Chapter 7: Cello as the Leader of the String Section

Chapter seven contains comparisons between all contributing elements of sound in the cello.

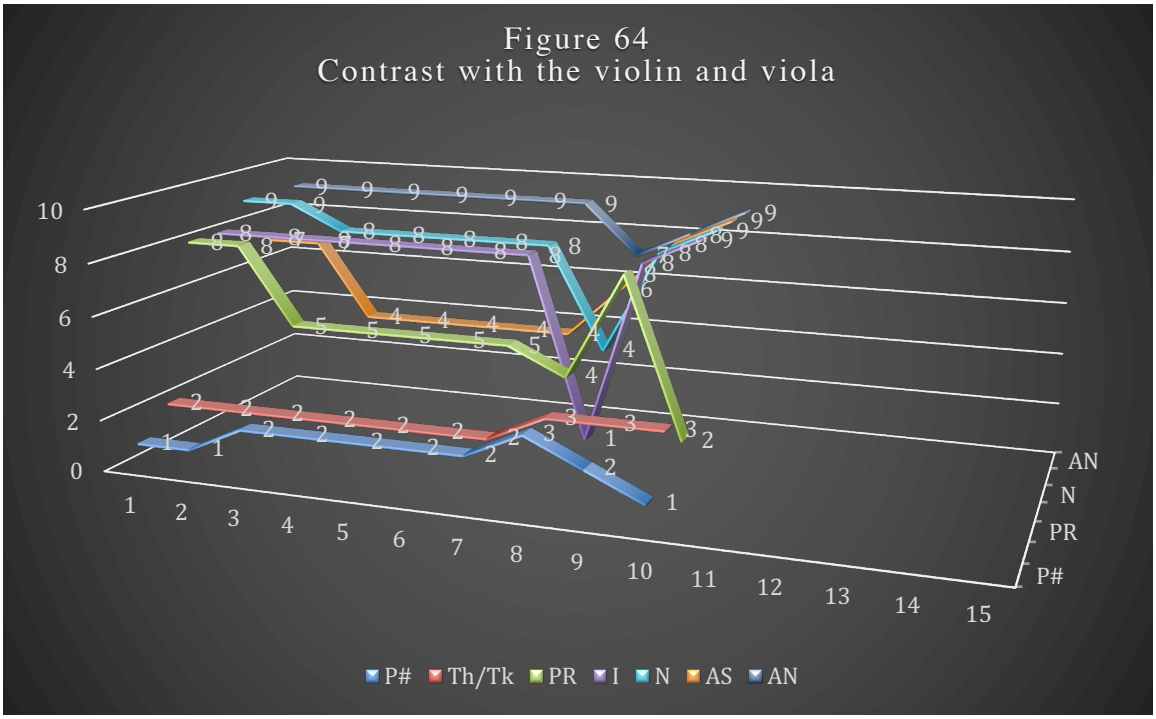

Figure 64 demonstrates a definite form that contrasts with the opening sections of the violin, Figure 52, and viola, Figure 55. The beginning section of cello consists of three smaller sections: the middle section, bars 3 – 7, showing stagnant parallelism, and the opening and closing sections, 1 – 3 and 7 – 10, showing spikes and drops. The contrast between these sections and the interactivity between different elements of sound contributes to the form in Figure 64. There is also a contrast between Figure 64 and the other string instruments in the beginning section. The contrast between string instruments in Crama contributes to the construction of timbre within the string section.

