Consonant and vowel symbolism in Native North American languages

Online and on-site Workshop

December 8 and 9, 2022

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Inalco.

Consonant and vowel symbolism in Native North American languages

Call for papers

Sound symbolism has been a growing research subject for the last few decades (e.g. Hinton et al. 1994; Nuckolls 1999; Johansson et al. 2020), and so have ideophones (e.g. Voeltz & Kilian-Hatz 2001; Dingemanse 2012, 2017, 2019; Dingemanse et al. 2016; McLean 2020; Akita & Prashant 2019), which can be viewed as lexicalized, language-specific instances of sound symbolism. North American languages often are underrepresented in these works (with the exception of Hinton et al. 1994 and large typological surveys such as Alderete & Kochetov 2017; Johansson et al. 2020), even though many Native languages of this continent possess a specific type of sound symbolism, where consonant (and sometimes vowel) shifts express augmentation/diminution or various degrees of intensity (Mithun 1999).

Consonant symbolism was described as early as the 1890s for the Siouan languages (Dorsey 1892) and the 1910s for Wishram (Sapir 1911), and has since been the object of numerous investigations on individual languages (e.g., Aoki (1994) for Nez Perce, Boas & Deloria (1941) for Dakota, Melnychuk (2003) for Cree), as well as on families or proto-languages (e.g., Tarpent (2002) for the Penutian Phylum, Pentland (1974) for Algonquian, Langdon (1971) for Yuman, Rankin (1998) for Siouan-Yuchi) and areas (e.g., Nichols (1971) for the western region).

Symbolic consonant shifts can spread by language contact. Hinton (1991) describes how several Uto-Aztecan languages developed diminutive consonant symbolism by contact with Yuman languages in California. It is also one of the few linguistic traits that have passed from one language family to another in the Plains area (from Siouan to the Caddoan language Arikara; Hollow & Parks 1980). It can be considered one of the areal features of several regions or sub-regions, including the Northwest Coast, the Plateau, and Northern California (Sherzer 1968, 1976; Nichols 1971; Campbell 1997). Nichols (1971) lists and studies its presence in more than 25 languages in the western part of the continent, with several clusters of specific types of shift.

With this workshop, we wish to resume the areal and typological investigation of symbolic consonant and vowel shifts in Native languages of North America. We encourage presentations on consonant or vowel gradation phenomena in individual languages and language families, if possible with an areal perspective. The following questions may be a relevant starting point:

- How similar are the sound symbolic alternations attested across different areas and families?
    - In their structure: which kind of contrasts are used (cf. Nichols 1971)? How much of the phonemic inventory is involved in these contrasts? Are the shifts restricted to one or a few word classes?

    - In their semantics: what do the symbolic shifts express in each language?
- How well do they map onto known universal tendencies of sound symbolism (cf. Ultan 1978; Alderete & Kochetov 2017; Johansson et al. 2020)?
- Are there other documented cases of areal diffusion of sound symbolism? Does areal diffusion concern the structure, the semantics, or both? Does it coincide with the diffusion of other linguistic traits?
- Is there a word class that could be called “ideophones” in the languages displaying sound symbolism? Are consonant/vowel symbolism and ideophones related in some ways? (e.g., does the first frequently affect ideophones?)

The workshop is organized within the framework of the “Ideophones and Interjections in a typological, areal and diachronic perspective” research program funded by the Empirical Foundations of Linguistics Labex, Paris. It will be held in Paris and online on the 8th and 9th of December, and will involve two half-day sessions at the hours most convenient for participants in Paris and online.

