

A MOSAIC OF LANGUAGES AND CULTURES

STUDIES CELEBRATING THE CAREER OF KARL J. FRANKLIN

Edited by Kenneth A. McElhanon and Ger Reesink

SIL International
2010

16

Helter skelter and ñugl ñagl: English and Kalam Rhyming Jingles and the Psychic Unity of Mankind

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ABSTRACT

There was a time, way back in the *Naked Chef* days, when all that mockney cockney, luvvly jubbly stuff just made you want to give Jamie Oliver a damned good slap.

(Michelle Rowe,
Weekend Australian Review,
September 13, 2008)

Kalam, a Trans New Guinea (TNG) language of Madang Province, Papua New Guinea, has at least 60 “rhyming jingles,” expressions similar to English *higgledy piggledy* and *dilly dally*. A rhyming jingle consists of two phonological words, the base and the rhyme, which differ in the form of first syllable, and together form a single grammatical word. Kalam rhyming jingles fall into several phonological types, chiefly those where, in the rhyme, (1) only the first consonant changes, e.g., *gadal badal*, *jnow bnow*, *sлом dlom*, (2) only the first vowel changes, e.g., *gtij gtoŋ*, *ñugl ñagl*, *nugsum nagsum*, and (3) the first CV changes, e.g., *gogeb mageb*, *kosi masi*, *ñugog pagog*. Such expressions are widespread among TNG languages as well as occurring in many other languages around the world. After examining the phonology, semantics and grammar of the Kalam expressions, I will try to place them in comparative perspective, asking what the occurrence of such similar patterns in unrelated languages tells us about the psychic unity of Mankind?

1 Introduction

English discourse is peppered with expressions of the type of *helter skelter*, *hocus pocus*, *nitty gritty*, *dilly dally*, *tittle-tattle* and *topsy-turvy*, often referred to as

“rhyming jingles” (or simply “jingles”).¹ The term *jingle* is an old one, but the OED definition applies it to rhymes in general, but in specific cases it is chiefly used to refer to expressions such as the above.

- **jingle** 3. a. of prose or verse: To sound with alliteration, rhymes or the like (1670). b. To play with words for the sake of sound; to rhyme (1642).

The relevant part of the entry in the Macquarie Dictionary (Delbridge 1981) runs as follows:

- **jingle** *verb* 4. to make rhymes. *noun* 8. a musical succession of like sounds, as in rhyme or alliteration. 9. a piece of such verse. 10. a simple, repetitious, catchy rhyme set to music, especially for advertising.

Macquarie defines *rhyme* as follows:

- **rhyme** *noun* 1. agreement in the terminal sounds of lines in verse or of words. 2. a word agreeing with another in terminal sound.

Rhyming jingles have sometimes been called “Siamese expressions” and sometimes have been subsumed under broader terms such as “expressives” and “ideophones.” Joel Bradshaw (2006:53) notes that “ideophone” has recently (December 2004) been added to *Wikipedia*, which gives the following definition:

- **Ideophones** are word utilizing sound symbolism to express aspects of events that can be experienced by the senses, like smell, color, shape, sound, action or movement. Ideophones are attested in all languages of the world; however, languages vary in the extent to which they make use of them.

However, I do not think sound symbolism is a central feature of rhyming jingles.

Typical jingles consist of two phonological words that are identical in form, except for one or more elements in the first syllable. In most cases, at least one of the words has no meaning by itself and occurs only as part of a rhyming jingle. Many rhyming jingles have been part of the language for centuries and new ones are constantly coming into currency. More than 150 such expressions appear in the *Oxford English Dictionary* I have collected another 60 or so and have found additional examples on the Web, chiefly at <www.trussel.com/flipflop.htm>.

There is something playful and more than faintly ridiculous about rhyming jingles, but they are best used sparingly, like spices. No doubt this is why

¹I am delighted to contribute to a festschrift for Karl Franklin, whose diverse contributions to New Guinea linguistics have greatly enriched the field. It is something of a shock to realise that more than 40 years have passed since we first met and almost 40 since I had the pleasure of being an examiner for Karl’s PhD thesis on Kewa grammar. For helpful comments and information on this paper I am indebted to participants in the Papuanists’ workshop held in Sydney, July 2006, and in an earlier seminar presentation at ANU. David Nash subsequently alerted me to relevant material on the Web.

Michelle Rowe, the reviewer quoted above, coined her own pair of jingles to censure the youthful Jamie Oliver for an over-use of playful speech devices in his early TV cooking programs. True, they helped him achieve an I-don't-take-all-this-too-seriously style of presentation that was part of his appeal, but the seasoning was a bit too rich for the reviewer's taste.

This paper takes a serious look at the linguistic properties of rhyming jingles, first in English and then in Kalam, a language spoken by about 20,000 people living in the Bismarck and Schrader Ranges in SW Madang Province, Papua New Guinea. It is one of some 400 languages that belong to the Trans New Guinea (TNG) family, which dominates much of interior New Guinea.² I began doing fieldwork in the Kalam speech community as a graduate student in the 1960s. At that time I had not come across rhyming jingles in any language other than English, and, in my naïvite, was surprised to find that Kalam has many such expressions and indeed that they fall into three main phonological types that closely parallel the main types found in English.

In following sections I will compare the phonological characteristics of English and Kalam rhyming jingles and, more briefly, their semantics and grammar, and then ask why such similar patterns occur in languages that are not demonstrably related. Given that Kalam and English belong to language families that have probably been separate for more than 50,000 years, it is unlikely that we have any hope of establishing a common historical origin for the resemblances between their rhyming jingles.³ A functional or neurological explanation must be sought.

2 English rhyming jingles

2.1 Phonology

2.1.1 Features common to typical rhyming jingles

English has a range of phonologically diverse expressions that have claims to be called rhyming jingles. We may begin by recognizing a prototypical class, which has the following characteristics:

1. The jingle consists of two phonological words that are identical in form except for one or more elements in the first syllable. The first phonological word will be referred to as the base and the second as the rhyming word or rhyme.
2. The number of syllables in each word may be one, two or three.