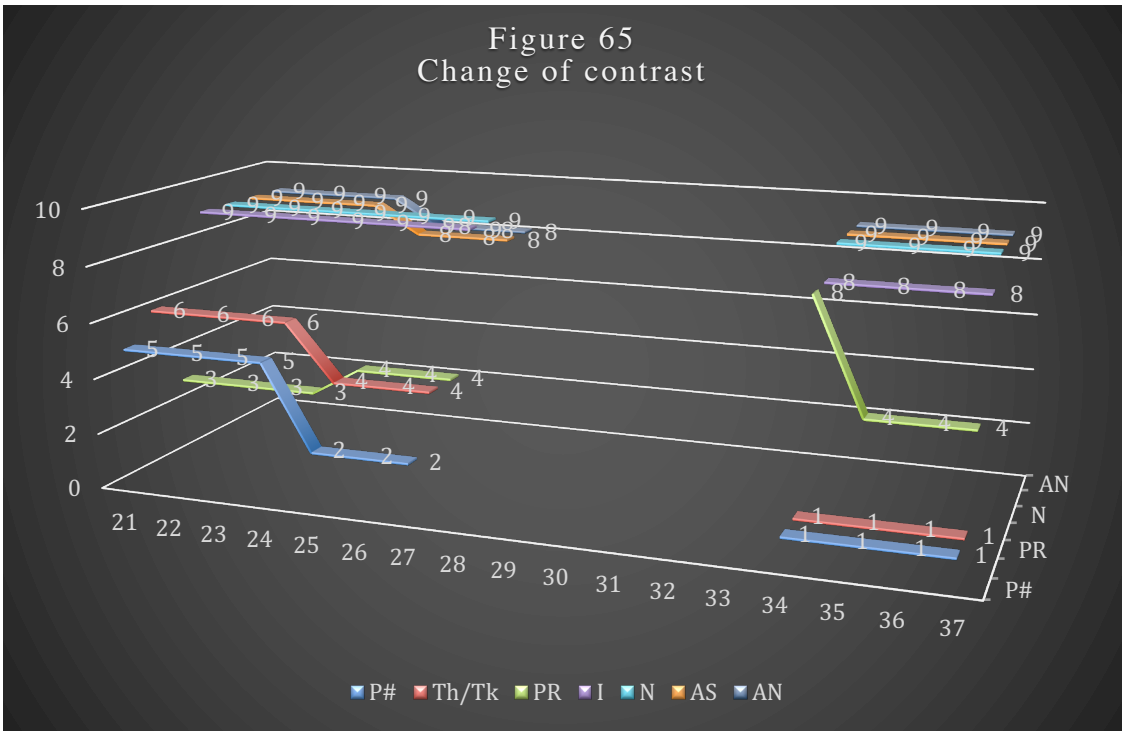

Figure 65 does not suggest a form as definite as Figure 64, and there is a change in the level of contrast. In other words, the disproportionality between the levels of parallelism and contrast transforms into a new level. More importantly, the parallelism among the contributing elements creates a contrast between Figures 64 and 65, due to the appearance of deviations and parallelisms in Figure 64. The parallelism contributes to the overall transformation of timbres from Figures 64 to 65, supporting a sense of transformation in the timbre, which begins in Figure 64 and continues to Figure 65. This transformation supports the continuity of sound.

