Semantic associations (II)

Martine Vanhove
LLACAN
Fédération Typologie et Universaux Linguistiques
vanhove@vjf.cnrs.fr
http://llacan.vjf.cnrs.fr/pers/p_vanhove.htm

OUTLINE

- 1. Case study: EAT
  - Lexicalization of EAT (types of systems, comparability)
  - Semantic associations
    - Monosemy *vs* polysemy, schematic meaning *vs* prototypical meaning
    - Categories of metaphorical paths (Newman)
  - Lexicon-grammar interaction – Cognitive approach
    - EAT in Persian (Family)
- 2. Case study: BREATHE
  - Semantic maps of polysemy networks (François)

CASE STUDY: EAT

- No typological study based on a more or less balanced sample
- Studies with different approaches (theoretical, methodological)
- On one specific language or few languages
- On some languages of one genetic stock
- On some languages of an area

CASE STUDY: EAT

- Gouffé (1966) Hausa
- Newman (1987) English
- Williams (1991) Hausa
- Pardeshi et al. (2006) Asia
- Bonvini (2008) Niger-Congo
- Family (2008) Persian
- Henault (2008) Indo-European
- Newman (ed.) (2009):
  - Naes, Amberber (transitivity) Wierzbicka (NSM), Aikhenvald (Manambu), Rice (Athapaskan), Hook & Pardeshi (Indo-Aryan), Yamagushi (Japanese) Jung Song (Korean), Jaggar & Buba (Hausa), Newman & Aberra (Amharic)

FOCUS 1:
Lexicalization of EAT

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Directly linked to a universal of experience of a physiological type
- But not a lexical universal, neither a semantic prime (NSM)
- The organization of the lexicon related to ingestion of food (and liquids) differs from one language to another => different ways of encoding the concept

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- One word
- Compound words (e.g. Mayali, Australian) (Newman 2009, from Evans p.c.)
  - "ordinary" language: *ngu* 'to eat'
  - "mother-in-law" language: *yak-wa* 'to eat/ drink' = *yak* 'without, nothing' + *wa* 'to follow'
- Incorporated morphemes + classificatory verb stem (e.g. Athapaskan 'into the mouth')
- No specific lexeme

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Some languages have a unitary conceptual category and have one word for both ‘eat’ and ‘drink’, e.g.
  - **Kalam** (Papuan): *ñb-*
  - **Warlpiri** (Australian): *ngarni*
  - **Zulu** (Bantu, Niger-Congo): *dla*
  - **Avestic** (Indo-European): *ngami-*
  - **Indo-European** **xvar-*
  - **Colloquial Persian** (Indo-European): *xordæn*

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Some languages do not have a generic term for ‘eat’, e.g. Mooré (Gur) (Bonvini 2008)
  - *dí* ‘to eat (for things that cannot be chewed)’
  - vs: *lélem* ‘to lick’; *dumi* ‘to bite, sting’; *kaghlé* ‘to crunch’; *wäbé* ‘to chew, browse, graze’; *fõõghé* ‘to absorb’; *möghé* ‘to suck’; *vélé* ‘to swallow’; *nyü* ‘to drink’

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Some languages do not have a generic term for ‘eat’, but one is prototypical, e.g. Sar (Nilo-Saharan):
  - *uun ‘*to eat (soft food)’ without chewing, suck; to feed o.s. for herbivorous animals, graze’
  - *esa* ‘to eat (tough food)’, ‘to chew, masticate’; ‘to eat (chewed food)’; ‘browse’; **‘eat in general’**
  - *ngoR ‘*to chew with effort, eat a hard object, crunch’

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- The whole structure of ingestion words is organized differently in languages
  - **Fongbe** (Kwa): *ɖù 'to eat'; 'to chew, crunch, gnaw, bite'; 'to absorb', vs*: *ɖùɖɔ́ '*to lick, take sth. with the fingers to eat it'; *mì* 'to swallow'; *nù* 'to drink'.
  - **Fulani** (Atlantic) *nyaam-* 'to ingest (food), eat'; 'to consume, feed on', *vs ŋat-* 'to bite'; *yak-* 'to eat in fits and starts, by chewing or by pecking'; *moɗ-* 'to swallow, gobble up'; *yar-* 'to drink'

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Languages often have several terms for eating, depending on various modalities: the texture of the food, the manner of eating, the moment of eating, the quantity eaten, the type of food eaten, etc.
  - **French**: *déjeuner* 'have lunch', *dîner* 'have dinner' – *mâcher* 'chew'; *s'empiffrer* 'stuff oneself'; *grignoter* 'nibble', etc.

FOCUS 1: EAT in Chewa (Bantu)

- "**Generic**"
  - *dia*, LL 'to eat'; *dya*, L 'to eat'
  - *dew*a, LL 'to eat'; 'to be eaten'
- **Texture of food**
  - *mony*ola, LLL 'to eat anything soft'; easily broken off; as bananas; nsima porridge…
  - *kuk*uta, LLL 'to eat anything hard'; or that sounds hard; as munching an apple; as a dog in gnawing a bone knocks it against the ground; as in eating green maize
  - *bubud*a, LLL 'to gnaw'; 'nibble'; 'to eat hard things'; such as bones; maize; hard meat; even an apple

FOCUS 1: EAT in Chewa (Bantu)

- **Manner of eating**
  - *bud*ula, LLL ‘to eat off’; ‘nibble off’; ‘cut at the rim’…
  - *dyets*a, LL ‘to eat much’; ‘to pasture’; ‘give to eat’
  - *dyel*ana, LLL ‘to eat in common’; each one bringing his share
- **Part of the day**
  - *fis*ula, LLL ‘to eat breakfast’
  - gwetsa *ntsamilo*, LLHLL ‘to eat in the early morning’; a morning snack

FOCUS 1: EAT in Chewa (Bantu)

- **Type of food**
  - *kamb*ula, LLL ‘to eat relish without nsima’
  - *sinkh*a, LL ‘to eat the relish by itself’
  - *tsinkh*a, LL ‘to eat up the relish by itself’; leaving the nsima; as a person does who is not hungry
  - *ntsinkh*a, LL ‘to eat only the relish’
  - *sind*ika, LLL ‘to eat the relish only’
  - *sip*a, LL 1. ‘to eat without sauce’; 2. ‘to suck’; ‘lick’
  - *pwav*ula, LLL ‘to eat ndiwo without nsima’

FOCUS 1: EAT in Chewa (Bantu)

- **Metaphores (?)**
  - *nyinyidz*ila, LLLL ‘to grumble at the smallness of anything’; ‘to work slowly’; with intent to make it last out; ‘**to eat a little at a time** so as to spin out the food store in the nkhokwe’
  - *pot*a, LL ‘to prepare hospitality’; also ‘**to eat with**’; ‘partake of the hospitality of’; 2. ‘to pay’; root of mphotho; ‘hire’
  - *sin*ila, LLL ‘to work slowly with intent to make a job last out’; ‘**to eat little at a time** so as to make the food store last’; ‘to be frugal’
  - *som*ola, LLL ‘to begin’; ‘take the first taste’; ‘drink a little first’; ‘**to begin to eat**’

FOCUS 1: EAT in Navajo and Jicarilla (Athapaskan)

Navajo	*Jicarilla*	*Food being consumed*
*yiyáá*ʔ	*yííyá*	eating in general that requires chewing & swallowing (includes everything but stew, which is drunk)
yíʔaal	*yɪʔáál*	hard or chewy object (ice)
yíɬtšož	*yiɬtšoš*	long, stringy object (jerky, sinewy meat)
yišɣal	*yiɬɣaɬ*	meat [ceremonial]
yišxhit		one round object
yíɬsʔeeʔ	*yíɬsʔéʔ*	mushy matter (corn mush, apple sauce)
yištéél	*yiɬeeɬ*	Separable objects (corn kernels, grapes, berries)

Pseudo-classificatory verbs of eating (Rice 2009: 119)

stem	*manner/food of consumption*	*example edibles*
-yíih	consume/chew UNSPECIFIED	anything
ʔaaɬ	consume/chew HARD, COMPACT	corn, peyote, candy
-chozh	consume/chew LEAFY	lettuce, hay
-ghaɬ	consume/chew MEAT	meat
-keed	consume/chew ROUND	bun, melon
-tsʔééh	consume/chew MUSHY MATTER	mush, jello
-deeɬ	consume/chew PLURAL OBJECT	berries, eggs
-wol	consume/chew MARROW	marrow
-jooɬ	consume NON-COMPACT MATTER	cotton candy
-tɬeeh	consume MUSHY MATTER	ice cream
-mááɬ	consume/devour by GULPING/BOLTING	single piece of food
-ʔaah	consume SOLID, ROUND OBJECT dunked in liquid	moistened bread, cake
-dlá	consume/drink UNSPECIFIED	soup, thin gruel
-kaah	consume/drink from OPEN CONTAINER	milk from glass
-tʔaah	consume/drink from CLOSED CONTAINER	milk from bottle

Navajo verb stems of consumption (Rice 2009: 119)

FOCUS 1: *Lexicalization of the concept of EAT– types of systems*

- Type of food
  - *rubima-* 'eat fish', *burnyja-* 'eat meat', *nanba-* 'eat vegetable' (Dyirbal, Girramay dialect, Australia)
- Manner/ texture of food
  - *-kaba-* 'eat where a lot of chewing is involved*, jome-na-* 'eat where little or no vhewing is needed', *komo-na-* 'eating which involves spitting out seeds', *bako-na-* 'eating by sucking (e.g. melon, sugar cane)' Jarawara (Arawa, Amazonia)

FOCUS 1

- **DO WE COMPARE LIKES WITH LIKES?**
- A structuralist answer: “the hyperonymic definition of *eat* can only be considered within the framework of one language, because of the specificity of the oppositions between the lexical items which characterize it.”
- Still “It is at least possible to find within these definitions some regularities” that allow comparability (Bonvini 2008)

FOCUS 2:
Semantic associations of EAT

FOCUS 2 (semasiology): Polysemy, heterosemy, semantic shift

- EAT is crosslinguistically often highly polysemous and refers to different realities than the human physiological experience of food ingestion, both at the synchronic and diachronic levels

FOCUS 2: Schematic meaning

- Akan (Kwa, Niger-Congo) *di* 'eat' = 110 semantic subcategories in Christaller (1881) subsumed in 'to take (in the hands); to handle; to use, make use of, employ'
- 'partake of or participate in' (Welmers 1973:477)
- "A schematic meaning refers to one node of the semantic network of a lexical items which expresses a meaning fully contained in others, e.g., 'partake of or participating in' might be a schematic meaning with respect to Akan *di*" (Newman 2009: 4)

FOCUS 2: Prototypical meaning

- Two solutions to reconcile monosemy and polysemy: prototype (Rosch 1973) & radial categories (Lakoff 1987).
- "A prototypical meaning … is one which is experienced as representative of the whole category and which is the immediate source for semantic extensions, e.g., 'eat' would be the prototypical meaning of Akan *di*." (Newman 2009:4)

FOCUS 2: Polysemy *vs* monosemy

- Haspelmath (2003: 214), “general-meaning analyses are not particularly helpful if one wants to know in what way languages differ from each other.”
- Cross-linguistic comparison is more fruitful if polysemy is stated explicitly
- Let’s start with the prototypical meaning in each language of a given sample and try and compare the polysemous networks!

FOCUS 2 (semasiology): Polysemy, heterosemy, semantic shift

- Typological questions:
- Are there recurring patterns of semantic associations?
- How can we categorize them?
- Do they correlate with genetic groupings, areal groupings, etc.?