²There are some 20,000 speakers of Kalam living in the Bismarck and Schrader Ranges, Madang Province. They are traditionally subsistence farmers who cultivate a range of root crops and keep pigs. The first semiregular contacts of Kalam people with Westerners took place in the 1950s and the language was unwritten until the 1960s.

³Humans first entered Sahul (the Australia-New Guinea continent) more than 40,000 years ago. It is likely that some of the so-called 'Papuan' language families of New Guinea and Island Melanesia are descended from languages that go back to this early settlement.

3. Each word carries one primary stress, which is always on the first syllable.
4. If the base has two or three syllables, the second and third syllables are exactly duplicated in the rhyme.
5. The first syllables of the base and the rhyme are always alike either in the first vowel or the first consonant, but not both.
6. The first syllable of the base may begin with a consonant or a vowel.
7. The first syllable of the rhyme begins with a consonant.
8. Consonant clusters are not allowed in the first syllable of the base but are allowed in the rhyme.

2.1.2 *The main phonological types*

Typical rhyming jingles fall into two main phonological types, A and B, according to the change made in the first syllable of the rhyming word. Both types A and B are highly productive.⁴ In type A: *helter skelter*, *argy bargy*, the onset of the rhyme differs from that of the base. There are two main subtypes, differing as follows:

1. In type A(i) the onset of the base is a single consonant. This consonant is replaced in the rhyme by a different consonant e.g., *raggle taggle*, *hob nob*, or by a consonant cluster, e.g., *helter skelter*.
2. In type A(ii) the base begins with a vowel. In the corresponding syllable of the rhyme a consonant precedes this vowel, e.g., *argy bargy*, *airy fairy*.

2.1.2.1 *Type A jingles*

A fairly extensive, but far from exhaustive, list of type A(i) jingles is given in table 1. Here and in later tables, the dates of first recorded occurrences are given where they are known.

⁴I will not consider here the type of *stick shmick!* and *farmer shmarrer!* (which I understand has entered English from Yiddish) because its phonological constraints and patterns of use and semantics seem to be somewhat different from typical jingles.

Table 1: Some English jingles of type A(i)

<i>bees' knees</i>	<i>n.</i> (?20 th c.)	<i>hurry scurry</i>	<i>v.</i> (1732)
<i>big wig</i>	<i>n.</i> (?20 th c.)	<i>humpty dumpty</i>	<i>n.</i> (1698)
<i>culture vulture</i>	<i>n.</i> (?20 th c.)	<i>jeepers creepers</i>	<i>interj.</i> (? 20 th c.)
<i>fuddy duddy</i>	<i>n.</i> (c. 1900)	<i>lippety clippety</i>	<i>adv.</i> (? 19 th C.)
<i>fuzzy wuzzy</i>	<i>n.</i> (1890)	<i>mininy piminy</i>	<i>adj.</i> (1815)
<i>hanky panky</i>	<i>n.</i> (1841)	<i>mumbo jumbo</i>	<i>n.</i> (1738)
<i>harum scarum</i>	<i>adj.</i> (1674)	<i>namby pamby</i>	(1745)
<i>heebie jeebie(s)</i>	<i>n.</i> (1927)	<i>nit wit</i>	<i>n.</i>
<i>hells bells</i>	<i>interj.</i>	<i>nitty gritty</i>	<i>n.</i> (1579)
<i>helter skelter</i>	<i>adv.</i> (1593)	<i>pell mell</i>	<i>adv.</i> (1579)
<i>heyday</i>	<i>n.</i> (1751)	<i>rag-tag</i>	<i>n.</i> (1820)
<i>hirdy girdy</i>	<i>n.</i> (Scots, c. 1500)	<i>raggle taggle</i>	<i>adj.</i>
<i>hob nob</i>	<i>v.</i> (1763)	<i>razzledazzle</i>	(1890 <i>n.</i>)
<i>hocus pocus</i>	<i>n.</i> (1624)	<i>rinky dinky</i>	<i>adj.</i> (1870)
<i>hobson jobson</i>		<i>roly poly</i>	<i>adj., n.</i> (1601)
<i>hotch potch</i> <i>hodge podge</i>	<i>n.</i> (1503)	<i>rootin tootin</i>	<i>adj.</i>
<i>hoddy doddy</i>	(1553)	<i>rum tum</i>	? <i>adj.</i> (1876)
<i>hoddy noddy</i>	(c. 1600)	<i>rumbletumble</i>	? <i>adj.</i> (1801)
<i>hogen mogen</i> <i>hogan mogan n.</i>	(1713). <i>adj.</i> (1705)	<i>rumpy pumpy</i>	<i>n.</i>
<i>hoker moker</i>	<i>adj.</i> obs. for <i>hugger mugger</i> (1526)	<i>silly billy</i>	<i>n.</i> (ca 1790)
<i>hoity toity</i>	<i>adj.</i> (1657)	<i>sin bin</i>	<i>n.</i> (20 th c.)
<i>holus bolus</i>	<i>adv.</i> (1847)	<i>superduper</i>	<i>adj.</i> (20 th c.)
<i>hokey pokey</i>	<i>n.</i> (20 th c.)	<i>tag rag</i>	(1582) <i>n</i> *
<i>holy moly</i>	<i>interj.</i> (20 th c.)	<i>teeny weeny,</i> <i>= teensy weensy</i>	<i>adj., n.</i>
<i>hubbub</i>	<i>n.</i> (1555)	<i>tutti frutti</i>	(20 th c.)
<i>hubble bubble</i>	(1634)	<i>walkie talkie</i>	<i>n.</i> (20 th c.)
<i>hugger mugger</i>	<i>v.</i> (late ME), <i>adj.</i> (1674)	<i>what-not</i>	<i>n.</i> (1540)
<i>huff snuff</i>	<i>n.</i> (1583)	<i>willy nilly</i>	<i>adv.</i> (1608)
<i>humdrum</i>	<i>adj.</i> (1553)	<i>wing ding</i>	<i>adj.</i> (? 20 th c.)
<i>hurly burly</i>	<i>n. & adv.</i>	<i>zoot suit</i>	<i>n.</i> (? 20 th c.)

