

Variability of Languages in Time and Space

Lecture V

Variability in Morphology, part 2

- Typology of grammatical categories:
- Nominal categories: Number, Case, Head-marking, Determination
- Linguistic quiz

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Typology of Grammar

- Not universal, but many categories are present in many languages (*see next slide*)
- Nouns
 - semantic meanings (number, determination, possessivity)
 - syntactic meanings (agreement classes, case, head-marking)
- Verbs
 - temporal categories, aspect, modality, epistemic possibility, evidentiality, causality, (gender)
- Distinguishing word classes
 - nouns vs. verbs
 - semantic features (denote a thing vs. denote an action)
 - pragmatically (nouns introduce participants to the scene, and verbs deploy them)
 - formally (e.g. inflectional morphology)
 - syntactically (how they are combined with other word classes)

Word Classes (POS)

- nouns
- verbs
- adjectives
- adverbs



open word classes

Cross-linguistically valid criteria for distinguishing word classes can be applied

-
- pronouns (personal, possessive, reflexive, reciprocal, demonstrative, relative, interrogative, indefinite)
 - articles
 - adpositions
 - conjunctions
 - numerals
 - interjections

Grammatical Categories for Today

Nominal categories

- Number
- Nominal case
- Head-marking (Ezāfe)
- Determination

Number

- Grammatical category of nouns, pronouns, adjectives, and verb agreement
- Expresses count distinctions
- Most often: singular vs. plural, but there are also
 - *dual*, (Lithuanian, Arabic, Maltese, Icelandic, Old Church Slavonic, Slovenian, Sorbian)
 - *trial* (Tok Pisin, Tolomako Lihir) (Papua New Guinea)
 - *paucal* (old Arabic, some languages of Papua New Guinea)
- Very rare numerical uncertainty system
 - one – more than one – indefinite number in some African languages

Expression of Nominal Plurality

Reduplication

Indonesian

rumah	'house'	rumah-rumah	'houses'
perubahan	'change'	perubahan-perubahan	'changes'

Special word

Hawaiian

'elua	a'u	mau	i'a
two	my	pl	fish
'my two fishes'			

(Oceanic Group of Australian Family)

Tones

ngiti (Sudan)

kamà	'chief'	kámá	'chiefs'
màlàyikà	'angel'	màlàyíká	'angels'
màlimò	'teacher'	màlímó	'teachers'
adòdu	'my brother'	adódu	'my brothers'

Prefixation

Anindilyakwa

wirr-iyikwayiwa
pl-child
'children'

