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Parallelism and Number Patterns in the Kalevala Contrasted with Hebrew Patterns

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I am hardly the first to observe the intriguing similarities between line parallelisms in Classical Hebrew poetry, as witnessed in the Old Testament, and line parallelisms in Finnish folk poetry, as witnessed in the *Kalevala*. Such similarities have been noted for years, and have even provided motivation for the early Finnish scholars Erik Cajanus and Daniel Juslenius to claim that a genetic relationship existed between these languages. Cajanus made his claim in his dissertation in 1697, and Juslenius followed with his own comparison of Finnish with Hebrew and Greek traditions in 1728. Such early interests were traced in detail by Wolfgang Steinitz in his 1934 monograph. More recently the sociopolitical impact of such notions is also discussed by William A. Wilson in his book *Folklore and Nationalism in Modern Finland*. Naive as such ideas may seem today, it must be remembered that it was not until many years later that Robert Lowth, in "The Preliminary Dissertation" to his translation of Isaiah (1778), adopted the term "parallelism" for poetics, and Western scholars began to study Hebrew parallelisms in earnest (Jacobson, 399). Today we are aware of parallelisms in many languages throughout the world, but those that use it as a major principle of organization are relatively limited in distribution (Bright 438). Fortunately, Finnish has been one language that has attracted considerable attention; in fact, in virtually every study in current literature on parallelism, Finnish is cited as a prime example.

Roman Jacobson's study of "Grammatical Parallelism and its Russian facet" goes far beyond its title to provide a broad discussion of the topic. His landmark article shows that studies in parallelism have often been misleading in suggesting that parallelism is the "survival of a primeval helpless, tongue-tied means of expression" (22-23). Citing the insight of Claude Levi-Strauss, he remarks: "The pervasive parallelism of oral poetry attains such a refinement in the 'verbal polyphony' and its semantic tension that the myth of primitive poverty and paucity of creativeness once more betrays its unfitness (424). It is such recognition of the richness of parallelism in oral literature that makes research at this intersection of linguistics and literary structure very interesting. Of course many studies exist on related *Kalevala* topics, including August Ahlqvist's *Suomalainen runousoopi kieelliseltä kannalta*, Robert Austerlitz' Ob-Ugric Metrics, Pentti Leino's *Kieli, runo ja mitta*, and Paul Kiparsky's "Metrics and Morphophonemics in the Kalevala." This paper is a more modest attempt to focus on one aspect of Finnish parallelism, namely the use of numbers, contrasting their poetic use in Finnish with their use in Classical Hebrew poetry. Although the main focus is on parallelism, other occurrences of numbers that may not technically be considered parallelisms are included. The topic as it pertains to Hebrew has been discussed recently by Watson (144-149), who draws on studies by Haran, Roth, and Weiss, but the topic as it pertains to Finnish has not been treated.

In both poetic traditions numbers occur in parallel lines in similar patterns, one of the most striking of which is the pattern in which the number in the second parallel line is increased by an increment of one. For example (Hebrew examples are given here in English translation from the King James Bible):

**Hebrew:**

He shall deliver thee in six troubles:
yea: in seven there shall no evil touch thee.

**Job 5:19**

**Finnish:**

seuro seitsemän kesytta,
soak [for] seven summers,

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and three nights.

Pata kokonaista
Also
And Jonah was
Finnish:

vuotta

bobs [for] eight years
Kal. 6:204-5

Another pattern is one in which the number in
the second line is increased by a multiple of 10. For
example:

Hebrew:
How should one chase a thousand,
and two put ten thousand to flight...
Deut. 32:30

Finnish:
Syonyt on sa'anki miestä,
[it] has eaten a hundred men,
tuonnut tuhat urostaa,
destroyed a thousand heroes,
Kal. 26:191-92

Still a third pattern is one in which the numbers in
parallel, temporal phrases are balanced with respect
to enumerated days and nights. For example,

Hebrew:
So they sat down with him upon the ground seven
days and seven nights, and none spake a word
unto him:
Job 2:13

And Jonah was in the belly of the fish three days
and three nights.
Jonah 1:17

Finnish:
Pata kiehui paukutteli
The pot boiled noisily
kokonaista kolme yöitä,
for a whole three nights
kolme pääveä keväistä.
three spring days.
Kal. 9:447-449

Also
vuotti vielä yöitä kolme,
[he] waited still for three nights
saman verran päiviäksi.
[the] same number of days, too.
Kal. 2:53-54

Far from being isolated examples, such instances
are abundant, and they raise two major questions,
one obvious, the other less obvious, but still im-
portant: 1) how does one account for such simi-
larities, and 2) how do the numbers function
rhetorically in each case.

