

Fiat Lingua

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A Conlanger's Thesaurus

William S. Annis*

January 18, 2020 (Version 2.1)

Introduction

When I begin to create a new language, I rarely have any trouble coming up with the first hundred or so words. After that point, however, I start to leave large gaps. This list started out as a tool to help me deal with vocabulary creation beyond that first hundred. I just took the Minimum Buck list from [CALS](#), cleaned it up a little and sometimes expanded it.¹

However, a bare list of English words is not as useful as it could be. I wanted a tool to help me avoid careless relexicalization when creating vocabulary. This document is the (ongoing) result of me hunting down everything I can find on lexical typology, although some other preoccupations of mine are also evident. The motivating principles for this document are,

- Don't just be a collection of exotica, but note cross-linguistic patterns and variation.
- Make clear how words might relate to other words, semantically and derivationally.
- Consider historical development where reasonable.
- View grammar and lexicon as a continuum.²
- Be concise. There are other resources for complex matters.

For an example of things I have avoided, the Navajo verb for “to see” rather infamously involves a stem relating to round solid objects, with sight being derived from the operation of the eyeballs. This is certainly different from English, but it is also very rare.

Reading the Entries and Maps

Many vocabulary items are, unfortunately, simply an English word, with a part of speech left in place mostly to disambiguate homophones. Where I have good information on likely polysemies, I have made a note (see the entry for **sun**, for example).

Some entries contain single notes about other words the entry word may have become or come from in some languages. These historical changes are included on the assumption that a single lexical item might encompass more than one meaning for a while, or might remain related by derivation. These changes are marked with an arrow, as in “a word for **vessel** can → **head**.” Similarly, common paths of grammaticalization³ are marked, “**hand** *n.* *Gr.* ∼ agent ‘by’.”

Recent research in lexical typology with semantic maps has been producing interesting results that not only respect cross-linguistic variation but also provide interesting and useful generalizations, as well as a notation that lends itself to tinkering with

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¹I leave “Monday” in as a reminder, but removed the rest of the days of the week, for example.

²Generative conlangers can still find this a useful and productive artistic fiction, even if Construction Grammar offends.

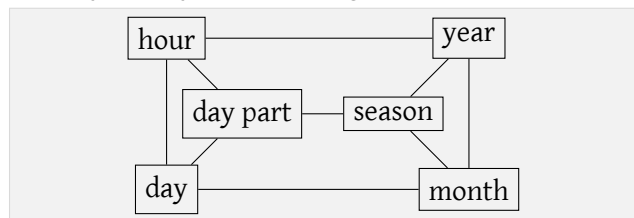
³Most from Heine and Kuteva's *World Lexicon of Grammaticalization*.

by language inventors. There are two sorts of maps in this document.

The first sort of map is of common pairwise polysemies. In this map any two connected items are represented by a single word in at least some languages. Most of these maps come from Perrin 2007 and List *et al.* 2013,⁴ which can be consulted for even more details, but those marked “personal” have been created by me with software and data described at the link in the map.

When consulting the polysemy maps, consider the possibility that certain meanings might only be present in derived or compound uses of the root.

The second maps, and the most complex, are those in which multiple connected items are represented by a single word or construction in at least some languages. For example, the map below describes the possible relationships between constructions to mark simultaneous time by units (“on Monday, in July, in the spring”),



English, for example, uses “at” for hour and some uses of day part (“at noon”), “in” for some uses of day part, season, year and month (“in April”), and uses “on” for day. French on the other hand uses “en” for year, season and month, “à” for hour and some uses of day part, and uses no marking for day and some uses of day part. Notice how similar constructions are linked.

It is an assumption of these maps that if two nodes share a common construction, they will be either directly connected, or connected through

some intervening nodes which will also use the same construction. Using this time map, if your language marks “in 1992” and “on Monday” with the same construction, there will be nodes between them that use the same construction, say the hour node, or the month one. This assumption is not always valid, but it is often enough to be interesting.

Both types of map are potentially useful for a historical conlanger. The connecting lines provide likely avenues for semantic shift over time. A few of the maps have arrows on the connecting lines to mark known routes of historical shift.

Cautions

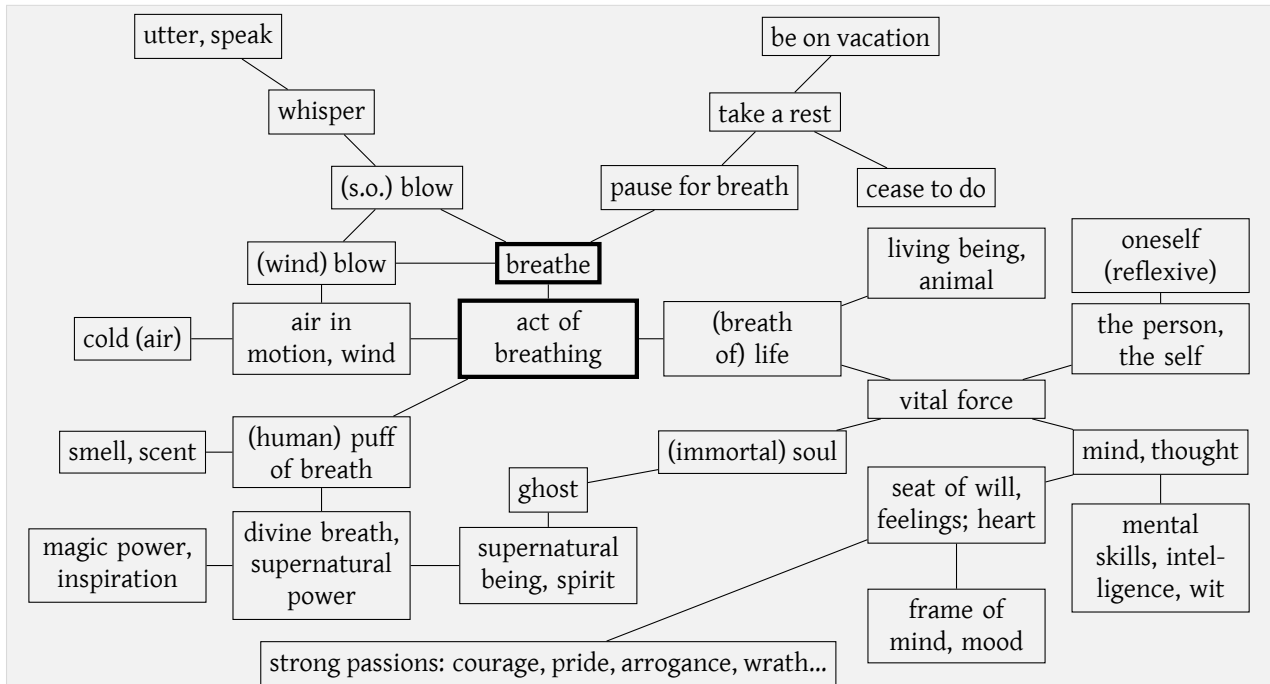
The most interesting part of this thesaurus comes from the work of lexical typologists. Very often, these maps and hierarchies are part of ongoing research programs, and most are probably incomplete or misleading in some part. Also, typology necessarily produces statistical results, leaving some variation unaccounted for. In one study of polysemy, fully 149 of the 257 sense pairings noted, 58%, occurred in but one language. I have no problem imagining a scenario where the word “peanut” also means “mid-afternoon,” which certainly does not occur in any paper or lexicon I’ve ever encountered.

Further, just because something doesn’t happen in human languages, doesn’t actually mean it’s impossible to learn — it might just be harder. So twisting the semantic maps and implicational hierarchies into knots is probably non-fatal.

This collection is not intended to be a tool to evaluate conlangs, nor would it produce very interesting languages if used mechanically. But I do hope others will find it a useful tool to knock their thinking out of well-worn, but barely conscious, semantic ruts we inherit from our mother tongues.

⁴I have omitted minor connections in some maps in the interest of readability. See the recently (2019) updated CLICS³ for more complete maps.

The Thesaurus



Map 1: François 2010, a map of variations on “breathe.” Note that no language from the sample has a word with all meanings in this map, nor do most cover even half of the map with a single word.

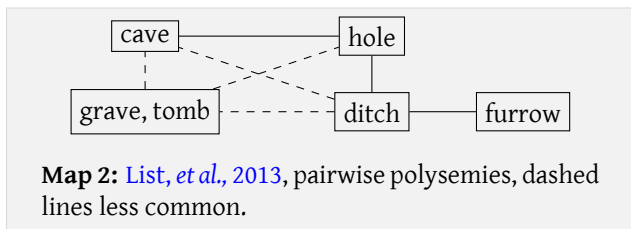
The Physical World

air *n.* See Map 1.

area, region *n.* *Gr.~>* locative “around”.

ash, ashes *n.*

cave *n.* See Map 2.



Map 2: List, et al., 2013, pairwise polysemies, dashed lines less common.

cloud *n.* See Map 5.

darkness *n.* See Map 57.

dust *n.* See Map 5.

earth (soil) *n.* See Map 9.

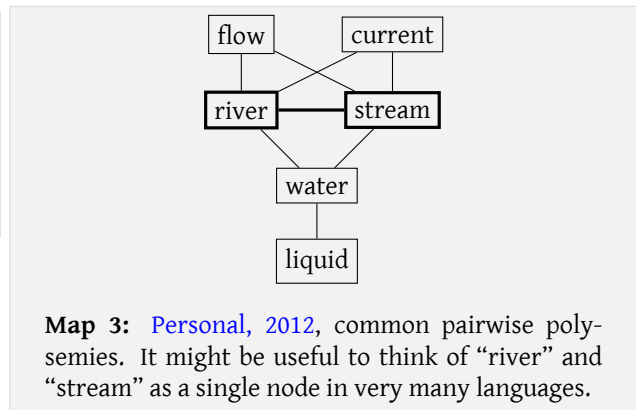
earth (land) *n.* *Gr.~>* locative “down,” “below,” “under.” See Map 9.

fire *n.* See Map 4.

flame *n.*

fog *n.* See Map 5.

forest *n.* also woods



Map 3: Personal, 2012, common pairwise polysemies. It might be useful to think of “river” and “stream” as a single node in very many languages.

gulf, bay *n.*

ice *n.* See Map 59.

island *n.*

lake *n.*

light *n.* visible electro-magnetic radiation; See Map 7.

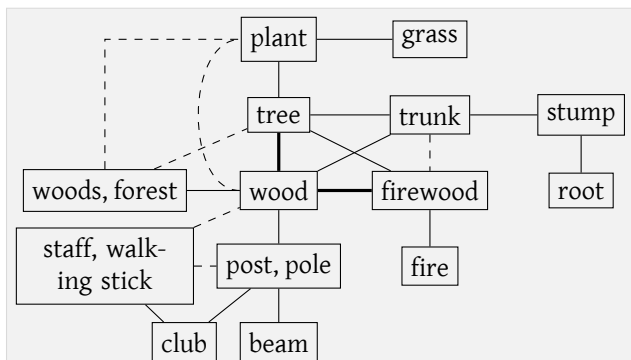
light, kindle, ignite *v.*

lightning *n.* In some languages of the Philippines, may distinguish day from nighttime lightening; or “heat” lightening (unheard, from a distant storm) from local lightning with thunder.

mainland *n.* See Map 9.

match *n.* little fire-stick

mist *n.* See Map 5.



Map 4: List, et al., 2013, pairwise polysemies, dark lines very common, dashed lines less common.

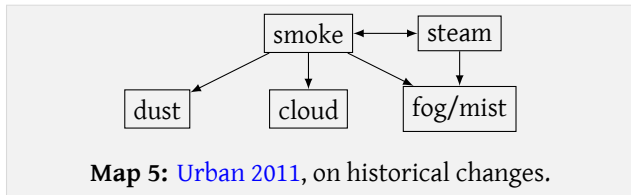
moon *n.* The words for **sun** and **moon** interchange historically only in the languages of North America.

mountain *n.* also: hill; can → **forest**. See Map 6. See Map 54.

mud *n.* See Map 9.

plain, field *n.*

rain *n.* See Map 8.



Map 5: Urban 2011, on historical changes.

river *n.* also stream, brook. See Map 3. See Map 8.

sand *n.*

sea *n.*

shade, shadow *n.*

shore *n.* See Map 18.

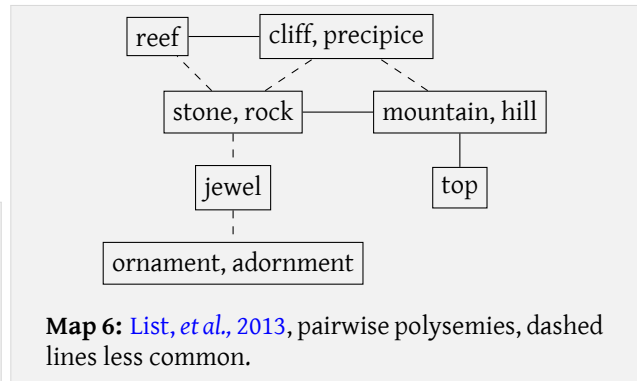
sky *n.* Gr.→ up.

smoke *n.* See Map 5. See Map 9.

snow *n.* See Map 59.

spring, well *n.*

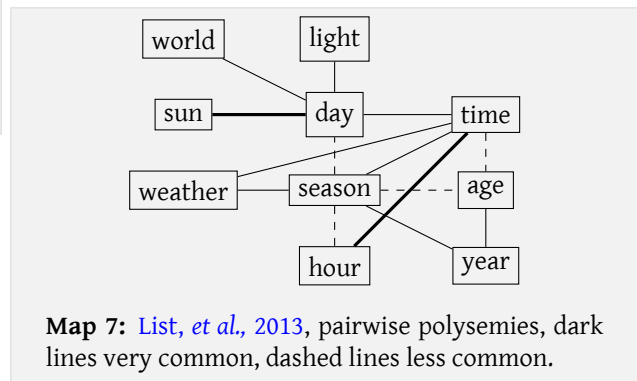
star *n.*



Map 6: List, et al., 2013, pairwise polysemies, dashed lines less common.

stone *n.* also: rock See Map 6.

sun *n.* The words for **sun** and **moon** interchange historically only in the languages of North America. See Map 7.

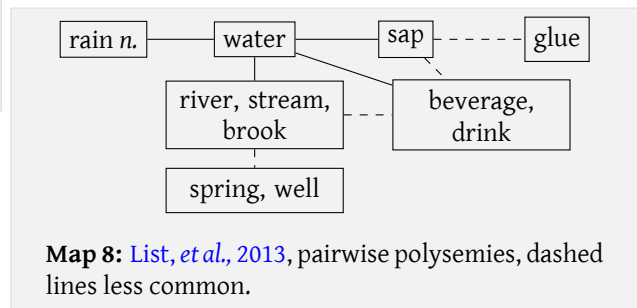


Map 7: List, et al., 2013, pairwise polysemies, dark lines very common, dashed lines less common.

thunder *n.*

valley *n.*

water *n.* See Map 8.



