LANGUAGE, CULTURE, AND COGNITION

Thomas Van Hoey 司馬智

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台灣語奧 TOL
2019/07/17

What’s in a name?

And more specifically my full name:

Thomas Greta Roger Van Hoey

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[toːmas ɣʁeːta roʒeː van huj]

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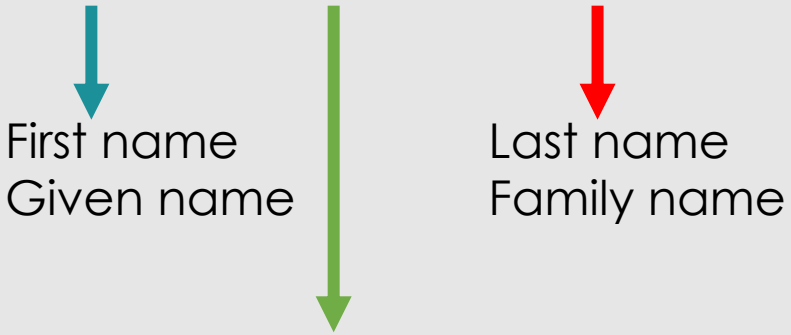

First name
Given name

Last name
Family name

Middle names

(in my case grandmother and grandfather)

What's in a name?

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What's in a name?

So what can we learn about this small case study?

Traditional Belgian (Dutch) names

- are pretty **long**
- often **mention where the forefather came from**
- are **cultural markers** (Flemish names ≠ Dutch ≠ French ≠ German)
- are **confusing for other countries**

  but so are e.g. Chinese names for us!

COMPUTER ELECTRIC BRAIN

Same cognition, different culture

World Cup 2018
When Belgium played
Event in Taipei

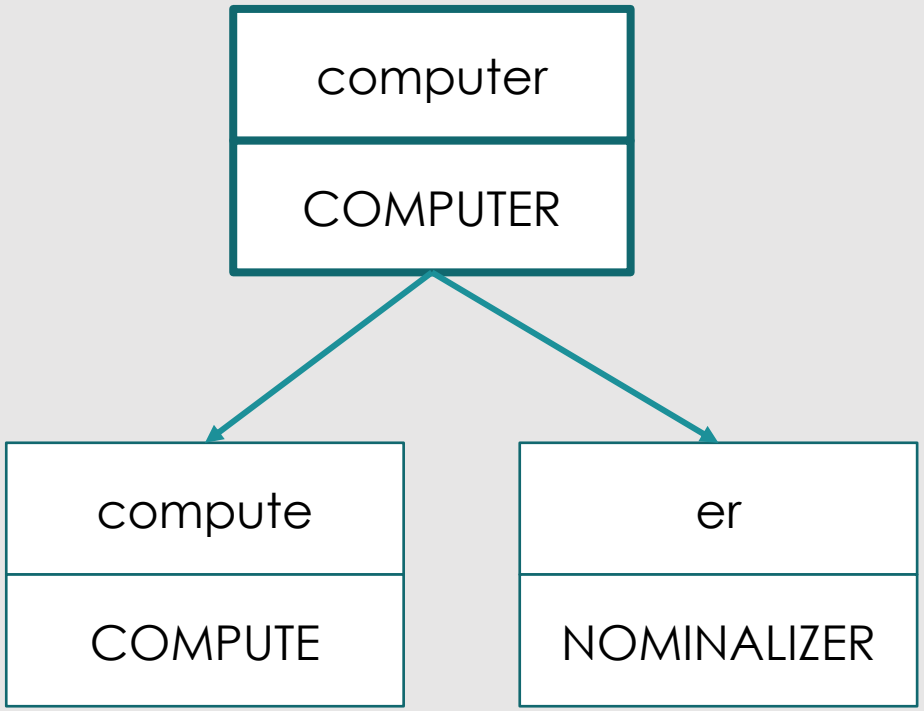
Pirahã people (Brazil)

Different cultures (different languages) conceptualize differently

COMPUTER

language	term	gloss
English	comput-er	compute - ER
French	ordina-teur	ordo (Latin ‘order’) – (T)EUR
Afrikaans	reken-aar	reken ‘calculate’ - AAR
Chinese	電腦 diàn-nǎo	electric – brain
Pirahã	?	?

Different cultures (different languages) conceptualize differently



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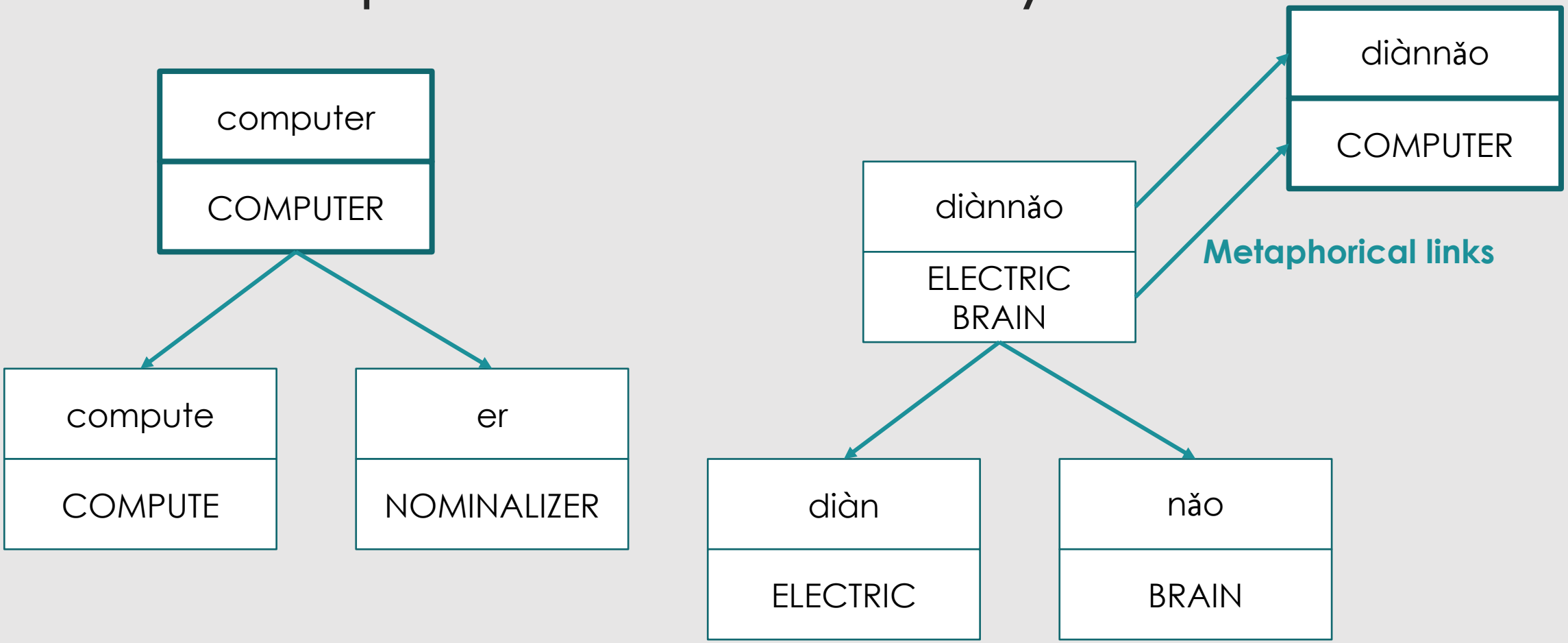