FOCUS 2: classification of semantic associations

- Newman's (2009) approach: different categories of metaphorical paths based on the semantic and physiological properties associated to EAT

Extension type	*semantic and syntactic properties*
PERFECTIVITY	change in the state of the food eaten
INTERNALIZATION	properties of the consumer in the process: incorporating sth into one's personal sphere -> agent's role – involves sensory experience
DESTRUCTION OF FOOD	effect on the food (the thematic patient)
SENSATION & DESTRUCTION	agent-oriented & patient-oriented aspects of EAT

FOCUS 2: classification of semantic associations

INTERNAL COMPLEXITY	eat is dynamic, involving actions by a person which affect some other entity, but where the person also typically experiences a range of sensations
SPATIAL TEMPORAL PROFILE	food is taken into mouth and moves through the digestive tract
ACTIVE ZONE	mouth, teeth, tongue, palate
FORCE DYNAMICS	forceful crushing and biting of food, controlled by person
TYPICAL SOCIAL/CULTURAL SIGNIFICANCE	eating is vital to humans, is usually enjoyed, and is the basis for many social occasions ; it can be the means to induce altered physical and psychological states

Components of the central meanings of eat in English (adapted from Newman 2009:3, following Langacker 1987)

FOCUS 2: Extensions of EAT based on internalization

- Motivated by the properties of the consumer in the consuming process, i.e. incorporating something into one's personal or private sphere.
- 'Absorb other things than food (O) by non human/ inanimate (S)':
  - Mandarin: earth absorbs (eats) water, Korean: cloth absorbs (eat) dye, Japanese: be stuck (thread), be caught (fish in a net), consume (electricity, petrol)

FOCUS 2: Extensions of EAT based on internalization

- Based on sensations of consumer, the role of the agent motivates the extension – often involves sensory experience (pleasant or unpleasant).
- Intake by human of sth else than food or sth abstract:
  - Enga (Trans-New Guinea): *mútí nengé* (tobacco eat) 'smoke tobacco/cigarette'
  - Mandarin (Sino-Tibetan): *chī yào* (eat medicine) 'take medicine' (in classical Mandarin = eat & drink)
  - Korean (the child does not listen (lit. 'eat') to his mother's word), Mandarin (eat soft not eat hard 'be open to persuasion but not to coercion')

FOCUS 2: Extensions of EAT based on internalization

- Emotional, intellectual satisfaction, enjoyment
  - Mandarin *chī hǎohuà* (eat good_words) ‘to savour praise’; *chī xiāng* (eat fragrance/ popular) ‘to be very popular’; *chī de kāi* (eat CONNECTIVE open/public) ‘to be popular’
  - Zulu (Bantu, Niger-Congo) *uku-dla amaxoxo* (PREF-eat chat) ‘enjoy a chat’

FOCUS 2: Extensions of EAT based on internalization

- Emotional, intellectual satisfaction, enjoyment
  - <To take the most of, to take advantage of>
  - Get married (Kasem *dí kānī* /eat woman/)
  - Flirt (Kasem)
  - Regain health (Kasem *dí bīnī* /eat seasonal_cycle/)
  - Be happy, enjoy (Fongbe; Sar, Baguirmi)
  - Make profits (Fongbe; Duala)
  - Inherit (Fongbe; Kikongo)
  - Celebrate, feast (Fongbe; Kikongo; Navajo)

FOCUS 2: Extensions of EAT based on internalization

- **Experience unpleasantness**
- **Enga** (Papuan): to growl (of stomach); bite lips, seem to do sth wrong together; be cold; rot; be difficult; be stingy; afflict; be disagreeable, be angry; be belligerent; be sick
- **Amharic** (Semitic, Afroasiatic): misery + CAUS-eat 'treat cruelly'; hardship + CAUS-eat 'give hard time'; faeces + CAUS-eat 'beat/defeat/make suffer badly'

FOCUS 2: Extensions of EAT based on internalization

- Experience unpleasantness
  - Be ashamed (Kasem; Fongbe)
  - Be humiliated (Kasem; Korean)
  - Be angry (Koyukon, Athapaskan)
  - Suffer (Kasem, Mooré; Fongbe, Akan; Fulani; Duala, Kirundi, Kikongo; Sar, Baguirmi; Hausa; Korean)
  - Be beaten, hit (French, Latin; Mwotlap)
  - Itch, irritate (French, Russian; Kirundi)
  - Waste, spend money, go into debt, borrow (Kasem; Fongbe, Akan; Fulani; Duala, Kikongo; Bambara; Sara, Baguirmi; Hausa; Amharic; Japanese; Korean)

FOCUS 2: Extensions of EAT based on the destruction of food

- Patient oriented, motivated by the effect (the destruction) of eating on the food
- Physical destruction, injuring, overpowering (common extension)
  - Zulu (Bantu, Niger-Congo): *dla* 'eat' > 'eat into, rust, corrode, wear into'
  - Rumu (Trans-New Guinea): *yo nana* (village eat) 'to raid a village'; *yu nana* (ridge/island eat) 'to hunt over an island'
  - Amharic (Semitic, Afroasiatic*):bəl* 'eat' > defeat s.o., win, burn (fire)

FOCUS 2: Extensions of EAT based on the destruction of food

- Physical destruction, injuring, overpowering
  - Defeat, win (Kasem; Fongbe; Fulani; Sara, Baguirmi; Hausa; Amharic; Japanese)
  - Exploit, bully (Kasem; Fongbe; Fulani; Kirundi; Sara, Baguirmi; Hausa; Nahuatl; Japanese)
  - Make suffer, harm, destroy (Fongbe; Mooré; Fulani; Kirundi; Sara, Baguirmi; Hausa; Amharic; Nahuatl; Japanese; Korean; Manambu)
  - Burn (Hausa; Amharic; Mwotlap; Manambu)
  - Be sick, have cancer (Amharic; Dene, Athapaskan)
  - Reign, govern, be chief (Kasem, Mooré; Fongbe; Sara, Baguirmi; Hausa; Arabic)
  - Deceive, betray (Fongbe; Fulani; Kirundi; Bambara; Hausa)
  - Be right (Kasem)

FOCUS 2: Extensions of EAT based on the destruction of food

- **Psychological torment**
  - Amharic (Semitic, Afroasiatic):

    bəll-a-ňň eat.PST.PERF.3SG.M.SBJ-1SG.OBJ

    lit. he ate me = ‘he made me sick / I worry for him’

    səw-yəw *anjət-e-n*

    man-that.DEF intestine-my-ACC

    bəll-a-ňň

    eat.PERF-3SG.M.SBJ-1SG.OBJ

    lit. that man eats my intestines = ‘I feel sorry for that man’.

FOCUS 2: Extensions of EAT based on the destruction of food

- Psychological torment
  - Be bitter (Kasem): *à dí wəcīʊ* /I eat.PF thing difficult/ 'I swallowed an affront, I am bitter')
  - Suffer (Kasem: *kʊ dí à wʊ* /this eat.PF me belly/ 'this made me suffer intimately; Fongbe: *ɖu wùvɛ* /eat pain/ 'to feel pain, suffer; show disgust')
  - Be envious (Kikongo)

FOCUS 2: Extensions of EAT based on sensation and destruction

- Sexual intercourse = pleasurable experience + physical interaction – "we should accept a multiplicity of motivations relevant to this extension of 'eat'." (Newman 2009:)
  - Hausa *ci* 'eat; have sexual intercourse'
  - Zulu *dla* 'eat; have sexual intercourse'
  - Rumu (Papuan): heterosemy *nana* 'consume, eat, drink' *tu* 'guts' > *tu nana* 'to have sexual intercourse'
  - Yir-Yuront (Australian): *pay* 'bite; eat; drink, suckle; bite (fig.), pinch, sting; copulate with'
  - Inuit: verbalizing affix -*tuq*- 'eat', 'drink', 'have sexual intercourse'
  - Korean: *mek* 'eat, have sex with a woman'

FOCUS 2: Grammaticalization of EAT

- Extensions based on internalization (perfectivity of ‘eat’): change in the state of the food -> appropriate image for the completion of a change
  - Chepang (Tibeto-Burman) *jeʔ* ‘eat’ > verbal suffix of completion or finality

lw ʔal-jeʔ ʔuya

right go-EAT.SUFFIX therefore

‘Right, go then! (for good).’ (Caughley 1982: 97)

FOCUS 2: Grammaticalization of EAT

- Extension based on internalization (emotional satisfaction)
  - Chepang emotive ‘eat’ suffix (satisfaction and pleasure in respect to the whole situation)

ʔowɾʔ *waɾʔ-koɾʔ* *coʔ* *jyal-jeɾʔ-ʔaka-yɾʔ*

that bird-GEN child flee-eat-PAST-PL

‘The young birds escaped (luckily)’

(Caughley 1982: 97)

FOCUS 2: Grammaticalization of EAT

- Internalization: Adversative Passive marker
  - Hausa (Chadic, Afrasiatic)

yaa	*ci*	*duukàa*
he.PAST	eat	beat.V.NOUN

‘He was severely beaten’

  - Restricted in Sinhalese (Indo-Aryan), Modern Greek (Haspelmath 1990: 64, fn 9)
  - Disputable in Korean, Kharia and Juang (Austro-Asiatic)

Lexicon-grammar interaction

FOCUS 3 (semasiology): lexicon-grammar interaction

- Næss (2009: 40) “The semantic property characteristic of EAT […] is crosslin-guistically seen to reduce the overall transitivity of verbs or constructions: They refer to acts which affect their agents and indeed where the effect on the agent, as opposed to that on the patient, is the agent’s main motivation for acting.”

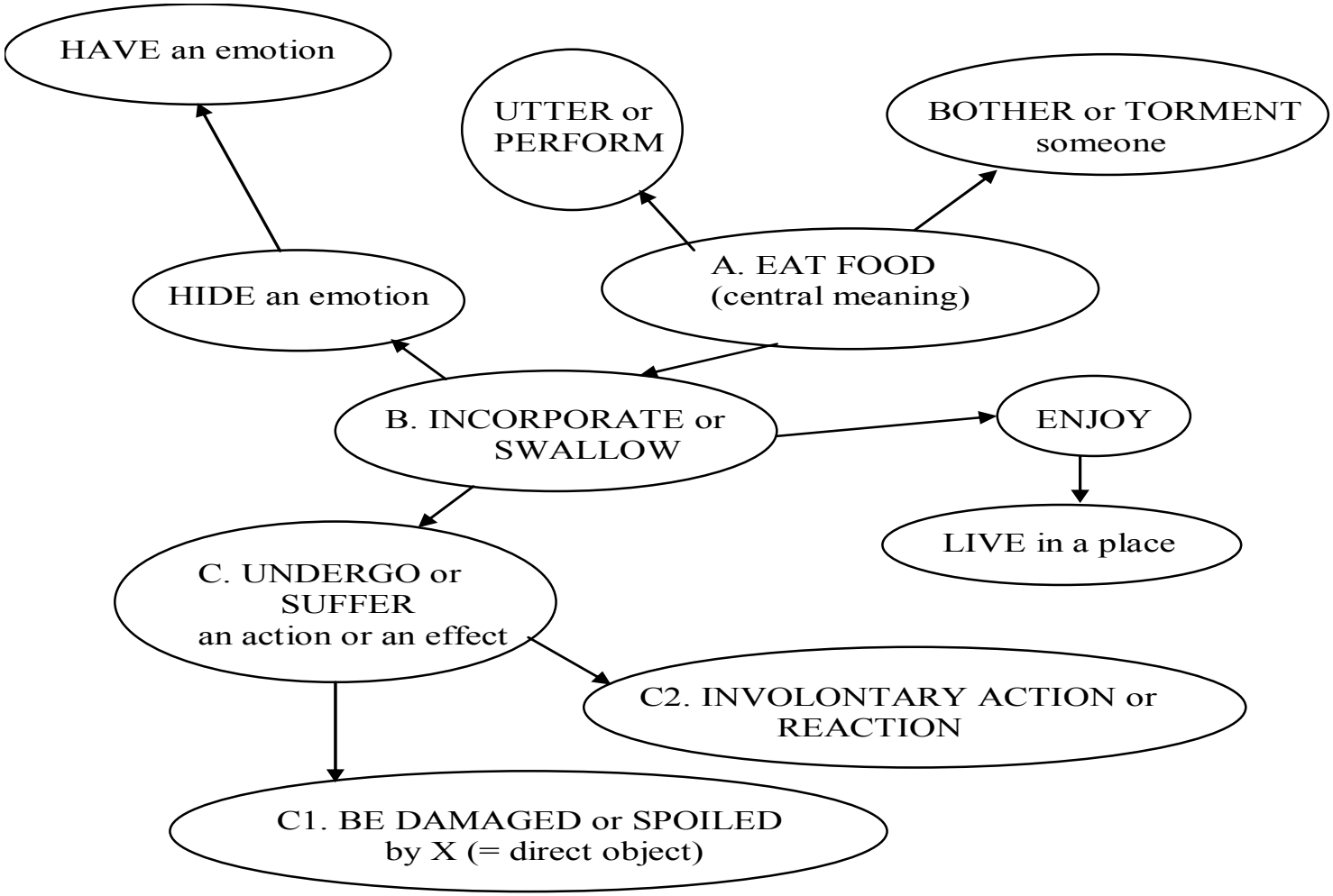
FOCUS 3 (semasiology): lexicon-grammar interaction

