Toward a typology of imperative negation
The negative first principle

Daniël Van Olmen
Introduction
The issue

- Horn (2001: 450)

"While Neg First is operative in both declarative and imperative contexts, there is a particularly strong motivation for avoiding postverbal negation in directive speech acts (imperatives and their functional equivalents). While a violation of Neg First in [The woman isn't eating] might result in temporary confusion, a similar transgression in the context of [Don't kill him!] would literally constitute a matter of life and death (Kill him – oops – not!)."

- echoing Jespersen (1917: 5-6)

"[The tendency to place the negative first] is still strong in the case of prohibitions, where it is important to make the hearer realize as soon as possible that it is not a permission that is imparted."
"The findings in Table 2 corroborate the negative-first principle. In the declarative as well as in the prohibitive, the negative marker is found much more often before than after the main verb. The findings do not seem to back the hypothesis that the principle is even stronger in directives."

<table>
<thead>
<tr>
<th></th>
<th>Preverbal NMP</th>
<th>Postverbal NMP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preverbal BCN</td>
<td>96</td>
<td>12</td>
<td>108</td>
</tr>
<tr>
<td>Postverbal BCN</td>
<td>11</td>
<td>48</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>60</td>
<td>167</td>
</tr>
</tbody>
</table>
However, no consideration of ...

- **form of the negator**
  - in affixes, competition of Neg First with overall cross-linguistic preference for suffixation
  - as pointed out by Dryer (2013a) for standard negation

- **reference point of Neg First**
  - little evidence for clause-initial interpretation of Neg First (Dahl 2010: 23)
  - but vis-à-vis main verb (Dryer 2013b, as well as Van Olmen 2010) or finite element (Dahl 1979)?
  - or construction-/language-specific reference point (Miestamo 2005: 185)?
However, no consideration of ...

• word order
  – generally, good predictor of the strength of Neg First
  – as shown for standard negation by Dryer (2013b)

• areality
  – postverbal negation known to cluster in particular areas
  – see, for instance, Reesink (2002) and Vossen (2016)
Present objectives

• reanalyze the original data, taking into account
  – form of negator
  – reference point of Neg First
  – word order
  – areality

• to achieve a more accurate assessment of the impact of Neg First on declaratives and imperatives/directives
Methodological issues
Miestamo's (2005) restricted sample

• contra genealogical bias
  – no more than 1 language per genus
  – i.e. family of languages with an estimated time depth of 3,500-4,000 years
  – see Dryer (2005: 584)

• contra areal and bibliographical bias
  – no co-territorial or adjacent languages from different genera
  – % of languages in sample ~ % of genera in Dryer's (1989) 6 macro-areas
  – coverage of genera in each macro-area randomly reduced to the lowest proportion of bibliographical coverage of genera (in Australia & New Guinea)
• total of 179 languages

AFR  Khoekhoe, Jul’huan, Yakoma, Diola-Fogny, Yoruba, Degema, Igbo, Ebira, Dogon, Supyire, Ijo (Kolukuma), Bagirmi, Kresh, Ngiti, Lugbara, So, Maasai, Nubian (Dongolese), Murle, Kunama, Maba, Kanuri, Koyraboro Senni, Tera, Masa, Somali, Iraqw, Maale, Arabic (Egyptian)

EU-AS  Basque, Albanian, Armenian (Eastern), Icelandic, Hindi, Finnish, Mansi, Khalkha, Evenki, Nivkh, Japanese, Korean, Godoberi, Lezgian, Brahui

SEA-O  Cantonese, Tibetan (Standard Spoken), Kayah Li (Eastern), Bawm, Meithei, Thai, Jru’, Khasi, Khmer, Nicobarese (Car), Khmu, Vietnamese, Seediq, Kambera, Maori, Tabu, Paiwan, Chamorro, Tagalog, Tukang Besi, Batak (Karo)


NAM  Greenlandic (West), Slave (Hare), Haida, Cree (Plains), Wiyot, Oneida, Yuchi, Koasati, Tonkawa, Kiowa, Nahuatl (Tetelcingo), Comanche, Pima Bajo, Makah, Bella Coola, Shuwup, Quileute, Kutenai, Klamath, Nez Perce, Wintu, Pomo (Southeastern), Seri, Maricopa, Karok, Wappo, Chumash (Ventureño), Chinantec (Lealao), Mixtec (Chalcatongo), Otomí (Mezquital), Popoloca (San Juan Atzingo), Purépecha, Totonac (Misantla), Zoque (Copinalá), Huave, Mam