Goal for this session

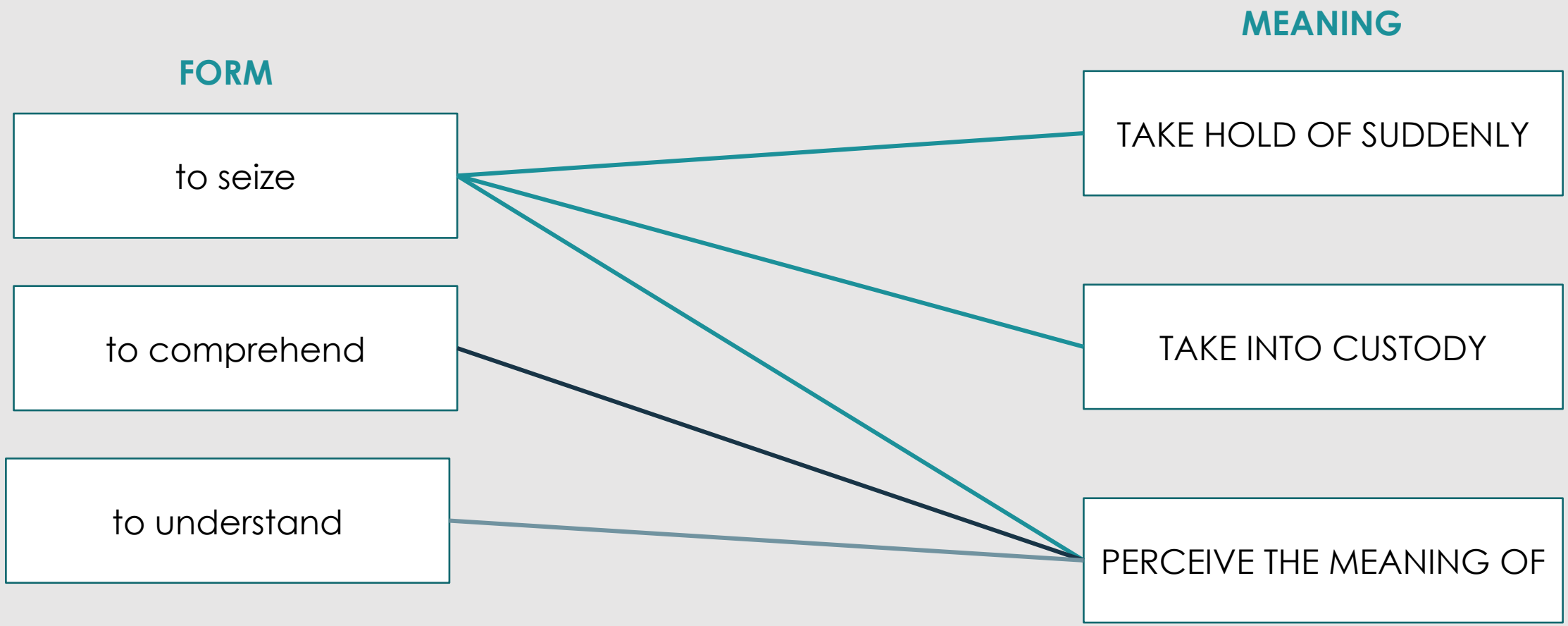
Generally speaking, we can divide language into units that have two sides:
the FORM and **the MEANING**.

Sometimes there are more FORMS attached to one MEANING,
or more MEANINGS attached to one FORM.

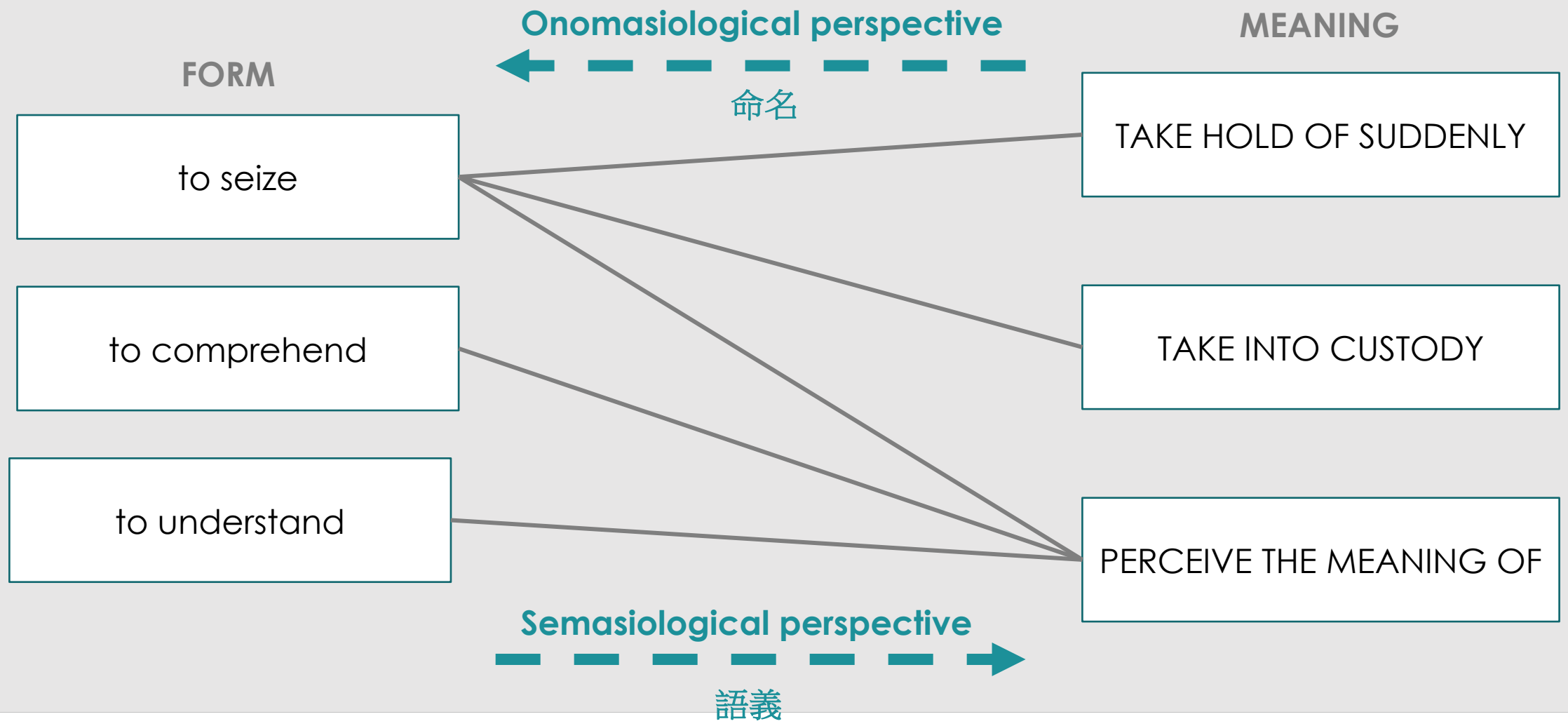
Today we will look at the relationship between FORMS and MEANINGS,
focusing on the **different processes languages can get these FORMS and MEANINGS**.

Hopefully, this will help you when you are stuck in your linguistic problem.

Goal for this session



Goal for this session



ONOMASIOLOGY
命名學

Onomasiology
where does this word come from?

Five important mechanisms

1. applying productive morphological rules;
2. making new words;
3. distorting existing word forms;
4. borrowing;
5. semasiological extension

O1. productive morphological rules

Imagine you are a non-Chinese speaking student entering the Linguistics Olympiad and this is your dataset.

a. 生物學	1. biochemistry
b. 物理學	2. geology
c. 化學	3. linguistics
d. 生化學	4. geography
e. 語言學	5. chemistry
f. 地理學	6. biology
g. 地質學	7. physics

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學 = STUDY

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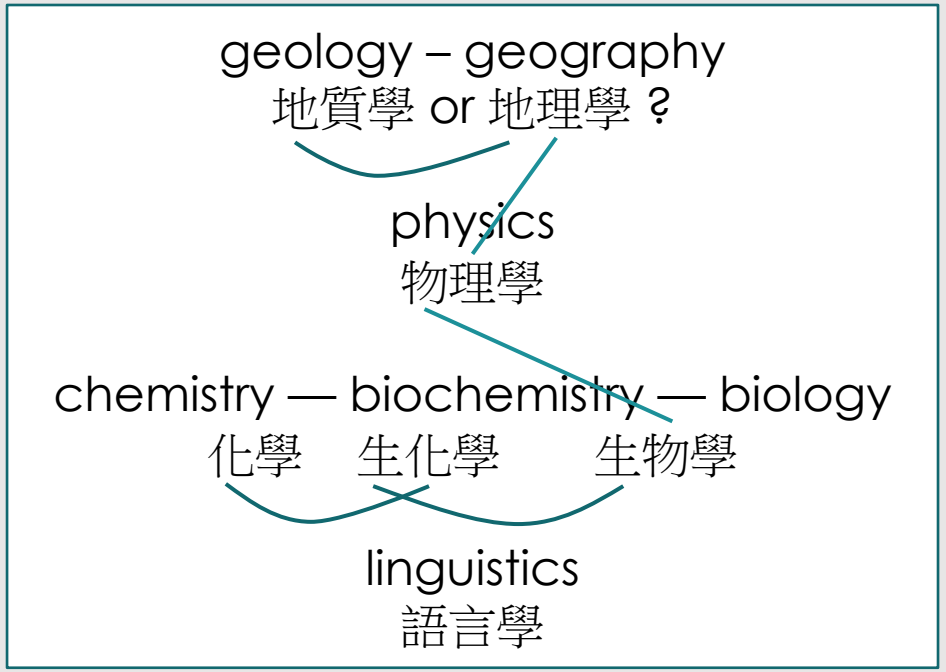

O2. Neologisms

Neologisms 新詞 are words that ‘appear out of the blue’, out of nowhere.