- Transitive *vs* intransitive = interaction between two entities *vs* consumer experiences sensations
  - Two lexemes: Kiribati (Oceanic, Austronesian) *kana* 'eat, tr.' *vs am'arake* 'eat, intr.'
  - Morphology, e.g. vocalic alternation: Lango (Nilo-Saharan) *àcámò* 1SG.eat$_{TR}$.PERF 'I ate it' *vs àcɛ́mò* 1SG.eat$_{INTR}$.PERF
- Animate S has 2 semantic roles: agent and experiencer (cf. middle verbs)

FOCUS 3: a cognitive approach of EAT

- Two solutions to reconcile monosemy and polysemy: prototype (Rosch 1973) & radial categories (Lakoff 1987)
- *Radial categories* are categories motivated by conventions, but not predictable from rules (as opposed to generative categories)

FOCUS 3: RADIAL categories



Radial diagram of meanings of the verb EAT in Hindi-Urdu (Pardeshi et al. 2006: 105)

FOCUS 3: a cognitive approach of EAT

- Grammatical constructions are pairings of forms and contents
  - They can be as small as words or affixes, or be whole sentence structures. Constructions include both universal and general knowledge as well as idiosyncratic and language-specific information
- Construction grammar denies any strict distinction between syntax and lexicon and proposes a *syntax-lexicon continuum*

FOCUS 3: a cognitive approach of EAT

- No claim is made that constructions or the parameters used to construct them are innate or universal, although there are presumably strong universal constraints.
- Mental spaces are cognitive structures entirely in the minds of interlocutors

FOCUS 3: *xordæn* ‘to eat’ in Persian

- Family (2008)
- Few full lexical verbs, but a set of some 12 ‘light’ verbs which combine with (usually) nominal preverbs, and *xordæn* ‘eat’ is one of them
- “Light Verb” Constructions are *productive* in Persian

FOCUS 3: *xordæn* ‘to eat’ in Persian

- *xordæn* (tr.) as a full verb is highly polysemous:
  - ‘eat (usually after chewing), drink, gnaw, devour, waste or spend, corrode, cause itching, make appear as used, being in the line of damage, receive, be beaten, take and never give back, hit, strike, touch, fit, match, be synchronized, ending up somewhere’
- inchoative verb, telic or atelic (undergoing an action or experiencing a state).

xordæn ‘to eat’ in Persian

- The diagram of the semantic space of Persian *xordæn* ‘to eat’
- “The light verb’s semantic space is populated by “notional islands” where groups of light verb constructions, expressing similar notions, combine the light verb with a restricted, but large, class of preverbs”

Figure 1: *xordæn's complete semantic space*

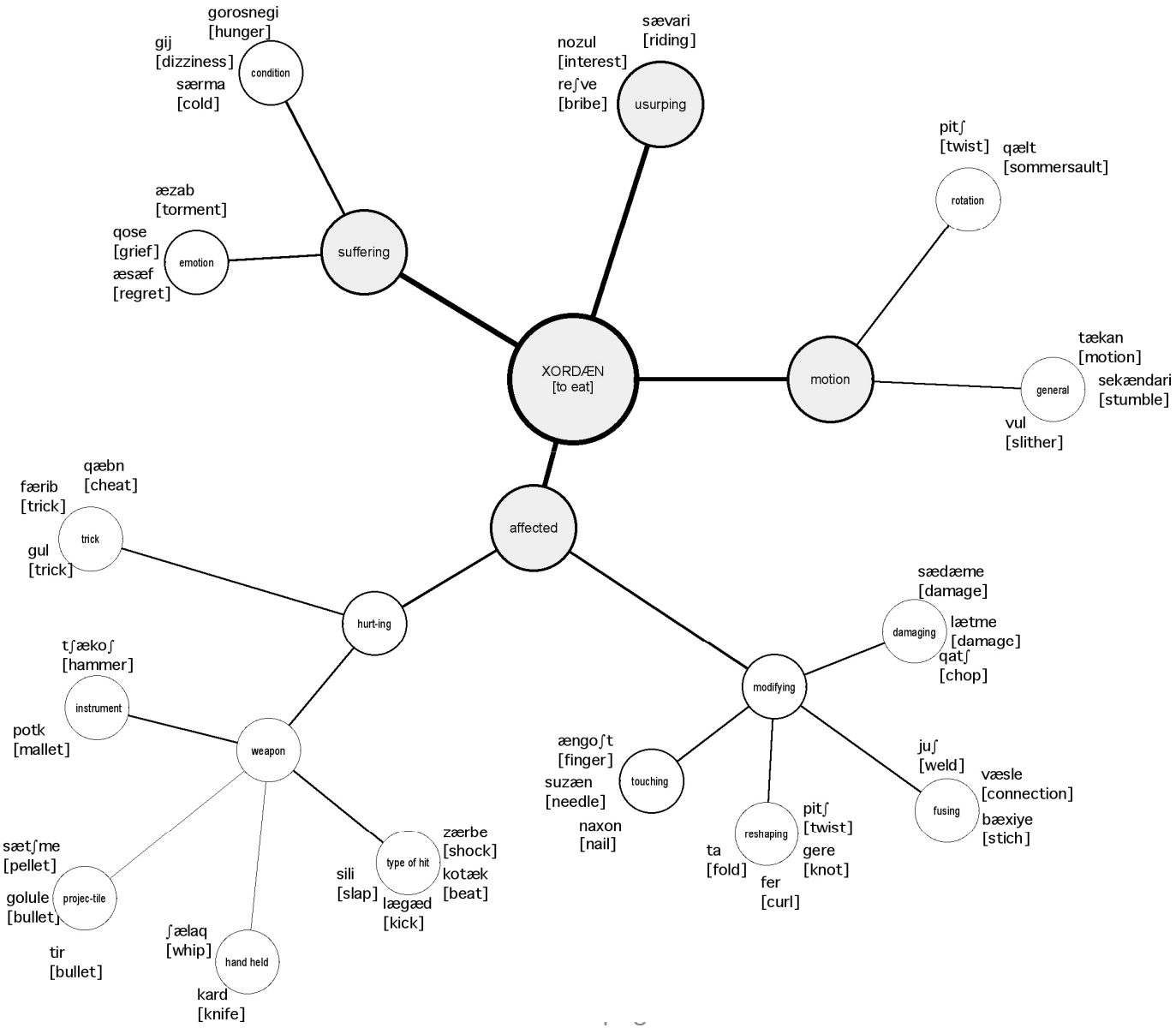
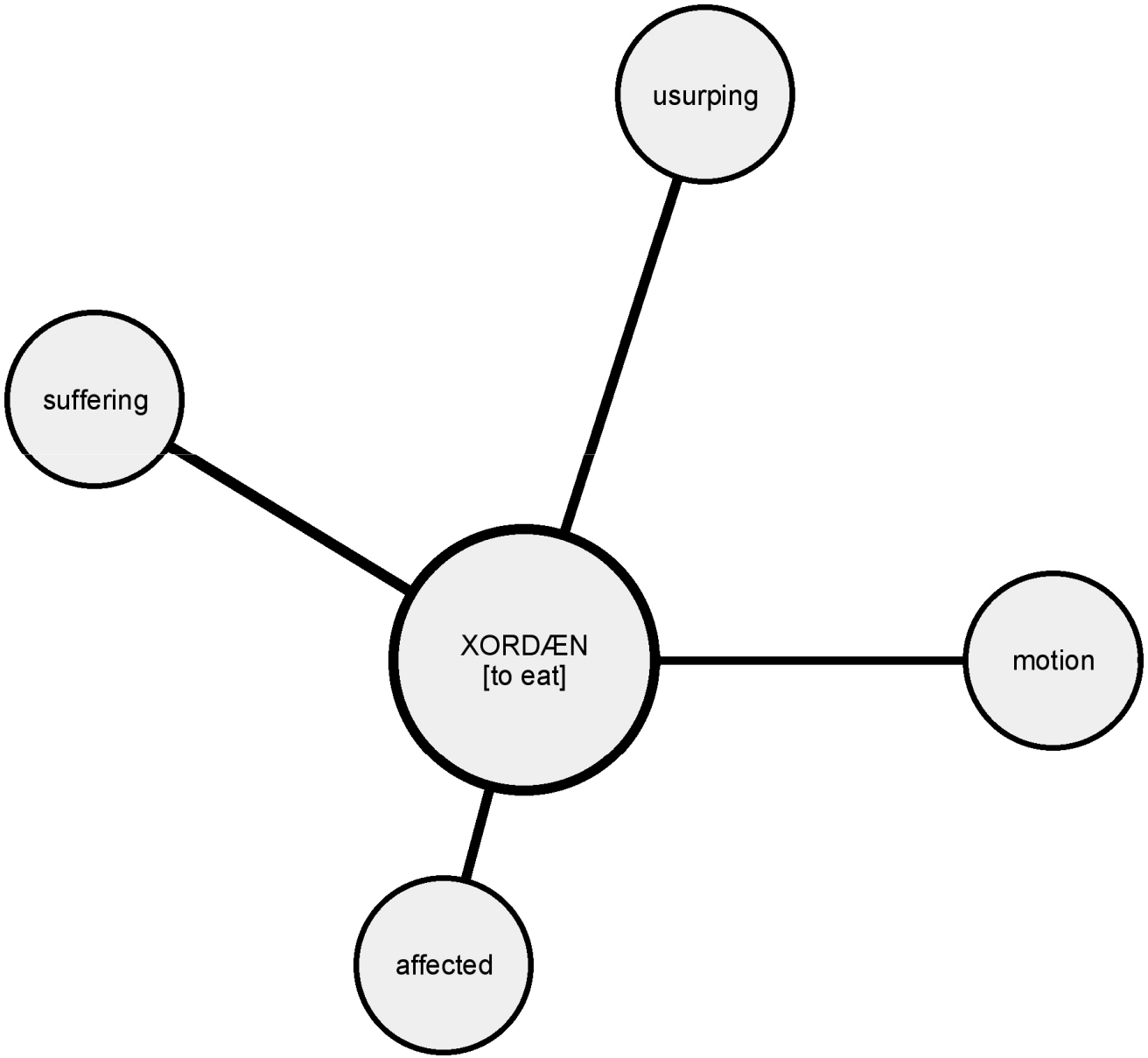


Figure 2: *Major branches in xordæn's semantic space*



xordæn ‘to eat’ in Persian

- The proximity of the islands (belonging to the same branch) express closer similarity of notions than islands further away.
- This configuration is one of several possible configurations, there is no strict metric on this space.

xordæn ‘to eat’ in Persian

- The meanings of *xordæn* as a LV “are not directly related to its full verb meanings and are often difficult to isolate from the construction itself.”
- “The meaning of each construction is motivated by both of its elements, but the specific nuances arise at a different level, namely, that of the construction.”

xordæn ‘to eat’ in Persian

- Each PV has attributes which activate certain meanings of the LV and the LV in turn contributes relevant features inherent to it, creating a meaning different from the meaning of either component.

xordæn ‘to eat’ in Persian

- *Xordæn* produces mostly intransitive LVCs where S is a proto-patient undergoing a change of state or experiencing a state.
- The meanings of the actions expressed by *xordæn* are generally ones of being affected, and usually have a negative connotation.

