

Categorically it is the pairings of the lower odd number and the next higher even number which thusly rhyme. Example (in Czech) JedA & dvA, TŘi & čtyŘi, pĚT & šEsT, sed*M & os*M, DEvĚT & DEsET. These numerals are the focus of this study. Many other languages rhyme their numerals (Eskimo, Finnish) but among Indo-Europeans only the Slavs do it so profoundly. The related Balts also rhyme their numerals to a lesser degree.

It had not escaped the notice of the author that there are other pairs, which rhyme for more mysterious purposes. For instance: (2) DVĚ & (9) DeVĚt also display some rhyming features. In Armenian (2) yerku and (3) yerek - display rhyming.

We may speculate that stone-age people who fabricated baskets and cloth rhymed their numerals using the dual number for the over/under binary features of such technologies. Contemporary computer science (1011001010001) relies on the same principle. Even in the modern world we have numerical rhymes used to teach knitting and similar productions of fabrics. [3.] Musings of a Knitting Spinning Felting Dyeing Braiding Aficionado <http://nurseknit.blogspot.com/2006/11/knitting-rhymes-and-surprise-video.html>

While in all of the Indo-European languages there remains the similarity of phonemes representing numerals, (Sed*m = Seven, Tri=Three) it is only in the Slavic Numerals that the rhyme and reason is evident. NonSlavic languages, which are (or were) in contact with Slavic languages, display some similar rhyming. This paper attempts to standardize the correlations between the linguistic distance and time and space of devolution from the original Slavic model. It begs the question if genetic distance will relate to the rhyming distance.

Abstract: Venetic/Slavic Languages rhyme their numerals by twos to a high frequency. In parts of the Slavic continuum the rhyme sometimes becomes "relaxed" as in (3) TrI & (4) ČetyrE or rhymes simply by the ending phoneme rather than by a final (whole) syllable. Non-Slavic languages seldom rhyme their numerals. Indo-European languages which evolved in proximal geographical space to Slavic lands or shared time with the Slavs had retained more of the numerical rhyme than had languages which are distal or did not share history with the Slavic element. Thus, Baltic languages, which share with the Slavs a contiguous boundary as well as membership in the Balto-Slavic group of I-E languages, had retained more of the numerical rhyme than had all the other Indo-European tongues. Venetian and Dalmatian dialects display rhyming of numerals while Standard Italian does not. Evidently, this is because these dialects have a long history as well as geographic contact with the Slovenes and Croats. Bavarian dialect rhymes some of its numerals while Standard German rhymes not. Bohemia and Bavaria share an extensive border as well as much common history. Tocharian B (Western) rhymes more of the numerals than Tocharian A (Eastern), which is located further from Slavic lands. Thus, a general law of relativity is proposed which predicts the frequency of numerals (between one and ten), which rhyme in a particular language. This prediction is based on degrees of proximity (space) and duration (time) of the separation from the compulsive Slavic need to rhyme numerals. The parody to Einstein's Theory of Relativity was at first serendipitous but subsequently useful and deliberate.

Key Words: Numerals, Rhyme, Instrument, Slavic, Veneti, Proximal, Distal, NonSlavic, Dual Gramatical Number, Binary, Digital, Pairings, Masculine JEDEN - Feminine JEDNA-ENA-ODNA..., Gender Dependent Counting,

Rhyme of Numerals used as an instrument to measure the Evolution/Devolution of Indo-European Languages from their Slavic Proto-Type

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Central Bavarian: (proximal to Czech)	oans	zwoa	drai	viare	fimbfe	sechse	simme	aochte	naine	zene	Total
Consonants (4)									n	n	16
Vowels (2)					e	e	e	e	e	e	12
											28

Italian	uno	due	tre	quatro	cinque	sei	sette	otto	nove	dieci	Total
Consonants (4)			tr	tr			(tt)	(tt)			24
Vowels (2)											0
											24

Venetian	on	do	tri	cuatro	sinque	sie	sete	oto	nove	diese	Total
Consonants (4)			tr	tr	s	s	t	t			32
Vowels (2)					i e	ie			e	e	12
											44

Dalmatian	join	doi	tra	kwatro	chenk	si	sapto	guapto	nu	dik	Total
Consonants (4)			tr	tr			pt	pt			32
Vowels (2)	oi	oi					a o	a o			16
											48