Map 8: List, et al., 2013, pairwise polysemies, dashed lines less common.

wave *n.*

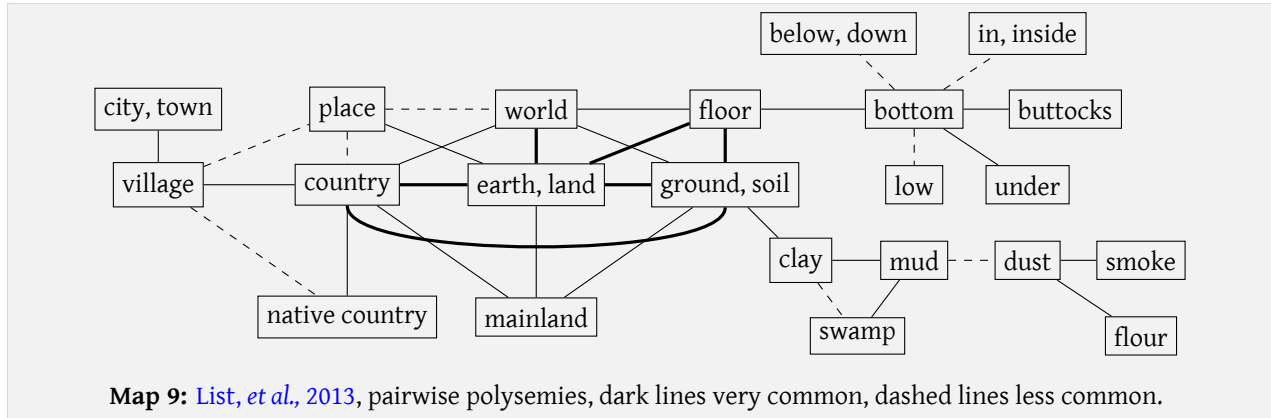
weather *n.* See Map 7.

wind *n.* See Map 1. Winds may get **special names**, based

on their season, direction, strength or temperature.

wood *n.* See Map 4.

world *n.* See Map 7. See Map 9.



Map 9: List, *et al.*, 2013, pairwise polysemies, dark lines very common, dashed lines less common.

Kinship

ancestors *n.*

aunt *n.*

boy *n.*

brother *n.*

child *n.* *Gr.*→ diminutive. **Children** *Gr.*→ plural (for animates).

cousin *n.*

daughter *n.*

daughter-in-law (of a man) *n.*

descendants *n.*

family *n.*

father *n.* *Gr.*→ male.

father-in-law (of a man) *n.*

female *adj.* human

girl *n.*

granddaughter *n.*

grandfather *n.*

grandmother *n.*

grandson *n.*

husband *n.*

infant, baby *n.*

male *adj.* human

man adult male *n.* *Gr.*→ male.

marry *v.* There may be separate words (sometimes related, sometimes not) to describe a man getting married vs. a woman getting married. For **marriage** See Map 29.

mother *n.* *Gr.*→ female.

mother-in-law (of a man) *n.*

nephew *n.*

niece *n.*

offspring (son or daughter) *n.*

orphan *n.*

parents *n.*

person, human being *n.* *Gr.*→ indefinite pronoun, "we".

relatives, kinsmen *n.*

sister *n.*

son-in-law (of a man) *n.*

stepdaughter *n.*

stepfather *n.*

stepmother *n.*

stepson *n.*

uncle *n.*

widow *n.*

woman *n.* *Gr.*→ female.

Animals

The vocabulary for domesticated animals can be quite complex, with completely different words to distinguish (1) male from (2) female, (3) adult from (4) young; for males, whether they are (5) castrated or (6) intact; for females, whether they have yet (7) given birth or (8) not. There may be further subdivisions in age (see the large Sami vocabulary for [reindeer](#)). I have collapsed the list below to species.

animal *n.* See Map 1. See Map 13. See Map 24.

ass, donkey *n.*

bear *n.*

bee *n.* See Map 22.

camel *n.* See [immense Somali vocabulary](#).

cat, kitten *n.*

chicken, hen, rooster, chick *n.*

cow, bull, steer, cattle, calf *n.* An **ox** is a castrated bull used for work. **Cattle** can → **wealth**.

deer, stag, fawn *n.*

dog, bitch, puppy *n.*

duck, (drake), duckling *n.*

elephant *n.*

female animal *adj.*

fish *n.* See Map 13. See Map 12.

fly *n.*

fox, vixen, kit *n.*

goat, buck, wether, doe, kid *n.*

goose, gander, gosling *n.*

herdsman *n.*

horse, stallion, gelding, mare, foal/colt *n.*

insect *n.*

lion *n.*

livestock *n.*

manure *n.*

male animal *adj.*

monkey *n.*

mouse, rat *n.*

mule *n.*

pasture *n.*

pig, sow, boar, piglet *n.*

sheep, ram, ewe, lamb *n.*

snake *n.*

stable, stall *n.* See Map 31.

wing *n.* See Map 12. See Map 15.

wolf *n.*

worm *n.*

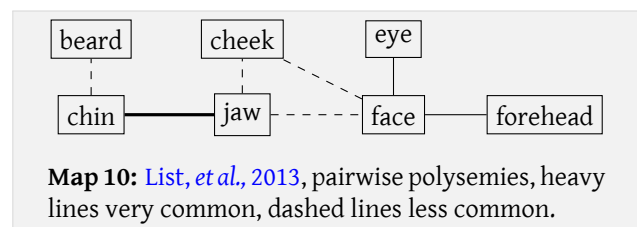
The Body

arm *n.* See Map 16. See Map 12.

back *n.* *Gr.*→ after (temporal), behind, then (“afterward”). See Map 48.

bald *adj.*

beard *n.* See Map 10.

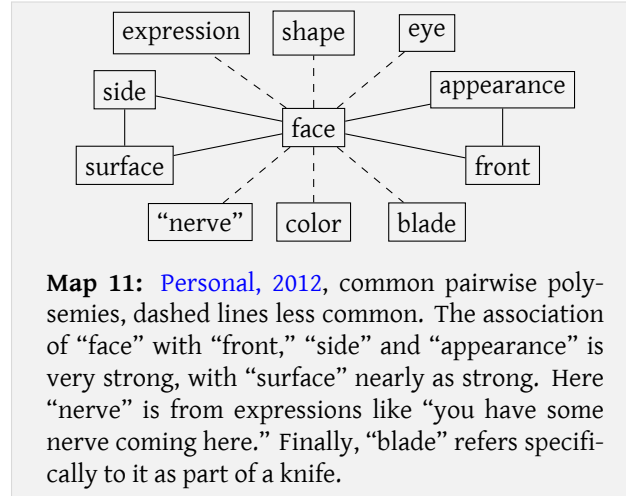


beget (of father) v.

bite v.

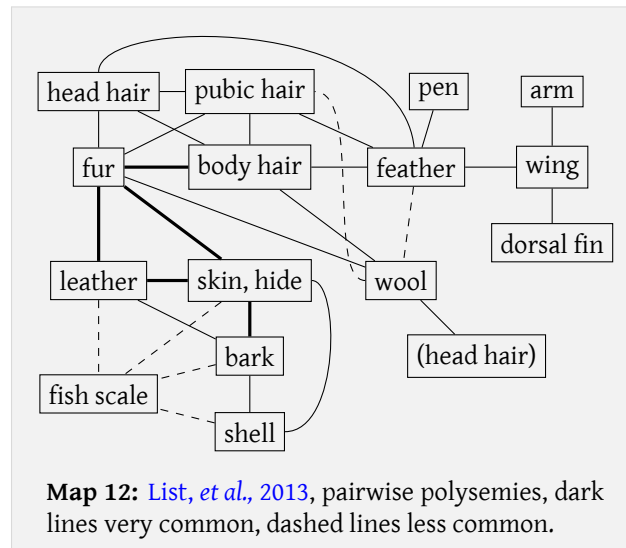
blind adj.

blood n.



body n. *Gr.*→ middle voice, reciprocal, reflexive and intensive reflexive (“I myself did it”). See Map 13.

bone n. See Map 17.



brain n.

break wind v.

breast n.

breathe, breath v. See Map 1.

bury (the dead) v.

buttocks n. *Gr.*→ locative “down” and “behind.” See Map 9. See Map 17.

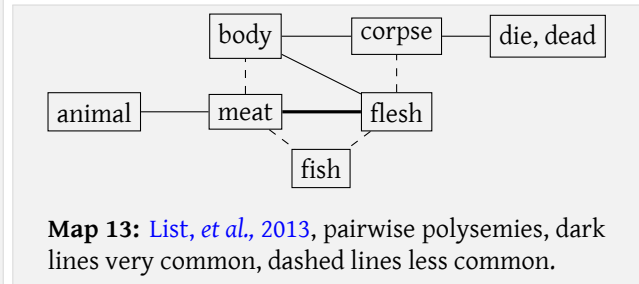
cheek n. See Map 10.

chest n.

chin n. See Map 10.

conceive v. See Map 67.

corpse n. See Map 13.



cough v. See Map 59.

cure, heal v. See Map 70.

deaf adj.

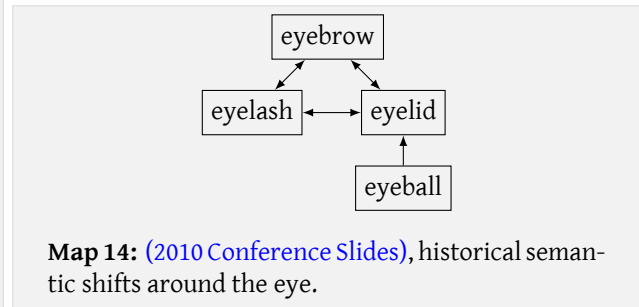
defecate, excrement v. , n.

die v. See Map 13.

dream n.

ear n. *Gr.*→ locative “near,” “around the corner”.

elbow n.



eye n. See Map 14. See Map 11. See Map 10. *Gr.*→ “before”, “front.”

face n. See Map 11. See Map 10. *Gr.*→ “front,” “up.”

finger n. See Map 16. *toe* and *finger* often the same; a language may have a special word for one or more of index, ring or little finger.

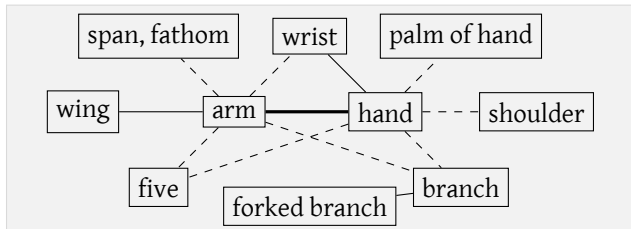
flesh n.

foot n. *Gr.*→ bottom of, under. In African languages **foot-**

print may *Gr.*→ locative “behind.” See Map 17.

forehead *n.* See Map 10.

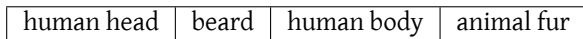
genitals *n.*



Map 15: List, et al., 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

grave, tomb *n.* See Map 2.

hair *n.* The word can be broken down into:



with contiguous elements possibly having the same word. Swahili has a distinct word for each. (2010 Workshop Slides). See Map 12. See Map 54.

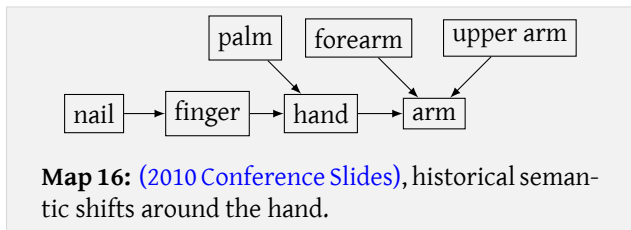
hand *n.* *Gr.*→ agent “by,” locative, “five”. See Map 16. See Map 15.

have sexual intercourse *v.*

head *n.* A word for **vessel** can → **head**. *Gr.*→ front, middle, intensive reflexive, “up”. See Map 54.

heart *n.*

horn *n.* not the musical instrument



Map 16: (2010 Conference Slides), historical semantic shifts around the hand.

intoxicated *adj.*

jaw *n.* See Map 10.

joint *n.* See Map 33.

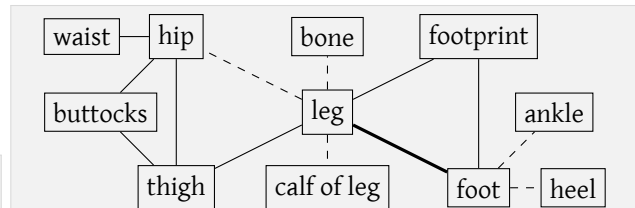
kill *v.* See Map 75.

knee *n.*

lame *adj.*

lazy *adj.*

leg *n.* See Map 17.



Map 17: List, et al., 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

lick *v.* See Map 26.

life *n.* See Map 1.

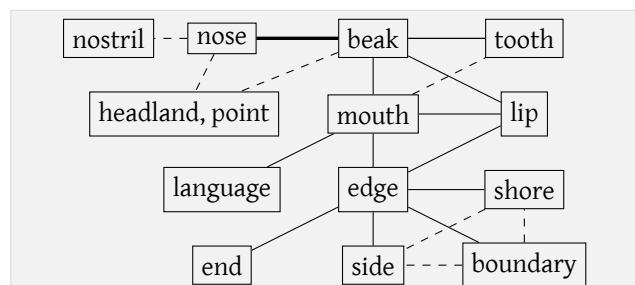
lip *n.* *Gr.*→ locative. See Map 18.

live be alive *v.* See Map 1. See Map 51.

liver *n.*

medicine, drug *n.*

mouth *n.* can → **an opening**. *Gr.*→ front. See Map 18.



Map 18: List, et al., 2013, pairwise polysemies, dark lines very common, dashed lines less common.

mute *adj.*

naked, bare *adj.*

navel *n.* See Map 48.

neck *n.*

nose *n.* See Map 18.

perspire *v.*

physician *n.*

poison *n.*

pregnant *adj.* See Map 67.

