

UNIVERSALITY OF ONOMATOPOEIC WORDS DECREASES WITH DE-ICONIZATION



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Summary:

1. Material and methods
2. Iconicity by onomatopoeic coinage: How we imitate
3. Iconicity by onomatopoeic coinage: arbitrary restrictions
4. Iconicity and diachronic research
5. Universality of onomatopoeic words
6. Conclusions



1. Material and methods

English

✓ *3d edition of the Oxford English Dictionary (OED):*

<https://www-oed-com.emedien.ub.uni-muenchen.de/>

✓ *Written Sound* <http://www.writtensound.com/index.php>

✓ linguistic articles

1244 words imitative (by origin)

688 onomatopoeic words (denote sounds)

+ Taylor (2007) 1200 words



1. Material and methods

Russian

- ✓ Vasmer (2009). an etymological dictionary of the Russian language
- ✓ + Shliakhova (2004) 1500 words

550 onomatopoeic words

- ✓ etymological analysis
- ✓ method of phonosemantic analysis
 - ✓ semantic analysis
 - ✓ comparative method



2. Iconicity by onomatopoeic coinage: How we imitate

Onomatopoeic ideophones / interjections

- ✓ newly coined imitative words have a very ‘diffuse’ form and a poorly defined meaning related to sensory imagery
- ✓ it is often difficult to draw a strict line between phonetics and phonology;
- ✓ an imitative word is self-evident both in form and in its (situational, ‘here-and-now’) meaning;
- ✓ onomatopoeic exclamations and ideophones are ‘performed’ rather than conveyed

**Imitative
coinage is not
so simple!**



2. Iconicity by onomatopoeic coinage: How we imitate

acoustic characteristics of the natural sounds (pitch, length, etc.)

sequence of acoustic segments in natural sounds

imagic
iconicity

diagrammatic
iconicity

acoustic characteristics of onomatopoeic words (pitch, length, etc.)

sequence of acoustic segments in speech

**Imitative
coinage is not
so simple!**

pre-language cognitive metaphor

Davydova, 2022 (in print)

sound of air coming out of a pierced tire
an abrupt repetitive sound (of raindrops)