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Program

Thursday, December 8, 2022

16:00 Welcome coffee

16:30 Opening & Introduction
Julie Marsault; in person

16:45 “Consonant sound symbolism east of the Rocky Mountains”
Peter Bakker; remote

17:25 Break

17:40 “The Archiphonaestheme in Pai Languages: A Lexicographic Challenge”
Abbie Hantgan; in person & Corbyn Sipes; remote

18:20 “Consonant symbolism in the Umatilla Sahaptin lexicon”
Gretchen Kern; remote

19:00 Discussion

19:15 Social hour in break-up rooms

19:50 End of the first day

Friday, December 9, 2022

16:00 Welcome coffee

16:30 “Consonant gradation in Umóⁿhoⁿ (Omaha) and in Siouan”
Julie Marsault; in person

17:10 “Sound Symbolic Sets in Siouan and Caddoan Languages of the Northern Plains”
Armik Miyarzan; in person

17:50 Break

18:05 “Consonant Symbolism in Western Apache Ideophones”
Willem de Reuse; in person

18:45 “Prosodic augmentation in Upper Tanana Dene”
Olga Lovick; remote

19:25 Discussion & Closing

20:15 Dinner at the restaurant “Au 35” (35 rue Jacob, 75006 Paris)

Abstracts

Consonant sound symbolism east of the Rocky Mountains

Peter Bakker (Aarhus University)

There is a clear divide in the occurrence of consonant symbolism in North America. Consonant symbolism is rampant west of the “great divide” of the continent, the Rocky Mountains, but almost absent east of that mountain chain. East of the Rocky Mountains we only have Uto-Aztecan, Siouan languages and Algonquian languages with consonant symbolism, and in these families in widely divergent degrees.

In my presentation, I will discuss this divide, and suggest, following earlier research, a historical, perhaps even genealogical, connection of Siouan, Uto-Aztecan and Algonquian with the west of the continent. Diminutive symbolism as well as other forms of consonant symbolism will be discussed. The historical arguments will point to a western origin of (at least) two of these families, and the linguistic argumentation will draw on typological data, consonantal features of dialect differences in languages east of the great divide with parallels in the west, and social arguments such as the connection with the speech of the tricksters.

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The Archiphonaestheme in Pai Languages: A Lexicographic Challenge

Abbie Hantgan and Corbyn Sipes (The Language Conservancy)

Pai consists of a group of closely related languages in the Yuman language family. Alan Shaterian, in his seminal study of Yavapai (Shaterian 1983: 160), dubbed the term, 'archiphonaestheme' to describe the phonemic representation of suprasegmentals found in the morphology of the language. Examples drawn from the closely related language Hualapai (Watahomigie, Yamamoto, and Bender 1982: 406), clearly illustrate this phenomenon. The suprasegmental alternation [l] ~ [r] ~ [t̪] represents the diminutive and augmentative of onomatopoeic verb stems' objects:

1a. ***l****ebk* 'for a large object to be flapping'

1b. ***r****ebk* 'for a small object to be flapping'

2a. *ra**l**uthk* 'to make something large burst/to pop or burst something large'

2b. *ra**r**uthk* 'to make something small burst/to pop or burst something small'

3a. ***l****ath-**l**ath* 'large popping noises'

3b. ***r****ath-**r**ath* 'small popping noises'

3c. ***t****ath-**t**ath* 'very small and rapid popping noises'

Otherwise described as 'consonant symbolism' (Nichols 1971), the diminutive-augmentative alternation of alveolar consonants is found among many related languages in both verbal and nominal paradigms. Langdon (1996: 93) expands that historically, the proto-phoneme *R participated in 'consonantal ablaut' with reflexes *n *nj *r *l *lj indicating "activities characterized by persistent, abrasive motions affecting a surface". Langdon also notes that some languages of the Pai family employ an even larger range of consonants to express both size and intensity. The following table is adapted from Kaufman (1989: 31) to summarize these patterns:

Smaller / Less intense	Larger / More intense
t, r	l
k	q
s	θ
p	v

Vowels also participate in supersegmental alternations. Shaterian writes that in Yavapai, "...a vowel of any length, i.e. regardless of its specification with respect to length in the lexicon, may occur overlong as an emphatic device" (p. 43). Nasalization is another means to characterize very small objects and offspring of animals and humans. Reduplication is a highly productive method of expressing repetition or intensity in Yuman languages more generally (Munro 1979). The following examples from Shaterian (1983: 162) highlight combinations of consonantal and vocalic alternations as well as reduplication can occur to produce slight semantic differences in Yavapai:

