

Simplifications in the babytalk register:

a look at Nootka examples

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The differences which separate adult language from the language of children are quite well documented, throughout the maturation process of the child, and much research and study has been devoted to the development of adult language by children. Of course, children learn their language from adults and older children and the language spoken by a child is very much influenced by the nature of language directed toward him, as well as developmental factors. Conversely, it may be possible that children are able to influence the speech of their elders by forcing adults to bend to the linguistic inabilities of the child. The mechanisms by which children influence the speech of adults is much less well-documented than the mechanisms by which adults influence children, although in recent years more research has been directed toward this phenomenon.

Many theories of phonology have been advanced to explain and describe the way in which children develop language sounds. Some theories are more adequate than others in the description and explanation of the many phenomena which are present in children's utterances.

Theorists such as Waterson (1970) have adopted a stance which places emphasis on the role of perceptual input and allows more individual flexibility in the development of speech sounds. This so-called 'prosodic theory' rejects a universal hierarchy of acquisition proposed earlier by Jakobson (1941/1968) in favour of an emphasis on the individual linguistic environment of the child and the perceptual saliency of the sounds presented to him. It is the position of the prosodic camp that syllables and supra-segmentals are most salient to children early in their development and that children perceive words holistically, without an undue awareness of how elements are arranged within the word.

According to the prosodic theory, children attend only to the high saliency portion of words. The differences which can be observed between a child's perceptual ability and productive capability are explained by recourse to childrens' motor development.

The sounds which children tend to produce first tend to be those sounds which do not require a high degree of fine motor skills. Individual variations in which sounds are acquired in what order are explained by environment and individual perceptual variability.

The prosodic theory's dependence on the linguistic environment of the language-learning child causes one to pose the question: What is the linguistic environment of a young child?

Snow (1972) disclosed some of the features of adult speech to children — notably shortened utterances with meaningful pauses and reduced grammatical complexity and greater repetition. There is also a tendency for adults to talk to children only about things that are inside a child's compass of world knowledge. Garnica (1977), Ferguson (1964) and other researchers have remarked on the special lexical items used by adults when speaking with children and have also noted such suprasegmental phenomena as higher and more variable pitch. It appears that adults alter their speech in an effort to make their utterances more simple to process and use pitch variation as a way of eliciting orienting behavior by the child.

Kaye (1980) found that mothers' speech to children of language-learning age is different than that directed to young infants. Infants cannot possibly understand the words directed to them, so no effort is made to use special babytalk lexical items until a child is about a year old. Babytalk lexical items are reserved for children who may be able to benefit from their simplicity in order to learn language more quickly. This tendency for mothers to adjust their speech in the presence of children with different linguistic capabilities is evidence that adults adjust language to suit children's verbal and cognitive abilities.

Since the babytalk register seems to depend on children's verbal ability, it is only natural that babytalk lexical items are similar in some respects to the speech which language-learning children produce.

Children's linguistic limitations result in the phonological shape of items directed toward them being similarly limited. This can result in simplifications, homonymy and reduplications in babytalk which are similar to those present in the speech of young children.

Reduplication has been given as a characteristic of the babytalk register by numerous scholars and the reduplication of phonological

elements in child forms can easily be seen in almost any language. English, for example, has babytalk forms such as wa-wa "water", din-din "dinner", etc.

Reduplication of phonological elements seems to be one of the abiding characteristics of babytalk throughout the world. What is the basis of this 'universal'?

Not all languages use reduplication for grammatical purposes, but almost all seem to employ phonological reduplication as a stylistic variant when speaking to young children. Perhaps the reason for the wide use of reduplication stems from the use of reduplication by language-learning children themselves. Schwartz, Leonard, Wilcox and Folger (1980) found that some children use reduplication as a means of producing disyllabic words when their phonological inventory is still small. This observation is concordant with the prosodic theory of language acquisition which holds that the number of syllables in a word is a highly salient feature of the word, whereas the actual phonological elements are less salient, and therefore less important to the child.

