Elevative Deixis in Wano
Exploring Human Social Cognition in Grammar

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Wano, spoken by about 7,000 native speakers, is a Papuan language of Trans-New Guinea Phylum, Dani-Kwerba Stock, which is found in the interior of Papua of the regency of Puncak Jaya. The language is closely related to Dani, Walak, and Nggem. It is an SOV language typology that has a complex morphological system. Four spatial dimensions are morphosyntactically coded in elevative deixis, which are steepness/non-steepness distinction, proximity/distality distinction, adverbial/attributive expressions, and vertical/horizontal plane. This paper discusses the grammatical operation of a set of two-term system: ei “up” and ou “down” that serves as the basic forms for the elevational deixis in Wano.

Keywords: Wano, elevative deixis, steepness/non-steepness, proximity/distality, adverbial/attributive, vertical/horizontal

Introduction

Human language is built upon acceptable sounds stringed together (phonetics) that in turn makes sense in a structural manner (phonology), and that then form meaningful words (morphology) and sentences (syntax). Furthermore, such meaningful words and sentences must in turn make sense in their application. For example, John loves eating bananas is an acceptable expression in English but not *Bananas love eating John. In the last example, even though the structure of the sentence is perfectly correct, it is not acceptable by English speakers because it conveys an odd type of meaning (semantics). Furthermore, the use of the language by its speakers must be understood also in a pragmatic context also. The expression I am allergic to coffee may simply be a statement, or may imply a polite refusal to a question What about a cup of coffee?

Human language is also built up on social cognition (cognitive linguistics and psycholinguistics), and the worldview of its speakers (anthropology-linguistics and socio-cultural norms of life).

Across languages, mostly similar meanings are expressed in a rather different way of grammatical coding or expression that involves all aspects of linguistics mentioned above. The English speakers will have the way of saying: What is your name when asking for the person’s name. The Indonesian speakers will say: Siapa nama Anda, which literally means Who name you in English. Likewise, while in English we are accustomed to: John runs the business, in Indonesian we have: John menjalankan bisnis, which, again, literally means John walks the business.

In one culture, we would point to a direction or point at someone by using our index finger, while in the other the thumb is used; yet, in another, we would simply protrude our lower lip towards a certain direction to...
someone, or towards someone as a way of pointing. Furthermore, speakers may direct to or point at someone or something using their minds. This is a cognitive spatial sense of mind, which we will explore further here.

Four spatial dimensions are grammatically coded in elevative deixis: steepness/non-steepness distinction, proximity/distality distinction, adverbial/attributive expressions, and vertical/horizontal plane. A set of two-term system: *ei* “up” and *ou* “down” (as shown in example (1)) serves as the basic forms for the elevative deixis. Both deixis are found either with or without final glottal stop with no semantic value.

Example (1) *ei ~ eiq* “up”

*ou ~ ouq* “down”

The basic forms can be used adverbially and attributively, as shown in (2) and (3) respectively.

Example (2)

<table>
<thead>
<tr>
<th>ando</th>
<th>ra</th>
<th>ou</th>
<th>acodi</th>
<th>nok</th>
<th>mbonggu,</th>
<th>ando</th>
<th>ra</th>
<th>we</th>
</tr>
</thead>
<tbody>
<tr>
<td>anto</td>
<td>ta</td>
<td>ou</td>
<td>acodi</td>
<td>nok</td>
<td>mbon-k-u</td>
<td>anto</td>
<td>ta</td>
<td>w-e</td>
</tr>
<tr>
<td>other</td>
<td>who</td>
<td>down</td>
<td>PN</td>
<td>next</td>
<td>cut-REAL-3p.A</td>
<td>other</td>
<td>who</td>
<td>come-s.A</td>
</tr>
</tbody>
</table>