4a. *h<u>ee</u>**l**i* 'flow (as a river)'

4b. *h<u>o</u>**l**ho**l*** 'flowing (as a waterfall)'

4c. *<u>he</u>**r**he**r**i* 'slide down'

Thus, the question for the lexicographer is how to accurately represent these lexemes and the supersegmental processes that are associated with them. One option is to create separate dictionary entries for all attested alternations, but this necessitates that the learner memorize rather than discover these productive patterns. Shaterian offers us the option of using an archiphonaestheme such as L for the diminutive/augmentative pairing, and Langdon suggests *R. The drawback of this method is that it designates one of the options as a default. Comparative examples are drawn from our on-going Yavapai dictionary projectas well as other published sources on the Pai language family.

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Consonant symbolism in the Umatilla Sahaptin lexicon

Gretchen Kern (Confederated Tribes of the Umatilla Indian Reservation)

Sahaptin, a Sahaptian language spoken in Oregon and Washington, has been noted as an outlier, along with its sister language Nez Perce, in its patterns of consonant symbolism, perhaps due to its location on the periphery of the areal spread of sound symbolism in the western United States. (Nichols, 1971:840) It is also noted for its use, dialectally, of sound symbolism only in Coyote stories, rather than in everyday speech. (Rigsby & Rude, 1996:672; Jacobs, 1931:113-4)

Even between Sahaptin and Nez Perce, which once had a strong community of speakers bilingual in the two languages, there are significant differences in the use of consonant symbolism. For example, Nez Perce has three consonant pairs participating in sound symbolism: s > c, n > l, k > q. (Aoki, 1994:17) Sahaptin, on the other hand, has seven or eight pairs showing a plain-diminutive contrast, and three pairs showing a plain-augmentative contrast. (Rude, 2014:8; Rigsby & Rude, 1996:672) Notably, Sahaptin shows the opposite direction to Nez Perce in q > k, which is perhaps more in line with language universals.

Northwestern Sahaptin is said to allow use of consonant symbolism freely in speech, while Northeastern Sahaptin shows similar patterns to Nez Perce in using it in combination with reduplication to express diminutiveness. (Jacobs, 1931:135) In Umatilla (Columbia River) Sahaptin, consonant symbolism is generally restricted to Coyote stories and to lexicalized forms, such as *miyánaš* ‘child’ containing ‘plain’ consonants and *miyálas* ‘baby’ containing diminutive ‘l’ and ‘s’.

Of three current first language speakers I surveyed, one was very familiar with consonant symbolism and said he frequently uses it in speech to express diminutiveness or derision. He does not have strong Northwestern Sahaptin influence, but is very linguistically aware and tends to be innovative in his language use. The two other speakers, who tend to be more conservative, were unfamiliar with consonant symbolism except in lexicalized pairs with a clear contrast in meaning such as given above. However, use of consonant symbolism in Umatilla Sahaptin seems to have been a part of the language as recently as a generation ago. I am told that Umatilla speakers considered speakers of the Upriver dialect of Nez Perce funny or cute for having only an s in their language, and no š, because it sounded like they were constantly using the diminutive half of the š > s pair from Sahaptin consonant symbolism. (Noel Rude, p.c.)

In this talk, I will investigate the use of consonant symbolism in the Umatilla Sahaptin lexicon using the Umatilla Dictionary (Rude, 2014) as a corpus. By using a Python-searchable version of the dictionary, I will be able to provide some quantitative data on observations provided by past research. For example, it has been suggested that “the word *xʷɨsaat* ‘old man’ has diminutive sounds (xw and s), thus suggesting something like ‘little old man’, whereas *łmáma* ‘old lady’ (with augmentative ł) could imply ‘big old lady’.” (Rude, 2014:8) While current

(conservative) speakers do not necessarily feel that these words contain an inherent suggestion of diminutiveness or augmentation, by collecting all words which include only diminutive or only augmentative consonants, we may be able to identify patterns in the semantics of sound symbolism when diminutive or augmentative words appear in the lexicon without an unshifted pair for contrast.