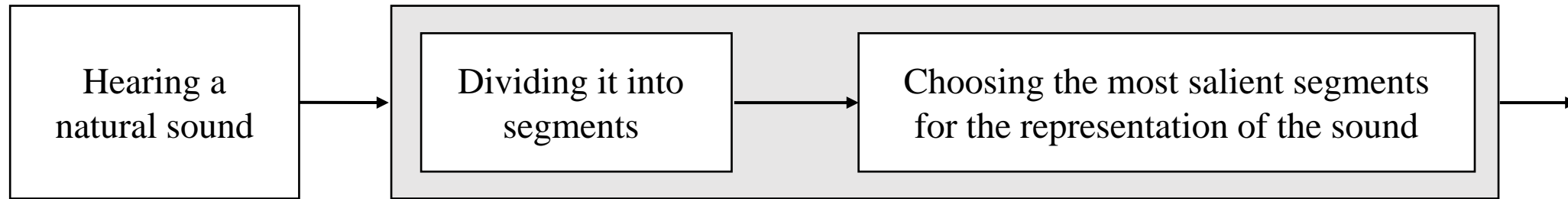
Rus. *sh-sh-sh*

Rus. *kap-kap*

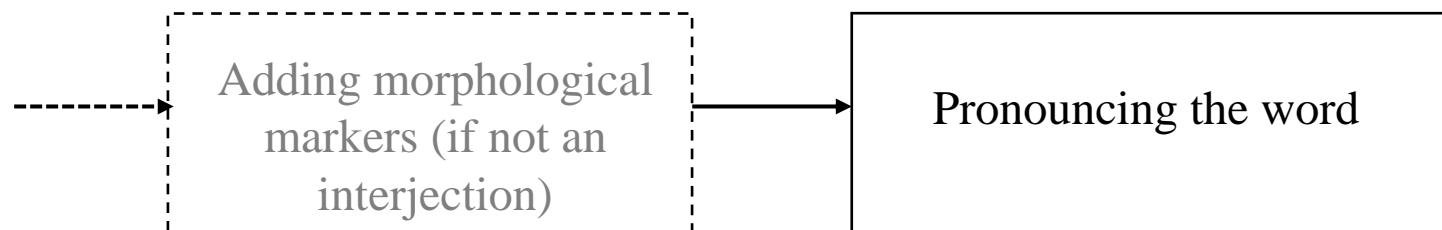
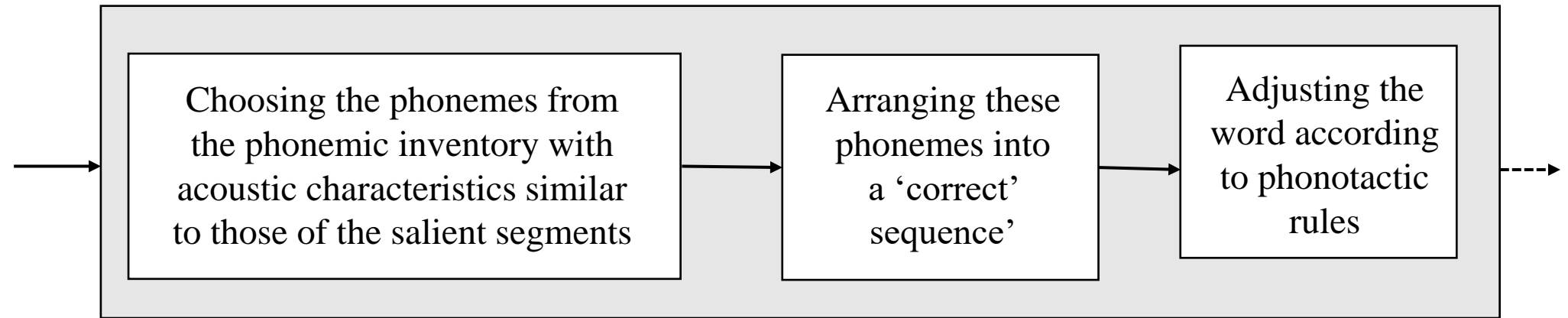
Davydova, 2022 (in print): pre-language **cognitive metonymy** is the basis of mimetic sound symbolism (words like *cough*, *mwah* or *teeny*, *bubble* etc.); iconic correlation is between articulatory gestures and movements / shapes / sizes etc.



2. Iconicity by onomatopoeic coinage: How we imitate



**Imitative
coinage is
not so
simple!**

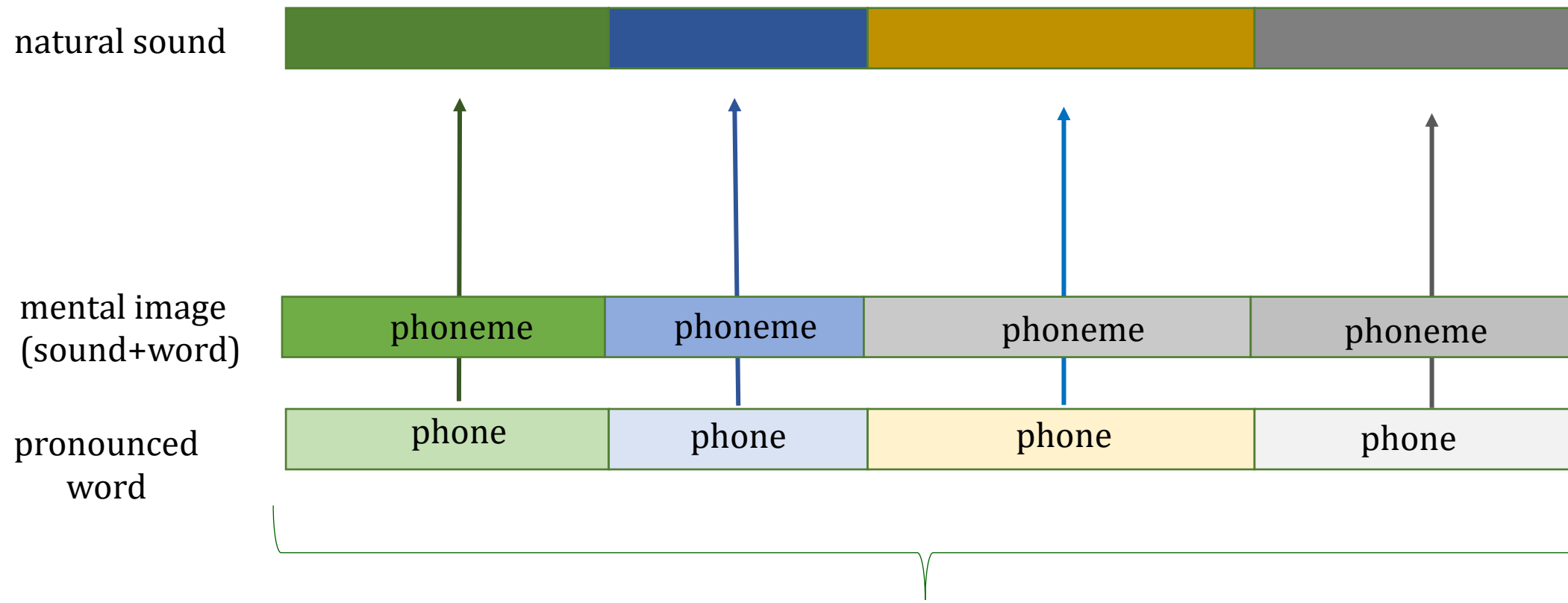


Flaksman, in print



2. Iconicity by onomatopoeic coinage: how we imitate

Phonemes in onomatopoeic words have an additional, *imitative function* (function of reference to types of natural sounds)



Imitative coinage is not so simple!