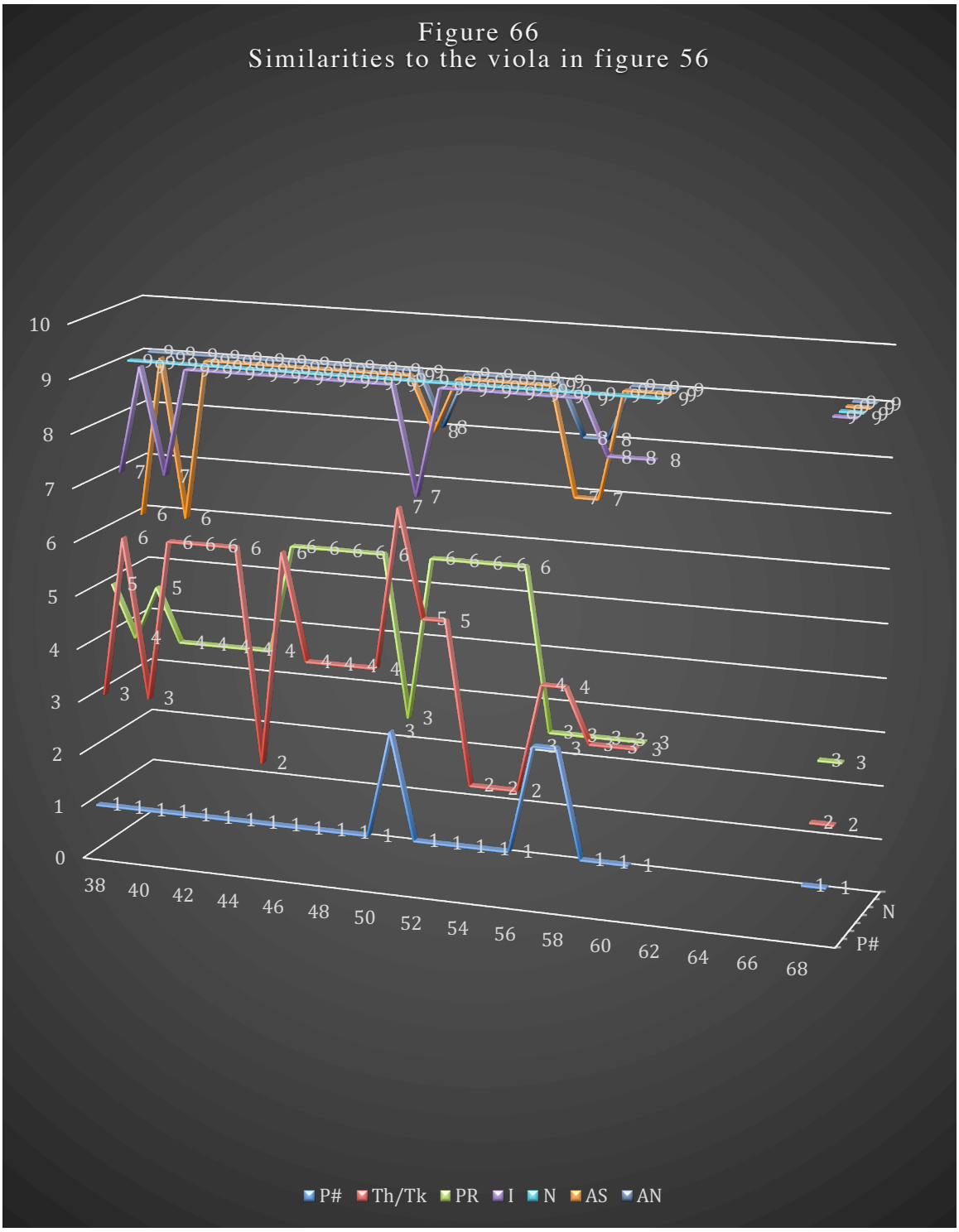

Figure 66 functions in a similar way as Figure 56. There is stagnant and parallelism relationship in the bottom portion of Figure 67 between the number of partials and thinness and thickness of sound, as well as in the top portion between the amount of noise category, the sharpness of attack

category, and 7. The interactivity between series thinness and thickness of sound and 3, in the middle portion, contributes to the overall construction of form in Figure 66. In this way, Figure 66 can be divided into three sub-sections: A) bars 38 – 45; B) bars 45 – 57; A') bars 59 – 69. The interaction between these different elements of sound contributes to the form in Figure 66 of Crama.

