Universität Zürich[UZH]

Department of Comparative Linguistics

Kiranti in Global Perspective

Balthasar Bickel

Polysynthesis

Chintang:

	1s	1di	1pi	1de	1pe	2s	2d	2p	3s	3ns	intransitive
1s						*tupnaʔã* *tupnaʔãniŋ* *tupnehẽ* *matupyoknehẽ*	*tupnaʔãce* *tupnaʔãceniŋ* *tupnace* *matupyoknace*	*tupnaʔãni* *tupnaʔãniniŋ* *tupnanihẽ* *matupyoknanihẽ*	*tubukuŋ* *tubukuŋniŋ* *tubuhẽ* *matupyoktuhẽ*	*tubukuŋcuŋ* *tubukuŋcuŋniŋ* *tubuŋcihẽ* *matupyoktuŋcihẽ*	*tupmaʔã* *tupmaʔãniŋ* *tubehẽ* *matupyoktehẽ*
1di									*tupcoko* *tupcokoniŋ* *tubace* *matupyoktace*	*tubumcum* *tubumcumnim* *tubumcumhẽ* *matupyoktumcumhẽ*	*tupceke* *tupcekeniŋ* *tubace* *matupyoktace*
1pi									*tubukum* *tubukumnim* *tubumhẽ* *matupyoktumhẽ*		*tubiki* *tubikiniŋ* *tubihẽ* *matupyoktihẽ*
1de						*tupnaʔãncĩyã* *tupnaʔãncĩyãniŋ* *tupnancĩyehẽ* *matupyoknancĩyehẽ*			*tupcokoŋa* *tupcokoŋaniŋ* *tubacehẽ* *matupyoktacehẽ*	*tubumcumma* *tubumcummaniŋ* *tubumcummehẽ* *matupyoktumcummehẽ*	*tupcekeŋa* *tupcekeŋaniŋ* *tubacehẽ* *matupyoktacehẽ*
1pe									*tubukumma* *tubukummaniŋ* *tubummehẽ* *matupyoktummehẽ*		*tubikiŋa* *tubikiŋaniŋ* *tubiehẽ* *matupyoktiehẽ*
2s	*atupmaʔã* *atupmaʔãniŋ* *atubehẽ* *{a-ma}tupyoktehẽ*			*{a-ma}tupceke* *{a-ma}tupcekeniŋ* *{a-ma}tubace* *{a-ma-ma}tupyoktace*	*{a-ma}tupno* *{a-ma}tupnikniŋ* *{a-ma}tube* *{a-ma-ma}tupyokte*				*atuboko* *atubokoniŋ* *atube* *amatupyokte*	*atubukuce* *atubukuceniŋ* *atubuce* *{a-ma}tupyoktuce*	*atupno* *atupnikniŋ* *atube* *{a-ma}tupyokte*
2d	*atupmaʔanciŋ* *atupmaʔanciŋniŋ* *atubaŋcihẽ* *{a-ma}tupyoktaŋcihẽ*								*atupcoko* *atupcokoniŋ* *atubace* *amatupyoktace*	*atubumcum* *atubumcumnim* *atubumcumhẽ* *{a-ma}tupyoktumcumhẽ*	*atupceke* *atupcekeniŋ* *atubace* *{a-ma}tupyoktace*
2p	*atupmaʔaniŋ* *atupmaʔaniniŋ* *atubaŋnihẽ* *{a-ma}tupyoktaŋnihẽ*								*atubukum* *atubukumnim* *atubumhẽ* *amatupyoktumhẽ*		*atubiki* *atubikiniŋ* *atubihẽ* *{a-ma}tupyoktihẽ*
3s	*utupmaʔã* *utupmaʔãniŋ* *utubehẽ* *{u-ma}tupyoktehẽ*	*maitupceke* *maitupcekeniŋ* *maitubace* *{mai-ma}tupyoktace*	*maitupno* *maitupnikniŋ* *maitube* *{mai-ma}tupyokte*	*matupceke* *matupcekeniŋ* *matubace* *{ma-ma}tupyoktace*	*matupno* *matupnikniŋ* *matube* *{ma-ma}tupyokte*	*natupno* *natupnikniŋ* *natube* *{na-ma}tupyokte*	*natupceke* *natupcekeniŋ* *natubace* *{na-ma}tupyoktace*	*natubiki* *natubikiniŋ* *natubihẽ* *{na-ma}tupyoktihẽ*	*tuboko* *tubokoniŋ* *tube* *matupyokte*	*tubukuce* *tubukuceniŋ* *tubuce* *matupyoktuce*	*tupno* *tupnikniŋ* *tube* *matupyokte*
3d	*utupmaʔanciŋ* *utupmaʔanciŋniŋ* *utubaŋcihẽ* *{u-ma}tupyoktaŋcihẽ*								*utupcoko* *utupcokoniŋ* *utubace* *{u-ma}tupyoktace*	*utubukuce* *utubukuceniŋ* *utubuce* *{u-ma}tupyoktuce*	*utupceke* *utupcekeniŋ* *utubace* *{u-ma}tupyoktace*
3p	*utupmaʔaniŋ* *utupmaʔaniniŋ* *utubaŋnihẽ* *{u-ma}tupyoktaŋnihẽ*								*utuboko* *utubokoniŋ* *utube* *{u-ma}tupyokte*		*utupno* *utupnikniŋ* *utube* *{u-ma}tupyokte*

jo-go-yaŋ *na-khutt-i-**ca**-i-**hatt**-i-**bir**-i.*

whatever-NMLZ-ADD 3[s]>2-steal-2pO-V2:eat-2pO-V2:move.away.TR-2pO-V2:do.for-[SBJV.]2pO

‘It (a cat) may steal everything from you and eat it all up!’ [story.cat.204]

Syntactified Ergativity

- Ergative case unconditionally assigned by all and only transitively inflected verbs, except for some pronouns (e.g. 1sS in Belhare, 1excl in Chintang)

Belhare (Bickel 2003)

a. *ina-ŋa wa khuiʔ-t-u.*
DEM-ERG chicken[-NOM] [3sA-]steal-NPST-3sO
'That one steals / will steal the chicken.'

b. *ina wa khuʔ-yu.*
DEM[-NOM] chicken[-NOM] [3sS-]steal-NPST
'That one steals chicken.' ('S/he is a chicken-stealer')

- Occasional with reflexes even in syntax:

Belhare (Bickel 2004)

a. *khoŋ-ma nui-ka.*
play-INF may-2s[NPST]
'You may play.'

b. *lu-ma nui-ka.*
tell-INF may-2s[NPST]
'Someone may tell you.' (*not:* 'You may tell him/her.')

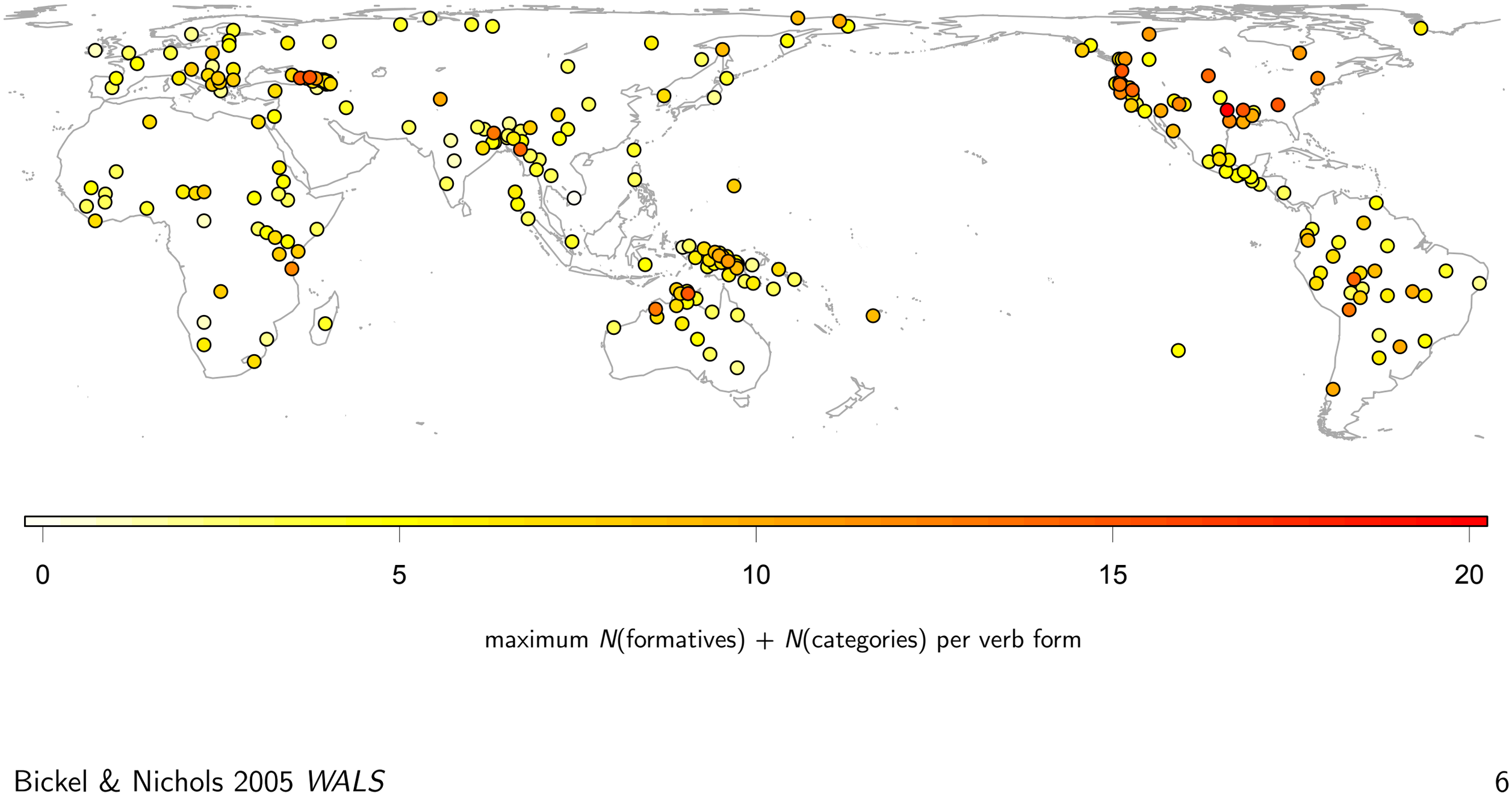
Possessive classes

Limbu

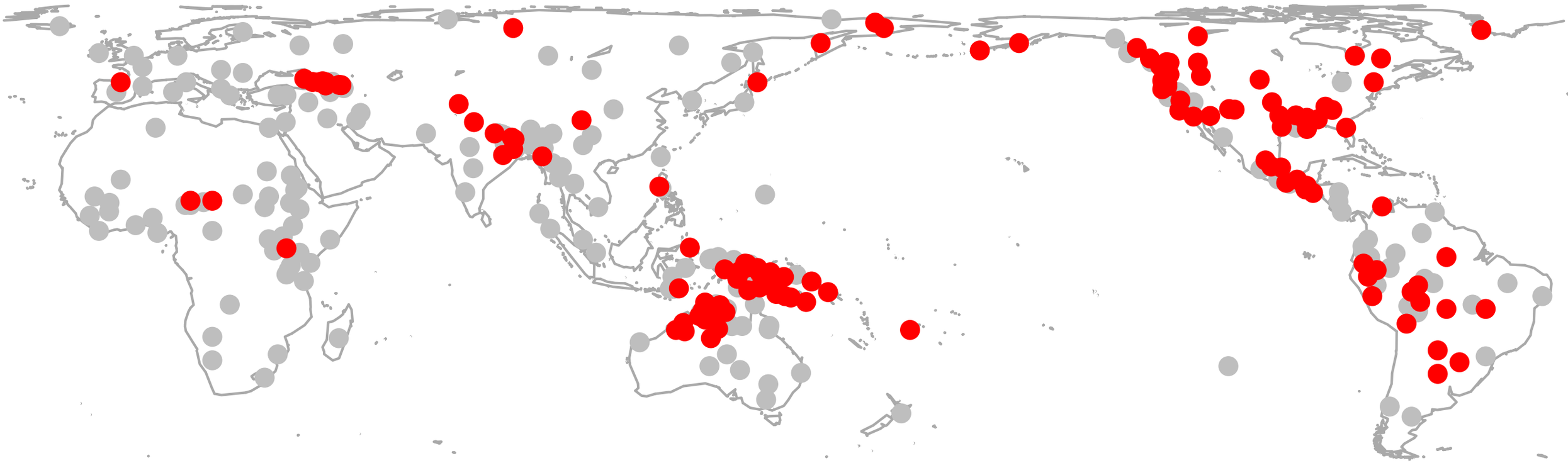
	Class I	Class II	Class III
Effect	Nasalization	Stem reduction	
1sg form	*a–mbhɔŋaʔ* 'my uncle'	*a–nsaʔ* (< *nusaʔ*) 'my sibling'	*a–yuma* 'my grandmother'
sample members	friend, father, mother, aunt etc.	head, older sister, moustache, sibling, etc.	(default)

WHY?

