4-2-1993

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Luthy, Melvin J. (1993) "Parallelism and Number Patterns in the Kalevala Contrasted with Hebrew Patterns," Deseret Language and Linguistic Society Symposium: Vol. 19 : Iss. 1 , Article 20. Available at: https://scholarsarchive.byu.edu/dlls/vol19/iss1/20

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Parallelism and Number Patterns in the *Kalevala* Contrasted with Hebrew Patterns

Melvin J. Luthy

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, 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 runousoppi 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. 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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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 tuihat 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 yöätä,
for a whole three nights
kolme päivää kevästä.
three spring days.
Kal. 9:447-449

Also
vuotti vielä yöä kolme,
[he] waited still for three nights
saman verran päiviäki.
[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 important: 1) how does one account for such similarities, 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 coincidence, common origin, borrowing, or to a universal 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 tendency. The first step is to consider the tendency for line parallelism in general, which we find as a common feature in oral literature in general. In some cases this rhetorical practice is retained and further developed after succeeding generations have produced written literature, as appears to be the case with Classical Hebrew. It is conceivable, therefore, 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 resulting 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 to support the notion of universal tendency. The occurrence of numbers in single-digit incremental patterns may be explained by the same phenomenon 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 example above. It is precisely this close semantic association that apparently causes numbers in parallel 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 universal tendency. Thus, when we approach the question 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
  [she] carried it two, three months
- neljännenki, viennennki,
  fourth-too fifth-too
- kuuta seitsemän, kaheksan
  month-prtv seven eight
- ympäri yheksän kuuta
  around nine month-prtv
  around nine months

Also:

- kesosenko, kaksosenko,
  summer-ques two-ques
  [for] two summers?
- viitosenko, kuutosenko
  five-ques six-ques
  [or] five, or six
- vainko kymmenen keseä
  even-ques ten
  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 ten-fold 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'anki miestä
  [it] has eaten a hundred man-prtv
- tuhonnut tuhat urosta
  destroyed [has] thousand hero-prtv
- vuotti vielä yöä kolme,
  wait-pst still night-prtv three
- viitosen saaman verraan päiväätki.
  [the] same amount days-prtv-three

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:

- kantoi kuuta kaksi, kolme
  [she] carried it two, three months
- neljännenki, viennennki,
  fourth-too fifth-too
- kuuta seitsemän, kaheksan
  month-prtv seven eight
- ympäri yheksän kuuta
  around nine month-prtv
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  [the] same amount days-prtv-three
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Also:

Itki yöä kaksi kolme,
cried-pst night-prtv two three
[he] cried two, three nights,
saman verran päiväki
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 neitän,
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, neitän, 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:

ejoll' on vihki viiennelä,
who has attire five-of woman-of
Who has the wedding attire (beauty) of five women,
muoto kuuen morsiamen.
form six-of bride-of
[the] form (grace) of six brides
Kal. 47:157-58

Again, the number (viien) 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:

ekatkesi kivi kaheksi;
break-pst rock two-into
[the] rock broke in two
paasi kolmeksi paahtui.
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 [l] 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 kueella 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 actually 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 viiennelä
wind gust-on fifth-on
on the fifth gust
kupahalla kuuennelä
float (wave)-on sixth-on
on the sixth wave
Kal. 49:591

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.

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