SAM  Ika, Pech, Rama, Epena Pedee, Páez, Awa Pit, Cuiba, Tuyuca, Andoke, Betoi, Yaruro, Warao, Sanuma, Waorani, Yagua, Jebero, Shipibo-Konibo, Quechua Imbabura), Jaqaru, Nadëb, Baré, Apalai, Mekens, Wayampi, Bororo, Canela-Karô, Trumai, Kwazá, Wari’, Pirahã (check), Paumari, Canamari, Araona, Movima, Mosetén, Chipaya, Pilagá, Mapudungun, Gününe Kûne

C-P  Haitian Creole
Comparanda

• standard negation
  – à la Miestamo (2005: 42)
  – construction(s) that a language uses to turn the truth value of a proposition $p$ of a verbal declarative main clause into (the closest equivalent of) $\neg p$

Haitian Creole (Hall 1953: 33)

li rété
he stop
'He stopped.'

li pa rété
he NEG stop
'He didn't stop.'
Comparanda

• imperative/directive negation
  – construction(s) that a language uses to get the addressee(s) to stop or refrain from doing something
  – "opposite" of the imperative à la van der Auwera et al. (2013)

Haitian Creole (Hall 1953: 68-69, 182)

<table>
<thead>
<tr>
<th>English</th>
<th>Haitian Creole</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Look!'</td>
<td>gadé!</td>
</tr>
<tr>
<td>'Don't cry!'</td>
<td>pa krié!</td>
</tr>
<tr>
<td>'Don't sit down!'</td>
<td>piga chita!</td>
</tr>
<tr>
<td>look</td>
<td>NEG cry</td>
</tr>
<tr>
<td>sit.down</td>
<td>PROH sit.down</td>
</tr>
</tbody>
</table>


Comparanda

- restricted to "canonical" cases (see Aikhenvald 2010: 18)

*don't go!* but not 'let's not go!' or 'don't let's go!'

- including "indirect" constructions (à la Schalley 2007)
  - i.e. primary but non-dedicated way of expressing prohibition
  - because Horn's (1989) hypothesis is about directives, not just imperatives

Warndarang (Maran, Australian; Heath 1980: 84)

*gu*-gi-ñi-*ga*

**NEG**-take-2SG-IRR

'Don't take him!' or 'You will not take him.'
Typology

- type 1: negation solely after reference point

Taba (South Halmahera West New Guinea, Austronesian; Bowden 1997: 388)

\[ n\text{-}han \quad ak\text{-}la \quad te \]
3SG-go ALL-sea NEG

'She's not going seawards.'

Awa Pit (Barbacoan, Barbacoan; Curnow 1997: 247)

\[ na\text{-}wa=na \quad pyangta\text{-}mun \quad na\text{-}wa \quad pyan\text{-}man \]
1SG-ACC=TOP kill-PROH.SG 1SG-ACC hit-PROH.PL

'Don't kill me!'  'Don't hit me!'
Inanwatan (South Bird's Head, Trans New Guinea; De Vries 1996: 108-109)

(náwo) né-se-sa-aigo
NEG 1SG-walk-FUT-NEG

'I will not walk.'

Nivkh (isolate; Gruzdeva 2001: 62, 68)

ra-gavr-ja t'a ra-ja
drink-NEG-IMP.SG PROH drink-IMP.SG

'Don't drink!'
Typology

• type 3: negation before (and, possibly, after) reference point

Asmat (Asmat-Kammaro, Trans New Guinea; Voorhoeve 1966: 127)

mó-por  pák  em-óf
INT-see   NEG   do-MDPST.1SG.3SG
'I didn't see it.'

Amele (isolate; Roberts 2016: 103)

wa=na  cain  n-ag-aun
water=in  PROH  go.down-2SG-NEG.FUT
'Don't go down into the river!'
Typology

• types 1.5 and 2.5? – only a few cases, so just classified as 2 here

Yagua (Peba-Yaguan, Peba-Yaguan; Payne & Payne 1990: 314, 318)

\[
\text{sa-tuvy-su=tya} \quad \text{sa-imu} \quad \text{néé} \quad \text{ray-jimiyiy-ruuy}
\]

\[
3\text{SG-ear-VBZ=NEG} \quad 3\text{SG-LOC} \quad \text{NEG} \quad 1\text{SG-eat-POT}
\]

'He didn't pay attention to him.'