Inflectional Synthesis

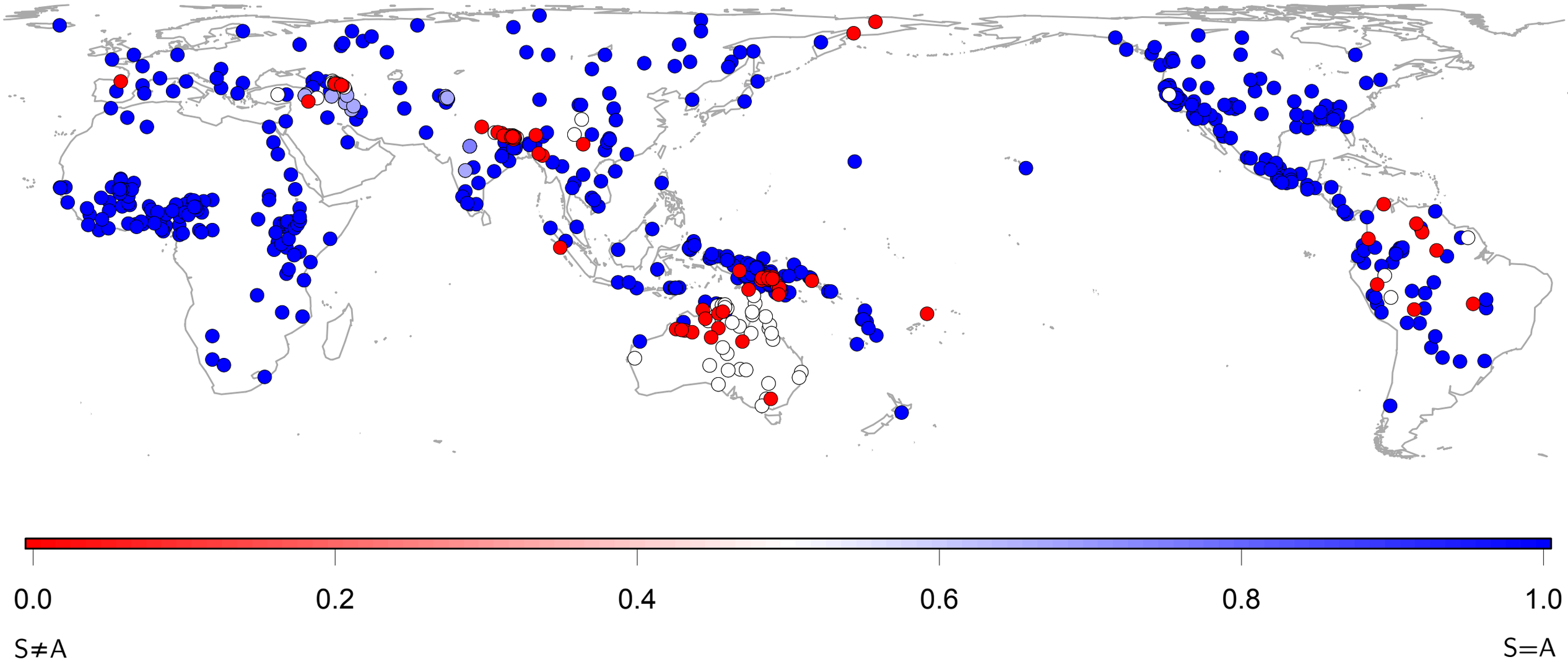


Polyagreement (*sensu stricto*: no clitics, no optional agreement etc.)

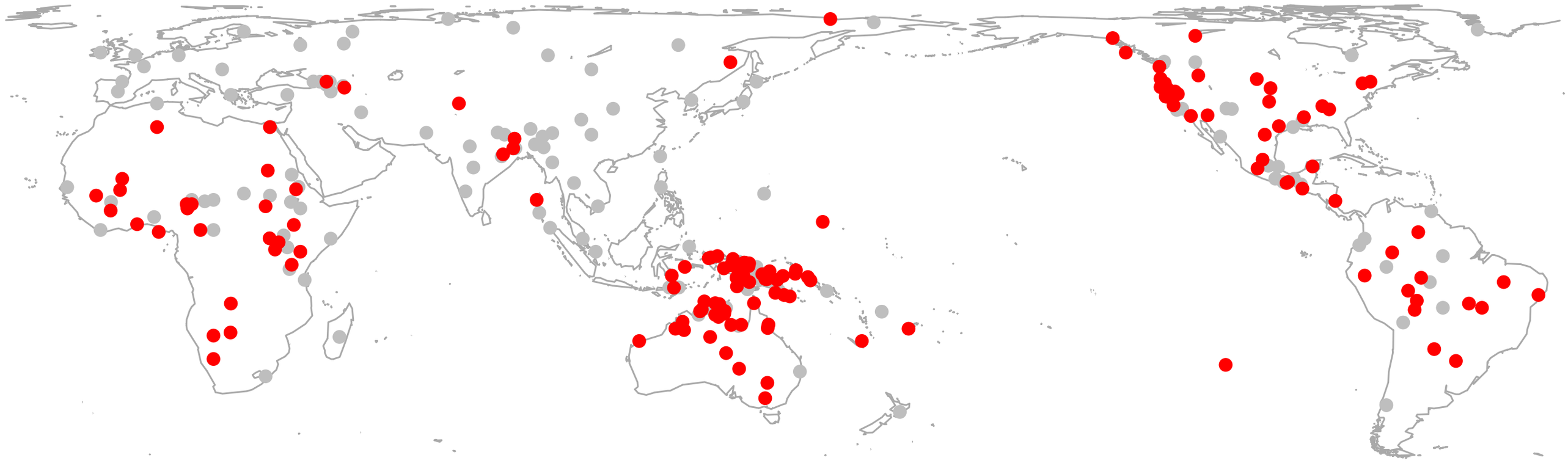


Bickel & Nichols AUTOTYP data

Ergativity: proportion of S=A case per conditions

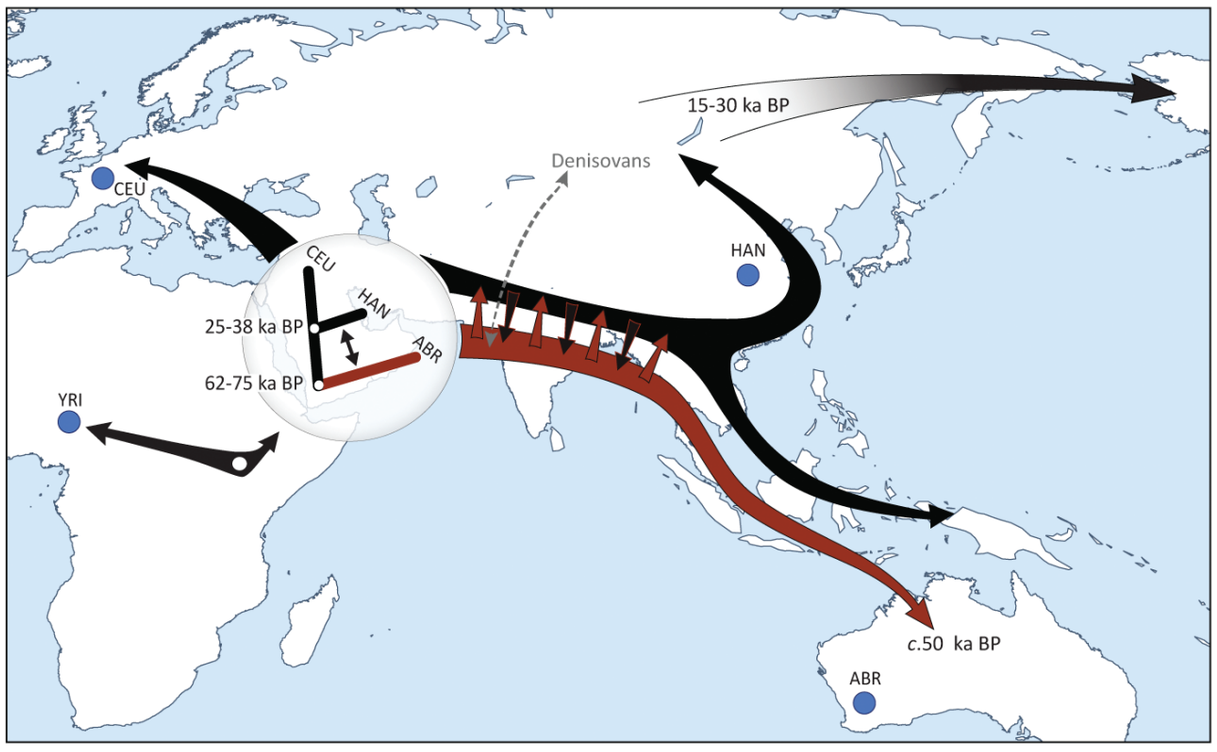


Possessive classes

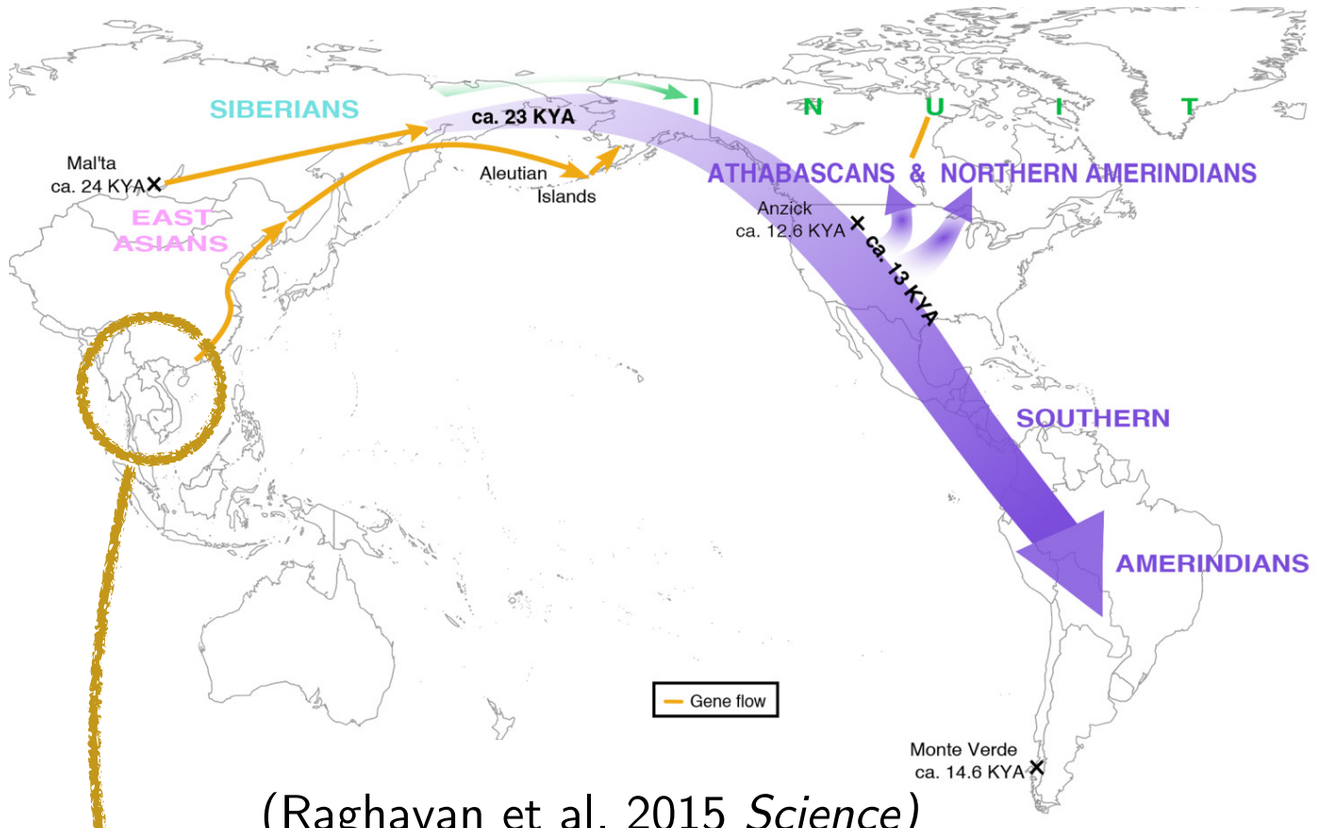


The Eurasian Enclave Theory: Historical Scenario

< ca. 15kya



(Rasmussen et al. 2011 *Science)*

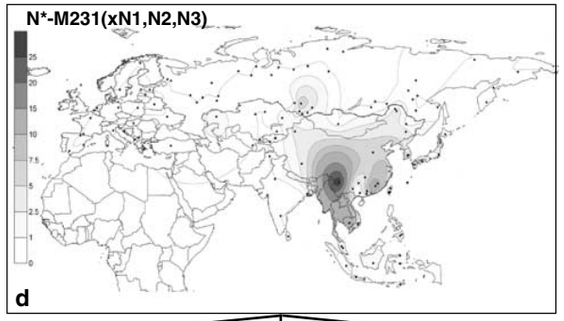


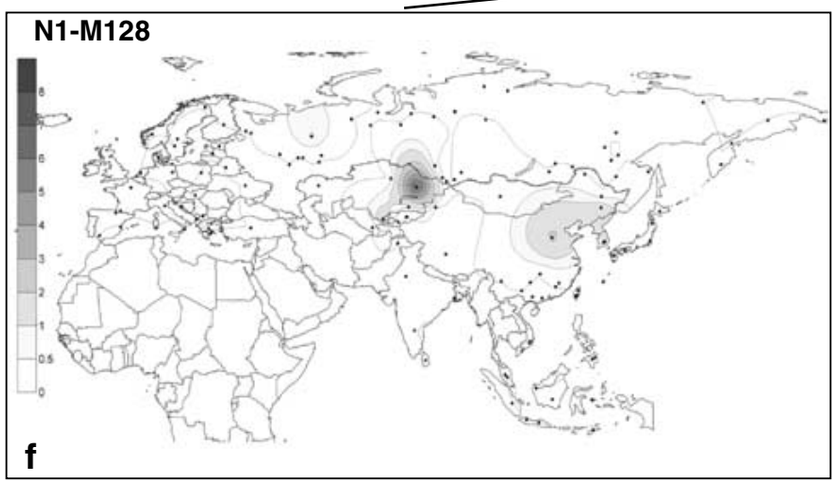
(Raghavan et al. 2015 *Science)*

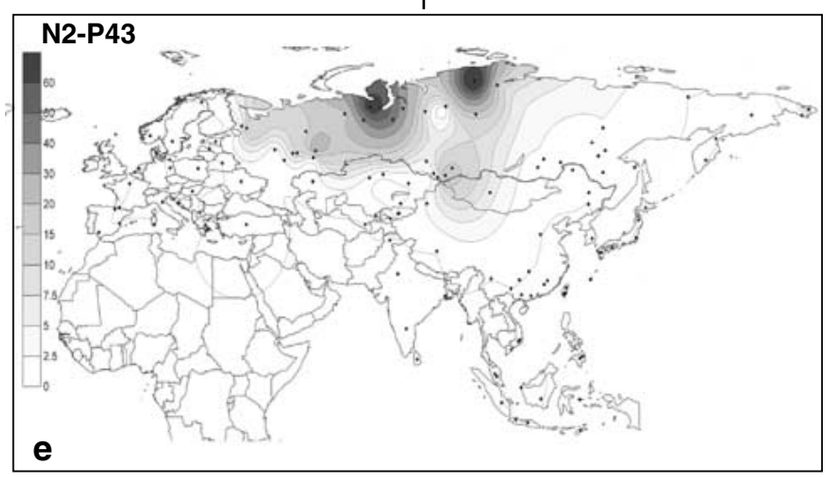
Australasian "Ypykuéra" Population, no longer present here (Skoglund et al. 2015 *Nature*)