Accounting for Similarities

When one searches for causes, one realizes that
such similarities must be attributed either to coin-
cidence, common origin, borrowing, or to a uni-
versal tendency. The similarities are too striking
and too frequent to be dismissed as coincidence.
The evidence for the possibility of borrowing may
be found in the fact that Russian is the only Indo-
European language that participates in this feature,
and it has had ample opportunity to be exposed to
other language traditions that use parallelisms. The
evidence for common origin is stronger, since we
witness entire families of languages, e.g., Semitic
and Uralic that use grammatical parallelisms in
their poetic traditions. The evidence for universal
tendency is also strong, and therefore deserves closer
analysis. If we investigate this last possibility in two
steps, we find a cogent argument for such a ten-
dency. The first step is to consider the tendency for
line parallelism in general, which we find as a com-
mon feature in oral literature in general. In some
cases this rhetorical practice is retained and fur-
ther developed after succeeding generations have
produced written literature, as appears to be the
case with Classical Hebrew. It is conceivable, there-
fore, that the similar parallel structures are the
result of a universal tendency, which would help
explain the similarities in disparate languages.
Otherwise, the possibility of these similarities re-
sulting from borrowing or common origin cannot
be completely dismissed.

The second step of our inquiry is to consider
why numbers appear in similar numerical patterns
in the parallel structures. Again, there is evidence
ts to support the notion of universal tendency. The
occurrence of numbers in single-digit incremental
patterns may be explained by the same phenom-
enon that governs other words in parallel lines,
namely as a consequence of word association. It
goes without saying that a poet searching for words
to complete structurally and semantically parallel
lines will choose words of the same grammatical
category that have close semantic association. Thus
the words “bob” and “soak,” and “summer” and
“year” have been selected in the first Finnish ex-
ample above. It is precisely this close semantic
association that apparently causes numbers in par-
allel lines to have an incremental progression of
one. Numbers do not have synonyms, so the poet
must use another number, if repetition of the same
word is to be avoided. When another number is
chosen, it is by association with the first. Repeated
experiments, which anyone can replicate, show
that when persons responding to simple word-
association tasks are prompted with numbers from
one to ten, virtually without exception, they will
respond with another number in sequence, either
higher or lower by one. It appears that this simple
mental association of numbers may easily be a uni-
versal tendency. Thus, when we approach the ques-
tion of why two very different languages use parallel
structures, particularly with numbers, in strikingly
similar ways, we find that although borrowing is
a possibility, our best answer opens the door to
considering universal features of language and
cognition.
Rhetorical Functions of Numbers

Putting the reasons for these similarities aside for the moment, we can look at how the number patterns function both in the Hebrew of the Old Testament and in the Finnish of the Kalevala. Watson discusses five primary rhetorical functions of parallel numbers in Classical Hebrew: enumeration, indefinite number, climactic effect, to denote abundance, and only one number of the pair intended (147-49).

In only some cases might these categories apply to Finnish at this point in linguistic history. Perhaps the categories indefinite number, enumeration, and denoting abundance might fit in some cases; however, any attempt to make Finnish fit this mold would be like attempting to make English fit Latin grammar. When studied in their own right, the Finnish uses are more correctly categorized into three primary rhetorical functions: intensifying, adding aesthetic quality, and enumerating. These categories are not mutually exclusive; in fact, there may be considerable overlapping, but the broad categories appear to offer a good framework for discussion.

Intensifying

The intensification function is the most frequent of the three, occurring in least 165 instances, making up 64% of the total occurrences of multiple numbers, many of which occur in parallel structures. The function of intensification is illustrated by a sample of occurrences noted below:

kantoi kuuta kaksi, kolme
[he] carried it two, three months

neljännenki, viennenki, fourth-too fifth-too
a fourth, too [and] a fifth
kuuta seitsemän, kaheksan
month-prtv seven eight
seven, eight months

ympäri yheksän kuuta
around nine month-prtv
around nine months

Also

kesosenko, kaksosenko,
summer-ques two-ques
[for] two summers?

viiotosenko, kuutosenko
five-ques six-ques
[or] five, or six

vainko kymmenen keseä
even-ques ten summer-prtv
even [for] ten summers?