*inyyom* o *ma* akbiri *ndone* ari

3s-with | place | sacred | PN | cave-LOC | that |

*unggugu,*

<table>
<thead>
<tr>
<th>ando</th>
<th>ra</th>
<th>tukmid</th>
<th>injenok</th>
</tr>
</thead>
<tbody>
<tr>
<td>un-k-u-k-u</td>
<td>anto</td>
<td>ta</td>
<td>tukmid</td>
</tr>
<tr>
<td>go through-REAL.3p.A-REAL.-3p.A</td>
<td>other</td>
<td>who</td>
<td>PN</td>
</tr>
</tbody>
</table>

*yinonde* nok, *nu* *ru* *mbugu* *eiq*

PN | next | go-3p.A | way | scatter-REAL.-3p.A | up |

*nouguaragogo*

n-ou-k-at-ak=o \ 

go-REM-REAL.-3p.A-then=PAUS

“As for others, they went down (Lit. ‘cut down’) to Acodi, yet others came and went through (the) sacred Akbiri, (the) cave, yet others climbed up Tukmid, then Yinggeo, then went up scattering away, they went.”

[Burung, in progress]

Example (3)

<table>
<thead>
<tr>
<th>an</th>
<th>da</th>
<th>kwa</th>
<th>manggu</th>
<th>muni</th>
<th>nome</th>
<th>wunumu</th>
<th>ra</th>
</tr>
</thead>
<tbody>
<tr>
<td>an</td>
<td>ta</td>
<td>kwa</td>
<td>manku</td>
<td>muni</td>
<td>name</td>
<td>wun-umu</td>
<td>ta</td>
</tr>
<tr>
<td>1s</td>
<td>who</td>
<td>woman</td>
<td>first</td>
<td>born</td>
<td>that</td>
<td>therefore</td>
<td>exist-3p-LOC</td>
</tr>
</tbody>
</table>

*eiq* ne, *nova* enot *nimbirak* *dambuno, *

*eiq* ne | n-ova | enot | n-impitak | dampun=o | |
| up | S.REF | 1s-father | PN | 1s-together | unite=PAUS |

*pincoragogo,*

yuicenok | ka,

pinit-jot-ak=o \ 

j-u-itje-nok | ta ||

bind-say-then=PAUS | say-3p.A-1p.U-then | who |

*eee bogo,*

it-nuk | dampun | pinit | yuicenok | ka,

*eee bok=o | it-nuk | dampun | pinit | j-u-itje-nok | ta | |
| STUT | good=PAUS | do-next | unite | bind | say-3p.A-1p.U-then | who |

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With reference to the speaker, the deixis marks “steepness” and “non-steepness” distinction as well as “proximity-distality”, which we will see in the following sections respectively.

**Steepness and Non-steepness**

The marking of the “steepness” notion is indicated by the prefix *d*- on the basic forms (as shown in example (4)).

Example (4) a. 
- **dei** “up.steep”
- **d-ei** steep-up

b. **dou** “down.steep”
- **d-ou** steep-down

The degree of steepness depends on the speaker’s perception of his/her surroundings. Supposed Acodi in example (2) were situated on a steep location, based on his/her intuitively topography knowledge of the Wano surrounding area, then we would expect **dou** “down-steep”. A similar assumption is true for Tukmid where the people walked through Yinggeo along the steep ravine, then **dei** “up-steep” was expected. The first and the second clauses of utterance in example (2) would then be reproduced as given in example (5).

Example (5) 
- **ando** ra, **dou** acodi, ...
- **anto** ta | **d-ou** atjodi |
- other who steep-down PN

... noku, nu ru mbugu **deiq**
- **d-eiq**

next go-3p.A way scatter-REAL-3p.A steep-up

**Proximity-Distality Distinction**

The elevative proximity-distality distinction with reference to the speaker pointing to the referent at different distances is also found. When the referent is “near to speaker” the basic form is suffixed by *-nya/-ngga* “PROX”, as illustrated in example (6). When it is “far from speaker”, the suffix *-dum* (or *-dom*) “DIST” is applied as we have in example (8). When it is some where between “near to speaker” and “far from speaker”, both *-nya/-ngga* “PROX” and *-dum* (or *-dom*) “DIST” are suffixed to the root *ei* “up” and *ou* “down”, as shown in example (7). In free translation, I will call this “proxital” indicating the distance between “proximal” and “distal”. When the distinction is not a prior concern in the speaker’s mind, then the basic forms *ei* “up” and
ou “down” is used. This is illustrated in Figure 1.