*a. = *rif raff*, b. tags and rags of dress, all dressed in rags. *adj.* c. *pell mell*.

Certain additional phonological preferences apply to Type A(i) jingles.

1. Phonological words are usually disyllabic.
2. The preferred first consonant in the base is /h/. Of the 60 expressions listed in Table 1, 27 have initial /h/.
3. The rhyme seldom begins with a fricative and never with /h/.
4. If the base begins with a voiceless fricative it is usually followed by a stronger consonant, e.g., *f > d*, *f > w*, *j > kr*, *s > b*, *s > d*, or by a consonant cluster, e.g., *harum scarum*, *helter skelter*, *hurry scurry*, *huff snuff*.
5. If the base begins with /h/ and the rhyme with /s/, the /s/ is likely to introduce a consonant cluster, usually /sk/.

Type A(ii) is productive but has fewer members than A(i). Examples that have been noted are given in table 2.

Table 2: Some English jingles of type A(ii)

<i>airy fairy</i>	<i>adj.</i>	<i>even steven(s)</i>	<i>adj.</i>
<i>argle bargle</i>	<i>n.</i> (1589)	<i>itsy bitsy</i>	<i>adj.</i>
<i>argy bargy</i>	<i>n.</i>	<i>itty bitty</i>	<i>adj.</i>
<i>arty farty</i>	<i>adj.</i>	<i>okey dokey</i>	<i>interj.</i>

2.1.2.2 Type B: dilly dally

This type, illustrated in table 3, conforms to the following rules:

1. The first vowel changes in the rhyming word.
2. The base as well as the rhyme must always begin with a consonant. Thus **illy dally*, **dilly ally* and **illy ally* are unacceptable.
3. The first vowel in the base is always the lax high front unrounded vowel /ɪ/. Thus, while *flip flop* occurs, **flop flip* and **flap flop* are not possible jingles.
4. The first vowel in the rhyming word must be either the low front vowel /æ/, or the low back rounded vowel /ɔ /, or their dialectal equivalents. Thus, **flip flep*, **flip flupp*, **flip floop*, and **flip flope* are not possible jingles.

Table 3: Some English jingles of type B

<i>chit chat</i>	<i>n.</i> (1710)	<i>rickety rackets</i>	<i>adj.</i> (1893)
<i>chitter chatter</i>	<i>n.</i> (1712)	<i>riff raff</i>	<i>n.</i> (1470)
<i>crick crack</i>	<i>n.</i> (1565)	<i>ship-shape</i>	<i>adj.</i> (1678)
<i>dibbly dobbly</i>	<i>n.</i> (20 c.)	<i>shilly shally</i>	<i>adv.</i> (1678), <i>adj.</i> (1734)
<i>dilly dally</i>	<i>v.</i> (1741)	<i>snipper snapper</i>	<i>n.</i> (1590)
<i>ding dong</i>	<i>n.</i> (1560)	<i>splish splash</i>	<i>n.</i> (1720)
<i>fiddle faddle</i>	<i>n.</i> (1577)	<i>swish swash</i>	<i>n.</i> (1547)
<i>flim flam</i>	<i>n.</i> (1538)	<i>tick tack</i>	<i>n.</i> (1549)
<i>flip flap</i>	<i>adv.</i> (1529), <i>n.</i> (1678)	<i>tick tock</i>	<i>n.</i> (1848)
<i>flip flop</i>	<i>v. & n.</i>	<i>tingle tangle</i>	<i>n.</i> (1693)
<i>hippity hoppity</i>	<i>adv.</i>	<i>tittle tatttle</i>	<i>n. & v.</i> (1529)
<i>jim jam</i>	<i>n.</i> (1550)	<i>whim wham</i>	<i>n.</i> (1529)
<i>jingle jangle</i>	<i>n.</i> (1640)	<i>wiggle waggle</i>	<i>n.</i> (1825)
<i>knick knack</i>	<i>n.</i> (1618)	<i>wishy washy</i>	<i>adj.</i> (1693)
<i>mish mash</i>	<i>n.</i> (1450)	<i>zig zag</i>	<i>v. & adj.</i> (1712)
<i>ning nong</i>	<i>n.</i> (20 th c.)		

In many cases one or both of the phonological words used in a jingle are playful creations, formed by altering a standard word in ways additional to the systematic alterations that characterize each of Types A-H. Most often the alterations involve adding a final syllable. The addition is often -y or ends in y, e.g., *bargy* in *argy bargy*, *bitsy* in *itsy bitsy*, *shally* in *shilly shally* (*shall* as in *shall I* or *shan't I?*) and both *wish* and *wash* in *wishy washy*, and both *walk* and *talk* in *walkie-talkie*.

There are other types of rhyming jingles, all bearing a family resemblance to typical rhyming jingles.

2.1.2.3 Type C: jiggery pokery

This type resembles jingles of Types A and B in that the base and the rhyme have the same number of syllables and identical prosody, but it has certain distinctive features. The phonological characteristics of Type C jingles are:

1. The first syllable of the base is replaced in the rhyming word by a syllable with a different onset and vowel. That is, only the non-initial syllables rhyme.
2. In the case of two syllable words, the rhyme may be only in the vowel of the final syllable. This vowel is usually the tense high front unrounded vowel /i/.

3. The final consonant (if any) in the first syllable need not be identical to that of the rhyming word.

Type C is much less productive than A and B. Table 4 records the few examples that have been noted.

