

Arbitrariness, Iconicity and Systematicity in Language

Qianyu Cheng

q.cheng@tilburguniversity.edu

Original paper:

Dingemanse, M., Blasi, D. E., Lupyan, G., Christiansen, M. H. & Monaghan, P. (2015).
Arbitrariness, iconicity and systematicity in language. *Trends in Cognitive Sciences*, 19(10),
603–615.

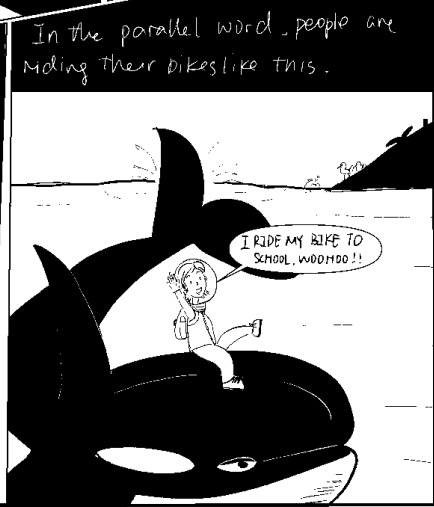
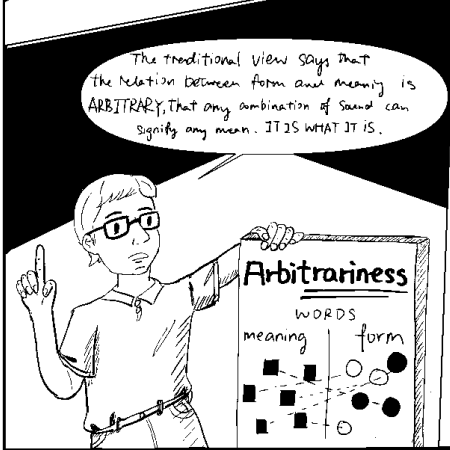
[https://www.sciencedirect-
com.tilburguniversity.idm.oclc.org/science/article/pii/S1364661315001771?casa_token=F6VpYc
bUwlsAAAAA:MSu5x70m1DDipWfWVfmxgNK-iJnVISOW-
uuquHtLwOV_u1rl0SEolWUpsLquWac8ePAYT11nGQ](https://www.sciencedirect.com/tilburguniversity.idm.oclc.org/science/article/pii/S1364661315001771?casa_token=F6VpYcbUwlsAAAAA:MSu5x70m1DDipWfWVfmxgNK-iJnVISOW-uuquHtLwOV_u1rl0SEolWUpsLquWac8ePAYT11nGQ)

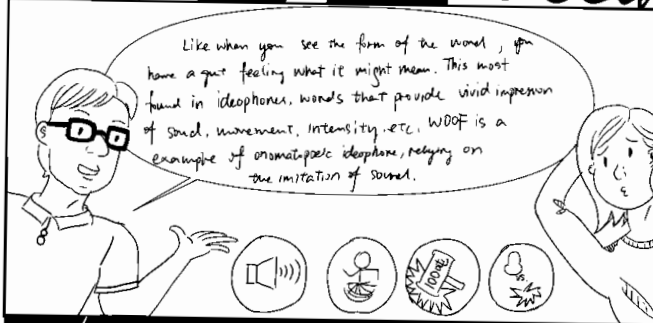
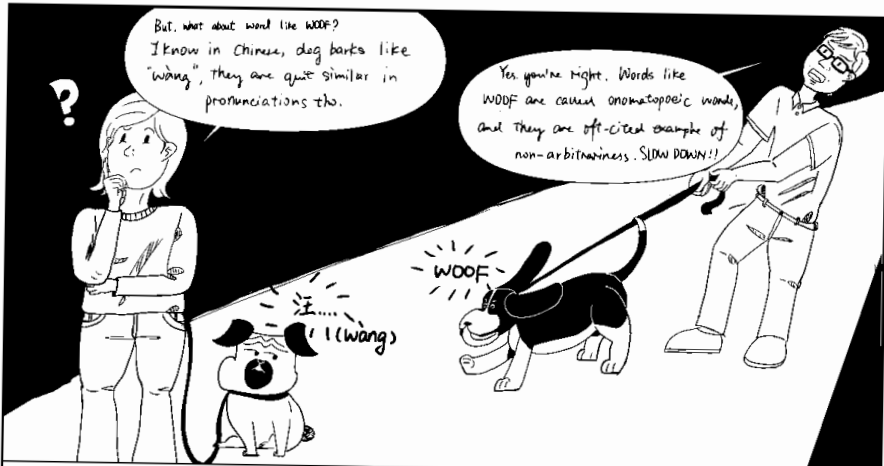
Project created for the class:

