Prosody and Bare Nouns in Mongolian

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Slides

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Introduction

- prosody of bare nouns in Mongolian
- compare **regular bare nouns** with **pseudo incorporated objects** (PNI)
- analyze under Match Theory (Selkirk, 2009; Elfner, 2015)
- propose a modification to Match Theory
- intonational phrase, ι, phonological phrase, ϕ, and phonological word, ω match exclusively to phases (Chomsky, 2001, *inter alia*)
- idea based on Compton and Pittman (2010); Kratzer and Selkirk (2007); Newell (2008); Ershova (2020)
  - DP and vP phases map to ϕ, and
  - nP phase maps to ω.

- initial LH contour found on full objects and bare objects with wide scope
- PNI objects (diagnosed by narrow scope) lack initial LH contour
- Mongolian prosody: LH contour is related to the ω
- propose that the LH contour appears at the left edge of a ϕ.
- offer prosodic evidence for the distinction between "full" bare objects (DOM?) and PNI in addition to the morphosyntactic evidence discussed by Guntsetseg (2016).

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Match Theory

- direct relationship between syntactic structure and prosodic structure
- violable constraints (Elfner, 2015; Selkirk, 2009, 2011).
- constraints as follows:

(1) Match Theory Constraints

    (a) CP - ι (CP with illocutionary force?)

    (b) XP - ϕ

    (c) X - ω

DOM and PNI

- DOM: case marking on noun varies with respect to a variety of properties (Bossong, 1991; Fábregas, 2013; López, 2012, *inter alia*):
  - humanness
  - animacy
  - specificity
  - definiteness

- usual trend: animate nouns trigger DOM while inanimate nouns do not

- PNI: noun (typically the object) is bare or has reduced morphology (Massam, 2001; Dayal, 2011).

- semantic properties that resemble canonical noun incorporation (Mithun, 1984).

DOM and PNI in Mongolian

- DOM and PNI in Mongolian studied most extensively by Guntsetseg (2016)
- animacy, definiteness, and specificity play a strong role
- portion of the variation found (Guntsetseg, 2016, p.78)

(2)   **ⓐ** *Bi   ene   oxin-*(yg)   xar-san*
       I   this   girl-ACC   see-PST
       'I saw this girl.'

   ⓑ *Bi   neg   oxin-(yg)   xar-san*
       I   a   girl-ACC   see-PST
       'I saw a girl.'

   ⓒ *Bi   oxin-(*yg)   xar-san*
       I   girl-ACC   see-PST
       'I saw a girl.'

DOM and PNI in Mongolian

- Guntsetseg (2016): PNI in Mongolian.

> **Example**
>
> | *Bi* | *öčigdor* | *nom* | *unš-san* |
> |------|-----------|-------|-----------|
> | I | yesterday | book | read-PST |
>
> 'Yesterday, I did book-reading.'

- discuss the difference between the obligatorily caseless examples, (2 c) and PNI, above

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Methodology

- preliminary investigation only (thanks to covid 19): bare nouns only examined
- PNI = bare nouns with narrow scope
- DOM = bare nouns with wide scope
- pitch contours of these sentences were analyzed on Praat (Boersma and Weenink, 2018)
- compared to known intonational correlates of prosodic categories in Mongolian (Karlsson, 2014)
- Karlsson: ω has initial LH contour
- TBU is the mora

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Results

- (i) definite LH pitch contour on the noun or (ii) flat contour
- results are shown in Table 1
- bare, narrow scope - only 1 item had a clear LH contour, a few had a slight LH contour
- bare, wide scope - clear LH contour
- Objects with plural marking or case marking (or both) clearly showed the LH contour typical of ωs, see Figure 1.