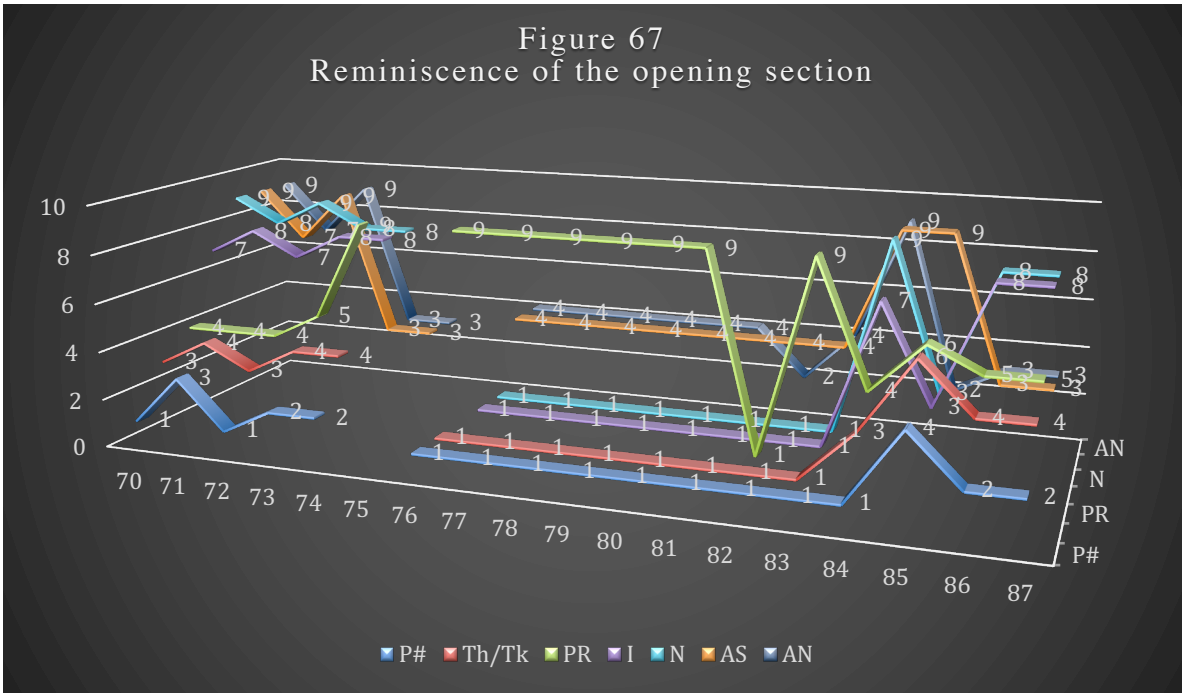

Figure 67 presents similarities and contrast to Figure 66. While there are many fewer parallelism between different elements of sound, these two Figures share a clear form. There are three subsections in this section: A) bars 70 – 74; B) bars 76 – 81; and A') bars 81 – 87.

The similarity in form and contrast in the construction of timbre between Figures 66 and 67 supports the idea of timbral transformation from one section to another. A similar pattern was also observed in Figures 64 and 57. Thus, it is becoming more clear which transformation of timbres from one section to another supports the continuity of sound in this sound-based composition.

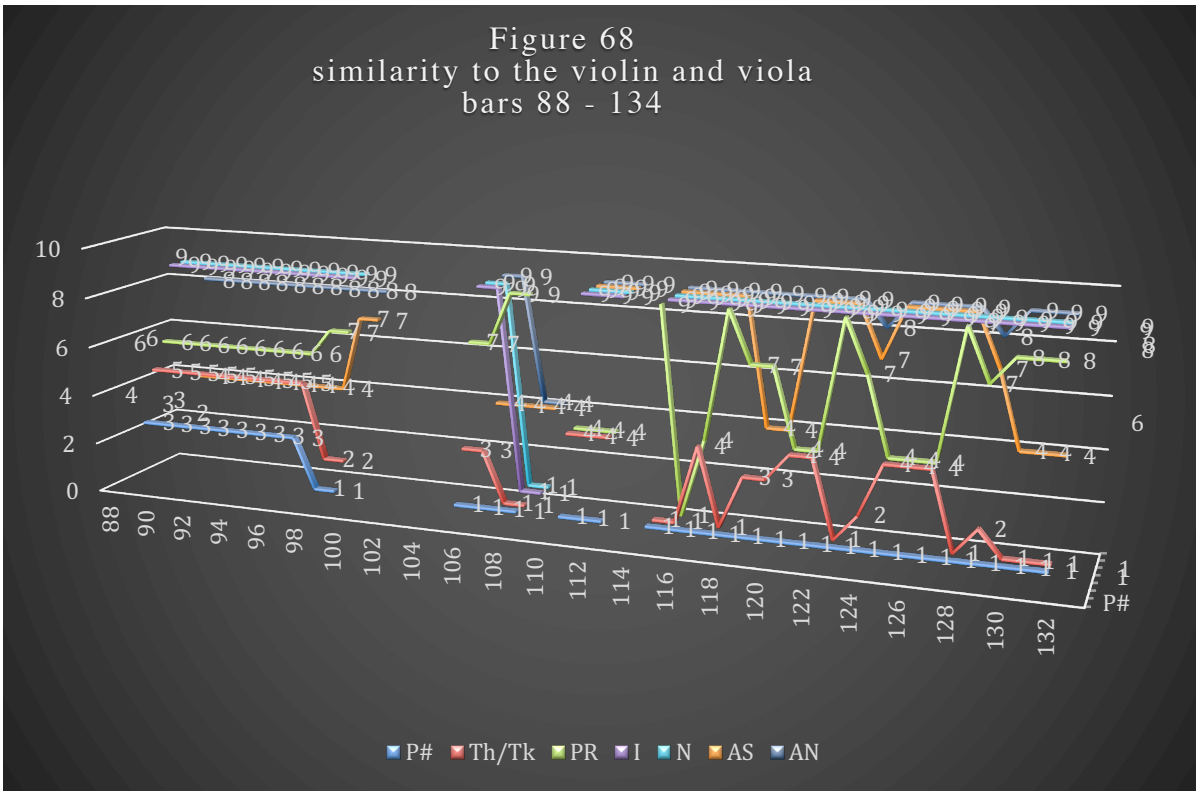
Figure 68
similarity to the violin and viola
bars 88 - 134
P#
P# Th/Tk PR I N AS AN