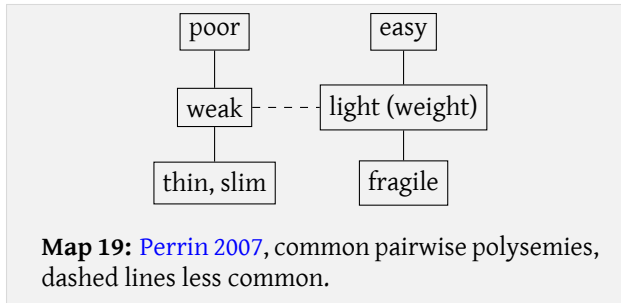
rest *v.* See Map 1.

shoulder *n.* See Map 42. See Map 15.

sick, sickness *n., adj.*

skin *n.* See Map 12.

skull *n.* See Map 54.



sleep *v.*

sneeze *v.*

spit *v.*

stomach *n.* **belly** *Gr.~>* in (“AT-belly OF-house”), even to a temporal “in”.

strong, mighty, powerful *adj.* See Map 67.

tail *n.*

throat *n.*

thumb *n.*

tired, weary *adj.*

toe *n.* see **finger**.

tongue *n.*

tooth *n.* See Map 18.

udder *n.*

urinate *v.*

vomit *v.* See Map 38.

wake up *v.* See Map 45.

weak *adj.* See Map 19.

well, health *adj.*

womb *n.*

wound, sore *n.*

yawn, gape *v.*

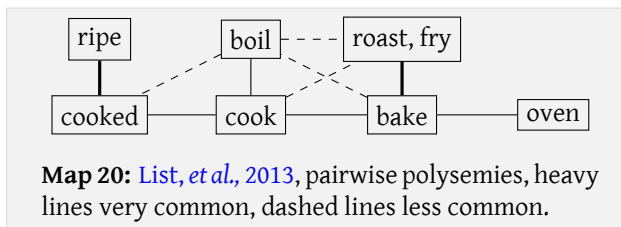
Food and Drink

bake cook or harden by means of dry heat, *v.* See Map 20.

bean *n.*

beer *n.* See Map 22.

boil *v.* See Map 20.



bowl *n.* See Map 25.

bread *n.*

breakfast *n.*

butter *n.* See Map 23.

cheese *n.*

cook *v.* prepare by applying heat See Map 20.

crush, grind *v.* See Map 35. See Map 75.

cup, drinking vessel *n.* **Vessel** can → **head**. See Map 25.

dinner *n.*

dish *n.* See Map 25.

dough *n.*

drink *v.* May be identical to **eat**. Whatever word encompasses **drink** may also mean **smoke** (tobacco).

eat *v.* May also encode: texture of the food (esp. hard vs. soft), manner of eating (“stuff oneself, nibble, eat communally”), moment of eating (“have breakfast”), quantity eaten (“devower”). Or, **eat** and **drink** may be the same. Often used in metaphors of emotion. (2010 conference slides) *Gr.~>* passive.

fig *n.*

food *n.*

fork (tableware) *n.*

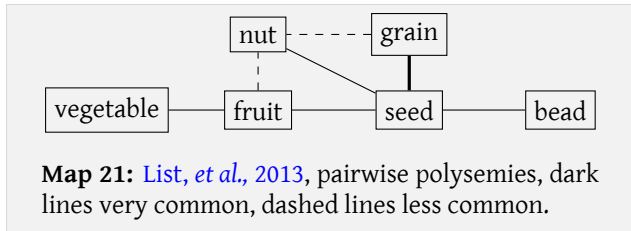
fruit *n.* See Map 21.

grape *n.*

honey *n.* See Map 22.

hunger *n.*

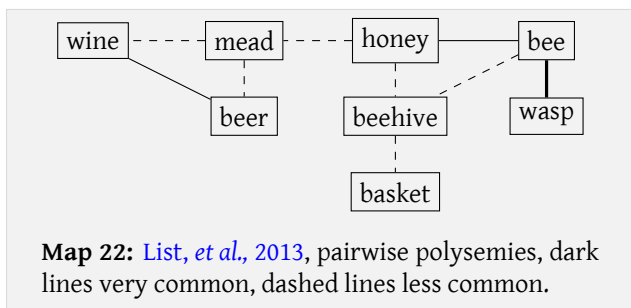
kettle *n.*



knead *v.*

lunch *n.*

mead *n.* See Map 22.



meal *n.*

meal, flour *n.*

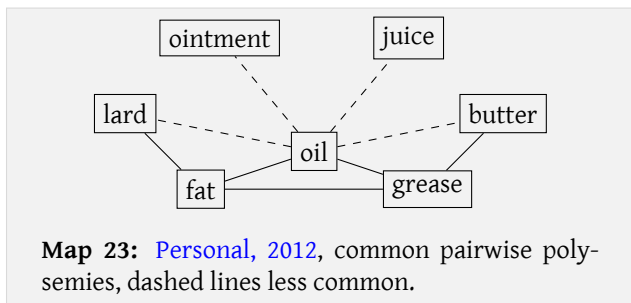
meat *n.* also **flesh**. See Map 24. See Map 13.

milk *n. v.* See Map 35.

mill *n.*

nut *n.* See Map 21.

oil *n.* See Map 23.

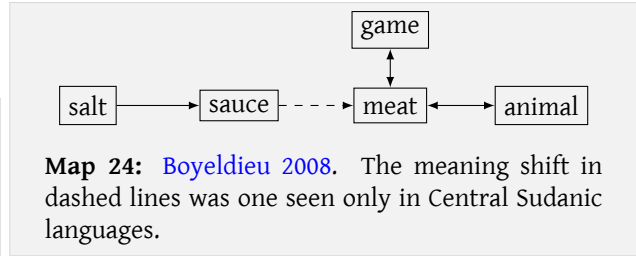


olive *n.*

oven *n.* See Map 20.

pan *n.*

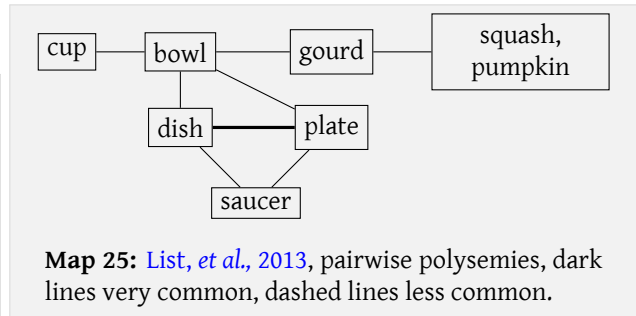
pepper *n.*



pitcher, jug *n.* Vessel can → head.

plate *n.* See Map 25.

pot, cooking vessel *n.* Vessel can → head.



potato *n.*

ripe *adj.* See Map 20.

roast, fry *v.* See Map 20.

salt *n.* See Map 24.

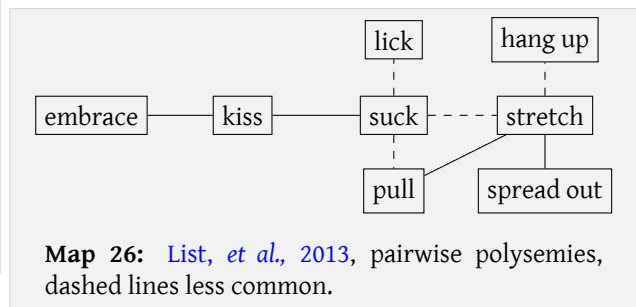
sausage *n.*

soup, broth *n.*

spoon *n.* See Map 27.

stir, mix *v.* See Map 45.

suck *v.* See Map 26.



sugar *n.*

supper *n.*

thirst *n.*

vegetables *n.* See Map 21.

wine *n.* See Map 22.

Clothing and Grooming

Languages may have merely two verbs “put on” and “take off” for clothing, but some may have many more, usually coding for the relevant body part or shape of item put on (things that encircle tend to cluster, as for watches, necklaces, belts, etc.). There are generally more verbs for putting on than taking off. (2013 Conference Abstract)

awl *n.*

belt, girdle *n.* See Map 48.

boot *n.*

bracelet *n.*

brush *n.* See Map 27.

button *n.*

cloak *n.*

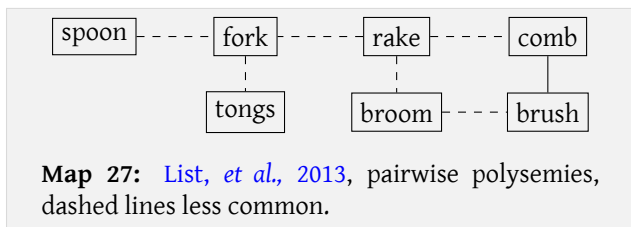
cloth *n.*

clothing, clothes *n.*

coat *n.*

collar *n.*

comb *n.* See Map 27.



cotton *n.*

dye *v.* See Map 34.

felt *n.*

fur *n.* See Map 12.

glove *n.*

handkerchief, rag *n.*

hat, cap *n.*

jewel *n.* See Map 6.

leather *n.* See Map 12.

linen, flax *n.*

loom *n.*

mirror *n.*

necklace *n.*

needle *n.*

ointment *n.* See Map 23.

ornament, adornment *n.* See Map 6.

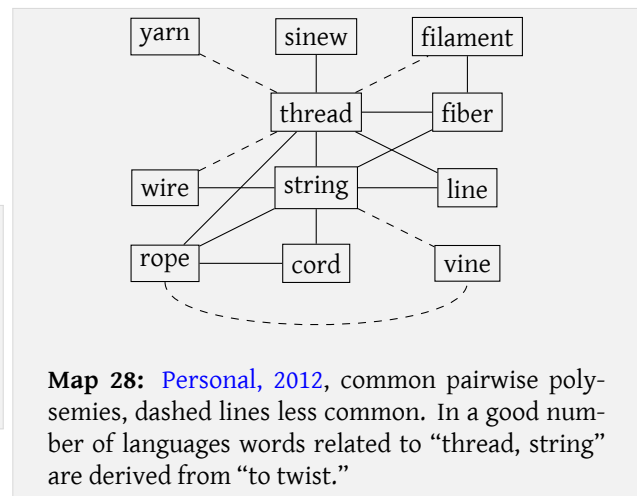
pin *n.*

pocket *n.*

razor *n.* See Map 36.

ring (for finger) *n.*

sew *v.*



shirt *n.*

shoe *n.*

silk *n.*

skirt *n.*

soap *n.*

spin *v.*

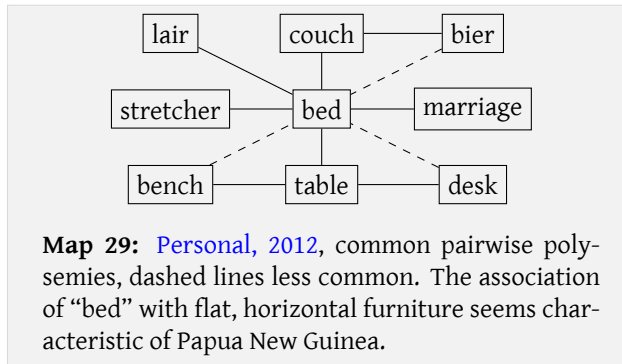
spindle *n.*

stocking, sock *n.*
 tailor *n.*
 thread *n.* See Map 28.
 towel *n.*
 trousers *n.*

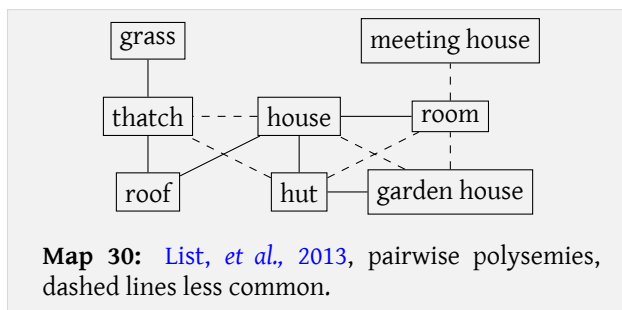
veil *n.*
 weave *v.*
 woman's dress *n.*
 wool *n.* See Map 12.

The House

bed *n.* See Map 29.



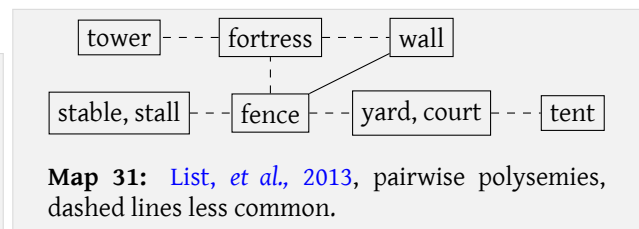
candle *n.*
 chair *n.*
 chimney *n.*
 door, gate *n.*



dwelt, live *v.* See Map 51.

fireplace *n.*

floor *n.* See Map 9.
 house *n.* Gr.→ locative. See Map 30.
 hut *n.* See Map 30.
 key *n.*
 lamp, torch *n.*
 lock *n. v.*
 roof *n.* See Map 30.
 room *n.* See Map 30.
 stove *n.*
 table *n.* See Map 29.
 tent *n.* See Map 31.



wall *n.* See Map 31.
 window *n.*
 yard, court *v.* See Map 31.