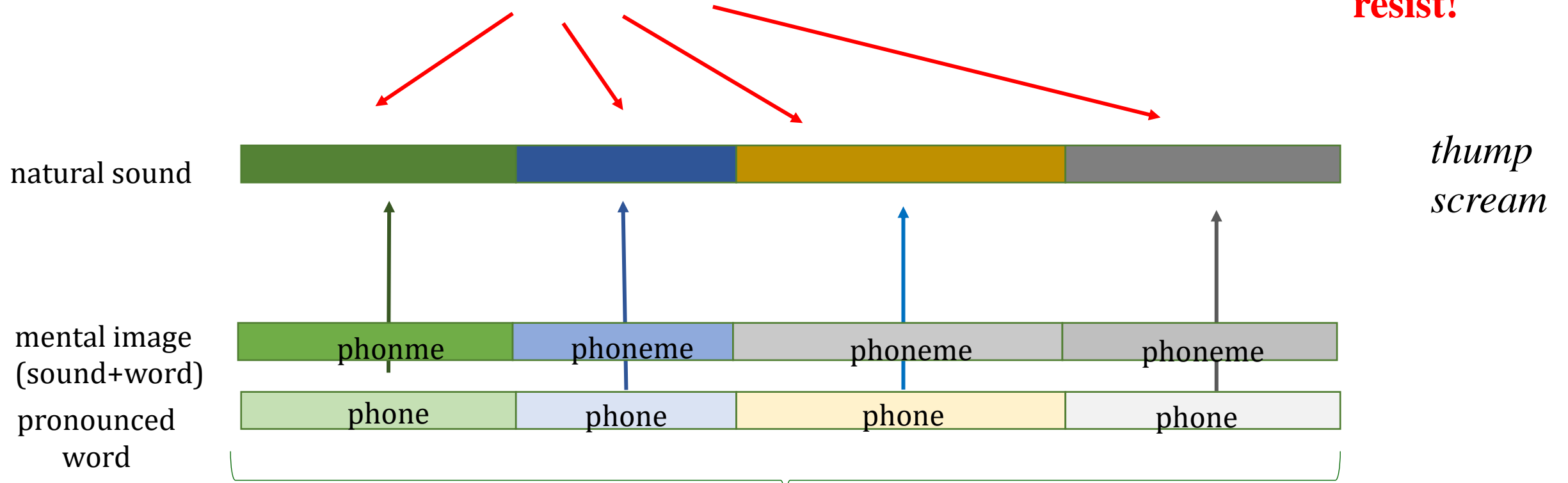
sound of a certain type with certain salient acoustic characteristics



3. Iconicity by onomatopoeic coinage: arbitrary restrictions

arbitrary restriction 1: phonemic inventories

ideophones resist!



arbitrary restriction 2: rules of phonotactics



3. Iconicity by onomatopoeic coinage: arbitrary restrictions

arbitrary restriction 3: Multiple-nomination law

One and the same concept may have different (iconic) motifs of nomination and vice versa – one and the same motif of nomination may be encountered in several concepts

(Voronin, 2006: 185)

I. one concept (a dog's bark) can have several *motifs* of nomination:

(1) a ha low-pitched 'howling' sound (rendered by *aroo*, *kyoodle*, *bow-wow*);

(2) high-pitched 'yelping' sound (*ki-yi*, *yip*, *yelp*);

(3) a low-pitched 'growling' sound (*ruff*, *woof*, *aroo*, *arr*);

(4) a sharp, abruptly ending sound (*arf*, *waff*, *buff*, *wuff*, *yaff*, *bay*, *yap*), etc. - see Shamina (2017)

many-to-many mapping by imitative
coinage

II. the same motif of nomination (a high-pitched tone) is encountered in several *concepts*:

(1) *beep* 'sound made by a horn'

(2) *peep* 'a sound of a young bird or mouse'

(3) *bleep* 'a radio signal'

4. Iconicity and diachronic research

PDE	/la:f/	<i>clip</i> 'to reduce, cut down'
ModE	<i>lauff</i>	<i>clip</i> 'to cut short, curtail, diminish'
IME	<i>lagh</i>	<i>clippen</i> 'to shear (sheep)'
eME	<i>lachze</i>	<i>clippen</i> 'to cut'
OE	<i>hlahhan</i>	ON <i>klippa</i> 'to cut'
PG	* <i>klakhjan</i>	? * <i>klip-</i> 'to make a sharp sound'

Language change is dangerous for iconicity!



