On the vowel euphony in Finnic alliterative folksongs

he folk poetry following the quadripartite trochaic metre has been common to most Baltic-Finnic peoples. The origin of the metre is hidden in the distant past, perhaps two millennia ago, and it was in active use in folk poetry until the 20th century. This folk poetry has included mythological epic songs, adventure warrior epic, incantations, wedding songs, ballads, historical songs, various lyric songs and proverbs and riddles - a broad spectrum of oral tradition. The same poetic language has been used also in the literary epics of the Finnish Kalevala and Estonian Kalevipoeg. In addition to meter, a number of various structural and stylistic means have formed the special register or poetic language, usually called Kalevala metre and Kalevala language, named after the most widely known product of the poetic tradition. The article of Arvo Krikmann is devoted to one very prominent quality of the Baltic-Finnic poetic register, alliteration.

The older folksongs of most Finnic peoples share the so-called Kalevala form, the main constituents of which are parallelism, alliteration (and assonance), and quadripartite trochaic rhythm.

Below are some excerpts from the monograph *The Temporal Structure of Estonian Runic Songs* by Jaan Ross and Ilse Lehiste (2001: 14, 139, 141):

meie ko du ka uge'ella	our home is far away
vi isi ve rstada va heta	many miles from here
ku usi kui vada jõgeda	with six dry rivers
se itse so oda si tke'ada	seven sloppy swamps
ka heksa ka la+mereda	eight seas of fish
ü heksa hü va ojada	nine beautiful brooks
kü mme kü lma allikada	ten cold springs in betweer
pere+ na ine na isukene	housewife, dear woman
mu ile annid mu ida tüöda	you gave different tasks to others
su lasele su urta tüöda	to the hired man you gave big jobs

mulle tüöda albusamba	to me you gave worse work
a nnid mul a ned a jada	you gave me the task to drive
	the geese
annid mul ka nad ka itseda	you gave me to protect the
	chickens
le stas+jalad le pistada	to pacify the web-footed ones
va rvas+jalad va igistada	to calm down the toe-footed
	ones
a jasin a ned vesile	I drove the geese to the waters
ka rgutin ka nad ke sale	I drove the chickens to the
	fallow field
le stas+jalad le pikusse	the web-footed ones to the
	alder grove
va rvas+jalad va iniulle	the toe-footed ones to the
	meadow
tuli ku ri, ku rja lindu	an angry, evil bird came
a jas mo a ned vesilta	drove my geese from the
	waters
ka rguti ka nad ke salta	drove my chickens from the
	fallow field
le stas+jalad le pikusta	the web-footed ones from the
	alder grove

So, the alliteration works from the left to the right within a single line; parallelism, in turn, operates from the top to the bottom, paraphrasing the content set up in the first line through two or more succeeding lines. And of course, it makes the development of events or other train of thought very slow and long-winded.

Finnic languages have strong natural bases to evolve the alliterative type of verse: the stress is on the first syllable (before the arrival of recent foreign words), they had almost no consonant clusters at the beginnings of words and so on.

The number of alliterative verses in Finnic runic songs is said to vary between 80 and 95 per cent on average, depending on the age of the material, language and dialect, the kind of material (whether epic or lyric), etc.

The alliterative chain usually consists of two links, but their number can also be higher (up to five).

A verse usually includes one single alliterative chain, but sometimes two or more: *mure musta parre peale: mure musta + parre peale* ('[I put] my concern on the black joist').

Alliteration is, of course, also a semantic phenomenon: it results from the choice of words and thus brings about the specific so-called 'semantic mist' in the contents of the text. But primarily it is considered a euphonic phenomenon which helps to make music out of the lexical substance of the song.

Research on the euphonic (phonetic) aspect of alliteration readily suggests many quantitative, that is statistical, approaches.

There are some typical problems that were discussed in the literature long ago, and which one inevitably encounters when trying to build up the statistics.

