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On the semantics and pragmatics of negation and their effects on the structure of negatives in a cross- linguistic perspective

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Abstract

Cross-linguistic typological work on negation has paid most attention to standard negation, i.e. the negation of declarative verbal main clauses (Dahl 1979; Payne 1985; Dryer 2013a,b,c; Miestamo 2005, 2013). Other aspects of negation that have received at least some attention in large-scale typological studies include the negation of imperatives (van der Auwera & Lejeune 2013), the negation of stative (nonverbal, existential, etc.) predication (Croft 1991; Eriksen 2011; Veselinova 2013), the negation of indefinite pronouns (Haspelmath 1997, 2013; Van Alsenoy 2014), abessives (Stolz et al. 2007), the effects of negation on the marking of NPs (Miestamo 2014), and negative replies to questions (Holmberg 2015) – for a recent overview of typological work on negation, see Miestamo 2017. Currently, typological work is underway on various aspects of the typology of negation: e.g., Veselinova's work on negative lexicalizations and the relationship between negation and TAM, Miestamo & Koptjevskaja Tamm's work on antonyms, Van Olmen's work on negative imperatives, and Mauri & Sansò's work on anticircumstantial clauses as well as Miestamo, Shagal & Silvennoinen's work on negation in dependent clauses.

In typological work, explanations for cross-linguistic generalizations are most often sought in the functional properties of the phenomenon under study. Such explanations include, for example, economy-based explanations of cross-linguistic markedness patterns, e.g. explaining the markedness of the plural by its lower text frequency as compared to the singular. In this talk, instead of first presenting typological generalizations on the structure of negatives and then discussing their possible functional explanations, I will turn the perspective around, start from the functional properties (semantics, pragmatics, processing etc) of negation and see what kinds of negative structures they may give rise to. I will discuss ways in which negation differs from affirmation in its semantics and pragmatics, paying attention for example to the discourse context of negation, and how such differences can be seen as motivating various cross-linguistically recurring structural patterns in negatives. This shift of perspective will help us to see connections between different typological properties of negatives that might otherwise go unnoticed.

Outline

- Background
- The discourse context of negation
- Stativity and dynamicity
- Reality status
- Frequency

Background

The domain of negation

- Clausal negation
 - standard negation
 - negation in non-declaratives
 - negation of stative predictions
 - negation in non-main clauses
 - negative lexicalizations.
- Non-clausal negation
 - negative replies
 - negative indefinites and quantifiers
 - negative derivation, case marking and adpositions
- Other aspects of negation
 - scope of negation
 - negative polarity
 - marking of NPs in the scope of negation
 - reinforcing negation
 - negation, coordination and complex sentences
 - Further: neg-raising, contrastive negation, metalinguistic negation, diachrony, etc.

For an overview, see:

Miestamo, Matti. 2017. Negation. In Alexandra Aikhenvald & R.M.W. Dixon (eds.), *Cambridge Handbook of Linguistic Typology*, 405-439. Cambridge: CUP.

This is also the structure of the Questionnaire for describing the negation system of a language. Available online via <http://tulquest.huma-num.fr/fr/node/134>.

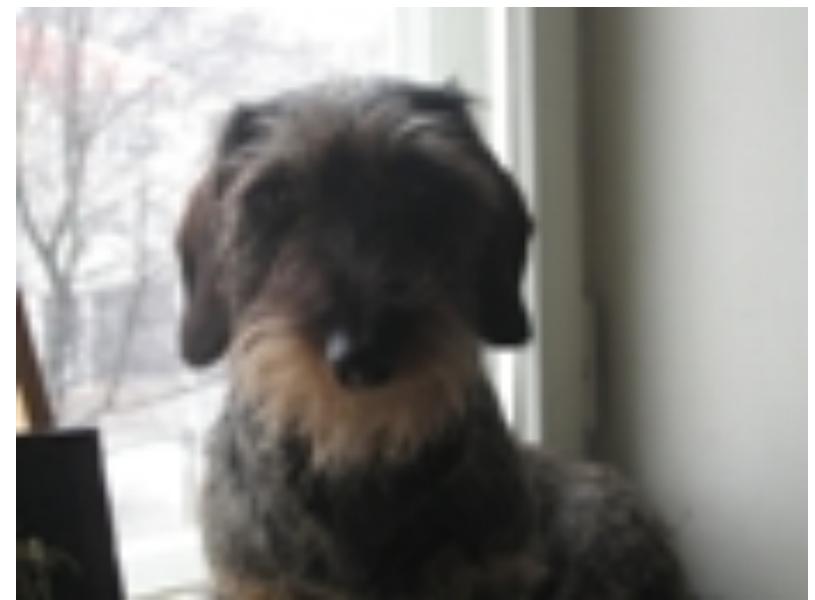
Standard negation

- Informally: The basic means a language has for negating declarative main clauses with a verbal predicate..
- Definition (comparative concept):

“A standard negation construction is a construction whose function is to modify a verbal declarative main clause expressing a proposition p in such a way that the modified clause expresses the proposition with the opposite truth value to p , i.e. $\sim p$, or the proposition used as the closest equivalent to $\sim p$ in case the clause expressing $\sim p$ cannot be formed in the language, and that is (one of) the productive and general means the language has for performing this function.” (Miestamo 2005: 42)

Standard negation

- *King Arthur was barking on the balcony.*
- *King Arthur was not barking on the balcony.*
- *King Arthur barks on the balcony.*
- *King Arthur does not bark on the balcony.*



Large-scale typological work on negation

- Standard negation
 - Dahl 1979; Payne 1985; Forest 1993; Honda 1996; Dryer 2013a,b,c [2005, 2011a,b]; Miestamo 2005, 2013[2005]; Miestamo & van der Auwera 2011.
- Negative imperatives (prohibitives)
 - van der Auwera & Lejeune 2013[2005]; van Olmen ongoing.
- Stative predictions
 - Croft 1991; Eriksen 2011; Veselinova 2013, 2015.
- Negative indefinites
 - Kahrel 1996; Haspelmath 1997, 2013[2005]; Van Alsenoy 2014.
- Abessives
 - Stolz et al. 2007.
- Effects of negation on the marking on NPs
 - Miestamo 2014.
- Negative replies to questions
 - Holmberg 2015.

Symmetric and asymmetric negation (Miestamo 2005)

- In symmetric negation, negatives do not differ structurally from affirmatives except for the presence of the negative marker(s).
- In asymmetric negation, there are structural differences, i.e. asymmetry, between affirmatives and negatives in addition to the presence of the negative marker(s).
- Symmetry and asymmetry can be observed in constructions and paradigms.
- Asymmetric negation can be further divided into subtypes.

Symmetric constructions

Negatives differ from their corresponding affirmatives by the mere presence of negative markers.

Taba (Bowden 1997: 388)

- | | |
|--|---|
| a. <i>n-han ak-la</i>
3SG-go ALL-sea
'She's going seawards.' | b. <i>n-han ak-la te</i>
3SG-go ALL-sea NEG
'She's not going seawards.' |
|--|---|

Washo (Jacobsen 1964: 603, 604–605)

- | | |
|---|---|
| a. <i>l^e-ímeʔ-hu-i</i>
1-drink-PL.INCL-IMPF
'We are drinking.' | b. <i>l^e-ímeʔ-é's-hu-i</i>
1-drink-NEG-PL.INCL-IMPF
'We are not drinking.' |
|---|---|

Symmetric paradigms

The correspondences between the members of the paradigms used in affirmatives and negatives are one-to-one.

Romanian (Indo-European, Romance)

a. (a) <i>cânta</i> ‘to sing’ PRS		b. (a) <i>cânta</i> ‘to sing’ IMPF		
	AFF	NEG	AFF	
1SG	<i>cânt</i>	<i>nu cânt</i>	<i>cântam</i>	<i>nu cântam</i>
2SG	<i>cânți</i>	<i>nu cânți</i>	<i>cântai</i>	<i>nu cântai</i>
3SG	<i>cântă</i>	<i>nu cântă</i>	<i>cânta</i>	<i>nu cânta</i>
1PL	<i>cântăm</i>	<i>nu cântăm</i>	<i>cântam</i>	<i>nu cântam</i>
2PL	<i>cântați</i>	<i>nu cântați</i>	<i>cântați</i>	<i>nu cântați</i>
3PL	<i>cântă</i>	<i>nu cântă</i>	<i>cântau</i>	<i>nu cântau</i>

(constructed examples)

Asymmetric constructions

Negatives differ from their corresponding affirmatives by something else than the mere presence of negative marker(s).

Diola Fogny (Sapir 1965: 33)

- | | |
|---------------------|---------------------|
| a. <i>pan-i-maj</i> | b. <i>let-i-maj</i> |
| FUT-1SG-want | FUT.NEG-1SG-want |
| ‘I will want.’ | ‘I won’t want.’ |

Makah (Matthew Davidson, p.c.)