Intensification is achieved by stating numbers in a series, intensifying the message with each addition-al phrase, but paying only incidental attention to alliteration, which, in other rhetorical uses, is salient.

Another type of numerical intensification evident in both Hebrew and Finnish uses is the tenfold incrementation that we saw in the Hebrew example:

“How should one chase a thousand and two put ten thousand to flight...?”
Deut. 32:30

In Finnish we find analogous intensification, but unlike the occurrence of numbers in multiple series, alliteration is significant in these uses, as the following lines attest:

syönyt on sa’anä miestä
eaten has hundred-even man-prtv
[it] has eaten a hundred men
tuhonnut tuhat urosta
destroyed [has] thousand hero-prtv
[it] has destroyed a thousand heroes
Kal. 26:191-92

Also:

sata miestä siiven alle,
hundred man-prtv wing-gen under-to
a hundred men underneath the wing
tuhat purston tutkaimenehen
thousand tail-gen tip-to
a thousand underneath the tip of the tail

sata miestä miekallista
hundred man-prtv sword (adj)
a hundred swordsmen
tuhat ampuja urosta
thousand shooter hero-prtv
a thousand shooters
Kal. 43:157-160

The third method of using numbers for intensification also finds an analog in Hebrew. It is the balancing of equal numbers of days and nights in temporal expressions. This use gives rise to such familiar Biblical phrases as “three days and three nights” (Jonah 1:17), and “forty days and forty nights” (Genesis 7:12). The same pattern occurs in Finnish with two slight modifications: the noun nights occurs before days, and the second line, while communicating the same equivalence relationships lacks explicit numbers:

vuotti vielä yöitä kolme,
wait-pst still night-prtv three
[he] waited still [for] three nights

saman verran päivääki.
same amount days-prtv-too
[the] same number of days, too
Kal. 2:53-54
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Also:

Itki yöä kaksi kolme,  
cried-pst night-prtv two three  
[he] cried two, three nights,  
saman verran päivääki  
same amount days-prtv-too  
[the] same number of days, too  
Kal. 7:125

The ordering of nights before days can be explained by Panini's principles regarding word length, vowel length, and number of consonants (O'Connor 98-99). Kiparsky also notes, "other things being equal, the words of a line are arranged in order of increasing length" (Kiparsky 1972:168), e.g., "rough and ready," “one and only” (Kiparsky 168). The principle holds with Finnish “ yö” and “ päivä.”

Adding aesthetic quality

The second most frequent rhetorical use of numbers in the Kalevala may be called aesthetic parallelism, in which the function of the numbers appears to be neither for intensification nor for enumeration, but for sheer alliterative effect. At least 80 instances of otherwise arbitrary numbers occur in the Kalevala, accounting for 31% of the rhetorical uses of numbers. Indeed, the combining of single-digit incrementation of numbers in parallel patterns with alliteration yields rich sound quality to many verses, as in the following:

Niin näkevi neljä neittä,  
so sees-he four maidens  
So [he] sees four maidens  
viisi veen on morsianta,  
five sea-of are brides  
[there are] five brides of the sea  
Kal. 2:59-60
It appears that the alliteration with the noun maiden, neittä, governs the selection of the number four, neljä. In the next line the alliterative v’s work well with five and sea (water).

Consider also:
joll’ on vihki viiten vaimon,  
who has attire five-of woman-of  
Who has the wedding attire (beauty) of five women,  
uuota kuuen morsiamen.  
form six-of bride-of  
[the] form (grace) of six brides  
Kal. 47:157-58
Again, the number (viiten) appears to be chosen to alliterate with the other words both preceding and following it. The number in the second line need not alliterate. The line contains other nasal alliteration.

Also:

katkesi kivi kaheksi;  
break-pst rock two-into  
[the] rock broke in two  
paasi kolmeksi pakahtui.  
boulder three-into burst-pst  
[the] boulder burst into three [pieces]  
Kal. 49:251-52
The velar alliteration in words of the first line calls for a number beginning with [k] (two). Fortuitously, the next number in sequence also begins with [k] (three), tying the second line to the first, though not necessarily. The alliterative labial stops in the second line complete the couplet to give the impression of a forceful breaking apart. The assonance of the final [i] sound in each word is not to be ignored, either.