The first question is, as Pentti Leino (1970: 317) has put it, 'are the instances of alliteration in the text under investigation sporadic or at least partially the result of a conscious effort to alliterate?' Leino himself is convinced that only the instances of conscious choice must be taken into consideration, leaving out, for example, spontaneous coincidences of first sounds of various 'grammatical' or 'auxiliary' words in a verse line. However, it seems quite dubious how such a bivalent distinction could be made, considering the continuous character of the lexicon – be it in the runic song or elsewhere. In my own investigations all cases of alliteration – from clearly conscious and poetic to clearly spontaneous and 'grammatical' ones – have been included in the statistics.

Of course, the repetition of initial consonants, particularly stops, is the most reliable basis for speaking about alliteration; therefore some authors tend to exclude 'zero consonant' cases from alliteration.

Things are more problematic with the first-syllable vowels. Some authors suggest clearly distinguishing *alliteration* as a repetition of initial C's from *assonance* as a repetition of first-syllable vowels (whether in postconsonantal or 'zero-consonantal' position). Matti Sadeniemi's (1951: 79) typology of Finnic alliteration, however, includes all four possible combinations:

- CV : CV both consonants and (nuclear) vowels coincide: *kuusi kuivada jõgeda* 'six dry rivers'
- 2) ØV: ØV words begin with one and the same vowel (the so-called 'zero consonant' case): *ajasin aned vesile* 'I drove the geese to the waters'

CV₁: CV₂ - the identical consonants are followed by different vowels:

viisi verstada vaheta 'five versts from here'

4) ØV₁: ØV₂ – words begin with different vowels (another variant of the 'zero consonant' case): *mitu orja ilma pealla* 'how many slaves in the world'

The first two cases represent 'strong', and the last two 'weak' alliteration.

Hence, the question arises of whether it is justified to make a simple bivalent distinction between assonance and non-assonance, or whether, perhaps, we have to do with a continuous scale of vowel relationships where the 'pure' CV-alliteration is just the highest level or limit of the scale. If, under given lexical-semantic conditions, the perfect coincidence of postconsonantal or word-initial vowels is impossible to achieve, the intuitive search for a subsequent word pair with maximal or at least a sufficiently good similarity of different first-syllable vowels $(CV_1: CV_2 \text{ or } \emptyset V_1: \emptyset V_2)$ will follow. This hypothesis also finds support from investigators of early Finnish folklorists and linguists (Elias Lönnrot, D. E. D. Europaeus, August Ahlqvist, Arvid Genetz), who have observed that some vowel combinations like $a-\ddot{a}$, o-u, $y-\ddot{o}$ seem to be more favoured than others.

My own preliminary tests with limited material from Estonian runic songs in the middle of the 1960s also indicated the existence of certain ranks of preference, and certain systems of rules that govern the vocalism of runic alliteration, and encouraged me to continue the search for further evidence for the nature of these rules.

This leads us directly to the next cluster of questions: what kind of and how much empirical material should we gather in order to reach the required degree of representativeness and reliability? Runic songs evidently strive to achieve the 'pure', or 'strong', same-vowel alliteration (CV : CV or $\emptyset V : \emptyset V$), making these cases statistically prevalent. In other words, the general frequency level of 'weak' alliteration is quite low, so should the total number of texts investigated be noticeably larger?

Fortunately, I had at my disposal the manuscript of (the then unpublished) *Eesti rahvalaulud. Antoloogia* (Anthology of Estonian Folksongs', Tedre *et al.* 1969–74) that includes over 7000 song texts and is now also accessible on the internet. In around 1966 I started to go through the manuscript. On small sheets of paper I wrote out each verse where the 'consonant-proved' $CV_1 : CV_2$ alliteration occurred, and thus arrived at a total of perhaps 40,000 slips.

I then had great difficulties in finding a suitable collection of Finnish *runo* songs.