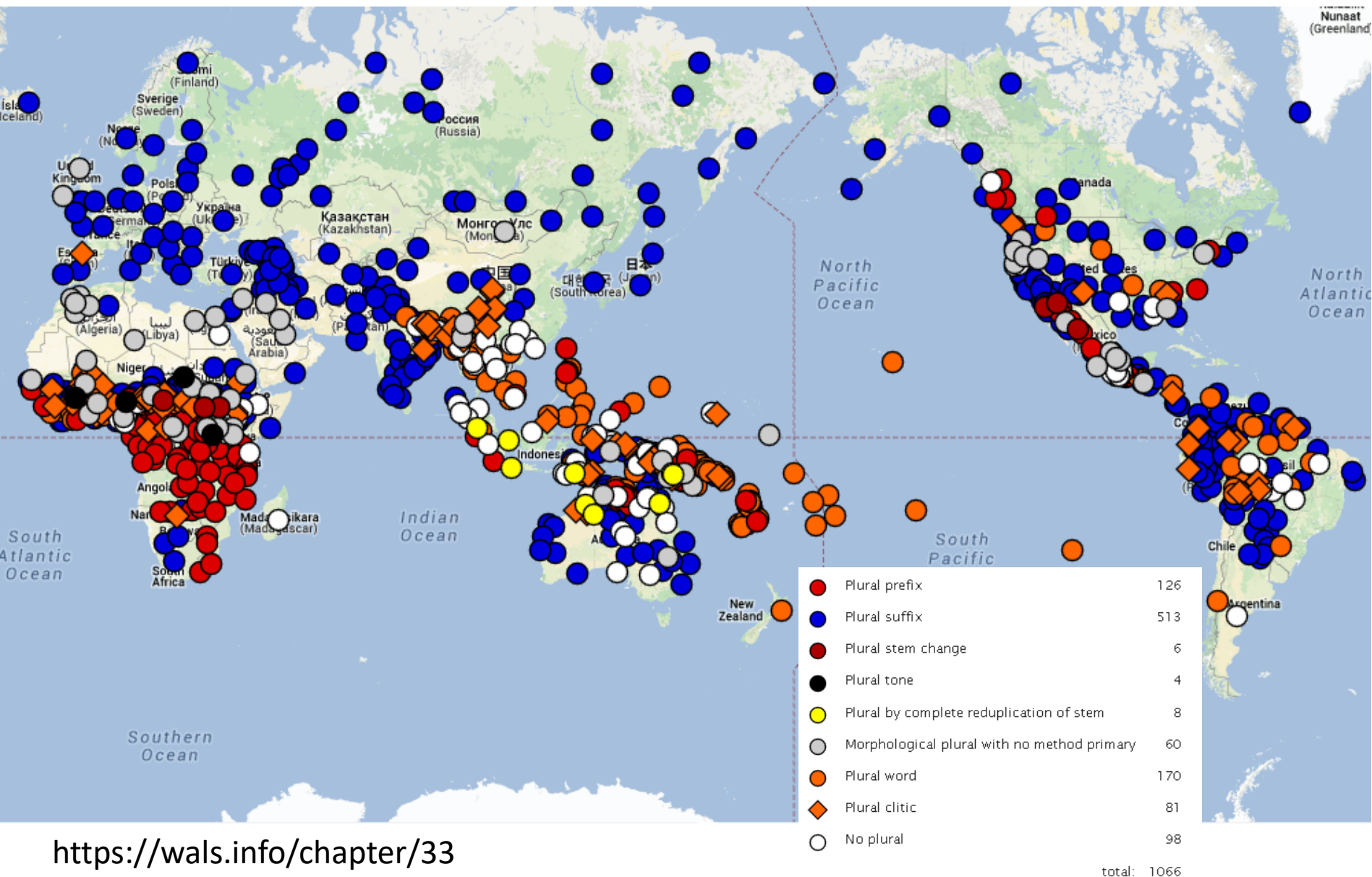
(North Australia)