- | | |
|-----------------------------|-------------------------------|
| a. <i>weʔič-(b)u-í</i> | <i>łaxuk-ºiq</i> |
| sleeping-PST-IND.3SG | man-ART |
| ‘The man was sleeping’ | |
| b. <i>wiki-(b)u-í</i> | <i>weʔič</i> <i>łaxuk-ºiq</i> |
| NEG-PST-IND.3SG | sleeping man-ART |
| ‘The man was not sleeping.’ | |

Asymmetric paradigms

Burmese (Sino-Tibetan, Burmese-Lolo)

- a. *θwâ-dé*

go-ACL

'goes, went'

- b. *θwâ-mé*

go-POT

'will go'

- c. *θwâ-bí*

go-PRF

'has gone'

- d. *ma-θwâ-bû*

NEG-go-NEG

'does/did/will not go, has not gone' (Cornyn 1944: 12–13)

The correspondences between the members of the paradigms used in affirmatives and negatives are not one-to-one.

FORM
(linguistic
structure)

Affirmative



Negative

FUNCTION
(semantics,
pragmatics)

Affirmation

Negation



FORM
(linguistic
structure)

Affirmative



Negative

-



FUNCTION
(semantics,
pragmatics)

Affirmation

- reality
- stativity/dynamicity
- neutral context
- high frequency
- etc

Negation

- non-reality
- stativity
- (pre)supposed context
- low frequency
- etc

Performance–Grammar Correspondence Hypothesis (PGCH)

- Grammars have conventionalized syntactic structures in proportion to their degree of preference in performance, as evidenced by patterns of selection in corpora and by ease of processing in psycholinguistic experiments.
(Hawkins 2004: 3)

The discourse context of negation

The discourse context of negation

- Negatives typically occur in contexts where the corresponding affirmative is supposed or at least somehow present.

A: *Oh, King Arthur didn't bite anyone!*

B: *Erm... why... does he usually do that?*

- Givón 1978, cf. Tottie 1991, Thompson 1998

Effects of the discourse context of negation: neutralization

- With the corresponding affirmative present in the context, there is less need to specify the temporal, aspectual or modal properties or the participants in the negative than in the affirmative.
- Discourse preference in languages in general, and in many languages, it has grammaticalized as neutralization of grammatical distinctions in negatives.
- The discourse effect is being tested in our ongoing work (Miestamo, Shagal & Silvennoinen).

Amele (Roberts 1987: 224–225)

a. f-ec ‘to see’

	TDPST	YDPST	RMPST	NEG.PST
1SG	<i>fi-g-a</i>	<i>fi-g-an</i>	<i>fe-em</i>	<i>qee + fe-l-em</i>
2 SG	<i>fa-g-a</i>	<i>fa-g-an</i>	<i>fe-em</i>	<i>fe-l-em</i>
3 SG	<i>fe-i-a</i>	<i>fe-i-an</i>	<i>fe-n</i>	<i>fe-l</i>
1DU	<i>fo-w-a</i>	<i>fo-w-an</i>	<i>fo-h</i>	<i>fo-lo-h</i>
2/3DU	<i>fe-si-a</i>	<i>fe-si-an</i>	<i>fe-sin</i>	<i>fe-le-sin</i>
1PL	<i>fo-q-a</i>	<i>fo-q-an</i>	<i>fo-m</i>	<i>fo-lo-m</i>
2/3PL	<i>fe-ig-a</i>	<i>fe-ig-an</i>	<i>fe-in</i>	<i>fe-l-ein</i>

(Subtype A/Cat/TAM/Neutr in Miestamo 2005)

Hunzib (van den Berg 1995: 76–77)

a. *čax* ‘write’

	AFFIRMATIVE	NEGATIVE
PRETERITE	<i>čáx-er</i>	<i>čax-ís</i>
PRESENT 1/2 PERSON	<i>čáx-čo</i>	<i>čax-č-át'</i>
PRESENT 3 PERSON	<i>čax</i>	<i>čax-át'</i>
AORIST	<i>čax-á</i>	—
FUTURE	<i>čax-ár</i>	<i>čax-óys</i>

b. *-eλ'e* ‘go’

	AFFIRMATIVE	NEGATIVE
PRETERITE	<i>eλ'e-r</i>	<i>eλ'-ís</i>
PRESENT 1/2 PERSON	<i>eλ'e-č</i>	<i>eλ'e-č-át'</i>
PRESENT 3 PERSON	<i>eλ'e</i>	<i>eλ'-át'</i>
AORIST	<i>eλ'-á</i>	—
FUTURE	<i>eλ'-ár</i>	<i>eλ'-óys</i>

(Subtype A/Cat/TAM/Neutr in Miestamo 2005)

Harar Oromo (Owens 1985: 66)

a. ‘go’, PST.AFF

1SG *deem-e*

2SG *deem-t-e*

3SG.M *deem-e*

3SG.F *deem-t-e*

1PL *deem-n-e*

2PL *deem-t-ani*

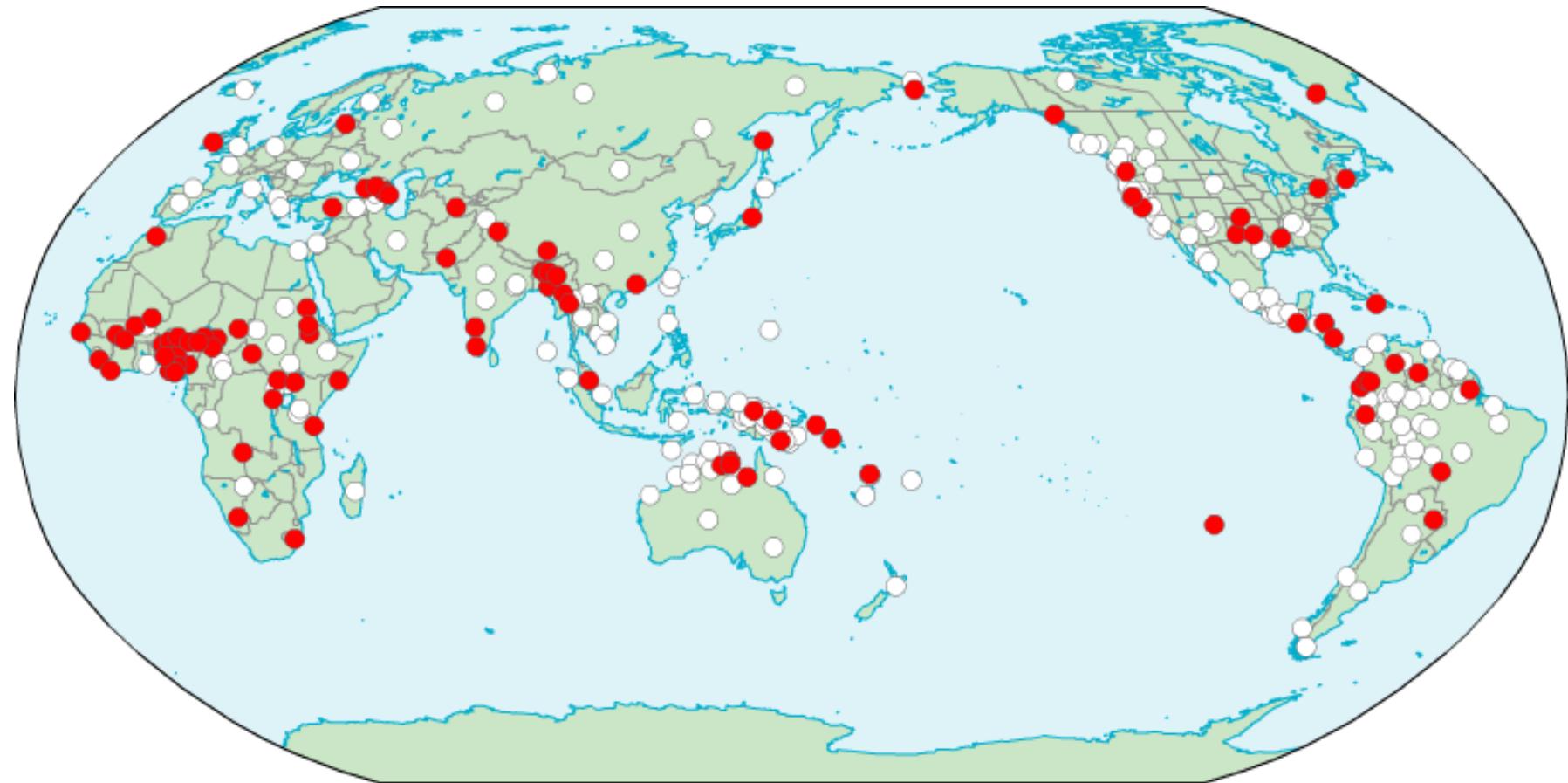
3PL *deem-ani*

b. ‘go’, PST.NEG

ALL PERSONS *hin-déem-n-e*

(Subtype A/Cat/PNG/Neutr in Miestamo 2005)

Subtype A/Cat/TAM



- 1. [201] Not-A/Cat/TAM
- 2. [96] A/Cat/TAM

NB! Not all of these involve neutralization. Neutralization of TAM categories (A/Cat/TAM/Neutr) found in 19% of the sample languages, neutralization of PNG categories (A/Cat/PNG/Neutr) is rare, just 2 % of the sample languages.