Actually, the situation is paradoxical because in general and in principle the premises for studying any textual aspects of Finnic runic songs are promising: at the

A recent publication in the FF Communications



Songs of the Border People Genre, reflexivity, and performance in Karelian oral poetry by Lotte Tarkka

Rune-singing in the Kalevala meter is one of the few Euro-pean oral poetries to survive the long nineteenth century. In her comprehensive study of the poems collected in the Archangel Karelian parish of Vuokkiniemi, Lotte Tarkka places this tradition within historical and ethnographic realities, contexts of local and elite ideologies, and the system of folklore genres. The songs of the border people emerge as praxis, the communicative creation of individual and collective identities grounded in a mythic-historical view of the world. The bond between the songs and their singers is articulated through an intertextual analysis of key cultural themes and the textual strategies used in their elaboration. In performance, singers and their audiences could evoke alternative realms of experience and make sense of the everyday in dialogue with each other, supranormal agents, and tradition. The poems, as powerful representations and performatives, endowed those who voiced them with godlike creative capacities, as coined in the proverb 'The things I put into words, I make real'.

otte Tarkka is Professor of Folklore Studies at the University of Helsinki. Her areas of expertise include Kalevala-meter poetry, Finnish mythology, oral poetries and textualization, genre, and intertextuality, especially in the context of archival sources.

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Tiedekirja Bookstore, tiedekirja@tsv.fi Shop online at <http://www.tsv.fi/tiedekirja> turn of the century, practically all major corpuses of Finnish-Karelian and Estonian runic songs have been digitised – perhaps from 160,000 to 180,000 song texts from both sides are now at the disposal of folklorists in Helsinki and Tartu.

Finns have also published on the internet the database containing the huge collection of *Suomen kansan vanhat runot* ('Ancient Poems of the Finnish People'). However, in their present form, the Finnish texts are unfortunately 'inedible' for any computer programs. They are dialectal, full of all kinds of diacritical marks and need a lot of time-consuming preparatory work.

Of course, nobody uses paper slips any more.

The only Finnish(-Karelian) sources I found on the internet were two books by Elias Lönnrot – his epic *Kalevala* (the 'New' Kalevala, 1849), and his book of slightly edited and modified runic songs *Kanteletar* (1840) – both about 22,000 verses. In full awareness of their partly non-folkloric nature and a certain 'Lönnrot's impact factor' in them, I nevertheless tested both of them for CV_1 : CV_2 rules, recalling the old joke Estonian folklorists used to tell 40–50 years ago:

Question: What is the main difference between the *Kalevala* and the Estonian epic, *Kalevipoeg*?

Answer: The *Kalevala* contains 95 per cent runic songs and 5 per cent Lönnrot's own poetry, whereas *Kalevipoeg* contains 5 per cent folkloric verses and 95 per cent Kreutzwald's personal creation.

It took almost a year to build up the statistics on the Estonian anthology. It took almost a week to build up the statistics for the *Kalevala*, as I did not need to write heaps of paper slips.

The next question was: what and how one should count when encountered with $CV_1 : CV_2$ problematics? The first thing to come to one's mind is a representative random sample of verses. But as that sample, under the above-mentioned conditions, must be voluminous enough – including, in the ideal case, each $CV_1 : CV_2$ occurrence in the given corpus – the sample will inevitably include a considerable number of highly recurrent pairs or chains of alliterating word stems – spontaneous co-occurrences of 'grammatical' words, various stereotypical verses and formulae, etc. Evidently, they are frequent, first and foremost, not because of their euphonic beauty, but primarily for semantic reasons.