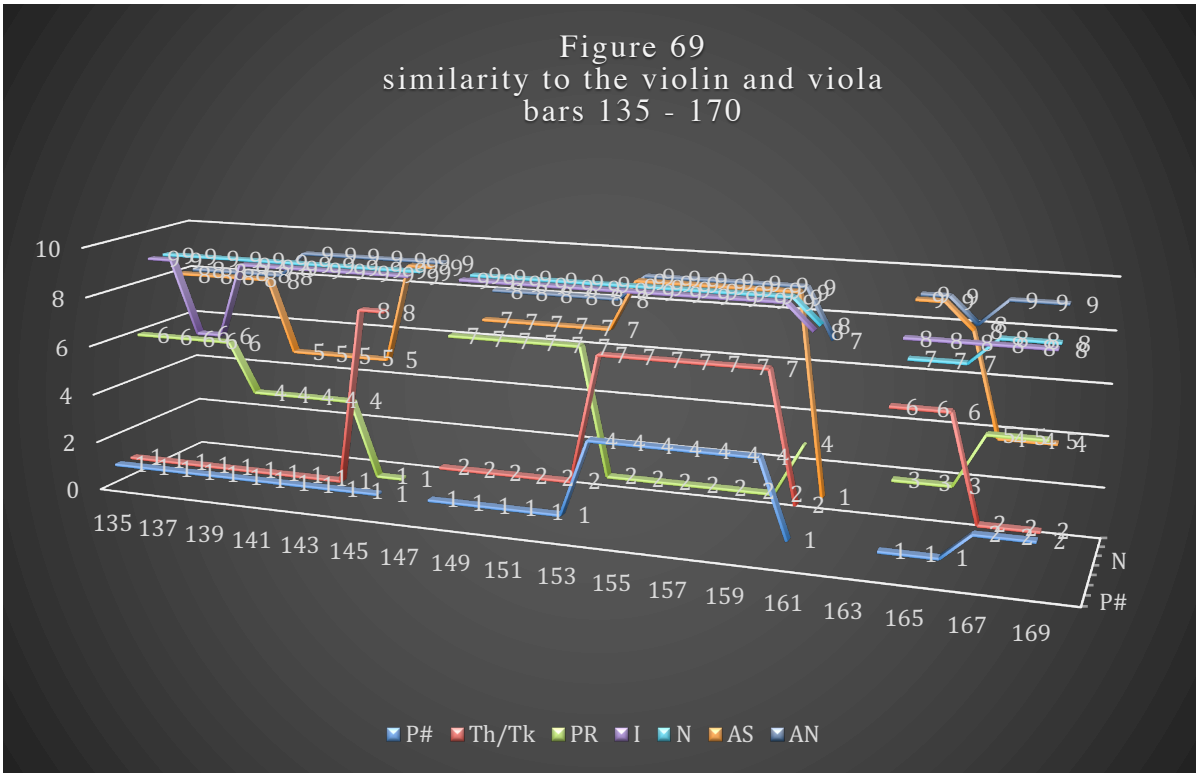
Figure 69
similarity to the violin and viola
bars 135 - 170
N
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Notice the stagnant motion in the number of partials of Figure 68 and 69, which contrasts with the spiked-and-dropped motion of number of partials in Figure 58. Also, the range of strongest partials of Figures 68 and 69 fluctuates between one and nine, which contrasts with the motion of the range of strongest partials in Figure 49. Furthermore, the sharpness of attack category fluctuates between four and nine the majority of the time, whereas the sharpness of attack category in Figure 58 remains mostly stagnant. There are other similarities between Figures 55 and 58, including the stagnant motion in Irregularity of sound category and sharpness of attack category. Notice the contrast between the almost-stagnant motion of the amount of noise category in Figure 49, with the spiked-and-dropped motion in Figure 58. The similarities, contrasts, stagnation, and parallel motion within the string section contribute to the complexity in the anatomy of timbre between different instruments and, in turn, contribute to form in Crama.