I performed an initial analysis on a corpus of 5,635 dictionary entries (without accounting for part of speech), counting the consonants in each word that participated in sound symbolism. Of these, 1,168 or approximately 20%, had only diminutive consonants. 55, about 1% contained only augmentative consonants. 1325 (24%) had only neutral consonants. 198 (4%) contained no consonants which participate in symbolism, and 2,894 (51%) had a mixture of consonants from different sound symbolism groups. A glance at the results suggests that words which contain a larger number (i.e. 3 or more) consonants from the diminutive series may also have a diminutive meaning, such as *kiyáwkiyaw* 'softly, not loud', *klawáwklawaw* 'whirligig beetle', and *k'aywálala* 'short person', while examples containing only a single consonant from the diminutive series are less likely to be obviously diminutive in meaning, even if that one consonant represents the totality of the consonants available for diminutive shifting in that word.

The results of this study will provide insight into the universality of consonant symbolism. This data will shed light on the degree to which a word or sound can convey a sense of diminutiveness or augmentation without a neutral pair in the lexicon for contrast. Inasmuch as consonant symbolism can be described as ideophones, we should expect to see the diminutive series represented in words with a diminutive sense, and the augmentative series represented in words with an augmentative sense, even without an active system of alternations in the language.

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Consonant gradation in Umóⁿhoⁿ (Omaha) and in Siouan

Julie Marsault (Inalco / Labex EFL; UMR 7597)

Siouan languages are famous for having a phenomenon of consonant symbolism affecting fricatives, where different points of articulation (alveolar, post-alveolar, velar) symbolically refer to different grades, e.g. of intensity, as in examples (1) and (2). This feature probably already existed in Proto-Siouan (Matthews 1970; Rankin et al. 2015), but is no more productive or only "semi-productive" (Matthews 1970) in the daughter languages.

(1) Consonant gradation between "yellow" and "brown" (Kasak 2019; BD; Matthews 1970; DD)

a.	Mandan	*síire*	'yellow'	*šíire*	'tawny'	*xíire*	'brown'
b.	Dakota	*zí*	''	*ží*	''	*ǧí*	''
c.	Hidatsa	*cíiri*	''	*šíiri*	''	*xíiri*	''
d.	Umóⁿhoⁿ	*zí*	''	*ží*	'orange-red'	*ǧí*	''

(2) Consonant gradation between "scratch" and "scrape" (Matthews 1970; BD; DD, SLW)

a.	Mandan	*kés*	'scratch'			*kéx*	'scrape'
b.	Dakota	*kʔéza*	''			*kʔéǧa*	''
c.	Hidatsa					*-káaxi*	''
d.	Umóⁿhoⁿ			*ga-žábe*	'to peel, bark'	*ga-ǧábe*	''

In Umóⁿhoⁿ, several dozen of roots show this phenomenon, sometimes with all three grades as in (1), others with only two grades as in (2) (the two contrasting grades vary). I propose a study of consonant gradation in Umóⁿhoⁿ, based on a dataset of 42 pairs (or triplets) of roots instantiating it and on the stems derived from them. The dataset was gathered by corpus research in 19th century as well as contemporary documentation (among others DD, DT, SE, SLW).

I will present what semantics can be associated with consonant grades in Umóⁿhoⁿ on the basis of this data, and discuss some methodological issues related to studying word meanings from texts. The semantics observed in Umóⁿhoⁿ will be compared to historical and comparative data, looking for the cognates in the Comparative Siouan Dictionary online (Rankin et al. 2015) and in contemporary grammars and dictionaries (esp. Hoocąk and Osage with Helmbrecht & Lehmann 2006 and Quintero 2006, respectively).

Abbreviations

BD	Boas & Deloria 1941
DD	Dorsey n.d.;
DT	Rankin 2009 (Dorsey's Texts)
SE	Saunsoci & Eschenberg 2016
SLW	Sanchez et al. in progress.

