

**Locating what is “arbitrary”:
Sound symbolism as
conceptualization of oral gesture
in Czech and Japanese**

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One of the prevailing points of discussion on onomatopoeia: arbitrariness debate

- View 1: Sound-meaning relationship is arbitrary in language; onomatopoeia is an outlier (onomatopoeia is “primitive”) (Saussure 1916/1959; also Kořínek 1934, Stankiewicz 1964)
- View 2: Onomatopoeia as a unique part of language with a complex system (emphasis on the non-arbitrariness of sound-meaning relationship) (cf. Hamano 1998, studies in Hinton, Nichols and Ohala 1994)

Neither view denies non-arbitrary relationship between sound-meaning. Onomatopoeia is pushed to the side from the “rest of the language” one way or the other.

The main ideas

Starting point: “If linguistic theory is unable to cope with the problems posed by ideophones, there is something wrong with the theory.” (Childs 1994:199)

Questions:

Should we get fixated on arbitrariness - a bipolar notion of sound-meaning relationship, as though the former is a monolithic whole?

Is sound symbolism a “totally different kind of linguistic animal” (Diffloth 1976:251)?

Claims:

- Each language selects some aspect of an oral gesture and builds meanings around it. These meanings are related by family resemblance, forming a radial category (Lakoff 1987).
- Meanings of sound symbolic expressions result from conceptualization of oral gesture (Fidler, forthcoming).

Advantages:

1. The mechanism proposed is not specific to sound symbolism. Conceptualization of reality is at the base of language.
2. The mechanism simultaneously allows us to pin down the difference between onomatopoeia and “the rest of the language” while preserving the common property between the two.
3. The mechanism can motivate cross-linguistic differences in phonosemantics of sound symbolic expressions.

Samples used for illustration

- [i, i:] (“the I-sounds”) in Czech onomatopoeic expressions (**OpEs**) (mostly monosyllabic, e.g. *pi*, *fí*, *ryc* but also suffix-like i-sounds e.g. *cupity* (data mostly from the Czech National Corpus) (part of 400+ types based on dictionary entries)
- For comparison Hamano’s research (1998) on the CV root in Japanese mimetic expressions, e.g. piN, piQ (N=syll. moraic nasals Q=glottal stop)

What existing literature says about high vowels

- High vowels are associated with small size and low vowels with large size (Hinton et al. 1994).
- Biological motivations (Ohala 1994)
- BUT – there is evidence that the association between vowel-height and magnitude may be reversed (Diffloth 1994) (Bahnar expressives)

high front vowels

- Articulation of high front vowels and their resulting sounds can be described with infinite degrees of granularity. It includes:
 1. The ridge of the tongue is raised towards the palate.
 2. The size of the oral cavity is decreased or narrowed.
 3. The volume of the tongue in the mouth is large.
 4. The tongue tip is directed downwards towards the low front teeth.
 5. The back of the tongue moves high towards the palate.
 6. The articulatory gesture results in a high-frequency sound
 7. The lips are stretched horizontally.
- ...
- ...

Czech l-sounds: sound produced by a small resonator

1. Jste malá ptáček, která neumí ještě létat [...] musí každé volat ***pí pí pí***.
(Koťátková 2005:170, italics in the original)
'You are small baby birds who don't know how to fly yet [...] each one must call out ***pí, pí, pí***.'
2. cvrček vylezl ze svého úkrytu a mysle si, že je sám, začal se svým **kry-kry, kry-kry...** (SYN2005)
'[...] a cricket crawled out of its hideout and, thinking that it is alone, started with its ***kry-kry, kry-kry***.'
3. Vrabčáci dělají **čim-čim-čim**
'Little sparrows go [lit. do] ***čim-čim-čim***'

Czech I-sounds:

smallness (shortness) of duration of sound, event

1. Karel začíná zuřivě blikat na protijedoucí vozidla: **blik**, policie, **blik**, **blik**, radar. Malá solidarita mezi řidiči proti společnému nepříteli
'Karel starts to flash [the headlights] ferociously at the vehicles going in the opposite direction: **blik**, police, **blik**, **blik**, a radar. A small solidarity among drivers against the common enemy.'
2. blýskala tam světýlka svíček, v pohybu plamínek slyšel: **bzí**k, **bzí**k, **bzí**k... okno se vlnilo křídly, křidélky černými, šedivými, mušky, komáři, mouchy, křídlaté mûry se ve světle svíjely v chumlu,
'there shone lights of candles. In the movement of flames [he] heard: **bzí**k, **bzí**k, **bzí**k... the window was billowing with wings, black and gray wings, little flies, mosquitoes, [...]

