Cognitive Neuroscience of Language: 16: Language exotica

Richard Shillcock

Goals

Look at the envelope of possibilities within which human language may exist; look at exotic language phenomena from around the world

Today's reading

Rodriguez-Fornells, A., Rotte, M., Heinze, H-J., Nösselt, T. & Münte, T.F. (2002). Brain potential and functional MRI evidence for how to handle two languages with one brain. *Nature 415*, 1026–1029.

Gilbert, A.L., Regier, T., Kay, P. & Ivry, R.B. (2006). Whorf hypothesis is supported in the right visual field but not the left. *Proceedings of the National Academy of Sciences*, 103, 489–494.

Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

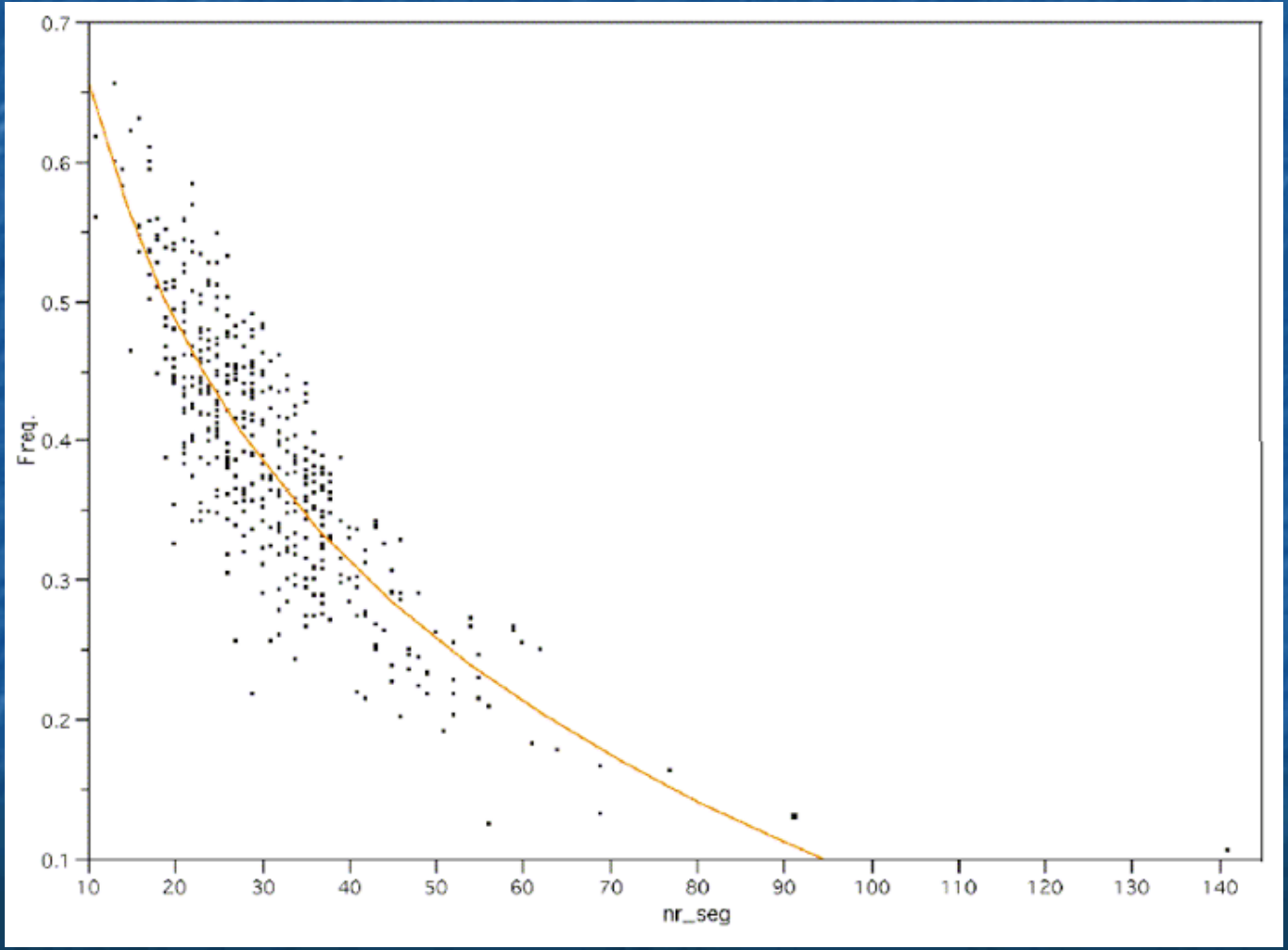
Numbers of segments

UCLA Phonological Segment Inventory Database

11 segments	Rotokas (Indo-Pacific), Mura (Chibchan) and Piraha
141 segments	!Xu (Khoisan)
consonants	6–95 (mean of 22.8)
vowels	3–46 (mean of 8.7)
Piraha	7 (+ /s/ ♂) consonants, 3 vowels
Pawaian	10 consonants, 12 vowels

Numbers of segments

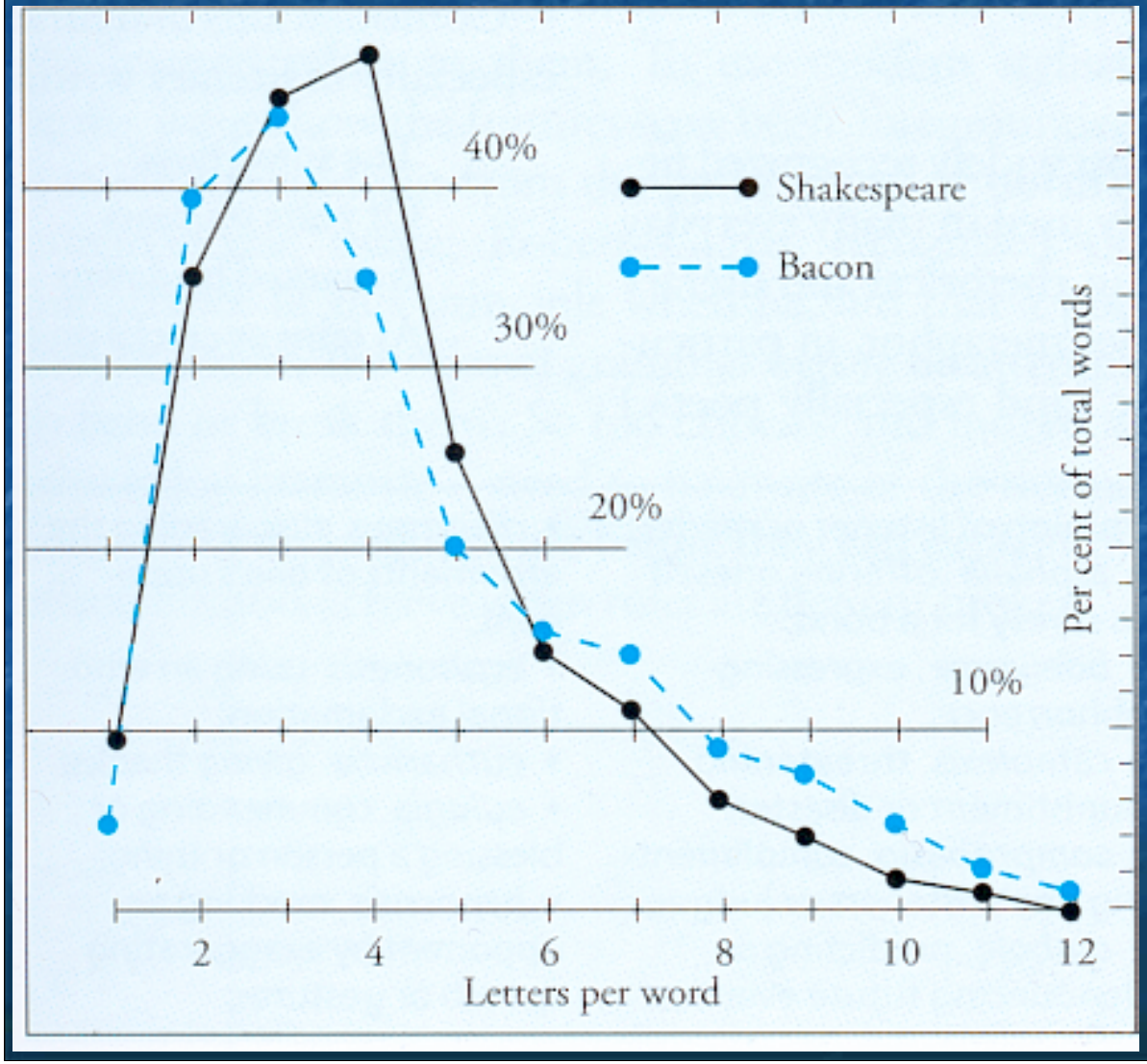
UCLA Phonological Segment Inventory Database



Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

Forensic linguistics and individual differences



Williams (1970), after Mendenhall

Agglutinating languages

angyaghllangyyugtuq "he wants to acquire a big boat" in Eskimo

angya-ghlla-ng-yug-tuq

Every category used to study language breaks down at its edges – even "word"

Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

Word order

SVO the boy saw the man
OVS Jones I invited – not Smith
VSO govern now my song
OSV strange fits of passion have I known
SOV pensive poets painful vigils keep

Word Order	Ruhlen		Mallinson and Blake		Hawkins		Tomlin	
	No.	%	No.	%	No.	%	No.	%
SOV	222	51	41	41	174	52	180	44.78
SVO	155	35	35	35	109	32	168	41.79
VSO	47	11	9	9	45	13	37	9.20
VOS	8	2	2	2	8	2	12	2.99
OVS	2	0.5	1	1	—	—	5	1.24
OSV	1	0.25	1	1	—	—	—	—

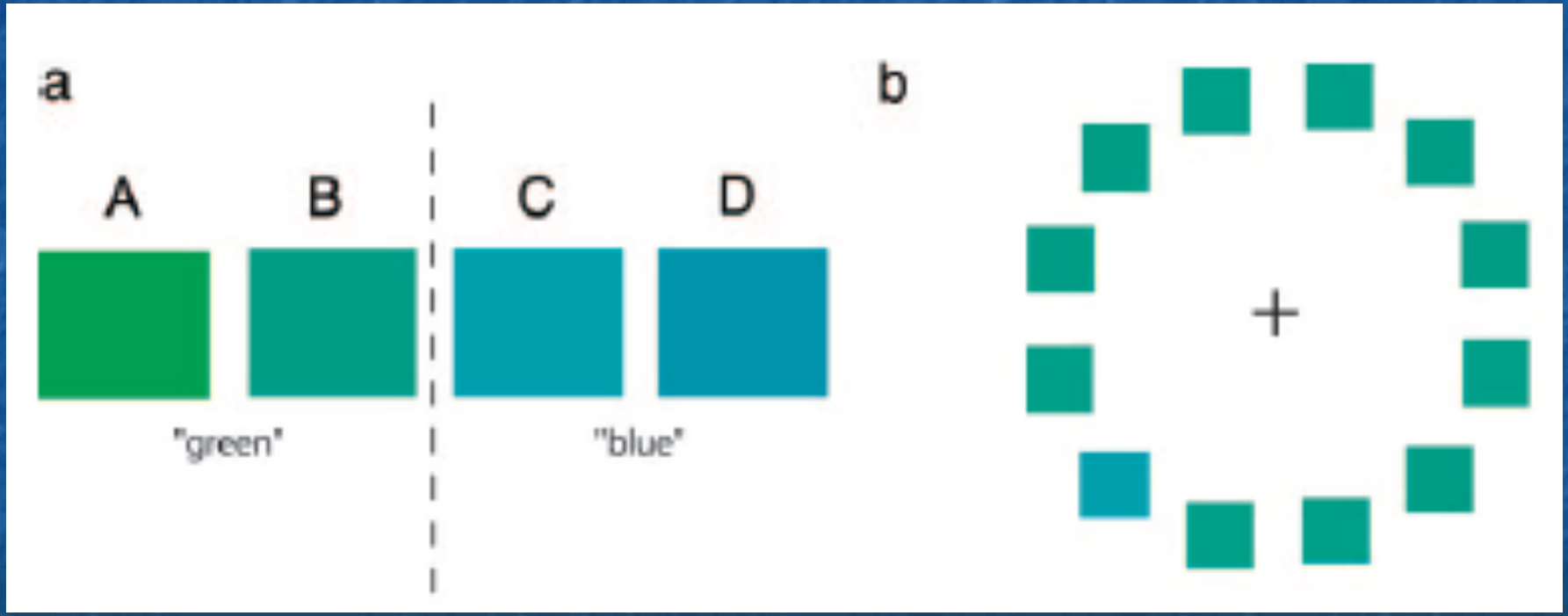
Peeters (1991)

Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

The Whorfian Hypothesis

yarla, pirti, pirnki, kartalpa, yulpilpa, mutara, nyarrkalpa, pulpa, makarnpa, katarta ... words for "hole" in Pintupi



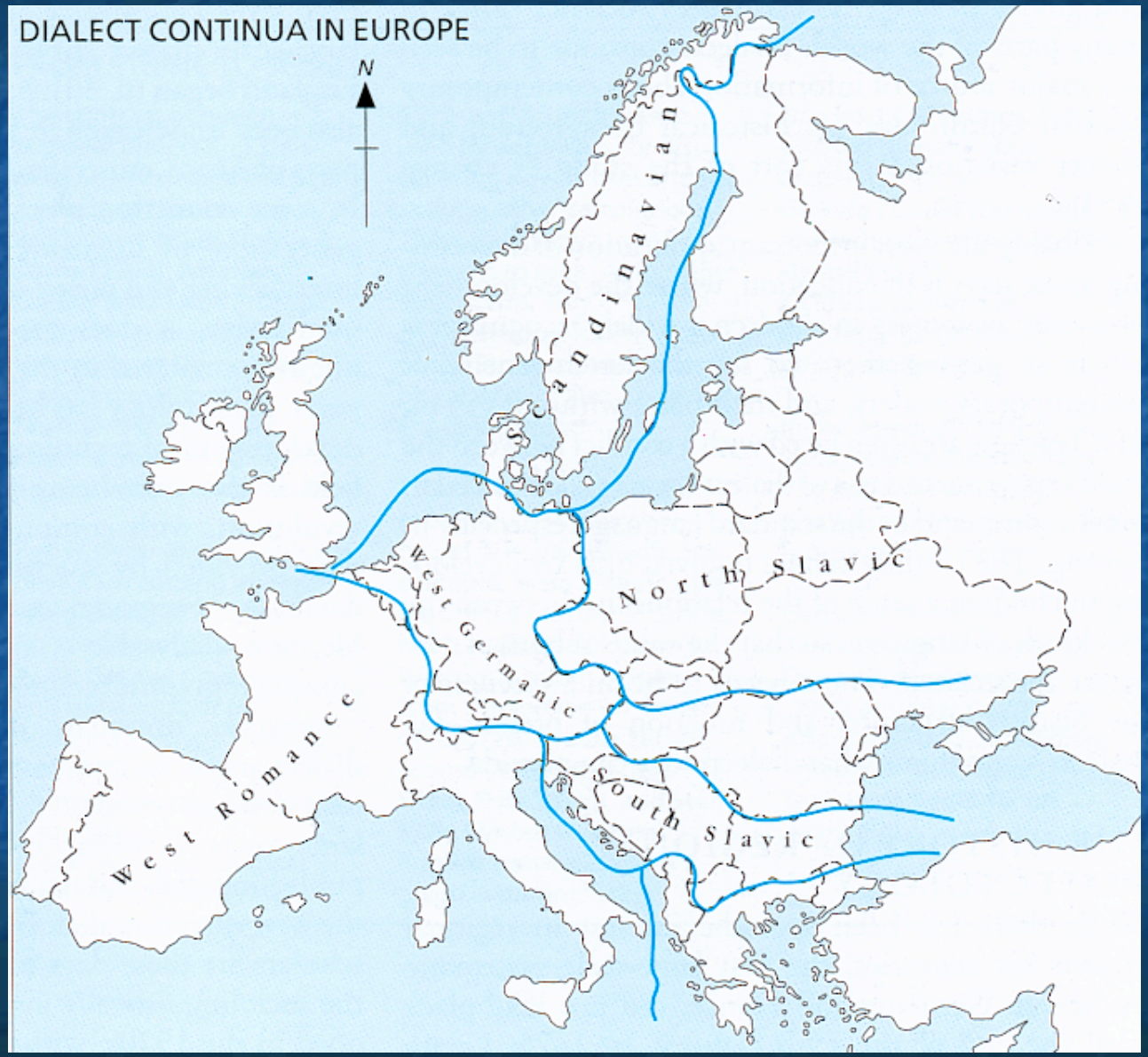
Gilbert et al. (2006)

cf. Talmy (2000)

Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

Dialect continua



Male and female speech in Koasati

Haas (1944)

Female	Male	
iskó	iskó	he drank
molhîl	molhis	we are peeling it

Channels and structure in Pirahã

Everett (2005)

Hum, Yell, Musical and Whistle speech in Pirahã

No number, quantifiers, colour terms, recursion

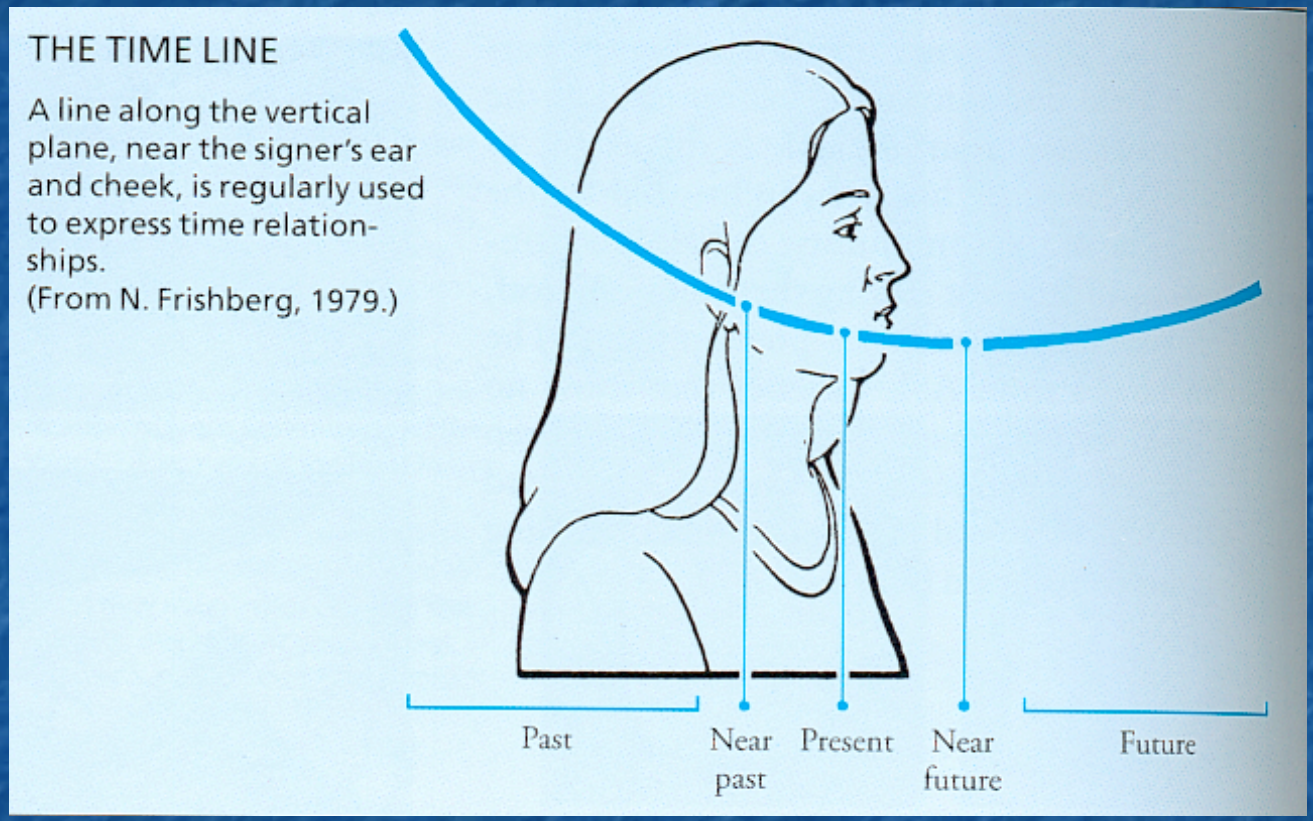
Wray and Grace (2005): esoteric *vs.* exoteric communication

Language exotica

phonology
lexicon
morphology
syntax
semantics
social
sign language

The time line in the signing space

Frishberg (1979)



Sign-language and "iconicity" (Levy)

Conclusions

Languages vary along numerous dimensions and are intimately tied to the real lives of the speakers and listeners