'I don't want to/can't eat.'

Koiari (Koiarian, Trans New Guinea; Dutton 1996: 56)

(Enagi) \text{gurami-hama}!

\text{PROH sit.down-PROH.SG}

'Don't sit down!'

néé more common than =tya

enagi usually dropped
Typology

• not applicable (NA) type

Evenki (Tungus, Tungus; Nedjakov 1997: ex. 97)

tala   e-kel         girku-ra
there  NEG.AUX-IMP.2SG  go-PTCP
'Don't go there!'

Ungarinja (Wororan, Australian; Rumsey 1982: 101)

njuna-wa-ŋulu-yiri
F-2PL.IRR-give.to-CONT
'Don't you people give to her!'
"There is no hard and fast cross-linguistically applicable definition of finiteness. ... Syntactically, finite verbs can act as the only predicate of independent clauses, whereas non-finites usually cannot. Morphologically, ... these syntactically dependent verbs may show deverbalization (reduced marking of verbal categories such as tense, aspect, mood and pronominal agreement as compared to finite verbs) and/or nominalization (acquisition of nominal categories such as case). ... The exact morphosyntactic characteristics of finiteness are[, however,] specific to individual languages."
Parameters

– not always easy as, cross-linguistically, "imperatives have little inflectional morphology" (Nikolaeva 2007: 139) (see also Aikhenvald 2010: 89)

Evenki (Tungus, Tungus; Nedjakov 1997: ex. 97)
\[\text{tala} \quad \text{e-kel} \quad \text{girku-ra}\]
there \text{NEG.AUX-IMP.2SG go-PTCP}
'Don't go there!'

Vietnamese (Viet-Muong, Austronesian; Thompson 1965: 221)
\[\text{uông ruou} \quad \text{chó uông ruou} \quad \text{không uông ruou}\]
drink alcohol PROH drink alcohol \text{NEG drink alcohol}
'Drink alcohol!' 'Don't drink alcohol!' 'I/you/... are not drinking alcohol.'
Parameters

- macro-area
  - based on Dryer (1989)
  - values
    - Africa (AFR): 29 languages
    - Eurasia (EU-A): 15 languages
    - South East Asia & Oceania (SEA-O): 21 languages
    - Australia & New Guinea (A-NG): 38 languages
    - North America (NAM): 36 languages
    - South America (SAM): 39 languages
    - (Creoles & Pidgins (C-P)): 1 language
Parameters

- word order
  - values: OV, VO and OV/VO
  - separate for standard negation and imperative negation, as a matter of principle …

"In Sare, a Sepik Hill language from Papua New Guinea …, an AVO order in imperatives is contrasted to AOV order in declarative clauses." (Aikhenvald 2010: 115)

"Though constituent order is typically discourse-based and fairly flexible in Zenzontepec Chatino … [i.e. OV/VO], it is firmly fixed in imperatives as VS/VAO." (Campbell 2017: 124)
Parameters

Zenzontepec Chatino (Zapotecan, Oto-Manguean; Campbell 2017: 129)

\[ ná \quad k-u-lā+tēʔé=wq \quad lyoʔo=wq \]

NEG     POT-CAUS-let.go+be.located=2PL  spouse=2PL

'Don't abandon your wives!'

– ... in practice, however
  • little variation between standard and imperative negation
  • and/or insufficient information in grammars about word order in imperatives
  • often assumptions here based on limited data
Parameters

- form of negation
  - values based on Dahl (1997) and Dryer (2013a)

- tone

Degema (Edoid, Niger-Congo; Miestamo 2005: 272)

- sóōl
- 3SG-jump.FACT
  - '(S)he jumped.'

- 'sóōl
- 3SG.NEG-jump
  - '(S)he didn't jump.'
Parameters

- affix

Maale (Omotic, Afro-Asiatic; Amha 2001: 229)

*dend-íppo*
go-2SG.PROH

'Don't go!'

- clitic

Awara (Finisterre-Huon, Trans New Guinea, Quigley 2002: 106)

*ma=i-ni-ke*  
tang-u-yo

PROH=3SG-tell-SS.PFV  
3SG-hit-2SG.DEFAULT.IMP

'Don't scold and hit him!'
Parameters

- particle

Skou (Skou, Western Skou; Donohue 2004: 263)

\(ke \; mè=m-àpe-pe \; ka\)

3SG.NF \hspace{1cm} 2SG=2SG-judge-RED \hspace{1cm} NEG

'Don't judge him!'