Agriculture and Vegetation

acorn *n.*
 bark *n.* See Map 12.

barley *n.*
 beech *n.*

birch *n.*
branch *n.* See Map 15.
crop, harvest *n.*
cultivate, till *v.*
dig *v.*
farmer *n.*
field (for cultivation) *n.* *Gr.*→ out(side), through.
fir *n.*
flower *n.*
fork *n.* pronged instrument for picking up things. See Map 27.
furrow *n.* See Map 2.
garden *n.*
grain (barley, oats etc) *n.* See Map 21.
grass *n.* See Map 4. See Map 30.
hay *n.*
hoe *n.* See Map 42.
leaf *n.*
maize, corn *n.*
mow, reap *n.*
oak *n.*
oats *n.*
pine *n.*
plant *n.* See Map 4.
plow *v.*
rake *n.* See Map 27.
rice *n.*
root *n.* See Map 4.
rye *n.*
seed *n.* See Map 21.
shovel *n.*
sickle, scythe *n.* See Map 36.
smoke (tobacco) *v.* See Map 5.
sow *v.*
spade *n.* See Map 42.
thresh *v.* See Map 75.
threshing-floor *n.*
tobacco *n.*
tree *n.* See Map 4.
vine *n.* See Map 28.
wheat *n.*

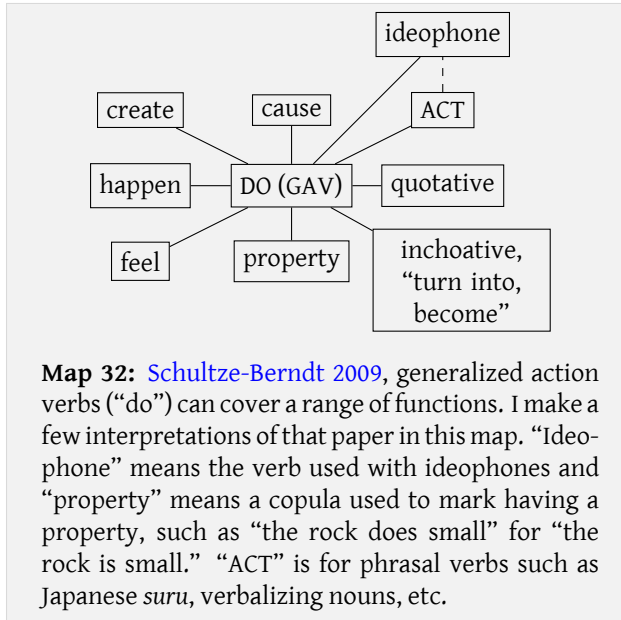
Basic Actions and Technology

anvil *n.*
ax *n.*
basket *n.* See Map 22.
bend *v.*
bore *v.*
break *v.* The sense **cut/break** can be partitioned over this continuum of material and shape,

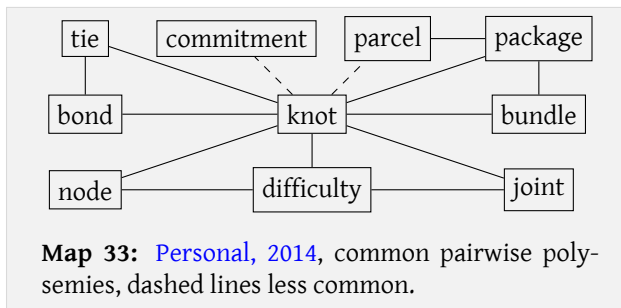
tear/rip	pop	break (flat)	break (stick)
----------	-----	--------------	---------------

(Majid, et al, 2007.)
broom *n.* See Map 27.
build *v.*
burn *v.* often to describe pain (esp. in the skin or eyes), fever or swelling.
carpenter *n.*
carve *v.*
cast (metals) *v.* See Map 41.
chain *n.*
chisel *n.*
clay *n.* See Map 9.
copper, bronze *n. adj.*
cut *v.*
do, make *v.*

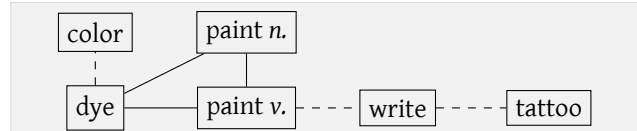
flay, skin v.
fold v.
forge v. See Map 41.
glass n.
gold n.
hammer n.



hit v. also strike, beat
iron n. See Map 36.
knife n. See Map 36. For **blade** See Map 11.
knot n. See Map 33.



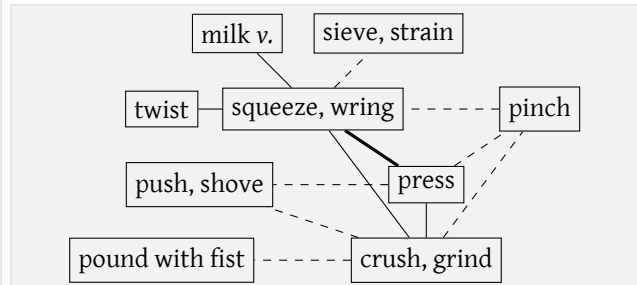
mold (clay etc) v.
nail n. fastener, used with hammer
paint v. n. See Map 34.



Map 34: List, et al., 2013, pairwise polysemies, dashed lines less common.

potter n.
pour v. cause to flow. See Map 41.

press v. do pressure to; push upon with weight or force. See Map 35.



Map 35: List, et al., 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

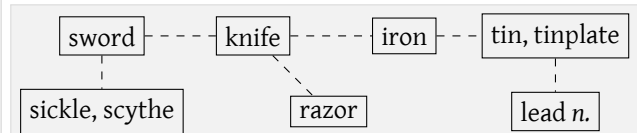
pull v. also draw. See Map 26.
rope n. See Map 28.

rub v. also wipe

saw n.
scissors, shears n.

sculptor n.

silver n.

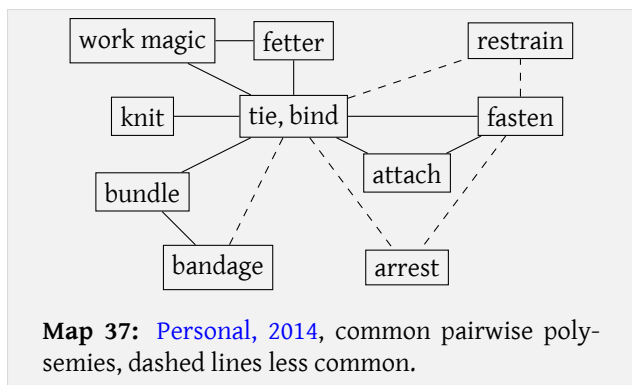


Map 36: List, et al., 2013, pairwise polysemies, dashed lines less common.

smith, blacksmith n.

split v.

spread out, strew v.



statue *n.*

stretch *v.* See Map 26.

sweep *v.*

tear *v.*

tie *v.* also bind, See Map 37.

tin, tinsplate *n.* See Map 36.

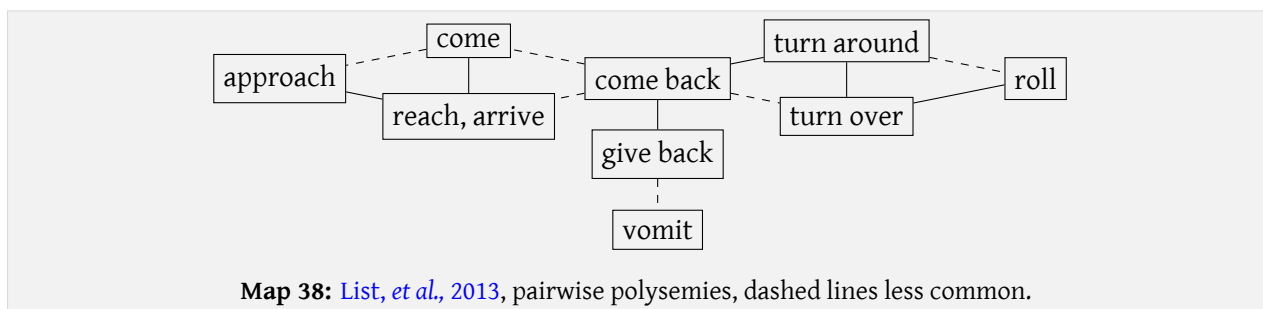
tool *n.*

wash *v.*

weave, plait *v.*

wipe also rub *v.*

work *n.*



Motion

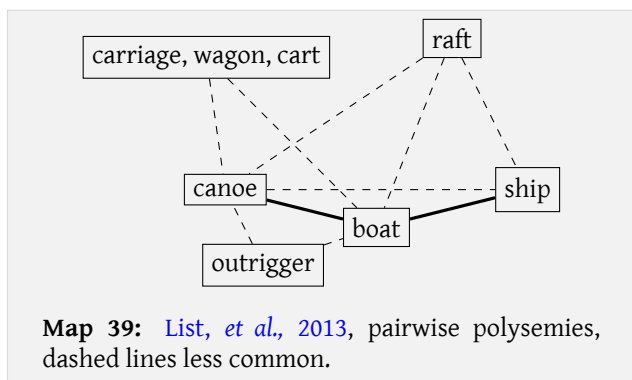
anchor *n.*

approach *v.* See Map 38.

axle *n.*

blow move/cause to move as a current of gas, *v.* See Map 1.

boat *n.* See Map 39.



bridge *n.*

bring cause something to come along with one toward a place, *v.* Occasionally **take** + cis- or translocative affixes, or **take** + **come**, **go** in serial verbs. See Map 43.

carriage, wagon, cart *n.* See Map 39.

carry (bear) *v.* See Map 43. Often in the languages of Asia (continental and insular) “carry” is elaborated even more than in the map: “carry in clothing,” “carry in several trips,” “carry on the back,” “carry something suspended in the hand,” “carry a load” (of animals and vehicles), “carry in the claws,” “carry or wear over the shoulder,” “carry over the shoulder on a pole,” “carry in the mouth” (as a cat with kittens), etc.

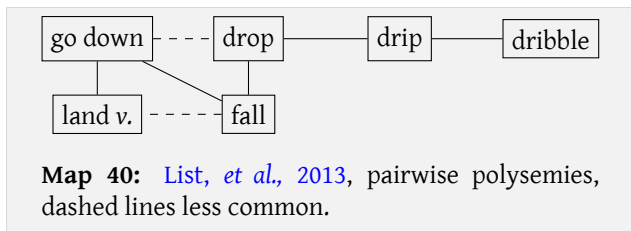
come *v.* See Map 38.

creep, crawl *v.* See Map 51.

dance *v.*

enter *v.*

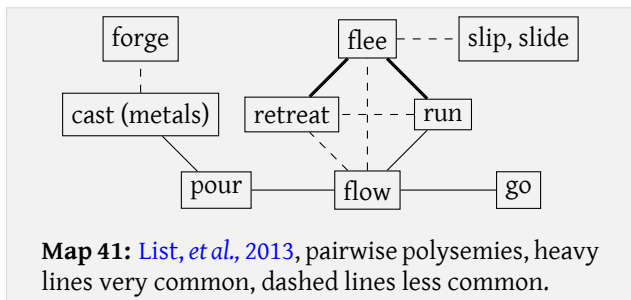
fall *v.* *Gr.*→ passive, locative “down.” See Map 40.



flee v. See Map 41.

float v.

flow v. travel in a current. See Map 41. See Map 45.



fly v. move through the air

follow v. can → **act according to.** Gr.↷ according to, behind, comitative (“with”). See Map 73.

go v. move from starting point to elsewhere See Map 45. See Map 40.

go away, depart v. See Map 45.

harbor, port n.

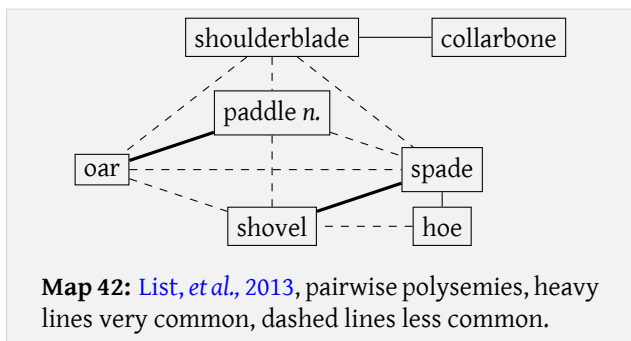
jump, leap v.

lead v. See Map 43.

mast n.

move v. engage in motion / cause to engage in motion. See Map 45.

oar n. See Map 42.



pursue v. Gr.↷ “do often”.

push v. also shove. See Map 35.

raft n. See Map 39.

raise, lift v. See Map 45.

reach, arrive v. Gr.↷ ability, allative, succeed, until (temporal). See Map 38.

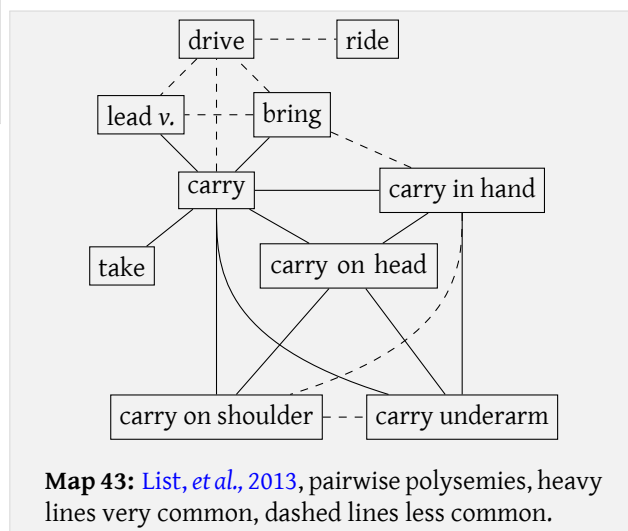
ride v. sit/perch in/on a vehicle/horse/etc. and travel. See Map 43. See Map 45.

rise v. See Map 45.

roll v. move like a ball/cylinder by turning over and over; See Map 38.

row v.

rudder n.



run v. See Map 41.

sail n.

sail v.

send v. See Map 77.

shake v.

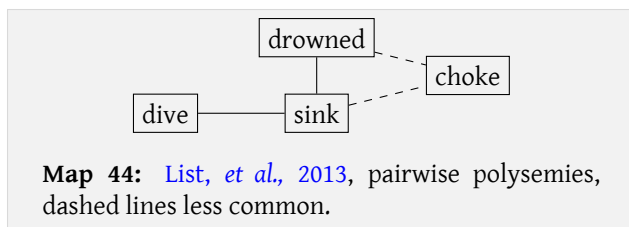
ship n. See Map 39.

sink v. See Map 44.

slide, slip v. See Map 41.

swim v.

throw v. Gr.↷ perfect, completive. See Map 75.



Map 44: List, et al., 2013, pairwise polysemies, dashed lines less common.

turn around v. can → **become**. See Map 38.

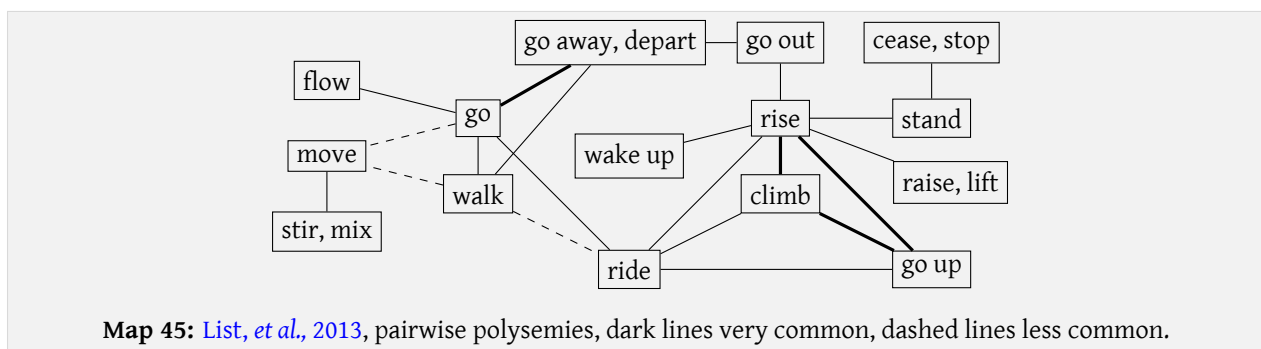
walk v. See Map 45.

wheel n.

wind, wrap v.

yoke n.

turn v. See Map 38.



Map 45: List, et al., 2013, pairwise polysemies, dark lines very common, dashed lines less common.