4. Iconicity and diachronic research

THE METHOD OF DIACHRONIC EVALUATION OF IMITATIVE LEXICON

(M.A. Flaksman 2015)

De-iconization is the gradual loss of iconicity caused by parallel acting of regular sound changes and regular sense development of a word (Flaksman 2015, 2017)

Method of diachronic evaluation of iconic lexicon

- ❖ establishing the regular sound changes a word has undergone and whether these sound changes were phonosemantically significant;
- ❖ establishing semantic shifts the word has undergone and whether it still retains its original (sound-related) meaning;
- ❖ establishing the word's degree of phonetic, morphological, and syntactic integration



Stages of de-iconization

	SD-1	SD-2	SD-3a	SD-3b	SD-4
integration	-	+	+	+	+
phonosemantically significant regular sound changes	-	-	+	-	+
considerable semantic shifts	-	-	-	+	+

- SD-1** onomatopoeic **interjections**, or in some languages, **ideophones**, newly the least conventional, poorly integrated into the language both syntactically and morphologically
- SD-2** imitative nouns, verbs, adjectives; well-integrated and expressive at the same time
- SD-3a** have undergone either some form or meaning changes, thus, having their expressivity considerably lessened
- SD-3b**
- SD-4** both their form and meaning have changed to such extent that they can only be named 'iconic' from the historical perspective

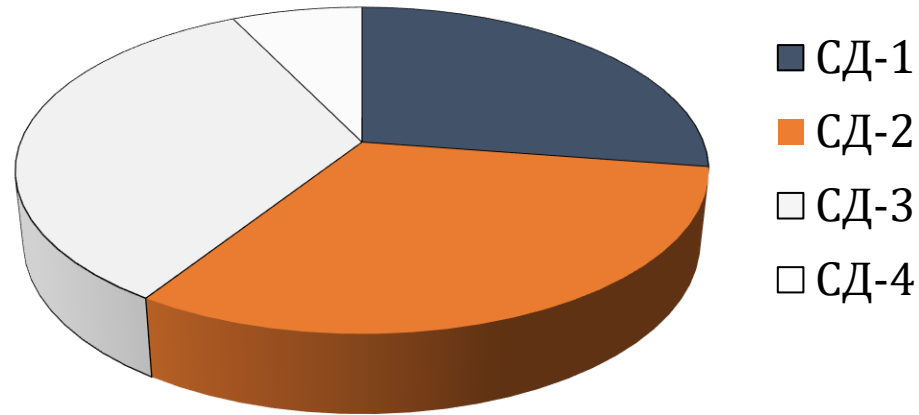


Stages of de-iconization

Examples					
	<i>English</i>	<i>Old English</i>	<i>Icelandic</i>	<i>Russian</i>	<i>Proto-Germanic</i>
SD-1	bzz! zzz! tlok-tlok!	ea! eáw! ' <i>alas!</i> '	bja ' <i>fie!</i> '	<i>bzzz</i> 'buzzing' <i>ha-ha</i> <i>ku-ku</i>	-
SD-2	buzz screech	hlahhan 'to laugh' cearm 'singing, charm' fneosan 'to sneeze' galan 'to yell'	hrópa 'to shout' gagga 'to bark'	<i>pisk</i> <i>shurshanie</i> <i>strekot</i>	*fneusan- 'to sneeze' *fīsan- 'to blow' *bremman- 'to drone, hum'
SD-3a SD-3b	laugh cliché	galdor 'incantation'	bjalla 'a bell'	<i>suslik</i> <i>klukva</i>	*knīpan- 'to pinch' *hraban- 'a raven' *uwwilōn- 'an owl'
SD-4	gargoyle butter	cu 'cow'	rabarbari 'rhubarb'	<i>drozd</i>	-

Modern English imitative words according to de-iconization stages

(data from Flaksman 2015)



De-iconization of ModE imitative words

Examples:

SD-1 *bzz! zzz! tlok-tlok;*

SD-2 *buzz, screech;*

SD-3a *laugh*, **SD-3b** *cliché* ;

SD-4 *gargoyle, butter*

CD-1	347	28%
CD-2	401	32%
CD-3	427	33%
CD-4	91	7%



Occasional onomatopoeic/mimetic interjections in English

Number of entries: **1198** (after grouping):

BAM [Attack #41, 1983] The sound of a gunshot; the sound of an explosion, a sound made by pounding on a door, the sound of a plant pot to the head: [Emiril Live, TV] the sound of kicking it up a notch;

BHWOOOM [Batman #502, 1993] The sound of an explosion;

BWOP [Captain Marvel vol.1 #42, 1976] A hitting sound;

CRRR [The Adventures of Tintin: Explorers on the Moon, 1954] The sound of radio static;