Real neologisms are rare.

language	term	gloss
French	schtroumpf	smurf
Dutch	smurf	smurf
English	smurf	smurf (< Dutch)
German	Schlumpf	smurf
(Taiwan) Mandarin	藍色小精靈 *lán-sè xiaǒ jīng.líng*	blue small leprechaun

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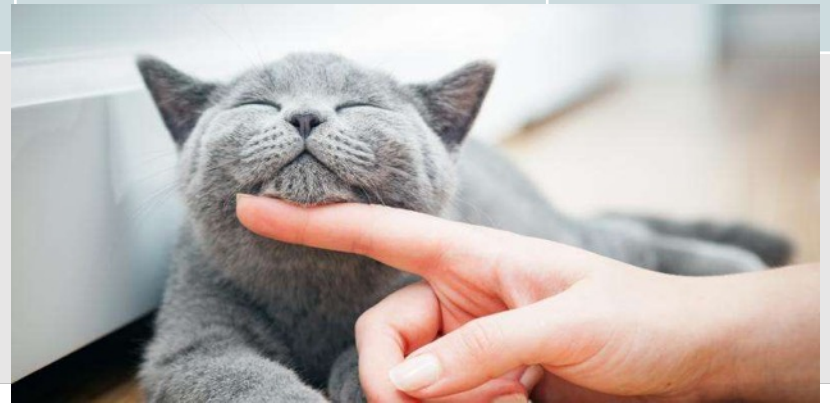
O2. Neologisms: onomatopoeia

Neologisms 新詞 can also include onomatopoeia and ideophones.

language	term	gloss
English	cuckoo	cuckoo
Dutch	koekoek	cuckoo
English	purr	purr



O3. Distortion of existing words

A. Ellipsis (clipping): leaving out (parts of) words

a) pianoforte > piano ‘piano’

b) 語言學奧林匹克 > 語奧 ‘Linguistics Olympiad’

B. Contamination (blending):

a) irrespective → irregardless ← regardless ‘不管’

C. Phonetic developments

a) English *peep* [piːp] < Middle English *pepen* [piːpən] < Old English *pipian* [piːpʲən]
/i/ <i> changed to /ai/ <i> but the sound /piːp/ was still needed so respelled <peep>
(English ripe [ɹaɪp] < Middle and Old English ripe [ɹiːpə])

O3. Distortion of existing words

D. Folk etymology

a)	hamburger	<	Hamburg-er	‘person from the German city Hamburg’
		→ <	ham-burger	‘bun with meat (ham)’

E. Morphological reinterpretation

a)	hamburger	<	ham-burger	‘bun with meat (ham)’
b)	cheeseburger		cheese-burger	‘bun with (meat and) cheese’

O4. Borrowing

Languages borrow words from other languages *all the time*.

Often only parts of the MEANING or the FORM get borrowed, or parts of these get adapted to the target language.

language	term	pronunciation
British English	computer	/kəmˈpjuːtə/
American English	computer	/kəmˈpjuːtɚ/
Dutch	computer	/komˈpjuːtər/
Japanese	コンピューター koNpyutaa	/kompjuːtɑː/

O5. Semasiological extension

Semasiology is about asking “what does this word mean”?

So if the meanings of a word increase, then that also counts as a way of getting a ‘new word’.

language	term	meaning extension
English	mouse	RODENT → COMPUTER MOUSE
		loan translation
Dutch	muis	RODENT → COMPUTER MOUSE

SEMASIOLOGY
語義學

Semasiology
what does this word mean?

Four important groups of mechanisms

1. generalisation and specialisation;
2. amelioration and pejoration;
3. metonymy;
4. metaphor.

S1. generalisation — specialisation

Generalisation:

when a word meaning originally referred to a very specific meaning but over time broadens its span of reference.

Specialisation:

when a word originally had a broader range of meanings but this narrowed over time.

time

S1. generalisation — specialisation

Generalisation:

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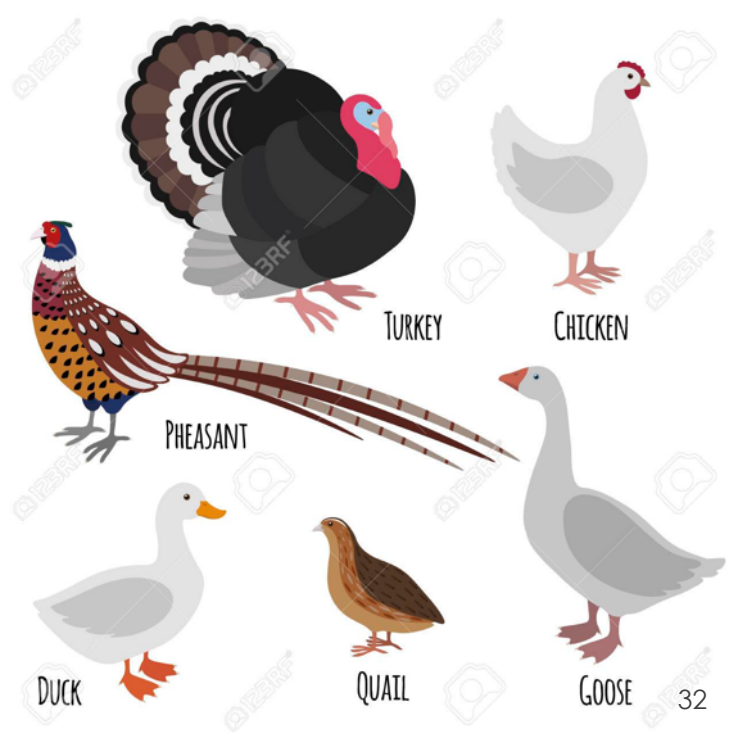
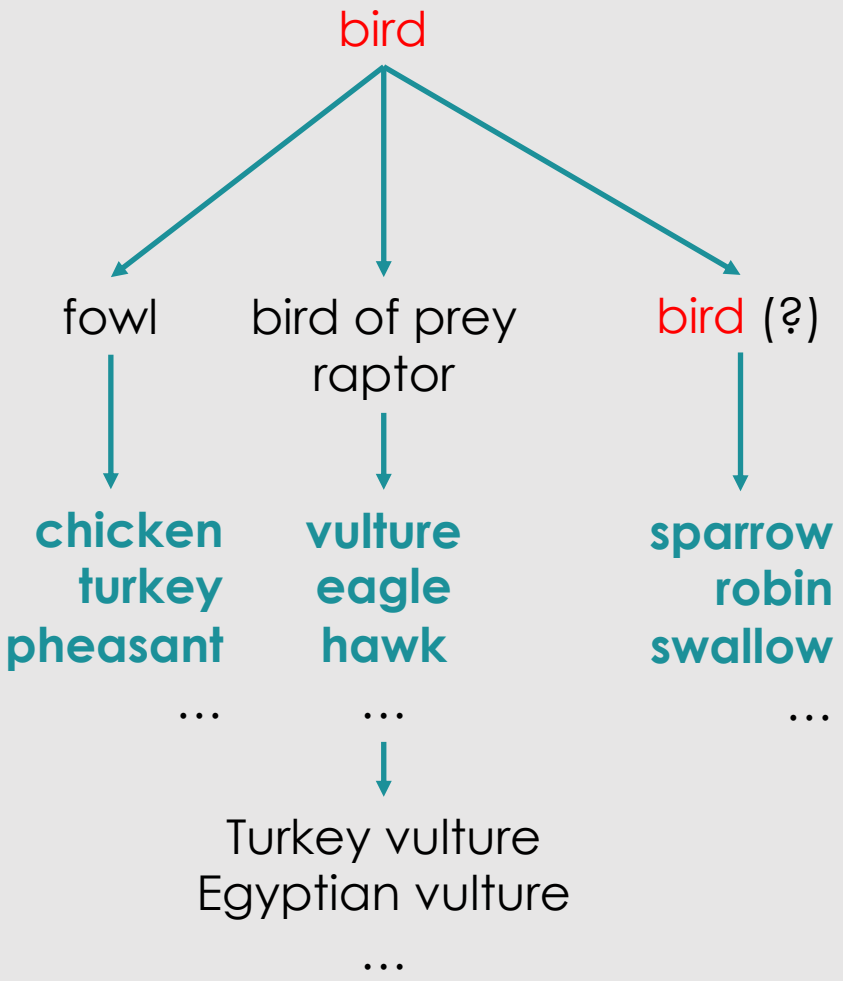
when a word originally had a broader range of meanings but this narrowed over time.

language	term	meaning
English	fowl	bird of the order Galliformes (chicken, turkey, pheasant etc.)
Middle English	foul, foghel, fowel, fowele	bird
German	Vogel	bird
Dutch	vogel	bird
Proto-Germanic	*fuglaz	bird



S1. generalisation — specialisation **taxonomy**



SUPERORDINATE

INTERMEDIATE

BASIC LEVEL

SUBORDINATE

Birds are also 'vertically' classified in **folk taxonomies (分類學)**.