Effects of the discourse context of negation: emphasis

- In its typical discourse-context, negation involves contrast with something (pre)supposed in the context and as an abrupt speech act therefore often needs reinforcement.
- Discourse preference for emphasising negation may grammaticalize as
 - emphatic marking in standard negation
 - double/multiple negator constructions via Jespersen Cycles.

Meithei (Chelliah 1997: 133, 228)

a. *təw-i*

do-NHYP

‘(She) does.’

b. *təw-e*

do-ASS

‘(Yes, she) has.’

c. *əy fotostat təw-tə-e*

I photostat do-NEG-ASS

‘I haven't made copies.’

(Type A/Emph in Miestamo 2005)

Type A/Emph



Double/multiple negators

French (constructed example)

Elle ne viendra pas.

3SG.F NEG come.FUT.3SG NEG

‘She will not come.’

Nese (Crowley 2006: 70)

Ø-se-be-yes-te

3SG.R-NEG-NEG-walk-NEG

‘(S)he did not walk.’

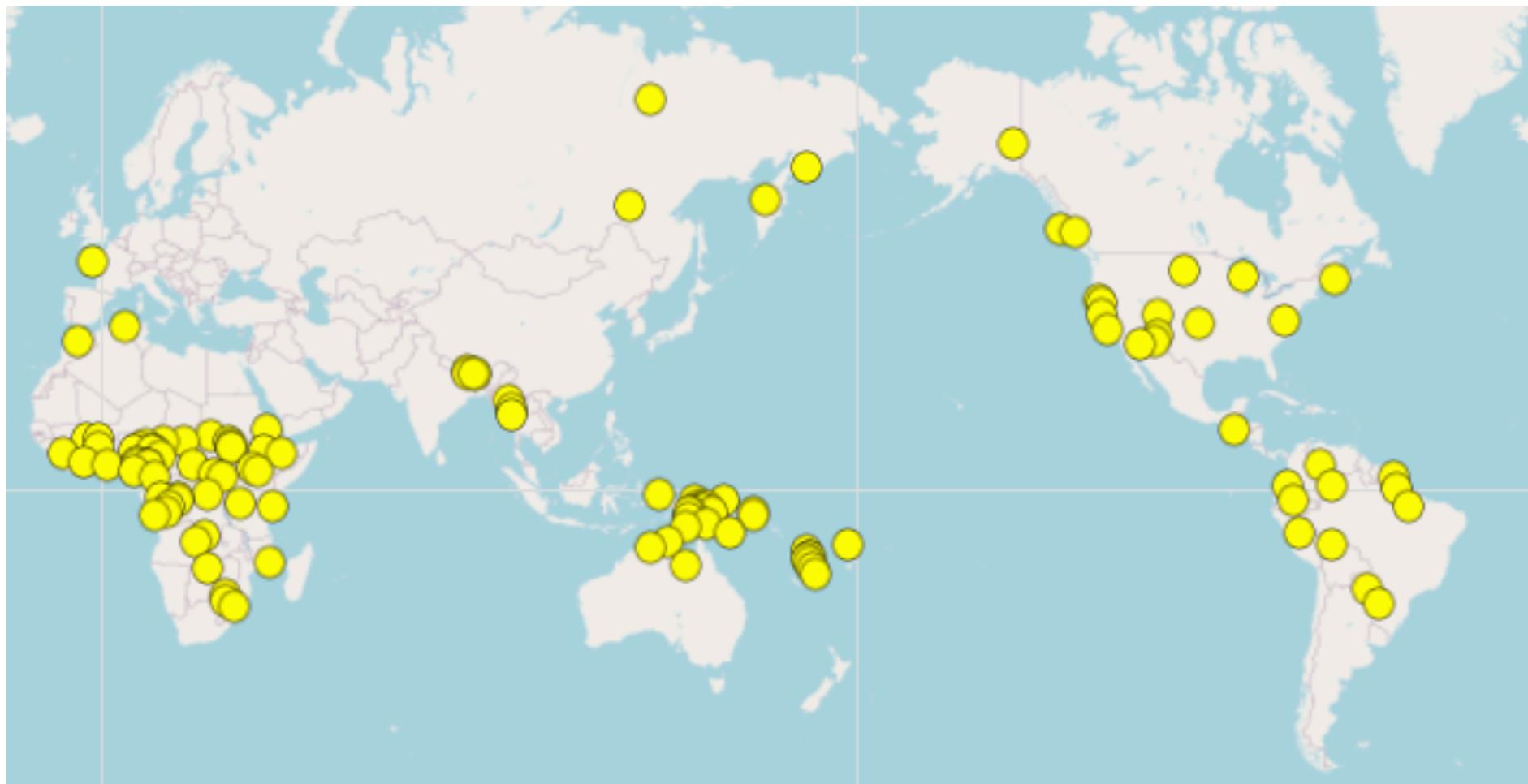
Lewo (Early 1994: 405)

pe-re a-pim re poli

NEG-NEG 3PL.S-R.come NEG NEG

‘They didn’t come.’

Languages with double/multiple negators: 119/1157 (Dryer 2013)

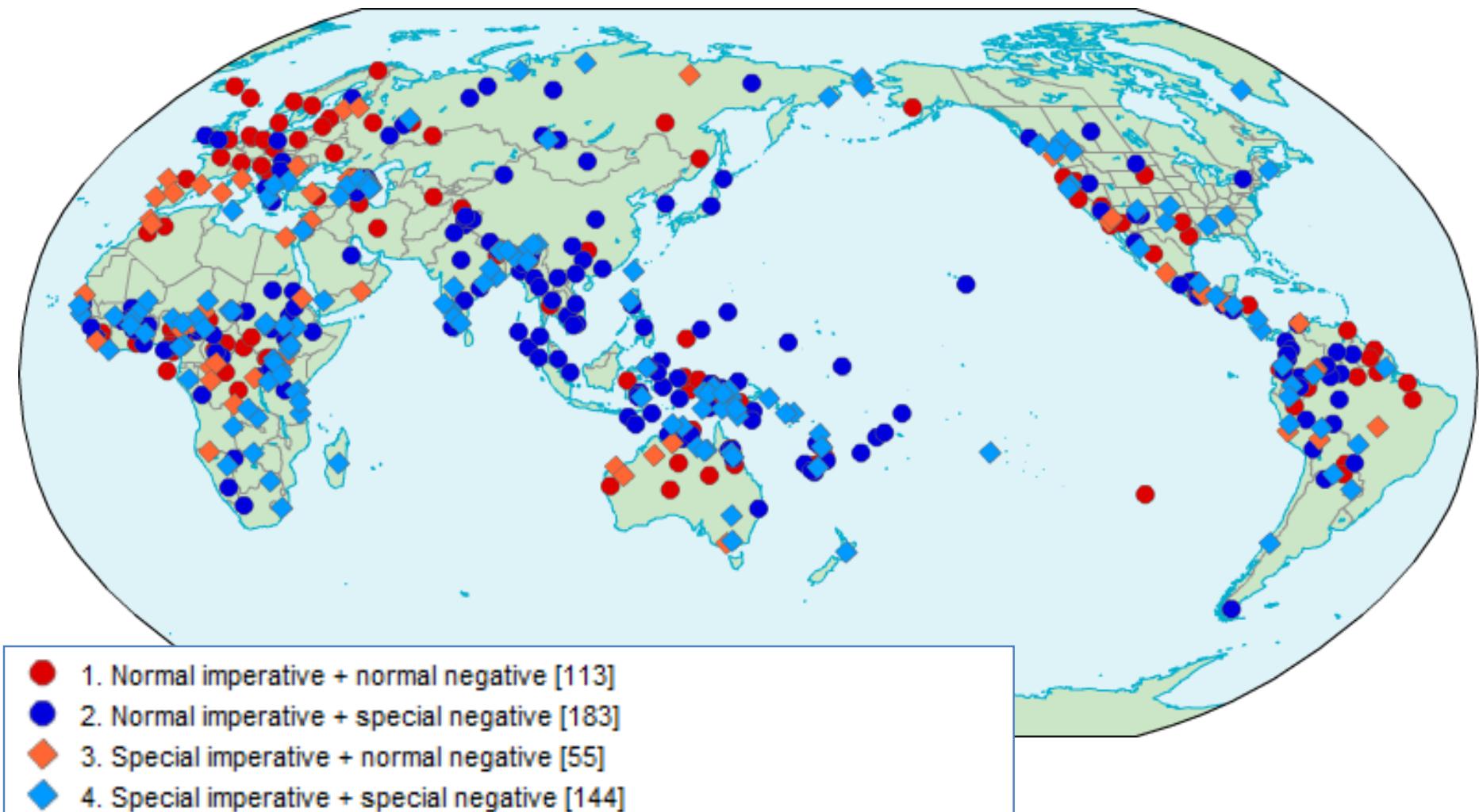


Effects of the discourse context of negation: emphasis

- Perhaps also:
 - prohibitives as a special speech act also partly related to emphasis (cf. van der Auwera 2006)
 - Neg-First partly motivated by emphasis, important to express negation early in the sentence (cf. MaOP, Hawkins 2004)