Table 4: Some English jingles of type C

<i>arsy versy</i>	<i>adv.</i> (1539)	<i>topsy turvy</i>	<i>adj.</i> (1528)
<i>hunky dory</i>	<i>adv.</i> (?20th c.)	<i>upsy daisy</i>	<i>interj.</i>
<i>jiggery pokery</i>	<i>n.</i> (1896)	<i>whippersnapper</i>	<i>n.</i> (1674)
<i>knickerbocker</i>	<i>n.</i> (19 th c.)		

I will touch only briefly on the following additional types, D-G.

2.1.2.4 Type D: bric-a-brac, chock-a-block, chug-a-lug, ding-a-ling, rub-a-dub

Similar to type B but the base and rhyme each consists of one syllable and begins with a consonant, and they are linked by an unstressed mid central vowel.

2.1.2.5 Type E: bumpety-bump, clickety-click, clickety-clack, yakkety-yak, gobbledy-gook

This type has a three syllable base with a one syllable rhyming word. The rhyme copies the first syllable of the base or differs only in the vowel.

2.1.2.6 Type F: spic and span, dribs and drabs, flotsam and jetsam

Similar to types B or C, but the base and rhyme are joined by *and*, so the expression is grammatically three words.

2.1.2.7 Type G: abra cadabra

Similar to type A but the base has two syllables and the rhyming word has three.

2.2 Grammar

Together the base and the rhyming word form a single grammatical word (a phrasal word) belonging to one or another major part of speech: noun, adverb, verb or adjective. Many are nouns, e.g., *riff raff*, *argy bargy*, *hanky panky*, *hodge podge*, *tittle tattle*. Many are adjectives, e.g., *arty farty*, *harum scarum*, *itsy bitsy*, *wishy washy*. Many are interjections, e.g., *ding dong*, *okey dokey*, *holy moly*, *upsy daisy*. Some are adverbs, e.g., *hippety hoppity*, *crick crack*, *ding dong*. A few are verbs, e.g., *dilly dally*, *zig zag*. A good many can belong to more than one part of

speech, e.g., *crick crack* (n., adv. & interj.), *fiddle faddle* (n. & interj.), *flip flop*, (v. & n.).

2.3 Semantics and symbolism

It is difficult to make overarching generalizations about the semantics of rhyming jingles. The most general tendency, almost a categorical rule, is that at least one of the phonological words has no meaning by itself. Often neither word has meaning by itself, as, for example, *helter skelter*, *hodge podge*, *holus bolus*, *jiggery pokery*, and *shilly shally*. (Some of these words are however derived by distorting existing words. Thus *holus* is a play on *whole*, and *shilly shally* is said to be a play on something like *will he or shall he?*, applied to an indecisive public figure). Otherwise, the meaningless element may be the base, as *dilly*, *hob*, *mish* and *razzle*, in *dilly dally*, *hob nob*, *mish mash*, and *razzle dazzle*, or (less often) the rhyme, as *tag*, *swash* and *jangle* in *rag tag*, *swish swash*, and *jingle jangle* (here *tag* and *jangle* are not used on their literal senses). In a fairly small minority of jingles both the words have meaning, e.g., *flip flop*, *nit wit* and *wiggle waggle*, although the meaning of the whole is seldom, if ever, fully predictable from the parts.

Particular sets of jingles share certain characteristic semantic features:

1. There is a class of onomatopoeic jingles that denote a sequence of sounds, in most cases sharp or resonating sounds, e.g., including *chitter chatter*, *crick crack*, *ding dong*, *flip flap*, *jingle jangle*, *splish splash*, *tick tock*. These jingles are all of type B, where the base and the rhyme differ in the stressed vowel. The sound symbolism here is perhaps that the successive sounds are not represented as exact repetitions but as varying slightly.
2. There is a set of adjectives and nouns that have in common the idea of disorderliness, e.g., *harum scarum*, *hodge podge*, *helter skelter*, *hurly burly*, *mish mash*, *pell mell*.
3. There is a class of jingles that refer to uneven or modulated movement, e.g., *zig zag*, *wiggle waggle*, *hippety hoppity*, *dibbly dobbly* and perhaps *flip flop*, *helter skelter* and *hurly burly*.
4. Certain adjectival and nominal jingles indicate a sort of weakness of character or behaviour. Some imply a lack of genuine substance or firmness, e.g., *airy fairy*, *arty farty*, *namby pamby*, *shilly shally*, *wishy washy*, while others denote stupidity (*nit wit*, *ning nong*) or people of low status or bad behaviour (*riff raff*, *hoi polloi*).
5. In a small class of nouns the jingle refers to speech or actions intended to deceive or obscure: *hocus pocus*, *mumbo jumbo*, *jiggery pokery*.

3 Kalam rhyming jingles

More than sixty rhyming jingles are recorded in the Kalam dictionary (Pawley and Bulmer 2003), and new jingles are occasionally coined.

3.1 Phonology

3.1.1 Background notes on Kalam phonology

Before I describe the phonological characteristics of Kalam jingles, the reader needs to become acquainted with certain features of the Kalam sound system and the orthography used here. The orthography is that used in the dictionary (Pawley and Bulmer 2003) and is a modified version of that devised by Biggs (1963) and Pawley (1966). The orthography is essentially phonemic, but because of the phonetic complexity of the Kalam sound system, the phonemic representation is not a straightforward indication of pronunciation. Kalam has 16 consonant phonemes as given in table 5.

Table 5: Kalam consonant phonemes

	bilabial	alveolar	palatal	velar
nasals	m	n	ɲ	ŋ
oral obstruents	p	t, s	c	k
prenasalised obstruents	b	d	j	g
retroflex lateral		ɭ		
semivowels	w		y	

Certain consonants are phonetically complex or have two or more distinct allophones, as indicated in table 6.

