Demonstratives and directionals: initial orientation

Alexandra Y. Aikhenvald

1 Spatial setting: orientation, distance and directionality
Major means of expression cover:
• shifters with deictic reference to a person or a thing other than speaker or addressee, that is, demonstratives;
• inherently directional verbs, oblique noun phrases and adverbs;
• directional morphemes, and affixes to verbs;
• serial verb constructions with directional meanings.

Each of these can have metaphorical extensions. The expression of direction and orientation can be done through pointing (which may or may not be integrated into the grammar). The meanings of spatial setting may correlate with the environment in which the language is spoken.

2 Demonstratives, and deictic expressions
The class of shifters with deictic reference to some person (or some thing) other than speaker or addressee is 'demonstratives'. We distinguish:

(a) Nominal demonstratives — can occur in an NP with a noun or pronoun (e.g. '[this stone] is hot') or, in most languages, can make up a complete NP (e.g. '[this] is hot').
(b) Local adverbial demonstratives — occur either alone (e.g. 'put it here') or with a noun taking local marking (e.g. 'put it (on the table) there')
(c) Verbal demonstratives 'do it like this', with an accompanying mimicking action — can occur as the only verb in a predicate, or together with a lexical verb.

Types (a) and (b) are found in every language whereas type (c) is relatively rare.

2.1 Meanings
The meanings of nominal and adverbial demonstratives may involve:
(i) distance to or from speaker, and sometimes also to/from addressee;
(ii) visibility by the speaker, and sometimes also to/from addressee;
(iii) height, stance and direction — topographic deixis.

Many languages have a 'simple' two-term system, 'this' (close to speaker) versus 'that' (far from speaker), e.g. Alamblak (Sepik Hill, PNG: Bruce 1984: 81):

(1) ind-ar-r (DEMONSTRATIVE-close-masc.sg) 'this (one)'
    ind-ur-r (DEMONSTRATIVE-far-masc.sg) 'that (one)'

A language may have a three-term system, e.g. Quechua (Weber 1989: 38):

(2) kay 'this (one) here' (proximal)
    chay 'that one there' (medial)
    taqay 'that one over there' (distal)

Longgu, an Oceanic language (Hill 1992: 96-7), has four degrees of distance:

(3) nene 'this: proximal'
    nina 'that: medial'
    ninaina 'that over there'
    nihou 'that a long way over there'

Distance can involve the speaker and the addressee, as in Tamambo (Jauncey 2011: 99):
A demonstrative system may involve visibility:

**Table 1. Demonstratives in Palikur, an Arawak language, Brazil/French Guiana**

<table>
<thead>
<tr>
<th></th>
<th>in speaker's hand</th>
<th>near to speaker and to hearer</th>
<th>far from speaker and near hearer or vice versa</th>
<th>far from both, visible</th>
<th>very far from both, not visible</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc</td>
<td>ner</td>
<td>ner</td>
<td>nop</td>
<td>metra</td>
<td>nere</td>
</tr>
<tr>
<td>fem</td>
<td>no</td>
<td>no</td>
<td>nop</td>
<td>notra</td>
<td>nore</td>
</tr>
<tr>
<td>neut</td>
<td>inin</td>
<td>ini</td>
<td>nop</td>
<td>inetra</td>
<td>inere</td>
</tr>
</tbody>
</table>

Or it may involve relative height, stance and direction (uphill, downhill, and also upriver, downriver etc). This is known as 'topographic' deixis. Examples come from languages spoken in hilly areas, e.g. Lak (Northeast Caucasian: Murkelinskij 1967: 497).