About half of language-learning children studied by Schwartz, Leonard, Wilcox and Folger (1980) exhibited reduplication as an abiding strategy in word formation. There were no sex differences or other social or environmental factors which influenced the children's ability to use the reduplication strategy — it appeared that some children are born with the propensity to use that method of word formation. It is possible that individual perception plays a role in determining if the reduplicating strategy is used, but this was not broached in the study. One may project from this study, however, that there is a high percentage of children who are inherent reduplicators and that it is possible that this tendency is present across cultures. Since we can acknowledge the possibility that babytalk is to some extent patterned after the speech of children, then it is equally possible that reduplication is a strategy which one might well expect to crop up in babytalk all over the world.

Not all languages confine reduplication to their babytalk registers; in fact, a large number of languages use reduplication productively as a grammatical element. One language which depends on reduplication for a number of grammatical functions is Nootka. Grammatical reduplications in Nootka are of two major types; the first type yields a meaning change. This change involves the meaning of the root, indicating that the entity,

action or state which is expressed by the root, is spread over time or space. In other words, reduplication of the root means to repeatedly do an action, or to have something exist here and there. A form from Ahousaht Nootka which uses this form of reduplication is the form which means "to clap hands", seen in example 1(a) below:

1. (a)	ʔuḥ	ʔuḥ	(y)a
	reduplicated morpheme	ROOT: "to hold hand flat against a surface"	continuation suffix
	yielding: ʔuḥʔuḥa "to clap hands (continuously)"		

The second type of reduplication adds no additional meaning to the root, but is obligatorily required by certain suffixes (Rose 1976). This non-meaning altering reduplication can be seen in the example below:

1. (b)	ḥa	ḥawit	ʔuk
	reduplicated morpheme	ROOT: "chief"	SUFFIX "resembling" (obligatory reduplication)
	yielding: ḥaḥawitʔuk "resembling a chief"		
	[taken from Rose (1976)]		

In the babytalk register in Nootka, another type of reduplication may be seen which is unlike the grammatical reduplications given above. It is phonological reduplication which bears a striking resemblance to the phonological reduplications in English and other languages' babytalk forms. The reduplication in the Nootka babytalk register has the same appearance as forms which are generated by language-learning children, and are very different from their adult register counterparts. Seen below in example 2 are some of these reduplicative babytalk forms juxtaposed with their adult counterparts.

2. GLOSS	ADULT FORM	BABYTALK FORM
mother	ʔumʔi (Ahousaht)	ma•ma (Ahousaht)
hurt or injury	ʔu•suq ^w (Nitinaht)	na•na (Nitinaht)
let's eat!	haʔuke•ʔidicʃ (Nitinaht)	ma•ma (Nitinaht)

These phonologically reduplicated forms are quite different in form and complexity from the grammatically reduplicated forms seen above, and from the adult forms of the words in example 2. As can be seen on the previous page, the babytalk register demands drastic simplification of the phonology and of the length and complexity of the word. What happens in languages such as Nootka when a grammatically reduplicated word is directed to children? Since the babytalk register demands simplicity, are reduplicating morphemes dropped in order to simplify, even though reduplication seems 'natural' for children to produce and understand?

In some examples from Nootka it appears that the reduplicative morpheme is retained, while the suffix which conditions its presence may be lost. For example, $\lambda u \dot{h} \lambda u \dot{h} a$ (given in example 1 (a)) becomes $\lambda u \dot{h} \lambda u \dot{h}$ when elicited as babytalk. While loss of such a small suffix is hardly a major simplification, it is indicative of a larger pattern of simplification by suffix deletion, as well as giving an indication that the reduplicative morpheme is regarded as simple enough to be retained in forms directed toward children, while suffixes are regarded as "excess baggage".

Clearly, most forms which we associate with babytalk are not those which are merely grammatically simpler, but those which are totally different from the adult forms. In Ahousaht, these suppletive forms exhibit exactly what one expects of suppletive babytalk forms. They are phonologically simple, with the phonemes restricted to sounds which might reasonably be produced by a language-learning child.

What is meant by suppletive forms is that the babytalk item bears no phonological relationship to the adult form and is not built from the same root.