Possession

account, reckoning n.

avaricious, stingy adj. See Map 60.

beggar n.

borrow v.

buy v. See Map 47.

cheap adj.

coin n.

dear (costly, expensive) adj.

debt n.

destroy v.

earn v. See Map 47.

find v. discover the location of, See Map 47.

get, obtain v. *Gr.*→ ability, change of state, obligation, passive, past, possibility, succeed; See Map 47.

give v. *Gr.*→ benefactive, causative, dative, purpose; existential expressions (“there is”) and from there might be used in passives. Different forms may exist for different recipients, with, for example, one verb used for 1st and 2nd person recipients and another for 3rd person recipients, or a separate form for all three. The forms may be related or suppletive (Linguist List 11.1166). See Map 46.

See Map 38.

give back, return v. See Map 38.

harm, injure, damage v.

have v. possess / be furnished with, See Map 47.

hire v.

hold v. See Map 47.

keep, retain v. See Map 47.

lend v.

lose v.

market (place) n.

merchant n. See Map 46.

money n. various things may fulfill this role, which can appear in the lexicon (cowry shells, cocoa beans).

owe v.

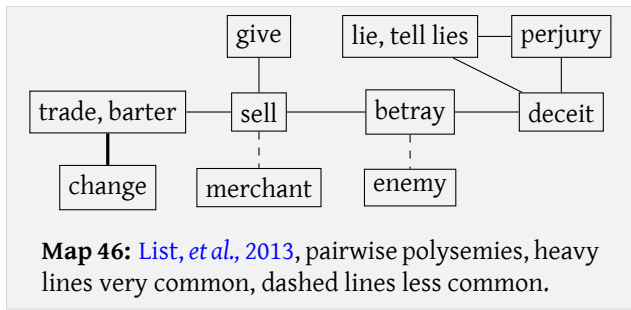
own, possess v. See Map 47.

pay v.

poor adj. See Map 19.

preserve, look after, keep safe, save v. See, look at can → look after, care for; See Map 47. See Map 70.

price *n.*



Map 46: List, et al., 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

release, let go *v.* See Map 77.

rich *adj.*

save, rescue *v.* See Map 70.

seek, look for *v.*

seize, grasp, take hold of *v.* can → **understand**. *Gr.*↔ have.

sell *v.* See Map 46.

store, shop *n.*

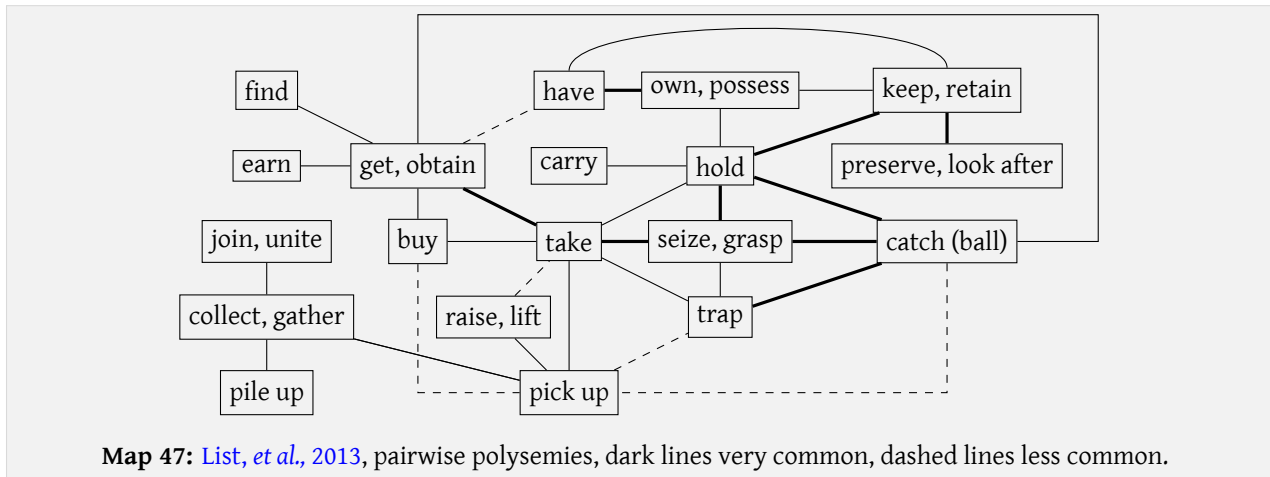
take *v.* *Gr.*↔ causative, future, instrument, patient, “have”; See Map 47. See Map 43.

tax, tribute *n.*

trade, barter *v.* See Map 46.

wages *n.*

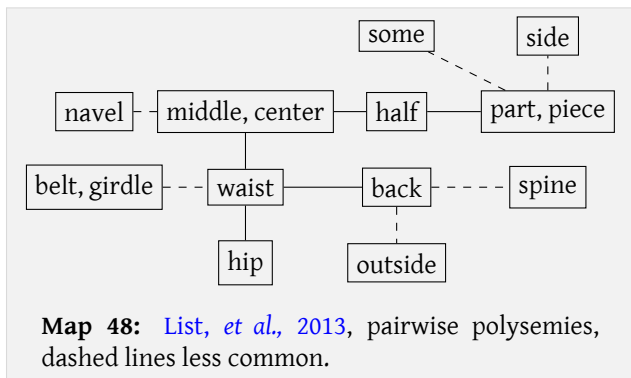
wealth *n.* **Cattle** can → **wealth**.



Map 47: List, et al., 2013, pairwise polysemies, dark lines very common, dashed lines less common.

Spatial Relations

big *adj.* See Map 52. See Map 53.



Map 48: List, et al., 2013, pairwise polysemies, dashed lines less common.

bottom *n.* See Map 9.

center *n.* *Gr.*↔ locative “between” or “in”.

change *v.* become/make different. See Map 46.

circle *n.*

collect, gather *v.* See Map 47.

corner *n.*

cover *v.*

crooked *adj.*

cross *n.* *Gr.*↔ across.

deep *adj.*

divide *v.*

east, south, west, north *n.*

end *n.* See Map 18. See Map 54.

far *adj.*

flat *adj.*

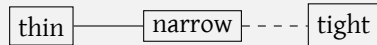
grow *v.*

hide, conceal *v.*

high *adj.* See Map 54.

hole *n.* may distinguish between a hole that goes all the way through something vs. one that does not.

hook *n.*



Map 49: Perrin 2007, common pairwise polysemies, dashed lines less common.

left *adj.*

like, similar *adj.*

line *n.*

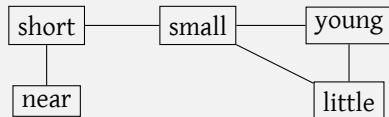
long of much length *adj.*

low *adj.*

measure *v.* See Map 69.

middle *n.* See Map 48.

narrow *adj.* See Map 49.



Map 50: Perrin 2007, common pairwise polysemies, dashed lines less common.

near *adj. adv.* See Map 50.

open *v. adj.* See Map 77.

place *n.* See Map 9.

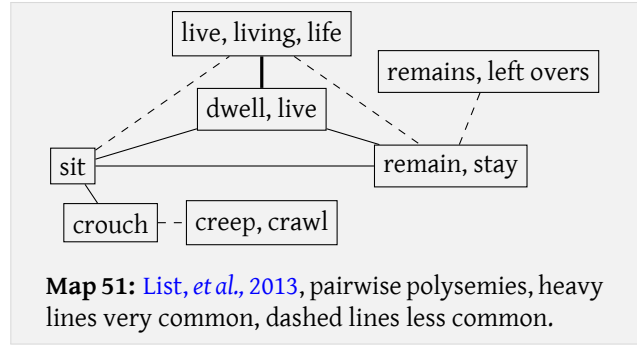
remain, stay *v.* *Gr.↔* durative, habitual. See Map 51.

remains, left overs *n. adj.* See Map 51.

right *adj.*

round *adj.*

separate *v.*



Map 51: List, et al., 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

shallow of little depth *adj.*

short of little length *adj.* See Map 50.

shut, close *v.*

side *n.* See Map 11. See Map 18. See Map 48.

sit *v.* *Gr.↔* continuous. See Map 51.

small *adj.* also little

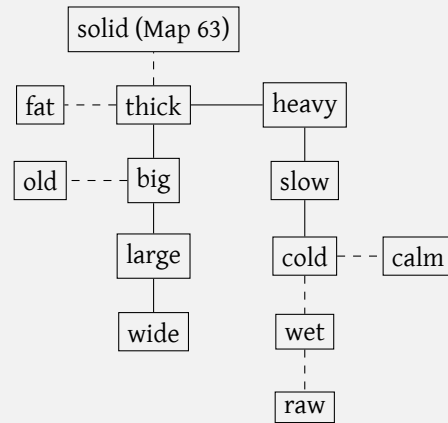
sphere, ball *n.*

square *n.*

stand *v.* *Gr.↔* continuous, copula. See Map 54. See Map 45.

straight not bent *adj.*

tall *adj.*



Map 52: Perrin 2007, common pairwise polysemies, dashed lines less common.

thick *adj.* See Map 52.

thin *adj.* See Map 49.

top *n.* See Map 6.

wide *adj.* also broad; See Map 52.

Quantity

all *adj.* also every

alone, only *adj. , adv.*

empty *adj.* Might be separate lexical item specifically for empty of people. See Map 64.

enough *adj.* See Map 53.

few *adj.* few in number, see also little

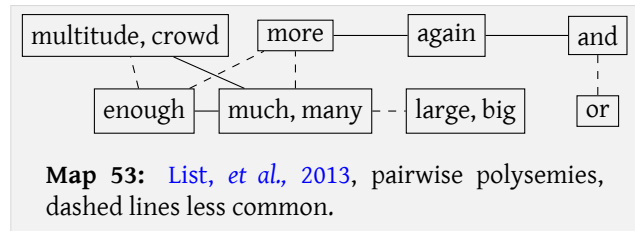
first *adj.*

full *adj.*

last *adj.* See Map 54.

little a small quantity of, see also few *adj.*

many *adj.* also much. See Map 53.



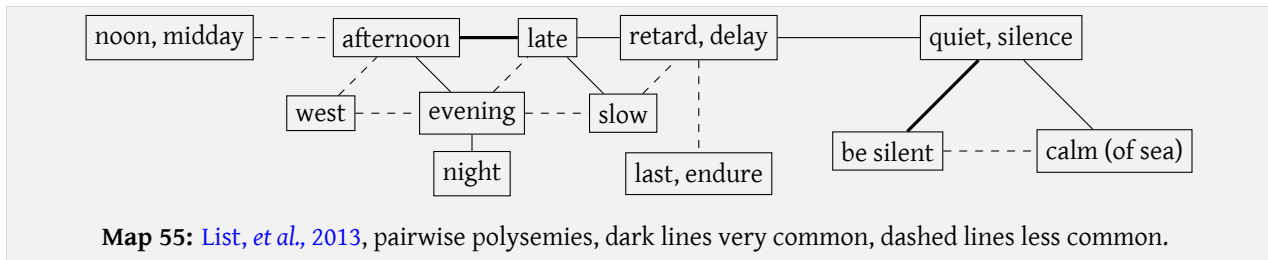
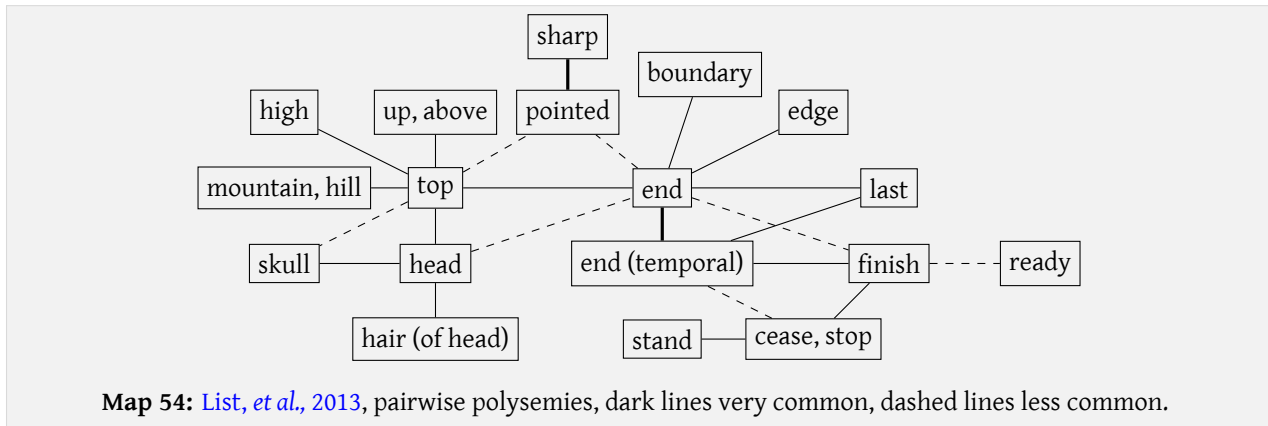
more *adj. , adv.* See Map 53.

multitude, crowd *n.* See Map 53.

one *Gr.~* together, other.

three *adj.*

three times *adv.*



Time

Monday *n.* and the remaining days of the week.

again *adv.* See Map 53.

age *n.* See Map 7.

always *adv.*

autumn *n.*

begin *v.* *Gr.~* first.

cease, stop *v.* See Map 1. See Map 54. See Map 45.

clock, timepiece *n.*

dawn *n.*

day *n.* may be separate words for day as 24 hour period vs. daytime; See Map 7.

early *adj.*

end (temporal) *n.* See Map 54.

evening *n.* See Map 57. See Map 55.

finish *v.* See Map 54.

hasten, hurry *v. intr.*

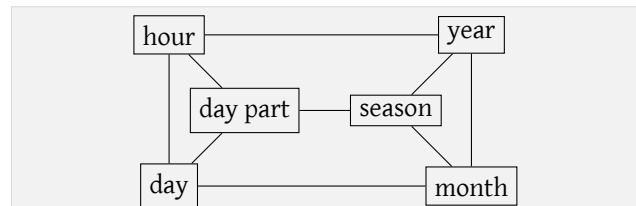
hour *n.* See Map 7.

immediately, soon *adv.*

last, endure *v.* See Map 55.

late *adj.* See Map 55.

month *n.*



Map 56: Haspelmath 1997, on the markers used to indicate simultaneous location in time. For example, English uses “at” for hour and day part (*e.g.*, morning), “on” for day and “in” for everything else, with overlap with “at” for day part. Hausa, on the other hand, uses **dà** for hour, day part and season, **à** for year and month, and no marking for day. This map has some exceptions.

morning *n.*

never *adv.*

new *adj.* May = **young**.

night *n.* See Map 57. See Map 55.

noon, midday *n.* See Map 55.