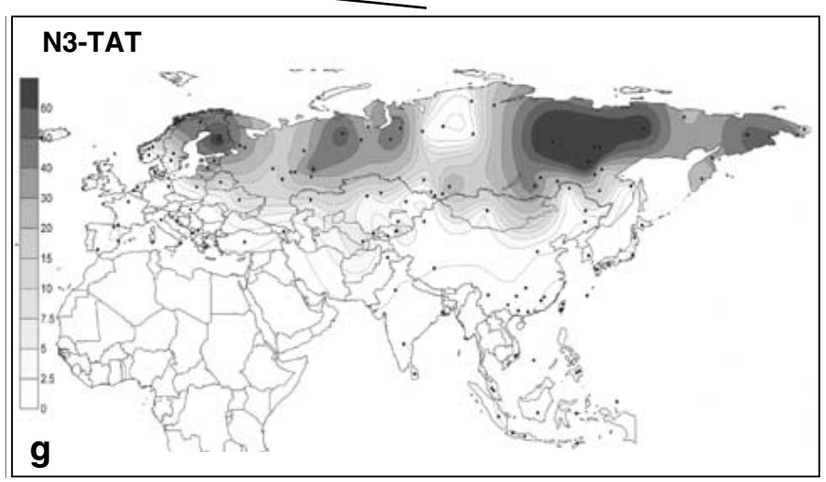
The Eurasian Enclave Theory: Historical Scenario

> ca. 15kya



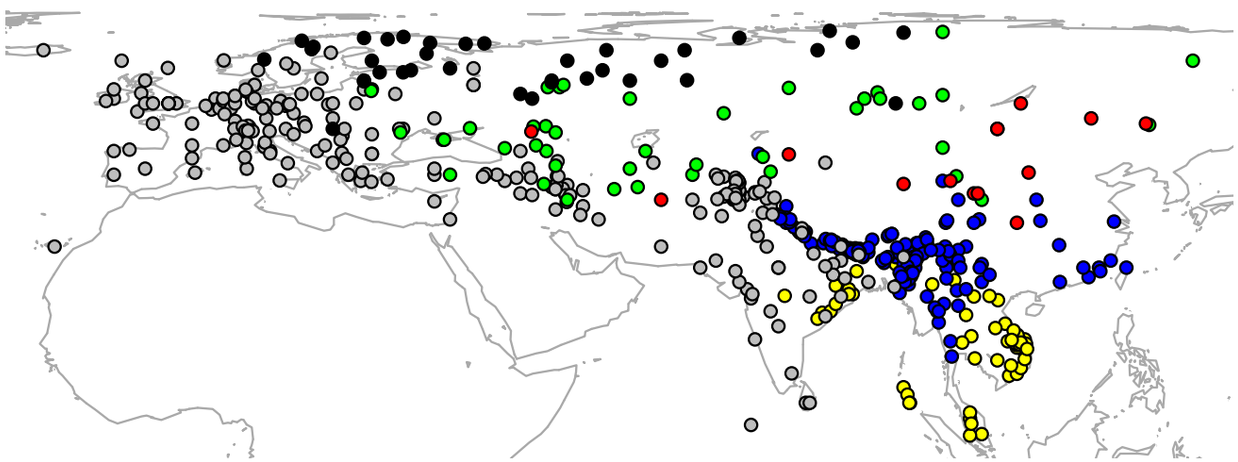






(Rootsi et al. 2007 *Eur. J. Hum. Gen*)

Large-scale language spreads



Empires and urbanized states in

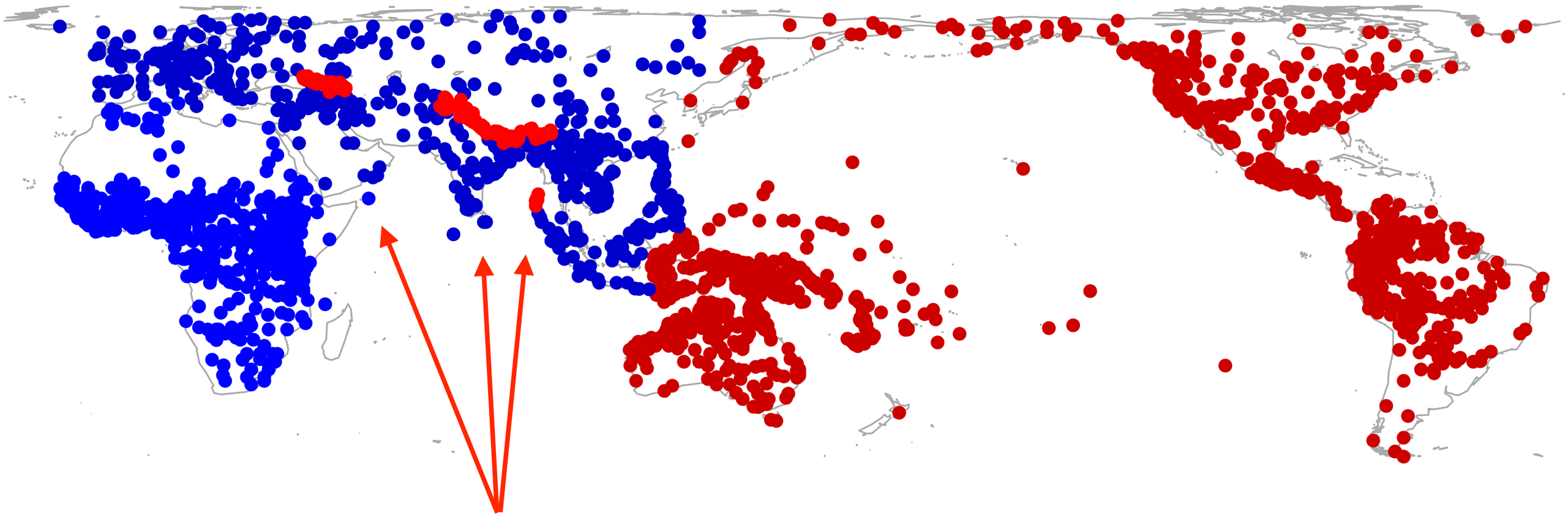
- the steppe (e.g. Nichols 1998*)
- the Tibetan plateau and the SA/SEA "valleys" (e.g. DeLancey 2013^{+})

Bickel & Nichols 2005 *WALS*, 2005 in *Clusivitity*; **Archeology and Language*, $^{+}$*Trans-Himalayan Ling*

The Eurasian Enclave Theory: Prediction I

Modern Eurasia: several recent spreads, high contact

Trans–Pacific: old and heterogenous



Enclaves:

archaic, low contact; some similarity to Trans-Pacific

Evidence from clustering approaches:
combined AUTOTYP and WALS data

Principal Component Analysis (PCA) on feature prop per major clade

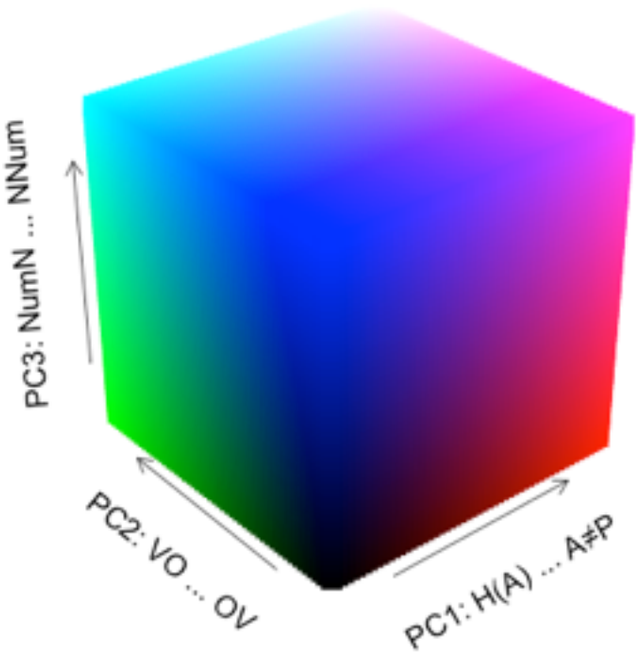
family	wals.DRYPQP01: Question.particle.with.other.position	wals.HAAEVC: Verbal.affix.or.clitic	wals.DRYCAS2: clitic	autotyp.morphology.per.language.POSS.CLASS: 2	wals.DRYCASB: pf	wals.MADPRS: None	autotyp.markers.per.language.Locus.A: F	wals.SIEGEN: Gender.distinctions.in.3rd.person.singular.only	autotyp.gramm: BasicLocus: D.on.H	autotyp.np.structure: construct	wals.DRYDEG: AdjDeg	autotyp.alignment.per.language.case: erg	wals.HASNPL: Plural.only.in.human.nouns	wals.STOORD0: second	wals.MADUVU2: some.uvulars	wals.STOORD: Ordinal.numerals.derived.from.cardinal.numerals	autotyp.alignment.per.language.split.PoS.AGR: TRUE	autotyp.gramm: markers.Locus: D.on.H	wals.HASWAN: complement.subject.implicit	wals.STOORD: Zero..Ordinal.numerals.do.not.exist
Arawan		0.67	1.00	0.00	0.00	1.00	0.00	1.00	0.00						0			0.00		
Algic	0	0.27	0.00	0.50	0.00	1.00	0.00	0.67	0.00	0.00	0.00		0	0	0	0.0	1.00	0.00	0	0.00
Anatolian									0.12			0					1.00	0.12		
Atakapa				0.00			0.00	0.00	0.00	0.00							0.00	0.00		
Austroasiatic	0	0.00	0.00	0.00	0.33	0.94	0.17	0.20	0.00	0.00	0.67	0	0	0	0	0.2	0.36	0.00	1	0.00
Arawakan	0	0.36	0.30	0.33	0.00	1.00	0.00	0.50	0.00	0.50	0.67	0	0	0	0	0.0	0.33	0.00	0	0.33
Ainu	0	1.00		0.00		1.00	0.00	0.00	0.00	0.67			0		0	0.0	0.00	0.00	1	1.00
Arandic	0		0.33	0.00	0.00	1.00	0.00		0.00	0.00	1.00	0	0		0		1.00	0.00	1	
Albanian	0	1.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0		0	0	0.0	1.00	0.00	0	0.00
Adamawa-Ubangi	0	0.00	0.00	0.00	0.00	0.12	0.00	0.20	0.00	0.00	1.00	0	0	0	0	0.0	0.50	0.00	1	0.00

→ PCA

- PCA with imputation (`pcaMethods`, Stacklies et al. 2007 in *Bioinformatics*)
- map the first 3 PCs (accounting for 62% of the total variance) to RGB color space