(5) 

va 'this (close to speaker)'
mu 'close to hearer', ta 'that far from both speaker and hearer'
qa 'the one higher than the speaker'
qa 'the one lower than the speaker'

Height and direction may be integrated with visibility, as in Hua, from Eastern Highlands of PNG:

**Table 2. Demonstratives in Hua (Haiman 1980: 258)**

<table>
<thead>
<tr>
<th>LEVEL WITH SPEAKER</th>
<th>UPHILL</th>
<th>DOWNHILL</th>
</tr>
</thead>
<tbody>
<tr>
<td>close to speaker</td>
<td>ma</td>
<td>buga</td>
</tr>
<tr>
<td>close to hearer</td>
<td>na</td>
<td>muna</td>
</tr>
<tr>
<td>neutral as to distance</td>
<td>ora</td>
<td></td>
</tr>
<tr>
<td>visible, distal</td>
<td>bura</td>
<td>biga</td>
</tr>
<tr>
<td>non-visible, distal</td>
<td>bira</td>
<td>mina</td>
</tr>
</tbody>
</table>

Further perceptual meanings in demonstratives may include 'being audible', as in Santali (Munda: Neukom 2001: 42-4):

(6) 

*han* pe₁-pe tale bagwan that.far.VISUAL see-2person.SUBJECT palm garden 'Look at that one over there, (there is) a palm-tree garden'

(7) 

*tē* tamak-ko ru-y-et'-kan that.AUDIBLE drum(sp)-3person. SUBJECT beat-y-IMPF:ACTIVE-IMPF 'Listen, they are beating the drums' (lit. those drums you can hear)

The semantic extensions of these demonstratives are parallel to those in evidentiality systems: the visual demonstrative can refer to 'what is evident', while the auditive one may also refer to smell, taste and feeling (Neukom 2001: 42). Deictics as 'evidentiality strategies' are a feature of a few Tibeto-Burman languages, and also Dyirbal (Dixon forthcoming).

Spatial reference extended to temporal reference, e.g. *this year, that year*. They may have overtones of endearment and familiarity. Cavineña (Guillaume 2008: 616) has three demonstratives: *riya* 'near speaker', *tume* 'there, near or familiar to addressee', *yume* 'over there, not near or familiar to speaker
or addressee'.

On English, see Zandvoort (1975: 148):
'the demonstrative pronouns, especially in their deictic function, are often used with emotional connotation. The kind of feeling implied (affection, vexation, contempt, disgust, etc.) depends on the situation.'

Both this and that may carry either a positive or a negative overtone. Examples include: I can't stand that/this mother-in-law of yours (negative), These/those modern poets publish a lot (could be positive or negative), This headache is killing me (negative).

Local adverbial demonstratives point to a place — unlike nominal ones which point to an object. In English, local adverbial demonstratives here and there parallel this and that in terms of spatial relations.

Local adverbial demonstratives are often derived from nominal ones; they may have more distinctions, e.g. Indonesian (Sneddon 1996: 160, 189):

<table>
<thead>
<tr>
<th>NOMINAL DEMONSTRATIVES</th>
<th>LOCAL ADVERBIAL DEMONSTRATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ini 'this: near speaker'</td>
<td>s-ini 'here: near speaker'</td>
</tr>
<tr>
<td>itu 'that: not near speaker'</td>
<td>s-itu 'there: mid-distance from speaker'</td>
</tr>
</tbody>
</table>

Alternatively, local adverbial demonstratives may have fewer distinctions than nominal ones. Longgu has 4 nominal demonstratives (in example 3) and 3 adverbial demonstratives: ine 'here' (possibly, from the locative preposition i followed by a reduced bound form of the proximale deictic nene 'this') and ina 'there', from i and bound form of nina 'that' (Hill 1992: 81).

Verbal demonstratives, or deictic verbs, are a subclass of verbs which involve deictic reference to the action. In Mapuche, the major indigenous language of Chile, the verb fa- and its derived forms means 'do/be/become like this (proximal)', and fe- means 'do/be/become like that (distal)'. Compare fa-nte- 'be big like this' and fe-nte- 'be big like that' (Smee 1989: 424-5, 2008: 504-5):

(9) iñché ñi tasa eymi mi tasa fa-nte-n-üy
I my cup you.sg your.sg cup be.like.this-'much'-VERB-INDICATIVE
'My cup is as big as your cup here'

(10) iñché ñi tasa eymi mi tasa fe-nte-n-üy
I my cup you.sg your.sg cup be.like.that-'much'-VERB-INDICATIVE
'My cup is as big as your cup over there'

2.2 Functions
In most languages nominal demonstratives can
(1) make up a complete NP (as in 'This is hot'); and
(2) occur in an NP with a noun or a personal pronoun (as in 'This stone is hot').