	LH contour	flat contour
non-bare	19	0
bare, narrow scope	5(1)	9
bare, wide scope	4	0

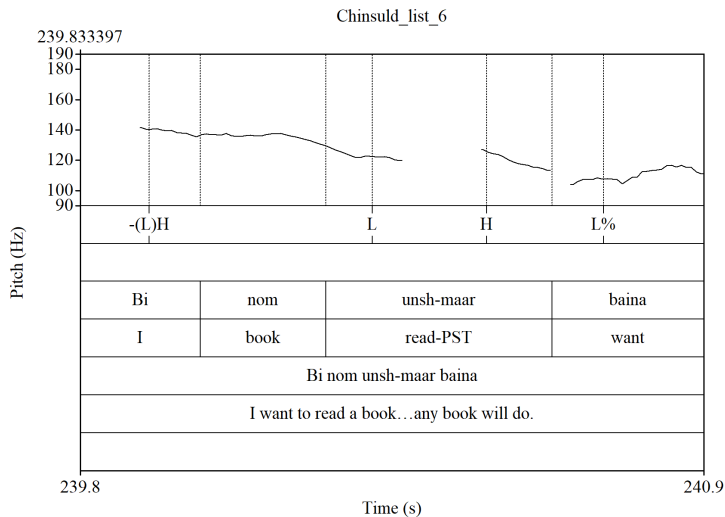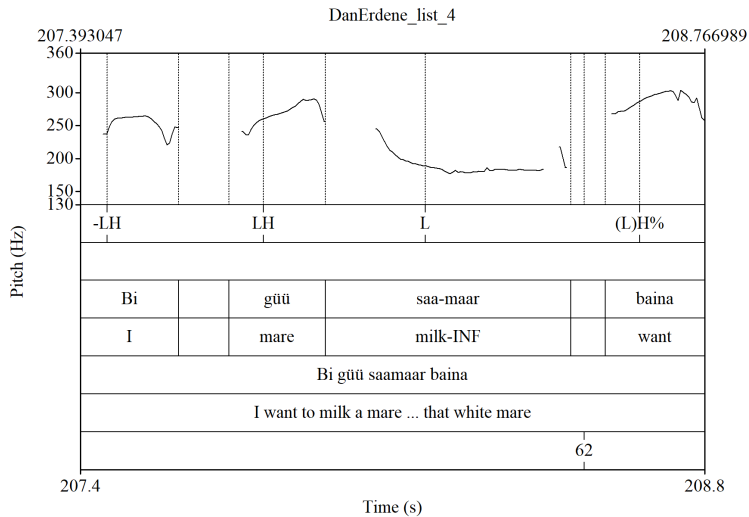Table: Pitch contours on nouns
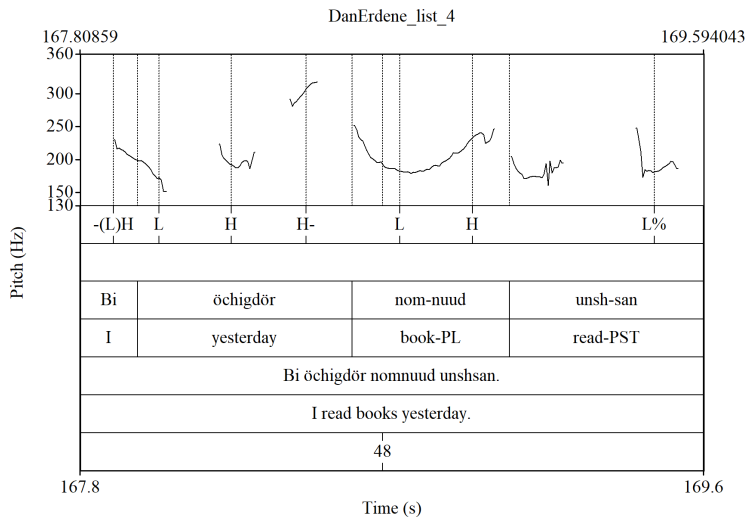
Results

Figure: Plural Noun

Results

Figure: Bare noun, narrow scope

Results

DanErdene_list_4

Bi	güü	saa-maar	baina
I	mare	milk-INF	want

Bi güü saamaar baina

I want to milk a mare ... that white mare
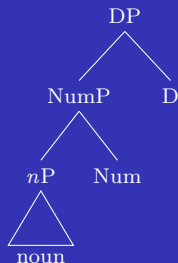
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Discussion