Change in the root

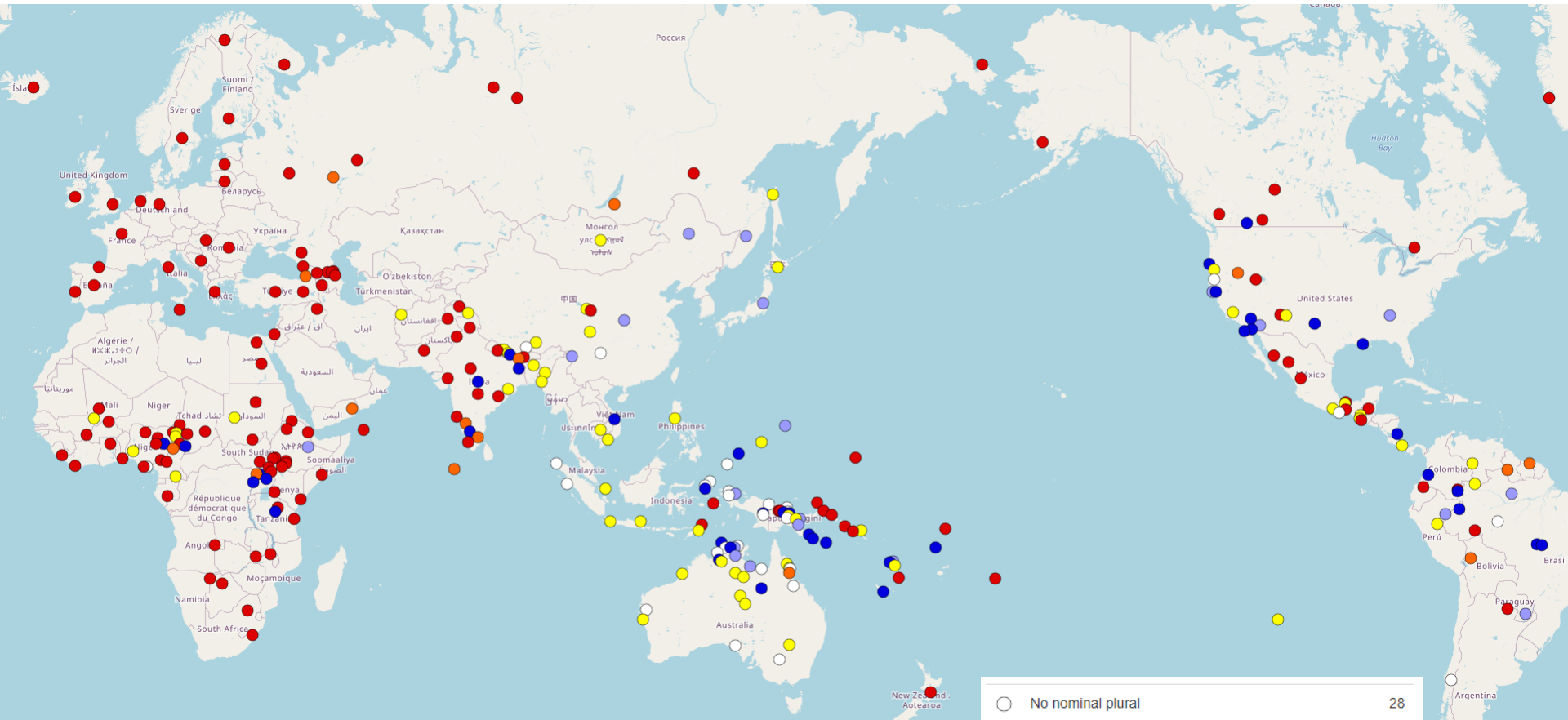
Maricopa, USA

humar	'child'	humaar	'children'
nchen	'older sibling'	nchiin	'older siblings'
hat	'dog'	haat	'dogs'
mhay	'boy'	mhaa	'boys'

Expression of Nominal Plurality



Occurrence of Nominal Plurality



○	No nominal plural	28
●	Plural only in human nouns, optional	20
●	Plural only in human nouns, obligatory	40
●	Plural in all nouns, always optional	55
●	Plural in all nouns, optional in inanimates	15
●	Plural in all nouns, always obligatory	133

Total: 291

Evenki

Bi uluki-je

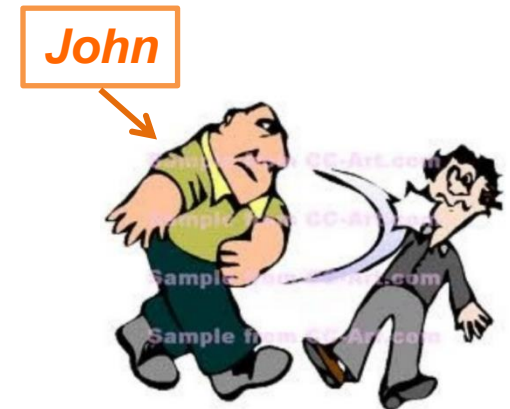
va:-d'a-m.

I squirrel-IND.ACC kill-PRES-1SG.SUBJ

I hunt for squirrels.

Nominal Cases

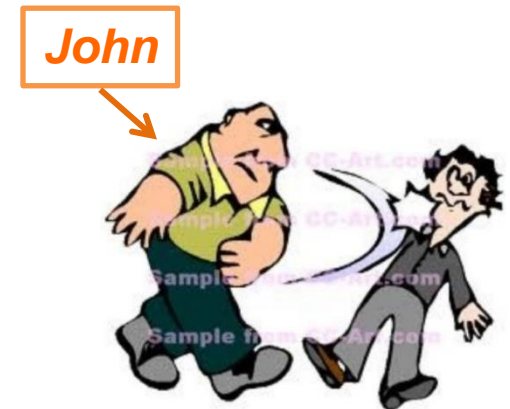
- Syntactic: express grammatical relations (subject, object, oblique...)
 - Subject (\approx ACTor in PDT)
 - Object (\approx PATiens in PDT)
 - Indirect Object, oblique (\approx ADDRessee in PDT)
 - Other (\approx ORIG, EFF in PDT, Instrument)
- Semantic (Thematic roles, Semantic roles)
 - Ch. Fillmore (1968, 1971)
 - Express conceptual notions (agent, patient, instrument...)
 - Example: If someone named John purposely hits someone named Bill, then John is the *agent* and Bill is the *patient* of the hitting event.
 - *John hit Bill.*
 - *Bill was hit by John.*



NOMINATIVE (a really simplified view)

Nominal Cases

- Syntactic: express grammatical relations (subject, object, oblique...)
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NOMINATIVE (a really simplified view)