- verb

Evenki (Tungus, Tungus; Nedjakov 1997: ex. 97)

\(tala \; e-kel \; girku-ra\)

there \hspace{1cm} NEG.AUX-IMP.2SG \hspace{1cm} go-PTCP

'Don't go there!'
Parameters

• noun

Nadëb (Nadahup, Nadahup; Weir 1994: 295)

\textit{dooh} \quad \textit{kalapéé} \quad \textit{a-ód}

\textbf{NEG} [be.nonexistent.NMLZ] \quad \text{child} \quad \text{PFX-cry.NIND}

'The child is not crying.'

• NA

Ungarinjin (Wororan, Australian; Rumsey 1982: 101)

\textit{njuna-wa-ŋulu-yiri}

F-2PL.IRR-give.to-CONT

'Don't you people give to her!'
Parameters

– three issues

• languages with more than one form of negation

Yimas (Nor-Pondo, Sepik-Ramu; Foley 1991: 251, 276)

\[ \text{apu-tmi-nc-mpwi} \quad \text{ma-mpwi} \quad \text{ma-mpwi tmi-k} \quad \text{pack} \]
\[ \text{PROH-talk-PRS-talk} \quad \text{other-talk} \quad \text{other-talk talk-IRR} \quad \text{PROH} \]

‘Don’t talk anymore!’

⇒ treated and counted separately
Parameters

- singular versus double negation

Daga (Dagan, Trans New Guinea; Murane 1974: 56)

- ya \(\text{war-an-e}\)
- NEG get-2PL.IMP-PROH

'Don't get it!

\[\Rightarrow \text{singular to be compared to double (mainly to see distribution in SN and IN)}\]
\[\Rightarrow \text{optional double negation treated as singular AND double}\]
\[\Rightarrow \text{for global counts, negators treated separately}\]
Parameters

- unclear status of form of negation

Ju|huan (Northern Khoisan, Khoisan; Snyman 1969: 135)

(N/a) [eu] n!o'ä g!'ei

PROH[leave] well hurl stick

'(Don't) hurl the stick [well]!'

⇒ classified as "hybrid" here
⇒ i.e. particle/verb for Ju|huan
Results

I. Introduction
II. Methodological issues
III. Results
IV. Conclusion
With MV as reference point
In general

• distribution of languages

<table>
<thead>
<tr>
<th></th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
<th>Type NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN</td>
<td>54 (30.17%)</td>
<td>24 (13.41%)</td>
<td>101 (56.42%)</td>
<td>0</td>
</tr>
<tr>
<td>IN</td>
<td>58 (32.77%)</td>
<td>8 (4.52%)</td>
<td>111 (62.71%)</td>
<td>2</td>
</tr>
</tbody>
</table>

– types 2 and 3 > type 1 in SN and IN → Neg First at work in both
– significantly different distribution, though ($\chi^2 = 8.60, p < 0.05$)
– but mainly due to fewer languages of type 2 in IN
– as a result of more variation in negative constructions in SN
– proportion of type 1 languages almost identical in SN and IN
With MV as reference point

In general

- overall strength of Neg First
  - SN: $\mu$ 2.26, $\sigma$ 0.90
  - IN: $\mu$ 2.30, $\sigma$ 0.93
  - no significant difference ($p > 0.05$ according to t-test)

- so, at a general level, limited evidence for Neg First being stronger in imperatives than in declaratives (with MV as its reference point)
With MV as reference point
Macro-area