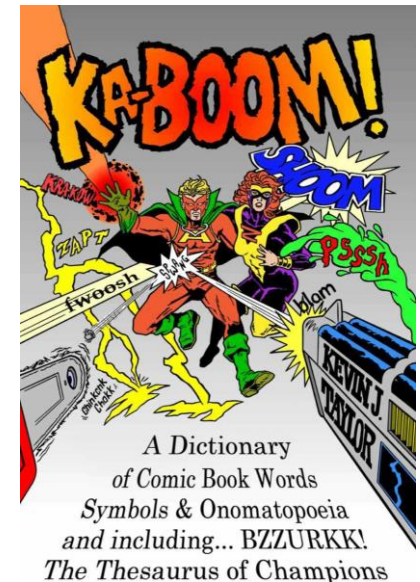
FZSSSSSSSSSS [MAD #217, Sept. 1980] The sound of champagne fizzing;

GLOOP [MAD #211, Dec. 1979] The sound of food being splashed: [MAD #233, Sept. 1982] A soup sound;

KTAK [Clint #1, 1986] The sound of an object breaking;

TOOOOO [MAD #238, Apr. 1983] The sound of an alarm.

SD-1



Characteristic traits of English occasional imitative interjections:

SD-1

- Expressive vowel lengthening (KA ROOOOM The sound of a shattering blow)
- Gemination (ZZZCHATHZZZ The sound of an energy discharge)
- No phonotactic constraints (VREET The sound made by an Energy Beam; ZZRAKSH The sound of electronic weapon fire)
- (Proto)morphology characteristic of (only) imitative words (KA CHOOM The sound of an exploding nerve gas canister),
- Reduplication (BLAT BLAT The sound of a truck's air horn)
- Expressive ablaut (BING BONG The sound of a doorbell)



Occasional onomatopoeic/mimetic interjections in English

plosives : abrupt sounds, hits

- English: *tap* ‘to strike (something) lightly’;
 - English *click* ‘a short light often metallic sound’;
 - Bashkir: *tap* ‘an abrupt sound accompanying a fall of a heavy body’;
 - Chuvash *pat* ‘an imitation of something popping
-
- **BAP** [G.I.Joe vol.1 #61, 1987] The sound of an object being struck
 - **DIT** [MAD #177, Sept. 1975] The sound of a falling hat hitting a head
 - **TAK** [Dare Devil: The Man Without Fear vol.1 #5, 1994] The sound that a flipped coin makes when it bounces on a table

fricatives/sibilants: hissing, rustling noises

- English *hiss* ‘a voiceless fricative sound like that of a prolonged s’,
 - Turkish *fiš-* ‘hissing’;
 - Ossetian *syf-syf* ‘rustling’
-
- **ZZZT** [MAD's Don Martin Cooks Up More Tales, 1976] The sound of a beetle ending its flight by flying into an open mouth
 - **FSHSSSTTT** [Dead Pool: The Circle Chase 4, 1993] The burning sound of a magnesium flare
 - **FFF FFFT** [Clint #1, 1986] The sound of an airborne object in motion

Occasional onomatopoeic/mimetic interjections in Russian

SD-1

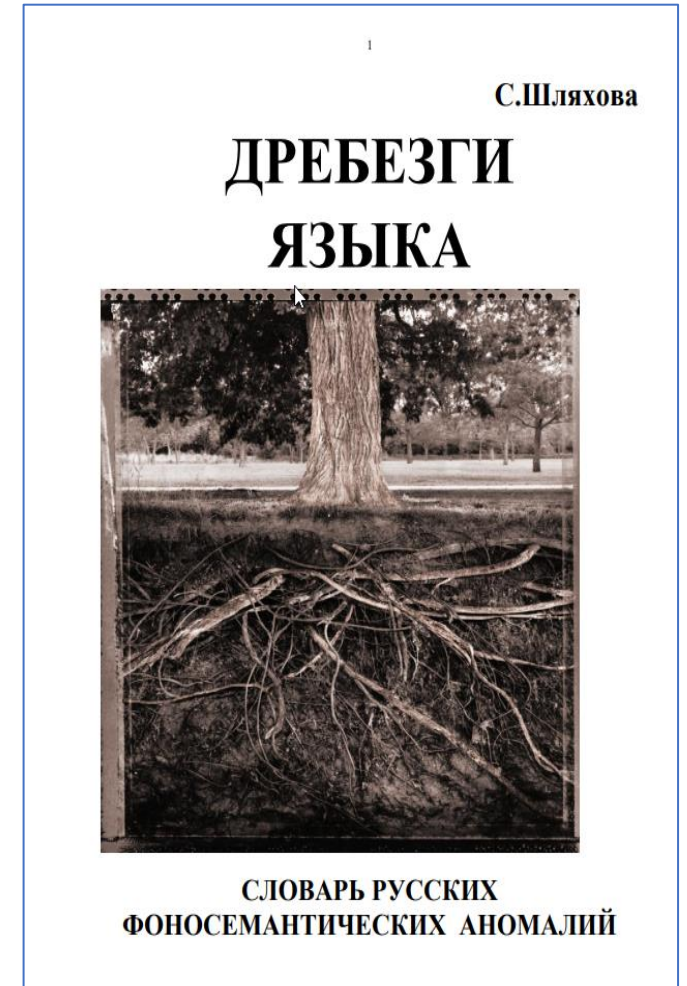
ca **1500** words (1876 with cross-references)
from Shliakhova (2004)

Shliakhova, S. S. (2004). *Drebezgi yazyka: slovar' russkijh fonosemanticheskikh anomalii*

[**Shards of language: a dictionary of Russian phonosemantic abnormalities**].