Albanian	nje	dy	tre	katér	pesé	gjasté	shtaté	teté	nénté	dgjeté	Total
Consonants (4)			tr	t r	s	s	t	t	t	t	40
Vowels (2)					e	e	e	e	e	e	12
											52

Greek	éna	dío	tria	tessera	pénde	éksi	eftá	oxtó	ennéa	déka	Total
Consonants (4)			tr	t r			t	t			24
Vowels (2)			a	a							4
											28

Hungarian	egy	kett-o	harom	negy	ot	hat	het	nyolc	kilenc	tiz	Total
Consonants (4)					t	t					4
Vowels (2)											0
											4

Finnish	yksi	kaksi	kolme	nelja	viisi	kuusi	saitesman	kahdeksan	yhdeksan	kymmenen	Total
Consonants (4)	ks	ks			s	s	n	ks n	ks n	n	56
Vowels (2)	i	i			i	i	a	a			12
											68

Saami-Lapp	okta	guokte	golbma	njeallje	vihtta	guhtta	cielza	gavcci	ovcci	logi	Total
Consonants (4)	kt	kt			htt	htt		cc	cc		56
Vowels (2)					a	a		i	i		8
											64

Anatolian Languages are too fragmented to be of use here

Armenian	mek	yerk'u	yerek	cors	hing	vec	yot	ut	inn	tasn	Total
Consonants (4)		rk	r k						n	n	24
Vowels (2)		e	e								4
											28

English	one	two	three	four	five	six	seven	eight	nine	ten	Total
Consonants (4)											
Vowels (2)											0

Turkish	bir	iki	uc	dort	bes	alti	yedi	sekiz	dokuz	on	Total
Consonants (4)								k z	k z		16
Vowels (2)						i	i				4
											20

Tocharian B	se	wi	traï	štwer	piš	skas	sukt	okt	nu	šak	Total
Consonants (4)			tr	t r	s	s	kt	kt			40
Vowels (2)											
											40

Tocharian A	sas	wu	tre	štwar	pañ	sak	spat	okat	nu	šak	Total
Consonants (4)			tr	t r			t	t			24
Vowels (2)							a	a			4
											28

Notice that Tocharian B rhymes more than Tocharian A because it is closer to Slavic lands!

Avestian	aeuua	duua	traiiö	čatBarö	pañča	xšuuuaš	hapta	ašta	nauua	dasa	Total
Consonants (4)			tr	t r			t	t			24
Vowels (2)	uua	uua	o	o			a	a	a	a	24
											48

Sanskrit	eka	dva	tri	catúr	páñca	s.as.	saptá	as.tá	náva	dáca	Total
Consonants (4)			tr	t r			t	t			24
Vowels (2)	a	a					a	a	a a	a a	16
											40

Swedish	en	två	tre	fyra	fem	sex	sju	atta	nio	tio	Total
Consonants (4)											
Vowels (2)									io	io	8
											8

[6.] SIDEBAR [The excellent source of the above information is the website Numerals in Over 5000 Languages, <http://www.zompist.com/numbers.shtml>]

"Poetic license" allows a latitude and a margin of error and bias. The author of this paper is flexible and receptive to other such calibrations. Still, he trusts that you will see at first glance that the Slavic languages rhyme their numerals MORE than others. Other languages rhyme their numerals minimally or not at all. Also it is important to notice that Lithuanian has much more rhyme than does Swedish, Finnish has much more rhyme than Saami-Lapp, Venetian and Dalmatian have more rhyme than Standard Italian, Tocharian B has more rhyme

than Tocharian A, etc. In all cases -- the more proximal the language is to Slavic Lands -- the more rhyming of numerals it has. The more distal the language is to Slavic Lands -- the less rhyme there is in the numerals. In Slavic languages the frequency of rhyme is about 80 points. In the Baltic languages the average of rhyme is about 54 points. The range of rhyme outside of the Slavic and Baltic languages is determined by distance and degree of contact.

Discussion:

For these reasons I propose that the original Indo-European counting was invented by Stone Age Slavic tribes as a Binary System of mathematics useful in Weaving and Basketry and later punch cards used in looms and first computers. It was based on two Grammatical Genders (Jedna & Dva).