<table>
<thead>
<tr>
<th>Macro-area</th>
<th>Negation</th>
<th>$\mu$</th>
<th>$\sigma$</th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
<th>Type NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>SN</td>
<td>1.97</td>
<td>0.87</td>
<td>11 (37.93%)</td>
<td>8 (27.59%)</td>
<td>10 (34.48%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.24</td>
<td>0.95</td>
<td>10 (34.48%)</td>
<td>2 (6.90%)</td>
<td>17 (58.62%)</td>
<td>0</td>
</tr>
<tr>
<td>EU-A</td>
<td>SN</td>
<td>2.13</td>
<td>0.92</td>
<td>5 (33.33%)</td>
<td>3 (20%)</td>
<td>7 (46.67%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.20</td>
<td>0.94</td>
<td>5 (33.33%)</td>
<td>2 (13.33%)</td>
<td>8 (53.33%)</td>
<td>0</td>
</tr>
<tr>
<td>SEA-O</td>
<td>SN</td>
<td>2.52</td>
<td>0.87</td>
<td>5 (23.87%)</td>
<td>0 (0.00%)</td>
<td>16 (76.19%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.62</td>
<td>0.80</td>
<td>4 (19.05%)</td>
<td>0 (0.00%)</td>
<td>17 (80.95%)</td>
<td>0</td>
</tr>
<tr>
<td>A-NG</td>
<td>SN</td>
<td>2.42</td>
<td>0.83</td>
<td>8 (21.05%)</td>
<td>6 (15.79%)</td>
<td>24 (63.16%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.35</td>
<td>0.92</td>
<td>11 (29.73%)</td>
<td>2 (5.41%)</td>
<td>24 (64.86%)</td>
<td>1</td>
</tr>
<tr>
<td>NAM</td>
<td>SN</td>
<td>2.69</td>
<td>0.71</td>
<td>5 (13.86%)</td>
<td>1 (2.78%)</td>
<td>30 (83.33%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.75</td>
<td>0.65</td>
<td>4 (11.11%)</td>
<td>1 (2.78%)</td>
<td>31 (86.11%)</td>
<td>0</td>
</tr>
<tr>
<td>SAM</td>
<td>SN</td>
<td>1.82</td>
<td>0.91</td>
<td>20 (51.28%)</td>
<td>6 (15.38%)</td>
<td>13 (33.33%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>1.71</td>
<td>0.96</td>
<td>24 (63.16%)</td>
<td>1 (2.63%)</td>
<td>13 (34.21%)</td>
<td>1</td>
</tr>
</tbody>
</table>
With MV as reference point
Macro-area

• no significant differences between Neg First in SN and in IN in any area
  – neither in terms of the distribution of languages ($p > 0.05$ for all $\chi^2$ tests)
  – nor in terms of the overall strength of Neg First ($p > 0.05$ for all t-tests)

• but substantial differences ($p < 0.01$ after Bonferroni correction)
  – overall strength of Neg First
    • in SN: NAM, SEA-O & A-NG > SAM and NAM > AFR
    • in IN: NAM, SEA-O & A-NG > SAM
  – distribution of languages
    • in SN: NAM & SEA-O > SAM & AFR (con.) and NAM & A-NG > SAM (prog.)
    • in IN: NAM & SEA-O > SAM (con.) and NAM, SEA-O & A-NG > SAM (prog.)
With MV as reference point
Word order

<table>
<thead>
<tr>
<th>Word order</th>
<th>Negation</th>
<th>µ</th>
<th>σ</th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
<th>Type NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>OV</td>
<td>SN</td>
<td>1.93</td>
<td>0.91</td>
<td>40 (44.94%)</td>
<td>15 (16.85%)</td>
<td>34 (38.20%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.00</td>
<td>0.98</td>
<td>41 (47.13%)</td>
<td>5 (5.75%)</td>
<td>41 (47.13%)</td>
<td>1</td>
</tr>
<tr>
<td>VO</td>
<td>SN</td>
<td>2.63</td>
<td>0.73</td>
<td>10 (14.29%)</td>
<td>6 (8.57%)</td>
<td>54 (77.14%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.62</td>
<td>0.78</td>
<td>13 (17.81%)</td>
<td>2 (2.74%)</td>
<td>58 (79.45%)</td>
<td>1</td>
</tr>
<tr>
<td>OV</td>
<td>VO</td>
<td>SN</td>
<td>2.45</td>
<td>0.83</td>
<td>4 (20.00%)</td>
<td>3 (15.00%)</td>
<td>13 (65.00%)</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>2.47</td>
<td>0.87</td>
<td>4 (23.53%)</td>
<td>1 (5.88%)</td>
<td>12 (70.59%)</td>
<td>0</td>
</tr>
</tbody>
</table>

- again, no significant differences at all between Neg First in SN and Neg First in IN
With MV as reference point
Word order

• but in both SN and IN, word order affects Neg First
  – i.e. VO > OV | VO > OV in
    • distribution of languages
    • overall strength of Neg First
  – with significant differences (p < 0.017 after Bonferroni correction) between VO and OV in all cases

• what is the relationship between Neg First, word order and macro-areas?
With MV as reference point
Word order and macro-area

• low absolute numbers but still...