Semantic Roles - Examples

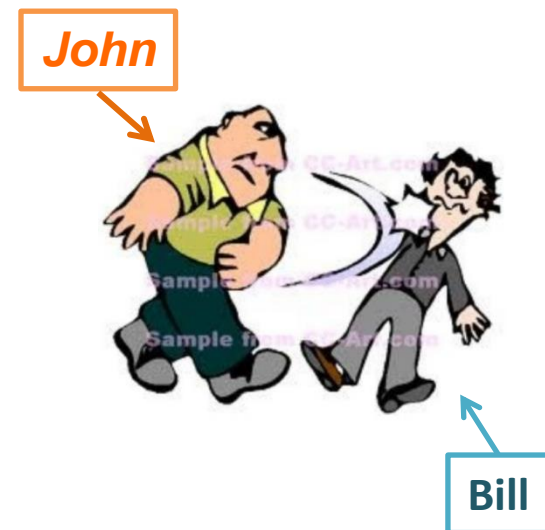
- Agent: The 'doer' of the action denoted by the predicate
- Patient: The 'undergoer' of the action or event
- Experiencer: The living entity that experiences the action or event
- Goal: The location or entity in the direction of which something moves
- Benefactive: The entity that benefits from the action or event (*John helped Susan to buy her first car*)
- Causer: The referent which instigates an event rather than actually doing it (*The rain destroyed the crops*)
- Source: The location or entity from which something moves
- Instrument: The medium by which the action or event is carried out
- Locative: The specification of the place
- Recipient: Argument that receives something (*I paid my landlord the rent*)

Semantic Roles: Agent vs. Patient

- Agent: The 'doer' of the action denoted by the predicate

John hit Bill.

Bill was hit by John.



- Patient: The 'undergoer' of the action or event

John hit Bill.

Bill was hit by John.

Semantic Roles: Patient

- Also known as *affected*, *undergoer*
- The entity undergoing a change of state or location, or which is possessed, acquired or exchanged, a person who experiences an event, the thing or person that is affected by an event
 - The entity predicated with a state or location:
 - *The door is open.*
 - *John is at home.*
 - The entity undergoing a change of state or location:
 - *He opened the door.*
 - *The door swung open.*
 - *He threw the ball across the yard.*
 - *The ball rolled off the table.*
 - The entity which is possessed, acquired, or exchanged:
 - *John has a new book.*
 - *John bought a new book.*
 - *John gave Mary a new book.*



John hit Bill.
The dog ate the meat.
Mary became sad.

Semantic Roles vs. Syntactic Cases

- Semantic roles do not always correspond directly to a syntactic function in a sentence
 - Semantic roles a subject can play:

<i>Sentence</i>	<i>Syntactic function</i>	<i>Semantic role</i>
<u>Bob</u> opened the door with a key.	SUBJECT	AGENT
<u>The key</u> opened the door.	SUBJECT	INSTRUMENT
<u>The door</u> opened.	SUBJECT	PATIENT

Benefactive, Recipient, Addressee

- **Benefactive:** The entity that benefits from the action or event

John helped Susan to buy her first car.

- **Recipient:** Argument that receives something

I paid my landlord the rent.

- **Addressee:** Human argument who receives information

Mary told John the truth.

Benefactive, Recipient, Addressee

- Languages use grammatical case markers to distinguish semantic roles
 - Many roles vs. not so many grammatical markers for cases → roles are combined
- Example:

Semantic roles Benefactive, Recipient and Addressee are mostly combined and use Dative, BUT

 - in Sanskrit, Accusative is used for the Addressee and Dative is used for Benefactive and Recipient
 - in Dravidian languages, there is a special case for Benefactive, while Recipient + Addressee + Patient get Accusative

Semantic Roles: Comitative

Relationship of "accompaniment": "in company with", "together with"

John washed the car with Mary.



Estonian

suffix “-ga”

ja	Barber	rüüpa-b	koos	Balthasari-ga	sügava	sõõmu
and	Barber	drink-3.SG	together	Balthasar-COM	deep.GEN	mouthful.GEN

And Barber takes a sip together with Balthasar.

Chukchi

circumfix

a'ачек	ңытоскычат-гьэ	га-мэлгар-ма
boy	ran.out-PERF	COM.PRED-gun-COM.PRED

The boy ran out with a gun

Hungarian

suffix “-stul/-stül,”

ruhá-stul	és	cipő-stül	feküd-t-em	az	ágy-ban
clothes-COM	and	shoe-COM	lie-PAST-INDEF.1.SG	the	bed-INE

I was lying in bed with my clothes and shoes on.

