The Spatial and Temporal Conceptualizations of Isbukun Bunun

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Outline

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II. Spatial conceptualizations of Isbukun
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I. Theoretical Frameworks

A. Time as a spatial metaphor:

- “The formal equality of the spacelike units by which we measure and conceive time leads us to consider the “formless item” or “substance” of time to be homogeneous and in ratio to the number of units.” (Whorf 1956: 153)

- “For a long time, linguists have noted that the spatial and temporal terms in English and other related languages overlap considerably.” Clark (1973: 48)
As a matter of fact, time as a spatial metaphor is found not just in English and other related languages (SAE in Whorf’s terminology), but also in the languages of other language families.

Lakoff & Johnson (1999: 151) explain that the spatial metaphors of time “occur in very different languages around the world” because they “arise from our most common everyday embodied experience of functioning in the world.”
Lakoff and Johnson (1980; 1999) and Lakoff (1987) put forward the idea that many cognitive categories (models/metaphors) are shaped by the human body, including spatial and temporal concepts. Such categories are the results of “the embodied mind.”

Four sets of deictic spatial concepts generated by the speaker’s body (Fillmore 1982: 39-49): front/back, proximal/nonproximal, up/down and right/left.
Time construed as a one-dimensional, asymmetrical phenomenon (Clark 1973: 49) and relative to the speaker’s moment of speaking (the present time) is more compatible with the first two sets.

Future in front and past in back (for the moving ego) (Clark 1973:50; Lakoff & Johnson 1999)

Ex. *Trouble lies ahead.* (Clark 1973:51)

Ex. 陳子昂<登幽州台歌>: 「前不見古人，後不見來者」 ‘In the front, the ancient people cannot be seen again, and in the back, the future generations cannot be seen, either.’
B. Two sets of deictic spatial concepts in relation to temporal concepts

1. 1st set of deictic spatial concepts

Front/back have before/after, prior to/posterior to and earlier/later as their counterparts:

Before ("pastward of"); after ("futureward of")

Prior to (a certain time/event); posterior to (a certain time/event); Earlier (in time); later (in time)

Ex. John left **before** Mary arrived. (Clark 1973: 50)

Mary left **after** midnight. (Clark 1973: 50)

Several years **earlier**, she had lived near the beach. (Fillmore 1982: 38)
2. 2nd set of deictic spatial concepts

**Proximal vs. Nonproximal** (Tanz 1971; Fillmore 1982; Clark 2000)

English has a two-way contrast regarding distance from the viewpoint of the speaker: *here/this* (proximal) and *there/that* (nonproximal) (Clark 2000: 55; Fillmore 1982: 48)
Some languages (Latin, Greek, Spanish, Japanese) have a three-way contrast (Fillmore 1982: 48) such as the following:

**Proximal**: close to the speaker and visible

**Nonproximal**: **medial** (+visible) or **distal** (-visible)

(Fillmore 1982: 50)

Japanese: *kore* (proximal: ‘this’); *sore* (medial: ‘that’); *are* (distal: ‘that’) (Fillmore 1982: 53)
C. Two spatial metaphors of time


The ego is moving along the fixed axis of time from back (past) to front (future) through an event or events. (tenses and aspects)
Ex. *I look* forward to Monday. (Clark 1973: 51) (simple present)

*I am writing* a paper now. (present progressive)

*I have been writing* the paper for two weeks. (present perfect progressive)

*I have finished* writing the paper. (present perfect)

*John sang* a song a moment ago. (simple past)

*He was reading* a book then. (past progressive)

Three subtypes: (a) the subject of a sentence is a temporal concept; (b) the sequence of dates or temporal events; (c) anteriority or posteriority of events
(a) Time flew by. (Clark 1973: 50)

Christmas is getting closer. (Evans & Green 2006: 84)

(b) Tuesday follows Monday. (Evans & Green 2006: 86)

The Qin Dynasty preceded the Han Dynasty.

(c) He left after December 5 (RT). (simple past)

John has discovered the problem earlier than anyone else (RE). (present perfect)
II. Spatial conceptualizations of Isbukun

1st set of spatial concepts

Front vs. Back

Front: *Inaak lumah tu tanangaus hai, aiza vahlas.* ‘In front of my house, there is a river.’

Back: *Inaak lumah tu tankinuz hai, aiza libus.* ‘Behind my house, there is a forest.’
2nd set of spatial concepts
Proximal vs. Nonproximal
proximal
⇒ generally visible
nonproximal
⇒ medial (+visible) or distal (-visible)
★ The contrast is manifested in Isbukun nouns, pronouns, spatial verb affixes, determiner suffixes, conjunctions, tense and aspect.
The proximal/nonproximal contrast

1. nouns:
Prox: *asang*an ‘this village: NOM’; *asang* ‘(present) village: NOM’
Nonprox: *asanga* ‘that village: NOM’; *mai-asang*  ‘ancient village: NOM’

2. pronouns:
Prox: *sain/sian/sa-ian* ‘this/he/she’ (NOM)
Nonprox: *sa-ia* ‘he/she/it’  (NOM)
The proximal/nonproximal contrast