Perm: Perm Pedagogic University Press.

- colloquial words
- occasional words from literature (with quotations)
- dialect words
- child speech /*motherese



Occasional onomatopoeic/mimetic interjections in Russian

- **АМ** редупл. звукоподр. арт. БАВ 22. Звук кусания; хватание ртом. разг. детск. *Ам-ам кашку, давай ам-ам. Ам будешь? Давай Полюшка ам-ам. Смотри какая кашка. Ешь-ешь, глотай.*

АМ redupl., articulatory, type 22 – a sound of biting, chewing (child language)

- **БАМЦ** Звукосимв.Обозначает и/или указывает на что-л. быстрое, неожиданное и/или интенсивное (в том числе и действие, движение).

БАМТС sound symbolic, denotes something quick, swift, sudden or intense

- **БАМС** 1 звукоподр. акуст. АБ 10. 1. Звук удара, стука

БАМС onomatopoeic acoustic – a sound of a hit

- **БЕМ** редупл. звукоподр. акуст. АБ 10. Звук колокола. <> *Около избы десятского забили в чугунную доску. Бем, бем, бем. Бем, бем, бем.. - понеслось по воздуху, и от этого частого, неугомонного звона щемило за сердце и становилось холодно.*

БЕМ redupl., sound of a bell

SD-1



Occasional onomatopoeic/mimetic interjections in Russian

Onomatopoeic words:

BEM – redupl., onom. – sound of a bell;

BAMS – onomatopoeic acoustic – a sound of a hit;

TO-TI-TO – onomatopoeic, redupl. – imitation of singing;

KUDAKH-KUDAKH – redupl., onom. – hen’s cluck;

GOP – onom – sound of fall;

KROK – onom – cry of a crow;

P-SH – onom – sound of air stream;

SKR – red. onom., . screaming noise;

SKRLY – red. onom. dial. – screaming noise;

KLIK-KLÜK – red. onom – sound of teardrops;

P‘N‘– onom. – sound of a bullet;

FJUIT‘– onom. – cry of a bullfinch.

SD-1



Occasional onomatopoeic/mimetic interjections in Russian

- Expressive vowel lengthening (**UUU** wind blowing)
- Gemination (**RRR**- roaring; **BRR** indicating cold or disgust; PSH-SH sound of airstream)
- No phonotactic constraints (**HVIK** – whistling, **PFUF** – puffing, breathing out, **SKR** – screaming noise; **PCH-HI** sound of sneezing)
- Reduplication (**KHE-KHE** – coughing)
- Expressive ablaut (**KLIK-KLÜK** – sound of teardrops)
- No syntactic (and morphological integration):

Он еще плотнее прижал ружье к плечу и - **ба-бах!** (*В.Астафьев. Наклепки*).

He pressed his gun against his shoulder even harder and , - **boom!**

SD-1



4. Universality of onomatopoeic words

Iconic correspondence between form and meaning

(Imitative words)

Articularatory imitation
(mimetic words)

Acoustic imitation
(**onomatopoeic words**)

Acoustic-articulatory imitation
(MM-intrakinesemisms)

Pure articulatory imitation
(MM-extrakinesemisms)

SD-2



(Voronin 2006)

Phonosemantic classification of onomatopoeic words

(Voronin, 2006)

SD-2

Types of denotata

- I. **Pulse.**
- II. Tonal Non-pulse.
- III. **Pure Noise Non-pulse.**
- IV. Tone-Noise Non-pulse.
- V. Quasi-pulse.
- VI. Pure Dissonance.
- VII. Tonal Quasi-non-pulse.
- VIII. Pure Noise Quasi-non-pulse.
- IX. Tone-Noise Quasi-non-pulse.