Sometimes different — but related — forms are used for (1) and (2) but generally the same forms are employed.

There is a tradition of using the term 'demonstrative pronoun' for (1); in fact, a nominal demonstrative is in most languages nothing like a personal pronoun in either form or function. And there is a tradition of using the term 'demonstrative adjective' for (2); in fact, demonstrative nominals are almost always totally different from adjectives, both in formal categories and in function. A more satisfactory label sometimes used for (2) is 'demonstrative determiner'; 'nominal demonstrative' can be used just for (1). It is most appropriate to use the label 'nominal demonstrative' because they may combine several functions (see Dixon 2010, for more discussion).
Table 3 illustrates possible syntactic, and discourse, functions of nominal demonstratives, using the example of English (see Dixon 2003; 2010).

**Table 3. Properties of nominal demonstratives**

<table>
<thead>
<tr>
<th>Function</th>
<th>proximal this</th>
<th>distal that</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can make up a whole NP</td>
<td>yes</td>
<td>yes</td>
<td>this is me; let me tell you this</td>
</tr>
<tr>
<td>2. Can occur in an NP with a noun</td>
<td>yes</td>
<td>yes</td>
<td>this man</td>
</tr>
<tr>
<td>3. Can occur with other modifiers in the leftmost position in an NP</td>
<td>yes</td>
<td>yes</td>
<td>these two big fat men</td>
</tr>
<tr>
<td>4. Substitution anaphora</td>
<td>yes</td>
<td>yes</td>
<td>A man came in. This man was my brother.</td>
</tr>
<tr>
<td>5. Substitution cataphora</td>
<td>yes</td>
<td>yes</td>
<td>These are the choices: either publish or perish.</td>
</tr>
<tr>
<td>6. Textual anaphora</td>
<td>yes</td>
<td>yes</td>
<td>John failed the exam. This annoyed everyone.</td>
</tr>
<tr>
<td>7. Textual cataphora</td>
<td>yes</td>
<td></td>
<td>Let me tell you this: all the funds are going to be cut.</td>
</tr>
</tbody>
</table>

Note that third person pronouns can also be used anaphorically, and cataphorically, e.g. English *He sang loudly. It annoyed me.*

In some languages, demonstratives used for deixis may not be used for anaphora, as in Tamambo, where only *mwende* 'this' (referred to) is used anaphorically (Jauncey 2011: 93-4).

Within NP structure, demonstratives tend to occur on the edges. Demonstratives may agree with the noun they modify in gender, number and classifier.

Local adverbial demonstratives generally function as non-inflecting modifiers to verbs. They may have only deictic functions, and also be used anaphorically. For each type of deictic — nominal, adverbial and verbal — it is important to know if they can also be used anaphorically. In Mapuche, verbal demonstratives are used to express textual anaphora:

(11) **fa-le-wma ińché**
    become.like.this-STATIVE-COMPLETIVE.VERBAL.NOUN I
    'This is how I was' (referring to what has been said before)

There may well be further types of demonstratives. In English, an angler may boast of the size of a catch either by holding his hands wide apart and saying *It was this big* or *It was so big*, or else by holding up a number of fingers and saying *It was this many* or *It was so many*. It appears that *so* has deictic reference as an alternative to *this* in contexts like this.

Tariana has a gestural deictic *khi*-. this is accompanied with a classifier and a gesture using one's hands: *khi-da hipada* (DEICTIC.LIKE.THIS-CL:ROUND stone) 'stone this big' (showing).

3 Further means of marking spatial setting

Spatial setting of a clause is typically shown with oblique noun phrases and adverbs, e.g. English *up hill, down hill, up, down, and so on.* Verbs can be inherently directional, e.g. English *go, come, ascend, descend.* They may or may not form a special subclass of verbs.

4 Directional and spatial marking on verbs and predicates: means and meanings

Spatial setting (direction and location) can be expressed with morphological marking on the verb.