An example of a suppletive babytalk form is the Ahousaht $hu \cdot \check{s}$ which obviously bears no correspondence to the adult form, $wa \text{?} i \text{?} \check{c} u \text{?} i$ meaning "go to sleep". The adult form can be analysed as a root, $we \text{?} i \check{c}$ -, plus (u), and the imperative suffix. This suffix is responsible for the glottalization before the / \check{c} /, or at least there is a strong probability that this is the case. The babytalk form, on the other hand, cannot be analysed further. This Ahousaht form is very similar to the form in Sapir and Swadesh (1939), $ho \cdot \check{s}$ glossed as "sleep, child form" (note that the orthography in Sapir and Swadesh employs /o/

in place of the current /u/). Also in Sapir and Swadesh is another form meaning much the same thing, which is ʔe·ho·š and may be related to their form meaning "be quiet", ʔaho·, seen later in the paper. Of these three forms given in the 1939 work, note that only one remains in the speech of the Ahousaht informant today.

Forms which universally crop up as babytalk items are words which name parents, food, water, and excretory products. Nootka is no exception, and suppletive forms for these meanings are present in the corpus (example 3, below).

3. AHOUSAHT

<u>Gloss</u>	<u>Adult</u>	<u>Babytalk</u>
"mother"	ʔumʔi	ma·ma
"father"	nuʔwi	ta·ta
"drink"	naqšia	maḥ (also means "water" in B.T.)
"defecate" (masc.)	wawik	pup
"eat"	haʔuk ^w in	pa·paš

It is interesting to compare the Nitinaht forms for the same meanings. Nitinaht is related to Ahousaht, but the adult phonology has no nasal consonants whereas Ahousaht contains four nasals. The forms in Nitinaht are:

4. NITINAHT

<u>Gloss</u>	<u>Adult</u>	<u>Babytalk</u>
"mother"	ʔabe·qs	ʔe·b
"father"	duwiʔ	de·t
"drink"	daqšia	maḥ
"defecate"	šab	hum
"eat"	haʔuke·ʔidicḥ	ma·ma·

Interestingly enough, although nasals are not present in the adult phonology, they are present in the babytalk register. This inclusion of abnormal phonological elements is not totally unknown in the babytalk register in other languages. Quileute, which is a Chimakuan language spoken in Washington State, also

lacks nasals in its adult phonology, but contains nasals in its babytalk (Frachtenberg 1917). The similarity between the babytalk of Quileute and that of Nitinaht is quite striking in other respects. Compare the forms in example 5, which show nearly identical items for the two languages.

5. <u>Gloss</u>	<u>Quileute Babytalk</u>	<u>Nitinaht Babytalk</u>
"toy"	lā'la'	la•la•
"clothes"	di'di'	ni•ni
"food/eat"	bā'ba'	ma•ma

Although the Quileute forms here have not been constructed using nasal consonants, the consonants which are used correspond to the Nitinaht consonants in all features except nasality. Perhaps there could be some borrowing between Quileute and Nitinaht through Makah which has resulted in these forms being so similar, or simply a coincidence stemming from the limited inventory which is used in babytalk.¹

It is interesting to review the forms given by Sapir and Swadesh (1939) as child forms in light of the forms listed in this paper. Comparing the forms given by them with the modern elicitations reveals a considerable amount of difference. This could indicate that babytalk forms in Nootka communities were of very restricted currency, so that the Ahousaht babytalk forms would be very unlike the Nitinaht, or could indicate that the babytalk register is one which is very susceptible to change. Forms in Sapir and Swadesh (1939) are given below, with their Nitinaht and Ahousaht counterparts.

From the comparison of the three sets of babytalk in example 6 one can observe that Ahousaht is much closer to the Sapir and Swadesh data than is Nitinaht, but that certain suppletive forms which existed in the early data are now replaced by diminutive forms based on adult roots. Of the Nitinaht forms in that example, only the forms meaning "go to sleep" and "drink" are a match for either the modern Ahousaht or the earlier data.

¹Thom Hess in a personal communication has noted that numerous forms in Nitinaht have been borrowed from Quileute through the geographically intervening Makah. Therefore it is not unlikely that some babytalk forms may have been passed along.

