Finding one’s way
(on the grammar of space of Gawwada,
a language of Southwest Ethiopia)

Mauro Tosco

Leipzig Spring School on Linguistic Diversity
March 26 - April 4, 2008
about the language

- An East Cushitic language (Afroasiatic)

- verb-final (SOV), head-initial (Hmod)

- nominative-accusative alignment
about the speakers and their land

- possibly 30,000 speakers

- farming (sorghum, corn) and cattle-keeping

- approx. latitude 5° 25’ N, longitude 37° 14’ E

- approximately 1,600-1,700 meters upon sea level

- ruggy mountainous area
QuickTime™ e un decompressore Animation sono necessari per visualizzare quest'immagine.
The problem

- how do you express positions? How do you say ‘he is in front of me’, ‘the house is to the left of the road’, ‘go down there!’, etc.?
On grammars of space (Levinson 2003)

Three frames of reference:

• *relative*, or viewer-centred (based on the viewer’s perspective); e.g., ‘he is to the left of the house’;

• *intrinsic*, or object-centred (based on the object’s intrinsic axes); e.g., ‘he is in front of the house’;

• *absolute*, or environment-centred (in which objects are represented with respect to some salient feature of the environment); e.g., ‘he is to the North of the house’ (Levinson 2003: 40).
absolute frames of reference
• Environment-centred, rather than viewer-centred: objects are represented with respect to some salient feature of the environment); e.g., ‘he is north of the house’.

The absolute frame of reference applies universally on the vertical plane (where gravity or the usual horizon provide orientation). On the horizontal plane orientation may be provided by the cardinal points (as in many Australian languages) or some salient local features.
Absolute frame of reference on the basis of the landscape

"He's north of the house."

(Levinson 2003: 40)
Relative frames of reference

• Viewer-centred (based on the viewer’s perspective); e.g., ‘he’s to the left of the house’.

• Relative frames of reference are based on a triangulation of three points: a viewpoint V, and a figure and ground distinct from V. It is based on the planes through the human body, yielding “up/down”, “back/front”, “left/right” oppositions (Levinson 2003: 43).
Relative frames of reference

"He's to the left of the house."

(Levinson 2003: 40)
Intrinsic frames of reference

- Object-centred (based on the object’s intrinsic axes); e.g., ‘he’s in front of the house’.

- The “intrinsic” features of the object are often functionally-determined (e.g., the front of a TV set is the side one watches, while the front of a car is determined by the direction of motion).

- It is often the case that human or animal anatomy provide the prototype.

- No language uses an intrinsic frame alone.
From relative to intrinsic

‘It’s turning right’
(not from my viewpoint, but according to the car’s “intrinsic” front)
The Gawwada frame of reference

- Interesting for the absence of any relative
  front
  right/left
  back

system for describing spatial relations.
The Gawwada frame of reference/2

A sentence such as

*ano  ḥola miskitt-atte
  idp.1sg loc.2sg.m right-loc.f

‘I am to your right’

is utterly ungrammatical, even incomprehensible.
The Gawwada frame of reference/3

Presence of an absolute

uphill (↑)
horizontal level (↔)
downhill (↓)

system based on the overall general slope of the land.
The Gawwada frame of reference

The Gawwada natural frame of reference for space
(from Brown 2006: 265, with modifications)
the three basic terms...

• *kut-e* ‘uphill’ (↑)
• *kor-e* ‘on the horizontal level’ (↔)
• *kal-e* ‘downhill’ (↓)
... and their derivates

<table>
<thead>
<tr>
<th>basic (f)</th>
<th>-loc</th>
<th>-loc-spec</th>
<th>int-loc</th>
<th>int-spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>kut-e</td>
<td>kut-á</td>
<td>kut-á-y</td>
<td>kut~t-á</td>
<td>kut~t-ú</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(↑)</td>
</tr>
<tr>
<td>kor-e</td>
<td>kor-á</td>
<td>kor-á-y</td>
<td>kor~r-á</td>
<td>kor~r-ú</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(←)</td>
</tr>
<tr>
<td>kal-e</td>
<td>kal-á</td>
<td>kal-á-y</td>
<td>kal~l-á</td>
<td>kal~l-ú</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(↓)</td>
</tr>
</tbody>
</table>
The Gawwada frame of reference

In Levinson’s (2003: 26) terms, the Gawwada frame of reference is:

• allocentric (environment- or object-centred, rather than viewer-centred)

• (speaker’s) orientation-free, or “intrinsic”, rather than orientation-bound and “deictic”
Yes, but…
how do you use the system?

- to describe location of things, either with respect to each other or to speakers and protagonists;

- the system is abstracted into a cardinal direction axis;

- “right” (*miskitte*) and “left” (*piihatte*) mean “right arm/hand” and “left arm/hand” only.