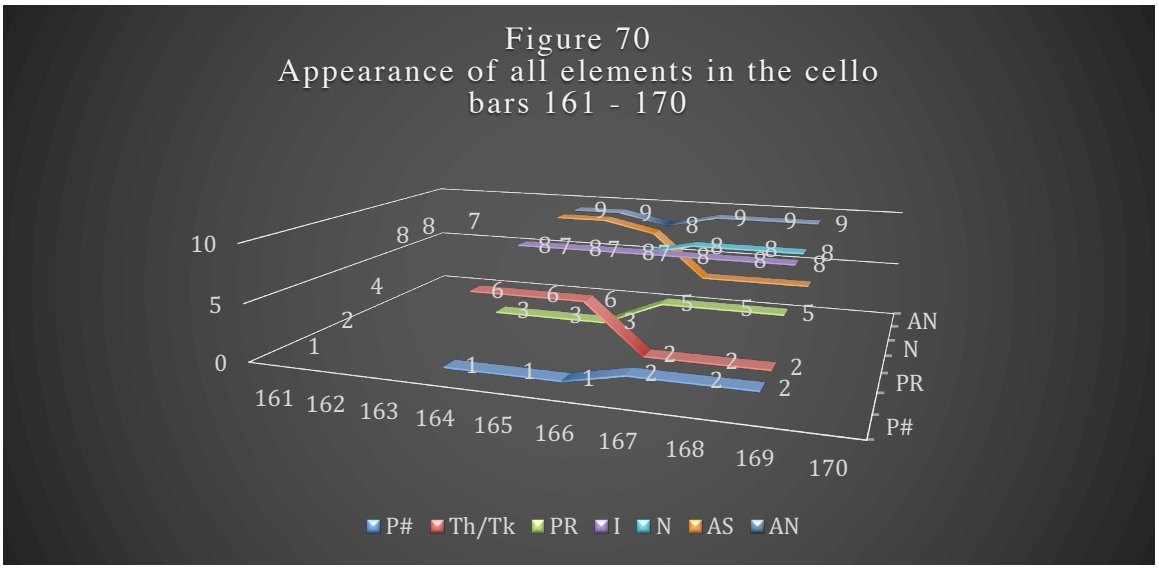


Figure 70, the ending section, presents all the same values, except value four, as Figure 64, the opening section, which shows these two sections to be almost identical. The identical character of Figures 64 and 68/69 contributes to form and coherency between the beginning and the ending sections, which shows timbre to be the primary element of form in a sound-based composition like Crama.