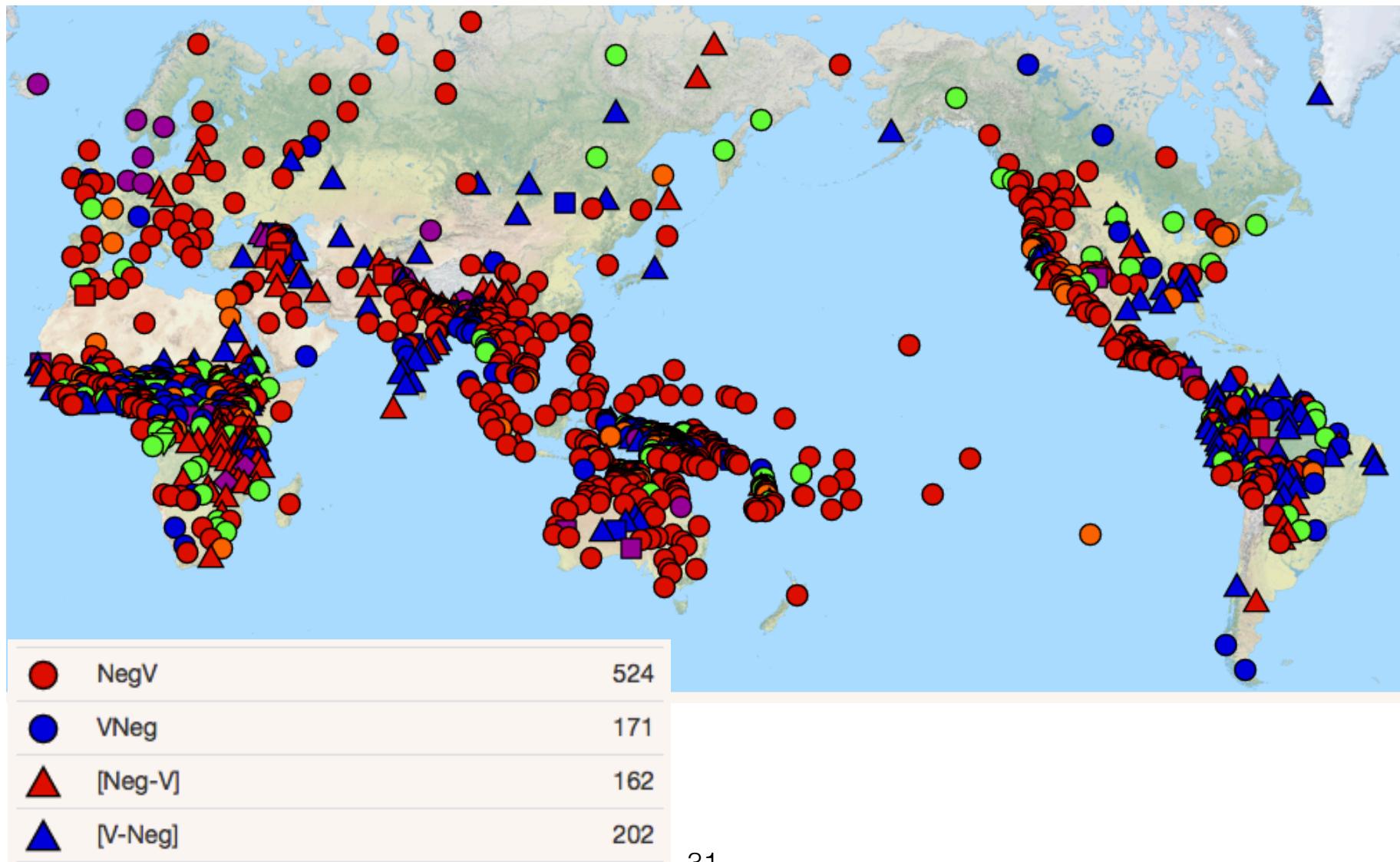
Negative imperatives

(van der Auwera & Lejeune 2005)



Position of negative marker

(Dryer 2013b)



Effects of the discourse context of negation: referentiality

- Negation and referentiality (Givón 1978: 72)

<i>John met a girl yesterday</i>	<i>John didn't meet a girl yesterday</i>
<i>... and Fred met one too</i>	<i>... and Fred didn't meet one either</i>
<i>... and Fred met her too</i>	<i>*... and Fred didn't meet her either</i>

- Negative sentences are not used to introduce new referents to the discourse. Referential objects are first introduced in affirmatives and appear as definite in negatives.
- Some languages have grammaticalized this discourse preference in their grammars.

NPs under negation

Araki (Alex François, p.c.)

- a. *nam les-i-a jau lo lepä*
1SG.R see-OBJ.REF-3SG coconut.crab LOC ground
‘I’ve seen the/a coconut crab on the ground.’
- b. *nam les-i-a jau mo-hese lo lepä*
1SG.R see-OBJ.REF-3SG coconut.crab 3.R-one LOC ground
‘I’ve seen a coconut crab on the ground.’
- c. *nam je les re jau lo lepä*
1SG.R NEG see PART coconut.crab LOC ground
‘I haven’t seen any coconut crab on the ground.’
- d. *nam je les-i-a jau lo lepä*
1SG.R NEG see-OBJ.REF-3SG coconut.crab LOC ground
‘I haven’t seen the coconut crab on the ground.’
[but not *‘I haven’t seen a coconut crab.’]

NPs under negation

Araki (Alex François, p.c.)

- a. **nam je les-i-a jau mo-hese lo lepä*
1SG.R NEG see-OBJ.REF-3SG c.crab 3.R-one LOC ground
*'I haven't seen a coconut crab on the ground.'
- b. **nam les re jau lo lepä*
1SG.R see PART coconut.crab LOC ground
*'I have seen any coconut crab on the ground.'
- c. *na pa han re jau*
1SG.IRR FUT eat PART coconut.crab
'I will eat a/some coconut crab.'
- d. *na pa han-i-a jau*
1SG.IRR FUT eat-OBJ.REF-3SG coconut.crab
'I will eat the coconut crab.'

NPs under negation

French (constructed examples)

- a. *je vois un chien*
I see.1SG INDEF dog
'I see a dog.'
- b. *je ne vois pas de chien*
I NEG see.1SG NEG PART dog
'I do not see a dog.'
- c. *il y a un livre sur la table*
EXIST INDEF book on DEF table
'There is a book on the table.'
- d. *il n'y a pas de livre sur la table*
EXIST.NEG PART book on DEF table
'There is not a book on the table.'

NPs under negation

Finnish (constructed examples)

- | | |
|---|--|
| a. <i>söin banaani-n</i>
eat.PST.1SG banana-GEN
'I ate {a/the} banana.' | b. <i>söin banaani-t</i>
eat.PST.1SG banana-PL.NOM
'I ate the bananas.' |
| c. <i>söin banaani-a</i>
eat.PST.1SG banana-PART
'I {ate some / was eating
{a/the}} banana.' | d. <i>söin banaane-j-a</i>
eat.PST.1SG banana-PL-PART
'I {ate (some) / was eating
{(some)/the}} bananas.' |

Finnish (constructed examples)

- | | |
|---|--|
| a. <i>en syönyt banaani-a</i>
NEG.1SG eat.PST.PTCP banana-PART
'I {didn't eat / wasn't eating} {a/the} banana.' | |
| b. <i>en syönyt banaane-j-a</i>
NEG.1SG eat.PST.PTCP banana-PL-PART
'I {didn't eat / wasn't eating} (the) bananas.' | |

NPs under negation

Xhosa (Taraldsen 2010: 1526)

- a. *ndi-bon-a aba-fundi*
1SG-see-FV 2-student
'I see the/some students'
- b. *a-ndi-bon-i ba-fundi*
NEG-1SG-see-FV 2-student
'I don't see any students'
- c. *a-ndi-ba-bon-i aba-fundi*
NEG-1SG-2-see-FV 2-student
'I don't see the students'
'There are some student I don't see.'