These examples are cases in which the contiguous words in the first line apparently govern the selection of a number beginning with an alliterative consonant. However, the alliterative number may occur in the second line as well:
tupa oli kuella tuella,  
house be-past six-on prop-on  
[the] house was on six props,  
seitsemällä seipähällä  
seven-on pole-on  
on seven poles  
Kal. 23:551-552
The number in the second line appears to have been selected to be alliterative with the final noun. Thus the second number is the primary number, and the number occurring in the first line is the secondary companion number. Alliteration with a number in the first line is irrelevant, because other words are alliterative. That is, the number 7 in the second line is the number of significance. The number 6 in the first line is there by association with 7.

In a few cases, it is difficult to determine which number is primary:
vihurilla viiennella  
wind gust-on fifth-on  
on the fifth gust  
kupahalla kuuennella  
float (wave)-on sixth-on  
on the sixth wave  
Kal. 5:91
A close analysis of how numbers participate in alliteration reveals how powerful it is in overriding other rhetorical tendencies such as single-increment parallelism in numbers. Evidence for this is found in instances in which the secondary line does not have alliteration of its own, so the single-digit
incrementation is broken in order to include a number that would be alliterative:

- koko kolmeksi kesäksi
  entire three-for summer-for
  for the entire three years
- viitiseksi vuotoseksi
  five-for year-for
  for five years
  Kal. 29:12

Also the following:

- miehen viieksi muruksi
  man-obj five-into crumbs-into
  [the] man into five crumbs
- kaheksaksi kappaleksi
  eight-into piece-into
  into eight pieces
  Kal. 14:449

In 22 instances the single-digit incrementation is broken to achieve alliteration, attesting to the power of this poetic device

**Enumerating**

The third and least used purpose of numbers in the Kalevala is for what we generally think numbers are for, that is for enumeration, the communicating of functional information. The number of occurrences noted for this purpose is 13, accounting for only 5% of the number patterns in the epic. Although this use is pragmatic, the presence of alliteration is significant. For example:

- laski kynttä kymmenkunnan
  lower-pst fingernail ten-amount
  [he] lowered ten fingers
- viisi sormea viritti
  five finger-prtv atuned-pst
  five fingers [he] set [atuned]
  Kal. 44:246

The relative distribution of these rhetorical functions of numbers in the Kalevala may be shown in the following diagram indicating percentages of occurrence of the general categories, but also the overlapping of categories; for example, instances of “intensifying” may also participate in sufficient alliteration and counting to warrant recognition of overlapping with both “adding aesthetic quality,” and “enumerating,” although neither of these would qualify as the primary category. Such can clearly be the case with the other categories, as well.

Although both Finnish and Hebrew poetic traditions show intriguing similarities in number patterns and in parallel structures, the rhetorical functions of the numbers appear to be very different. The structural properties shared by Hebrew and Finnish that are defined above are probably the result of universal tendencies in oral literature; still the possibility of borrowing cannot be totally ruled out. There is good evidence that some closely related languages share poetic parallelisms as a consequence of common origin, although this is not a serious claim for similarities between Finnish and Hebrew. Finally, one may ask why numbers have
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not been the subject of earlier study. Perhaps the tedious task of extracting and counting the data in works such as the Kalevala has not encouraged research, but current technologies such as optical scanners and computer concordance software are making such studies more inviting. This study’s use of a Kurzweil optical scanner to read the text into a computer and the WordCruncher computer program to retrieve the number combinations is a small example of how new technologies can help.

Works Cited

Ahlqvist, August. Suomalainen runousoppi kielelliseltä kannalta. (Helsinki, 1863); a revised version, “Suomalainen runo-oppi,” in the author’s Suomen kielen ranennus 1 (Helsinki, 1877).


Cajanus, Ericus. Lingvarum Ebraeae et Finnicae conveniencia. (Abo, 1697)


Juslenius, Daniel. Oratorio de convenientia linguae Finnicae cum Hebraea et Graeca.” Schwedische Bibliothek 1. 163 (1728)


Lowth, Robert. Isaiah. X-XI (London, 1779) 972

Roth, W.M.W. “The numerical sequence x/x+1 in the OT.” Vetus Testamentum. 12 (1962) 300-311.