Table 6: Phonetic realizations of obstruents

	p	t	s	c	k	b	d	j	g
Initial	ɸ	t	s	tʃ	k	mb	nd	ɲtʃ	ŋg
Medial	β	r	s	tʃ	ɣ	mb	nd	ɲdʃ	ŋg
final	p, b, β	r	s	tʃ	k	mp	nt	ɲtʃ	ŋk

3.1.2 Vowels

There are five contrasting vowels, written /a e i o u/, which in most contexts are pronounced [a e i o u]. All five vowels are phonetically long and carry word stress.

Kalam also has predictable vowels, which are not written in the Pawley and Bulmer phonemic orthography. A short vowel is inserted between successive

consonants within a phonological word. The predictable vowel, which may be regarded as a slow transition between consonants, is usually a high central [i], though after palatal consonants it is [i] and after /w/ it is [u]. In certain contexts it may be a short copy of the stressed vowel in the following syllable. It can be compared to the vowel that occurs before /l/ and /r/ in some English speaker's pronunciations of *film*, *athlete* and *farm*, or between /w/ and /n/ in some speakers' pronunciation of *known*, *shown*, *blown*. More generally, it can be compared to the predictable vowel that is standard between the final two consonants in *apple*, *fiddle*, *atom*, *horses* and *kisses* and between the verb-final consonant and *n* in *didn't*, *hadn't*, *hasn't* and *shouldn't*.

Words consisting of a consonant alone, e.g., *b* 'man', *d* 'hold', *g* 'do', *m* 'taro', also have a release vowel when spoken in isolation or followed by a word beginning with a consonant. When the #C# word is followed by a vowel, the release vowel is absent.

When two grammatical words are spoken as a single phonological word a transition vowel is often inserted at the grammatical word boundary, e.g., *yb* 'name' + *nad* 'your' is typically pronounced [yimbina.nt], not as [yimpna.nt].

Predictable vowels carry word stress if they occur in stressable positions (see 3.1.4).

3.1.3 Phonotactic patterns

Syllable structure in Kalam is maximally CVC, and minimally V. An initial syllable may consist of phonemic V, VC or CV or CVC, or of C (phonetically CV).

A word may consist of any combination of syllables, except that (a) no word can consist of a vowel alone and (b) no word can end in a, e or o. Thus a word may consist entirely of consonant-only syllables, having the shape C, CC, CCC, and so on. Words containing up to seven successive consonants have been recorded. Some examples of words consisting of consonants alone are *b* [mbə] 'man', *bg* [mbɨŋk] 'cinders', *ccp* [tyityip] 'goshawk', *glmd* [ŋgɨimint] 'newly initiated boy', *wjblp* [wundyimbɨɨp] 'bird' (in the ritual "Pandanus language"), *ddblŋ* [ndɨndɨmbɨɨŋ] 'k.o. fern', *pkŋkŋŋ* [ɸɨyɨniyɨniŋ] 'while I was hitting', and *tbtckl* [timbirindiyil] 'pointed, trimmed'.

3.1.4 Stress placement

Word stress is predictable. Every phonological word has at least one word stress, and many have multiple stresses, in accordance with the following rules:

- i. Stress the final syllable of all words (including monosyllables).
- ii. Stress all full (non-predictable) vowels.
- iii. Stress an initial syllable, provided it is not followed by a stressed vowel.

3.1.5 The three phonological types of Kalam rhyming jingles

Rhyming jingles in Kalam exhibit the same general phonological characteristics as those defining English prototypical jingles listed in (1) above, with one exception: primary stress is not confined to the first syllable because in Kalam all phonemic vowels carry primary stress.

Furthermore, there is a remarkable parallelism between English and Kalam in the main phonological types. Three productive phonological types occur in Kalam. These correspond closely to types A-C in English and are also labeled A-C.

3.1.5.1 Type A: *gadal badal*

The onset to the first syllable of the rhyming word differs from that of the base. There are two subtypes A(i) and A(ii). In type A (i) the base begins with a consonant. That consonant is replaced in the rhyme by a different consonant or by a consonant cluster. In type A(ii) the base begins with a vowel. In the rhyme a consonant precedes that vowel, e.g., *ask mask* [asik + masik].

Besides the phonological constraints that are diagnostic of type A jingles, there are certain additional constraints or preferences that apply quite widely to this class:

1. The base never begins with a labial consonant.
2. The preference is for at least one voiced consonant to occur in the base.
3. The rhyme almost always begins with a bilabial, either *m* and *w*.
4. At least one consonant in the rhyme must be voiced (if it is a voiced obstruent it must contain a phonetic nasal).

It turns out that features (1)-(4) also apply to the other two major types of jingle in Kalam, except that (2) does not apply to type B.

It should be noted that most rhyming jingles are “verb adjuncts,” a word class which only occurs paired with a verb root to form a complex predicate. The adjunct precedes the verb. Table 7 gives examples of type A.

Table 7: Some Kalam jingles of type A

Subtype (i)	
<i>cegi wegi nŋ-</i>	'keep looking back' (<i>nŋ-</i> 'perceive, know, see, look, etc., <i>cegi nŋ-</i> 'look back')
<i>cnaŋ mnaŋ g-</i>	'wear strings of beads that cross the chest and back diagonally'
<i>coley boley ag-</i>	'stammer, stutter, speak with a defect' (<i>ag-</i> 'say, make a sound')
<i>gadal badal g-</i>	'1. lay things criss-cross. 2. place things higgledy-piggledy, in a disorderly manner'
<i>gley wley g-</i>	rattle, clatter'
<i>gdey bdey g-</i>	'be uprooted, topple over'
<i>glow wlow g-</i>	(G)syn.(K) <i>gley wley g-</i>
<i>godey bodey g-</i>	'1. swing around like a propellor. 2. lurch and fall over, as a bird when shot on a branch' (sense 2 possibly = <i>gdey bdey</i>)
<i>gsey bsey g-</i>	'1. scurry along. 2. (of a group) make a lot of noise when going along'
<i>jnow bnaw g-</i>	'shake s.th.'
<i>joley boley (mnm) ag-</i>	'stammer, stutter, speak with a defect' syn. <i>coley boley</i>
<i>kopay mopay g-</i>	'(of a devastating storm) blow, rage'
<i>smay wmay g-</i>	'be dizzy'
<i>smeŋ kmeŋ g-</i>	= <i>someŋ komeŋ g-</i> 'swing back and forth (e.g., holding vines)'
Subtype (ii)	
<i>adk madk g-</i>	'turn s.th. over, reverse s.th.'
<i>ask mask g-</i>	'avoid or prohibit (taboo) s.th., because of ritual restrictions'