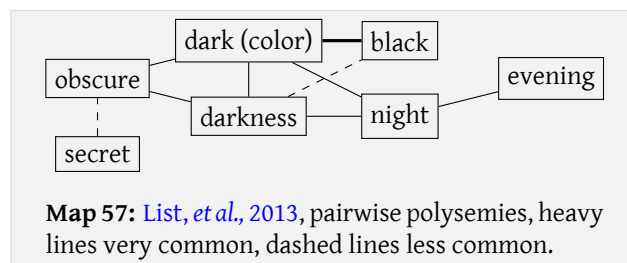
now *adv.*

often *adv.*

old *adj.* See Map 52. May have separate items for human

and non-human; or separate nouns for **old man** and/or **old woman**.

ready *adj.* See Map 54.



Map 57: List, *et al.*, 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

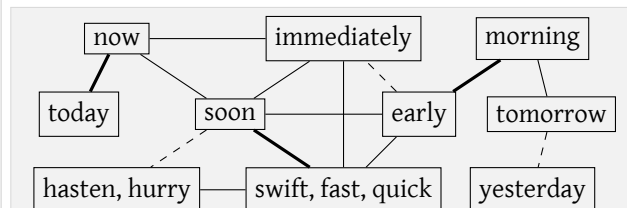
retard, delay *v. intr.* See Map 55.

season *n.* See Map 7.

slow *adj.* See Map 55. See Map 52.

sometimes *adv.*

soon *adv.*



Map 58: List, *et al.*, 2013, pairwise polysemies, heavy lines very common, dashed lines less common.

spring *n.* the season

summer *n.*

swift, fast, quick *adj.*

time *n.* See Map 7.

today *adv.*

tomorrow *adv.*

week *n.*

winter *n.* See Map 59.

year *n.* See Map 7.

yesterday *adv.* *Gr.* → past tense.

young of little age *adj.* May = **new**. See Map 50.

Sense Perception

Not all languages have the five sensory verbs of English. There is an implicational hierarchy,

sight ← hearing ← touch ← smell, taste

In languages lower on the hierarchy, a general perception verb such as “feel” or “perceive” will be used with an instrument for the modality. Only Kobon is known to construct all perceptions this way (Ricci 2010, Maslova).

The implicational hierarchy for colors (WALS 133):

black, white ← red ←
yellow, green ← blue ← brown
purple, pink, orange, grey

Verbs of perception may bleed into cognition (“I see”).

Words for temperature might make only two distinctions (“hot/warm” vs. “cold/cool”), three (“cold/cool” vs. “warm” vs. “hot”) or the four familiar in English. Temperature words may have three domains: tactile (“the dish is hot”), ambient (“it’s hot here”) and personal feeling (“I feel hot”), with one word for all three, three completely different roots, or some split between them. The personal feeling words may only exist for uncomfortable temperatures. There may be separate tactile words for food and especially water.

acid, sour adj. May distinguish natural sourness (fruit) from fermented sourness (yogurt, vinegar). See Map 60.

bitter adj. See Map 60.

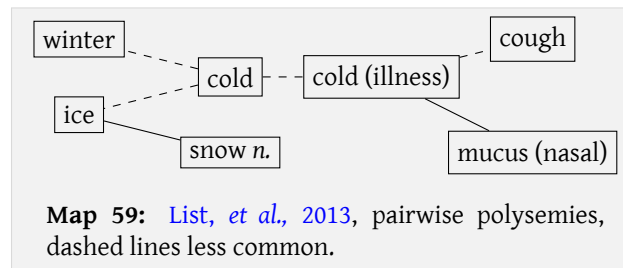
black adj. See Map 57.

blue adj. See Map 65.

bright with much light present adj. can → **comprehensible**.

clean adj. Gr.~> focus particle. See Map 64.

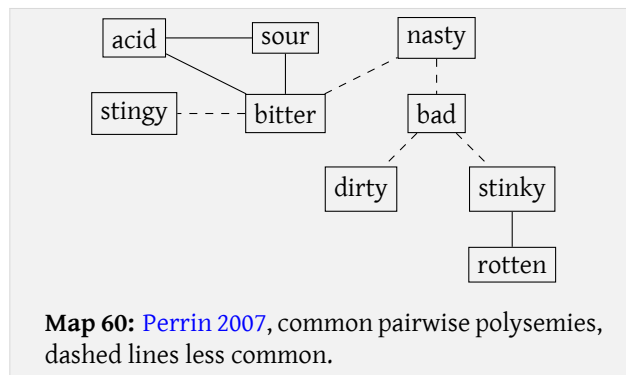
cold adj. See Map 59. See Map 52.



color n. See Map 11. See Map 34.

dark (in color) adj. See Map 57.

dirty adj. See Map 60.



dry adj.

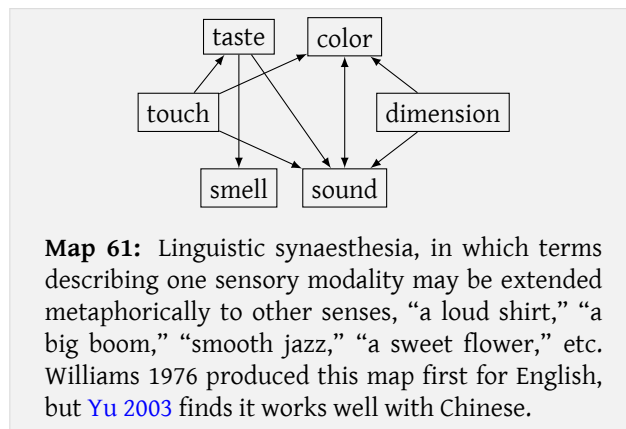
dull adj. also blunt

feel v. perceive with the tactile sense; See Map 32. See Map 69.

fragrant, good smelling adj.

green adj.

hard adj.



hear v. See Map 73.

heavy adj. of much weight; See Map 52. See Map 67.

hot adj. also warm

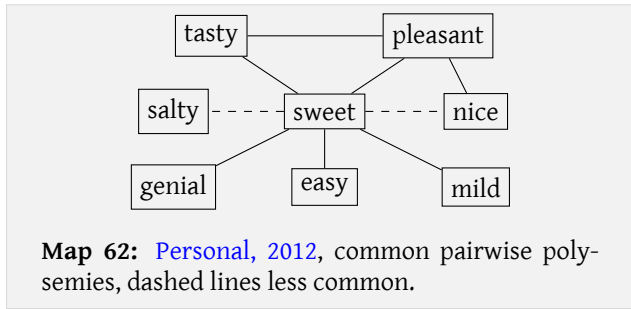
light (in color) adj. See Map 64.

light (in weight) adj. See Map 19.

listen v. See Map 73.

look, look at v. See, look at can → look after, care for,

can → wait.



loud *adj.* of much sonic intensity. See Map 67.

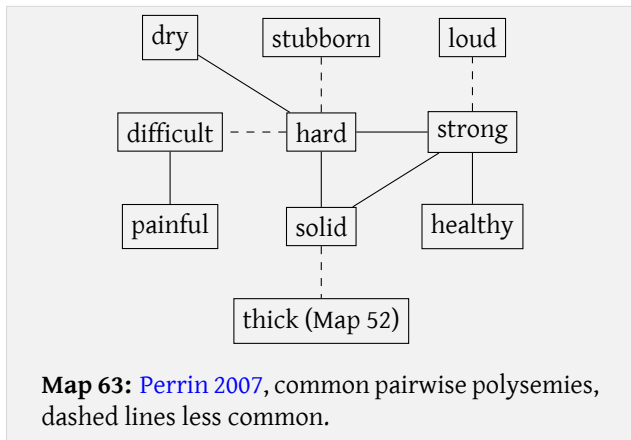
red *adj.* See Map 65.

rough *adj.* might distinguish visual from tactile; metaphorically can → **defects, difficulties**. See Map 67.

salty *adj.*

scent *n.* See Map 1.

see *v.* See, look at can → **look after, care for**; can → **wait**. *Gr.* → passive.



sharp *adj.* See Map 54.

shine *v.* radiate light

show *v.*

smell *v.* trans. and intrans.

smooth *adj.* might distinguish visual from tactile; metaphorically can → **absence of defect or difficulty**.

soft *adj.*

sound, noise *n.*

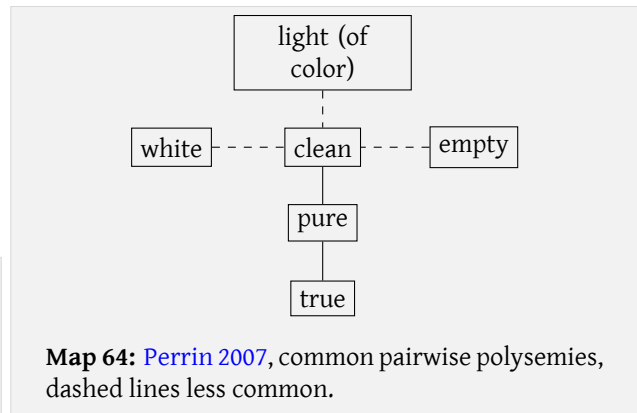
stinking, bad smelling *adj.* See Map 60.

sweet *adj.* See Map 62.

taste *v.* perceive by tasting. See Map 69.

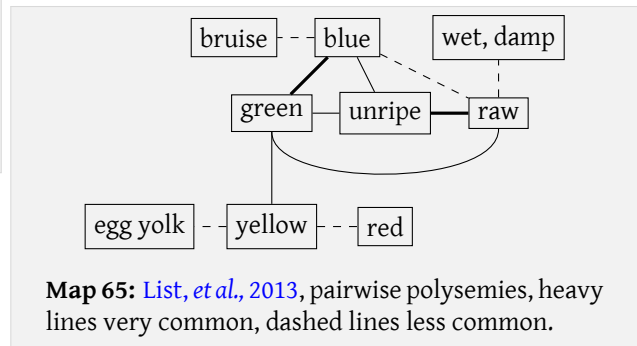
touch *v.*

wet, damp *adj.* See Map 52. See Map 65.



white *adj.* See Map 64.

yellow *adj.* See Map 65.



Emotions and Values

anger *n.* See Map 74.

anxiety, worry *n.*

bad *adj.*

beautiful *adj.*

blame *n.*

brave *adj.*

correct also right *adj.*

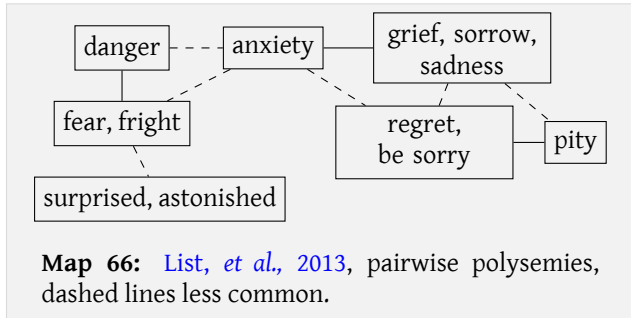
cry, weep *v.* See Map 71.

danger (situation) *n.* See Map 66.

dare *v.*

deceit *n.* See Map 46.

desire, want *v.*



envy, jealousy *n.*

faithful *adj.*

fault *n.*

fear *n.* To **fear** can → **to respect**. See Map 66.

forgive *v.* See Map 77.

good *adj.*

good fortune, luck *n.*

grief, sorrow, sadness *n.* See Map 66.

groan *v.* See Map 71.

hate *v.* See Map 74.

joyful, glad, happy *adj.*

kiss *v.* See Map 26.

laugh *v.*

lie, tell lies *n.*, *v.* See Map 46.

love *v.* *Gr.* → future, intention.

misfortune, bad luck *n.*

mistake, error *n.*, *v.*

mood *n.* See Map 1.

pain *n.*

pity *n.* See Map 66.

play *v.*

praise *n.*

proud *adj.*

regret, be sorry *v.* See Map 66.

shame *n.*

soul, spirit *n.* See Map 1.

tear *n.*

true *adj.* See Map 64.

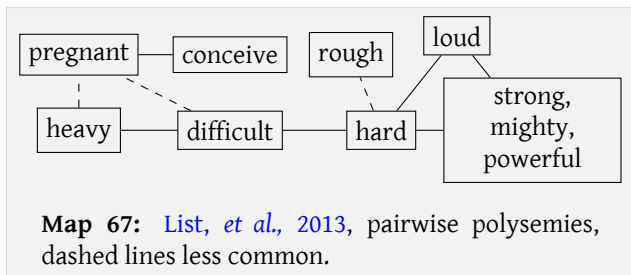
ugly *adj.*

wrong *adj.*

Cognition

believe *v.* accept as true. See Map 68.

cause *n.*



clear, plain *adj.*

difficult *adj.* See Map 67. See Map 63. See Map 33.

doubt *n.* See Map 68.

easy *adj.* See Map 19. See Map 62.

explain *v.* See Map 69.

foolish, stupid *adj.*

forget *v.*

idea, notion *n.*

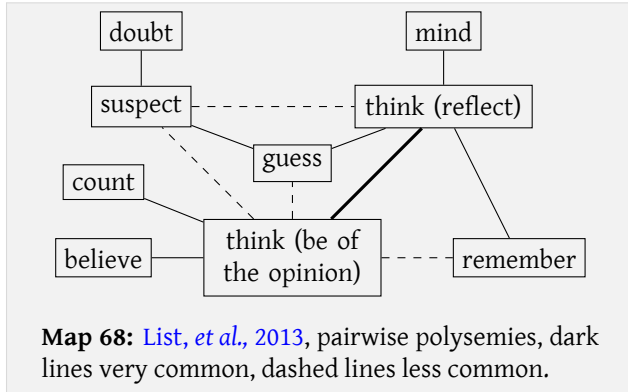
insane, crazy *adj.*

intention, purpose *n.*

know v. May distinguish knowing people from other sorts of knowledge. *Gr.*→ ability, habitual. See Map 69.

learn v. See Map 69.

mind n. See Map 1. See Map 68.



obscure adj. See Map 57.

pupil n.

remember v. See Map 68.

school n.

secret adj. See Map 57.

seem v.

study v. See Map 69.

sure, certain adj.

teach v. See Map 69.

teacher n.

