. Unlike the Bella Coola prefix, the Spokane root forms the basis of words on its own, without another root or root-like element: *tixw-o-t-m-n* ‘I’ll get it for you’ (Carlson and Flett 1989:93). Other resemblances in form between the lexical prefixes and stems within Bella Coola itself are suggestive of a diachronic relationship. In the prefix *kat*- ‘gather, collect, pursue, hunt’, for example, the final -t- could be the stem joiner -t- that links members of compounds. The remaining *ka* shows an interesting resemblance to the root *kaw* ‘transport, carry, bring, deliver’.

The inventory of lexical prefixes in Bella Coola is strikingly similar to a set of verb-like prefixes in Nisg̱a (Tsimshian) and to suffixes in Yup’ik (Eskimo) and Nootka (Wakashan). All show a high proportion of markers indicating presence or absence (‘gather’, ‘acquire’, ‘catch’, ‘fetch’, ‘make’, ‘have’, ‘use’, ‘lack’). The verb-like affixes in these languages are used in the same ways as the Bella Coola prefixes, to derive labels for nameworthy activities, to bring
referents into the discussion, and to background already established information (Mithun 1996).

3. Roots, Affixes, and the Sequencing of Grammaticization Effects

Though certain sets of affixes in Bella Coola and other languages of northwestern North America appear at first to serve functions usually expected of roots cross-linguistically, they do not in the end constitute a problem for morphological typologies based on the root-affix distinction. The affixes are clearly distinct from roots not only formally, never constituting the bases of words alone, but also functionally, carrying elements of meaning combinable with others into single words conveying one primary concept. They may represent an element of a noteworthy entity or activity, or information that is semantically or pragmatically subordinate within a particular context. As such they may serve a powerful role in shaping the flow of information in connected speech.

At the same time, the Bella Coola affixes, like those in other Salishan languages as well as Eskimoan, Tsimshian, and Wakashan languages, show characteristics that are considerably more root-like than most affixes. Their root-like properties are apparently a legacy of original diachronic sources in roots. Such a development is not surprising in light of our understanding of general processes of grammaticization, through which independent lexical items become increasingly grammatical in function and reduced in form. The lexical affixes as a group do show effects of grammaticization, with meanings that are more general and abstract than those of their stem counterparts, and more reduced in form. Still, we might wonder why they seem to have retained more root-like properties than most other affixes cross-linguistically.

An answer might lie in their paths of evolution. As we know from earlier attested forms in European languages as well as from comparative reconstruction of others, many modern grammatical morphemes underwent substantial grammaticization while still independent words, evolving slowly from roots designating concrete entities or actions, to grammatical particles, before ultimately fusing phonologically with their hosts to become affixes. The precursors of the Salishan lexical prefixes and suffixes, by contrast, appear to have followed a different path, first bonding phonologically with their hosts in compounds, at a time when they still retained their status as roots. Some functional changes would have occurred at that point, such as the loss of specific referentiality and case role. Others, however, such as the abstraction and extension of meaning, would have occurred only afterward, many over a considerable period of time. The origin in noun incorporation constructions explains well the vastness of the class of
suffixes. Instead of each descending from a distinct grammatical pattern, the lexical suffixes would have evolved from a single general compounding pattern that originally involved a potentially large number of roots, an open class. The at first surprising root-like character of these sets of affixes thus, rather than posing a problem for morphological typologies, takes us a step further to understanding the cross-linguistic variation we observe.

References