Cf. work on Nguni languages
by Miestamo & al. (2019);
Bloom Ström & Miestamo
(forthcoming).

NPs under negation

Changes in marking, Miestamo 2014:

Partitive/genitive case used	Finnic: Finnish, Estonian, Votic, Liv, etc.; Baltic: Lithuanian, Latvian; Slavic: Russian, Ukrainian, Polish; Basque
Non-specific (partitive) determiner used	Araki, Maëva, Samoan and various other Polynesian languages; French
Omission / restrictions on use of article	Albanian; Hungarian; Nambikuára
Absence of default determiner possible	Kita Maninka; Bantu: Xhosa, Zulu, Bemba, Bobangi, Kinyarwanda, Luganda
Class marker obligatory	Nunggubuyu
Absence of referentiality marker on verb	Hdi
Partitive marker on verb	Paamese
Effects on focus marking	Aghem; Kanuri; Lavukaleve
Effects on alignment	Northern Ge: Kayapó, Canela, Apinayé; Yimas

Stativity vs. dynamicity

Stativity vs. dynamicity

- The situations reported by negative statements are stative (b,d), but affirmatives can describe both stative (a) and dynamic (c) situations.

English (constructed examples)

- chris knows the song*
- chris does not know the song*
- chris drank the coffee*
- chris did not drink the coffee*

- Negatives construed as stative predictions in many languages (Type A/Fin in Miestamo 2005).

Apalaí (Cariban)

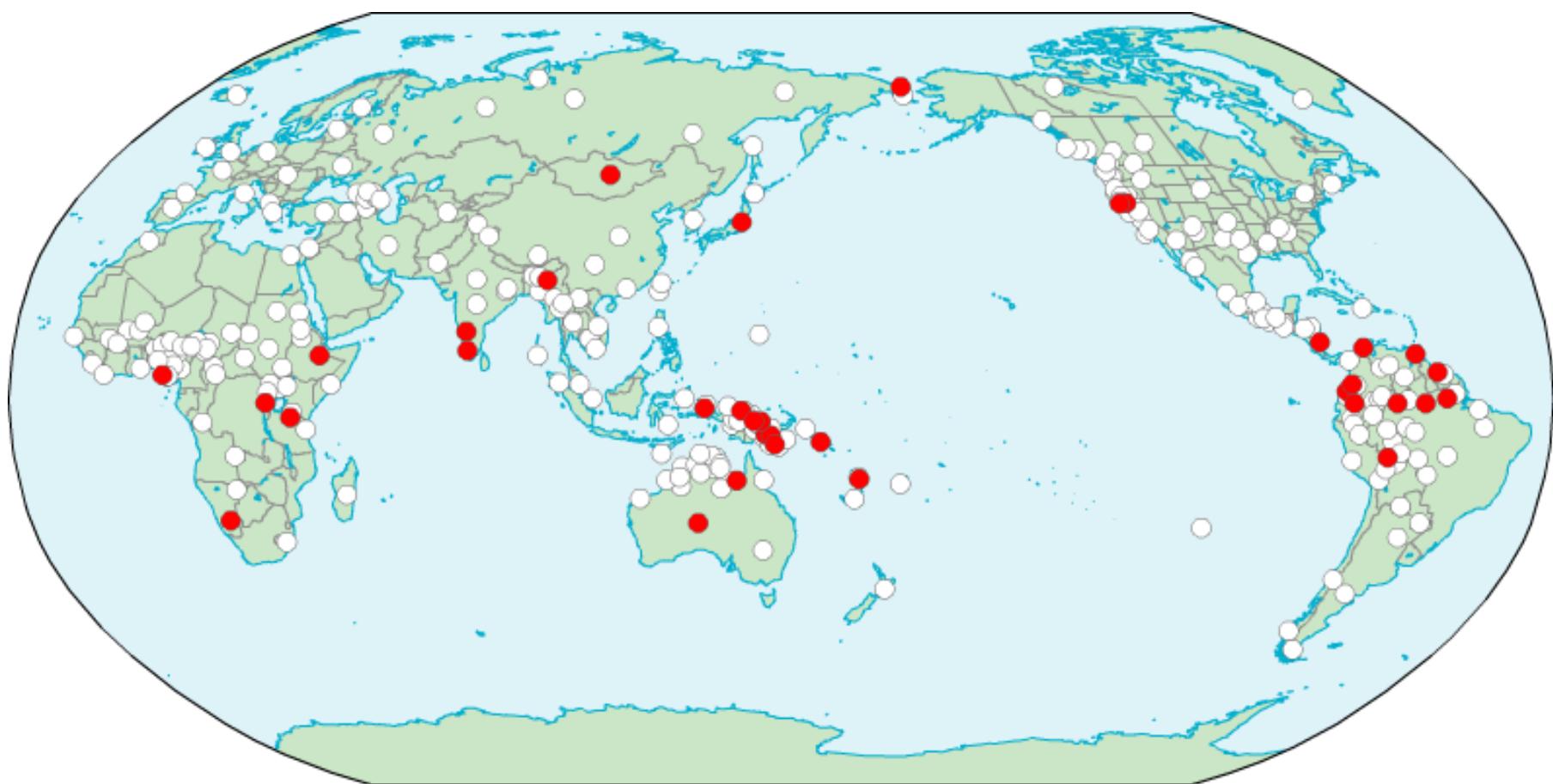
- a. *isapokara* [Ø]-*ene-no*
jakuruaru.lizard [1>3]-see-IMPST
'I saw a jakuruaru lizard.' (Koehn & Koehn 1986:64)
- b. *isapokara* *on-ene-pyra a-ken*
jakuruaru.lizard 3-see-NEG 1-be.IMPST
'I did not see a jakuruaru lizard.' (Koehn & Koehn 1986:64)

Sentani (Hartzler 1994: 52–53)

- a. *neyæ u-eu-ne*
he say-3SG.SUBJ.R-3SG.OBJ
'He is saying to him.'
- b. *o-boro-i*
NEG-hear-NTMP
'I/you/he/she/we/you/they
didn't/do(es)n't/won't hear.'

(Subtype A/Fin/Neg-LV in Miestamo 2005)

Subtype A/Fin/Neg-LV



- 1. [262] Not-A/Fin/Neg-LV
- 2. [35] A/Fin/Neg-LV

Evenki (Tungus)

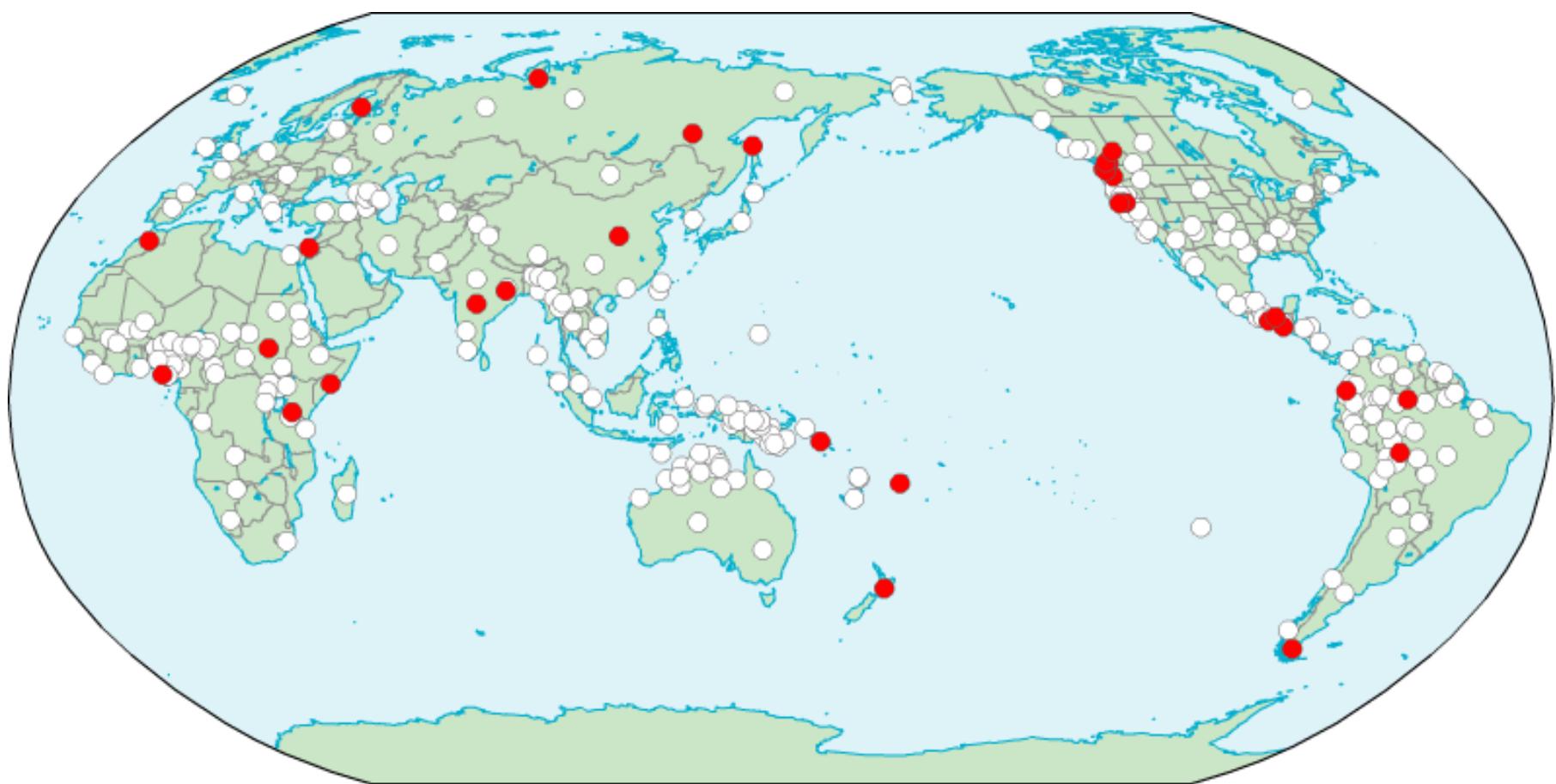
- a. *nujan min-du purta-va bū-che-n*
he 1SG-DAT knife-ACC give-PST-3SG
'He gave me the knife.' (Nedyalkov 1994: 2)
- b. *nujan min-du purta-va e-che-n bū-re*
he 1SG-DAT knife-ACC NEG-PST-3SG give-PTCP
'He did not give me the knife.' (Nedyalkov 1994: 2)