These are **not scientific groupings**, but classifications that grew over time, in the culture.

Often, a group of terms stand out, they are on the **BASIC LEVEL** and have the highest saliency (they are best known).

Finding morphemes for SMALL and BIG, or modifiers like Turkey / Egyptian**, may help you construct a taxonomy, and help you answer problems.**

S1. generalisation — specialisation **prototype**

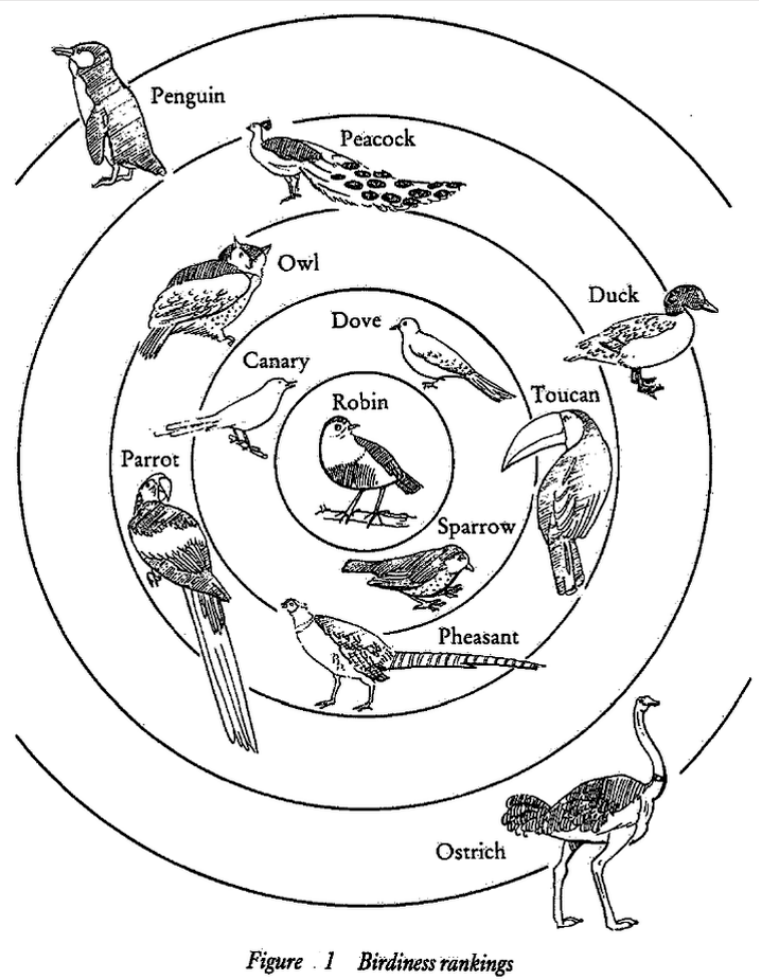


Figure . 1 Birdiness rankings

But a more cognitively realistic model is based on **prototype theory (原型理論).**

This states **that some words are better representatives of a category**.

So in English, the ***robin*** is the best example of a **BIRD**,
owls are slightly worse,
but ***penguins*** and ***ostriches*** are the worst.

You probably won't be asked about this in the exam but it is good to know that many categories of words do not have neat boundaries —
instead they have fuzzy boundaries, and center-periphery effects.

S1. generalisation — specialisation **prototype vs. definitions**

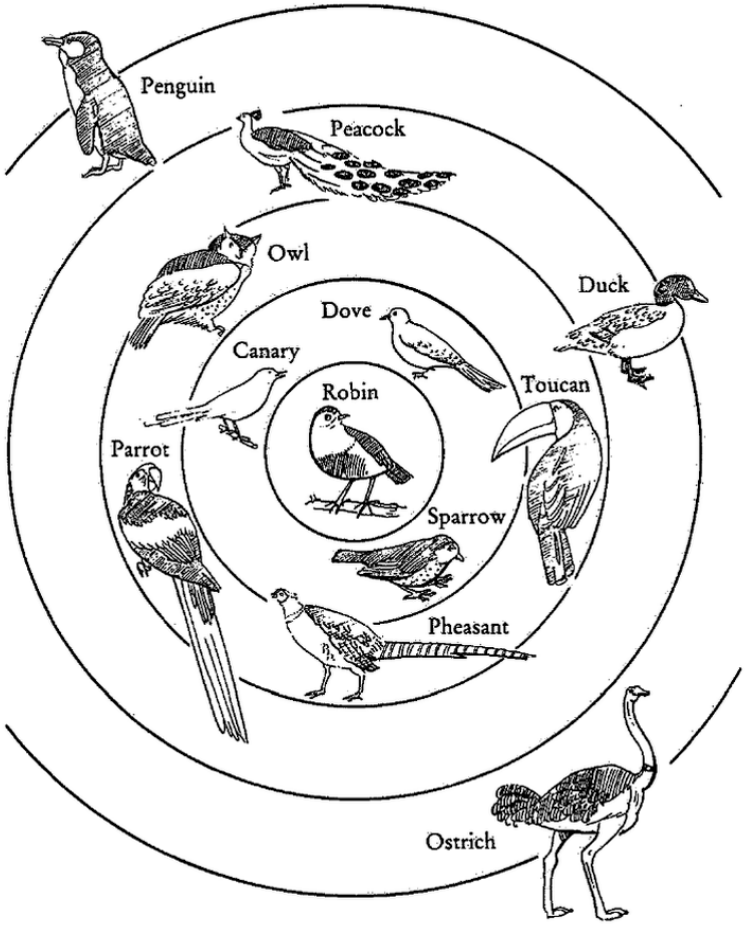
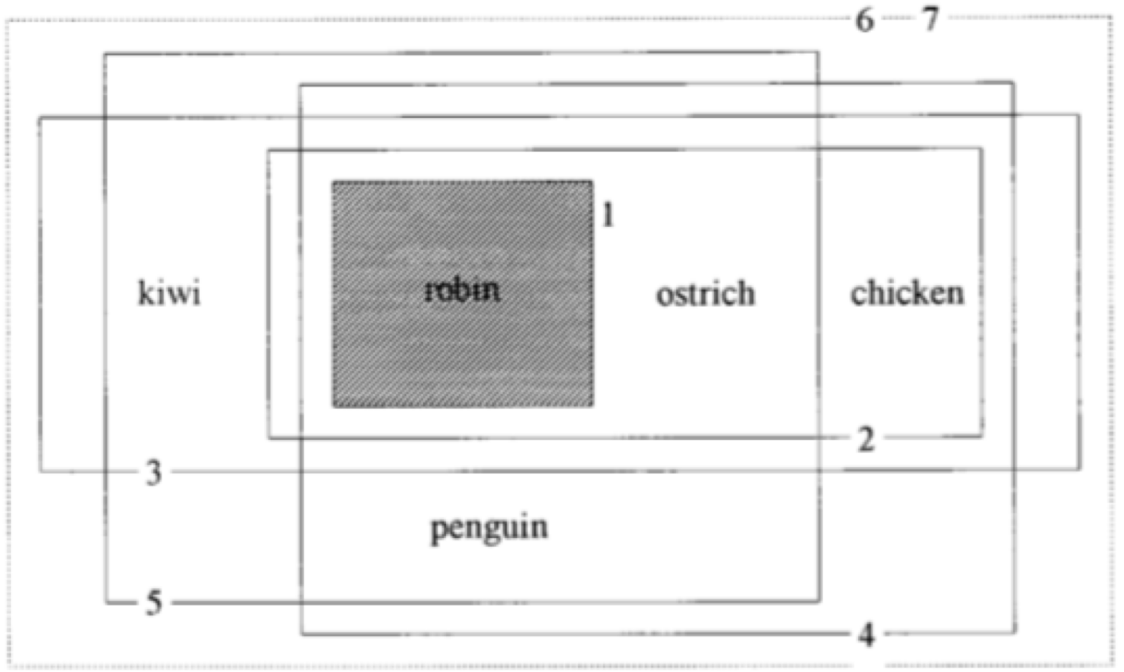


Figure . 1 Birdiness rankings



1 being able to fly
2 having feathers
3 being S-shaped
4 having wings
5 not domesticated
6 being born from eggs
7 having a beak or bill

Figure 1. A definitional analysis of *bird*

S2. amelioration — pejoration

Amelioration:

when the connotation of a word becomes **more positive** (it is *felt* to be more positive)

Specialisation:

when the connotation of a word becomes **more negative** (it is *felt* to be more negative)

word	original	intermediate	current meaning
geek	sideshow freak (1916)	student who lacks social graces but is obsessed with computers and new technology (1983)	someone with specialist knowledge

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Amelioration:

when the connotation of a word becomes **more positive** (it is *felt* to be more positive)

Specialisation:

when the connotation of a word becomes **more negative** (it is *felt* to be more negative)

word	original	intermediate	current meaning	grammaticalized
awful	- full of awe - terror-stricken	terrible	very bad	exceedingly great / very

S3. metonymy: contiguity

Metonymy 轉喻 is based on contiguity.