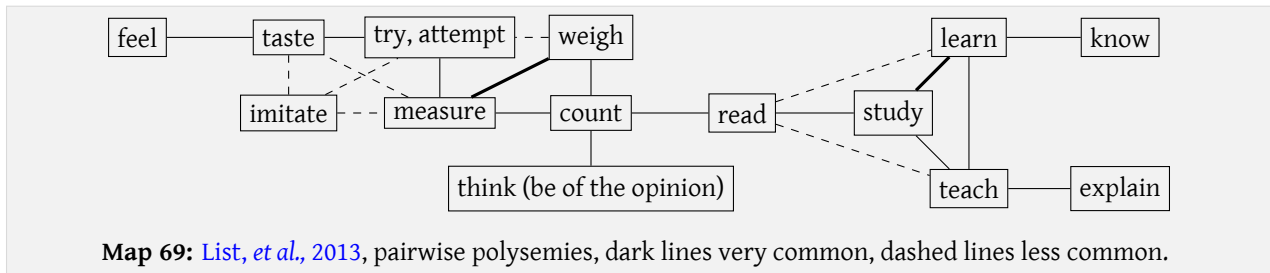
think be of the opinion v. **To calculate, count** can → **have an opinion**. See Map 68. See Map 69.

think (= reflect) v. See Map 68.

try, attempt v. See Map 69.

understand v. **grasp, seize** can → **understand**.

wise adj.



Speech and Language

admit, confess v.

announce v.

answer v.

ask, request v.

boast v.

book n.

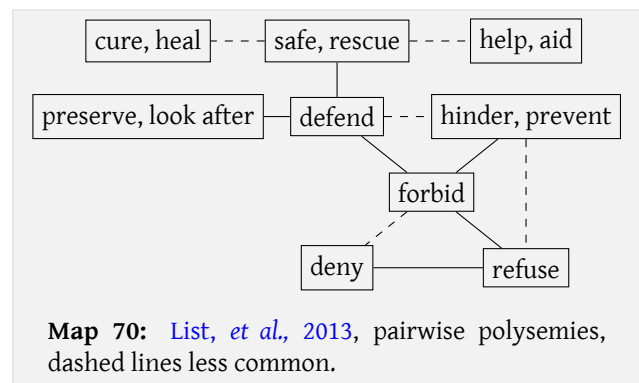
call, name v. See Map 71.

deny v. say that X is not true. See Map 70.

forbid v. See Map 70.

language n. See Map 72. See Map 18.

name n. “who is your name?” rather than “what?” is possible in some languages; See Map 71.



paper n.

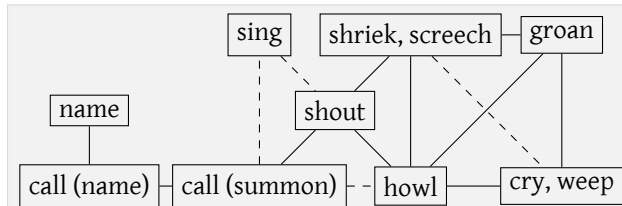
pen n. See Map 12.

poet n.

promise v. See Map 72.

read v. See Map 69.

refuse v. See Map 70.



Map 71: List, et al., 2013, pairwise polysemies, dashed lines less common.

say v.

shout, cry out v. See Map 71.

silent (be) adj. v. See Map 55.

sing v. See Map 71.

speak, talk v. See Map 1.

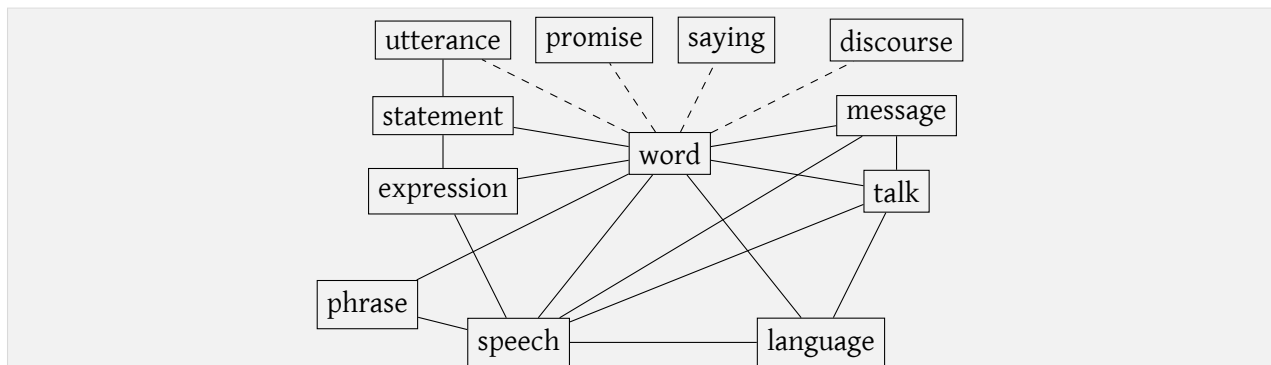
threaten v.

voice n.

whisper n. v. See Map 1.

word n. May also mean **matter, affair, thing**. See Map 72..

write v. See Map 34.



Map 72: Personal, 2012, common pairwise polysemies, dashed lines less common.

Social and Political Relations

boundary n. See Map 18. See Map 54.

citizen, subject n.

city, town n. See Map 9.

command, order v. See Map 77.

conspiracy, plot n.

country n. See Map 9.

custom n. See Map 76.

enemy n. See Map 46.

friend, companion n.

guest n.

help, aid v. To prop up can → **help**. See Map 70.

hinder, prevent v. See Map 70.

host n.

king, queen, ruler n.

let, permit v. See Map 77.

master n.

meet v.

neighbor n.

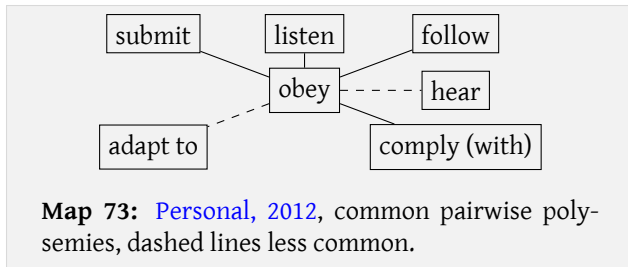
noble, nobleman adj. n.

obey v. See Map 73. May distinguish compliant, rapid obedience from a neutral sense.

one's native country n. See Map 9.

people, populace n.

prostitute n.



servant *n.*
slave *n.*
stranger *n.*
strife, quarrel *n.* See Map 74.
tribe, clan *n.*
village *n.* See Map 9.

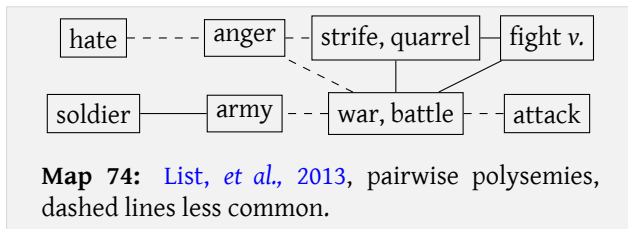
rule, govern *v.* See Map 77.

Warfare and Hunting

ambush *n.*

armor (defensive) *n.*

army *n.* See Map 74.



fight *v.* See Map 74.

fisherman *n.*

fortress *n.* See Map 31.

game (prey) *n.* See Map 24.

gun, cannon *n.*

helmet *n.*

peace *n.*

retreat *v. n.* See Map 41.

arrow *n.*

shield *n.*

attack *n.* See Map 74.

sling *n.*

battle-ax *n.*

soldier *n.* See Map 74.

booty, spoils *n.*

spear *n.*

bow *n.*

surrender *v.*

captive, prisoner *n.*

sword *n.* See Map 36.

club *n.*

tower *n.* See Map 31.

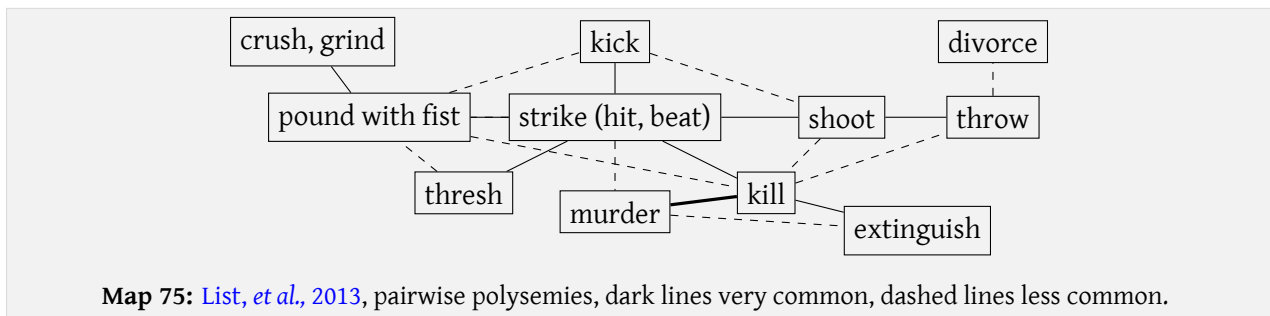
defeat *n.* Exceed, surpass, defeat *Gr.*→ comparative, "too."

victory *n.*

defend, defense *v. n.* See Map 70.

war, battle *n.* See Map 74.

weapons, arms *n.*



Law

accuse *v.*

acquit *v.* See Map 77.

adultery *n.*

arson *n.*

condemn *v.*

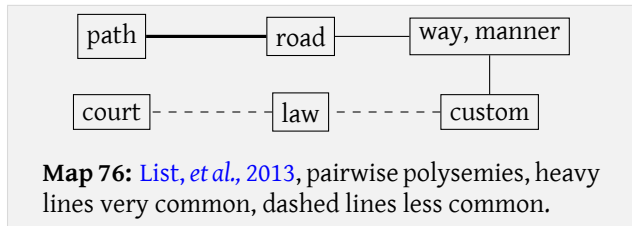
convict *v.*

court *n.* See Map 76.

defendant *n.*

fine *n.*

guilty *adj.*



innocent *adj.*

judge *n.*

judge *v.* compare something to criteria

judgment *n.*

law *n.* law in the abstract, general, a set of laws. Latin *ius*. See Map 76.

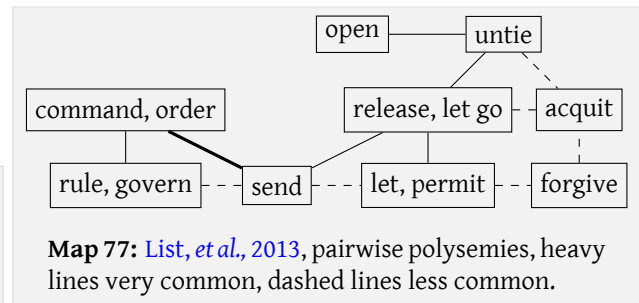
murder *n. v.* See Map 75.

oath *n.*

penalty, punishment *n.*

perjury *n.* See Map 46.

plaintiff *n.*



prison, jail *n.*

rape *n.*

steal *v.*

swear *v.*

witness *n.*

Religion and Belief

god *n.*

altar *n.*

bless *v.* wish good upon

curse *v.*

demon (evil spirit) *n.* See Map 1.

fairy, elf *n.*

fast *v.*

ghost, phantom *n.* See Map 1.

heaven *n.*

hell *n.*

holy, sacred *adj.*

idol *n.*

magic, witchcraft, sorcery *n.* See Map 1., See Map 37.

omen, portent *n.*

pray *v.* communicate with god(s)

preach *v.*

priest *n.*

religion *n.*

sacrifice, offering *n.*

sorcerer, witch *n.*

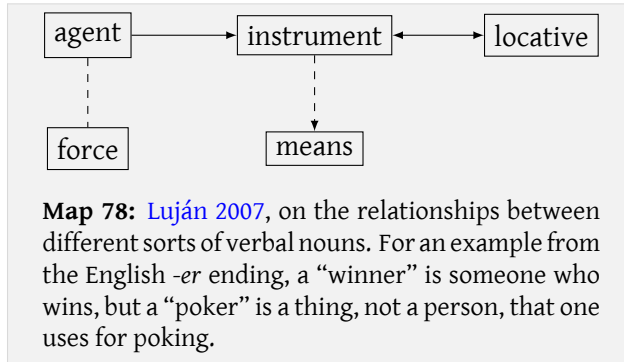
temple, church *n.*

worship *v.*

Other Implicational Maps and Hierarchies

This section has semantic maps, as well as some implicational hierarchies, which didn't sensibly fit in the word list. Most address more purely grammatical matters.

First, derivational implications,



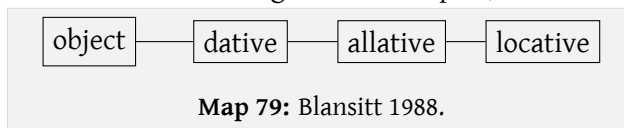
Cases and Adpositions

The following maps deal with the relationships and jobs of “cases,” some of which are also covered by adpositions. First, there is an implicational hierarchy in case marking,

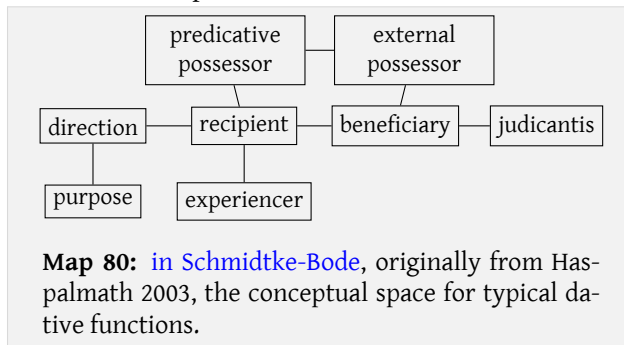
nom. ← acc., erg. ← gen. ← dat. ←
loc. ← abl., inst ← others

If your language has a dative case, you expect it also to have a genitive and an accusative (or ergative).

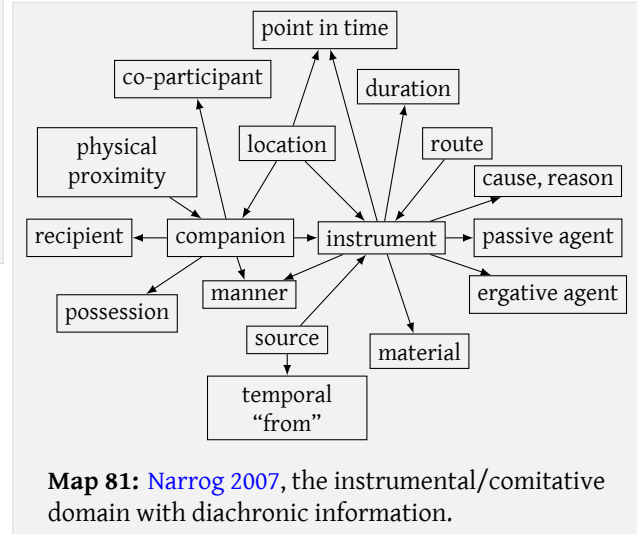
Cases that encode goals have Map 79,



If a single case form marks both the dative and the locative, it is expected to also encode the allative.