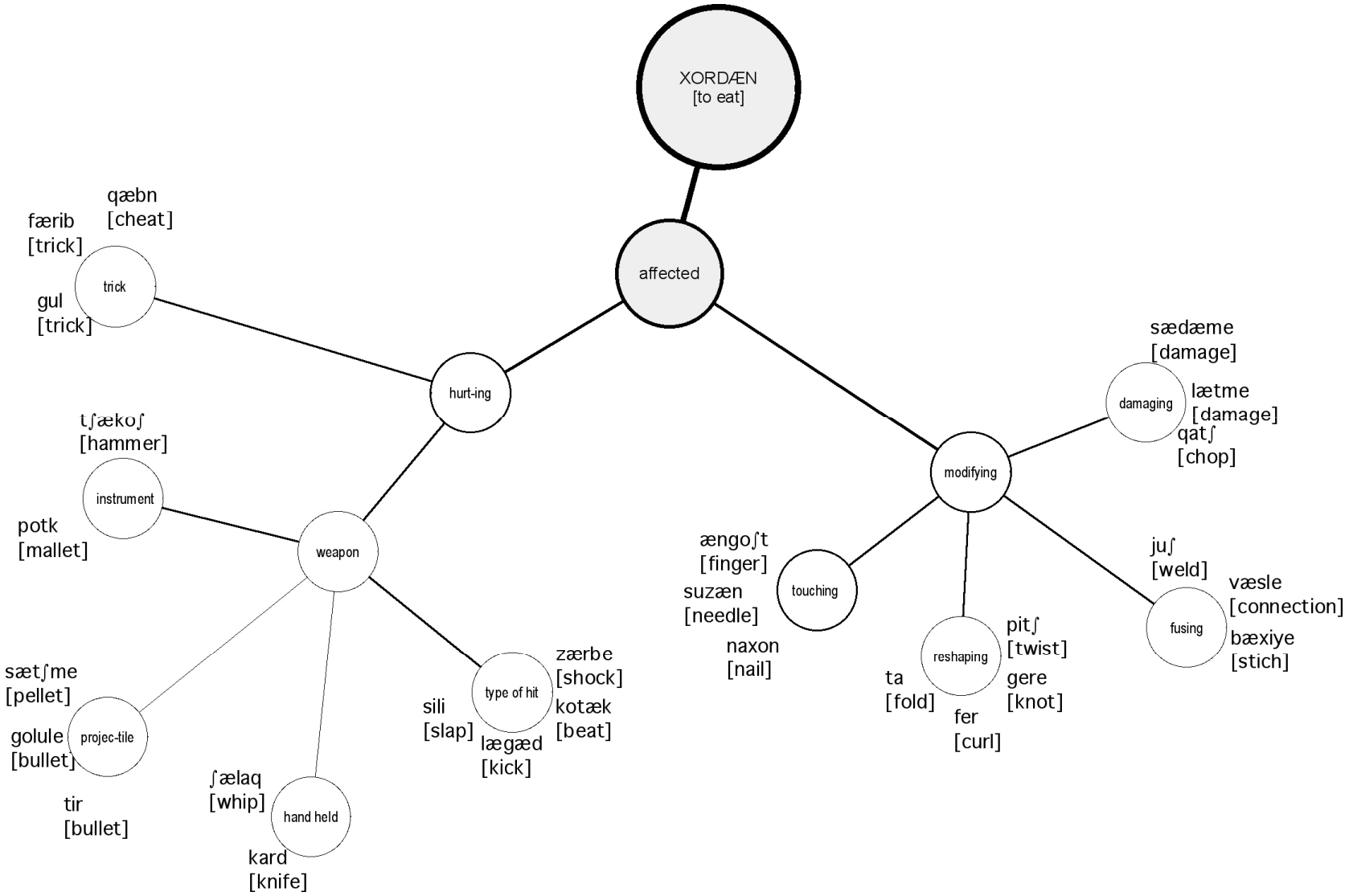
xordæn ‘to eat’ in Persian

- Some marginal LVCs are purely “idiomatic”, i.e., semantically opaque, e.g.
  - *kafur xordæn*, lit. campher eat ‘become impotent’
  - *ja xordæn*, lit. place eat ‘be surprised, shocked’
- Some are semi-transparent
  - *pa xordæn*, lit. foot eat ‘be stepped on’
  - *xis xordæn*, lit. wet eat ‘be soaked’

xordæn ‘to eat’ in Persian

- LVCs often portray images of swallowing, or being penetrated or pierced by something, or undergoing some process. This process is often to the detriment, and out of the control of the subject.
  - *zæxm xordæn* wound XORDÆN ‘be wounded’

Figure 3: *XORDÆN: AFFECTED*



XORDÆN: Affected

- The richest branch
- S undergoes the action
- Right islands: inanimate Obj
- Left islands: animate Obj
- Some LVCs are inchoative alternants of analogous LVCs with *zædæn* ‘hit’

XORDÆN: Affected

4.1.1. XORDÆN: Affected: Modified: Fused
Meaning: become fused or connected to parts of itself or to other entities usually through a natural process.
PV: type of connection or instrument/material used for fusing or connecting.
Remarks: Intransitive. These forms are used when the subject becomes fused or mended as a consequence of a natural process (rust, humidity, organic growth) and generally not the consequence of the actions of a conscience being. For example, the term *kuk xordæn* is rare, because stitching can only be done by a volitional external entity. Or, *juʃ xordæn* 'weld or fuse' can be used for a material when the fusion is the result of heat or rust or other environmental factors, but not directly when an entity has welded the items together (though if the speaker doesn't know, care, or remember who welded it, but only assumes the action has taken place, this form can be used). In the LVCs expressing the fusion of two different entities, the second entity occurs as an indirect object.

kuk xordæn	stitch XORDÆN	'be closed up by stitches'
peyvænd xordæn	graft XORDÆN	'be grafted (plants, organs)'
væsle-pine xordæn	patch XORDÆN	'be patched up

XORDÆN: Affected

in	*lebas*	*qæʃæng*	*æst*	*hærtʃænd*	*besyar*	*væsle-pine*
this	dress	beautiful	is	despite	much	patch

xord-e *æst*

eat-PTCP is

‘This dress is beautiful even though it has been patched up quite a bit’

XORDÆN: Affected

4.1.2. XORDÆN: Affected: Modified: Damaged
Meaning: be damaged or deteriorated.
PV: type of damage or wound.
Remark: Intransitive. These forms express substantial physical damage sustained by the subject. This damage is usually incurred by effects of the physical environment and doesn't necessarily involve an external, conscious agent. The damage usually diminishes the value and usefulness of the subject.

asib xordæn	injury XORDÆN	'be injured, be damaged'
zæxm xordæn	wound XORDÆN	'be damaged, wounded'
lætme xordæn	setback XORDÆN	'sustain setback' (e.g. progress)

saltænæt	*pæræst-an*	*dar*	*enɣelab*	*lætmehaj-e*
royalty	worshiper-PL	in	revolution	setback-GEN

ziyad *xord-ænd*
much ate-3SG
'The royalists sustained much setback in the revolution'

XORDÆN: Affected

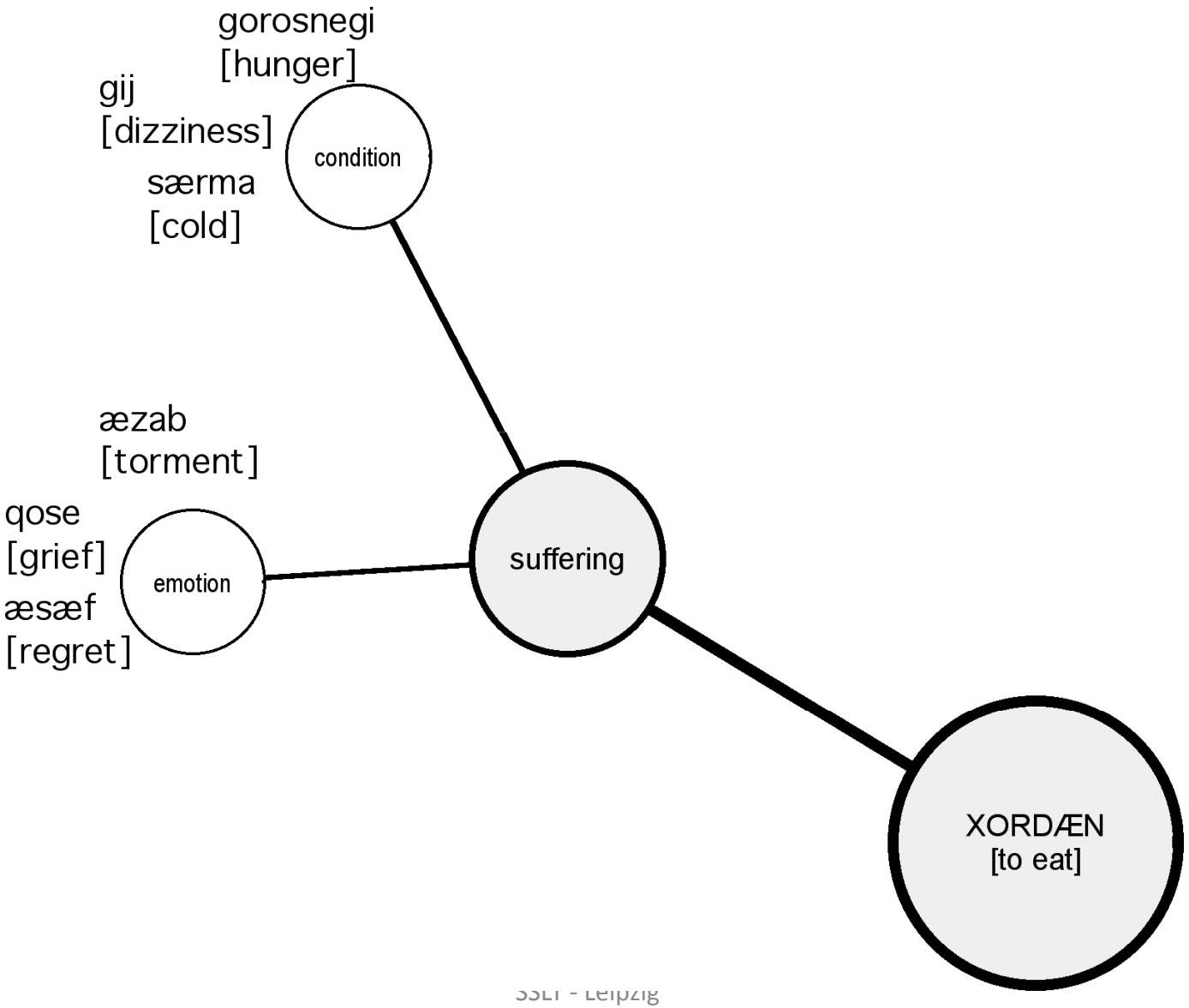
4.1.3.XORDÆN: Affected: Modified: Topology
Meaning: undergo an organized, topological change.

4.1.4. XORDÆN: Affected: Modified: Surface
Meaning: be touched with a hand or foot or an instrument, usually leaving a mark or imprint.

4.1.5. XORDÆN: Affected: Hurting: Weapon: Type of Hit
Meaning: be hit with another entity's hands, feet, or head.

4.1.9. XORDÆN: Affected: Hurting: Trick
Meaning: be tricked.

Figure 4: *XORDÆN: SUFFERING*



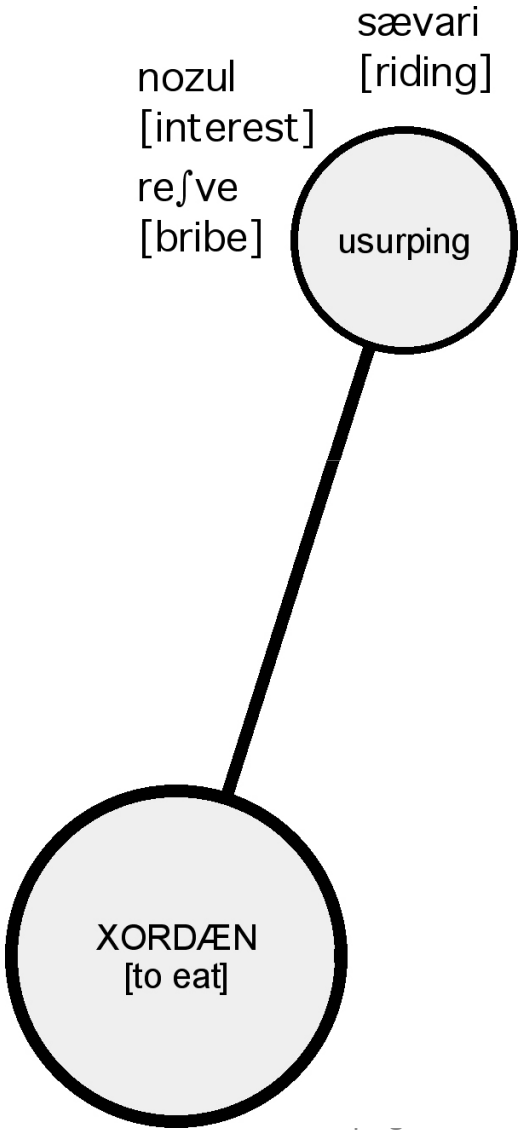
XORDÆN: SUFFERING

- The LVCs express suffering caused by a process or condition affecting a person physically or mentally. The cause of the suffering is usually an unintended result of an action. This is one of the only sets in the system that expresses abstract notions which otherwise mostly occur with the generic LV *kærdæn* ‘to do’. The LVCs in these islands are all atelic, activity verbs: they express durational conditions.

XORDÆN: SUFFERING

- If *xordæn* actually meant *to suffer*, we would also assign an abundant number of other meanings to account for the data. Further, we would expect the verb *xordæn* to be utilized in every instance of the expression of *suffering*, which is not the case. E.g. with some LVCs with *keʃidæn* 'to pull.' This island expresses continuous sufferance without necessarily being the result of an action, but rather of injustice.