Finnish (constructed examples)

- a. *King Arthur hauku-u Zorbakselle.*
King Arthur bark-3SG Zorbas.ALL
'King Arthur is barking at Zorbas.'
- b. *King Arthur ei haku Zorbakselle.*
King Arthur NEG.3SG bark.CNG Zorbas.ALL
'King Arthur is not barking at Zorbas.'

(Subtype A/Fin/NegVerb in Miestamo 2005)

Subtype A/Fin/NegVerb



- 1. [266] Not-A/Fin/NegVerb
- 2. [31] A/Fin/NegVerb

Reality status

Reality vs. non-reality

- Semantically, negation belongs to the realm of the non-realized whereas affirmation belongs to the realized.
- In many languages, this has grammaticalized as irrealis/non-indicative marking in realis/indicative negatives (Type A/NonReal in Miestamo 2005).
 - The semantic maps of the non-realized categories in question extend to declarative negation.

Maung (Capell and Hinch 1970: 67)

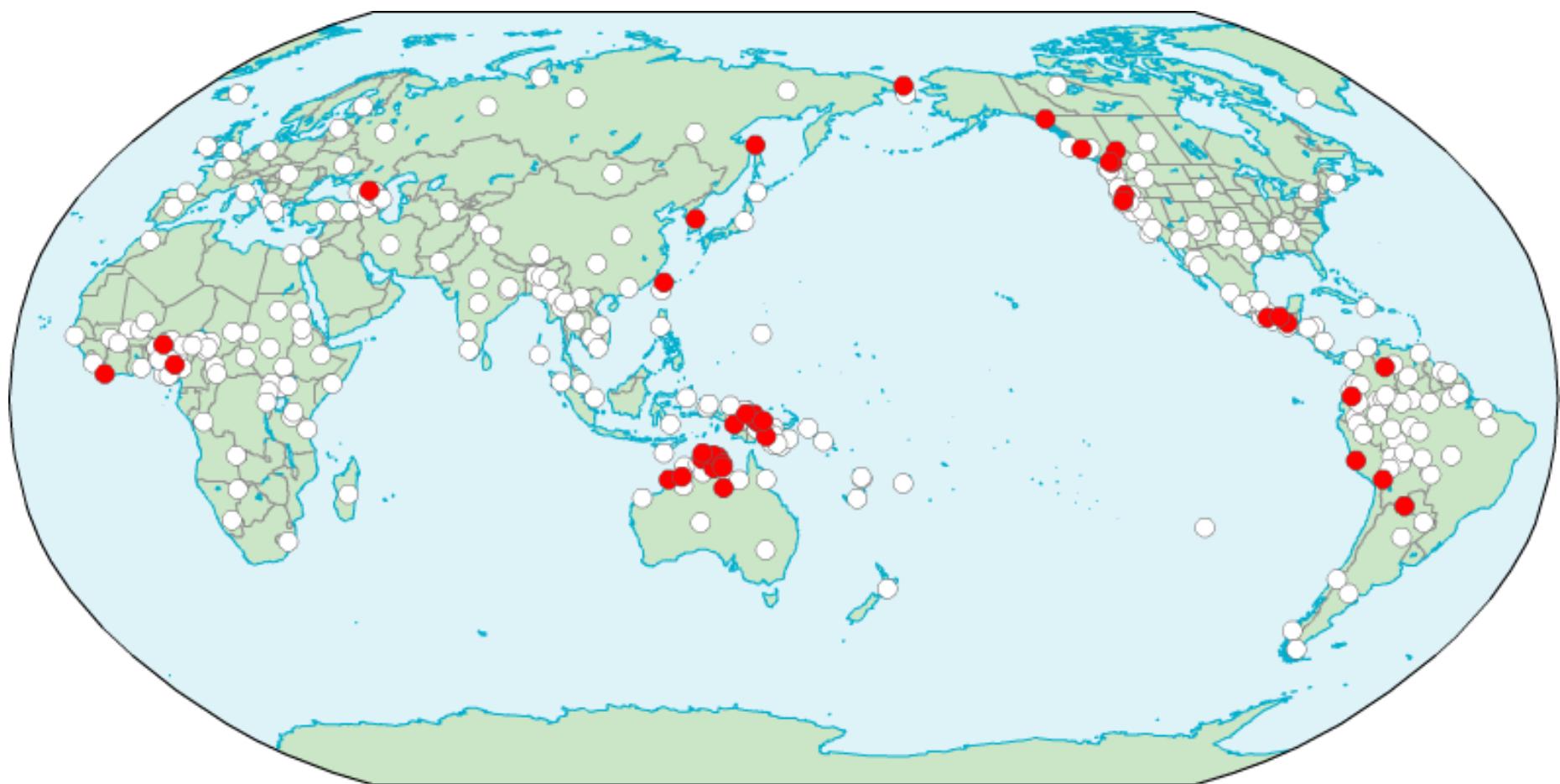
- a. *ŋi-udba* b. *ni-udba-ji*
1SG>3-put 1SG>3-put-IRR.NPST
‘I put.’ ‘I can put.’
- c. *marig ni-udba-ji*
NEG 1SG>3-put-IRR.NPST
‘I do not [/cannot] put.’

Jaqaru (Hardman 2000: 102, 106)

- a. *ill-w-imma-wa* b. *isha-w ill-w-imma-txi*
see-PST-1>2-PK NEG-PK see-PST-1>2-NEG/Q
‘I saw you.’ ‘I didn't see you.’
- c. *ill-w-imma-txi* d. *isha-txi ill-w-imma*
see-PST-1>2-NEG/Q NEG-NEG/Q see-PST-1>2
‘Did I see you?’ ‘Did I not see you?’