3. spatial verb affixes:
Prox: *isaincin* ‘here’
Nonprox: *adaiza* ‘there; medial’; *idaiza* ‘over there/far away; distal’

4. determiner suffixes
Prox: *lumahin/lumahan* ‘house-this.NOM’
Nonprox: *lumaha* ‘house-that.NOM’
The proximal/nonproximal contrast

5. conjunctions

Prox: **Mais lahaib saikin sia Saviahcia hai, saduu mas supah tu hanvang.**

‘When(ever) I pass by Mt. Jade, I see many sika deer.’ (simple present)

Nonprox: **Masa laihaib saikin takna sia Saviahcia hai, sinaduu mas supah tu hanvang.** ‘When I passed by Mt. Jade, I saw many sika deer.’ (simple past)
The proximal/nonproximal contrast

6. Tense

Prox:  *Saduu* saikin mas tumaz laupakadau. ‘I see a bear now.’ (simple present)

Nonprox (medial):

*Sinaduu* saikin mas tumaz tunsila. ‘I saw a bear the day before yesterday.’ (recent past)

Nonprox (distal):

*Sininaduu* saikin mas tumaz katavin. ‘I saw a bear last year.’ (remote past)
The proximal/nonproximal contrast

7. Aspect
Prox:  *Hanupin sa-ia, aat musuhaisin masatu cici.*
   ‘He has finished hunting and has returned to send the game.’ (present perfect)
Nonprox (medial):
   *Hinanupin sa-ia, aat minusuhaisin masatu cici.*
   ‘He had finished hunting and had returned to send the game.’ (recent past perfect)
The proximal/nonproximal contrast

Nonprox (distal):

*Hininanupin* sa-ia, aat minusuhaisin masatu cici.

‘He had finished hunting (in remote past) and had returned to send the game.’ (remote past perfect)
III. Temporal conceptualizations of Isbukun

A. Four-tense system based on the moving-ego metaphor

- Present: *hanup* ‘hunt’
- Recent past: *h<in>*anup ‘hunted’
- Remote past: *h<inin>*anup ‘hunted’
- Future: *nahanup* ‘will hunt’
Present vs. past expressions

- *maun* ‘eat’; *minaun* ‘ate’

- *iskuzakuza* ‘work under way at present’;
- *sinkuzakuza* ‘work done in the past’

- *laahaib* ‘pass by’ (present); *laichaib* (recent past);
- *lainihaib* (remote past)
But masamu ‘taboo’ is the only verb that doesn’t have the past tense, because to the Bunun people, it is timeless and should always be present. In this case, pragmatics exerts influence on the tense form of this particular verb.

Ex. Masamu kata mapasiza mas kautuszang.
‘We forbid marriage between families with the same surname.’
B. Four-aspect system based on the moving-ego metaphor

- Simple: *hanup* ‘hunt’
- Perfect: *hanupin* ‘has/have hunted’
- Repetitive: *hahanup* ‘hunt frequently/continuously/progressively’ (CV reduplication of the penultimate mora)
- Durative: *hanupang* ‘still hunting’
The repetitive and durative aspects can be combined to form the complex repetitive-durative aspect:

Ex. *hahanupang* ‘still hunt frequently/continuously/progressively’”
Two senses of the perfect suffix –in: (1) completion of an event (state or action), such as *kanahutingin* (has/have been completed); (2) inception of an event in the future, such as *namungaabin* (will soon).
The second sense of the perfect suffix –*in* gives rise to some temporal expressions indicating futurity:

*Past vs. future expressions*

Ex. *habas* ‘in the past’ vs. *habasin* ‘in the future’

*sangan* ‘a moment ago’ vs. *sanganin* ‘a moment later’

*katavin* ‘last year’ vs. *katavinin* ‘next year’
Two senses of the durative suffix –ang:

(1) ‘still’ (ongoing of an event after its supposed cessation), such as Maunang saikin ‘I’m still eating’;

(2) a period of past time such as habasang (ancient time), uvaazang (childhood), mainduduazang (youth), etc.
C. Four tenses and four aspects may be combined into 20 forms:

(1) *hanup* (simple present); (2) *hanupin* (present perfect); (3) *hahanup* (present repetitive); (4) *hanupang* (present durative); (5) *hahanupang* (present repetitive durative); (6) *hinanup* (simple past); (7) *hinanupin* (recent past perfect); (8) *hinananup* (recent past repetitive); (9) *hinanupang* (recent past durative); (10) *hinananupang* (recent past repetitive durative);
(11) hininanup (simple remote past); (12) hininanupin (remote past perfect); (13) hininanananup (remote past repetitive); (14) hininanupang (remote past durative); (15) hininanananupang (remote past repetitive durative); (16) nahanup (simple future); (17) nahanupin (future perfect); (18) nahahanup (future repetitive); (19) nahanupang (future durative); (20) nahahanupang (future repetitive durative).
D. Two Spatial Metaphors of Time

1. The moving-ego metaphor: [Figure 1]

*Manaskal saikin.* (I (am) *happy.*) (simple present)

*Namacindun sa-ia mas pusut kutunin.*

‘She *will weave* linen tomorrow.’ (Simple future)

*Hinanup sa-ia takna.*

‘He *hunted* yesterday.’ (Simple past)
Kanahtungin a inaak sinkuzakuza.