Czech I-sounds:

Smallness of value, “insignificant” (negative evaluation)

A když našel krabičku a zapaloval zápalku za zápalkou, byl velmi nespokojen: ani jedna nechytla. "**Fi na to!**"

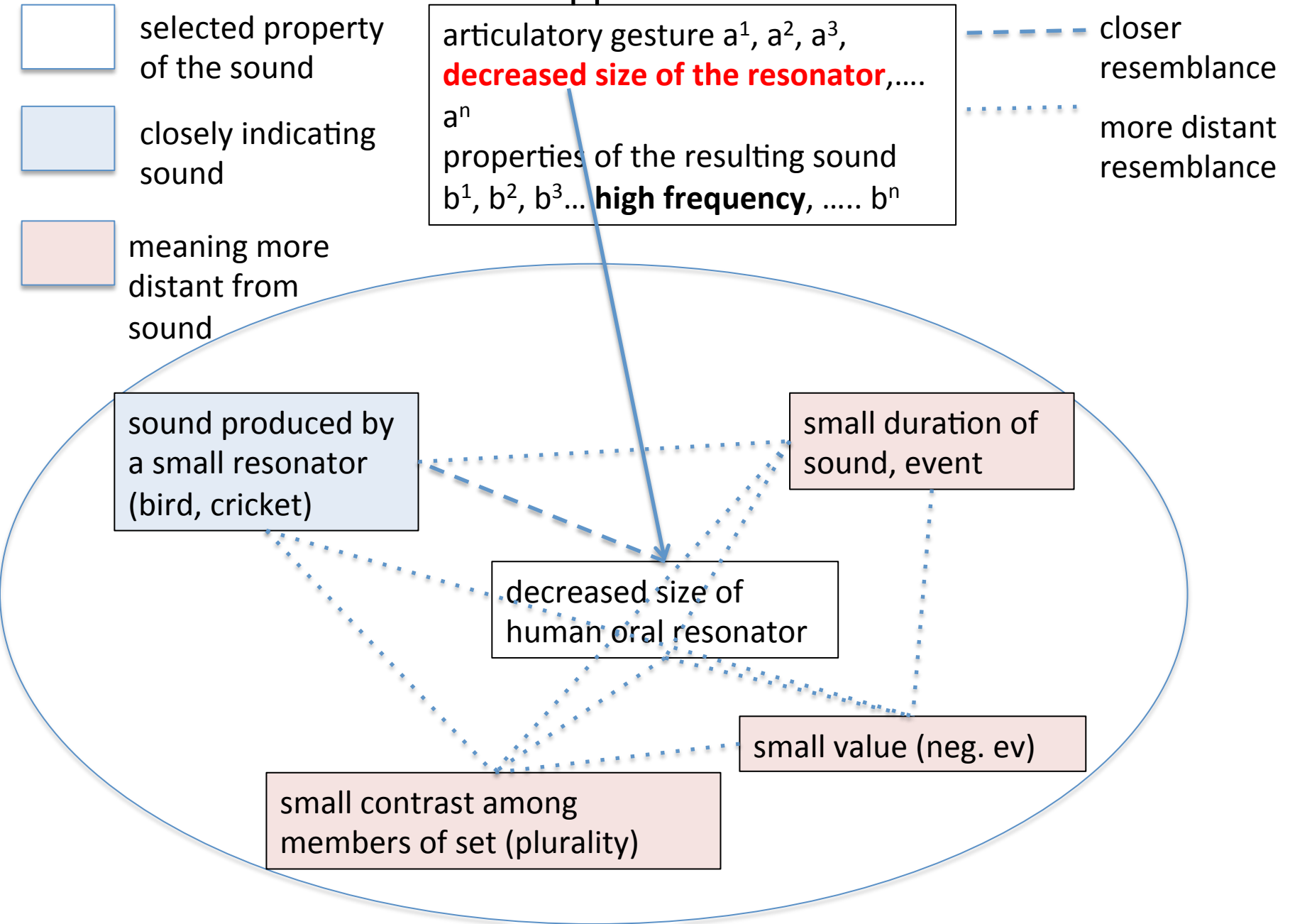
‘And when he found a [match] box and tried to light up a match one after another, he was very dissatisfied: not a single one lit up. “**Damn it!**’ [lit. **Fi** at it]’

Czech l-sounds:

plurality -- little contrast among members of a set – plural nouns are less individuated (Timberlake 1975) than singular nouns

1. Když vtom **cupy dupy, dupy cupy**, blíží se k nim jelínek (SYN)
'when at that moment **cupy dupy, dupy cupy**, a buck is approaching'
2. Déšť Běhá to okolo chalupy a dělá **cupity dupity**. (SYN)
'Rain It runs around the cottage and does **cupity dupity**.'
3. a tak jsme se mnohé odvážily do plavek a **šupky hupky** do vody (SYN)
'and thus many of us dared to get into the swimsuit and **šupky hupky** into the water.'