4.1 Affixes and predicate modifiers. Meanings 'here' and 'there' in Filomeno Mata Totonac, from Mexico, are expressed with verbal suffixes. Note that the speaker is the deictic centre:
(12) ći'-an 'arrive here'
cā'-an 'arrive there'

This distinction is referred to as VENTIVE (movement towards speaker, or centripetal) versus ITIVE or ANDATIVE (movement away from speaker, or centrifugal) (a feature of many Chadic languages, e.g. Hausa: Newman 2000: 655-6, 663). Many Australian languages have a special directional on the verb meaning 'going' and 'coming', cf. Yidiñ (Dixon 1977: 219):

(13)  Yagaljida-:  Ṽayu  wula-ŋali-ŋu
     Yagalida-LOC  1sgNOM  die-GO-FUTURE  there.LOC
'I will go and die there'

(14)  Ṽundu:ba  jambu:l  wuna-ŋada-n  yingu
     2plNOM  two  sleep-COME-IMPV  here.LOC
'You two come and sleep here!'

Mapuche (Smeets 2008: 257-8, 261-2) has three deictic-directional markers on verb:

(15)  -pa- indicates movement towards the speaker, or location near the speaker:
     müle-pa-n (be-HERE-IND1sg) 'I am here'
     -pu- indicates that the event takes place at a location away from the speaker:
     pe-pu-fi-y (see-LOC-DIRECT.OBJECT-3person) 'he saw it there'
     -me- indicates 'motion away from the speaker, e.g.
     küdaw-me-n (work-THITHER-IND1sg) 'I went to work'

Spatial relations expressed on the verb may involve direction up and down — 'topographic deixis':

Quechua (Weber 1989: 121-9, 151-2) has two directional suffixes on verbs:

(16)  -rkU 'up', as in ichi-ku-rku-sha (stand-REFL-up-3PERF) 'he stood up'
     -rpU 'down', as in yaqa-ku-rpu-sha (fall-REFL-down-3PERF) 'he fell down';

Alamblak (Sepik Hill, Bruce 1984: 151-2) has elevational prefixes on verbs which imply motion:

Table 4. Elevational motion prefixes in Alamblak

<table>
<thead>
<tr>
<th>Level</th>
<th>Sloping up</th>
<th>Sloping down</th>
<th>Straight down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toward speaker</td>
<td>yari(m)-</td>
<td>yua-</td>
<td></td>
</tr>
<tr>
<td>Away from</td>
<td>ri(m)-</td>
<td>u-</td>
<td>mē-</td>
</tr>
<tr>
<td>speaker</td>
<td></td>
<td></td>
<td>mī-, yhē(m)-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>wa-</td>
</tr>
</tbody>
</table>

There is also a set of elevational suffixes which can occur on a verb and do not imply motion, indicating spatial relationships upward, downward or on a level plane. The same set can be used on nouns (Bruce 1984: 151, 98):

(17)  -i(t)o 'on a level plane'
     -ko 'up'
     -we/-he 'down'

Prefixes and suffixes can be used together: prefixes for direction of motion, suffixes for location:

(18)  yua-muh-wē-r-we
     UP.TOWARD.SPEAKER-climb-IMPF-3sgmasc-DOWN
     'he is climbing up (towards speaker) down there'
Direction, space and motion may be a unique property of imperative clauses. One typical distinction is between a proximal command, for an action to be carried out close to the speaker, and a distal command, for an action to be carried out far from the speaker, as in Tariana:

(19) pi-ña-si
   2sg-eat-PROXIMAL.IMPV
   'Eat here' (close to the speaker)

(20) pi-ña-kada
   2sg-eat-DISTAL.IMPV
   'Eat over there' (away from where the speaker is; addressed to people outside the house)

Imperatives involving motion acquire special marking in a number of Carib languages from South America. Macushi (Abbott 1991: 49-51) distinguishes three motion categories in imperatives: 'static' imperative, motion away from speaker and motion towards speaker.

(21) tuna ene-’kî
   water  bring-IMPV.'STATIC'.NON.Collective
   'Bring water!'

(22) apo’ era’m-a-ta
   fire    get-IMPV.MOTION.AWAY.NON.Collective
   'Go get firewood!'