The original (Slavoform) Indo-European Language had a DUAL Grammatical Number. This DUAL number is still used routinely in Slovenian and other Slavic languages. Even in English it is still evident in words like "either" rather than "any" and "neither" instead of "none" and "both" instead of "all". It is also evident in English measures. e.g.: Two half-pints in a pint, Two pints in a quart, 2 quarts in a Half Gallon and Two Half Gallons in a Gallon 2-4-8-16... ounces. In European Music the octaves work the same as ounces.

These are just a few examples to clarify the DUAL nature of our ancestral counting and measuring which is so well preserved in the RHYME & REASON OF SLAVIC COUNTING.

Perhaps such "Half-Life" of Numerical Rhyme could be used to date the differentiation of Indo-European Languages.

All Indo-Europeanists are in agreement that the ORIGINAL INDO-EUROPEAN Language used Dual Number.

For more information about the earlier paper (2004) about the Slavic Rhyming of Numerals please see www.jandacek.com -- Click on PROTO-SLAVIC CONCEPTS Jandáček also speculates that the word for FIVE had its origins in the word for FIST and/or SPAN of fingers = PĚST and/or rozPJAT. The word for six is from S JEŠTĚ = ŠEST. (Še Vedno in Slovenian) (or as in Russian Ещё разик, ещё да раз!) (in the song "E-E yu Khnem" Jeszcze is the first word of the Polish National Anthem. [7.] SEVEN (SED*M) is likely from SE DvĚMa (With Two). 8 - Os*M or VOZEM may be from VÁŽEM = We bundle and TIE.

* Apologia: The council of a respected colleague (Anton Perdih) proposed that I would use the forms of the first two numerals as JEDEN & DVA. These two words do not rhyme. When at first I proposed to use the forms jednA & dvA (because they do rhyme) my friend protested that I erred in using "wishful science". I defend my preference by these five arguments:

1. In Slovenian the normal form is EnA & DvA.
2. When counting in the twenties 30s, 40s, 50s onto infinity -- the form of the numerals in Czech is exclusively (21) Dvacet jednA, (22) Dvacet dvA, (31) Třicet jednA, (32) Třicet dvA..... (91) Devadesát jednA, (92) Devadesát dvA (101) Sto jednA, (102) Sto dvA.....etc.
3. The two genders (feminine jednA) and (Masculine dvA) are consistent with the DUAL Number which I invoke at times in this paper (in other contexts).
4. And, yes, the Rhyme of jednA & dvA is consistent with (3) TŘI & (4) čTyŘI, (5) pJET & (6) šJEsT, (7) sedUM & (8) osUM and (9) DEvĚT & (10) DEsET. RHYME.
5. I had consulted with Anatole Klyosov and Basil Chulev and was reassured that one *can* count OdnA & Dva or Edna & Dva in other Slavic languages.

Yet another disappointment for me is that thus far I have not been able to use the various systems the Slavs use to designate palatalizations.

References

1. Traces of European past 2003 ZBORNIK ZALOŽNIŠTVO JUTRO, Jutro d.o.o., Ljubljana 2004, Base ten counting as the extension of the archetypical base five system of Basques and Slavs, Jandacek Petr
2. R.J. Schellen, Balto-Slavic Numerals, <http://members.tripod.com/rjschellen/BaltSlavNums.htm>

It was somewhat improved by Anton and Andrej Perdihin in 2003. Recently Jandáček needed reassurance that a feminine form "Edna" or "Jedna" could be substituted for the masculine form "Jeden" Anatole Klyosov and Basil Culev provided such reassurance. Jandáček needed this confirmation that "Jeden" was convertible into the feminine "Jedna" for a more perfect rhyme with Dva.

3. Website: <http://nurseknit.blogspot.com/2006/11/knitting-rhymes-and-surprise-video.html>
4. Website: <http://www.zompist.com/numbers.shtml> Numerals in Over 5000 Languages]
5. Website: www.jandacek.com has additional detailed information about Slavic Rhyming of Numerals
6. Website: <http://www.zompist.com/numbers.htm>
7. Polish National Anthem : Jeszcze Polska nie zginęła, en.wikipedia.org/wiki/Poland_Is_Not_Yet_Lost