Here are some highly frequent alliterative wordstem pairs in the 'Anthology of Estonian Folksongs' (abbreviation 's.s.' means 'the same word stem'):

nei u(ke) + noo r(uke)	maid ~ virgin + young	147
kuu lma + ko stma	hear+ reply	81
pei ukene + poi sikene	bridegroom + boy	72

mis + meie	what + we	68
siis + saama	then + get ~ receive ~ \dots	68
mina + mees	I + man ~ ~	39
mis + ma	what + I	38
kui + kodu	when ~ if + home	37
<pre>piht(a) + peen(ike)</pre>	waist + thin ~ slim	33
mina + mõistma	I + understand	32
le hm + lü ps(ma)	cow + milk(ing)	30
nu tma + noo r(ik)	cry + young ~ bride	30
see + saama	this ~ that + get ~ receive ~ \ldots	30
nai ne + noo r(uke)	woman ~ wife + young	27
mis + mu(l[le])	what + me ~ to me ~ my	25
meie + maa	our + land ~ soil ~ \dots	24

The highly frequent alliterative word stem pairs in the *Kalevala* appeared to be the following:

old Väinämöinen	321
so mentioned	232
mild Lemminkäinen	187
not + be (misc.)	182
old pious ()	116
that + smith	71
say + word (s.s.)	62
pretty Kaukomieli	57
mottled $\sim \dots + cover$	55
Kullervo, the son of Kalervo	52
age + old (s.s.)	50
be ~ was ~ \dots + Ilmarinen	46
be ~ was ~ \dots + good	41
young maiden	39
say + sentence (s.s.)	35
$laugh(ter) + woman \sim -men$	33
	old Väinämöinen so mentioned mild Lemminkäinen not + be (misc.) old pious () that + smith say + word (s.s.) pretty Kaukomieli mottled ~ + cover Kullervo, the son of Kalervo age + old (s.s.) be ~ was ~ + Ilmarinen be ~ was ~ + good young maiden say + sentence (s.s.) laugh(ter) + woman ~ -men

Therefore, a better estimate could be the total number of different $CV_1 : CV_2$ word-stem pairs themselves, ignoring their individual repeatability. This method should indicate more adequately the pressure each CV-initial part of the vocabulary has undergone in the process of creating and recreating (and not just transmitting) folksongs. Conspicuously enough, in some parts of the lexicon the alliterative pressure has been so strong that the supply of 'normal', 'meaningful' words appears to have been exhausted and the last 'emergency' resorts have been activated, like proper names, descriptive and other ideophonic words.

Many more specific questions will arise, for example with standardising the multitude of first-syllable vowel combinations. The phonetic and phonological systems of various Finnic languages – and of various dialects of the same language – differ quite substantially, so it may be hard to make the results of different observations comparable. One particular question is, for example, how to cope in our statistics with the great variety of first-syllable diphthongs that can be of three different origins in Finnic languages:

 old diphthongs that existed already in the hypothetical Proto-Finnic language:
Est. *naine*, Fi. *nainen* < *nainen 'woman'
Est. *teine*, Fi. *toinen* < *toinen 'other, second'
Est. *poeg*, Fi. *poika* < *poika 'son'
Est. *kõiv*, Fi. *koivu* < *koivu 'birch'

2) as the result of the syncopation of weak stops on the border of the first and second syllables:

Est. *viga* : *vea*, Fi. *vika* : *vian* < **vika* : *viγan* 'mistake; vice' Est. *tuba* : *toa*, Fi. *tupa* : *tuvan* < **tupa* : *tuβan* 'room; hut' Est. *rida* : *rea*, Fi. *rita* : *ridan* <**rita* : *riδan* 'row, line; a certain trap'

Est. süsi : söe, Fi. sysi : syden < *süsi : süδen 'coal'

3) the late diphthongs that in some Finnic languages (like Finnish and Karelian), and also North Estonian dialects, are the descendants of Proto-Finnic long vowels:

Fi., North Est. *tie* < **tee* 'way, road' Fi., North Est. *suo* < **soo* 'swamp'

Fi., North Est. *työ ~ tüö < *töö* 'work'

In my statistics all diphthongs were registered according to their so-called nuclear vowels, that is, in general, their first components, but in the case of late diphthongs the second component.