Visual Thinking and Composition, Winter 2020

Tilburg University, Department of Communication and Cognition

Instructor: Neil Cohn, neilcohn@visuallanguagelab.com, www.visuallanguagelab.com





And some Iconicity can be found even recurring across languages.

ICONICITY involves perceptuomotor analogies between aspects of form and meaning.

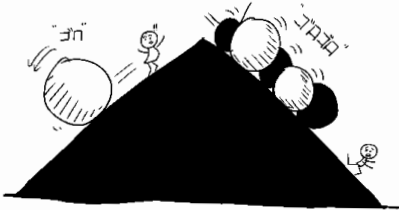
For Example:

Reduplication = repetition/distribution

In Japanese,

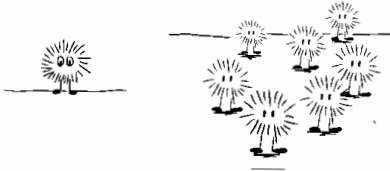
goro : goro goro

one heavy object rolling : Multiple heavy objects rolling



In Siwu (a language spoken in Ghana)

würüfüü : würüfü - würüfü
fluffy : fluffy here and there



Vowel quality = size/intensity

Also in Japanese,

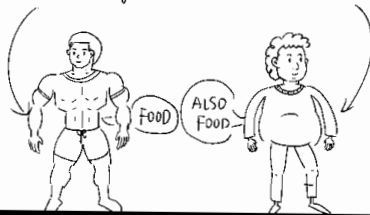
kokokoto
clattering

katakato
less noisy clattering

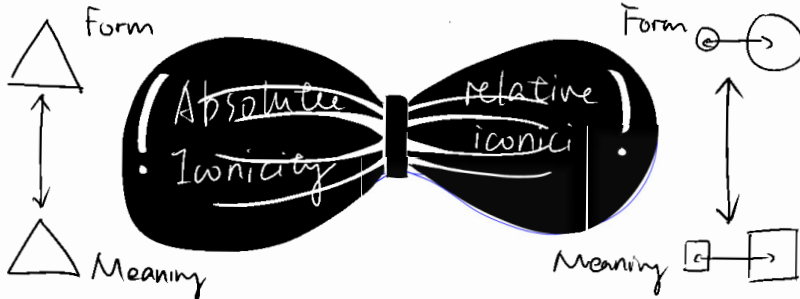


Also in Siwu,

pimibibi : pumbulu
Small belly : enormous round belly



One thing to notice is that the distinction is made between absolute & Relative Iconicity



The form directly assembles aspect of meaning.

The contrast between form is similar to that between Meaning

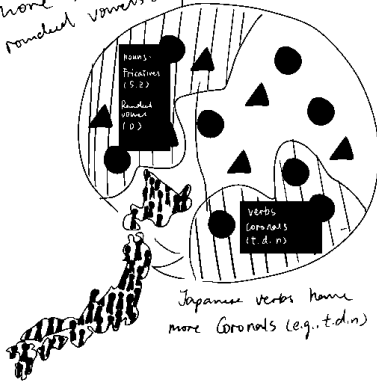
The Second type is Systematicity

It is a statistical relationship between the pattern of sound for a group of word and their usage

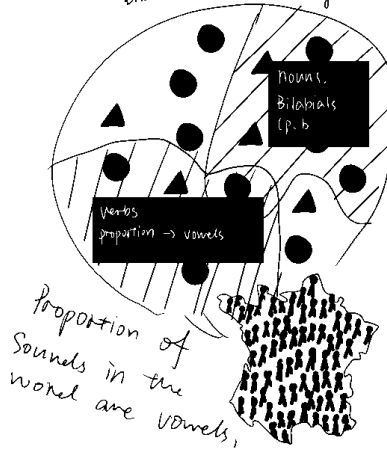
Corpus studies reveal that phonological and prosodic cues help to distinguish nouns from verbs and open from closed word classes. And these cues are often language-specific.