This means that there is a connection between the meanings, but you use one meaning to mean the other.

*I want to drink a **cup**.*	**CONTAINER** 杯子	→	**CONTAINED** 杯子裡面的咖啡
*Where is the **coke**?*	**CONTAINED** 可樂	→	**CONTAINER** 瓶子

*How many **heads** do we have today in this classroom?*	**PART** body part → **WHOLE** people
***The U.S.** is/are preparing for a war.*	**WHOLE** country → **PART** government

Metonymy is everywhere in language! Maybe you can think of some examples? 加油！

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Metonymy is everywhere in language! Maybe you can think of some examples? 加油！

S4. metaphor: similarity

Another extremely common language phenomenon is metaphor 隱喻.

This occurs when one meaning is perceived to be similar to another meaning, and thus two forms are perceived to be similar.

*This chair has two **arms**,*

*that one has four **legs**.*

Only humans have arms and legs

but we use these words because

they they are similar!

S4. metaphor — some kinds

a. material metaphor: Let's meet at the *foot of the mountain*.

b. functional metaphor: The *source* of a river vs. the *sources* used when writing this text.

c. functional metaphor: A fruit is *ripe* for plucking vs. somebody is *ripe* for a function.

d. experiential metaphor: "That *yellow color* (VISUAL) is so *loud* (AUDITORY)!", he said with a *heavy* (TACTILE) *voice* (AUDITORY).

山腳
山本

來源
↑
水源

§4. metaphor — dead or alive?

Many of the metaphors we use daily, even live by, do not seem special.

When you say 電腦 ‘electric brain’ for COMPUTER, do you think of an electric brain?

Probably not.

We can argue that 電腦 came from a metaphor,
but the metaphor is dead.

(That is also a metaphor: only living things can die.)

S4. conceptual metaphors

A major field of study considers so-called **conceptual metaphors**.

*He is known for his many **rapid conquests**.*
*She **fought** for him, but his mistress **won** out.*
*He **fled from** her **advances**.*
*She **pursued** him relentlessly.*
*He is slowly **gaining ground** with her.*
*He **won** her hand in marriage.*
*He **overpowered** her.*
*She is **besieged** by suitors.*
*He has to **fend** them **off**.*

All these examples talk about LOVE, but they use MILITARY TERMS – terms from WAR.

So **the metaphor happens at the conceptual level**, not just in the language.

The metaphor in these sentences is **LOVE IS WAR** — LOVE is understood in terms of WAR.

S4. conceptual metaphors

Can you guess what the conceptual metaphor is in this example?

*I'm feeling **up**. That **boosted** my spirits. My spirits **rose**. You're in **high** spirits. Thinking about her always gives me a **lift**. I'm feeling **down**. I'm **depressed**. He's really **low** these days. I **fell** into a depression. My spirits **sank**.*

S4. conceptual metaphors

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Or in this example?

*Look **how far** we've come. We're at a **crossroads**. We'll just have to **go our separate ways**. We can't **turn back** now. I don't think this relationship is **going anywhere**. We're **stuck**. It's been a **long, humpy road**. This relationship is a **dead-end street**.*

CASE STUDIES

Case study 1. MATCH

Definition:

‘short, slender piece of wood or other material tipped with a chemical sub- stance which produces fire when rubbed against a rough or chemically prepared substance’

language	target word form	source (original meaning)	process
English	*match*	‘wick’	metaphorical similarity
French	*allumette*	‘splinter’	taxonomical subordination (cf. case study 2)
German	*Streich-holz*	‘rub-wood’	metonymical compound
Spanish	*fósforo*	‘fire-bringing’	borrowing (Greek) + metonymy
Spanish	*cer-illa*	‘wax-DIMINUTIVE’	metaphorical similarity
Dutch	*luci-fer*	‘light-bringer’	borrowing (Latin)
Chinese	火-柴	‘fire-wood’	metonymical compound

Case study 2: WOOD

Let's say you have the following dataset.

What would a linguist do if he came across these words?

tree, forest, wood in different languages

a. Danish: *trae, skov*

b. French: *arbre, bois, forêt*

c. German: *Baum, Holz, Wald*

d. Spanish: *árbol, madera, leña, bosque, selva*

e. Dutch: *boom, bos, hout, woud*

Are French and German the same? What is the difference with Spanish? Danish? Dutch?

Case study 2: WOOD

Luckily, people have analyzed this for us:

Danish	French	German	Spanish	Dutch
trae	*arbre*	*Baum*	*árbol*	*boom*
	bois	*Holz*	*madera*	*hout*
			leña	
skov		*Wald*	*bosque*	*bos*
	forêt		*selva*	*woud*

But unfortunately, we still don’t know what the differences are!

Case study 2: WOOD

Using dictionaries and dictionaries, the linguist can then categorize them as follows:

Analytical primitives

	lexical items				
	Danish	French	German	Spanish	Dutch
TREE	*trae*	*arbre*	*Baum*	*árbol*	*boom*
WOOD (MATERIAL)		*bois*	*Holz*	*madera*	*hout*
FIREWOOD				*leña*	
FOREST (SMALL)	*skov*		*Wald*	*bosque*	*bos*
FOREST (LARGE)		*forêt*		*selva*	*woud*

These (temporary) analytical primitives are based on the Spanish case, which makes the most distinctions.

Case study 2: WOOD

		meanings				
		tree	wood (material)	firewood	forest (small)	forest (large
Danish	*trae*	✓	✓	✓		
	skov				✓	✓
French	*arbre*	✓				
	bois		✓	✓	✓	
	forêt					✓
German	*Baum*	✓				
	Holz		✓	✓		
	Wald				✓	✓
Spanish	*árbol*	✓				
	madera		✓			
	leña			✓		
	bosque				✓	
	selva					✓
Dutch	*boom*	✓				
	hout		✓	✓		
	bos				✓	
	woud					✓

This is the final categorization.

Maybe you end up with something similar in your question, or the previous step, but both are good solutions.

What this case study shows is that **taxonomies** differ across languages.

Case study 3: days of the week

language	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
English	'moon-day'	Tiwaz / Tyr	Wodan / Odin	Thor	Frigg	Saturn	sun
Dutch	maandag	dinsdag	woensdag	donderdag	vrijdag	zaterdag	zondag
German	Montag	Dienstag	Mittwoch 'mid-week	Donnerstag	Freitag	Samstag	Sunntag
Irish	Dé Luan	Dé Mairt	Dé Céadaoin	Déardaoin	Dé h-Aoine	Dé Sathairn	Dé Domh-naigh
.	'moon day'	'Mars' day'	'day of the first fast'	'day between fasts'	'day of the (primary) fast'	'Saturn's day'	'Lord's day'
Chinese	禮拜一	禮拜二	禮拜三	禮拜四	禮拜五	禮拜六	禮拜日
Chinese	星期一	星期二	星期三	星期四	星期五	星期六	星期日
Chinese	週一	週二	週三	週四	週五	週六	週日
Japanese	月曜日	火曜日	水曜日	木曜日	金曜日	土曜日	日曜日

Even though all these languages (and cultures) use the 7-day cycle as the basis for their week, they have different etymologies and thus conceptualizations.