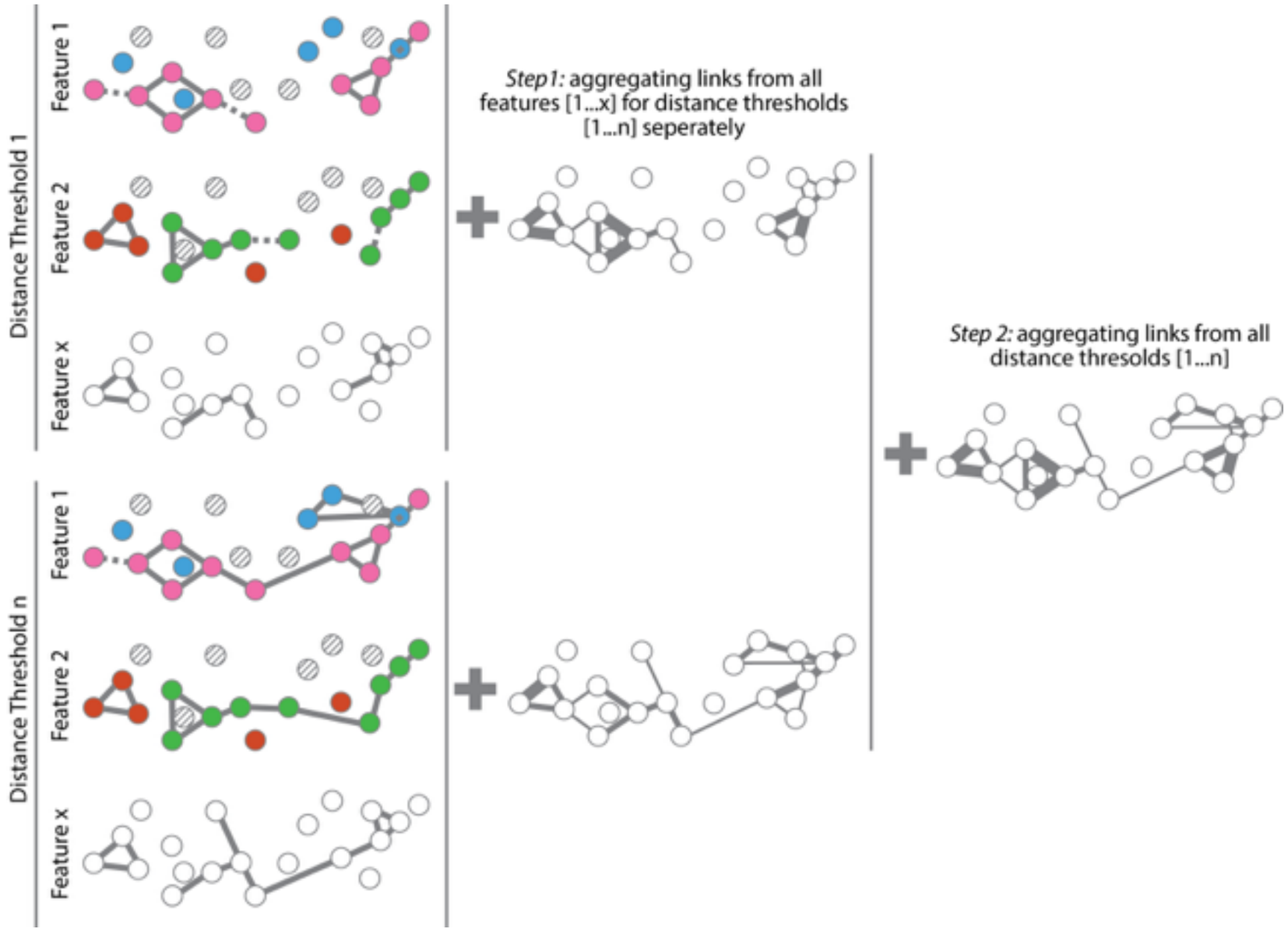
Principal Component Analysis (PCA) on feature prop per major clade

Top contributors to each PC:



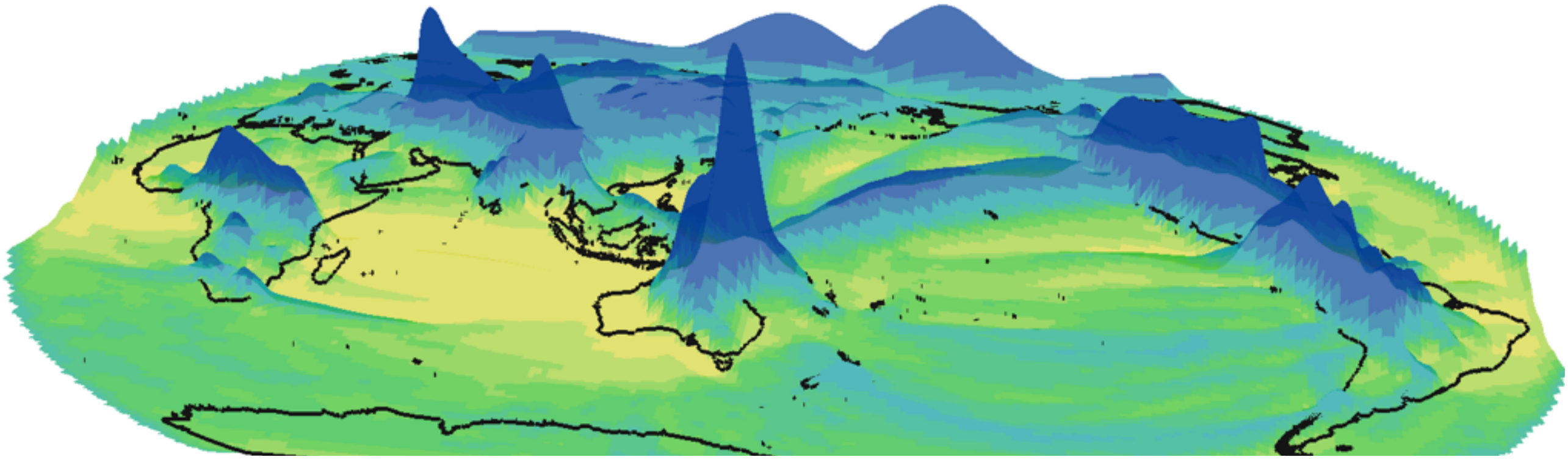
Density–based spatial clustering (dbSCAN)

- Link languages with the same feature values if they form a cluster with at least 3 members within a pre-given distance threshold
- Aggregate across all features and 7 distance thresholds (100km...10'000km)



→ Line densities in tesselations of 300km and compare results with H_0

Density–based spatial clustering (dbSCAN)



Evidence from hypothesis testing: combined AUTOTYP and WALS data

Testing the theory

1. Estimate diachronic biases per family/major clade, using sevaral methods (Bickel 2013 *Lang Typ and Hist Contingency*)
2. Perform Fisher Exact tests on the difference in bias directions between areas, across all 356 variables in WALS and AUTOTYP covering at least 250 languages each
3. Estimate False Discovery Rates*
4. Subtract variants of variables, e.g re voicing distinctions in WALS:
   - MADVOI: {none, in_plos_&_fric, in_plos_only, in_fric_only}
   - MADVOI2: {none, some}

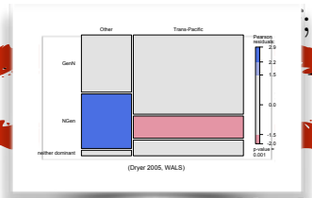
→ **at least ~ 35 true discoveries of Trans–Pacific ≠ Rest of the World**
(Bickel 2015 *Language Dispersals*)

→ **at least ~ 10 true discoveries of Enclaves ≠ Rest of Eurasia**
(provisional, non–validated result)

*using Dabney & Storey's 2014 bootstrap method in `R` package `qvalue`

A closer look at the results: Residual Analysis

Variable	*Source*	*N*(lang.)	*p*(sets)	*p*(MCMC)	*p*(ML)	*Trans-Pacific*	*Other*	*Variant of*
DRYPOS0	W	591	0.0000	0.0000	0.0000	+poss pf;-poss sf	-poss pf;+poss sf;-both	DRYPOS
MADVOI2	W	565	0.0000	0.0000	0.0001	-voicing;+no voicing	+voicing;-no voicing	MADVOI
DRYPOS	W	794	0.0000	0.0009	0.0069		;+poss sf	DRYPOS
DRYGEN	W	1102	0.0001	0.0042	0.0014	-NGen		DRYGEN
BAKADP2	W	377	0.0002	0.0002	0.0009	+no adp		BAKADP
DRYGEN0	W	1020	0.0002	0.0002	0.0001	-Nnp	-npN;+Nnp	DRYGEN
MADLAT	W	565	0.0002	0.0227	0.0041	-/l/no obstr;+no lat	+/l/no obstr;-no lat	MADLAT
POLYAGR.STRICT	A	331	0.0004	0.0004	0.0018	-absent;+present	+absent;-present	
DRYDEM0	W	1011	0.0004	0.0006	0.0017	+DemN;-NDem	-DemN;+NDem	DRYDEM
MADPRS	W	565	0.0006	0.0000	0.0019		+lab.velar	
LOCUS.POSS.BROAD	A	278	0.0006	0.0129	0.2974	+H	-H	LOCUS.POSS
MADTON02	W	525	0.0008	0.0007	0.0029	+atonal;-tonal	-atonal;+tonal	MADTON
HASWAN03	W	269	0.0011	0.0006	0.0055	+some desid	-some desid	HASWAN
LOCUS.POSS.AGGR	A	271	0.0014	0.0031	0.2974		-H	LOCUS.POSS
SIMPLE.LOCUS.S.BROAD	A	282	0.0017	0.0049	0.1770		+D;-H	
DRYSOV3	W	1226	0.0020	0.0015	0.0509	-other	-final/free;+other	DRYSOV
LocPOSSdm	A	282	0.0024	0.0024	0.0480		+present;-absent	LOCUS.POSS
ANDANG2	W	467	0.0027	0.0020	0.0038	-ŋ;+no ŋ	+ŋ;-no ŋ	ANDANG
DRYDEM	W	1084	0.0027	0.1625	0.0873	+Dem.wordN	-Dem.wordN;+NDem.word	DRYDEM
HASNPL22	W	290	0.0049	0.0049	0.0189	-pl anim;+no/opt pl	+pl anim;-no/opt pl	HASNPL
LocPOSShm	A	282	0.0059	0.0059	0.0084	-absent;+present	+absent;-present	LOCUS.POSS
DRYXOV	W	448	0.0081	0.0737	0.1270		+VOX	
DRYSOV2	W	1226	0.0083	0.0151	0.0064		-mixed;+medial	DRYSOV
BROFIN	W	590	0.0092	0.0092	0.0048		-hand=finger	
VP	W	1276	0.0101	0.0077	0.0335		-OV;+VO	DRYOBV
DRYOBV	W	1367	0.0106	0.0106	0.0357		+VO	DRYOBV
ANDANG	W	467	0.0128	0.1525	0.1943		-ŋ	ANDANG
ANY.V.AGR	A	349	0.0136	0.0136	0.0411		+absent	
Nr.POSS.CLASS	A	262	0.0139	0.0418	0.2509		-1	POSS.CLASSES
Nr.INALIEN.CLASS	A	255	0.0143	0.0801	0.3738			
CORASS	W	256	0.0145	0.0168	0.0982		+sem and formal	
LocPhm	A	294	0.0148	0.0105	0.0067		+absent;-present	LOCUS.P
CASE.ALIGN.PER.LANG.N	A	345	0.0152	0.0104	0.0102			
SIMPLE.LOCUS.P.NARROW	A	286	0.0153	0.0438	0.2594		-H	LOCUS.P
SIMPLE.LOCUS.P.BROAD	A	290	0.0157	0.0236	0.2594		-H	LOCUS.P



using the Maximum Statistic in a permutation test (Zeileis et al. 2007 *J. Comp. and Graph. Stat.*)

Trans–Pacific features present in at least some Kiranti languages

– tone

– **voicing distinction**

+ **polyagreement** (under various analyses)

+ possessive prefixes

+ **headmarked possession**

+ **desideratives** (if we count optatives as desideratives)

– postposed modifier NPs

+ preposed demonstratives

– non–final word order

– adpositions (although some languages, e.g. Yakkha, have recently developed true adpositions)

+ **non–accusative alignment in agreement triggers**

+ SO alignment in ‘give’ verbs

Trans–Pacific features *not* found in Kiranti languages

– laterals

– velar nasals

+ **optional or no nominal plural**

Other Eurasian enclave features found in at least some Kiranti

+ **high verb inflectional synthesis**
+ **retention of dep–marking in nominalizations**
+ semantic gender
+ preposed relative clauses
+ mixed predicative adj encoding
+ double negation
+ contrastive nasal vowels
+ category–based stem allomorphy

Candidate enclave features for which we lack sufficiently large databases

- aspirated stops alternating with breathy stops
- bipartite stems
- recursive inflection
- triplication (independent of doubled reduplication)
- co-argument sensitivity (in prep)
- conjunct/disjunct
- antipassives for 1P
- altitudinal case
- spatially specific interjections
- color-sensitive article

Eurasian spread features which at least some Kiranti languages escape

+ voicing distinction
+ tone
+ **large vowel systems**

– lex conjugation classes
– **mixed A, P agr slots**
– polyagreement

– **head–marked A**
– **head–marked P**
– **head–marked S**
– headmarked POSS

– desideratives
+ Generic–noun–based indef
– **possessive classes**

– possessive prefixes
+ preposed case markers

+ postposed demonstratives
+ postposed modifier NPs
+ non–final order
– WH oblig. initial

+ preposed adpositions

– coord primarily by juxtapos
+ sem and formal gender
+ obligatory noun plural
– evidentials (incl. hearsay)
+ adpositions

+ accusatives in pronouns
– **S≠A case (at least some)**
– S≠A agreement triggers
+ **DOM**
+ agreement split on PoS
– SO alignment

– **normal dep–marking in NMLZ**

Eurasian spread features which Kiranti languages do *not* escape

\+ laterals

\+ velar nasals

– noun incorporation

+ dependent-marked S, A, or P

+ dependent-marked possession

+ passives (although rarely used in Kiranti languages)

– optional or no nominal plural

\+ plural on animate nouns only

– same word for `hand' and `finger' (?)

The Eurasian Enclave Theory: Prediction II

Enclaves should specifically preserve ...

- **local features**: features that are easy to transmit over generations (easy to acquire in L1) but unlikely to spread in contact (difficult to acquire in L2) (e.g. Dahl 2004*, Trudgill 2011#, DeLancey 2013+)
- **difficult features**: features that are disfavored by processing principles: for processing principles to lead to change, one needs increased variance for selection to operate, and this in turn requires increased contact

$\rightarrow$ two psycholinguistic case studies

#Growth and maintenance of ling. complexity; #Socioling Typ; +Trans-Himalayan Ling

A case study on a local feature: polysynthesis

What is (poly)synthesis?

