

Podbevšek and Cvelbar: An attempt to test the disputable authorship empirically

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*SUMMARY: After Anton Podbevšek's collection of poems entitled *The Man with the Bombs* had been published in 1925, rumors appeared that those poems had been stolen from his friend Jože Cvelbar, another poet from Lower Carniola, who had died during the 1st World War. My hypothesis is that such rumors are a malicious fabrication against Podbevšek, who is considered to be an initiator of avant-garde literature in Slovenia. I attempt to deal with them first by analyzing Cvelbar's and Podbevšek's poetic beginnings, which reveal enormous differences between the two poets: one extremely unconventional, the other tied to tradition. I follow this distinction through their relation to war, which with Podbevšek is ambiguous and influenced both by futuristic ecstatic visions and the poet's personal war experience, on the other hand Cvelbar consistently and pacifistically rejects the war. In the second part of the article I apply some empirical methods to test my hypothesis in another system. The results of the statistical analysis also show that we are dealing with two distinct hands, which is especially evident from the "cusum" analysis of different text samples from both Podbevšek and Cvelbar. Finally I pose some questions about the justification of using empirical methods for authorship analysis and propose an interdisciplinary approach to developing an adequate methodology for Slovene texts.*

I. PROBLEM

After Anton **Podbevšek's** (1898-1981) collection of poems *The Man with the Bombs* had been published in 1925 in Ljubljana, rumors appeared that those poems had been stolen from his friend Jože **Cvelbar** (1895-1916), another poet from Lower Carniola, who had died during the first World War.

II. HYPOTHESIS

The traditional content analysis reveals significant differences between Cvelbar's (C) and Podbevšek's (P) poetic beginnings: P was extremely unconventional (he is considered to be an initiator of avant-garde literature in Slovenia), C tied to tradition; P's attitude to war was ambivalent while C was a pacifist throughout. On the grounds of these observations the hypothesis is formed that the above mentioned rumors were a fabrication against Podbevšek.

III. METHOD

I apply some empirical methods to test my hypothesis in another system. The results of the statistical analysis also show that we are dealing with two distinct writers, which is especially evident from the "cumulative sum" analysis of different text samples from both Podbevšek and Cvelbar.

1. Statistical analysis

For basic statistical analysis the program »Eva«, designed for Slovene texts by dr. Primož Jakopin, was used. The texts from both poets were first digitalized and then statistically compared. Significant were the graphs of word-length distribution which show substantial differences: Podbevšek is inclined to use longer words, some of them extremely long (average P : C = 6,73 : 5,78 letters/word). The sentences are much longer in Podbevšek's poetry as well (average P : C = 24,88 : 15,73 words/sentence), high percentage of them being extremely long (almost 20% exceed 40 words/sentence). There were also some significant indicators for different authorship in the frequencies of word usage, for example: Podbevšek shows a strong preference for comparative conjunction »kakor« compared to a more common synonym »kot«, which dominates in Cvelbar's poems. (This type of result is meaningful, but should be interpreted carefully and in accordance with other indicators.)

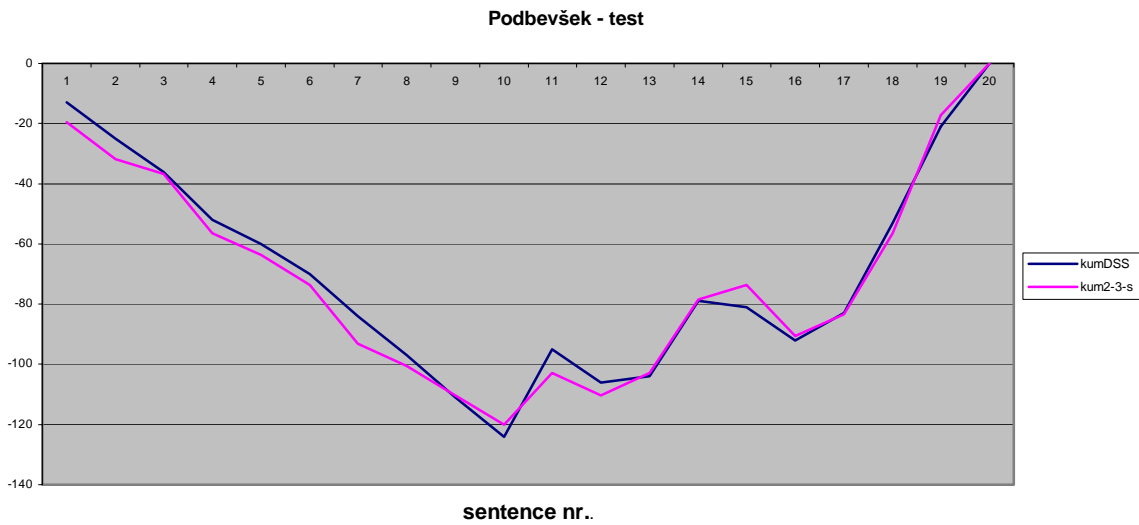
2. »Cusum« analysis

Second part of the empirical test was based on a method of »cumulative sum« (CUSUM) analysis as proposed by Jill Farrington (1996: *Analysing for authorship. A Guide to the Cusum Technique*. Cardiff: University of Wales Press), who advocates analyzing the subconscious usage of short words and has developed a methodology for authorship identification. Four excerpts (P1, P2; C1, C2: 4*20 sentences) were chosen both from Podbevšek's and Cvelbar's poetry and the running sum of the deviations from the average sentence length for each excerpt (the **blue line** on the graph, indicated **cumDSD**) was calculated. The second operation was to count the two-letter, three-letter words and words beginning with a vowel in each sentence and also calculate the running sum of the deviations from average (the **red line** on the graph, indicated **cum2-3-s**). For the same author both lines should overlay closely, which was successfully tested graphically for each of the four excerpts.