Semantic Roles: Abessive

(caritive and privative)

- The lack or absence of the marked noun
John washed the car without Mary.
- Especially used in Uralic languages



Finnish

raha "money"

rahatta "without money"

ilman rahaa "without money"

Hungarian

pénz "money"

pénztelen "without money"

haza "home(land)"

hazátlan "(one) without a homeland"

Locative Cases

Basic Localization	Case	Some combinations in Hungarian
IN – inside	LOKATIVE=ESSIVE (where, LOC)	Inessive
APUD – near		Elative
SUB – under	ABLATIVE=ELATIVE (from where, DIR1)	Illative
SUPER – over		Superessive
POST – behind		Delative
AD – on surface	LATIVE=DIREKTIVE (to where, DIR3)	Sublative
CIRKUM – around		Adessive
ULTRA – far from		Ablative
		Allative

Given Alutor words and their English translations:

kujŋətenək	near to the glass
rarəlqək	on the roof
rarayiŋəŋ	into the basement
aŋqakin	from the sea
aŋqan	the sea
keŋən	the bear
keŋəlqəkin	from the bear
rarəlqən	the roof
kujŋəŋ	into the glass
keŋək	inside the bear
aŋqatenək	on the beach



Translate into Alutor:

the basement
inside the house
the glass
from the roof
to the bear

Old French (*roy* - 'king')

Direct: roy-s roy-0

Oblique: roy-0 roy-s

2

Hungarian (*hajó* - 'ship')

Nominative:	hajó
Accusative:	hajó-t
Inessive:	hajó-ban
Elative:	hajó-ból
Illative:	hajó-ba
Superessive:	hajó-n
Delative:	hajó-ról
Sublative:	hajó-ra
Adessive:	hajó-nál
Ablative:	hajó-tól
Allative:	hajó-hoz
Terminative:	hajó-ig
Dative:	hajó-nak
Instrumental-Comitative:	hajó-val
Formal:	hajó-képp
Essive:	hajó-ul
Essive-Formal(-Similitive):	hajó-ként
Translative-Factitive:	hajó-vá
Causal-Final:	hajó-ért
Distributive:	hajó-nként
Sociative:	hajó-stul

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Number of Cases

Iceland (horse)

Nominative:	hest-ur
Accusative:	hest
Genitive:	hest-s
Dative:	hest-i

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Khanty (Ural; west Siberia) (*xo:t* - 'house')

Direct:	xo:t
Locative:	xo:t-na
Translative:	xo:t-ti

3

Trumai, Brazil (child)