In the dative Map 80, “predicative possessor” is for things like, “the book is mine,” and “judicantis” is for things like “to me this is a bad idea.” The “external possessor” is an unusual construction where a dative marks possession for a noun phrase it is not next to, “to me he touched the hand” for “he touched my hand.” It is common in parts of Europe, but not unheard of elsewhere.



There is a common hierarchy for adpositions (ATTACHED means things like “the fly on the wall”),

AT ← IN ← ON, UNDER ←
OVER (ABOVE), NEAR ←
ON TOP ← ATTACHED ← INSIDE

The further up the hierarchy one goes, the more specific things lower down the hierarchy become. So, in a language with many adpositions, the range of uses for “AT” is minimized. There is a possible split below ATTACHED, between grouping {ON, ON TOP, ATTACHED} vs. {OVER (ABOVE)} or grouping {ON, ON TOP, OVER (ABOVE)} vs. {ATTACHED}. (2010 conference slides)

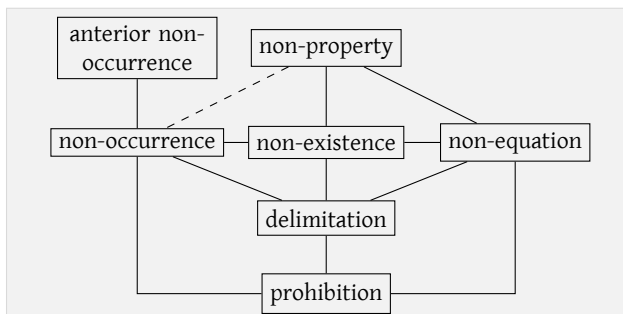
Intensifiers

Noun and pronoun **intensifiers** (“I myself am going to talk to him,” “They didn’t see the book itself”) are sensitive to animacy. There may be two intensifiers, with a single cut separating domains. The divi-

sions are: (1) 1st/2nd pronoun, (2) 3rd pronoun, (3) human noun, (4) animate noun, (5) concrete inanimate noun and (6) abstract inanimate noun. For example, Japanese uses *jisin* for 1–4 and *jitai* for 5–6; German *selbst* for 1–5, with nothing for 6; Malagasy splits splits after 2, and Spanish uses one word for all. (Gast 2007)

Negation

In map 82, delimitation matches English “no,” non-occurrence is the most commonly understood negation, “he didn’t do his reading,” and non-property is to negate adjective or other sorts of property predication, “the book isn’t good.” Finally, anterior non-occurrence is like English “not yet.”



Map 82: Bond 2009, conceptual space of negation (map somewhat modified from map in paper based on other parts of the paper). The items connected by the dashed line are not thought to have unique strategies for negation. All the rest have a unique negator in some language.

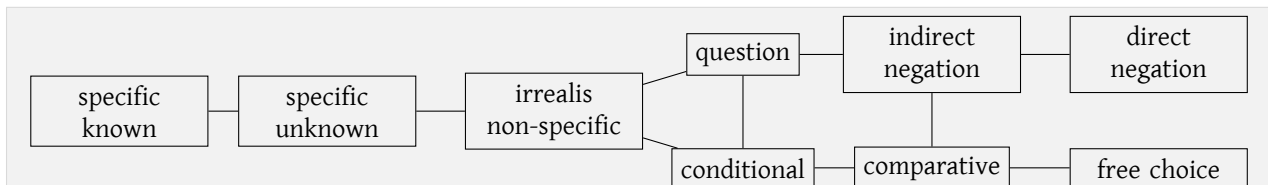
Conjunctions

The choice conjunction (“or”) is generally available in two meanings, (1) a simple alternative and (2) a choice-aimed alternative. The simple alternative simply lists possible options without making any demand on the listener (“I’ll either go to the bookstore, or order it online”). The choice-aimed alternative is a request for information (“will you stay or go?”). A language may unite these sense in a single conjunction, as English does, or it may have separate forms (Somali, Chinese).

“Or” may grammaticalize to become a question marker.

The range of senses between “and” and “but” can be divided into six senses, (1) sequential combination, “I shopped and came home,” (2) simultaneous combination, “she sang and danced,” (3) atemporal combination, “I shop here and they shop there,” (4) appositive contrast, “I bought a book, but my sister bought CDs,” (5) corrective contrast, “I didn’t buy a book but a CD,” and (6) counterexpectative contrast, “I bought the CD, but don’t like the band.” Each of the senses except (3), atemporal combination, may have an individual conjunction. Normally, the six senses are partitioned up, with contiguous senses having the same word, such as Hausa *kuma* covering 1–5 and *amman* for 6.

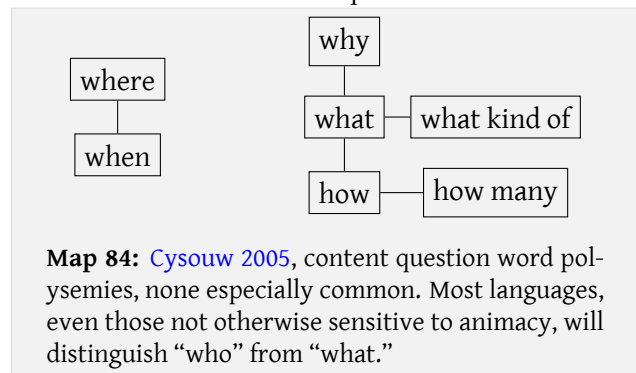
Several European languages have overlapping forms, with a general term covering several meanings while also having more sepecific forms available, such as Italian *ma* for senses 5–6, but *bensi* and *però* optionally usable for 5 and 6 individually. (Mauri 2010)



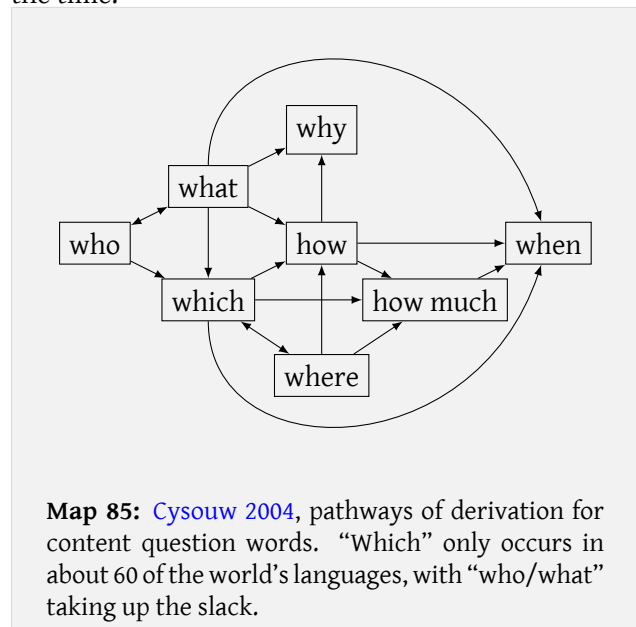
Map 83: Haspelmath 1997, semantic map of indefinites. Specific known, “Somebody called. Guess who?” Specific unknown, “I heard something, but couldn’t tell what.” Irrealis, “you must try somewhere else.” Question, “did anybody tell you?” Conditional antecedent, “if you see anybody, tell me.” Comparative, “John is taller than anyone.” Indirect negation, “I don’t think anyone knows.” Direct negation, “John didn’t see anybody.” Free choice, “You may kiss anyone.” See Migmaq for some examples.

Question Words

Speakers of Indo-European languages are used to content question words containing an obviously common element, such as *wh-* in English, or *qu-/c-* in Romance languages. This turns out to be very rare in most other languages, which can have quite dissimilar forms for their core question words.



“Who,” “what” and “where” are most likely to be non-derived, with “which” and “how much” non-derived a bit more than half the time, and “how” and “when” non-derived a bit less than half the time.



Demonstratives

Demonstrative pronouns and adjectives may distinguish two or three distances, either oriented to the speaker, the addressee, and some third party, or ac-

ording to relative distance from the deictic center (the people talking, or some location within a narrative).

Demonstratives may also encode, in addition to agreement marking such as number, gender and classifier,

- visible vs. invisible; additionally, something “phased out,” once in view but no longer; or visible, invisible but present, and absent
- location relative to the body of the speaker, addressee or some third person, in front of, behind and beside.
- relative altitude, high vs. low; or high vs. equal vs. low
- nominal tense (“former-,” “ex-,” “to-be”)
- relative cardinal direction, either a two pole system (east vs. west, north vs. south), or four pole
- relative geography, uphill vs. downhill; up-river vs. downriver; inland vs. out to the shore or sea
- relative motion, towards vs. away from, or along some path

Demonstratives are also regularly used to talk about what is being said, so that one form may refer to things already said and another to things about to be. (Gerner 2009)

Classification Prototypes

Certain prototypical distinctions appear in languages all over the world, though how and where they are expressed may take very different forms. It might be expressed in the noun gender system of one language (Swahili), the numeral and demonstrative classifier system of another (Chinese, Mayan), or in verbs of handling in another (Navajo). Some Austronesian languages have classifying possessive markers, *na mequ yaqona* “my kava (for drinking)” vs. *na noqu yaqona* “my kava (that I grew or will sell)” (Fijian).

The variation in classifier types is huge, but there are certain commonalities,

- Material: human, animate, female, tree(-like), etc.
- Function: cutting or piercing tools, for drinking, for eating, etc.
- Shape: long (saliently one-dimensional), flat, round, etc.
- Consistency: rigid, flexible, in a mass, etc.
- Location: for inherently locative things like a town, etc.
- Arrangement: in a row of, in a coil, in a heap, in a container, etc.

absolute, subject ←
 object, ergative ←
 indirect obj., loc., inst. ←
 ablative, committative

Copula hierarchy, with “copula” here referring to any support word to take verbal inflections,

location ← object ←
 property ← action

This hierarchy means that if a language requires a support verb to say “he is angry,” then you expect a similar structure for “he is at home.” If you invert the copula hierarchy, you get the verbalization hierarchy,

Pluralization Hierarchy

If a language marks plurals for a particular category below, it will also mark plural for everything to the left,

speaker ← speech act participant ←
 human ← animal ←
 individual object ← mass ←
 place ← abstraction

action ← property ←
 object ← location

Some Verb Hierarchies

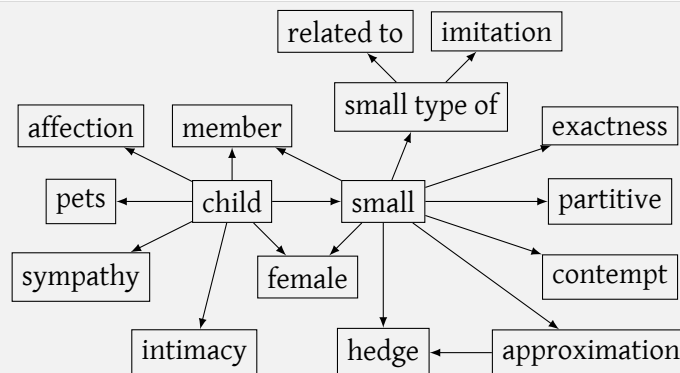
If TAM morphemes are not fused, the order of morphemes tends to follow a certain pattern. The hierarchy below marks distance from the verb stem,

stem ← aspect ←
 tense ← mood ← person/number.

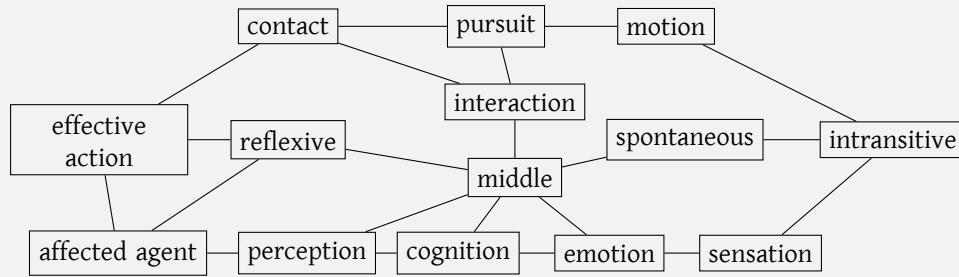
So, if a language has a verb-like form to say “he is a doctor” (it takes tense or other verbal marking, for example), then you also expect a verb-like structure for “he is angry.”

Not all verb types may take causative morphology. Inactive intransitive (unaccusative, “faint”) verbs are most likely to take morphological marking, then middles and ingestives (“eat”), then active intransitives (unergatives, “work”) and then finally transitives are least likely to take such marking. Or, a language may mark intransitive causatives differently from transitive causatives.

But see [this survey](#) for alternate orders.
 Agreement marking hierarchy,



Map 86: Jurafsky 1996, by way of Appah & Amfo 2001 (p. 85), semantic map of the diminutive.



Map 87: Malchukov 2005, transitivity splits (see also 2010). Verbs to the left are highly transitive and those to the right are highly intransitive, with individual languages splitting verbs for transitive vs. intransitive constructions in different places. In fact, this map may have multiple splits, so that verbs of cognition and emotion use yet a different construction than the basic transitive vs. intransitive split (such as with dative experiencers, for example). “Effective action” is such things as “break, kill.” “Affected agent” is for acts in which the agent is saliently affected, too, such as verbs of consuming (“eat,” etc.) and “see” and “learn.” “Contact” is for “hit, touch.” “Pursuit” includes verbs like “wait for” and “look for” (which are in English not transitive, taking prepositional objects). Some languages will allow some motion verbs to take canonical objects.

Adjectives

Some languages have no adjective word class at all, instead using either verbs or nouns to handle this function. However, some languages may have a small or medium-sized set of true adjectives. Small adjective inventories (8-12) will typically have words for four core semantic types, DIMENSION (“big,” “tall,” “deep”, etc.), AGE (“new,” “young,” etc.), VALUE (“good,” “bad,” “real,” “curious,” etc.) and COLOR. Medium-sized adjective inventories (12 to several dozen) will additionally have terms for the semantic types PHYSICAL PROPERTY (“soft,” “wet,” “hot,” “sweet,” etc.), HUMAN PROPENSITY (“jealous,” “clever,” “ashamed,” etc.) and SPEED (“fast,” “slow,” etc.). (Dixon 2004)

If a language has an open class of adjectives,

some of the types above may have special behavior, such as the set of French adjectives that come before rather than after their noun. A few Rotuman adjectives of the above semantic type are the only ones to take plural marking, and in Yurok some stative verbs with these meanings take classifier marking (humans, tools, long things, etc.).

Ideophones

What sense perceptions [ideophones](#) represent in any particular language has an implicational hierarchy ([conference abstract](#)),

sound ← motion ← visual patterns ←
 other sense perceptions ←
 inner feelings and cognitive states