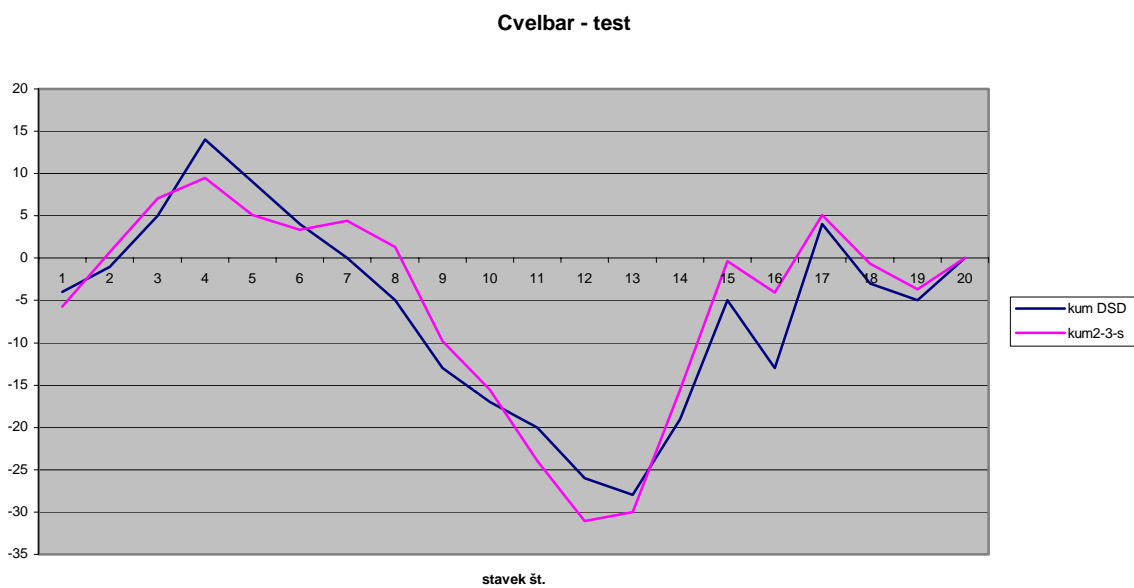
i) CONTINUITY TESTS

According to "CUSUM" methodology the rate between cumDS : cum2-3-s remains constant for a single author for many years and in different text types. Another test was done to confirm the continuity of authorship in both cases: two excerpts, taken from different text types and periods of each of poets, were joined in one graph for each poet (see **graphs 1 & 2**).

Graph 1 (test): Podbevšek-Podbevšek: 10 sentences (P1) + 10 sentences (P2)



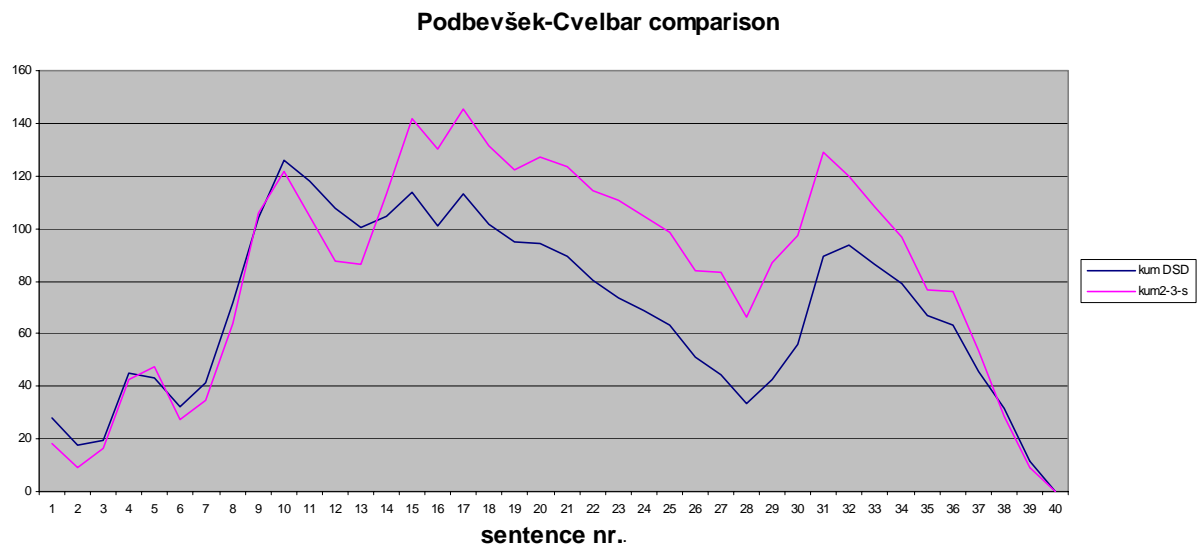
Graph 2 (test): Cvelbar-Cvelbar: 10 sentences (C1) + 10 sentences (C2)



ii) FINAL COMPARISON

20 sentences from P2 (Podbevšek) were inserted between 10+10 sentences of C2 (Cvelbar). The graph manifestly shows how the lines of the two graphs separate after sentence 10 and come back together after the sentence 30 which is an indicator that texts P1/P2 and C1/C2 were written by different authors (see **graph 3**).

Graph 3 (comparison): 10 sentences P2+ 20 sentences C2 + 10 sentences P2



IV. CONCLUSION

Both the statistical and »cusum« analyses support the initial hypothesis. But authorship attribution can be a tricky business and one can never confirm or reject authorship definitively. Especially “cusum analysis” can be a succesfull empirical tool for making viable conclusions in cases of disputable autorship, but it should still be combined and supported with other methods, even those more traditional.