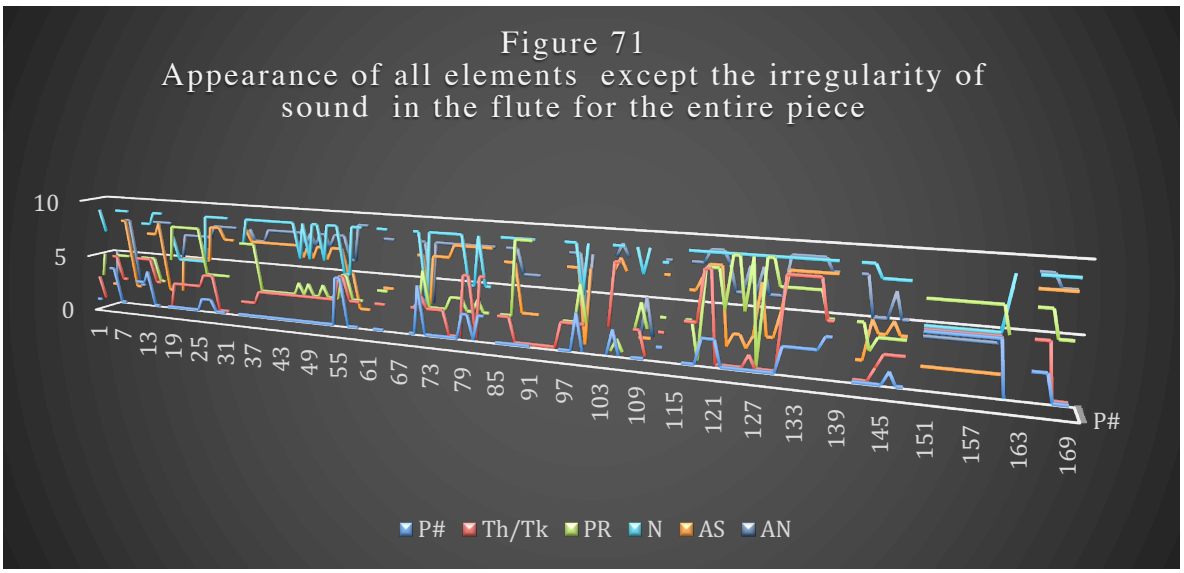


Figure 72
Appearance of all elements
in the clarinet in the entire piece

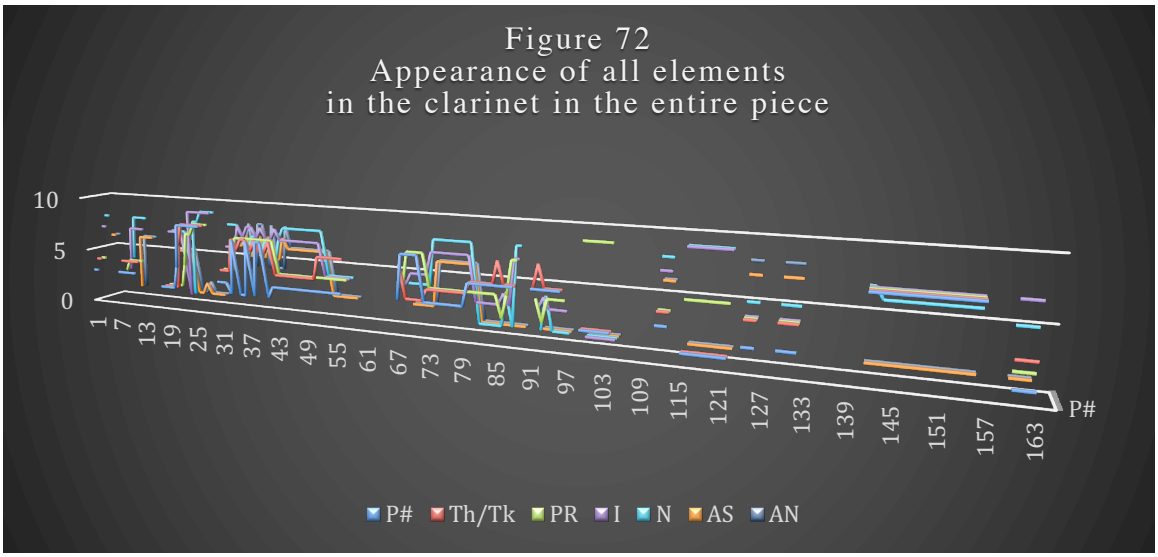


Figure 73
Appearance of all elements
in the violin for the entire piece

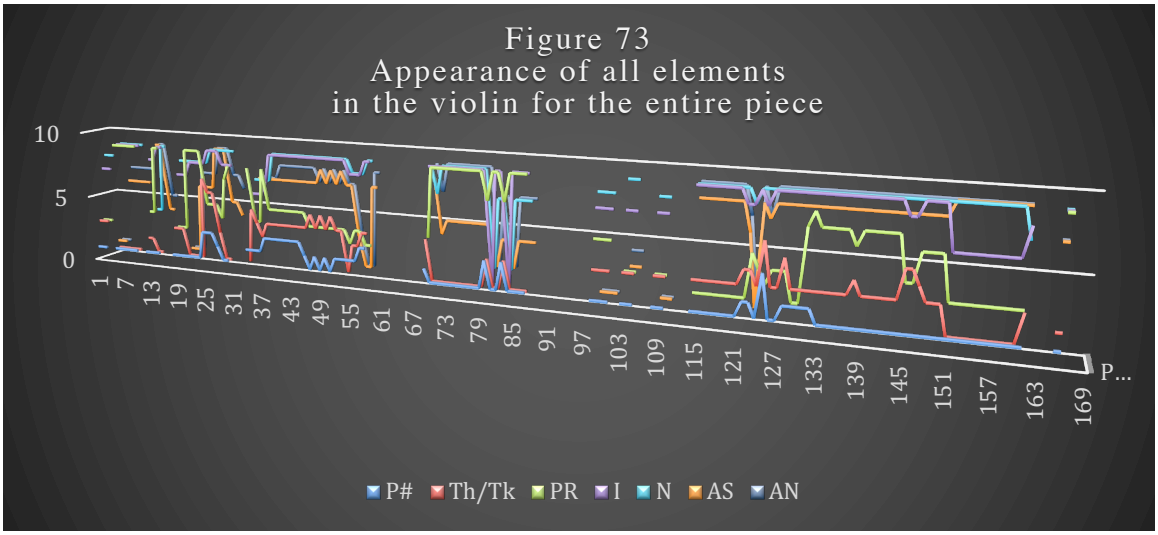
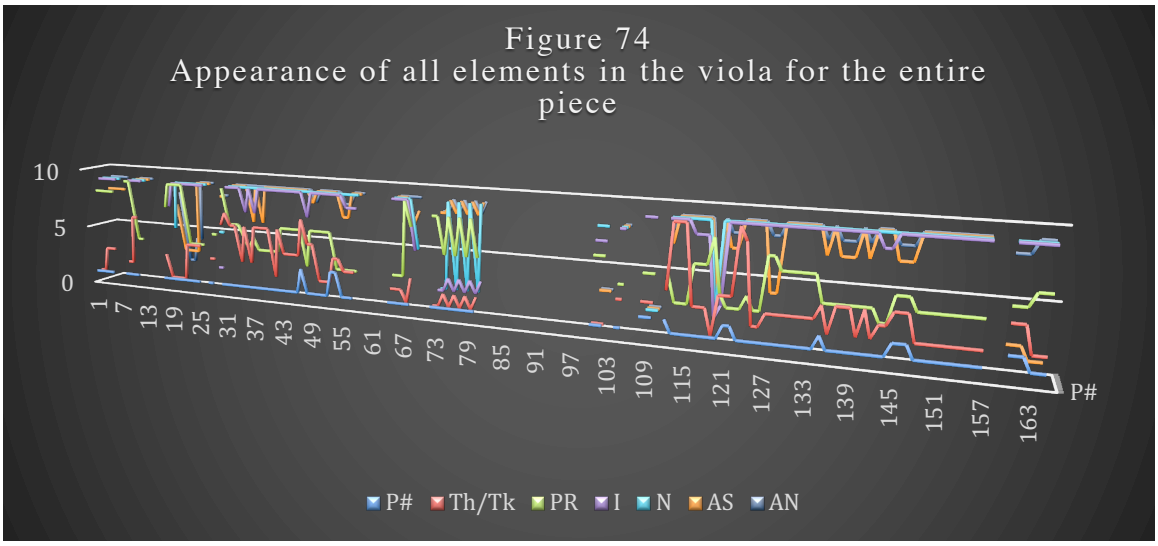
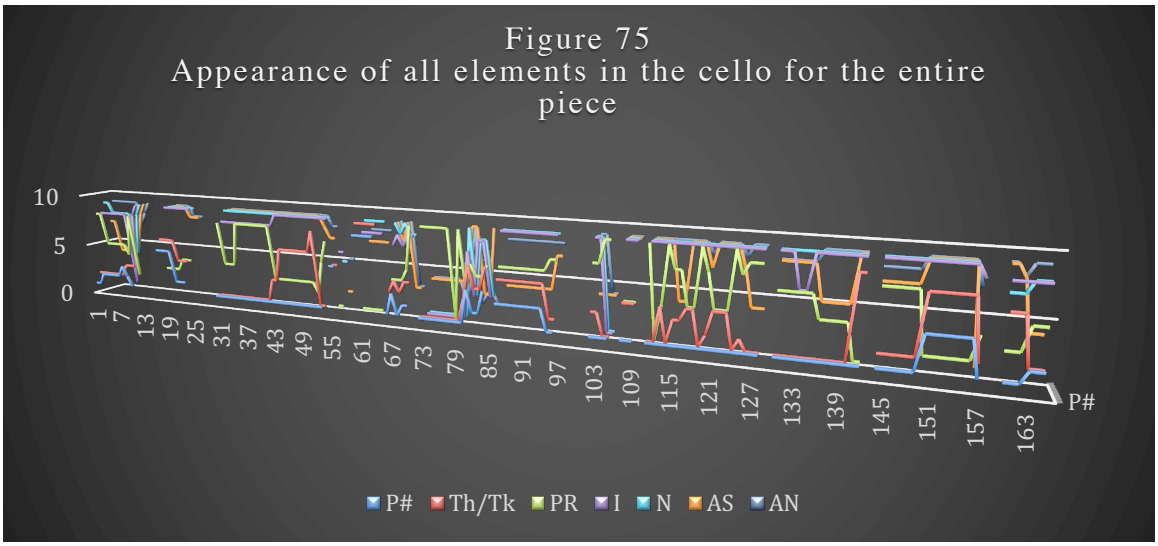


Figure 74
Appearance of all elements in the viola for the entire piece





Conclusion:

Figure 64 revealed that the three-part form of cello contributes to the overall sense of abstract counterpoint or correlation between the contributing elements of sound in the string section. Later on, in Figures 68/69, the abstract counterpoint was conceived via spike, drops, imitation, stagnant parallelism, parallelism, and deviations of contributing elements of sound. The cello plays a principle role in the abstract counterpoint via its contrast with violin and viola, and, in this way, the cello has an essential function in structuring timbres in the string section.