(Type A/NonReal in Miestamo 2005)

Type A/NonReal



Frequency

Textual frequency of negatives vs. affirmatives

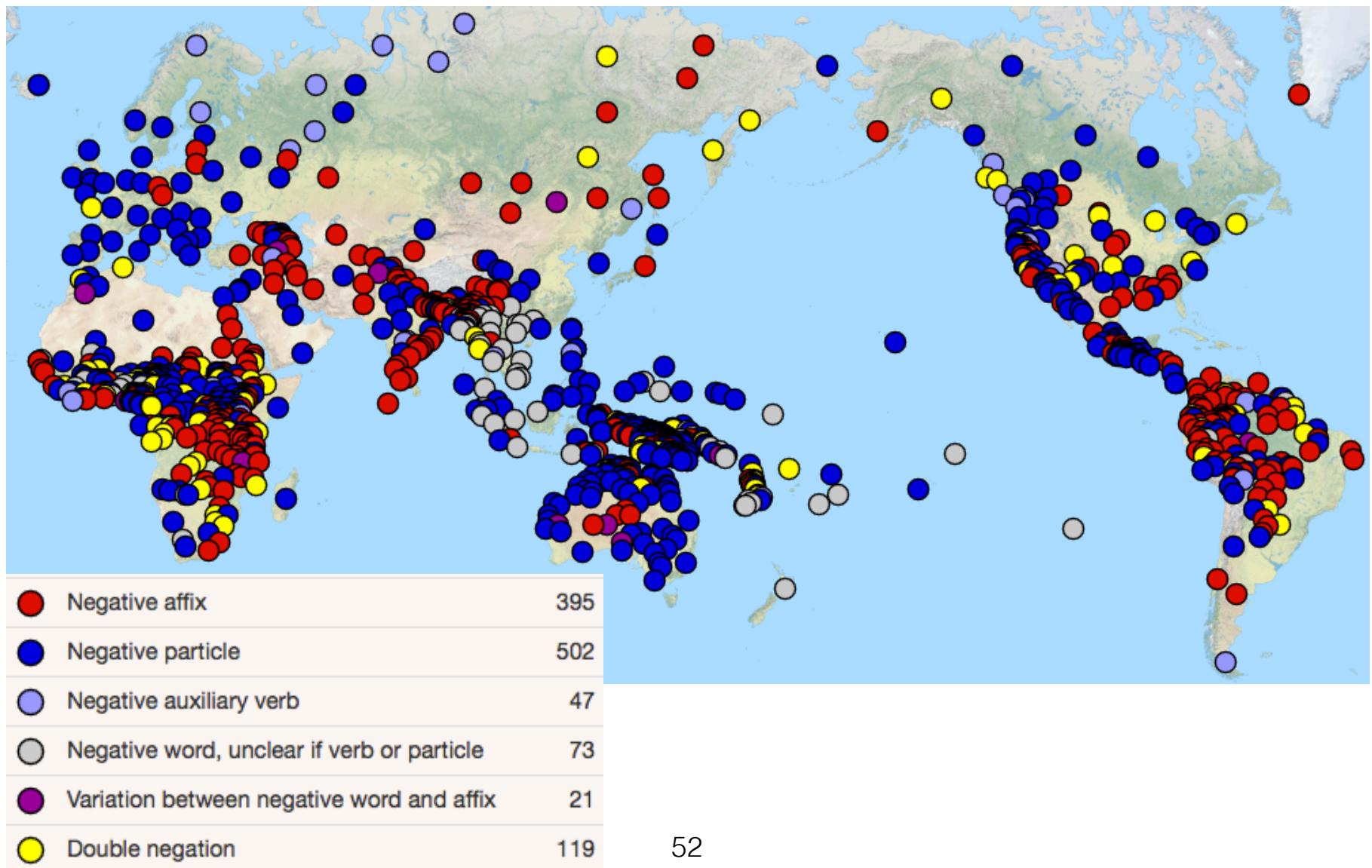
- Finnish declarative clauses ($n=9772$), 91 % affirmative, 9 % negative in the corpus data of Hakulinen & al. (1980: 120–121).
- English sentences ($n=263$), 90 % affirmative, 10 % negative in Givón's counts (2001: 373).

Textual frequency of negatives vs. affirmatives

- Frequency as an economy explanation for markedness
(Greenberg 1966, Croft 2003, Haspelmath 2006)
 - overt coding
 - behavioural potential.
- Overt coding: Negatives are universally overtly coded, affirmatives zero coded
- Behavioural potential: paradigmatic neutralization under negation
 - cf. discourse-context explanation – converging multiple motivations
 - (cf. lower degree of neutralization in polar questions, Miestamo 2007)

Type of negative marker

(Dryer 2013a)



Thanks for your
attention!

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Aikhenvald, A. 2010. *Imperatives and commands*. Oxford: OUP.
- van der Auwera, J. 2006. Why languages prefer prohibitives. *Journal of Foreign Languages* 1. 1–25.
- van der Auwera, J. & L. Lejeune. 2005. The prohibitive. In M. Haspelmath, M. Dryer, D. Gil & B. Comrie (eds.), *The world atlas of language structures*, 290–293. Oxford: OUP.
- van der Auwera, J. & L. Van Alsenoy. Forthcoming. On the typology of negative indefinites, In K.P. Turner & L.R. Horn (eds.), *An atlas of meaning*. Leiden: Brill.
- van der Auwera, J. & M. Devos 2012. Irrealis in positive imperatives and prohibitives, *Language Sciences* 34. 171-183.
- Bloom Ström, Eva-Marie & Matti Miestamo. To appear. The use of the augment in Nguni languages – a marker of referentiality? In Lutz Marten, Rozenn Guérois, Hannah Gibson & Eva-Marie Bloom-Ström (eds.), *Morphosyntactic Variation in Bantu*. Oxford: Oxford University Press.
- Bowden, John. 1997. *Taba (Makian Dalam): Description of an Austronesian Language from Eastern Indonesia*. Ph.D. Dissertation, University of Melbourne.
- Bright, William. 1957. *The Karok Language*. University of California Publications in Linguistics 13. Berkeley: University of California Press.
- Capell, A., and H. E. Hinch. 1970. *Maung Grammar*. Janua Linguarum, Series Practica 98. The Hague: Mouton.
- Chamoreau, Claudine. 2000. *Grammaire du purépecha*. Lincom Studies in Native American Linguistics 34. München: Lincom Europa.
- Chelliah, Shobhana L. 1997. *A Grammar of Meithei*. Mouton Grammar Library 17. Berlin: Mouton de Gruyter.
- Churchward, C. Maxwell. 1953. *Tongan Grammar*. London: Oxford University Press.

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Comrie, Bernard 1981. Negation and other verb categories in the Uralic languages, *CIFU VI*, Turku, 350-355.
- Cornyn, William. 1944. *Outline of Burmese Grammar*. Language Dissertation 38. Supplement to Language vol. 20, no. 4. Baltimore: Linguistic Society of America.
- Croft, William 1991: The evolution of negation, *Linguistics* 27, 1-27
- Dahl, Östen 1979: Typology of sentence negation, *Linguistics* 17, 79–106.
- Devos, M. & Johan van der Auwera. 2013. Jespersen cycles in Bantu: double and triple negation, *Journal of African Languages and Linguistics* 34. 205-274.
- Dryer, Matthew. 1988. Universals of negative position. *Studies in syntactic typology*, ed. by Michael Hammond, Edith Moravcsik, and Jessica Wirth, 93-124. Typological Studies in Language 17. Amsterdam: Benjamins.
- Dryer, Matthew. 1992. The Greenbergian word order correlations. *Language* 68.81-138.
- Dryer, M. S. 2013a [2005]. Negative morphemes. In M. Dryer & M. Haspelmath (eds.), World atlas of language structures online. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/112/>.
- Dryer, M. 2013b [2011]. Order of negative morpheme and verb. In M. Dryer and M. Haspelmath (eds.), World atlas of language structures online. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/143>.
- Dryer, M. 2013c [2011]. Position of negative morpheme with respect to subject, object, and verb. In M. Dryer and M. Haspelmath (eds.), World atlas of language structures online. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/144>.
- Eriksen, P.K. 2011. ‘To not be’ or not ‘to not be’: The typology of negation of non-verbal predicates. *Studies in Language* 35 (2): 275-310.

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Forest, Robert. 1993. *Négations: Essai de syntaxe et de typologie linguistique*. (Collection Linguistique LXXVII.) Paris: Klincksieck.
- Haspelmath, Martin. 1993. *A Grammar of Lezgian*. Mouton Grammar Library 9. Berlin: Mouton de Gruyter.
- Haspelmath, Martin. 1997. *Indefinite Pronouns*. Oxford Studies in Typology and Linguistic Theory. Oxford: Clarendon Press.
- Haspelmath, M. 2013 [2005]. Negative indefinite pronouns and predicate negation. In M. Dryer & M. Haspelmath (eds.), *World atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology, <http://wals.info/chapter/115>.
- Holmberg, A. 2015. *The Syntax of Yes and No*. Oxford: OUP.
- Honda, Isao. 1996. *Negation: A cross-linguistic study*. Buffalo: State University of New York at Buffalo dissertation.
- Jacobsen, William. 1964. *A Grammar of the Washo Language*. Ph.D. Dissertation. University of California, Berkeley.
- Jacobson, Steven A. 1990. *A Practical Grammar of the St. Lawrence Island / Siberian Yupik Eskimo Language*. Preliminary edition. Fairbanks: Alaska Native Language Center, College of Liberal Arts, University of Alaska.
- Jespersen, Otto. 1917. *Negation in English and Other Languages*. Konelige Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser I,5. Copenhagen: Høst.
- Kahrel, Peter. 1996. *Aspects of Negation*. Ph.D. Dissertation, University of Amsterdam.
- Kämpfe, Hans-Rainer, and Alexander P. Volodin. 1995. *Abriss der Tschuktschischen Grammatik auf der Basis der Schriftsprache*. Tunguso-Sibirica 1. Wiesbaden: Harrassowitz.
- Kimball, Geoffrey D. 1991. *Koasati Grammar*. Studies in the Anthropology of North American Indians. Lincoln: University of Nebraska Press.