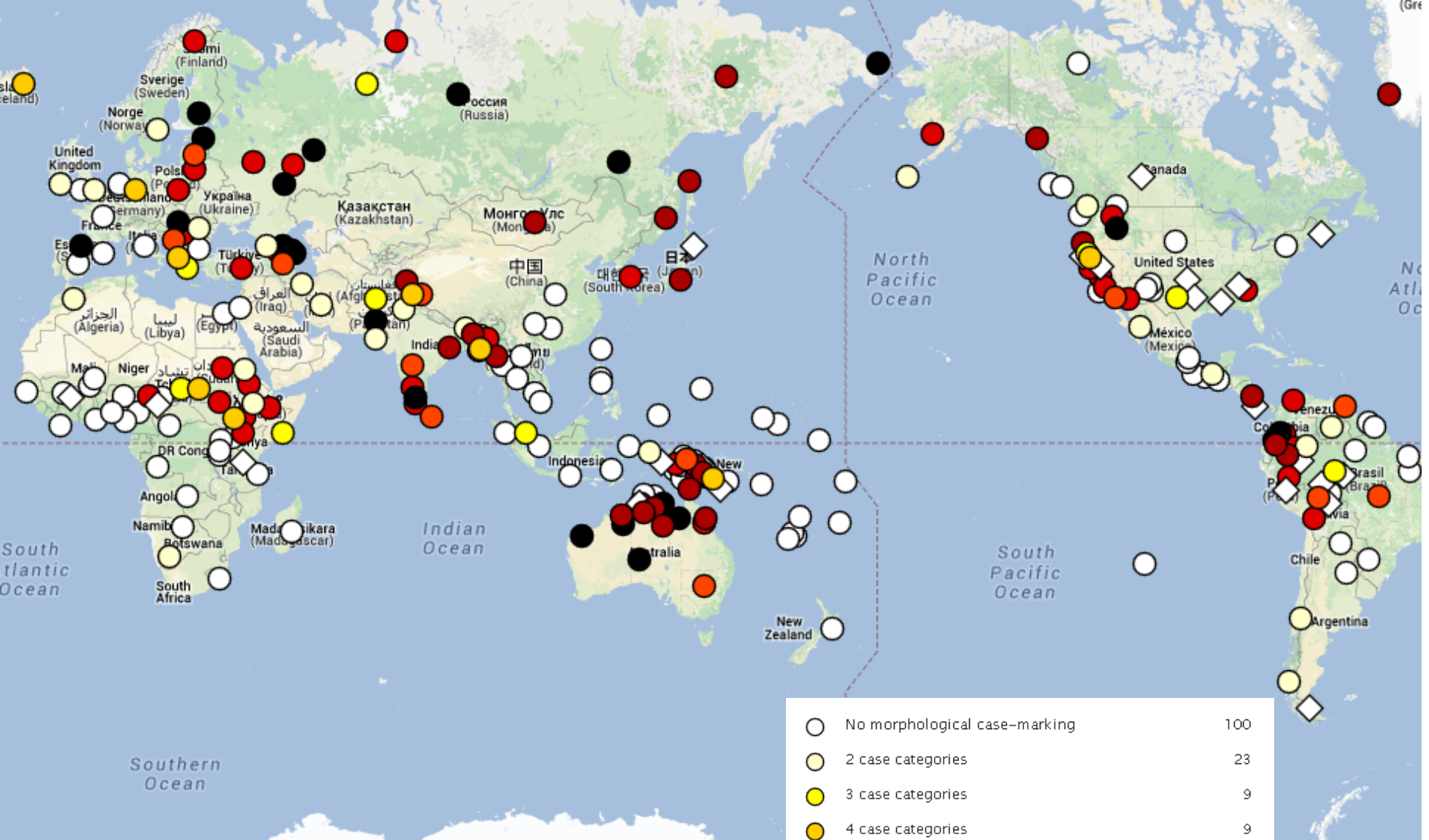
Absolutive:	axos
Ergative:	axos-ak
Dative:	axos-atl, axos-ki
Genitive:	axos-kate
Locative:	(esak-en)

5

Russian (*zavod* - 'factory', *karta* - 'map')

Nominative:	zavod	kart-a
Accusative:	zavod	kart-u
Genitive:	zavod-a	kart-y
Dative:	zavod-u	kart-e
Instrumental:	zavod-om	kart-oj
Locative:	zavod-e	kart-e

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Number of Cases

Expression of Case

Prefixes

Krongo (centr.Afrika)

àpá-ŋ ì?ìŋ á-kùufi
m.perf.hit-tr3sg.m instr-baton

‘He hit him with a baton.’

Proklitic



Cayuvava (Bolivia)

ji=[ka'reeča datì]
obl=[other place]
‘in another place’

Tone

Nandi (Kenya)

a. kè:r-éy kípe:t la:kwé:t
look.at-impf Kipet.subj child.nonsubj
‘Kibet is looking at the child.’