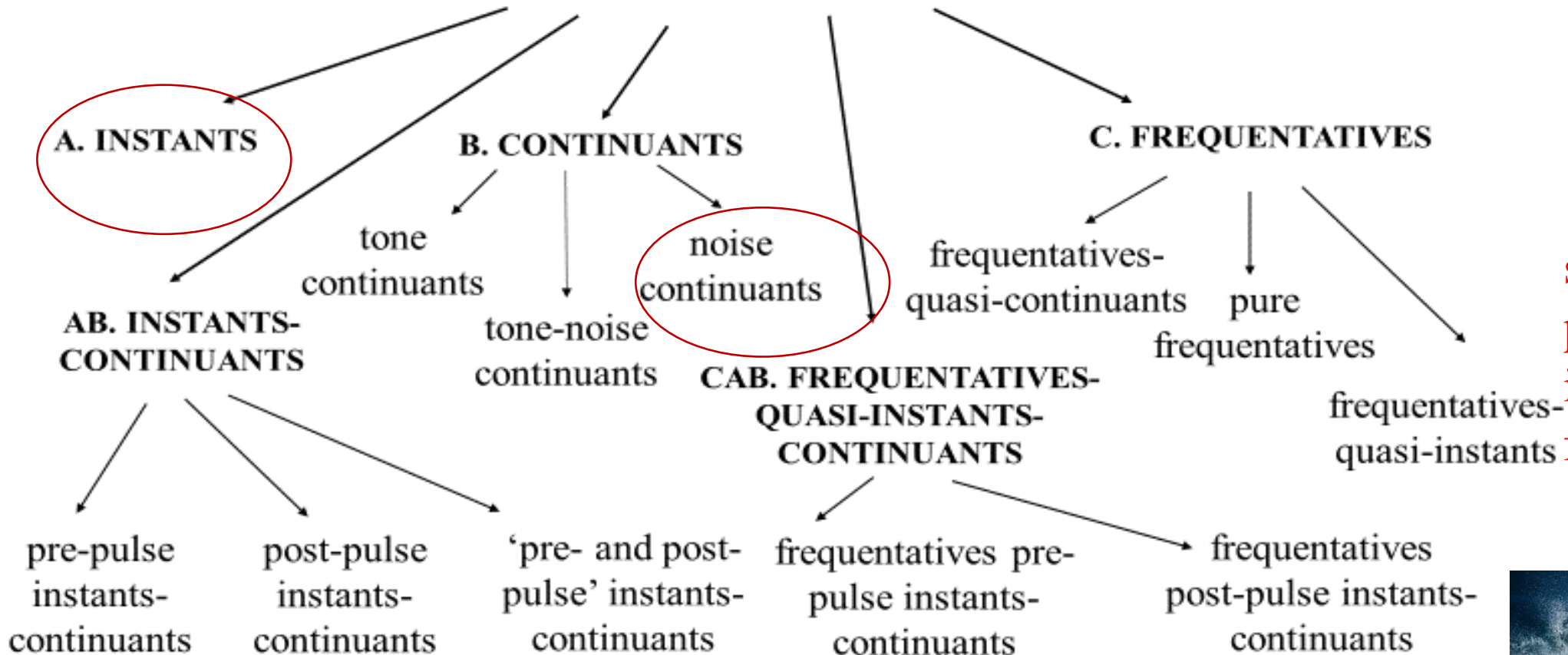
Types of onomatopoeic words

- A. **Instants**
- B1. Tonal Continuants
- B2. **Pure Noise Continuants**
- B3. Tone-Noise Continuants
- C1. Pure Frequentatives
- C2. Frequentatives-Instants
- C3. Frequentatives-Continuants
- D. Instants-Continuants
- E. Frequentatives-Instants-Continuants

salient
phonemes with
imitative
function



ONOMATOPOEIC WORDS



SD-2

salient phonemes with imitative function

+ tone, noise, tone-noise / long and short variations

+ tone, noise, tone-noise / long and short variations



Instants

PLOS + PLOS + (PLOS)

English: **tap** ‘to strike (something) lightly’;

English **click** ‘a short light often metallic sound’;

Bashkir: **tap** ‘an abrupt sound accompanying a fall of a heavy body’;

Baskir **kelt-kelt** ‘to tick (about a clock)’

Indonesian **tuk** ‘a knocking sound’;

Tajik **ТАК-ТАК** [tak-tak] ‘a knock on the door’;

Chuvash **пат** [pat] ‘an imitation of something popping’.

SD-2

recurring
pattern of
iconic
correlation
‘abrupt sound =
plosives’



Pure noise continuants

FRIC + (FRIC)

English **hiss** ‘a voiceless fricative sound like that of a prolonged s’;

English **flash** ‘a sudden rush of water down a river or watercourse’;

Turkish **fiş-** ‘hissing’;

Ossetian **syf-syf** ‘rustling’

SD-2

recurring pattern
of iconic correlation
‘hissing, rustling
sound =
fricatives/sibilants’



Occasional onomatopoeic interjections in Russian

SD-1 SD-2

lexicalization in Russian (synthetic language) = addition of affixes + phonological processes on morpheme boundaries