Example (6) a.  
\[ \text{einya} \]  
\[ \text{einya} \text{na} \]  
up-PROX  
“up.proximal”  

b.  
\[ \text{oungga} \]  
\[ \text{oungga} \text{nka} \]  
down-PROX  
“down.proximal”  

Example (7) a.  
\[ \text{einyadum} \]  
\[ \text{einyadum} \text{na-dum} \]  
up-PROX-DIST  
“up.proximal”  

b.  
\[ \text{ounggadum} \]  
\[ \text{ounggadum} \text{nka-dum} \]  
down-PROX-DIST  
“down.proximal”  

Example (8) a.  
\[ \text{eidum} \]  
\[ \text{eidum} \text{dum} \]  
up-DIST  
“up.distal”  

b.  
\[ \text{oudum} \]  
\[ \text{oudum} \text{dum} \]  
down-DIST  
“down.distal”  

Examples to illustrate the proximity-distality distinction are not easily found in texts. Supposed Acodi in example (2) was, at the time the elicitation took place, near to the speaker, we may expect oungga< ou-na \{down-PROX\} “down.proximal”. When it was somewhere between near and far, then ounggadum< ou-na-dum \{down-PROX-DIST\} “down.proximal”. If it was far, then oudum< ou-dum \{down-DIST\} “down.distal”. Likewise, when referring to Tukmid, the speaker would assert einya, einyadumor eidum, depending on his/her intuitively cognitive judgment. The same is true when the referent is “far from speaker”, where we would expect the deixis ounnggadum and deiqnyadum in 9a be respectively changed to doudum< d-oudum \{steep-down-DIST\} “steep.down.distal” and deiqdum< d-eiq-dum \{steep-up-DIST\} “steep.up.distal” as illustrated in example (9)b. The illustration in example (5) can now be modified in example (9).
Example (9) a. ando ra, dounggadum acodi,
anto ta | d-ou-nka-dum atjodi |
other who steep-down-PROX-DIST PN
nok, nu ru mbugu
nok | n-u tu mpu-k-u
next go-3p.A way scatter-REAL-3p.A

deiqnyadum nouguarago
d-eiq-na-dum n-ou-k-at-ak=o \ steep-up-PROX-DIST go-REM-REAL-3p.A-then=PAUS
“… they went down.proximal to Acodi, ... then went up.steep.proximal, scattering away, they went.”
[Burung, in progress]

b. ando ra, dou dum acodi,
anto ta | d-ou-dum atjodi |
other who steep-down-DIST PN
nok, nu ru mbugu
nok | n-u tu mpu-k-u
next go-3p.A way scatter-REAL-3p.A

deiqadum nouguarago
d-eiq-dum n-ou-k-at-ak=o \ steep-up-DIST go-REM-REAL-3p.A-then=PAUS
“… they went down.distal to Acodi, ... then went up.steep.distal, scattering away, they went.”
[Burung, in progress]

Up to this point, some morphophonological features are worth describing.

i. /n/ > [ŋ] / V_ N_ ei + na >einya “up.proximal”
| | [+high] [+alveolar]
| [+front] [+nasal ]

ii. /n/ > [ŋ] / V_ N_ ou + na >oungga “down.proximal”
| | [+high] [+alveolar]
| [-front ] [+nasal ]

Attributive and Adverbial Expressions

Syntactic function is also morphologically marked here. When the basic forms ei “up” and ou “down” are marked for degree of “steepness” with the prefix d-, the attributive function of the deixis requires a-, as illustrated in example (10), and the adverbial function requires n-, as in example (11).

Example (10) wano ap adei ambui ra, ome idik
wan o ap a-d-ei ampui ta | o-o-me i-dik
PN man ATTR-steep-up one who 3s-place-LOC 3s-no
dogwe ru yenggwa bok
do-k-we tu jen-k-wa bok ||
The elevative deixis can be outlined in Table 1.