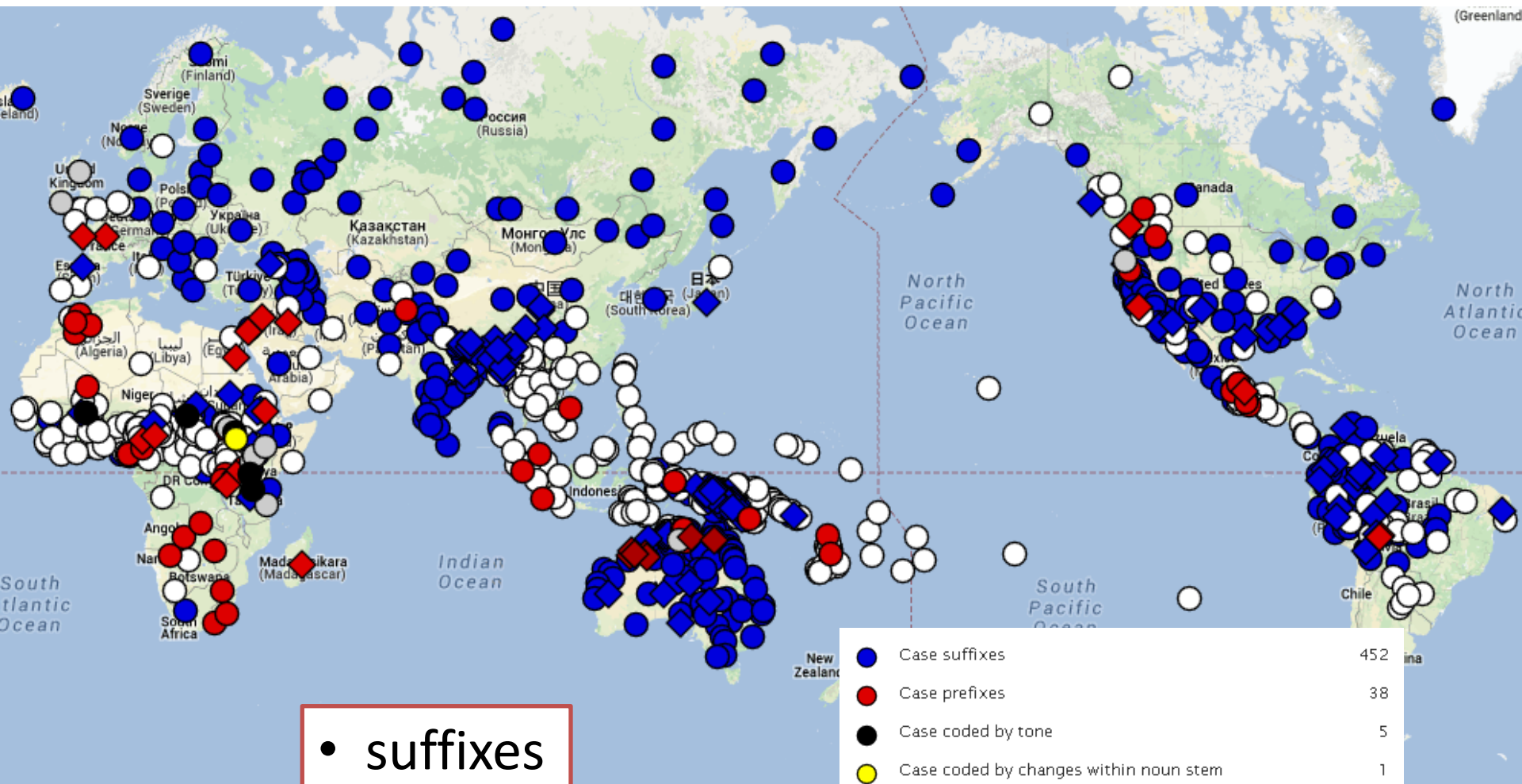
b. kè:r-éy kipe:t kípro:no
look.at-impf Kipet.nonsubj Kipro.no.subj
‘Kipro.no is looking at Kibet.’

Enklitic

Ungarinjin (Australie)

[dambun budaga]=ra
[camp their]=loc
‘at their camp’

Position of Case Affixes



- suffixes
- prefixes
- tones
- clitics

Case suffixes	452
Case prefixes	38
Case coded by tone	5
Case coded by changes within noun stem	1
Mixed morphological case strategies with none primary	9
Postpositional clitics	123
Prepositional clitics	18
Inpositional clitics	7
Neither case affixes nor adpositional clitics	379

total: 1032

Head-marking (Ezāfe)

- Other strategy of dependency marking (vs. case, e.g. *dũm otce*, *otcũv dũm*, *velký dũm*)
- Typical for Iranian, Turkish, Semitic, Fino-Ugric, etc. languages

- | | | | | |
|----|------------------------|------------------------|---------------------|--------------------------|
| a. | sānduq-e
case - izf | doxtār
girl | 'girl's (suit)case' | |
| b. | sānduq-e
case - izf | mān
I | 'my (suit)case' | |
| c. | sānduq-e
case - izf | qāšāng
nice | 'nice (suit)case' | |
| d. | sānduq-e
case - izf | qāšāng-e
nice - izf | doxtār
girl | 'girl's nice (suitcase)' |
| e. | sānduq-e
case - izf | doxtār-e
girl- izf | qāšāng
nice | 'nice girl's (suit)case' |