A multivariate typology (Bickel & Nichols 2007*, Bickel & Zúñiga 2015+)

1. **Available building blocks**
   - elements that ± select, i.e. need a superordinate host
   - elements that ± control, i.e. require or govern subordinate elements

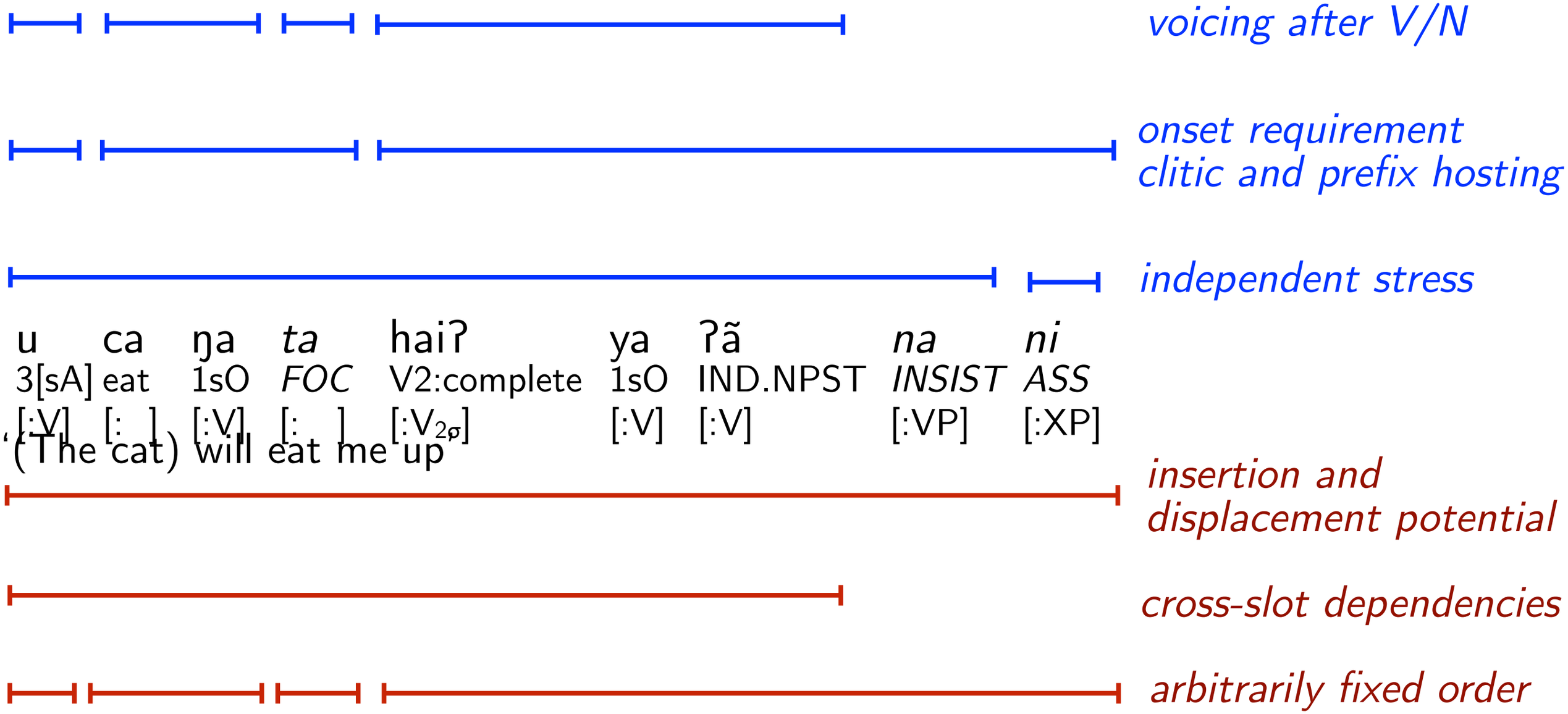
SELECT	CONTROL	*label*	*content*
—	+	V	lexical
—	—	clitics	IS markers
V	—	inflections	agr., TAMP, nonfinite forms
V	+	V2	derivations, lexical
VP	—	phrasal affixes	optative, some clause linkage markers
XP	—	free phrasal affixes	nominalizers, conjunctions, IS markers, etc.
X	—	reduplication	intensifying functions

2. **Phonological cohesion**: rule and constraint domains in phonology

3. **Syntactic cohesion**: rule and constraint domains in syntax

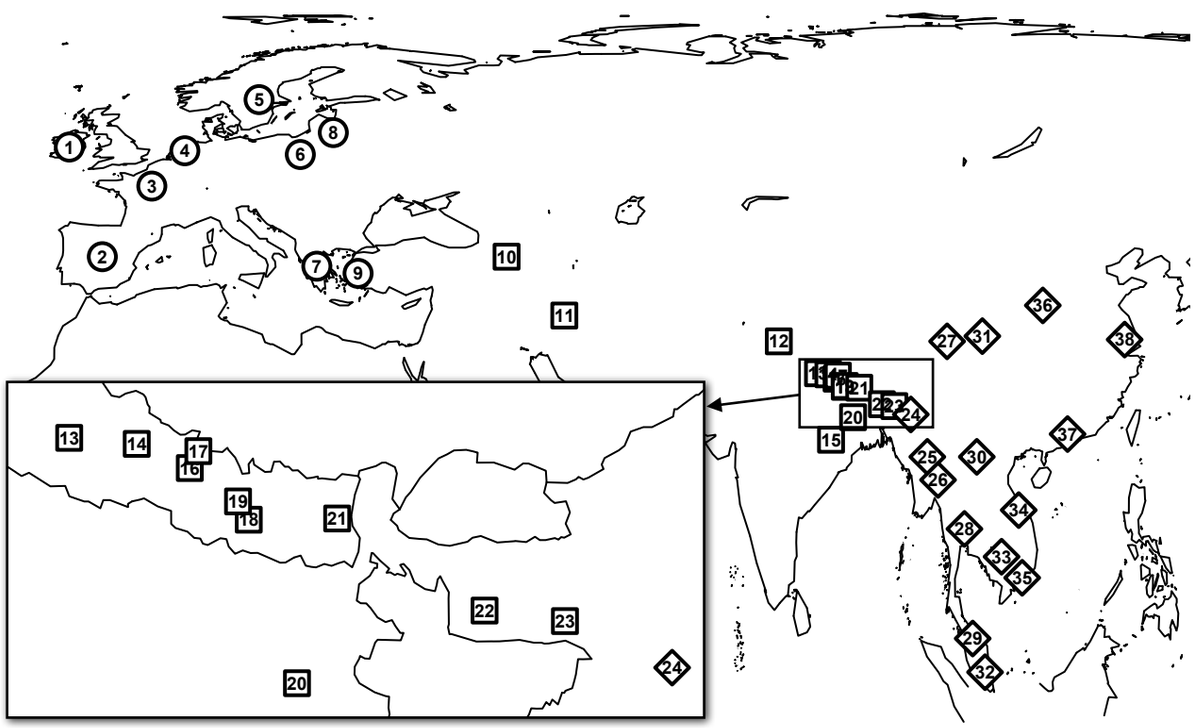
*in *Language Typology and Syntactic Description*; + in *Oxford H Polysynthesis*

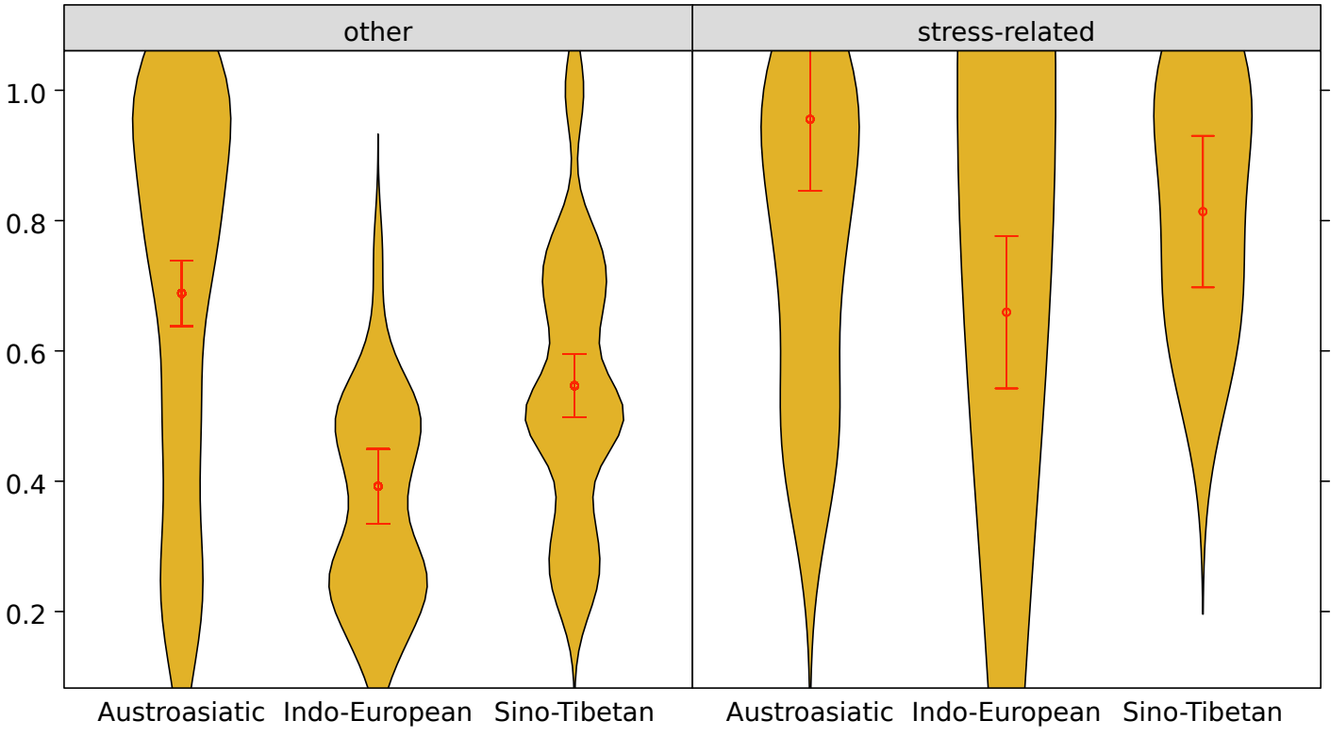
Chintang synthesis



Phonological cohesion does not seem to dependent much on contact

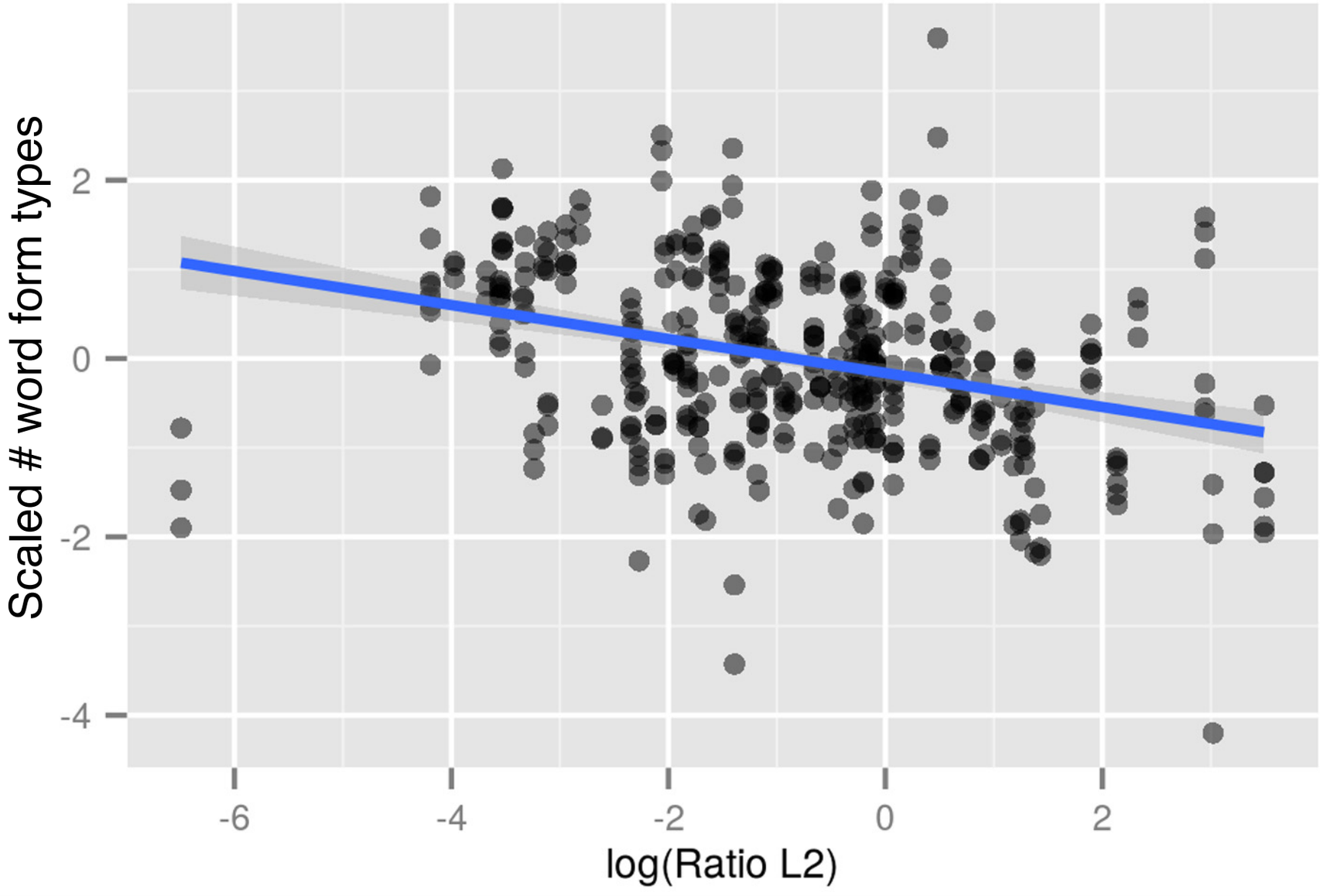
- **No effect of areas** on phonological domain size trends but significant effects of family membership and rule type (Bickel, Hildebrandt & Schiering 2009 in *Phonological Domains*)