Figure 5: *XORDÆN: USURPING*



XORDÆN: USURPING

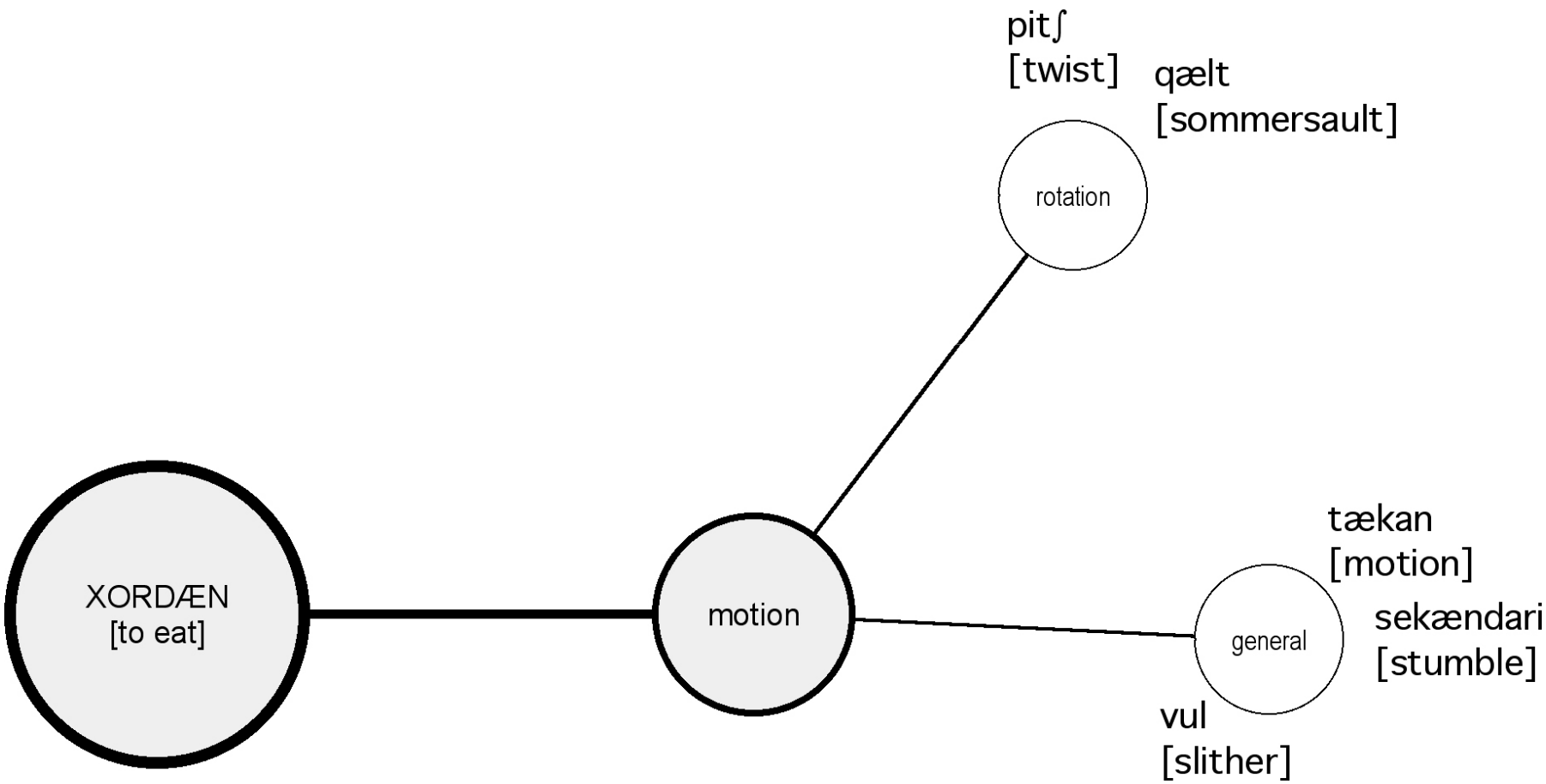
Meaning: Exploit service or property.
PV: the type of good that is being taken advantage of.
Remarks: Intransitive. The LVCs in this island express the notion of taking advantage of another person's labor or property. Here, the original meaning of *xordæn*, 'eat,' emerges in a metaphorical expression denoting gluttony.

reʃve xordæn	bribe XORDÆN	'accept a bribe'
nozul xordæn	interest XORDÆN	'charge interest'
pul xordæn	money XORDÆN	'embezzle or extract money'

hoquq-e	*kæm*	*ba'es-e*	*reʃve*	*xord-æn*	*ziyad*
salary-GEN	small	cause-GEN	bribe	eat-INF	much
ʃod-e		*æst*			
become-PCTP		is			

'Low salaries have become the cause of much bribery'

Figure 6: *XORDÆN: MOTION*



XORDÆN: AGITATED

- In these LVCs, the subject undergoes certain types of motion. The motion is usually unintentional on the part of the subject and often repetitive

XORDÆN: AGITATED

4.4.1. XORDÆN: Agitated: General
Meaning: move.
PV: type of movement.
Remarks: Intransitive. These LVCs express non-goal oriented movement, usually non-volitional. The movement results from an internal, uncontrollable condition or an external agent, such as twitching from muscle spasms (internal) or being shaken by someone to be woken up (external).

tækan xordæn	movement XORDÆN	'jerk, shake, wag'
telo telo xordæn	sway XORDÆN	'sway'
vul xordæn	fidget XORDÆN	'fidget'

bætʃe	*æz*	*bihoselegi*	*hæmæʃ*	*vul*	*mi-xord*
child	from	boredom	constantly	fidget	PROG-eat-3SG

'The kid constantly fidgeted from boredom'

TASK 2

- Is there a prototypical EAT word in your language (native tongue or language(s) of research)?
- What is its range of polysemy, and/or (metaphorical/contextual) uses?
- Try and figure out what kind of research questions could help sorting out the diversity of EAT words, and compare them crosslinguistically.

II. CASE STUDY: BREATHE

Semantic maps of polysemy networks: colexification

- François (2008): model of Semantic Maps (Haspelmath 2003)
- Empirical, atomistic approach to lexical typology
- Method for drawing a universal network of potential semantic extensions following the observation of polysemies attested across the world's languages

Colexification

- Languages differ as to which senses they *colexify*, i.e., lexify identically
- But individual pairings of colexified senses can be compared across languages
- Intertwined together, they compose a single, universal network of potential semantic extensions

The empirical method

- 1. Select the word that lexifies a notion in one language, and identify the various senses which form part of its polysemy
- 2. Do the same with a second language and add the new senses to the first list
- 3.Then proceed to another language, and expand the list accordingly
- 4. …

Overlapping polysemies

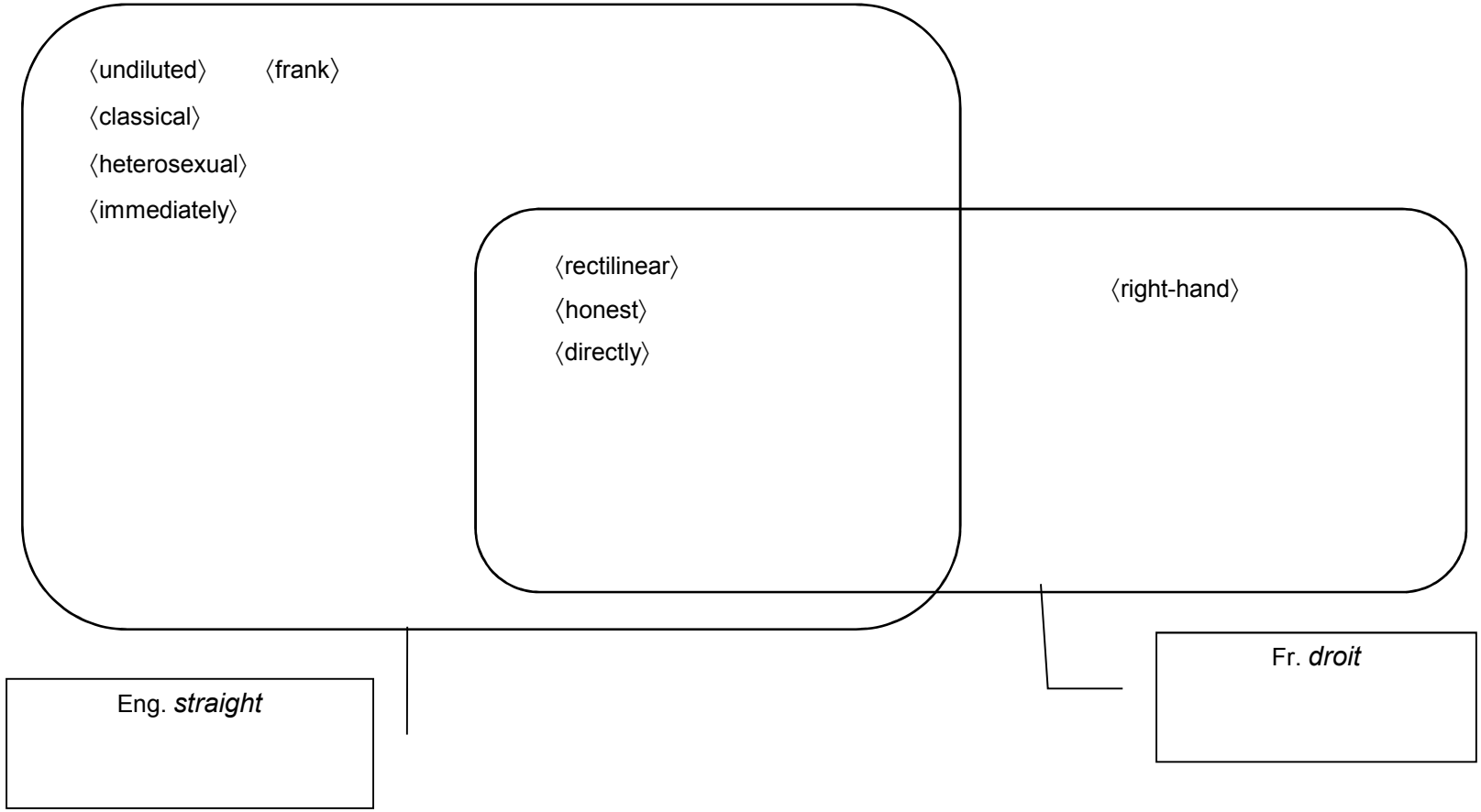
English

<rectilinear>	(*a straight line*)	<heterosexual> (*gay or straight*)
<frank>	(*straight talking*)	<undiluted> (*straight whisky*)
<honest>	(*a straight guy*)	<directly> (*straight to the point*)
<classical>	(*a straight play*)	<immediately> (*straight away*)

French

<rectilinear>	(*un trait droit*)
<directly>	(*aller droit au but*)
<honest>	(*un type droit*)
<right-hand>	(*le côté droit*)

Overlapping polysemies



The empirical method

- $\Rightarrow$ the list of senses for a given word is likely to evolve and may cover the whole lexicon
- $\Rightarrow$ the senses to be included in the universal list and in the semantic map should fill one condition: only include those senses that are attested to be in *strict colexification* in at least one language of the world

Colexification

- (1) “A given language is said to COLEXIFY two functionally distinct senses if, and only if, it can associate them with the same lexical form.”
- In synchrony
- Diachrony; lexical derivation; composition
- BUT the different types of formal relations should be kept distinct in the representation of the data

Colexification representations

- In tables of data:
  - ‘+’ = strict synchronic colexification
  - ‘[+]’ = diachronic and heterosemic colexification
- In semantic maps:
  - continuous lines
  - dotted lines

The empirical method

- The meanings are ordered in space
- Iconic grouping of close senses in contiguous areas of the map
- Two criteria: (1) ontological properties of each sense (= common semantic properties); (2) examination of empirical data from various languages.

Semantic maps

- “A semantic map is a geometrical representation of functions in ‘conceptual/semantic space’ that are linked by connecting lines and thus constitute a network.”

  Haspelmath (2003: 213)

Semantic maps

- “A semantic map is a geometrical representation of f “senses” ‘conceptual/semantic space’ that are linked by connecting lines and thus constitute a network.”