• SN: NAM, SEA-O & A-NG > SAM for Neg First
  – SEA-O: 85.71% = VO and 16 of those 18 languages = Type 3
  – A-NG: 71.05% = OV but 16 of those 27 languages = Type 3!
  – NAM: 36.11% = OV but 8 of those 13 languages = Type 3!
  – SAM: 58.97% = OV and 14 of those 23 languages = Type 1

• similar figures for IN
With MV as reference point
Form of negation

- no differences between SN and IN
- unsurprisingly, Neg First stronger in double neg.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Double</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SN</strong></td>
<td>197 (85.65%)</td>
<td>33 (14.35%)</td>
<td>0</td>
</tr>
<tr>
<td><strong>IN</strong></td>
<td>165 (87.30%)</td>
<td>24 (12.70%)</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negation</th>
<th>μ</th>
<th>σ</th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>2.14</td>
<td>0.98</td>
<td>83 (42.13%)</td>
<td>4 (2.03%)</td>
<td>110 (55.84%)</td>
</tr>
<tr>
<td>IM</td>
<td>2.19</td>
<td>0.98</td>
<td>66 (40.00%)</td>
<td>1 (0.61%)</td>
<td>98 (59.39%)</td>
</tr>
<tr>
<td><strong>Double</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>2.91</td>
<td>0.38</td>
<td>1 (3.03%)</td>
<td>1 (3.03%)</td>
<td>31 (93.94%)</td>
</tr>
<tr>
<td>IM</td>
<td>2.82</td>
<td>0.59</td>
<td>2 (8.33%)</td>
<td>0 (0.00%)</td>
<td>22 (91.67%)</td>
</tr>
</tbody>
</table>
With MV as reference point
Form of negation

- form of SN and IN negators

<table>
<thead>
<tr>
<th></th>
<th>SN</th>
<th>IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>tone</td>
<td>3 (1.22%)</td>
<td>2 (0.95%)</td>
</tr>
<tr>
<td>affix</td>
<td>90 (36.59%)</td>
<td>80 (38.10%)</td>
</tr>
<tr>
<td>clitic</td>
<td>7 (2.85%)</td>
<td>4 (1.90%)</td>
</tr>
<tr>
<td>clitic/particle</td>
<td>1 (0.41%)</td>
<td>1 (0.48%)</td>
</tr>
<tr>
<td>particle</td>
<td>112 (45.53%)</td>
<td>102 (48.57%)</td>
</tr>
<tr>
<td>particle/verb</td>
<td>13 (5.28%)</td>
<td>6 (2.86%)</td>
</tr>
<tr>
<td>verb</td>
<td>19 (7.72%)</td>
<td>15 (7.14%)</td>
</tr>
<tr>
<td>noun</td>
<td>1 (0.41%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>NA</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

no differences between SN and IN
With MV as reference point
Form of negation

- form of SN and IN negators and Neg First

<table>
<thead>
<tr>
<th>Form</th>
<th>Negation</th>
<th>μ</th>
<th>σ</th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>affix</td>
<td>SN</td>
<td>1.56</td>
<td>0.89</td>
<td>64 (71.11%)</td>
<td>2 (2.22%)</td>
<td>24 (26.67%)</td>
</tr>
<tr>
<td>IN</td>
<td>1.59</td>
<td>0.91</td>
<td>56 (70.00%)</td>
<td>1 (1.25%)</td>
<td>23 (28.75%)</td>
<td></td>
</tr>
<tr>
<td>particle</td>
<td>SN</td>
<td>2.49</td>
<td>0.85</td>
<td>26 (23.21%)</td>
<td>5 (4.46%)</td>
<td>81 (72.32%)</td>
</tr>
<tr>
<td>IN</td>
<td>2.49</td>
<td>0.86</td>
<td>25 (24.51%)</td>
<td>2 (1.96%)</td>
<td>75 (73.53%)</td>
<td></td>
</tr>
<tr>
<td>verb</td>
<td>SN</td>
<td>2.26</td>
<td>0.99</td>
<td>7 (36.84%)</td>
<td>0 (0.00%)</td>
<td>12 (63.16%)</td>
</tr>
<tr>
<td>IN</td>
<td>2.73</td>
<td>0.70</td>
<td>2 (13.33%)</td>
<td>0 (0.00%)</td>
<td>13 (86.67%)</td>
<td></td>
</tr>
</tbody>
</table>