Persian

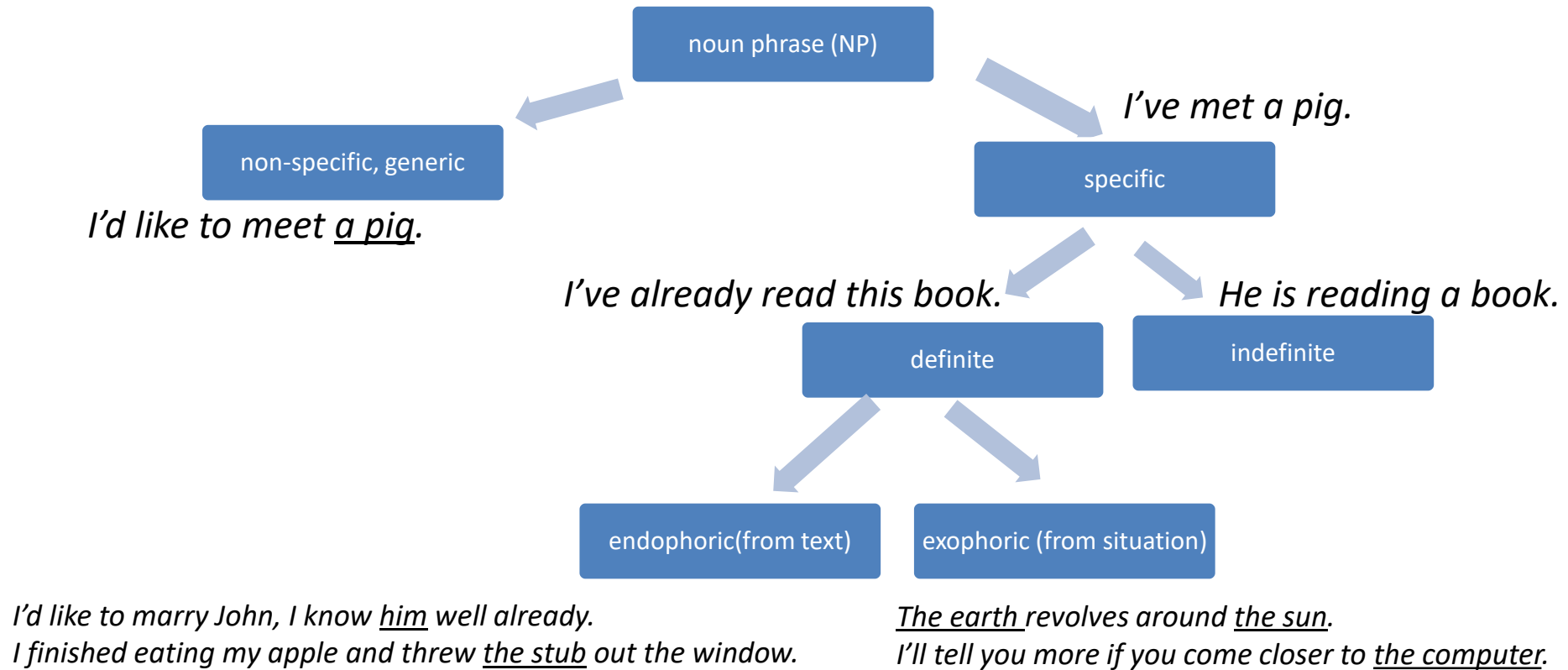
Determination

- Abstract meaning (words in dictionary, lists) → Realization in text
 - By noun phrases: Specific and non-specific NPs
 - By specific NPs: Definite and indefinite NPs
 - By definite NPs: Textual and situational definiteness (e.g. some Frisian and German dialects have distinct markers for textual and situational definiteness)
- The meaning of definiteness seems to be universal, but not the grammaticalization
 - Articles, pronouns
 - Expressing vs. non-expressing other grammatical categories
 - Syntactic means (e.g. word order)
 - Suprasegmentals (e.g. intonation)

Determination: Semantic Classification

abstract meaning vs. realisation in text

the meaning is the same, different grammaticalization



Determination and Referentiality

Marking referentiality	Marking definiteness
> languages (Turkic, Iranian, many African)	< languages (west-European)
The meaning must not be expressed by extra morphemes, may be reflected in grammar (e.g. case and number may be expressed only by referential nouns)	<ul style="list-style-type: none"> both specific and non-specific NPs are classified according to definiteness, without non-specifics being classified into a special group. often expressed by clitics → not always grammaticalized
<p>Bantu > Bemba: indefinite prefix of class&number marker:</p> <p>i-ci-tabo - 'a book, non-specific'</p> <p>ci-tabo - 'specific, definite or indefinite book'</p>	<p><u>English:</u></p> <p>A teacher should be patient. vs. The telephone was invented by Alexander Bell. vs. Ø Gentleman should never insult Ø woman.</p> <p><u>German:</u></p> <p>Das Auto ist des Deutschen liebstes Kind. vs. Die Heuschrecke ist ein Insekt.</p>