6. GLOSS	S&S 1939	AHOUSAHT	NITINAHT
"be quiet!"	?aho•	camak?iš?i	
"go to sleep!"	?e•ho•š/ho•š	huš	huš
"no, don't!"	?o?iš	wiki?išxax	
"mother, suckle"	ma•ma	ma•ma	?e•b
"water, drink"	ma•ḥ	maḥ	maḥ
"father"	ta•ta	ta•ta	de•t
"eat"	pa•pa	pa•paš	ma•ma•
"sore, hurt"	kaš	hišpiq	na•na
"affection" (interjection)	?o•?o•?o•		

There is quite a bit more work which remains to be done in Nootka communities, both on the babytalk register and on the language as a whole. I have found in my Nootka research that there is insufficient documentation on Nootka to provide an adequate source of reference in determining what a root may mean, or how it may combine with a suffix. Recent works, such as Rose's *Kyuquot Grammar* are helpful, but there is still a great deal which is not available on other varieties of Nootka, such as Nitinaht.

In conclusion, it can be said that the modern data which this paper employs indicate that the babytalk register in Nootka abides by the same rules which apply to babytalk the world over. The register uses special lexical items which refer to items and concepts which are within a child's world. These lexical items are presented in a modified and simplified phonological form. This phonological form depends heavily on sounds in a young child's early phonetic inventory. The use of an inventory which is restricted by the universal motor and cognitive limitations of young children results in languages producing babytalk forms which are similar, despite the genetic and geographic distances between them (as was suggested in the Nitinaht/Quileute example.) Reduplication, which is a meaningful grammatical element in Nootka, is retained in the language directed toward children, even in forms where the suffix which conditions the reduplication is deleted. The differences between modern and earlier data demonstrate a language decrement, and it is hoped that more research can be done on babytalk before further losses occur in these languages.

	AHOUSAHT		NITINAHT	
	ADULT	BABYTALK	ADULT	BABYTALK
'dirty'	ʔašx̄mis	ʔa•ʔa•tis	ʔašx̄abs	ʔiḥ
'lie down!'	čitkpiʔiči	čitkpiʔiču•cʔi		
'sit'	tiqpiλ	tiq	tiqpiḥ	
'clap hands'	ḥuḥḥuḥa	ḥuḥḥuḥ	ḥapx̄i•tḥ ^w	
'go to sleep!'	waʔiʔčuʔi	hu•š	weʔič	hu.š

	AHOUSAHT		NITINAHT	
	ADULT	BABYTALK	ADULT	BABYTALK
'mother'	ʔumʔi	ma•ma	ʔabe•qs	ʔe•b (voc.)
'father'	nuʔwi	ta•ta	duwiʔ	de•t (voc.)
'eat/food'	haʔuk ^w in	pa•paš	haʔuke•ʔidicĥ	ma•ma•
'suckle'		k ^w ink ^w ina		k ^w ink ^w ina
'drink/water'	čaʔak	maḥ	daqš ⁱ λ ca•ʔaksas	maḥ
'breast or bottle'				ma
'hurt/injury'	ʔusuqta	hiĥpiq	ʔu•suq ^w	na•na•ʔa•na•
'smile!'	cimḥ	kakuku		
'boo!'	hu	ʔiĥ		ʔuʔ

	AHOUSAHT		NITINAHT	
	ADULT	BABYTALK	ADULT	BABYTALK
'pass wind'	ʔiʔkcu•	ʔiʔkʔiʔkiš		
'penis'	kimis	kux ^w yak		
'vagina'	ʔičkun	ʔaʔaʔuck ^w in		
'defecate'	wawik	puᵑ	šab	hum
'give me!'	ʔiniʔis	ʔiniʔis(#)šaxš	hacse•ʔb	te•ʔb
'urinate (fem)'	tiskin	tis		ʔisano
'urinate (masc)'	ʔuqck ^w i	kuš ^w		

	AHOUSAHT		NITINAHT	
	ADULT	BABYTALK	ADULT	BABYTALK
'toy'	ka•kana			la•la•
'jump'	tux ^w šič	tux ^w	ʔackatšič	ʔack
'no!'	wik	wikiʔiš(#)šič		
'walk'	čič•šič	čič•šič		pe•pa
'monster'	čičʔik			ma•ʔa•
'grandparent'				nan
'put on clothes'				ni•ni•

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