(23) tuna era’m-a-tane’kî
   water  get-IMPV.MOTION.TOWARDS.NON.Collective
   'Come get the water'

4.2 Interactions with verb types. Mam, a Mayan language from Guatemala, has twelve morphemes within the verb phrase which express direction and motion. The markers are transparently related to intransitive verbs of motion. A paradigm for the verb ii- 'bring/take' is as follows (England 1983: 167-74):

(24) ma Ø-txi w-ii-7n-a (REC.PAST ABS-AWAY 1sg-take/bring-RN-1sg) 'I took it'
    ma Ø-tzaj w-ii-7n-a   TOWARD          'I brought it'
    ma Ø-pon w-ii-7n-a   FROM HERE TO THERE  'I took it there'
    ma Ø-kub’ w-ii-7n-a  DOWN            'I lowered it down'
    ma Ø-jaw w-ii-7n-a   UP                'I lifted it up'

There are three subclasses of verbs:
I. Verbs which take all directionals: verbs which involve unspecific movement, e.g. 'take/bring'.
II. Verbs which take few directionals if any because the motion they imply is very specific, e.g. qeech 'grind corn' and saa 'lay clothing out to dry'.
III. Verbs that take hardly any directionals because their meaning involves no movement, e.g. qaawa- 'scold'.

In Alamblak, the choice of one or two sets of prefixes for 'sloping up' depends on individual verbs (but no detail is given). Some verbs are always used with an elevational prefix, e.g. brn 'go'.

4.3 Directional serial verb constructions
Serial verb constructions are sequences of verbs which form one predicate. They have one tense, aspect, mood, evidentiality and modality value. Their components cannot be negated or questioned separately. They do not contain any marker of coordination or subordination. Asymmetrical serial
verb consist of a verb from a small closed class which provides an aspectual or directional
specification to the major verb, from a large open class.

In directional SVCs, the minor verb is typically a verb of motion or movement with
orientational semantics, e.g. Cantonese (Matthews 2006: 76)

(25) lei5 lo2 di1 saam1 lai4
    you take/bring PLURAL clothing come
    'Bring some clothes'

The motion verb 'come' as V₂ provides directional specification to the SVC: 'take come' means
'bring'. The transitivity value of an asymmetrical SVC is usually the same as that of the verb from
an unrestricted class.

Directional SVCs may only include verbs which involve motion. They may have a special
property: in Tariana, the directional minor verb in a SVC agrees in transitivity with the major verb:

(26) di-dia di-mare
    3sgnf-return 3sgnf-go.downstream
    'He returned (intransitive) downstream'

(27) di-dieta di-mareta
    3sgnf-return+TRANSITIVISER 3sgnf-go.downstream+TRANSITIVISER
    'He returned (something) downstream'

4.4 Grammaticalization pathways and some problems
Cavineña, a Tacana language (Bolivia) has suffixes referring to the spatial position of the subject:

(28) iwa 'wait'
    iwa-jara 'wait in a horizontal position
    iwa-bade means 'wait in a hanging position' (Guillaume 2008: 212-27, 308-20).

<table>
<thead>
<tr>
<th>Directional/Positional</th>
<th>Corresponding verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>-tsura 'GO.UP': direction up</td>
<td>tsura- 'go up, go upriver'</td>
</tr>
<tr>
<td>-bute/-butya 'GO.DOWN': direction down</td>
<td>bute- 'go down, go downriver', butya- 'lower'</td>
</tr>
<tr>
<td>-sikwa 'GO.AWAY'</td>
<td>NONE KNOWN</td>
</tr>
<tr>
<td>-jara 'LIE', e.g. tawi-jara- 'sleep lying'</td>
<td>jara 'lie'</td>
</tr>
<tr>
<td>-ani 'SIT', e.g. tawi-ani- 'sitting sleeping'</td>
<td>ani- 'sit'</td>
</tr>
<tr>
<td>-neti/-nitya 'STAND', e.g. peta-nitya- 'look standing'</td>
<td>neti- 'stand', nitya- 'make stand'</td>
</tr>
<tr>
<td>-bade 'HANG', e.g. iwa-bade- 'wait hanging' (snake)</td>
<td>bade 'hang'</td>
</tr>
</tbody>
</table>

We are faced with a possibility of an alternative analysis: are these one-word SVCs or markers of
spatial setting on verb?