Phonetic transcription

c = ts
š = ʃ
ž = ʒ
ǧ = ɣ

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Sound Symbolic Sets in Siouan and Caddoan Languages of the Northern Plains

Armik Mirzayan (University of Virginia)

In their 1941 *Dakota Grammar* Boas and Deloria list three pages of Lakota verb roots and stems with CV, CVC(V), and CCV shapes which show clear evidence of fricative graded sound symbolism in the language. The list shows that within this subset of vocabulary Lakota voiced and voiceless fricatives (/z, s/, /ʒ, ʃ/, and /ɣ, x/) pattern in a way that indicates an organization of the roots and stems into approximately three "degrees of intensity". This pattern is exemplified by the frequently quoted (de Reuse 1986 and Rankin 1998, among others) set *sóta* ="clear", *ʃóta* = "hazy, smoky, muddy", and *xóta* = "gray". The list by Boas and Deloria also contains a subset of words displaying semantically organized vowel gradation, specifically involving the vowels /i, e, a, u/ in stems like *kpi* = "sound of small crackling objects", *kpe* = "a somewhat sharper sound", *kpa* = "punctured / broken through", and *kpu* = "noise of sticks striking" (Boas and Deloria 1941; Ullrich 2012).

In this paper I revisit Boas and Deloria's list of consonant and vowel symbolism in Dakotan languages with two goals in mind. The first goal is areal and historical linguistic in nature: I examine the Dakotan word list from a comparative angle by (a) analyzing the list for semantic and structural patterns/sub-patterns of consonant and vowel gradations, and (b) surveying the extant literature in search of potentially similar symbolic sets of consonant and/or vowel gradations in Hidatsa, a Siouan language from the Missouri Valley sub-branch whose speakers are, and have been, in relative geographic proximity to Lakota. The second goal of this study is areal plus typological in focus. Specifically, I collect and organize sound symbolic sets in Arikara, a Northern Caddoan language of the Missouri river region, by (a) revisiting the brief notes on Norther Caddoan sound symbolism from Hollow and Parks (1980) and Rice (2016), and (b) searching for potential consonant and vowel gradations in collected Arikara narratives (Parks 1991). The purpose of this areal-typological study is to gain insights into paths through which at least parts of these sound symbolic gradations may have spread areally within the Northern Plains through contact between Siouan and Caddoan languages.

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Consonant Symbolism in Western Apache Ideophones

Willem de Reuse (The Language Conservancy)

The ideophones of Western Apache, a Southern Athabaskan language spoken on and around several reservations in Arizona (USA), consist of CVC monosyllabic structures sometimes related to verb stems, and often preceded by a prefix *n-* of uncertain meaning. Examples are:

nch'ił 'sound of cracking'	verb stem *-ch'ił* 'to crack open (as a nut)'
ndog 'sound of arrow hitting ground'	verb stem *-dog* 'to poke'
nghazh 'sound of biting on corn'	verb stem *-ghazh* 'to take a bite'
nkał 'sound of hammer'	verb stem *-kał* 'to hammer'
shoł 'sound of shuffling'	verb stem *-shoł* 'to move a heavy object'
ts'ǫǫs 'sound of kissing'	verb stem *-ts'ǫǫs* 'to kiss'

In the cases above, the verb stem itself can be considered imitative of a sound, but this is not always the base, as in the following ideophone and verb stem pairs:

baal 'showing a swinging object to a baby'	verb stem *-baal* 'to swing'
k'ąąs 'massaging'	verb stem *-k'ąąs* 'to massage'

However, most ideophones, used in the same syntactic frames as the ideophones above, are purely expressive and imitative, and cannot be connected to verb stem. Examples are:

bííb 'sound of honking'

mbag 'sound of hitting with a fist'

mbog 'sound of hitting with a big and solid object'

ndǫs 'sound of hitting with a ball or round object'

njé' 'sound of metal against metal, as two cars colliding'

nk'ǫ́ǫ́' 'sound of prolonged flatulence or stomach growling'

ntł'ás 'sound of hitting with flat of palm'

dóŋ 'sound of hitting with a bucket or frying pan'

ngáŋ 'sound of two cars hitting each other'

ntł'áŋ 'sound of hitting with a bucket'

nwah 'sound of hitting with a wide thing, such as a mattress'

wal 'sound of mauling of a dog'

wą́zh 'sound of eating like a dog'

Certain sounds, such as the labials *b, m, w*, are uncommon in Apache, but are quite common in ideophones; the velar nasal [ŋ] has been found as the last consonant of ideophones only.