For Example =

Japanese nouns have more Fricatives (e.g. s, z), and rounded vowels (e.g. o).



French nouns have more Bilabials (e.g. p, b) in the first syllable

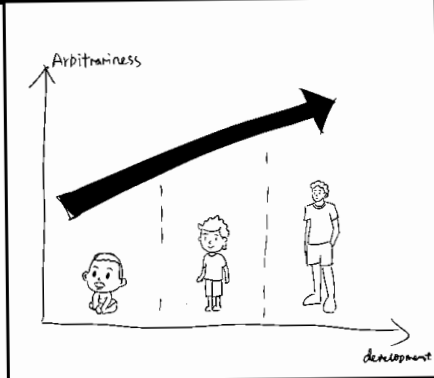
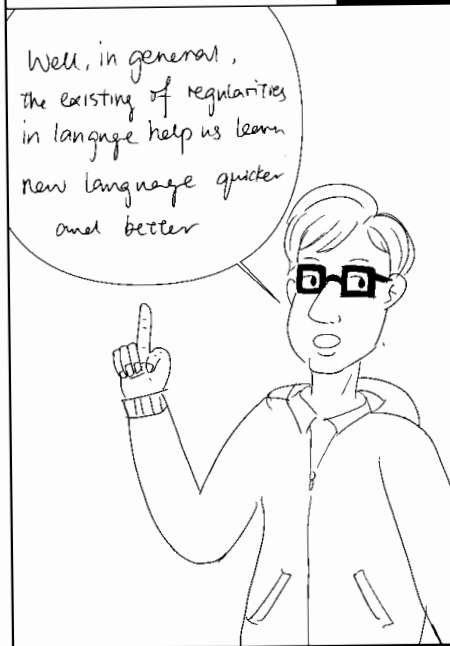
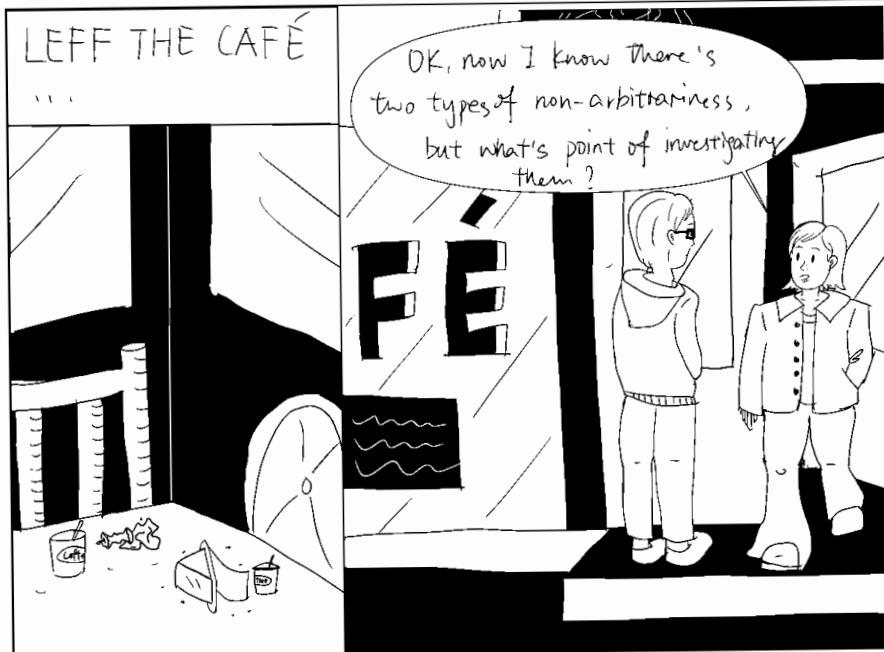