### Table 1

<table>
<thead>
<tr>
<th>Elevative Deixis</th>
<th>Basic forms</th>
<th>Proximal</th>
<th>Proxital</th>
<th>Distal</th>
</tr>
</thead>
<tbody>
<tr>
<td>“up”</td>
<td>ei</td>
<td>ei-nya</td>
<td>ei-nya-dum</td>
<td>ei-dum</td>
</tr>
<tr>
<td>“steep.up”</td>
<td>d-ei</td>
<td>d-ei-nya</td>
<td>d-ei-nya-dum</td>
<td>d-ei-dum</td>
</tr>
<tr>
<td>“ATTR.steep.up”</td>
<td>a-d-ei</td>
<td>a-d-ei-nya</td>
<td>a-d-ei-nya-dum</td>
<td>a-d-ei-dum</td>
</tr>
<tr>
<td>“ADV.steep.up”</td>
<td>n-d-ei</td>
<td>n-d-ei-nya</td>
<td>n-d-ei-nya-dum</td>
<td>n-d-iei-dum</td>
</tr>
<tr>
<td>“down”</td>
<td>ou</td>
<td>ou-ngga</td>
<td>ou-ngga-dum</td>
<td>ou-dum</td>
</tr>
<tr>
<td>“steep.down”</td>
<td>d-ou</td>
<td>d-ou-ngga</td>
<td>d-ou-ngga-dum</td>
<td>d-ou-dum</td>
</tr>
<tr>
<td>“ATTR.steep.down”</td>
<td>a-d-ou</td>
<td>a-d-ou-ngga</td>
<td>a-d-ou-ngga-dum</td>
<td>a-d-ou-dum</td>
</tr>
<tr>
<td>“ADV.steep.down”</td>
<td>n-d-ou</td>
<td>n-d-ou-ngga</td>
<td>n-d-ou-ngga-dum</td>
<td>n-d-ou-dum</td>
</tr>
</tbody>
</table>

*ATTR = Attributive, ADV = Adverbial*

The basic forms for “up” and “down” may be pronounced with glottal stop, thus; *ei ~ eiq “up” and ou ~ ouq “down*. The “distal” suffix -*dum* is also pronounced -*dom*. These deixis may be prefixed to a verb such as: 

- *d-ou-g-ot-ik “steep-down-REAL-1s-PROG” renders “I am falling”*, 
- *d-ou-g-ond-ik “you are falling”, and* 
- *d-ou-g-ar-ik “(s)he/it is falling”, for example.*

They may also carry locative marker -*mu/-me as in n-d-ou-mu-ngga “ADV-steep-down-LOC-PROX” renders “steeply down location.proximal”. Verbal inflections on deixis that express the motion of “up and down” are also found, as listed in example (12).
ELEVATIVE DEIXIS IN WANO

Example (12)  

a. **ouguei**  
ou-k-ei  
down-REAL-up  
“up and down” [Burung, in progress]

b. **dougueidum**  
d-ou-k-ei-dum  
stEEP-down-REAL-up-DIST  
“up.steep and down.steep.distal” [Burung, in progress]

c. **adougueingga**  
a-d-ou-k-ei-na  
ATTR-steep-down-REAL-up-PROX  
“is up.steep and down.steep.proximal” [Burung, in progress]

**Vertical and Horizontal Plane**

Deixis that refer to elevative locations make further distinction between vertical and horizontal planes. Such take the same structures and functions as the elevative deixis discussed above.

**Vertical Plane**

Wano employs deixis that distinguish “low-high” on a vertical plane, with reference to trees or mountains: *wenom* “up low” and *wunom* “up high”. In Table 2, adverbial use is marked by the palatalisation of /w/; *wenom* “low” becomes *wenyom* “lowly”. Examples (13) and (14) illustrate their functional use in discourse.