- no significant differences between SN and IN
- but in both SN and IN: Neg First in particles and verbs > Neg First in affixes
With MV as reference point
Form of negation and word order

<table>
<thead>
<tr>
<th>Word order</th>
<th>Negation</th>
<th>Affix</th>
<th>Particle</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>OV</td>
<td>SN</td>
<td>60 (50.00%)</td>
<td>51 (42.50%)</td>
<td>9 (7.50%)</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>54 (51.92%)</td>
<td>45 (43.27%)</td>
<td>5 (4.81%)</td>
</tr>
<tr>
<td>VO</td>
<td>SN</td>
<td>20 (25.64%)</td>
<td>49 (62.82%)</td>
<td>9 (11.54%)</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>18 (25.53%)</td>
<td>44 (61.97%)</td>
<td>9 (12.68%)</td>
</tr>
<tr>
<td>OV</td>
<td>VO</td>
<td>SN</td>
<td>9 (40.91%)</td>
<td>12 (54.55%)</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>8 (36.36%)</td>
<td>13 (59.09%)</td>
<td>1 (4.55%)</td>
</tr>
</tbody>
</table>

- Neg First in VO > Neg First in OV – Neg First in particles > Neg First in affixes
- % of particles in VO > % particles in OV
With MV as reference point
Form of negation and macro-area

• low absolute numbers but still...

• SN: NAM, SEA-O & A-NG > SAM for Neg First
  – SEA-O: particles 5x > affixes (~ 85.71% = VO)
  – A-NG: particles 2.5x > affixes (↔ 71.05% = OV)
  – NAM: particles ≈ affixes
  – SAM: affixes 2.2x > particles (~ 58.97% = OV)

• similar figures for IN
With FE as reference point
In a nutshell

- versus Neg First with MV as reference point
  - no substantial differences
  - except for higher numbers of Type NA languages

- no significant differences in Neg First between SN and IN

- roughly similar results regarding Neg First & ...
  - macro-areas
  - word order
  - forms of negation
Conclusion

I. Introduction
II. Methodological issues
III. Results
IV. Conclusion
Main findings
In general

- Neg First at work in SN and IN
- macro-area: strongest in NAM, SEA-O and A-NG; weakest in SAM and AFR
  - ~ work by, for instance, Güldemann (2007), Reesink (2002) and Vossen (2016)
- word order: stronger in VO than in OV
  - ~ Dryer's (2013) relevant chapters in WALS
- form of negation: stronger in particles than in affixes
  - ~ well-known preference for suffixation to prefixation
- no real differences between MV and FE as reference points
Main findings
SN vs IN

• no substantial differences in
  – singular versus double negation
  – forms of negation
  – or Neg First

• languages like Popoloca (Popolocan, Oto-Manguean; Kalstrom Dolson et al. 1995: 354)

  \[\text{cui-hya} \quad \text{ch'án} \quad \text{chéró-cjuia} \quad \text{cjín}\]
  \[\text{come.PRET-NEG} \quad 3SG \quad \text{PROH-go.PRET} \quad \text{far}\]

  'He didn't come.'
  'Don't go far!'
Main findings
SN vs IN

– ... but also languages like Una (Mek, Trans New Guinea; Louwerse 1988: 88-89)

\texttt{a-nyi ni kum bi-ngnun}
that-person 1SG NEG know-1SG.CONT
'I don't know that person.'

\texttt{uram e-na mem}
talk speak-INF PROH
'Don't talk!'
**Why is Neg First not stronger in IN than in SN?**

- **Horn's (2001: 450) hypothesis**
  - using the example of *kill him – oops – not!*
  - centers around possible confusion between positive and negative imperatives

- however, in Una (Louwerse 1988: 36), for instance, no such confusion occurs

```
eb-rum                       uram       e-na      mem
speak-IM_IMP.2SG             talk       speak-INF PROH
'Speak!'
'Don't talk!'```
Why is Neg First not stronger in IN than in SN?

- languages with different verb forms in positive and negative imperatives
  - 40.40% in van der Auwera & Lejeune's (2013) large convenience sample
  - 46.91% in our sample
- yet, no differences in Neg First between [+ IMP verb] and [- IMP verb] languages either
- so...
  - other ways of knowing "beforehand" whether imperatives are going to be negative or positive (e.g. intonation, context)?
  - or simply no difference in need for Neg First between declaratives and imperatives?
Thank you for your attention!

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United Kingdom
d.vanolmen@lancaster.ac.uk