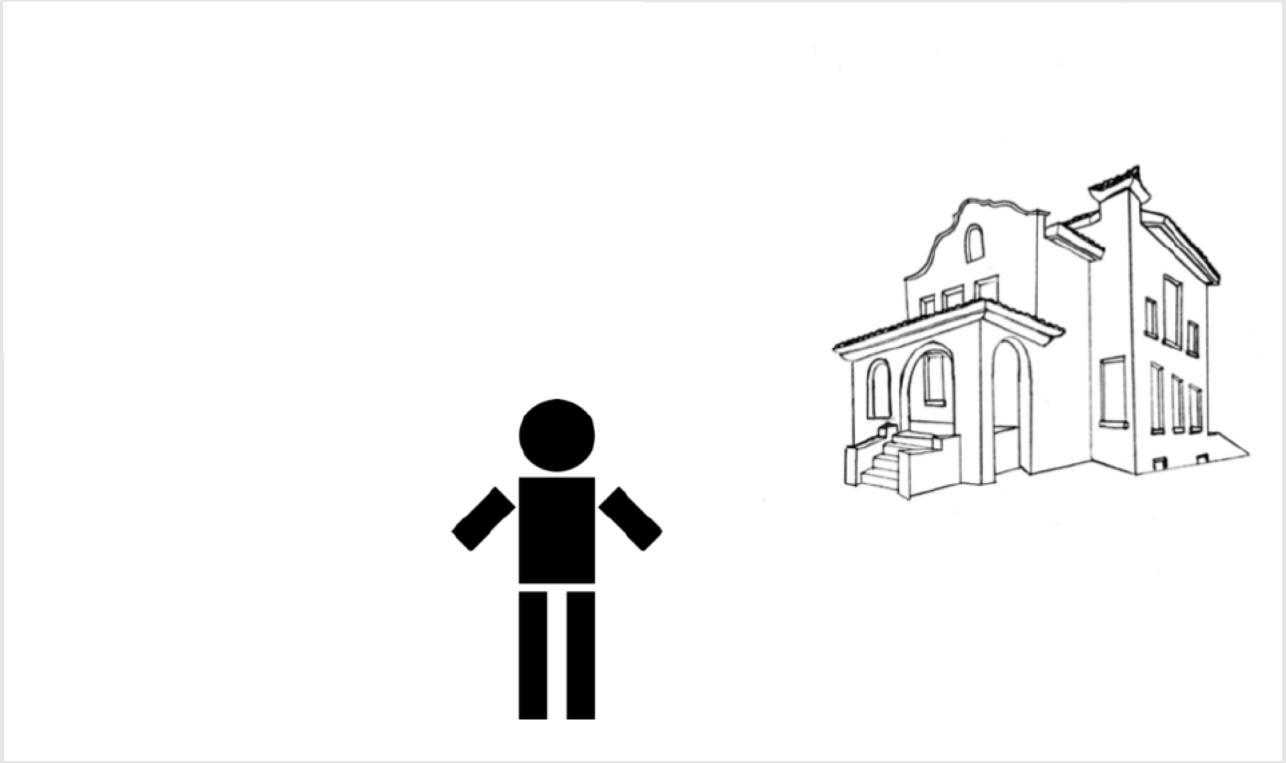
But the weird thing is, for English, Dutch and German, it is unclear where these words really came from for most people.

Chinese and Japanese have a transparent system.

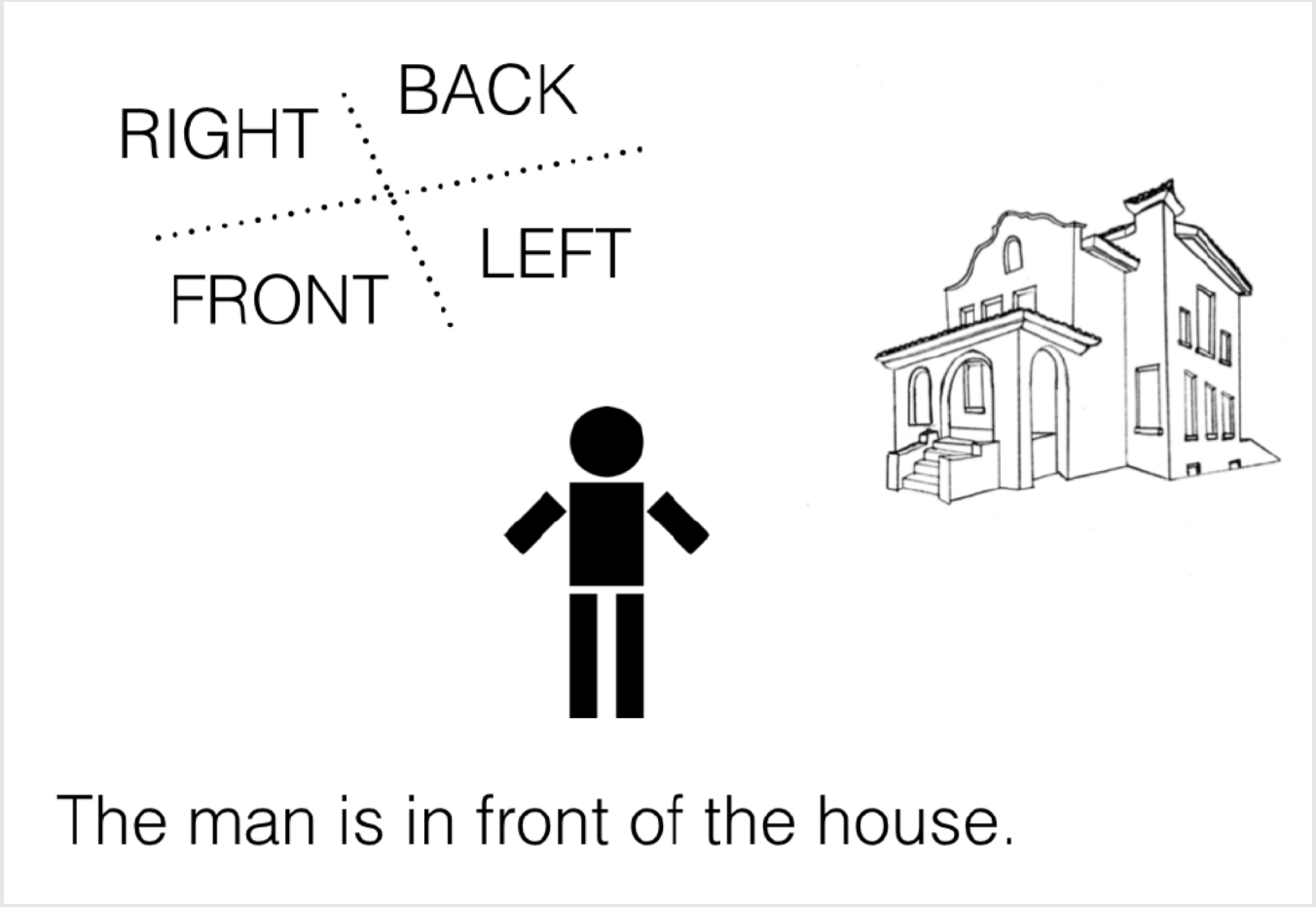
Irish does its own thing.

Case study 4: spatial language

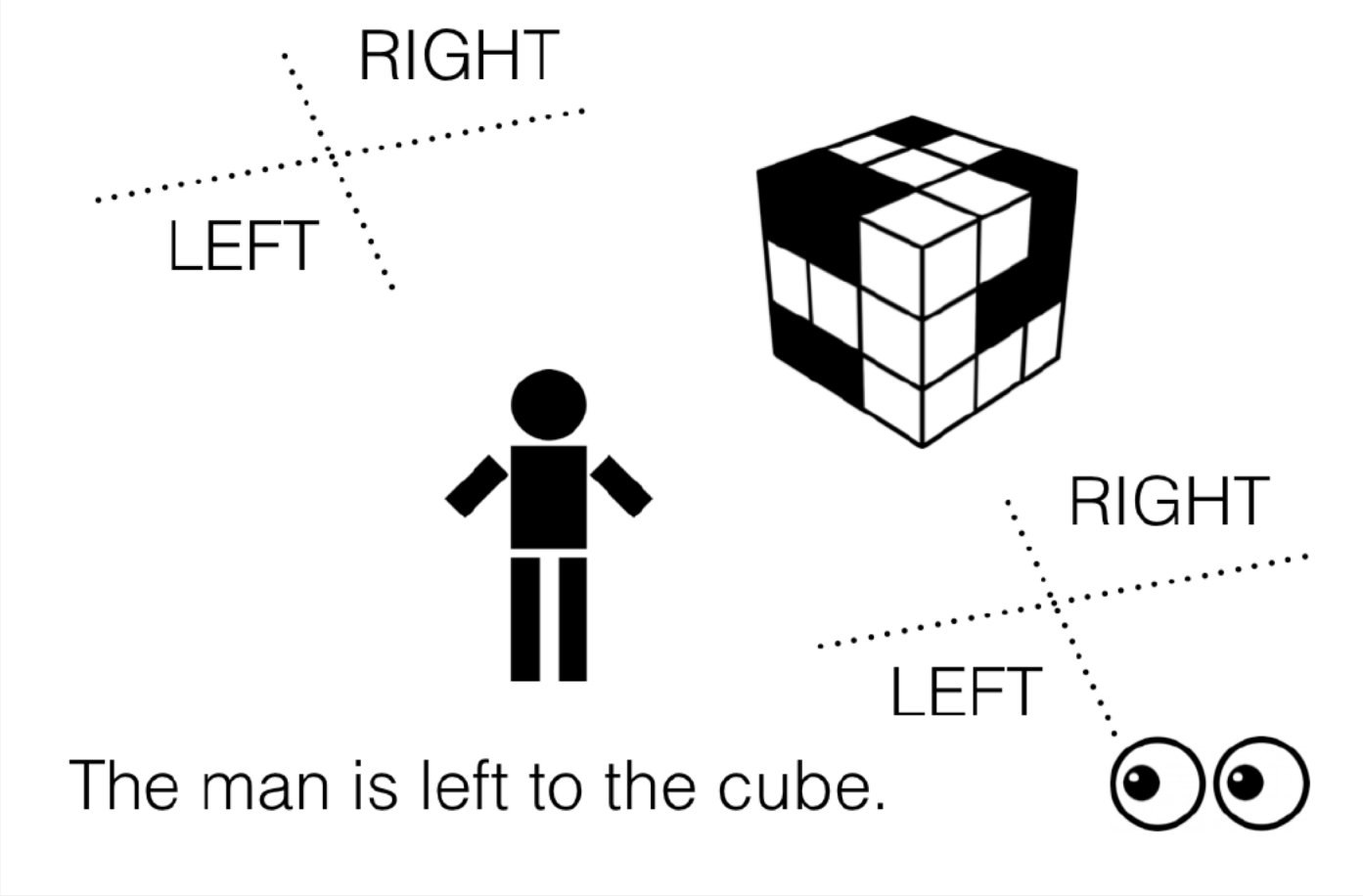
How do different languages talk about locations?