Meanings associated with the l-sounds in Czech OpEs: first approximation



Czech l-sounds: high-frequency sounds

a sound of a digital alarm clock, clinking of ceramic cups, a piece of cloth being ripped off.

1. **Pi pi pi pi. Pi pi pi pi. Pi pi pi pi.** Budík pipipipitomej. (loar.bloguje.cz/0503archiv.php, accessed by Google)
'Pi pi pi pi. Pi pi pi pi. Pi pi pi pi. The stupid alarm clock.'
2. **Cink, cink, cink** zvonil šálek.
'Cink, cink, cink the cup resounded.'
3. Nejdřív mu pruboval kabát a dělal na sukno křídou čáry-máry a **ryc!**,
utrhl mu límec u kabátu a pak ho zase přišpendlil
'First he examined his coat and made scribbles with chalk on the
material and **ryc!**, he tore off his collar on the coat and then put it back
again with a needle.'

Czech l-sounds: Startling sound (cause for raised alarm)

Řink! Cínový pohár dopadl na podlahu. [...] **Řink!** Skleněná výplň okna se vysypala. (drakkar.rpgplanet.cz/download/drakkar_2007_03_srpen.pdf, accessed 6/23/08)

‘Řink! A cup made of zinc fell on the floor. **‘Řink!** A glass pane of the window fell shattering into pieces.’

“Noteworthy” – high in value
(positive evaluation)

Sláva hoře! **Jipíííí!**" Dana se zasmála

‘Glory to the mountain! ***Jipíííí!***’ Dana laughed.’

Meanings associated with the I-sounds in Czech OpEs: further approximation

articulatory gesture $a^1, a^2, a^3, \dots a^n$
decreased size of resonator, a^n
properties of the resulting sound
 $b^1, b^2, b^3 \dots$ **high frequency**, b^n

decreased
size of
human oral
resonator

high frequency
sound (alarm clock,
clinking of cups,
cloth ripping)

high frequency sound
(resulting from the
oral gesture)

startling sound
(cause for
raised alert)