The empirical method

- Necessity to choose a specific notion as the pivot of the map ($\neq$ Haspelmath's method for drawing grammatical maps)
- $\Rightarrow$ the empirical data must consist exclusively of lexical units that specifically include this sense in their polysemy. This important requirement is a precaution against the risk of starting an open-ended map with evershifting boundaries

The empirical method

- The status of pivot of a lexical map has nothing to do with the notion of prototype, which is only relevant to the description of individual lexemes.
- The pivot notion of a (universal) lexical map is simply an arbitrary choice, the starting point before any lexical map may even begin to be drawn

Universality claim

- “The configuration of functions shown by the map is claimed to be universal” (Haspelmath 2003: 217).
- -> any new data from a natural language should therefore be able to falsify the results. Cf. Haspelmath (2003: 232)

Universality vs Diversity

- A universal grid serves to visualize the “emic” categorizations which are made by each specific language
- For a given form in a given language – usually understood in synchronical terms – it is possible to identify, on the universal map, those meanings that are covered by this form, and those that fall without its scope.

CASE STUDY: {BREATHE}

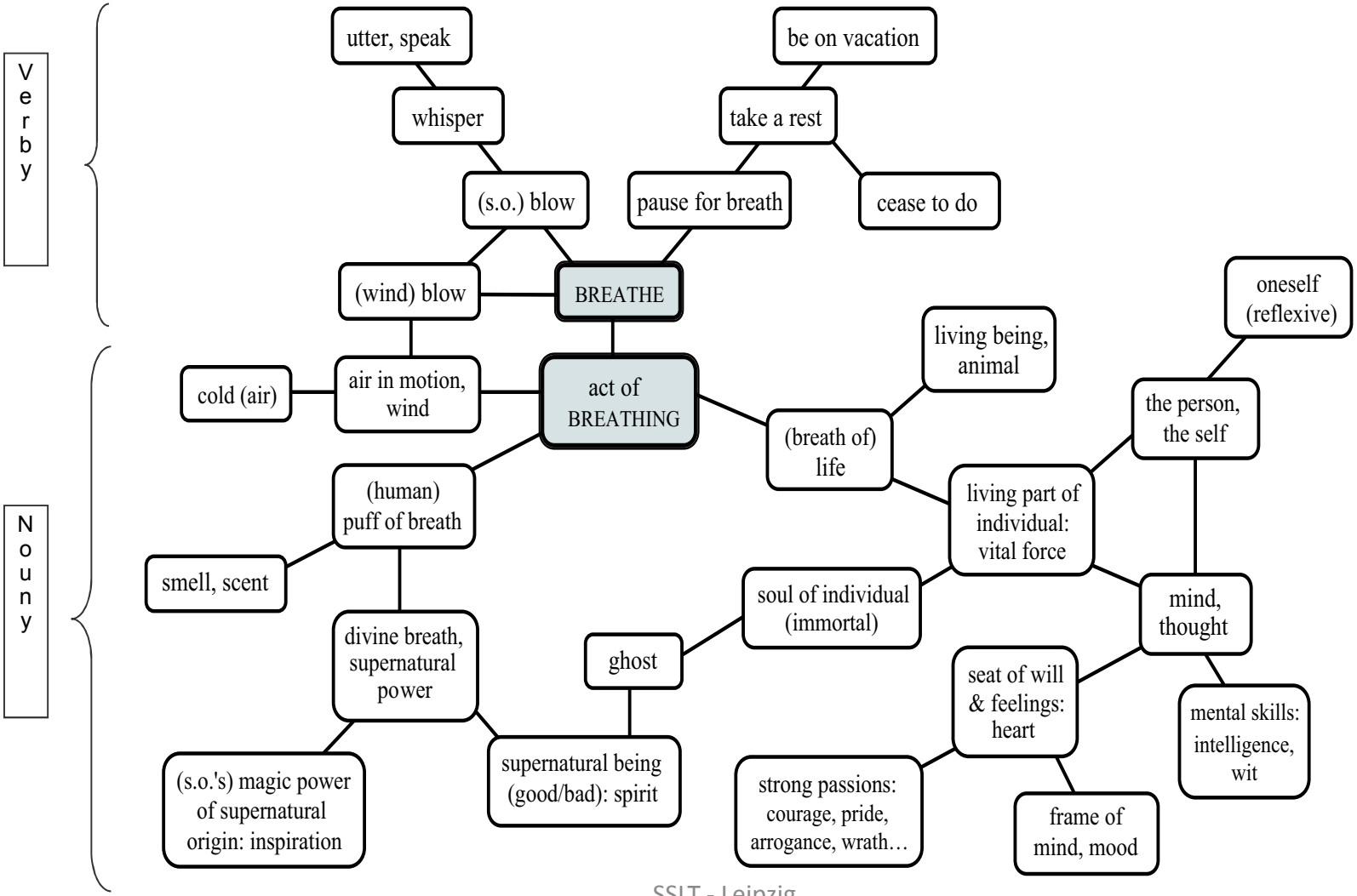
- 16 lexical headwords in 13 genetically diverse languages.
- The default headword is the noun. The cognate verb, when formally different, has a secondary status (loose colexification)

BREATHE

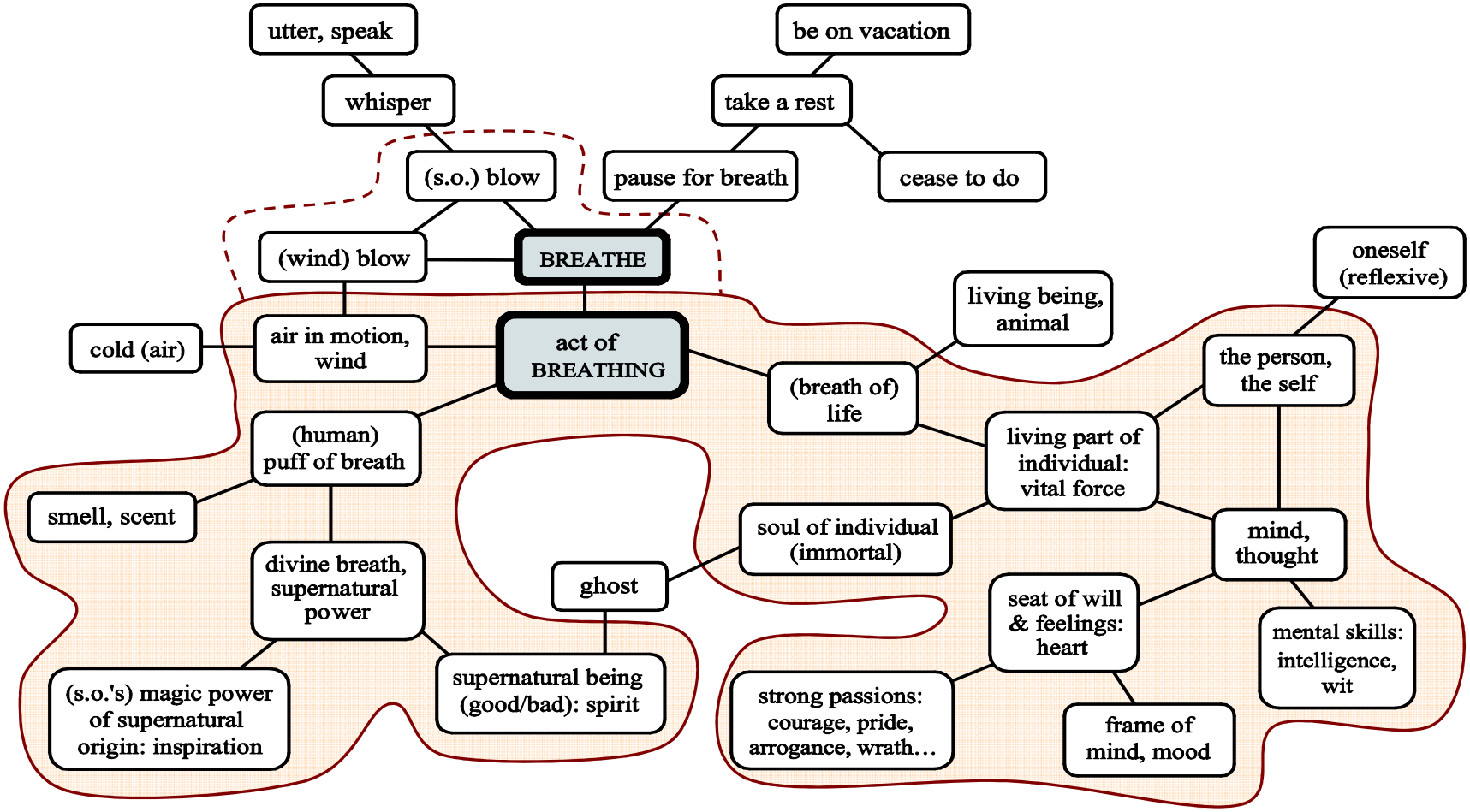
	SANSKRIT *ātman*	GREEK *psūkhē*	GREEK *pneuma*	LATIN *anima*	LATIN *spīritus*	RUSSIAN *dux*	MANDARIN *qì*	ALEUT⁺ *anri-*	NAHUATL *imi'iyo*	MWOTLAP *mōkhe-*	NELEMWA *horêâ-*	ARABIC *rūḥ*	ARABIC *nafas*	BEDJA *šūk*	SAR *koo*
BREATHE	[+]	[+]	[+]		[+]	[+]		[+]		[+]	+		[+]		+
(s.o.) blow		[+]	[+]		[+]	[+]		[+]		[+]	+		[+]		+
whisper, utter								+			+				
take a rest						[+]			+	[+]	+	[+]	[+]		[+]
be on vacation						[+]				[+]					
cease to do											+				
(wind) blow			[+]		[+]	[+]						[+]			
air, wind	[+]	[+]	+	+	+	[+]	+					[+]			+
cold (air)		[+]													
puff of breath	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
smell, scent			+		+	[+]	+		+	+		[+]			
ACT OF BREATHING	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
(breath of) life	+	+	+	+	+	+	+	+		+	+	+			
living being, animal	[+]	[+]		[+]		[+]									
vital force of individual	+	+	+	+	+	+	+	+		+		+	+	+	
person; self	+	+		+	+							[+]	[+]		
oneself (reflexive)	+											[+]	[+]		
mind, thought	+	+	+	[+]	+	+	+	+				+	[+]		
intelligence, wit	+	+													
will and feelings: heart		+	+	[+]	+	+	+					+			
pride, arrogance, wrath			+	[+]	+	+	[+]								
frame of mind, mood		+		[+]	+	+	+					+			
soul of indiv. (immortal)	+	+		+	+	[+]		+				+		+	
ghost		+		+		+		+				+			
divine breath or power			+		+	+						+			
magic power, inspiration			+		+	[+]						+			
supernatural being, God	+		+		+	+						+			