Syntactic selectivity matters most for L1 vs. L2 acquisition contrast

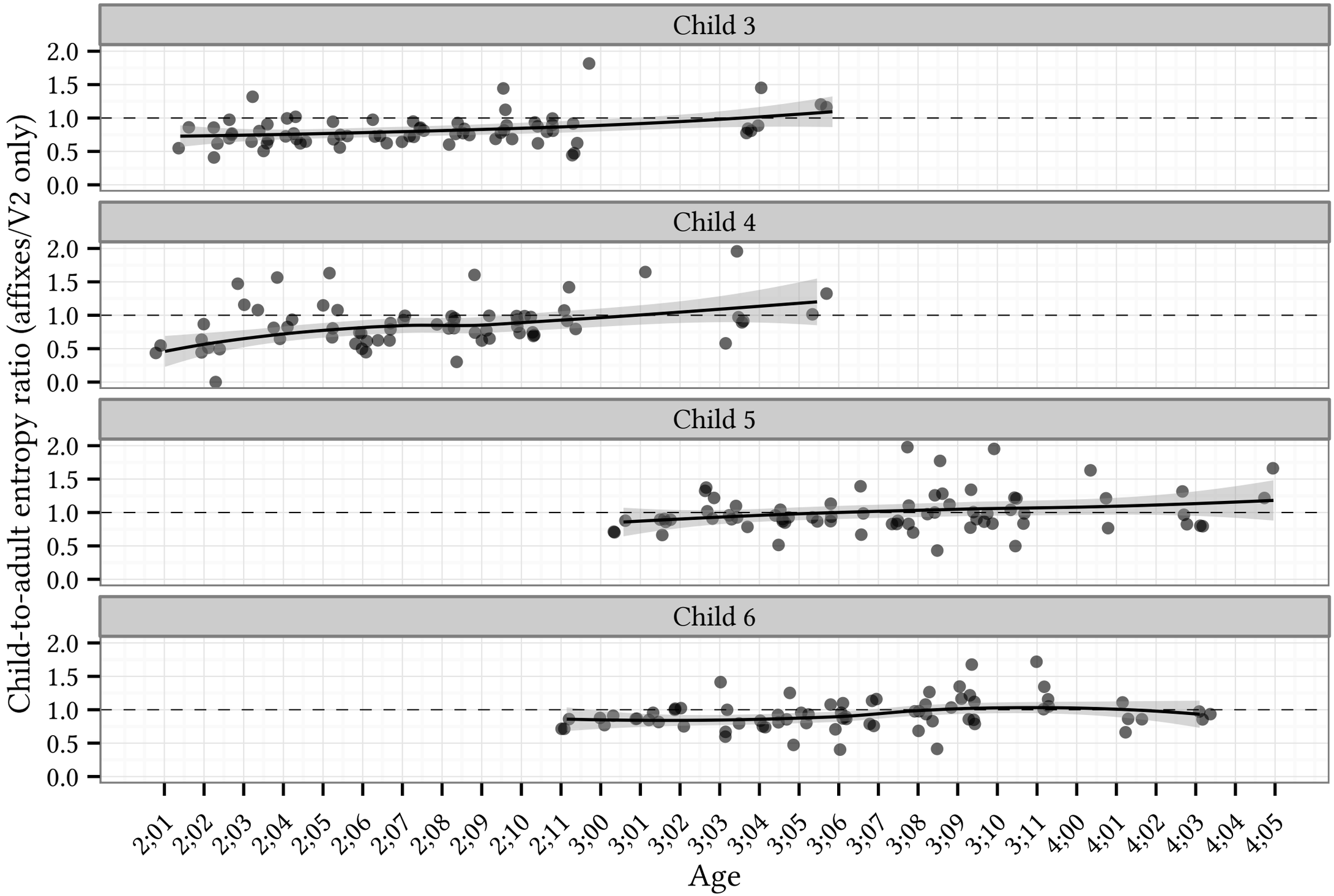
- with selective morphemes, roots come in more diverse environments → bigger learning challenge (Stoll 2009[+]; Stoll, Mažara & Bickel 2015[*])
- well-established effects on L2 acquisition (e.g. Dahl 2004[#], Trudgill 2011[%] etc; Bentz et al. 2015 *PLOS ONE*)



[+]in *Cambr. H Child Lang;* *in *Oxford H Polysynthesis;* [#]*Growth....;* [%]*Socioling Typology*

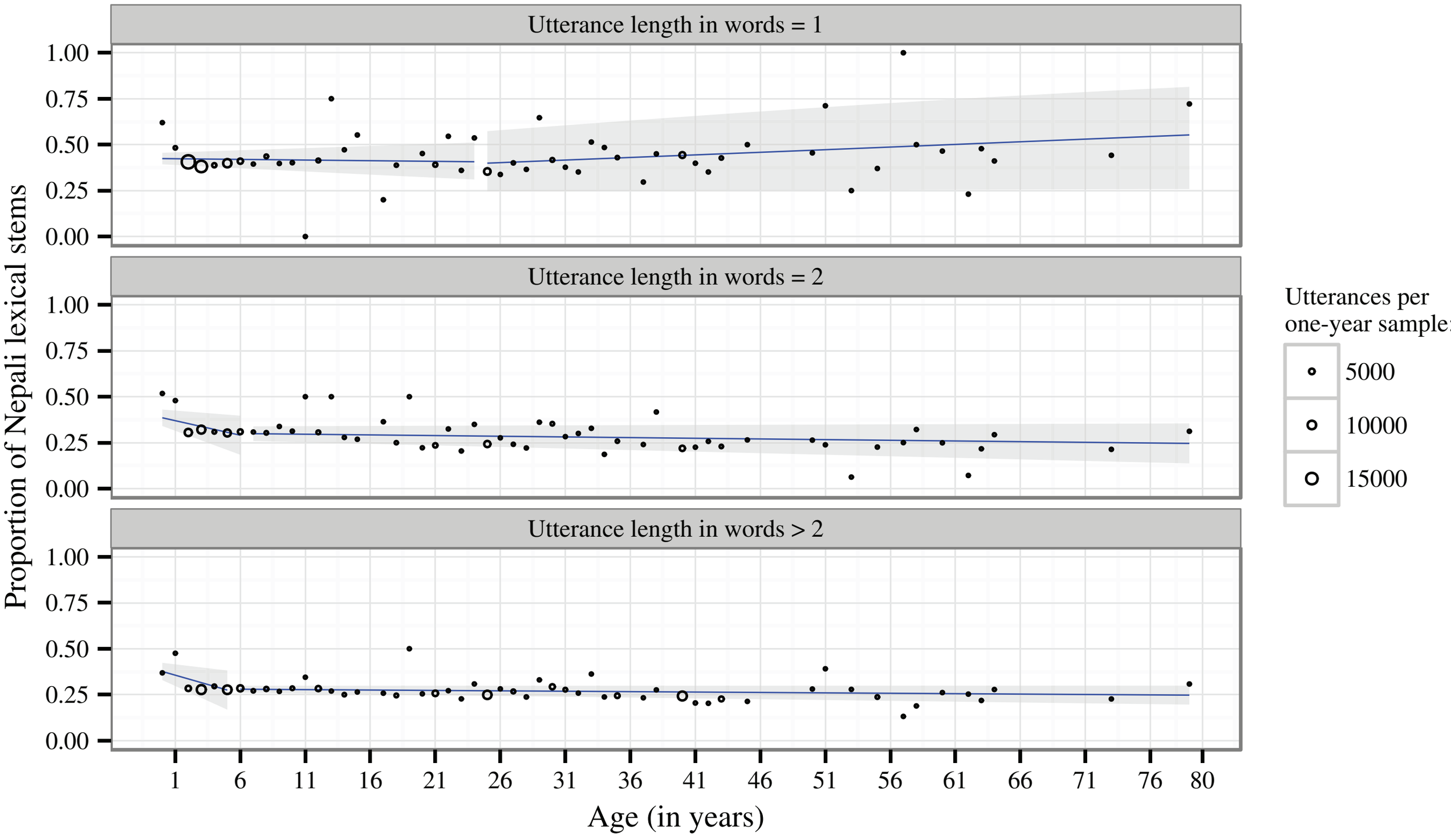
Syntactic selectivity matters most for L1 vs. L2 acquisition contrast

- but amazing acquisition performance in L1

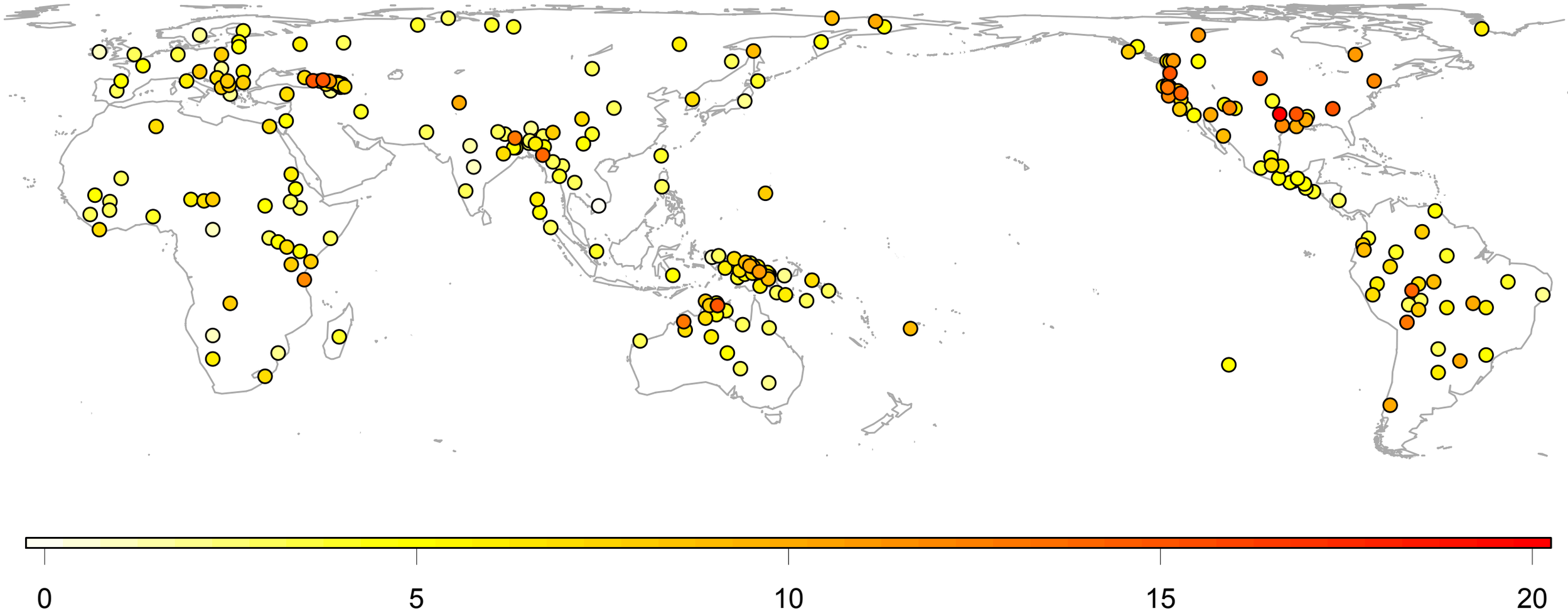


Syntactic selectivity matters most for L1 vs. L2 acquisition contrast

- affix morphology acquired even faster than adult degrees of code-mixing!