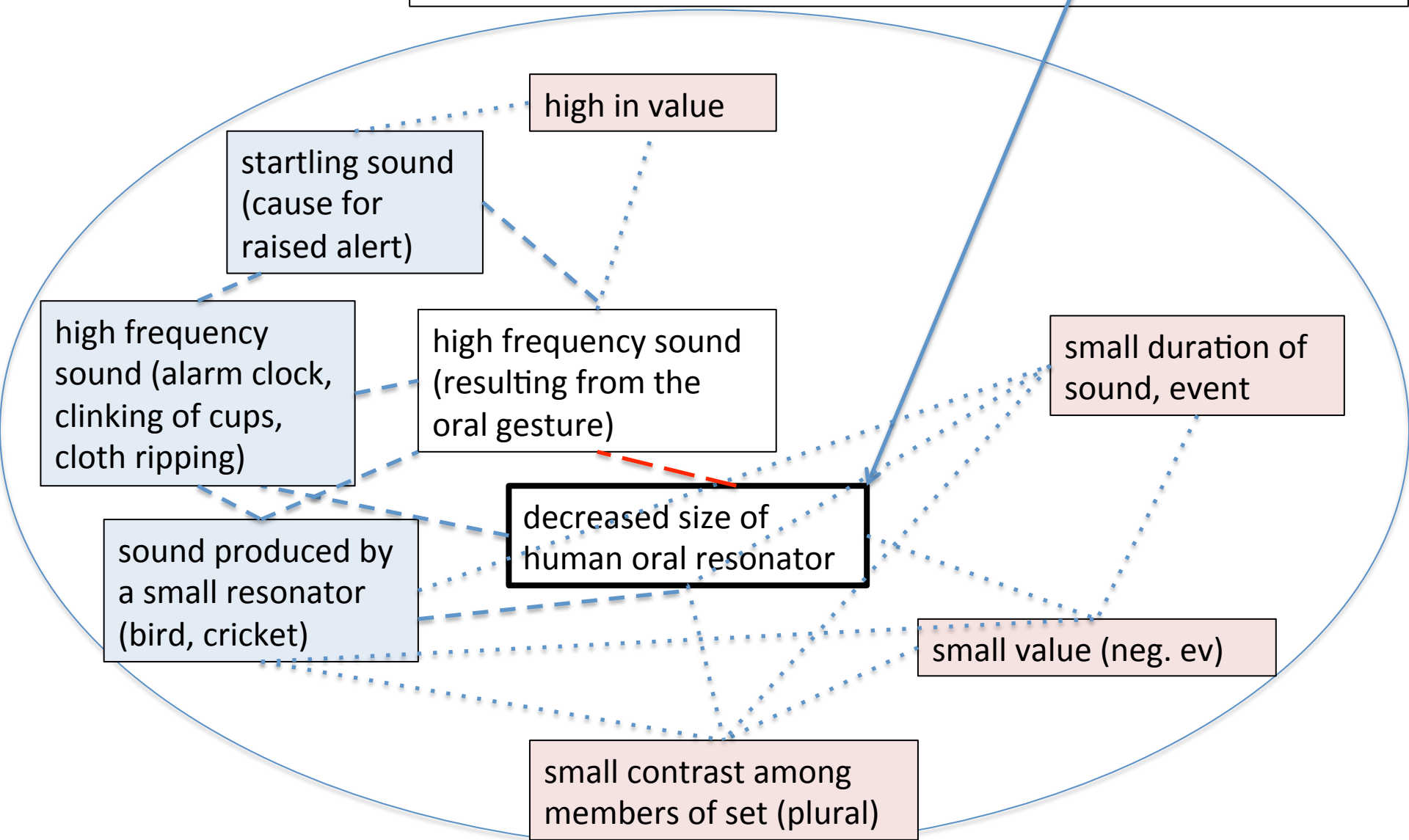
high in value

connection
related to
the I-sounds
themselves



Meanings associated with the l-sounds in Czech OpEs

articulatory gesture a^1, a^2, a^3 , **decreased size of the resonator**, a^n
properties of the resulting sound b^1, b^2, b^3 ... high frequency, b^n



Japanese mimetic words (Hamano 1998: 76)

situations represented by CV roots

- piN

striking a string (and producing a high-pitched sound)