3.1.5.2 Type B: *ñuŋl ñaŋl*

The first vowel changes in the rhyming word. There are certain additional constraints that apply quite widely to type B jingles:

1. The base begins with a consonant other than a bilabial.
2. Unlike English, the first vowel in the Kalam base is not restricted to /i/. There is, however, a preference for a high vowel to lower vowel sequence (the first vowel in the rhyme is usually /a/). Put another way, the shift is from a less resonant to a more resonant vowel.

Table 8 gives examples of type B.⁵

Table 8: Some Kalam jingles of type B

<i>gigu ag-</i>	'make successive sharp resonating sounds: rattle, ring, jingle, tap, knock'
<i>gtij gtoŋ g-</i>	'make a din or racket'
<i>guñm gañm g-</i>	'make curative magic with the herb <i>guñm</i> '
<i>gutgat g-</i>	'1. be sodden, soggy, 2. be oily, greasy'
<i>nuwsn nawsn tk-</i>	'clean the face thoroughly with leaves or cloth' syn. <i>nawsn tk-</i>
<i>kalkol g-</i>	'1. (of string) be tangled. 2 (of surface) be smeared'
<i>ñuŋl ñaŋl ag-</i>	'resound, of the evening chorus of insects, frogs, etc. in the grasslands'
<i>ygl wgl tb-</i>	'be a clear day'
<i>ygn wgn ag-</i>	'keep repeating oneself, go on and on'

3.1.5.3 Type C: *kosi masi*

The syllable of the rhyme differs from the first syllable of the base both in the first consonant and the first vowel phoneme (if any). (Bear in mind that in word-internal phonemic CC clusters a short predictable vowel separates the two consonants.) The constraints (1)-(4) that apply to type A also apply to type C and are repeated here for convenience:

1. The base never begins with a labial consonant.
2. The rhyme almost always begins with a bilabial, *b*, *m* or *w*.
3. At least one consonant in the rhyme must be voiced (if it is a voiced obstruent it must contain a phonetic nasal).
4. The preference is for at least one voiced consonant to occur in the base. There are few exceptions, e.g., *kopay mopay*, *kosi masi*.

In the case of type C jingles, there is one exception to constraint (2), namely, *kosb asb* [kosimp + asimp], but here it is noteworthy that the final element of the base is a prenasalised bilabial stop [mb].

There is an additional strong preference in type C, namely:

⁵A jingle such as *ygl wgl* or *ygn wgn*, whose initial elements are written here as /w/ and /y/, may be treated either as type A, B, or C, depending on the analysis of the initial element. In word initial position, /w/ and /y/ are realized as [wu] and [yi], respectively. Thus *ygl wgl* is pronounced [yɪŋgilwɪŋgɪl]. One can treat [yi] and [wu] as vowels /i/ and /u/ with predictable semi-vowel onsets or as consonants /y/ and /w/ with predictable vowel release. In some phonological processes /y/ and /w/ pattern like consonants. In the case of rhyming jingles it probably makes more sense to treat initial [wu] and [yi] as realizing vowels /u/ and /i/ or as realizing a CV sequence /wu/ and /yi/.

5. The first syllable in the rhyme is more resonant than that of the base. In most cases the increased resonance is carried by the vowel. If the first syllable of the base is CV, the vowel is always a mid or high vowel, never /a/. The corresponding vowel in the rhyme is almost always /a/. In the few cases where the base begins with a vowel this vowel is /a/ but the corresponding syllable in the rhyme has as its onset a bilabial resonant /n/ or /w/ and its nucleus is either /a/ or /o/.

Table 9 gives examples of type C.

Table 9: Some Kalam jingles of type C

Subtype (i). Base begins with a consonant	
<i>cckol mackol g-</i>	'1. twist s.th. over and over. 2. (bird) keep swerving, twisting and turning to avoid a pursuer (<i>cckol g-</i> , to twist s.th.)'
<i>gogeb mageb g-</i>	'be twisted, crooked'
<i>gotmat g-</i>	'shake the head from side to side'
<i>guskol maskol g-</i>	'make a mess, scatter things everywhere'
<i>jspok maspok g- = jspk maspk g-</i>	'crush, break into small pieces'
<i>kosb asb g-</i>	'dribble or foam at the mouth'
<i>kosi masi g-</i>	'1. be stacked, laid one on top of another. 2. stack things. cf. <i>kosi g-</i> be stacked'
<i>kocmac g-</i>	'crush or screwup (in the hand)'
<i>kluk malk asɲ mosɲ g- syn. kluk mask g-</i>	'become ritually contaminated by killing a game mammal, dog or cassowary'
<i>lñu mañu g-</i>	'feel uncomfortable (of the skin)'
<i>wlk malk g-</i>	'become ritually contaminated by crossing the path of someone who is contaminated'
<i>ygl wgl tb-</i>	'be a clear day'
<i>ygn wgn ag-</i>	'keep repeating oneself, go on and on'
<i>ytuk matk g-</i>	'pay no heed, ignore advice'
Subtype (ii). Base begins with a vowel	
<i>ask mosk g-</i>	'avoid, prohibit s.th.'
<i>asɲ mosɲ g-</i>	'be ritually contaminated'
<i>ykmak g-</i>	'follow a winding course'
<i>yswas g-</i>	'sulk, be in a bad mood'

Jingles of types A(i), B, and C are numerous in Kalam but there are only a few examples of type A(ii).