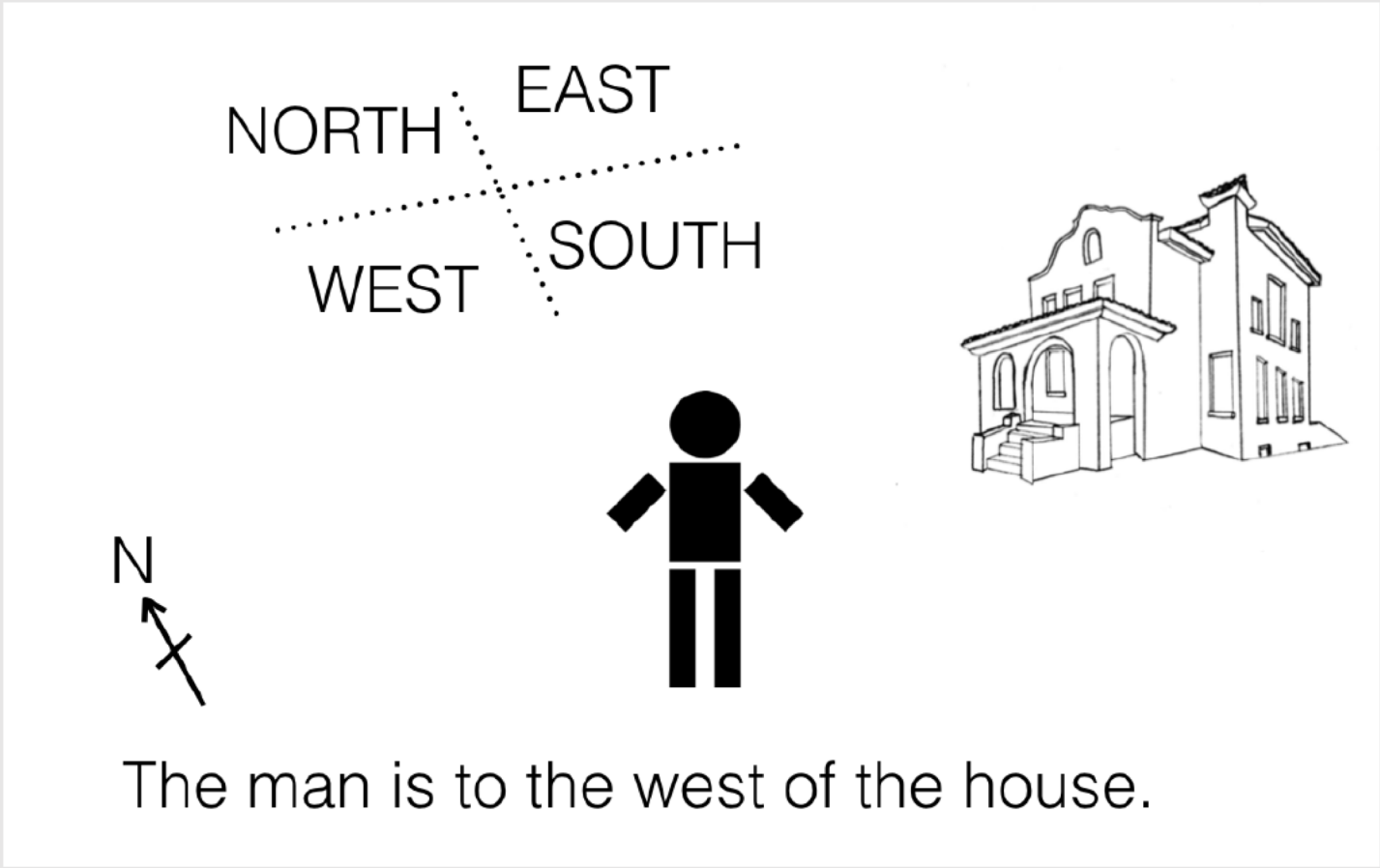
Case study 4: spatial language **intrinsic**

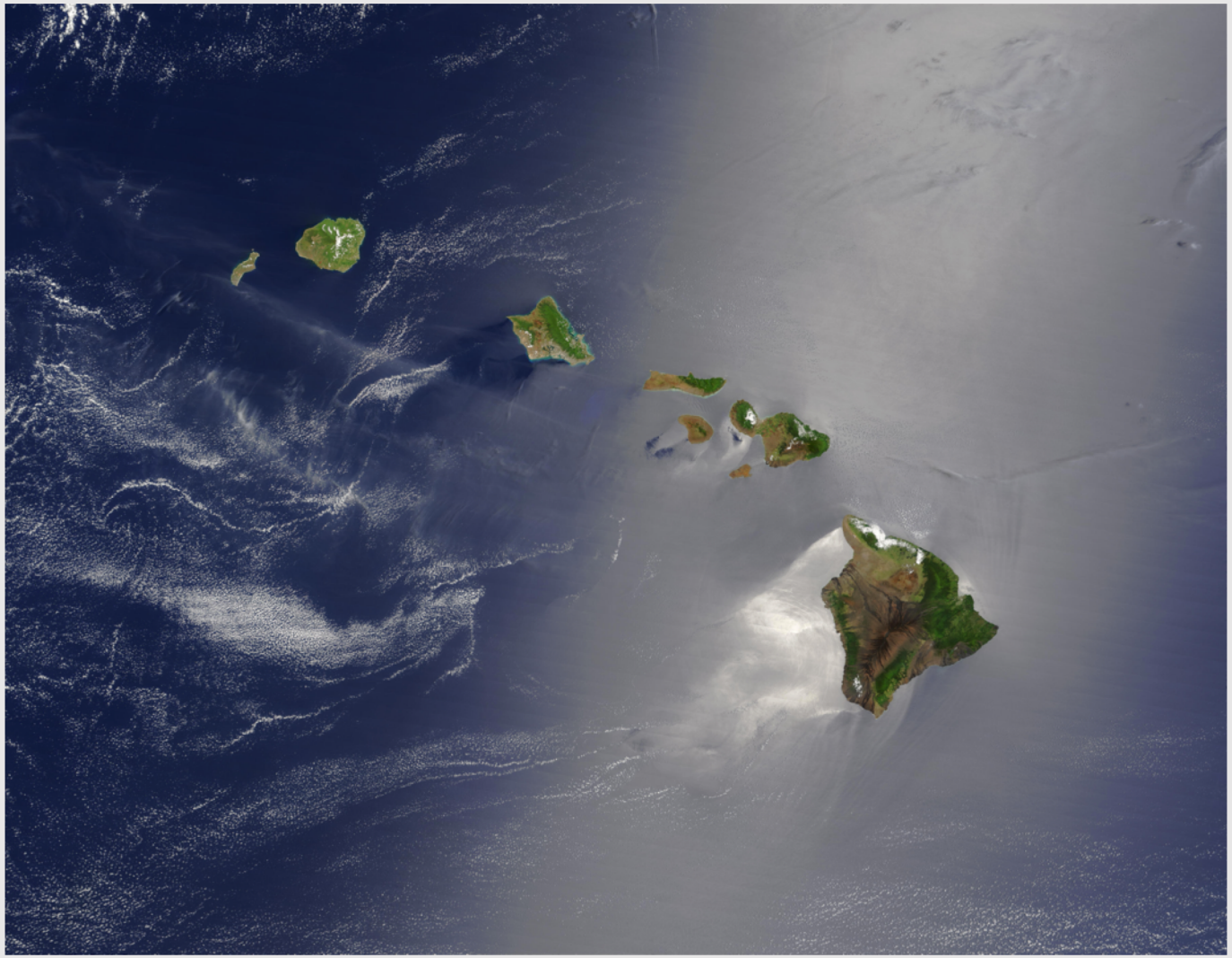


Case study 4: spatial language **relative**



Case study 4: spatial language **absolute**






mauka
makai

Case study 4: spatial language **land-sea axis**

Very prominent and consistent feature across Austronesian languages, from Taiwan all the way to Hawai'i.