Lexical data on the polysemy of {BREATHE}

Colexification of {BREATHE}



BREATHE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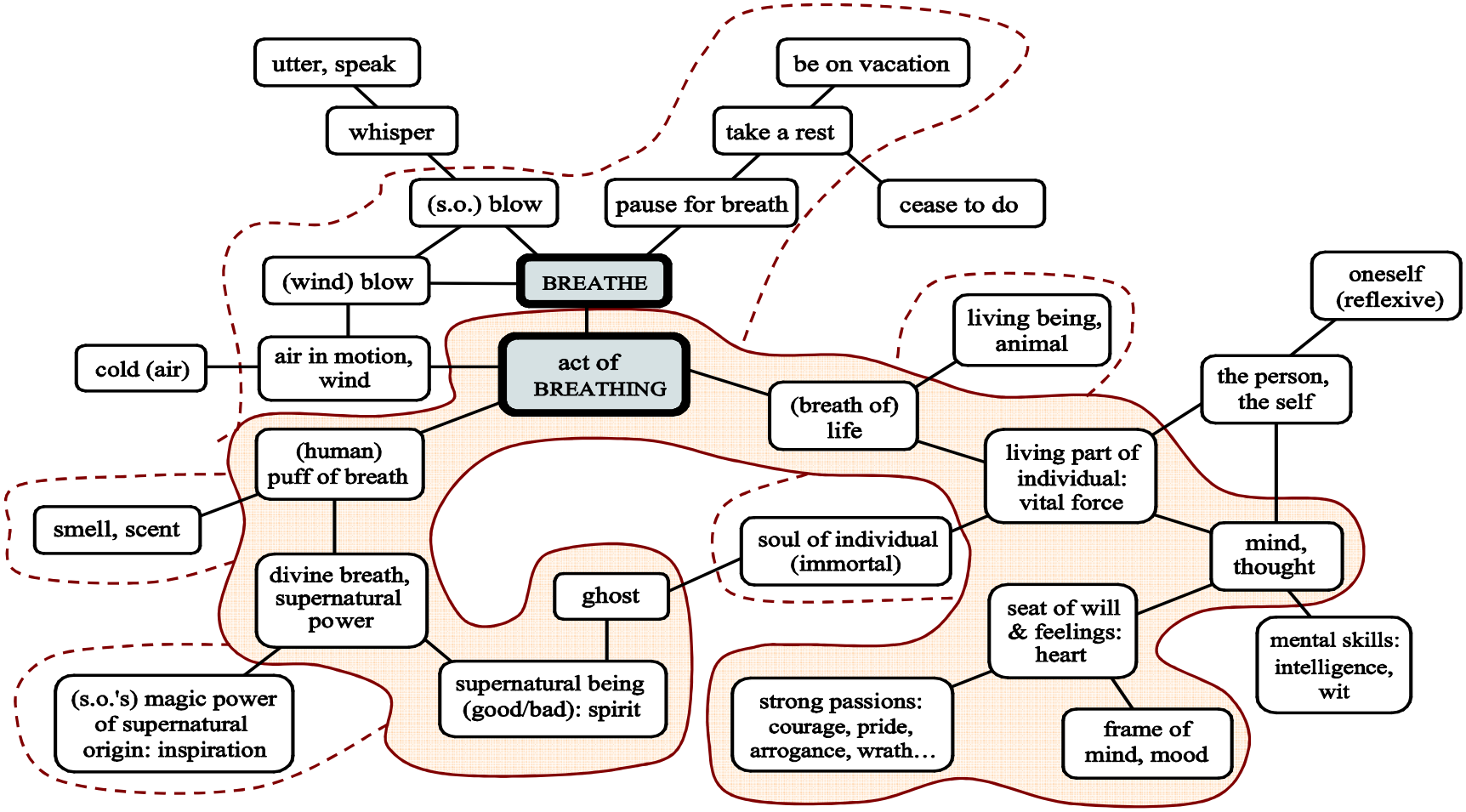
BREATHE
oneself (reflexive)
living being, animal
cold (air)
air in motion, wind
act of BREATHING
the person, the self
(breath of) life
(human) puff of breath
living part of individual: vital force
smell, scent
soul of individual (immortal)
mind, thought
divine breath, supernatural power
ghost
seat of will & feelings: heart
mental skills: intelligence, wit
(s.o.'s) magic power of supernatural origin: inspiration
supernatural being (good/bad): spirit
strong passions: courage, pride, arrogance, wrath…
frame of mind, mood

BREATHE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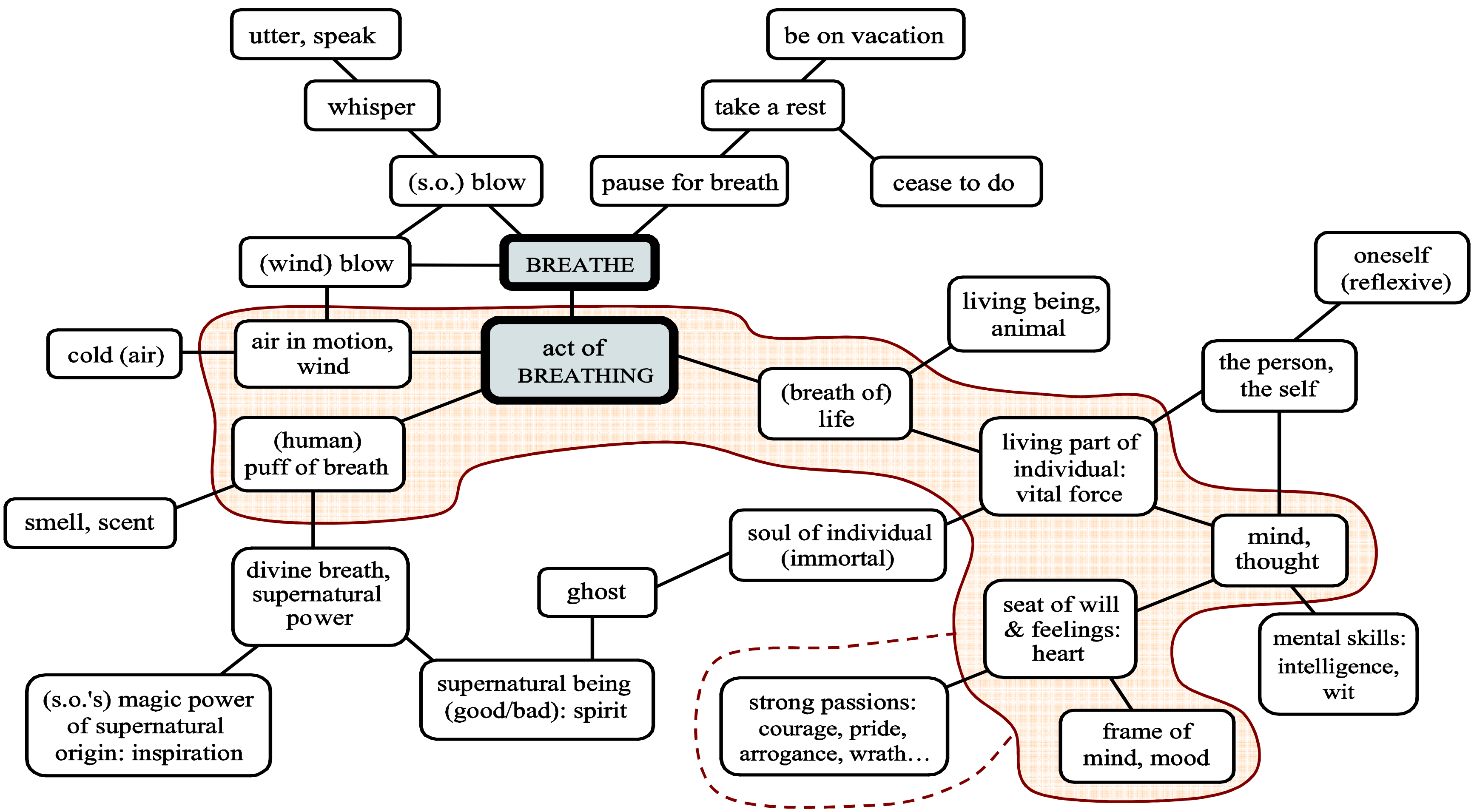
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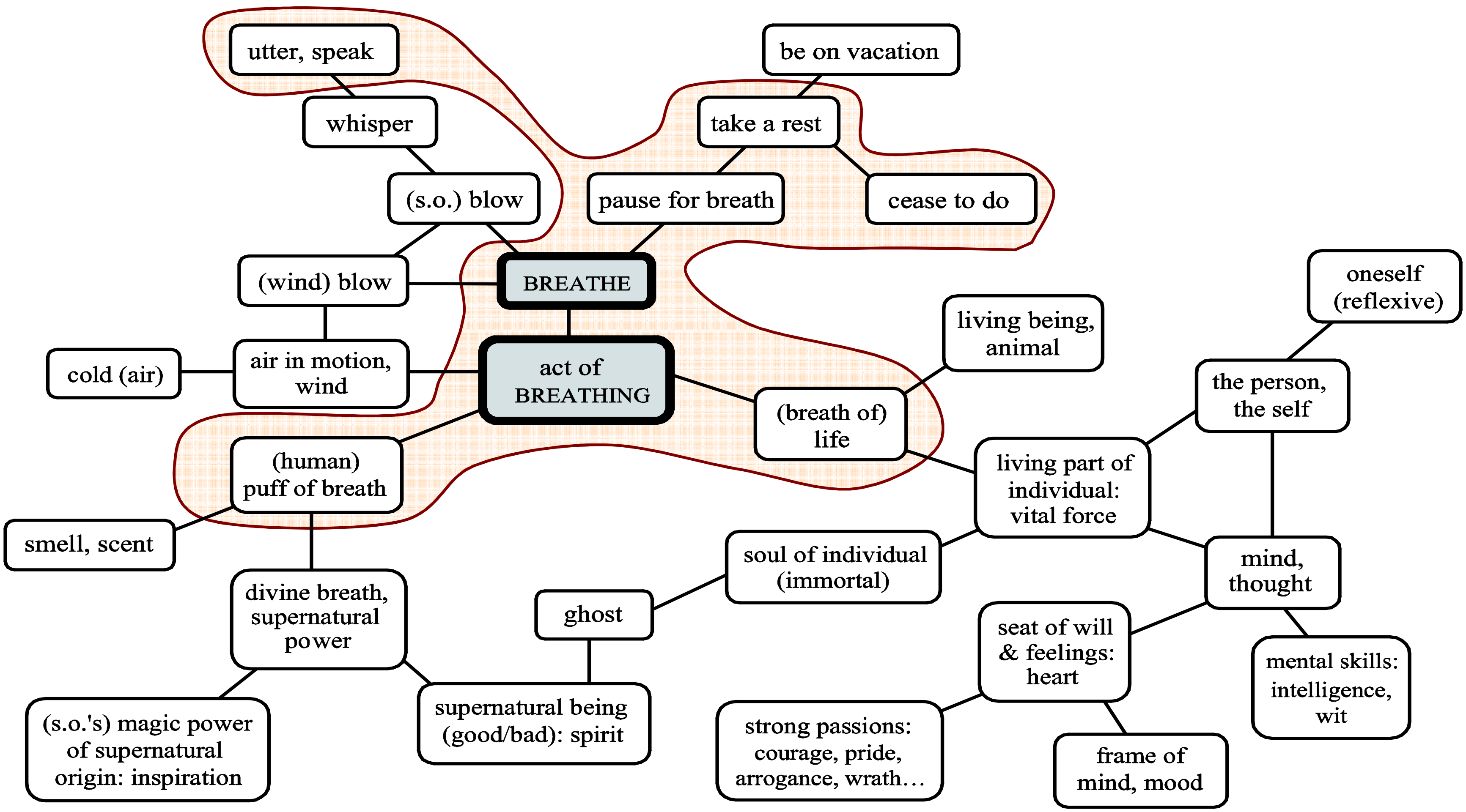