The next question was how to calculate the strength of preferences for each pair of vowels preceded by this or that word-initial consonant. One could guess that it might be sufficient just to take the representative dictionary of the given language, ascertain and square the 'lengths' of each particular CV-group and compare them with corresponding frequencies in the alliterative matter. This approach would, however, be deceptive because the individual probabilities of actualising different constituents (words or stems) of the given CV-group are far from equal. What is really needed seems to be something 'in between the vocabulary and the text'. To arrive at something like this, I checked the absolute frequencies of all CV₁:CV₂ word-stem pairs and summarised 'meetings' (intersections) of different nuclear vowels through all consonants (which is not statistically flawless). To estimate the density of connection between different vowels in the alliteration of Estonian folksongs and in the Kalevala, I used Zbigniew Pawłowski's (1967: 38) socalled colligation coefficients (or λ - coefficients, 'bivariate percentages') that are calculated from the formula:

$$\lambda_{AB} = \frac{A \cap B \times \sum_{tab}}{\sum A \times \sum B}$$

A recent publication in the FF Communications



Theoretical Milestones Selected writings of Lauri Honko edited by Pekka Hakamies and Anneli Honko

Lauri Honko (1932–2002) was among the leading folklorists of his time. In particular, he developed theories and concepts relating to folk belief, genre and epic. This collection represents a selection of Honko's key articles, which he considered worthy of republication himself. They relate to Honko's own research, to the debates and discussions he took part in; some are introductions to article collections produced by groups of researchers.

Honko's writings combine a typically strong empiricism with clear theoretical thought. His own theoretical framework was above all one of functionalism, within which he united other currents within folkloristics, such as 'composition in performance', 'ecology of tradition' and 'textualisation'. He was occupied by the question of how the individual performer used folklore, be he a teller of proverbs or jokes, a singer of oral poetry or a producer of written epic.

Honko was at no stage a representative of the traditional 'Finnish school' of folklore research, and origins and developments were a research challenge to him particularly from the perspective of how folklore adapts in different ways to its setting and circumstances of performance by means of variation, and how regularity may be discerned within this.

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Tiedekirja Bookstore, tiedekirja@tsv.fi Shop online at <http://www.tsv.fi/tiedekirja> where $A \cap B$ is the number of 'meetings' (intersections) of events A and B, ΣA and ΣB are the summary frequencies of these events in the given collection and Σ_{tab} is the sum total of all numerical data in the table through all of its rows and columns. (For more discussion about calculations of Estonian data, see Krikmann 1994.)

The ranks of decreasing preferences in the complex of non-low vowels in Estonian runic songs appeared to be the following (the vowel \tilde{o} being regarded as back mid illabial):

- 1)Vowels differing only in height (high/mid), all the rest being the same: o = u, e = i, $\ddot{o} = \ddot{u}$;
- 2)Vowels differing only in labiality (labial/illabial), all the rest being the same: $o = \overline{o}$, $e = \overline{o}$, $i = \overline{u}$;
- 3) Vowels differing in height and labiality, the gravity (back/front) being the same: u ≒õ, i ≒ö, e ≒ü;
- 4) Vowels differing only in gravity (back/front), all the rest being the same: e ⊆õ, u ⊆ü, o ⊆ö;
- 5)Vowels differing in height and gravity (back/front), all the rest being the same: $i = \overline{0}, o = \overline{u}, u = \overline{0};$
- 6)Vowels differing in labiality and gravity (back/front), all the rest being the same: $\delta \subseteq \phi$, $e \subseteq \phi$, $i \subseteq u$;
- 7)Vowels differing in all three features: $\tilde{o} \subseteq \ddot{u}$, $i \subseteq o$, $e \subseteq u$.