‘My work has been completed.’ (Present perfect: completive)

Namungaabin hudanan.

‘(It) will soon rain.’ (Future perfect: inceptive)

Hinanup inaak tama sia luduncia tanangausang tu islunghuang, niang musuhais.

‘My father went hunting in the mountain last week, and has not yet come back.’ (Simple past)
Hininanup inaak tama sia luduncia katavin, niang musuhais.

‘My father went hunting in the mountain last year, and has not yet come back.’ (remote past)
2. The moving-time metaphor

(a): [Figure 2]

*Namungaabin a Kulisumasu.* ‘Christmas is coming soon.’

*Tasbanin a Kulisumasu.* ‘Christmas has passed.’
2. The moving-time metaphor

(b):  [Figure 3]

*Malinuum* *tu tanangaus* *hai, Mali-ima.*
‘In front of Saturday (is) Friday./Friday (is) before Saturday.’ (simple present)

*Mali-ima* *tu tankinuz* *hai, Malinuum.*
‘In back of Friday (is) Saturday./Saturday (is) after Friday.’ (simple present)
Tai-uan masa sinaipuk mas Lipuun tu tanangaus hai, sinaipuk mas mailantangus tu Tauluu.

‘Taiwan was ruled by the Qing Chinese before ruled by the Japanese.’ (simple past)

Tai-uan masa sinaipuk mas Lipuun tu tankinuz hai, saipukunin mas Tauluu.

‘Taiwan has been ruled by the Chinese after ruled by the Japanese.’ (simple past; present perfect)
2. The moving-time metaphor

(c): [Figure 4]
Mais mapataz kata mas babu tu tanangaus hai, asa tu lushusun.

‘Before we kill a pig, it must (be) tied up.’ (simple present)

Masa tailmas-an tu tanangaus hai, hinanup saikin sia luduncia.

‘Ten days ago, I hunted in the mountain there.’ (simple past)
Mais *tasban* sa-ia punmas-anpainsananin malmananu masipul mas patasan hai, *namin-uni* masial tu isiing.

‘After studying hard for ten years, he will become a good doctor.’ (simple future)

*Masa pinunciun* tu *tankinuz* hai, *mininsia* Cianga mapatas Itu Malas-Isbukun tu Halinga.

‘After three years, that Ciang succeeded in writing an Isbukun dictionary.’ (simple past)
Masa minusuhais isaicia tama tu tanangaus hai, kailatanin a uvaaza mas asucia.

‘Before his father came back, that child had been bitten by that dog.’ (past perfect)
IV. Conclusions

A. Based upon the evidence from Isbukun Bunun and the other languages discussed above, deictic spatial concepts may well be used as metaphors (cognitive models) in many languages in the world, if not all, to conceive temporal concepts. It is our hope that more linguists specializing in different languages will endeavor to search for such correlations.
B. The two sets of deictic spatial concepts, namely front/back and proximal/noproximal serve as the basis for the two spatial metaphors of time: (1) the moving-ego metaphor; (2) the moving-time metaphor. The moving-time metaphor has three subtypes.
C. The moving-ego metaphor in both English and Bunun is the foundation for their respective tense and aspect systems.

D. Among the four sets of deictic spatial concepts, front/back and proximal/noproximal are used more frequently in the four major metaphors of time because they are more compatible with the one-dimensional, asymmetrical nature of time than up/down and right/left.
E. The four tenses and four aspects of Isbukun Bunun can be combined into 20 forms, 2.5 times more complex than the 8 English combinations of tenses and aspects.

F. The Austronesian languages of Taiwan are a goldmine of linguistic structures, both universal and culture-specific. Research on these languages will contribute a great deal to the study of language typology, historical-comparative linguistics and human language in general.
Uninang!

Thank you!

Comments and Questions?
Tenses
- remote past (distal)
  - tilim-
- recent past (medial)
  - n-

Past (Back) → E1 → E2 → P → E3 → E4 → Future (Front)

Ego
Here and Now
(Proximal)

Aspects
- -in
  (perfect: inception)
- -in
  (perfect: completion)
- -ang
  durative
- repetitive

-ang
durative
repetitive
Figure 2: Temporal subjects

Past (Front) ← T1 ← T2 ← P ← T3 ← T4 ← Future (Back)

Ego

observing

Here and now
Figure 3: Temporal sequence

Past (Front)  D1  D2  D3  P  D4  D5  D6  Future (Back)

Ego

observing

Here and now
Figure 4: Anterior/posterior events

Past (Front) ← E1 ← E2 ← P ← E3 ← E4 ← Future (Back)

Ego

observing

Here and now