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Koehn, Edward, and Sally Koehn. 1986. Apalai. In Desmond C. Derbyshire and Geoffrey K. Pullum, ed., *Handbook of Amazonian Languages*, vol. 1. Berlin: Mouton de Gruyter, 33-127.
- Lazdiņa, Terēza B. 1966. *Latvian*. (Teach Yourself Books.) London: The English Universities Press.
- Miestamo, Matti. 2000. Towards a typology of standard negation. *Nordic Journal of Linguistics* 23 (1). 65-88.
- Miestamo, Matti. 2003. Clausal negation: A typological study. Helsinki: University of Helsinki Ph.D. dissertation.
- Miestamo, Matti. 2004. Suomen kieltoverbikonstruktio typologisessa valossa. *Virittäjä* 108: 364–388.
- Miestamo, Matti. 2005. *Standard negation: the negation of declarative verbal main clauses in a typological perspective*. Empirical Approaches to Language Typology 31. Berlin: Mouton de Gruyter.
- Miestamo, Matti. 2005b. Symmetric and asymmetric standard negation. In Martin Haspelmath, Matthew Dryer, David Gil & Bernard Comrie (eds.), *The world atlas of language structures*, 458-461. Oxford: Oxford University Press. Available online at: <http://wals.info/chapter/113>.
- Miestamo, Matti. 2005c. Subtypes of asymmetric standard negation. In Martin Haspelmath, Matthew Dryer, David Gil & Bernard Comrie (eds), *The world atlas of language structures*, 462-465. Oxford: Oxford University Press. Available online at: <http://wals.info/chapter/114>.
- Miestamo, Matti. 2007. Negation – An Overview of Typological Research. *Language and Linguistics Compass* 1 (5): 552-570.
- Miestamo, M. 2014. Partitives and negation: A cross-linguistic survey. In S. Luraghi & T. Huomo, eds., *Partitive Cases and Related Categories*, 63-86. Mouton de Gruyter.
- Miestamo, Matti. 2016. Questionnaire for describing the negation system of a language. Available online via <http://tulquest.huma-num.fr/fr/node/134>.
- Miestamo, Matti. 2017. Negation. In Alexandra Aikhenvald & R.M.W. Dixon (eds.), *Cambridge Handbook of Linguistic Typology*, 405-439. Cambridge: CUP.

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Miestamo, Matti, and Johan van der Auwera. 2007. Negative declaratives and negative imperatives: similarities and differences. *Linguistics Festival, May 2006 Bremen*, ed. by Andreas Ammann, 59-77. Diversitas Linguarum 14. Bochum: Brockmeyer.
- Miestamo, Matti & Johan van der Auwera. 2011. Negation and perfective vs. imperfective aspect. In Jesse Mortelmans, Tanja Mortelmans & Walter De Mulder (eds.), *From now to eternity* (Cahiers Chronos 22), 65-84. Amsterdam/New York: Rodopi.
- Miestamo, Matti, Anne Tamm & Beáta Wagner-Nagy. 2015. *Negation in Uralic Languages* (Typological Studies in Language 108). Amsterdam: Benjamins.
- Miestamo, Matti, Dik Bakker & Antti Arppe. 2016. Sampling for variety. *Linguistic Typology* 20 (2). 233-296.
- Najlis, Elena Lidia. 1973. *Lengua Selknam*. Filología y Lingüística 3. Buenos Aires: Universidad del Salvador.
- Nedjalkov, Igor. 1994. Evenki. In Peter Kahrel and Ren, van den Berg, ed., *Typological Studies in Negation*. Typological Studies in Language 29. Amsterdam: Benjamins, 1-34.
- Owens, Jonathan. 1985. *A Grammar of Harar Oromo (Northeastern Ethiopia)*. Kuschitische Sprachstudien 4. Hamburg: Helmut Buske.
- Payne, John. R. 1985. Negation. *Language typology and syntactic description, volume I, Clause structure*, ed. by Timothy Shopen, 197-242. Cambridge: Cambridge University Press.
- Penchoen, Thomas G. 1973. *Tamazight of the Ayt Ndir*. Afroasiatic Dialects 1. Los Angeles: Udena Publications.
- Ramstedt, G. J. 1997. *A Korean Grammar*. Suomalais-ugrilaisen seuran toimituksia LXXXII. Helsinki: Suomalais-ugrilainen seura. [Reimpression, originally published in 1939].
- Sapir, J. David. 1965. *A Grammar of Diola-Fogny*. West African Language Monographs 3. Cambridge: Cambridge University Press.
- Schaik, Gerjan van. 1994. Turkish. *Typological studies in negation*, ed. by Peter Kahrel, and René van den Berg, 35-50. Typological Studies in Language 29. Amsterdam: Benjamins.

References

[Some items mentioned on the slides list may be missing; please ask me for any missing references you are interested in.]

- Sneddon, James Neil. 1996. *Indonesian, A Comprehensive Grammar*. Comprehensive Grammars. London: Routledge.
- Stassen, Leon. 1985. *Comparison and universal grammar*. Oxford: Blackwell.
- Stevenson, R. C. 1969. *Bagirmi Grammar*. Linguistic Monograph Series 3. Khartoum: Sudan Research Unit, University of Khartoum.
- Stolz, T., C. Stroh & A. Urdze. 2007. WITH(OUT): On the markedness relations between comitatives/instrumentals and abessives. *Word* 58(2). 63-122.
- Van Alsenoy, L. 2014. *A new typology of indefinite pronouns, with a focus on negative indefinites*. PhD dissertation, University of Antwerp
- Van Alsenoy, L. & van der Auwera, J. 2015. Indefinite pronouns in Uralic languages. In M. Miestamo, A. Tamm & B. Wagner-Nagy (eds), *Negation in Uralic Languages* (Typological Studies in Language 108). Amsterdam: Benjamins.
- Veselinova, Ljuba 2006. Towards a typology of negation in non-verbal and existential sentences. Paper given at The 80th Annual Meeting of the Linguistic Society of America, January 5-8, 2006, University of New Mexico, Albuquerque.
[www.ling.su.se/staff/ljuba/Non-verbalNegation01.pdf]
- Veselinova, L. 2013. Negative existentials: A cross-linguistic study. *Rivista di linguistica* 25 (1): 107-145.
- Veselinova, L. 2015. Special negators in the Uralic languages: Synchrony, diachrony and interaction with standard negation. In Matti Miestamo, Anne Tamm & Beáta Wagner-Nagy (eds), *Negation in Uralic Languages* (Typological Studies in Language 108). Amsterdam: Benjamins.
- Vossen, F. & Johan van der Auwera. 2014. The Jespersen cycles seen from Austronesian, *The diachrony of negation*, Ed. by M.-B. Mosegaard-Hansen & J. Visconti. Amsterdam: Benjamins, 47-83.
- Walker, Alan T. 1982. *A Grammar of Sawu*. NUSA Linguistic Studies in Indonesian and Languages in Indonesia 13. Jakarta: Universitas Atma Jaya.
- Weir, Helen. 1994. Nadëb. In Peter Kahrel and René, van den Berg, ed., *Typological Studies in Negation*. Typological Studies in Language 29. Amsterdam: Benjamins, 291-323.

Abbreviations

[Some items mentioned on the slides list may be missing; please ask me for any missing abbreviations you are interested in.]

1 first person, 2 second person, 3 third person, ABS absolute, ACC accusative, ACT actual, ADEL adelative, ADJ adjective, AFF affirmative, ALL allative, ART article, ASS assertive, AUX auxiliary, CERT certitive, CLT clitic, CMPL compleative, CNG connegative, CONT continuative, COP copula, CVB converb, DAT dative, DECL declarative, DEF definite, DUR durative, EL elative, ERG ergative, EX existential, EXCL exclusive, F feminine, FOC focus, FUT future, GER gerund, GND gender, HAB habitual, HYP hypothetical, IMP imperative, IMPF imperfective, IMPST immediate past, INCL inclusive, IND indicative, INDEF indefinite, INF infinitive, IRR irrealis, LOC locative, M masculine, N neuter, N~ non~ (e.g. NPST = nonpast), NEG negation/negative, PART partitive, PERF perfect, PFV perfective, PL plural, POT potential, PRES present, PST past, PTCL particle, PTCP participle, R realis, RS relativized subject, SBJN subjunctive, SG singular, SUBJ subject, SURP surprise mood, T theme, V verb.