Result: synthesis degree has the typical signature of a *local* feature

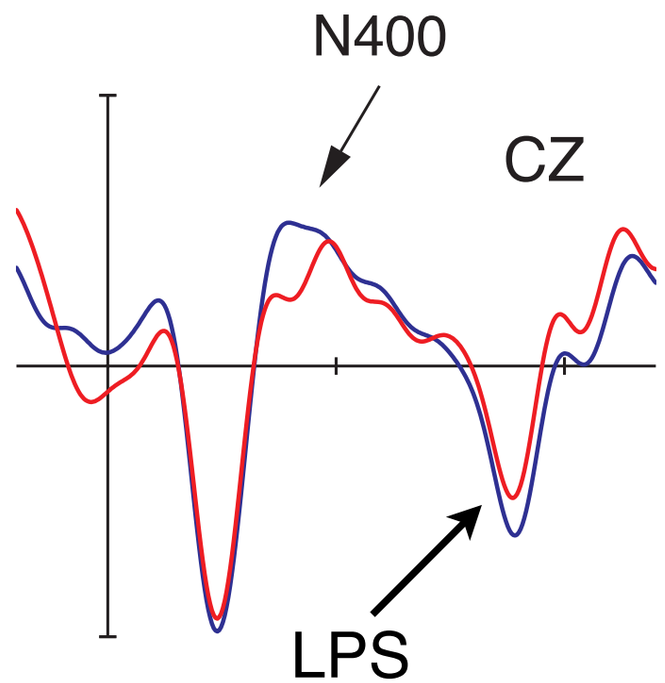


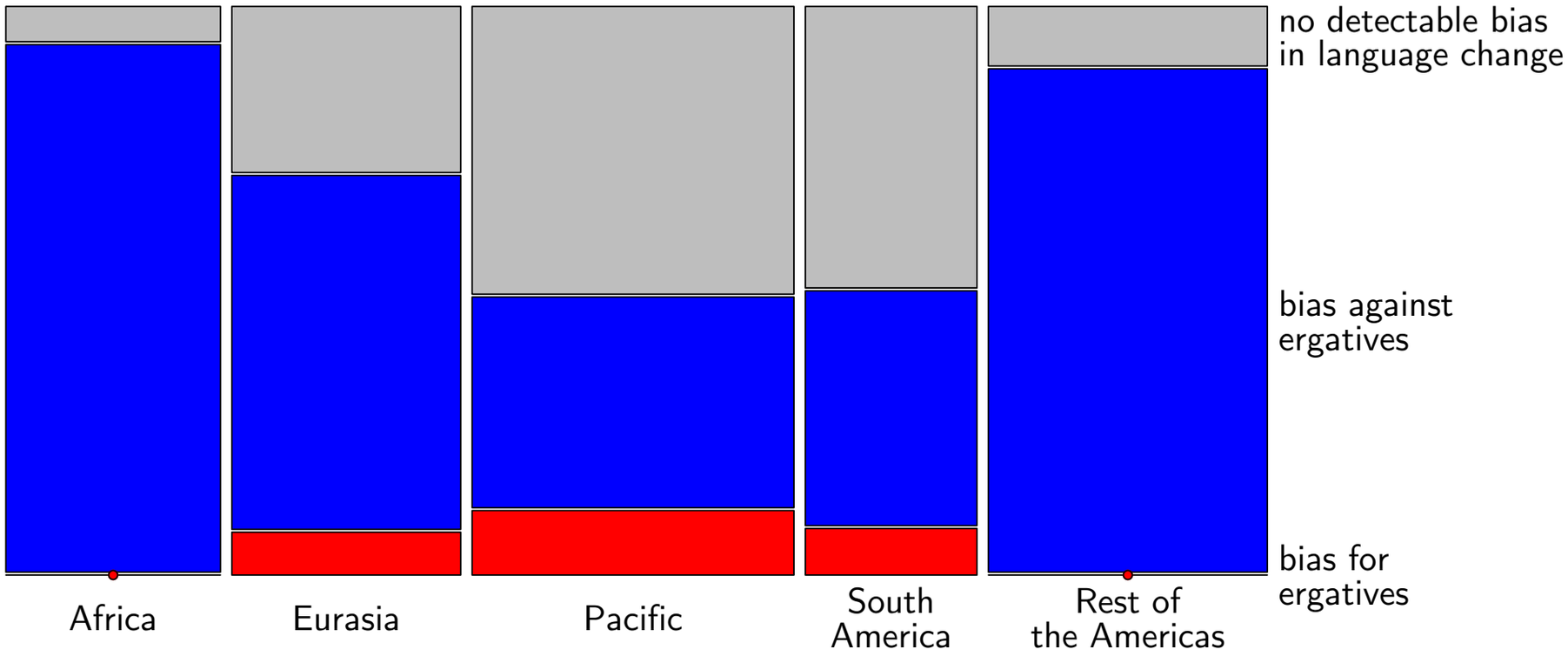
A case study on a difficult feature: strong ergativity

Processing disfavors ergativity in case marking

- The processing system prefers unmarked initial NPs to be A or S, not P (Bickel et al. 2015 *PLOS ONE*)

kitāb	***bec-ī***	*(Rām-ne)*
book(F)[NOM]	sell-PP.F	Ram-ERG
kitāb-ko	***bec-ā***	*(Rām-ne)*
book(F)-ACC	sell-PP.M	R-ERG

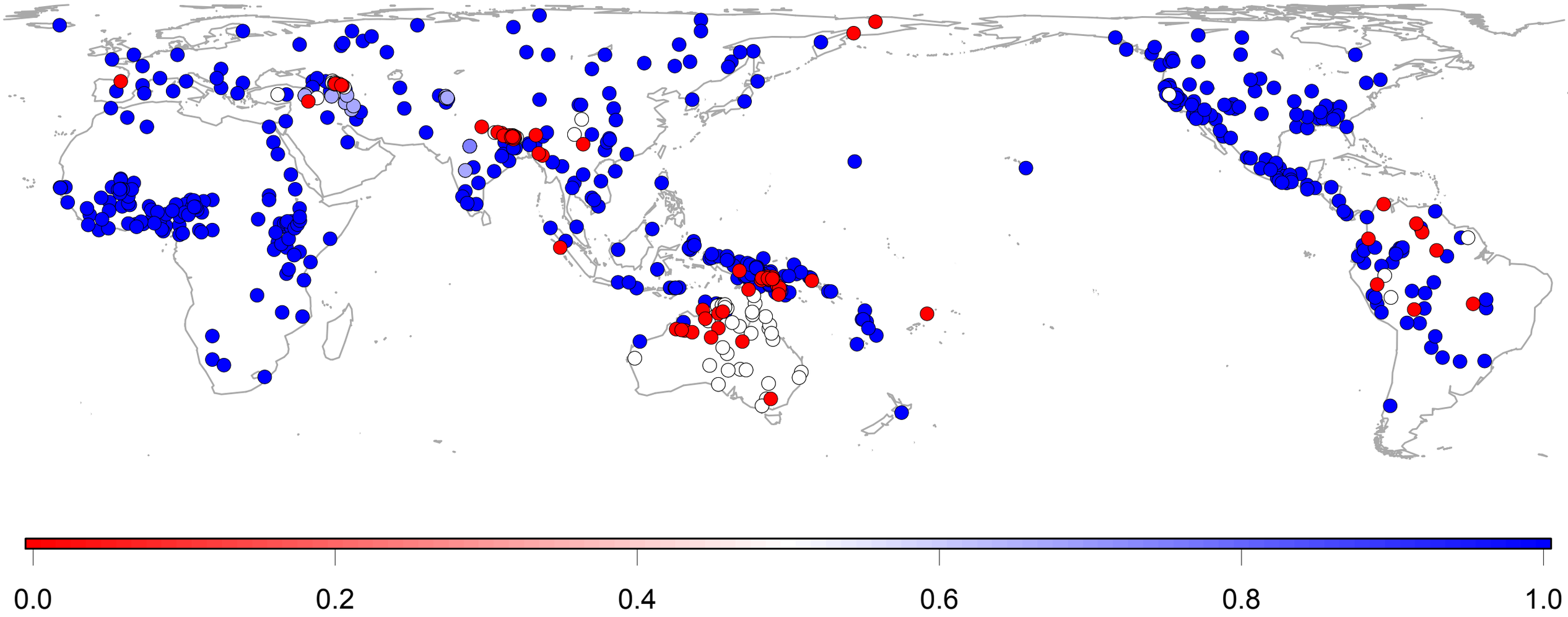




Processing disfavors ergativity in case marking

- BUT: no change without variation, and contact is a key source of variation

  → expect a (weak) correlation strength of ergativity in case-marking and degree of sociolinguistic isolation



Proportion of S=A case assignment across conditions per language

(CE) Kiranti case ergativity is particularly strong

1. **Widespread in the system**: only very few pronouns lack ergative case forms, for example
   - Belhare: only first person singular
   - Chintang: only exclusive forms (resulting from haplology)
   - Yakkha: first and second person pronouns
   - Puma, Yamphu: no constraint

Note: absence of case is driven by form, not meaning (Bickel 2000 *SL*):

Yakkha (Schackow 2014 *UZH Diss*):

a-phaŋ=ŋa	*men=na,*	*a-koŋma=ŋa=le*
1SG.POSS-MyZH=ERG	NEG.COP[3]=NMLZ.SG	1SG.POSS-MyZ=ERG=CTR
ta-ga=na	*raecha*	
bring[PST;3.P]-2.A=NMLZ.SG	MIR	

'Not the uncle, but you, auntie, really brought her here (the second wife)!' [06_cvs_01.042]

(CE) Kiranti case ergativity is particularly strong

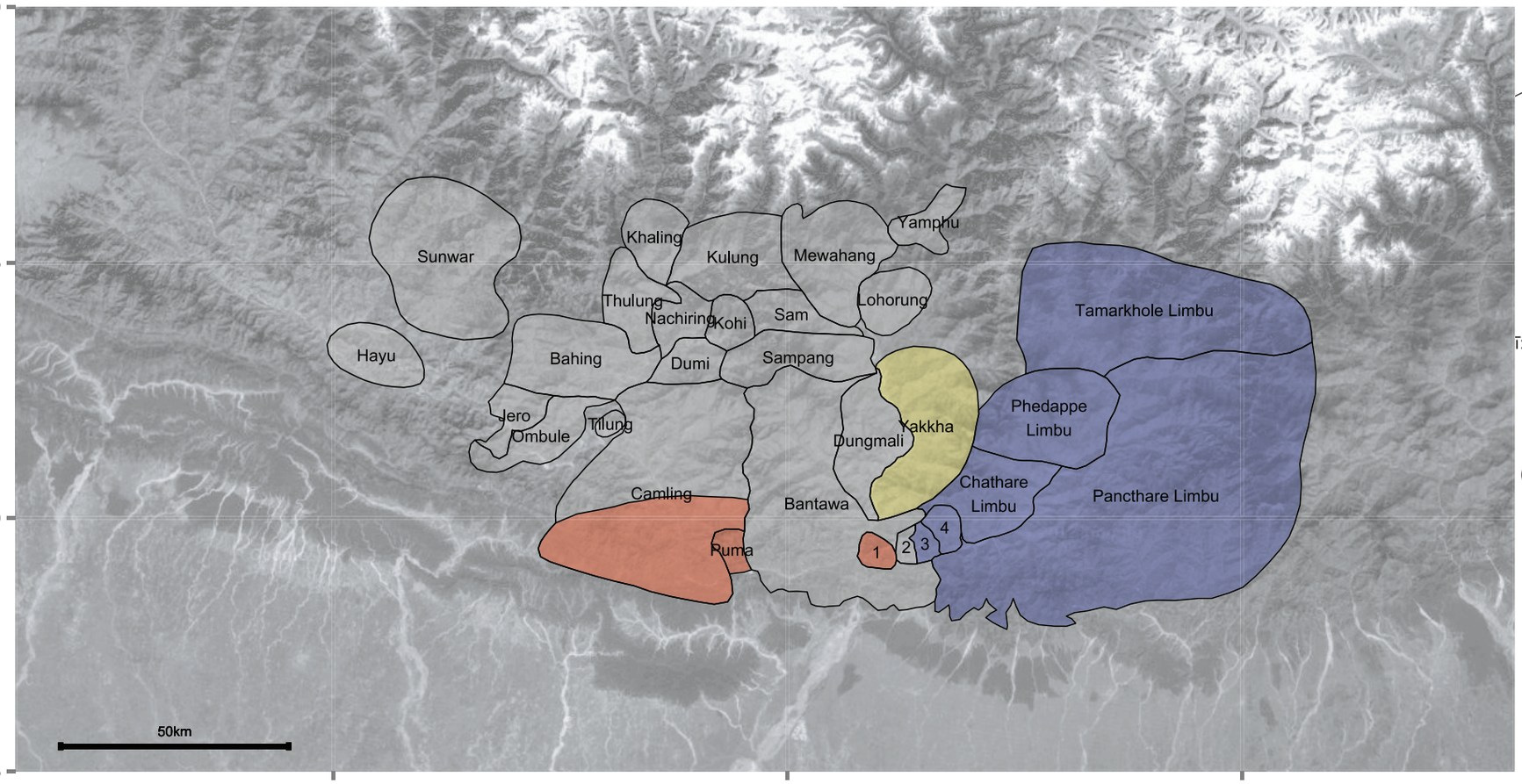
- ERG has even recently expanded (Bickel & Gaenszle 2015 in *JSALL*)

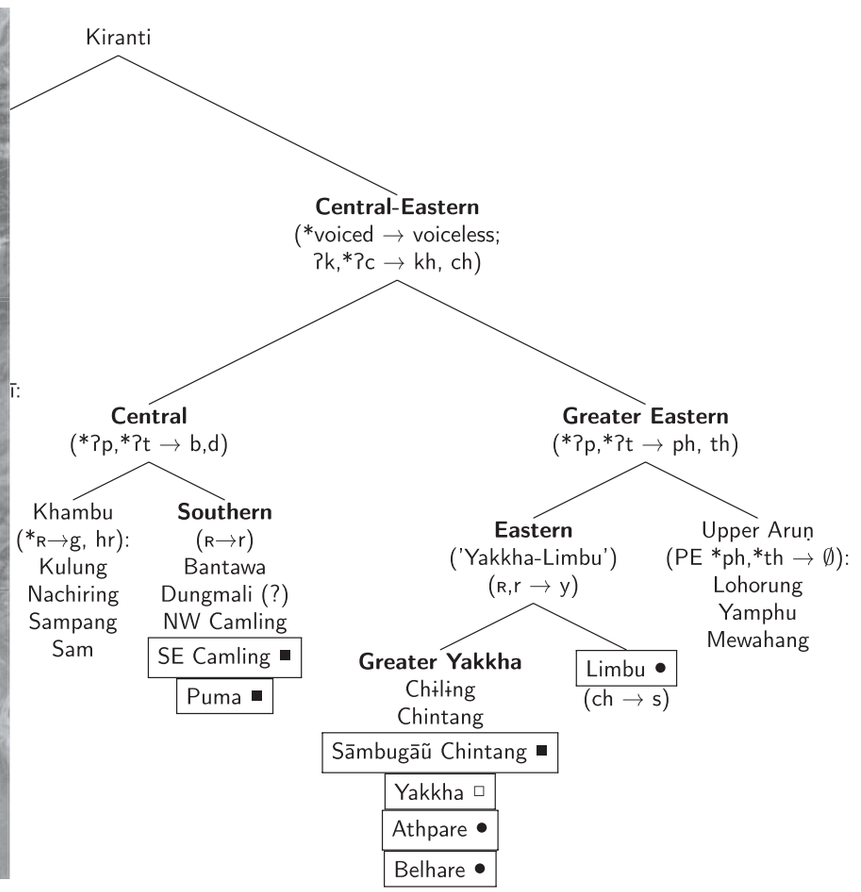
Belhare (Bickel 1996)

a. *un-na* *maʔi* *niu-t-u.* (active)
3s-ERG person[sNOM] [3sA-]see-NPST-3O
'S/he sees a (specific) person.' *or* 'S/he sees the person.'

b. *un* *maʔi* *ni-yu.* (antipassive)
3sNOM person[sNOM] [3sS-]see-NPST
'S/he sees people.' *but not* *'S/he sees the/a (specific) person.'

c. *un-na* *maʔi-ni-yu.* (first person object agreement)
3s-ERG eP-see-NPST
'S/he sees us (e).'