Motion verbs within asymmetrical SVCs often grammaticalise into directional markers indicating
path, source and trajectory of motion, as in Mam (24 and 29) and Olutec (Zavala 2006: 290-2).

<table>
<thead>
<tr>
<th>DIRECTIONALS</th>
<th>CORRESPONDING VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>-txi AWAY</td>
<td>xi7 'go'</td>
</tr>
<tr>
<td>-tzaj TOWARD</td>
<td>tzaaj 'come'</td>
</tr>
<tr>
<td>-pon FROM HERE TO THERE</td>
<td>poon 'arrive there'</td>
</tr>
<tr>
<td>-kub' DOWN</td>
<td>kub' 'go down'</td>
</tr>
<tr>
<td>-jaw UP</td>
<td>jaaw 'go up'</td>
</tr>
</tbody>
</table>

Directional markers are similar to verbs; they are not verbs. Why?
The arguments presented by Zavala for Olutec are:
(a) they form a closed set
(b) they are suffixes (bound morphemes)
(c) only some verbs occur with all the directionals; and they may get lexicalized.

In Toqabaqita (Lichtenberk 2006), verbs 'come' and 'go' have fully grammaticalised into directional particles \textit{mai} 'ventive' and \textit{kau} 'andative' (and there are more examples of 'come' gramaticalizing into a ventive marker, and 'go' to 'andative' in Heine and Kuteva 2002: 70-1, 155-6).

**4.4 Semantic extensions**

Markers of spatial setting on a verb or predicate may have non-spatial extensions.

In Mapuche (15), the suffix -\textit{pa} 'hither: movement towards the speaker or location near speaker' may indicate that the situation involves a development towards the present, as in:

\begin{verbatim}
(30) ka fe-le-\textit{pa}-tu-n
    and DEICTIC.VERB.'become.like.that'-STATIVE-HERE-ITERATIVE-IND1sg
    'And I was again as I was before' (Smeets 1989: 257)
\end{verbatim}

The suffix -\textit{me} 'motion away from the speaker' has overtones of temporariness, e.g.

\begin{verbatim}
(31) küla tripantu-\textit{me}-n Arxentina
    three year-THITHER-IND3sg Argentina
    'I was in Argentina for three years'
\end{verbatim}

In Alamblak (see Table 4 and (18)), the elevational prefix \textit{mē} 'movement sloping up' and the suffix -\textit{i(t)o} 'location on a level plane' also indicate 'future setting', while \textit{mi} 'movement sloping downwards' and -\textit{we} 'location down' indicate 'past setting' (Bruce 1984: 306).

In Shoshone (Uto-Aztecan: Dayley 1989: 66-8) directional suffix -\textit{kwan} 'go and do' also marks spontaneous completive aspect, and -\textit{kin} 'hither' has an inchoative meaning, and -\textit{kon} 'around, here and there' indicates a repetitive or durative activity'.

In Quechua (see (16)) the directional -\textit{rkU} 'up' may indicate politeness (Weber 1989: 154):

\begin{verbatim}
(32) Qo-:shi-rku-y
    give-accompany-UP-2IMPV
    'Help him a little' (please)
\end{verbatim}

The suffix -\textit{rkU} can mark surprising turns of event, as in English 'He up and hit him'. With \textit{yuri} 'to be born, to appear' it means 'show up, come onto the scene'. It may indicate suddenness or brevity with which something happens.

Directionals may get lexicalized, e.g. Mapuche \textit{ye} - 'carry', \textit{ye-\textit{pa}} - (carry-HERE) 'to take after someone'. Manambu has a system of eight directional markers (including 'upstream', 'downstream', 'across away from speaker', 'across towards speaker', 'inland, inside', 'to and for', 'sideways away from speaker', 'sideways towards speaker'. Lexicalized forms include:

\begin{verbatim}
(33) wa-saki- (talk-across.away.from.speaker) 'tell a traditional story'
    wuke-tay- (think-sideways.away.from.speaker) 'worry'
\end{verbatim}