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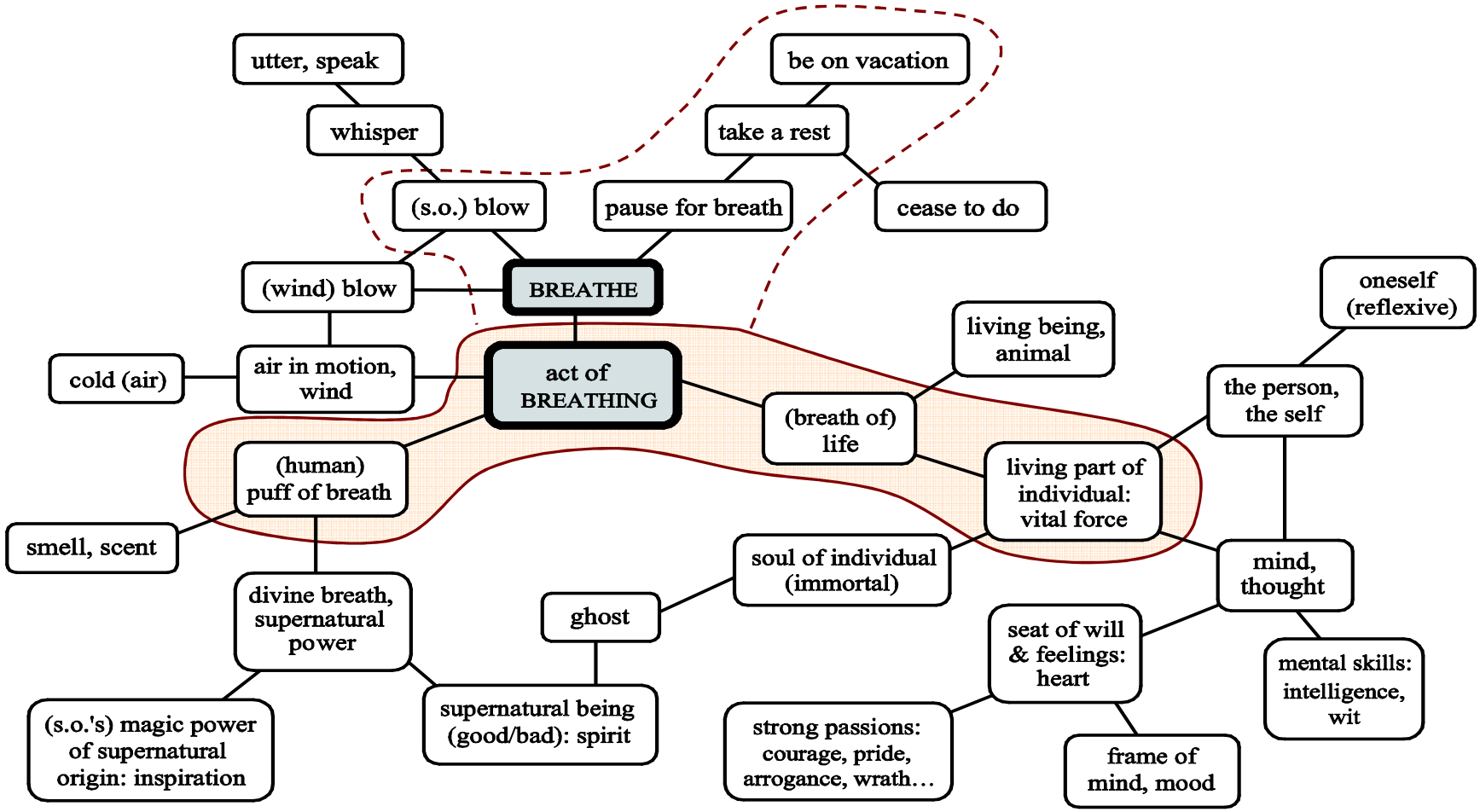
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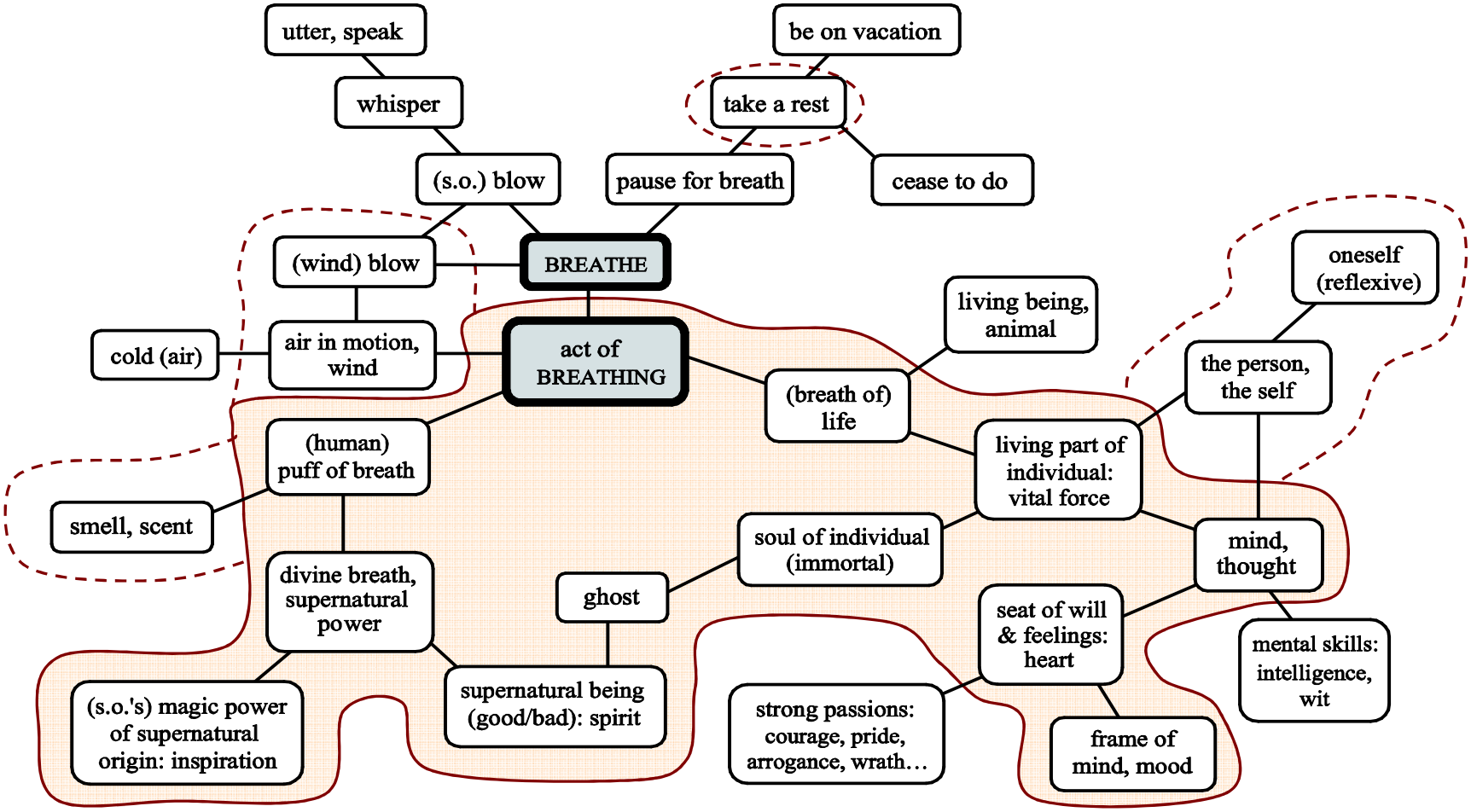
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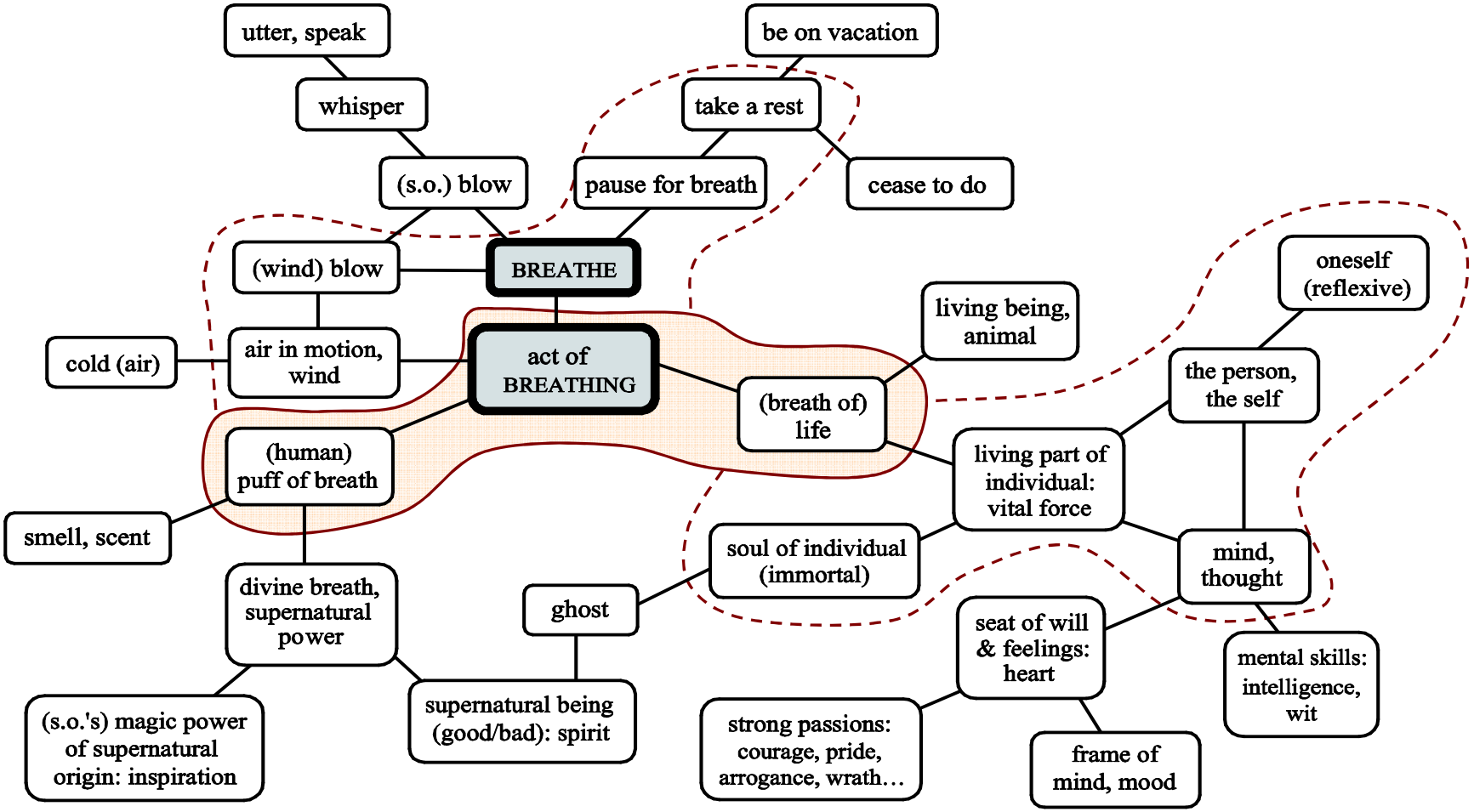
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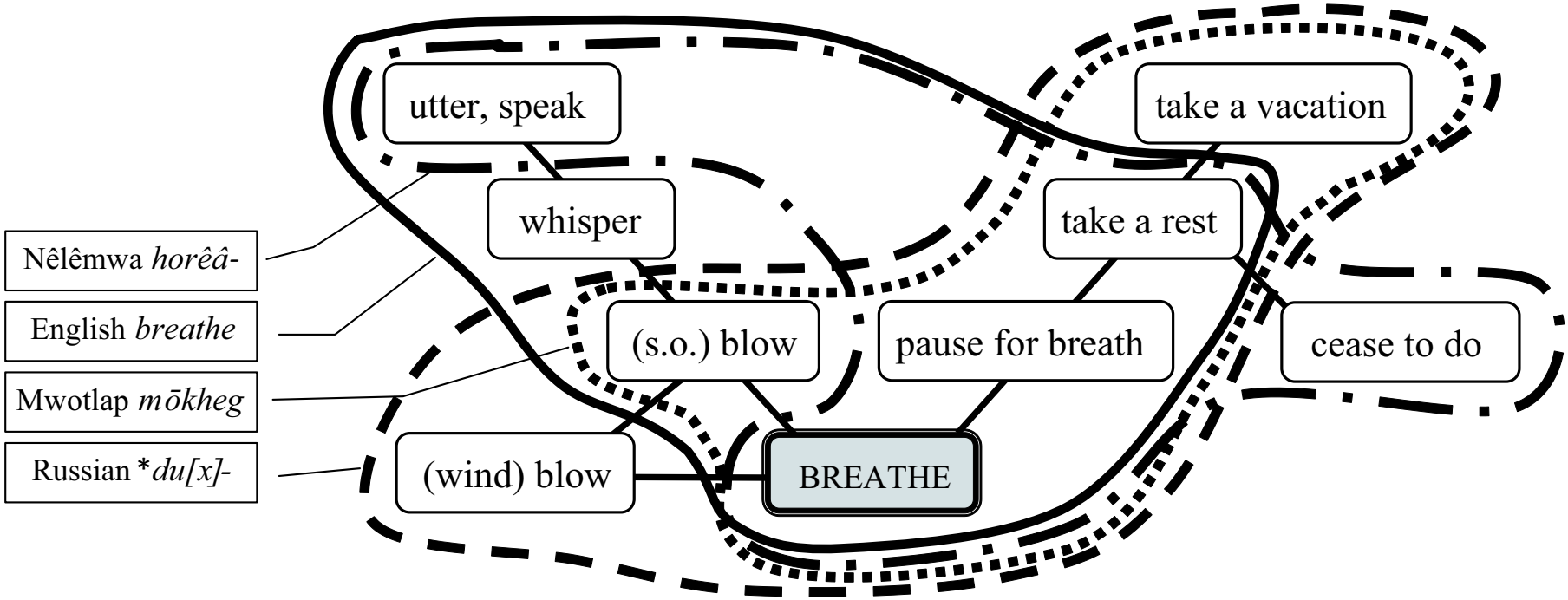
Some isolectic sets around the notion {BREATHE}



Typological research questions

- What proportion of the world's languages colexify <rectilinear> and <honest>
- Is this connection found only in a few scattered languages?
- Is it an areal phenomenon covering, say, Western Europe?
- Is it well represented in other parts of the world?
- Or is it universally common?

ONE RESULT

- Certain metaphors sometimes believed to be specific of certain civilizations (e.g. the connection ‘breath’ – ‘soul’ – ‘spirit’ found in the Bible) is in fact more widespread among the world’s cultures.