(CE) Kiranti case ergativity is particularly strong

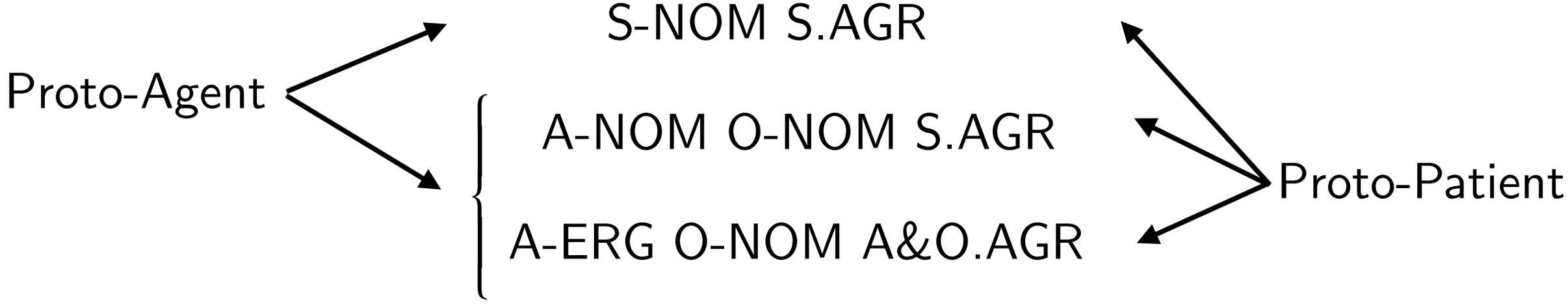
2. **ERG *iff* transitive morphosyntax; no free semantic parameter or any kind of differential/split/fluid subject marking**

   - Occasionally very limited, idiosyncratic variation, e.g.

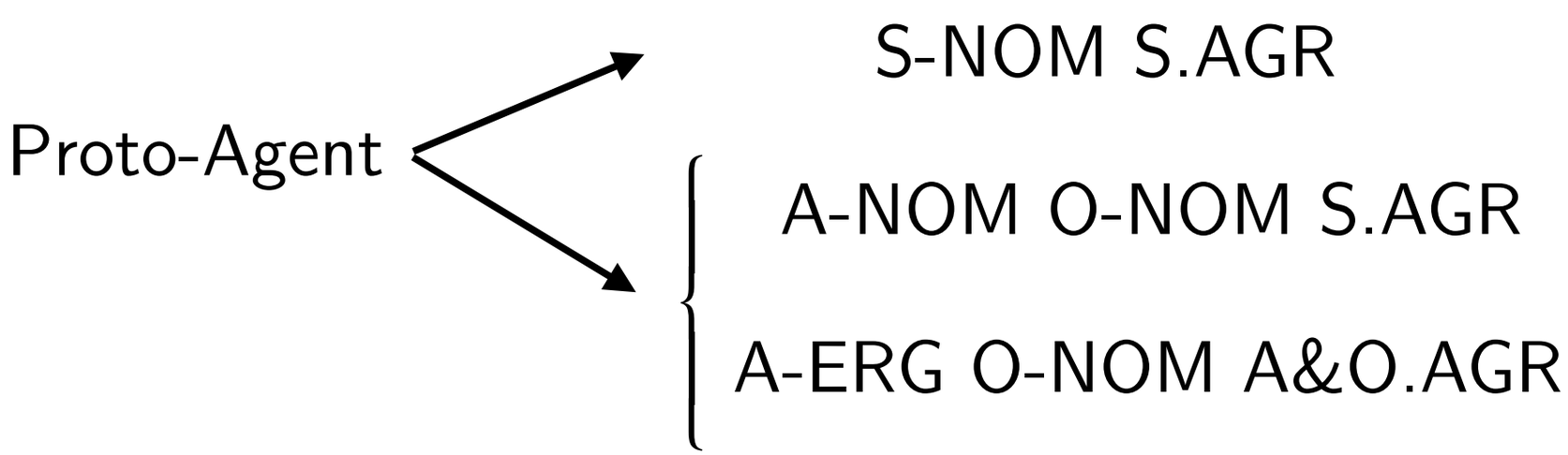
     in Chintang ergatives are frequent on 1pi and 2p vs. rare on 1s, 1di, 2s and 2d (ungrammatical on 1de and 1pe) — depending on many factors including language ideology (Schikowski, Paudyal & Bickel 2015 in *Valency Classes*)

- All morphosyntactic transitivity alternations either
  - have no impact on ERG assignment or
  - are driven by something else than agency or agent reference

Morphosyntactic transitivity in CE Kiranti (exemplified by Chintang)



Morphosyntactic transitivity in CE Kiranti (exemplified by Chintang)



Critical factor: Proto-Agent explication; focus on cause vs result

a. *Sa-ŋa u-lett-o-kha phuŋ?*
who-ERG 3[p]A-plant-3[s]P-$NMLZ_2$ flower
'Who planted the flower?' [CLLDCh3R07S01.953]

b. *Makkai-ce u-lett-a-ŋs-e.*
maize-ns 3[p]S-plant-PST-PRF-IND.PST
'The maize plants have been planted.' [field notes 2010]

a. *Saĩli, kana-phak na ba-tta=kha ghoŋ haŋ*
third.daughter 1pePOSS-pig TOP PROX-EXT-$NMLZ_2$ grow.big[.SBJV.NPST.3sS] COND
na aŋ…
TOP QTAG
'Saĩli, suppose our pig grew as big as this…' [CLLDCh1R06S03.0151]

b. *Ba=go phak them-ma ba-tta ghoŋs-o-ŋs-e?*
PROX-$NMLZ_1$ pig what-ERG PROX-EXT grow.big-3[s]P-PRF-IND.NPST[.3sA]
'What has let this pig grow this big?' [elicitation 2010]

Morphosyntactic transitivity in CE Kiranti (exemplified by Chintang)

S-NOM S.AGR

A-NOM O-NOM S.AGR

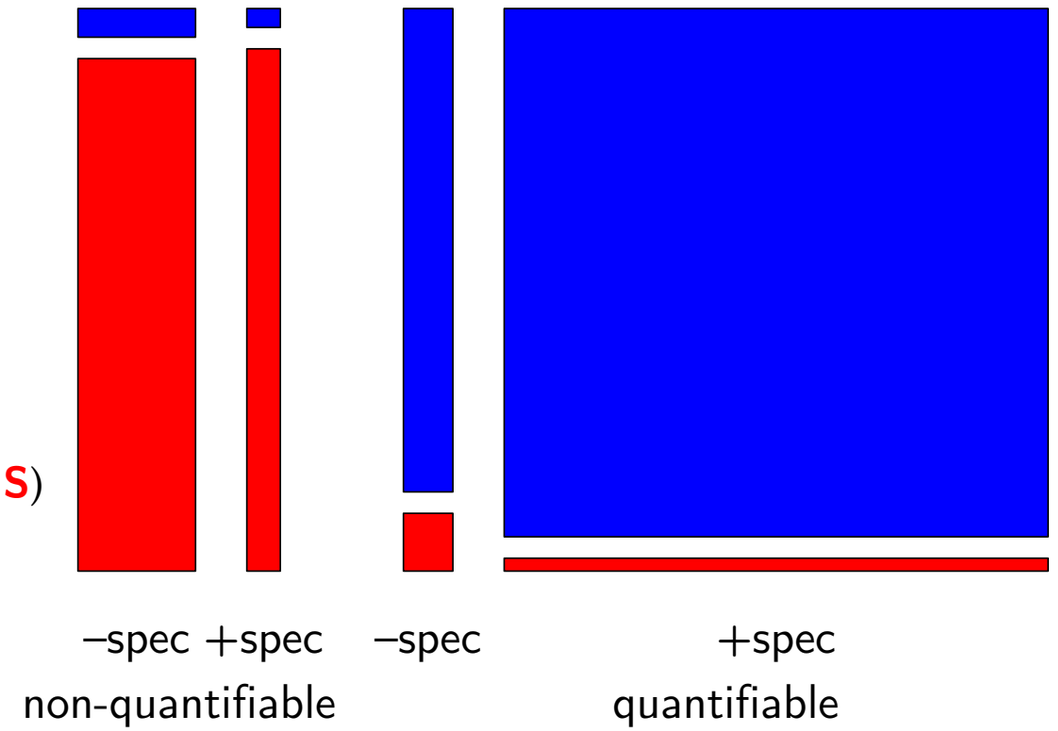
A-ERG O-NOM A&O.AGR

Critical factor: quantifiability; specificity of Proto-Patient

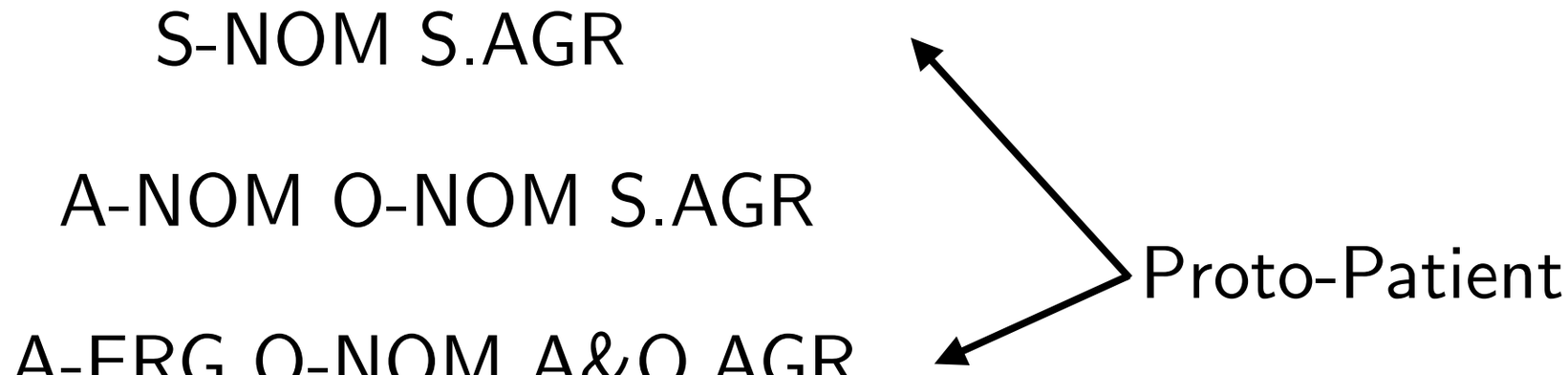
a. *huĩsa-**ŋa** maʔmi copt-o-k-o.*
DEM-**ERG** person[-NOM] [3sA-]look-3sO-NPST-3sO (**TRANS**)
'S/he looks at the people.'

b. *hungo maʔmi cop-no.*
DEM[-**NOM**] person[-NOM] [3sS-]look-NPST (**DETRANS**)
'HS/he looks at people.' (in general)

c. *huŋgo sumbhaŋ kaphapa kon-no-ta.*
DEM[-**NOM**] three helpers[-NOM] [3sS-]search-NPST-CNT (**DETRANS**)
'I'm searching for three helpers.'



Morphosyntactic transitivity in CE Kiranti (exemplified by Chintang)



Critical factor: P explication in possessive of experience constructions

a. *hana-ko i-rek* *kat-no?*
2s-GEN 2sPOSS-anger[-**NOM**] [3sS-]go-IND.NPST
'Are you angry?'

b. *hana-ŋa hun-ce* *i-rek* *a-katt-u-c-e?*
2s-**ERG** DEM-ns[-NOM] 2sPOSS-anger[-NOM] 2[s]A-bring.up-3O-3nsO-IND.PST
'Are you angry with them?'

Conclusions

Kiranti languages are special because they are located in the Eurasian Enclaves (together with other languages in the Himalayas, the Caucasus, the north Pacific coast, and the Andamans), where they were shielded off from the major spreads that started ca. 15kya

→ They are key languages for reconstruction within ST/TB/TH (cf. DeLancey's talk)

→ They allow a glimpse into how Eurasia looked like before 15kya: quite similar to what we nowadays find in the Americas, in PNG and in Australia