Hausa: -\textit{Vt} 'directional away in a literal directional sense' (Newman 2000: 655-6):

\begin{verbatim}
(34) jēfā 'throw at' versus jēfāf 'throw away';
    tūrā 'push' versus tūrāf 'push away'
\end{verbatim}
'Directional away in a conceptual sense':

(35) àwārā 'marry' versus auraľ 'marry off', lit. marry away
sāyā 'buy' versus sayaľ 'sell', lit. buy away
gādā 'inherit' versus gādaľ 'bequeath', lit. inherit away
karāntā 'read' versus karāntaľ 'teach', lit. read away

Olutec (Zavala 2006: 292):

(36) wa:n-pet 'sue somebody' nax-ka? 'get weak, wrinkle'
want-UP cross-DOWN

4.5 Further intricacies

Lexical verbs of direction and motion also undergo grammaticalization and lexicalization.
Go: can give rise to (a) directional 'away' ('itive' or 'andative'); (b) change of state, e.g. Tamil poo- 'go' used to mark change of state; (c) continuous aspect; (d) habitual aspect; (e) future marker (French aller faire qch), (f) 'intentional', as in English contraction gonna.

COME: can give rise to (a) directional 'towards' (ventive'); (b) 1pl imperative 'let's'...

Directionals may be used for cardinal directions, e.g. Mam:

(37) kub 'down' - south
jaw 'up' - north
el 'out' - - west
ok 'in' - east

Examples of further unpredictable meanings of directional forms:
Hebrew: 'immigrate to Israel' = 'go up'; 'emigrate from Israel' = 'go down'

(38) English 'What's up'? Up-coming, out-going...
Dress it up or Dress it down: said in a dress shop
Give someone a dressing down

5 'Embodied language': pointing, and orientation frames

Orientation frames: INTRINSIC (with regard to another object), RELATIVE (mapping from the observer's axis (front, back, left, right with regard to observer)), or ABSOLUTE (north, south, east, west with regard to the sun) (Levinson 2006).

How do speaker's of various languages use orientation and direction terms to describe position of various objects?

In face-to-face interaction, one expects pointing. This may involve:
(i) hand-pointing; (ii) finger-pointing; (iii) lip-pointing; (iv) eye-gaze; (v) combination thereof, or a division of labour.

Among the Indians of the Vaupés, full moving hand is used to indicate direction of travel when one is moving. Open palm is used to indicate direction (and also time — as direction of the sun) when talking about movement. Lip-pointing is used for pointing (with head-tilt to indicate distance). Eye gaze is also used for pointing (when something or someone is near); and for commands. Wilkins (2003) shows how index- and middle-finger pointing, and full-palm pointing are used among the Arrernte.

Iconicity of form: front vowels may correlate with proximity; back vowels correlate with distance.

6 Directionality in language and in the environment
Languages spoken in hilly environment have 'topographic deixis' — that is, marking of height and stance in demonstratives or verbs, e.g. Quechua, Alamblak, Manambu, Dyirbal, many Tibeto-Burman languages.

Languages spoken by river-dwellers are likely to have up-river/down-river distinctions in their grammar: Dyirbal, Manambu.

What happens if mountain-dwellers move into a river basin? In Mising (Tibeto-Burman: Post 2011) the forms which used to refer (and do so in related languages) to upward/downward have shifted to mean 'upriver/downriver'. The Apatani language lost such forms — the people live in flat area. These correlations are suggestive; however, we can never make non-controversial predictions...

References


—. 2006. 'Serial verb constructions in typological perspective', pp. 1-68 of Aikhenvald and Dixon (eds).


—. 2003. 'Pointing: a foundational building block of human communication', pp. 1-8 of Kita (ed.).


Weber 1989: 121-9, 151-2) has two directional suffixes on verbs:


Zavala, Roberto. 2006. 'Serial verbs in Olutec (Mixe-Zoque)', pp. 273-300 of Aikhenvald and Dixon (eds.)

Abbreviations:
CL - classifier; IMPF - imperfective; IMPV - imperative; IND - indicative; LOC - locative; masc - masculine; nf - nonfeminine; NOM - nominative; PERF - perfective; pl - plural; REFL - reflexive; sg - singular