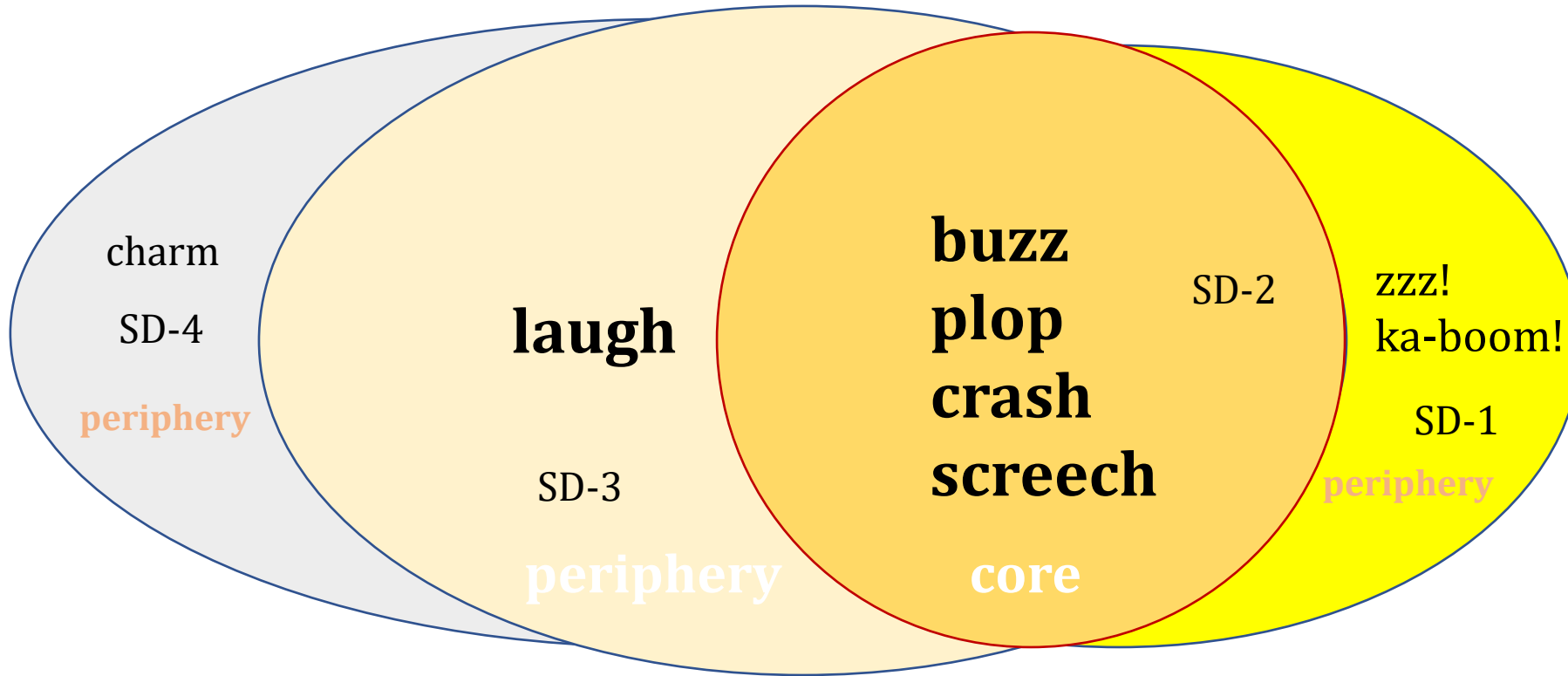
SHLJOP > (v) **shliop-at'**
(SPLASH > to splash)



	<i>English</i>	<i>Russian</i>
SD-1	<i>bzz!</i> <i>zzz!</i> <i>tlok-tlok!</i>	<i>khlop, khrijas', bukh, sh-sh, tuk</i>
SD-2	<i>buzz</i> <i>screech</i>	<i>khlopat', stuk (n) – stuchat' (v), shelest</i>
SD-3a SD-3b	<i>laugh</i> <i>cliché</i>	<i>klukva, suslik</i>
SD-4	<i>gargoyle</i> <i>butter</i>	<i>mops, lanch, drozd</i>

Core-periphery model of Modern English imitative vocabulary according to de-iconization stages

Maria Flaksman



Flaksman, in print

Core: SD-2 (expressive and functional)

Periphery : SD-1 (most expressive but not functional); SD-3 (functional but less expressive), SD-4 (functional but least expressive)



Conclusions

- de-iconization is the result of language change and is unavoidable;
- SD-1 > SD-2 stage is accompanied by the loss of ideophone-like traits;
- Indo-European languages contain hundreds of ideophone-like iconic formations on the periphery of their lexicons (occasional, colloquial, dialectal words);
- Lexicalization of these iconic interjections is a part of de-iconization (altogether 4 stages are distinguished)
- universality of onomatopoeic words decreases with de-iconization



References

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Thank for your attention

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