stretching a cloth/string/rope/fishing line

stiff peaks of foam, a stiff mustache, or stiff ears

a tense atmosphere or sharpness of sensation/intuition

jumping movement of a thin object as a fish or a tail

the way glasses/cups/china crack with one or a few lines

- piQ

a shrill high-pitched sound of a whistle or a sharp cry of a small bird

tearing cloth

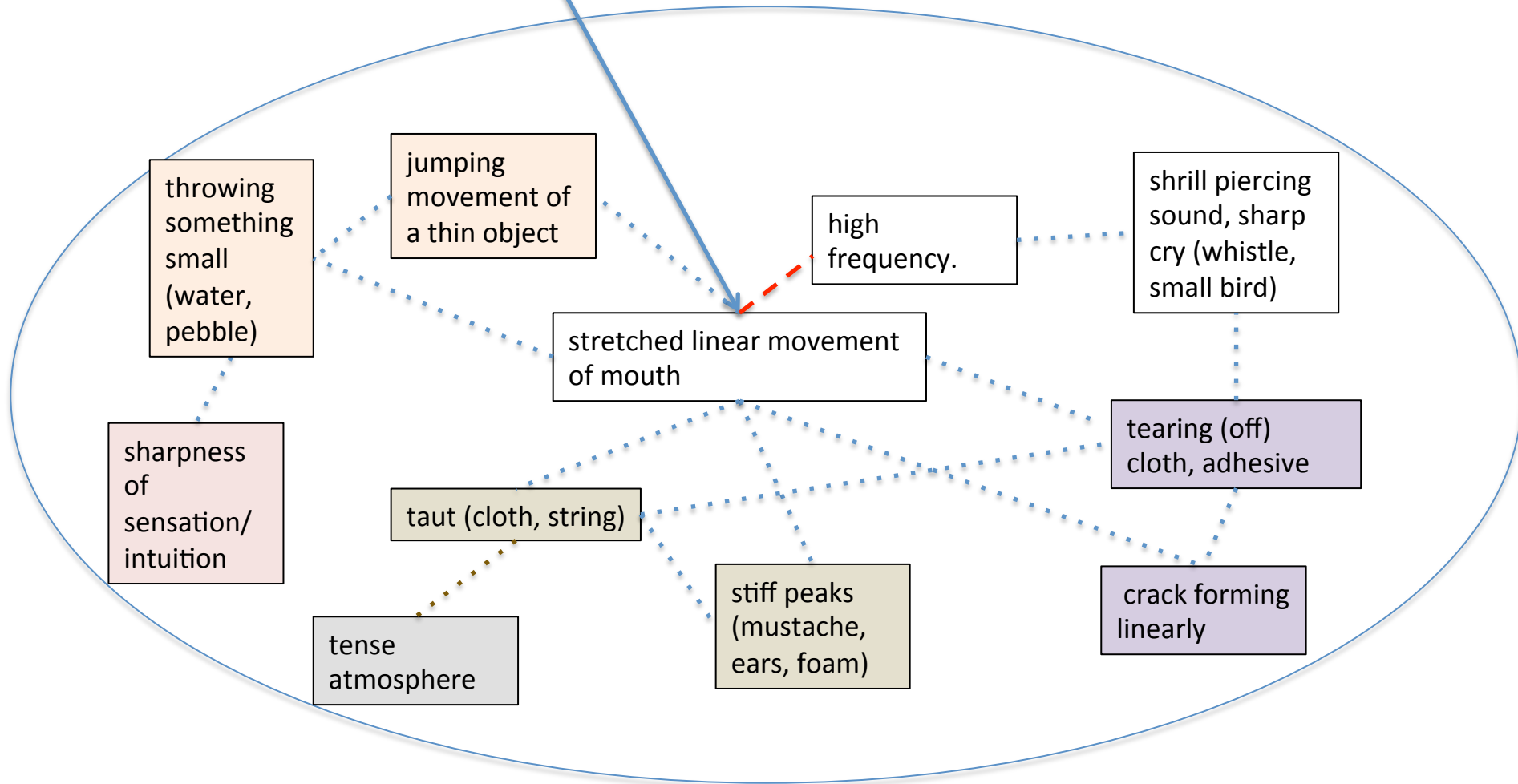
tearing off adhesive tape

throwing something small such as a small amount of water or a pebble over a long distance

the high vowel /i/ in Japanese indicates “the involvement of a line or a unilinearly stretched object.”

/i/ in CV mimetic words in Japanese

articulatory gesture a^1, a^2, a^3 , decreased size of resonator,
stretched linear movement of the mouth.... a^n
properties of the resulting sound b^1, b^2, b^3 ... **high frequency**, b^n



Back to the arbitrariness debate and the exclusiveness of onomatopoeia

- What to do with +/-arbitrary relationship between sound and meaning.

Perhaps “arbitrariness” is not a good term.

Each language chooses some aspect(s) of an oral gesture (conceptualizes the sound). This process of conceptualization is at the core of form-meaning relationship in language.

- Is sound symbolism a “totally different kind of linguistic animal” (Diffloth 1976:251)?

Not “totally”. *Some* aspects of oral gesture spawn meanings but the meanings are motivated by a similar mechanism as elsewhere in language.

Conclusions connecting to theories (1)

- The cognitive linguistic notion of radial category (Lakoff 1987) motivates semantics of sound symbolism as well as non-sound symbolism (sound symbolic expressions don't belong to the linguistic ghetto)
- The cognitive linguistic notion of radial category can account for cross-linguistic differences in phonosemantics of sound symbolism
- The proposed model is consistent with existing research:
 - Research on oral gesture is used to explain linguistic phenomena (Paget 1930, more recently Taunmüller 1996).
 - Selection of aspects of utterance is common to a non-sound symbolic linguistic phenomenon (direct quotations (Clark and Gerrig 1990)
 - Common ground between sound symbolism and “the rest of the language” vis-à-vis word formation (Bolinger 1950, Rhodes 1994, Bergen 2004)

Conclusions and connecting to theories (2)

- Model based on the universality of *mechanism* rather than the universality of the outcomes. (parallel to the usage-based model Bybee et al. 1994, Bybee 1995, 2001, 2006, 2010)
- The process of selection in conveying meaning is widespread. The process of blending multiple mental spaces is "at the root of what makes us human", and blending involves "*selective projection* [sic]" from the input mental spaces (Turner 2003) = only selected parts and relations from a set of meanings are used to yield a new meaning.
- Selection process takes place also on many levels: some words are primed (for metaphor, grammar, lexical relations, polysemy, text) (Hoey 2005)

Perhaps this story responds well to Childs' 1994 statement.

A cognitive linguistic approach can (perhaps) cope with one big issue regarding "arbitrariness" in language. It may liberate onomatopoeia from the "ghetto" where other approaches would like to put it.

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