They ‘are not used in a relative frame of reference to project egocentric axes for establishing spatial relations’ (*Brown 2008*: 156, fn. 4).
Getting to know an absolute system/1: position

minn-e kup-ito kal-á-y
house-pl mountain-loc.m downhill-loc-spec
‘the house is downhill, behind the mountain’
(the Locative/Genitive case)

minn-e  [kup-ito     kal-á-y]
house-pl  mountain-loc.m downhill-loc-spec
‘the house is downhill, behind the mountain’
Getting to know an absolute system/1: position

\textbf{ano } héla \textbf{kut-á-y}

\textit{idp.1sg obl.2sg.f uphill-loc-spec}

‘I am in the direction of the mountain in respect of you’/ I am in front of you’
Getting to know an absolute system/1: position

ató yela kal-á-y

{idp.2sg obl.1sg downhill-loc-spec}

‘you are downhill from the mountain in respect of me’/ you are in front of me’
Getting to know an absolute system/1: position

tullay-ixo minn-ete kor-á-y
D.-m house-loc.pl horiz.-loc-spec
‘The Dullay (river) is there behind/past the house’
Getting to know an absolute system/2: movement

kut-á ášš-a
uphill-loc go-imp.2sg
‘walk up there!’
Getting to know an absolute system/2: movement

minn-ad’d-í=sa       kor~r-ú=sa
house-plur-spec=det horiz~int-spec=det
ášš-a

go-imp:2sg
‘go to those houses far away there!’
Adapting the system to describe the relative position of entities

kal-á       piy-atte       karm-ito
downhill-loc ground-loc.f lion-loc.m
pak-o=ma     puʕ~ʕ-i
mouth-m=sit  fall~sem-pfv.3m
‘(the monkey) fell to the ground into the lion’s mouth’
A note on adpositions vs. case

- **=ma** (*S/T*): state or movement; multidimensional, diffuse
- **-ito/-atte/-ete/…** (*LOC* case): state or movement; unidimensional, punctual
A note on adpositions vs. case

minn-e=ma i=sór-ti
house-pl=sit 3=run-pfv.3f
‘she ran home’
A note on adpositions vs. case

minn-ete    i=sór-ti
house-loc.pl 3=run-pfv.3f
‘she ran home’
Relational nouns

- **kitt-e** (f) ‘interior’
- **(miint-e (f) ‘forehead’, plur miin-n-e)**
  - > **miin-e** (f) ‘front’
- **saapp-e** (plur) ‘aboveness’

(body part terms play a limited role)
To be in front of

ato     yela     miin-atte

{idp.2sg obl.1sg front-loc.f}

‘you are in front of me’
Relational nouns and state

mukuʕ-itt-e ʕanď-ete  kitt-att-e
frog-sing-f  water-loc.pl  interior-loc.f
i=ʕák-ti
3=be_there- pfv.3f
‘the frog was in the water’
Relational nouns and state

{kels-akk-o}  {kaark-ito saapp-ete}
monkey-{sing-m}  tree-{loc.m aboveness-{loc.pl}}
i=ɛakkaɗ-i
3=sit-{pfv.3m}

‘the monkey was sitting upon a tree’
Relational nouns and movement

minn-e  kitt-e=ma  húlli
house-pl  interior-f=sit  enter\imp.2sg

‘enter the house!’ (speaker is inside; =ma designates here the area within the house)
Relational nouns and movement

haarr-e saapp-e=ma i=ḥádd-i=pa
donkey-f aboveness-plur=sit 3=climb-pfv.3m=link
‘he climbed upon the monkey and…’
Other thingies...

ʕil-a 'up'
kat-a 'down'
it'-a 'beside/near'
What happened to the frog…

*muku* ng-itt-e lokko *anđ-e it’-a*
frog-*sing*-f slowly water-*pl* near

*na=táah-ti=pa*
*part*=swim-*pfv.3f=link*

‘the frog slowly swam close in the water, and…’
… and the elephant

\( \text{辛德·菲利普
nose-f up part=enter-cons.3f=link}
\)

\( \text{阿什·库塔诺
noon-ito}
\)

\( \text{她进入大象的鼻孔；她
went up into the brain’}
\)

(from: “The Elephant and the Frog”
...other space entities: verbs

Dedicated spatial verbs:

- páh — ‘to go up(hill)’
- óod — ‘to go down(hill)’
- táxxi — ‘to cross, move (on the horizontal level)’
Verbs/2

They are different from motion/position *a-spatial* verbs such as:

- ḥáḏḏī — ‘to climb, mount (e.g., a tree or an animal)’
- yák-am — ‘to descend, come down’
- ášš-a — ‘to walk, go (generic)’
- ġákk-aɗ — ‘to sit’
- ḥáʕ — ‘to rise; stand up’; also: ‘to fly’ (!!)
Verbs/2

and also from such venitive/andative pairs as:

• ókaay — ‘to come’
• xáf — ‘to arrive’
Deep thoughts, open issues

Semantic diversity across languages is great but constrained

What’s the relation between language and thought?

Neo-Whorfianism? (language determinism on thought)
World is complicated; languages too.
References


References (on the language)