Or, in the numerical expression:

Group	Height	Labiality	Gravity	V_1V_2	λ	λ average
				üö	2.85	
(1)	X			uo	2.84	2.72
				ei	2.46	
				oõ	1.18	
(2)		X		eö	0.95	0.96
1 C 1				iü	0.74	
				uõ	1.15	
(3)	X	X		iö	0.85	0.89
				eü	0.57	
				eõ	0.90	
(4)			Х	uü	0.90	0.79
				OÖ	0.56	
				iõ	0.92	
(5)	X		X	oü	0.73	0.74
				uö	0.58	
				ÕÖ	0.97	
(6)		X	X	eo	0.55	0.67
				iu	0.50	
				õü	0.69	
(7)	X	X	X	io	0.53	0.56
				eu	0.46	

As can be seen on the graph below, the low a and \ddot{a} also reveal quite regular behaviour. The most important marker is lowness. On the background of all field of relations a continues with gravity (that is, prefers back partners); whereas \ddot{a} seems to prefer illabial partners.

		λ						λ			
а	aä	1.96	low			ä	äa	1.96	low		
	aõ	1.21			illabial		äe	1.15		illabial	front
	ao	0.98		back	illabial/		äi	1.12			
	au	0.94	low/	- Date - State	labial		äõ	0.98	low/		front/back
	ae	0.88	not-low		illabial		äü	0.81	not-low		front
	ai	0.88		back/			äö	0.70		illabial/	
	aü	0.62		front	illabial/		äu	0.64		labial	front/
	aö	0.54		a na manana na sa	labial		äo	0.63			back

Density of connection of low vowels in Estonian runic songs.

Regrettably, I have not yet managed to build up an integral quantitative estimate to describe the alliterative behaviour of all Estonian vowels together.

Ranks of preferences between non-low and low vowels in the *Kalevala* ascertained through the same method of calculation are shown on the graph below:

Group	Height	Labiality	Gravity	V_1V_2	λ	λ average
(1)	x			yö ou ei	2,29 2,38 2,13	2,27
(2)		x		eö	1,50	1,2 <mark>8</mark>
				Iy	1,06	-
(3)			v	uy	1,28	0.08
(3)			~	oö	0,68	0,30
	(4) X X			оу	0,88	
(4)		uö	0,87	0,88		
1.214				iö	1,02	
(5)	X	X		ey	0,61	0,82
				eo	0,72	
(6)		X	X	ui	0,78	≈ 0,75
79.05			20	oi	0,91	
(7)	X	X	×	eu	0,61	≈ 0,75

Density of connection of non-low vowels in the Kalevala.

		λ				2241		λ			
a	aä	1.70	low]		ä	äa	1.70	low		
	ao	1.31			illabial/		äe	1.37		menes an	101
	au	1.20		back	labial		äo	1.13		not-high	?
	ai	1.19	low/		illabial		äö	1.00	low/		
	ae	1.06	not-low	back/			äy	1.00	not-low		
	ay	0.89		front	illabial/		äi	0.91		high	?
	aö	0.64			labial		äu	0.88			

Density of connection of low vowels in the Kalevala.

Because of space limitations, I have skipped here the results of calculations on the data of the digital *Kanteletar*, which turned out to be similar to those gained from Estonian songs and the *Kalevala*. My earlier investigations of vowel euphony in Finnic alliterative *runo* songs have involved only Estonian data and Elias Lönnrot's texts based on Finnish-Karelian folksongs, not Finnish-Karelian folksongs proper. Yet the homogeneity of these preliminary results allows us to see that preferences for pairing different vowels in Finnic alliteration neatly correlate with vowels' phonetic parameters, as well as with other types of phonetic relationships between Finnic sounds, for example diachronic changes, synchronic differences between related lan-

guages and different dialects of one and the same language. Researchers have now around 185 megabytes of digitised Finnish and Karelian alliterative folksongs at their disposal, and my initial hypotheses above need to be tested on numerous larger samples. The results of the eventual forthcoming tests will probably be affected by differences in vowel systems in particular languages and dialects, by stylistic preferences of particular singers, and by the time period of recordings. But I would venture to predict that however large the empirical data we gather and however refined the calculation methods we apply, the basic patterns of preferences described above will persist.

ARVO KRIKMANN is an Estonian folklorist living in Tartu and a member of the Estonian Academy of Science.

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