	Inland	**Seaward**
PAN	*daya	*lahud
Pazeh	daya 'upstream; east'	rahut 'downstream; west'
Thao	saya 'uphill, upstream'	raus 'downhill, downstream'
Paiwan	zaya 'upland, upriver'	lauz 'seaward, downriver'
Ilokano	dáya 'east'	láud 'west'
Cebuano	iláya 'away from coast/town'	iláwud 'near coast/town'
Mansaka	saka 'ascend; go upstream'	lawud 'downstream, seaward'
Kelabit	dayəh 'upstream'	laʔud 'downstream'
Malay	hulu 'upstream'	hilir 'downstream'
Kambera	dia 'upstream'	lauru 'downstream'
Paulohi	lia 'landward'	lau 'seaward'
Manam	auta 'landward'	ilau 'seaward'
Lakalai	-ilo 'landward'	-lau 'seaward'
Pohnpeian	peiloŋ- 'landward'	peiei- 'seaward'
Hawaiian	mauka 'landward'	makai 'seaward'

Yami: Orchid Island

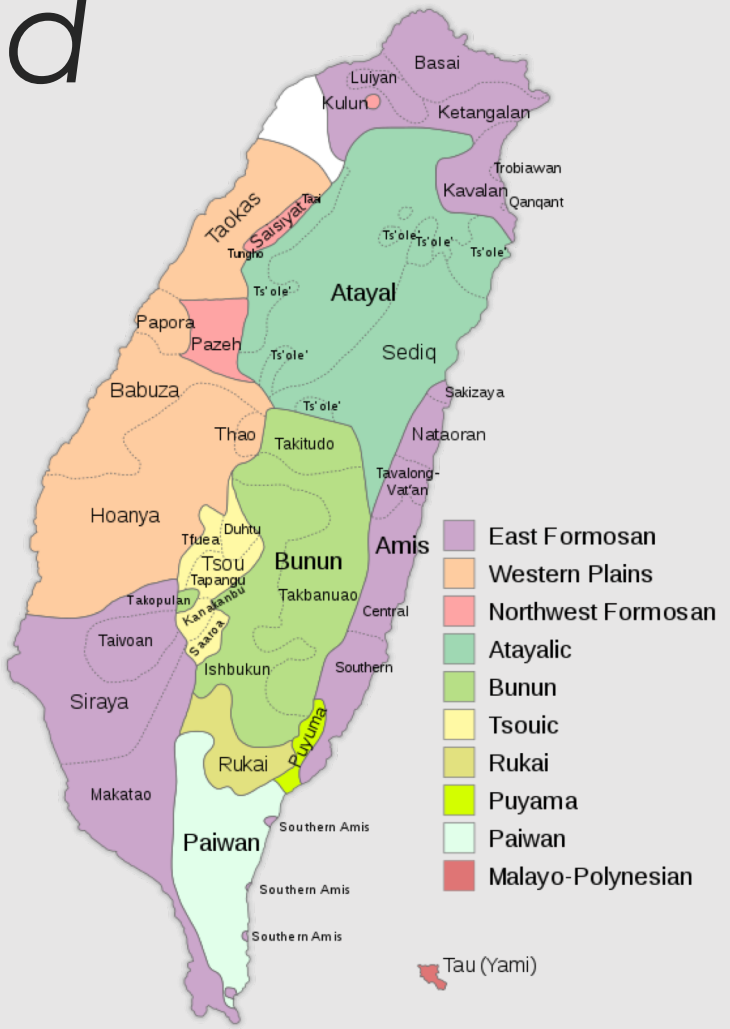
- The land-sea axis in Yami is represented by:
  - ***rala***
  - ***laod***

Yami: Orchid Island

- The land-sea axis in Yami is represented by:
  - ***rala***: 'inland/towards the mountain'
  - ***laod***: 'seaward'

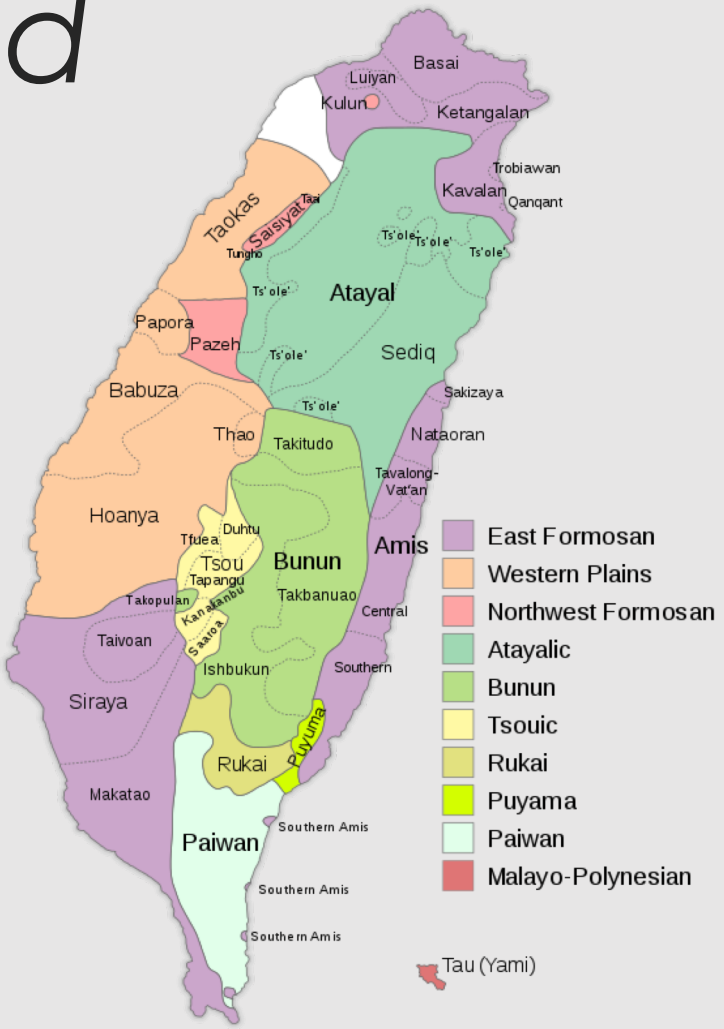
Yami: *irala* and *ilaod*

- From the roots *rala* and *laod* we now have the words ***irala*** and ***ilaod***, which have taken on a more specific meaning – what are they?
- (Hint: Yami is spoken on a small island located right next to a much, much larger island)



Yami: *irala* and *ilaod*

- From the roots *rala* and *laod* we now have the words ***irala*** and ***ilaod***, which have taken on a more specific meaning – what are they?
- ***Irala***: Orchid Island
- ***Ilaod***: Taiwan



FINAL THOUGHTS (BEFORE THE EXTRAS)

Final thoughts

This is just a small guide to ***help you explore what is possible.***

Whenever you are faced with a dataset, **try to find the meanings of the morphemes first** and then **put them together in a creative manner**.

Look at all the clues they give you.

For instance, if you have the words for ‘sea’ and ‘shoulder’ and you see them combined in ‘sea-shoulder’, try to think of the *metaphor* this could be. ‘shoulder’ is a part of the body, but the body in this case is the ‘sea’, so ‘sea-shoulder’ can be the ‘coastline’ or something similar.

So when you encounter a problem like that, don’t panic, breathe, and analyze. Good luck!

EXTRAS
FUNNY WORDS FROM DUTCH

woestijnschip

woestijn-schip

desert-ship

沙漠-船

woestijnschip

woestijn-schip

desert-ship

沙漠-船

metaphor

kameel
camel
駱駝

aardappel

aard-appel

earth-apple

地-蘋果

aardappel

aard-appel

earth-apple

地-蘋果

metaphor

potato
馬鈴薯 / 土豆

or is it potato?

stalen ros

stalen ros

steel horse

鋼 馬

stalen ros

stalen ros

steel horse

鋼 馬

metaphor

fiets

bi-cycle

腳-踏-車 / 自-行-車

References

Some general references, if you are super interested:

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