3.1.6 Other kinds of rhyming expressions

In Kalam, as in English, there are other sorts of rhyming expressions that do not conform to the canonical pattern of rhyming jingles.

3.1.6.1 Type D

The base is a reduplicated form consisting of identical CVC syllables. The rhyme is identical except that the vowel differs from that of the base. That is, base and rhyming word show consonant rhyme.

<i>becbec bachbac</i>	'headdress circlets (of possum fur, etc.)'
<i>tubtub toktok</i>	'small portable possessions, one's knick-knacks'
<i>tubtub towtow</i>	'resounding, of axes in the distance'

3.1.6.2 Type E

The base is a two syllable form CVCVC with non-identical vowels. Base and rhyme show full consonant rhyme, and rhyme in one of the two vowels.

<i>kuyan kuyon g-</i>	'go up and down, fluctuate in condition'
<i>kodarŋ kodorŋ g-</i>	'move back and forth, hither and thither'

3.2 Grammar

Almost all Kalam jingles belong to one of two major parts of speech: verb adjuncts and nouns.

3.2.1 Verb adjuncts

About 75 per cent of jingles are verb adjuncts. Verb adjuncts are an open class of non-inflecting roots or bases that occur only (or usually) before a verb, forming a complex predicate. The verb that most often partners these verb adjuncts is *g-* 'do, make, happen', but various other verbs also take verb adjuncts, such as *ag-* 'say, make sound', *ay-* 'put, become', *ŋŋ-* 'see, look, know', and *tk-* 'sever'. Jingles belonging to the verb adjunct class were listed in tables 7-9, together with the verb root that is their usual partner.

3.2.2 Nouns

The following is a fairly complete list of recorded rhyming jingles that are nouns.

3.2.2.1 Type A

<i>dagol bagol</i>	'kind of edible mushroom (<i>bay</i>) taxon'
<i>kawel mawel</i>	'enemy' (<i>kawel</i> 'enemy')
<i>słom dlom</i>	'runny mucus' (<i>słom</i> 'mucus')
<i>yala wala (mnm)</i>	'mixed language' (<i>mnm</i> 'language')

3.2.2.2 Type B

<i>gup-ss gap-ss</i>	'dew' (cf. <i>ss</i> 'urine')
<i>kitañ poptañ</i>	'kind of groundsel-like weed'
<i>nugsum nagsum</i>	'kind of vine'

3.2.2.3 Type C

<i>bglaj kawłaj</i>	'dark red clouds at dawn/dusk'
<i>kuli pali</i>	'type of beads worn across the chest'
<i>ñugog pagog</i>	'Grey Wagtail, a bird that dives into streams'
<i>todi madi</i>	'generic for unfamiliar birds resembling Whistlers'
<i>yukab aykab</i>	'fine spray rising from a waterfall'

3.2.3 Adjectives

Although the class of adjectives includes many fully reduplicated forms, only one adjectival rhyming jingle has been recorded—*tmey wmey* 'bad' was given as an example of a non-standard usage that some boys made up as a word-play variant of the standard adjective *tmey* 'bad'.

3.2.4 Verb series

Only one jingle made up of a series of verb roots has been recorded:

kluk malk g- 'become ritually contaminated by killing a game mammal etc.' (*kluk-* '(of a ritually contaminated person) pollute s.o. by contact', *malk-* 'cross-cross, interlace, twist together', *g-* 'do')

There are however several other cases where the base is a verb root and the rhyme is a verb adjunct, e.g., *adk madk (g-)*, *ask mask g-*.

3.3 Semantics and symbolism

A very few jingles are onomatopoeic as given in table 10.

Table 10: Onomatopoeic jingles

<i>gigu ag-</i>	'make successive sharp resonating sounds: rattle, ring, jingle, tap, knock'
<i>gley wley g-</i>	'rattle, clatter'
<i>gtij gtoŋ g-</i>	'make a din or racket'
<i>ñugl ñagl ag-</i>	'resound, of the evening chorus of insects, frogs, etc. in the grasslands' (Ti dialect, = <i>ñugi ñagi</i> in Etp dialect)
<i>tubtub towtow ag-</i>	'resound, ring out, thud, of the distant sound of axes chopping trees'

Some others are sound symbolic in other ways. It can be argued that in many jingles the sound symbolism comes from a combination of reduplication, indicating multiple movements or entities, and change in the first syllable of the rhyme, indicating irregular manner of movement (table 11) or abrupt change in position (table 12).

Table 11: Jingles of irregular manner of movement or change in direction

<i>adk madk g-</i>	'turn sth. over, reverse sth.'
<i>cegi wegi nŋ-</i>	'keep looking back' (<i>nŋ-</i> 'perceive, see, look', etc., <i>cegi nŋ-</i> 'look back')
<i>cnaŋ mnaŋ g-</i>	'wear strings of beads diagonally cross the chest and back'
<i>gadal badal g-</i>	'1. lay things criss-cross. 2. place things higgledy-piggledy, in a disorderly manner'
<i>gdey bdey g-</i>	'be uprooted, topple over'
<i>cckol mackol g-</i>	'1. twist s.th. over and over. 2. (bird) keep swerving, twisting and turning to avoid a pursuer' (<i>cckol g-</i> 'to twist s.th.')
<i>gogeb mageb g-</i>	'be twisted, crooked'
<i>ykmak g-</i>	'follow a winding course'
<i>godey bodey g-</i>	'1. swing around like a propellor. 2. lurch and fall over, as a bird when shot on a branch' (sense 2 possibly = <i>gdey bdey</i>)
<i>gsey bsey g-</i>	'scurry along'
<i>jnow bnow g-</i>	'shake s.th.'
<i>kopay mopay g-</i>	'(of a devastating storm) blow, rage'
<i>smay wmay g-</i>	'be dizzy'
<i>smeŋ kmeŋ g-</i> , = <i>someŋ komeŋ g-</i>	'swing back and forth (e.g., holding vines)'