**Vertical Plane Deixis**

<table>
<thead>
<tr>
<th>Attributive</th>
<th>Adverbial</th>
</tr>
</thead>
<tbody>
<tr>
<td>“up.low. VERT”</td>
<td><em>wenom</em></td>
</tr>
<tr>
<td>“up.high. VERT”</td>
<td><em>wunom</em></td>
</tr>
</tbody>
</table>

**Table 2**

**At** | **ne** | **ra** | **ap** | **waku** | **narik**, **wu**
--- | --- | --- | --- | --- | ---
3p | S. REF | who | man | hit.3s, U-REAL-p.A | go-3s/p.A- PROG | come-p.A

**Example (13)**  

“As for them, they went on killing people, having come this path up.low.vertical, they went up.steep to the Koyon village.” [Burung, in progress]

**Example (14)**  

“at ne urukuma baneq wunyom”

“at ne | utukuma baneq wunyom”
ki narago
ki n-at-ak=o \very go-3s/p.A-then= PAUS
“(s)he went high-up, vertical very high with the aircraft.”

Horizontal Plane

As with the vertical plane, some deixis in Wano distinguish “proximal-distal” on the horizontal plane, with reference to the speaker. In Table 3, any vowel-initial deixis marks the attributive function of the noun. Any n-initial deixis marks adverbial function.

Table 3

<table>
<thead>
<tr>
<th>Horizontal Plane deixis</th>
<th>Basic</th>
<th>Attributive</th>
<th>Adverbial</th>
</tr>
</thead>
<tbody>
<tr>
<td>“away. HORZ.PROX”</td>
<td>deru</td>
<td>aderu</td>
<td>nderu</td>
</tr>
<tr>
<td>deru</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detu</td>
<td></td>
<td>a-detu</td>
<td>n-detu</td>
</tr>
<tr>
<td>“away. HORZ.DIST”</td>
<td>derudum</td>
<td>aderudum</td>
<td>nderudum</td>
</tr>
<tr>
<td>derudum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detu-dum</td>
<td></td>
<td>a-detu-dum</td>
<td>n-detu-dum</td>
</tr>
</tbody>
</table>

The following example illustrates the case (as shown in example (15)).

Example (15) wonok nuerik mbaren banuk ka, yoan ne
wo-nok n-uet-ik mpaten ban-nuk ta | joan ne
ra, digo turu ra nderudum narago
ta | dik=o \ tutu ta n-detu-dum n-at-ak=o
who no= PAUS PN who ADV-away.HORZ.DIST go-3s/p.A-then= PAUS
nome, woranugo!”
nome | wota-nuk=o \ therefore come-next= PAUS
“Since we had carried (the canoe) and tied it, John (he said), ‘I tell you what, ... the Turu who went away, horizontal. distal is coming!’” [Burung, in progress]

Finally, as an accidental consequence of Wano to pographical and geographical setting, ei “up” generally refers to “south”, and ou “down” to “north” at present. On the other hand, the expressions for “east” and “west” are not deictically expressed, illustrated in example (16).

Example (16) a. o poiya we
o poija w-e
place sun come-3s.A “east”

b. o poiya ne
o poija n-e
place sun go-3s.A ‘west’

Conclusion

In this paper, we have seen how human language is built up that involves all aspects of linguistic studies while embracing social cognition and world view of native speakers of each language under studied. The
elevative deictic system of Wano, a Papuan language spoken in Papua, gives proof to the above notion. While similar features can be found among Papuan languages, it is not unreasonable to suggest that this can also be found in other languages as well.

References

Appendix A

Symbols
- morpheme break = clitic break
\ (short) closure in discourse 1 first person
\ \ sudden cut in discourse 2 second person
\ | short pauses in discourse 3 third person
\ || long pauses in discourse

Abbreviations
A actor PAUS pausal
ADV adverbial PN proper noun/name
ATTR attributive PROG progressive aspect
DIST distal PROX proximate
G.REF general referent/reference REM remote past
HAB habitual s, SG singular
HORZ horizontal S.REF specific referent/reference
INCEP inceptive aspect STUT stutter
INST instrument U undergoer
LOC locative V vowel (morphophonoly)
N nasal (morphophonoly) VERT vertical
p, PL plural