- ω bears initial LH contour in Mongolian (Karlsson, 2014)
- morphologically bare nouns with narrow scope do not bear this contour
- narrow scope is a prototypical property of PNI (Dayal, 2011)
- assume the bare nouns with narrow scope have been pseudo incorporated
- the bare nouns with wide scope are full DPs that lack DOM and just happen to be singular (i.e., no number marking)
- adopt the analysis in López (2012) for convenience
- assume PNI involves a structure no larger than nP, akin to Massam (2001)
- following are the three structures

Discussion
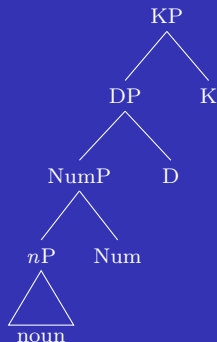
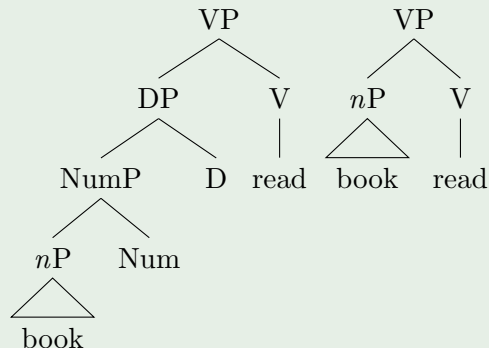case-marked object   bare object (wide scope)   PNI object (narrow scope)
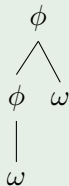
- all XPs map to ϕ under Match Theory
- therefore, no difference between a full DP and a NP expected; see example (2)
- the left tree is a non-case-marked full DP (bare noun with wide scope) and the right tree a PNI noun (narrow scope)

Discussion

Example

- trees above resemble following tree after pruning empty categories

Example

ϕ

ϕ ω

ω

Discussion

- standard Match Theory fails to predict any prosodic difference between the two
- propose that the phases map to prosodic categories (Compton and Pittman (2010), Kratzer and Selkirk (2007), and Newell (2008))
- propose that the CP phase maps to ι (although not considering the whole clause)
- **vP and DP phases map to ϕ**
- **nP phase maps to ω**
- initial LH contour as a property of ϕ rather than ω

Discussion

(3) Proposed Match Theory Constraints

- **(a)** CP $= \iota$
- **(b)** KP $= \phi$
- **(c)** vP $= \phi$
- **(d)** nP $= \omega$

- trees above restructured as follows

> ### Example
>
> $$\phi_{v\mathrm{P}}$$
>
> ϕ_{DP} ω $\omega_{n\mathrm{P}}$ ω
>
> $\omega_{n\mathrm{P}}$

Discussion
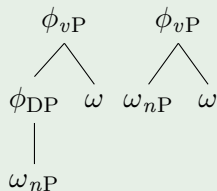
- tentative part!
- top node of extended projection (Grimshaw, 1990) domain for computation (Richards, 2016; Sheehan et al., 2017)
- (4) → Spell-Out of the extended nominal projections
- tree on the left (the bare noun with wide scope) is a ϕ, thus an initial LH contour
- tree on the right is a ω, so does not show such contour
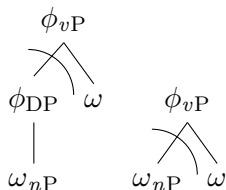
(4) Prosodic Trees with Spell-Out Domains

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Conclusion

- Mongolian bare noun objects:
  - high scope - full DP - LH contour - ϕ
  - low scope - bare nP - no contour - ω
- Match Theory cannot account for the facts as given
- only *__phases__* map to prosodic categories (Compton and Pittman (2010); Selkirk (2009); Newell (2008))
- KP maps to ϕ, vP maps to ϕ, and nP maps to ω
- assuming the initial LH contour as a property of ϕ, not ω, the facts fall into place
- the bare PNI noun, being an nP is a ω and lacks the LH contour
- the wide-scope bare object, being a full DP, is a ϕ, thus possesses the LH contour

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Acknowledgments

Thank-you!