Phonetic similarities with animal calls, e.g. *gós* ‘calling a dog’, cf. *gósé* ‘dog’, and with baby talk, e.g. *mam* ‘eat!, food’ will also be discussed.

The data in the presentation are from the author’s fieldwork (1992-present) on all dialects of Western Apache.

Prosodic augmentation in Upper Tanana Dene

Olga Lovick (University of Saskatchewan)

Upper Tanana is a Dene (Athabascan) language spoken by fewer than 50 mostly elderly individuals in eastern interior Alaska and the western Yukon Territory. The data for this study comes from narrative discourse collected primarily by me. In this talk, I describe the functions of a speech pattern I dub “prosodic augmentation”. This pattern is characterized by drastic lengthening of the stem syllable, with augmented syllables typically three to five times as long as non-augmented ones. This lengthening is often accompanied by raised pitch. In the practical orthography, prosodic augmentation is marked by colons following the vowel, with the number of colons roughly corresponding to the degree of augmentation (1).

(1) Dineh cho:::h!

man big

‘An enormously big man!’

This pattern is first mentioned by Jetté (1907) as a strategy to express superlatives in Koyukon, and by Tuttle (2018) as an intensifying device in Ahtna and Lower Tanana (all three are Alaskan Dene), similar to what is demonstrated in (1). I show here that its functions are broader and depend on the lexical category it applies to. With adjectives and verbs describing property concepts, prosodic augmentation expresses that the quality expressed is present in abundance (1). With other verbs, it can express increased intensity (2a), increased speed or distance (2b), or repetition (2c, d).

(2a) Shneh’į:::h. vs. Shneh’įh.

‘He looked at me long and hard.’ ‘He looked at me.’

(2b) Altha:::::ł! vs. Altthał!

‘She was running as hard and far as she could!’ ‘She was running!’

(2c) Shudehka:::t. vs. Shudehkat.

‘He kept asking me questions.’ ‘He asked me a question.’

(2d) Łuugn heh’įį::::k. vs. Łuugn heh’įįk.

fish they.always.do

‘They [take out] lots of fish.’ ‘They take out fish.’

With nouns, prosodic augmentation signals abundance (3a). When applied to directional adverbs (3b), it indicates increased distance. With other adverbs (3c, d), it intensifies the meaning.

(3a) Ji::::gn hǫǫłįį. vs. Jign hǫǫłįį.

	‘There were lots of berries.’			‘There were berries.’	
(3b)	ahne::::gn’		vs.	ahnegn’	
	‘a long way in the upland direction’			‘in the upland direction’	
(3c)	t’axo:::::h		vs.	t’axoh	
	‘finally, after a long time’			‘finally’	
(3d)	k’at’ee:::y	shyah’eh’aak	vs.	k’at’eey	shyah’eh’aak
	NEG	they.always.make.noise			
	‘they absolutely never make a noise’			‘they never make a noise’	

Prosodic augmentation is clearly an iconic pattern, where some sort of semantic increase (in amount, length of time, distance, intensity, or number of repetitions) is signaled through increased duration and raised pitch of the stem syllable. In this way, it mirrors common functions of reduplication as outlined originally by Sapir (1921), although it is a prosodic rather than morphological strategy. Functionally, it can be classified as being part of the evaluative domain (Grandi & Körtvélyessy 2015).

This speech pattern is highly characteristic of Upper Tanana: it is ubiquitous in narratives and often carries over into English discourse. It is also very salient to speakers and learners alike. For them, study of this topic is important as it validates their own perceptions of their language. For the field of language description, studies like this are important as they highlight the multifaceted functions of suprasegmental information.

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