Nouns

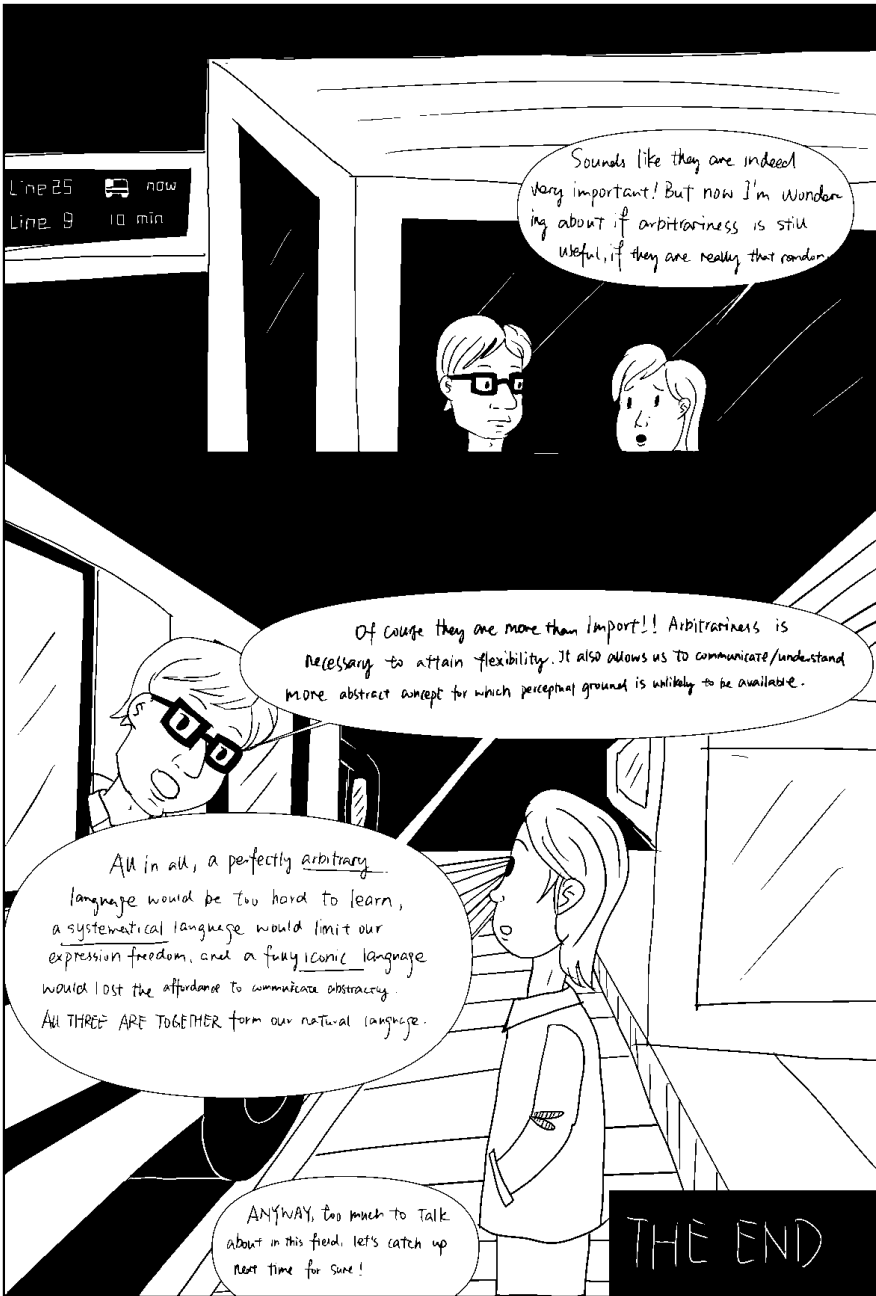
Being exposed to enough vocabularies, Systematicity of words helps us identify grammatical



Verbs



Studies show that words acquired earlier in the development tend to show less arbitrariness within the language, whereas words acquired later were more arbitrary.



Sounds like they are indeed very important! But now I'm wondering about if arbitrariness is still useful, if they are really that random

Of course they are more than important!! Arbitrariness is necessary to attain flexibility. It also allows us to communicate/understand more abstract concepts for which perceptual ground is unlikely to be available.

All in all, a perfectly arbitrary language would be too hard to learn, a systematical language would limit our expression freedom, and a fully iconic language would lose the affordance to communicate abstractly. All THREE ARE TOGETHER form our natural language.

ANYWAY, too much to talk about in this field, let's catch up next time for sure!

THE END