Table 12: Jingles indicating disorderliness and breaking

<i>guskol maskol g-</i>	'make a mess, scatter things everywhere'
<i>jspok maspok g-</i> , = <i>jspk maspk g-</i>	'crush, break into small pieces'
<i>kocmac g-</i>	'crush or screw up (in the hand)'
<i>coley boley ag-</i>	'stammer, stutter, speak with a defect' (i.e., "broken speech" (<i>ag-</i> 'say, make a sound'))
<i>joley boley (mmm) ag-</i>	'stammer, stutter, speak with a defect' syn. <i>coley boley</i>

4 Are rhyming jingles universal? A brief note on other Trans New Guinea languages and other language families

As dictionaries exist for scarcely five percent of the languages in the Trans New Guinea (TNG) family, anyone trying to survey the distribution of lexical types in this family is severely handicapped. However, a cursory survey indicates that rhyming jingles occur in a number of languages across subgroups that are genealogically diverse and (in some cases) geographically widely separated, e.g., Korafe of the Binandere group (Cindy Farr, p.c.), Kâte (Flierl and Strauss 1977) and Selepet (McElhanon and McElhanon 1970) of the Finisterre-Huon group, Koromu of the Madang group (Carol Priestley, pc), Ku Waru of the Chimbu-Wahgi group (Alan Rumsey, pc), Kewa of the Engan group (Karl Franklin, pc), and Grand Dani of the Dani group (Province of Papua, Indonesia). They are absent or very rare in some TNG languages, e.g., Apali (aka Emerum) of the South Adelbert branch of the Madang group (Martha Wade, pc).

Such a wide distribution is consistent with the hypothesis that rhyming jingles were present in Proto TNG. However, other possibilities must be considered, namely, (a) areal diffusion, and (b) parallel development. If rhyming jingles turn out to be a near universal, it will be hard to rule out (b).

Rhyming jingles (of one or more types) abound in many languages of mainland SE Asia, including Thai and Lao (Chapman 1995), Austro-Asiatic languages such as Vietnamese (Nguyen 1997:47), Mlabri of N. Thailand (Rischel 1995), and the Hmong languages of South China (Paul Sidwell, pc). They occur in Sinhalese (D. Chandralal, pc) and in at least some Malayo-Polynesian languages of Indonesia (Mark Donohue, pc).

Although rhyming jingles occur in many language groups and regions of the world, it seems they are absent from some. For example, jingles are common in Germanic languages, but it seems they are virtually absent in French. They appear to be absent in Australian languages. And although sub-Saharan African languages abound in ideophones, none of the many descriptions in the collection edited by Voeltz and Kiliam-Hatz (2004) mention rhyming jingles.

Spotty though the distributional data are, we can conclude that rhyming jingles are not universal in the sense of being present in every language, but have arisen independently in many different languages. It follows that they must reflect certain universal properties of the human mind which apply to the processing of sounds and to the pairing of sounds with meaning.

5 What do rhyming jingles tell us about the psychic unity of Mankind?

Can we draw any conclusions more specific than those given in the preceding paragraph? Why have rhyming jingles been invented independently by many different speech communities?

An obvious first observation is that there is a sense of fun associated with them. They are a form of word play. But what makes jingles fun? The key notions, perhaps, are repetition, rhythm and rhyme, mutation, nonsense and absurdity. No doubt sound symbolism is sometimes in there too, but as this term covers a wide range of associations and is in effect a cover term for some of the factors we are considering, it is too general to be a very useful explanatory notion.

Rhyming jingles are word internal verse: at once reduplication and rhyme. The two phonological words are (at least in the case of prototypical jingles) full reduplications, matching in the number and the form of syllables and in prosodic structure, except that in the first syllable the match is imperfect. This reduplication gives the words a rhythmic, musical effect, reflected in the name "jingle."

The significance of rhyme is that it involves a mutation, a small alteration in the reduplication, and as such it draws our attention to the form of the words being used. Like rhyme in general, the mutations in jingles are highly patterned and familiar, but because they are word-internal mutations, the rhyme is more immediate, and less subtle, more obviously playful, than the effect of rhyme in verse. Heightening the sense of playfulness, and adding a tinge of absurdity, is the fact that one or both of the phonological words is often a nonsense word.

The main phonological types of rhyming jingles, A, B and C, are very similar in English and Kalam. That is to say, the same kinds of alternations between base and rhyme occur: the rhyme may show a change in the first consonant, or in the first vowel, or, less commonly, in the entire first syllable. There are also more particular similarities in the properties of the variable consonants or vowels. In Kalam, it seems that the principle of weaker to stronger, usually an increase in resonance, applies to the progression from base to rhyme in all three types. That is to say, the variable consonant or vowel in the rhyme is generally more resonant than the corresponding segment in the base. In English, this principle clearly applies to type B jingles. However, it is not obvious that it applies consistently to types A and C. In type A it does seem to apply to bases whose onset is /h/ or a voiceless fricative.

All in all, rhyming jingles tell us quite a bit about how people the world over perceive and manipulate patterns of sound. They recognize rhyming and non-rhyming syllables. They manipulate words so that they match in prosodic features. They manipulate syllable onsets to create rhymes. They manipulate individual consonant and vowel phones according to distinctive acoustic features. And people find it pleasurable to play these phonological games.

The capacity to perform and enjoy these creative uses of sound patterns presumably goes back to quite an early stage in the evolution of human

language. The development of this capacity must have been part and parcel of the development of the properties of phonological systems that are shared by all modern human languages.

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