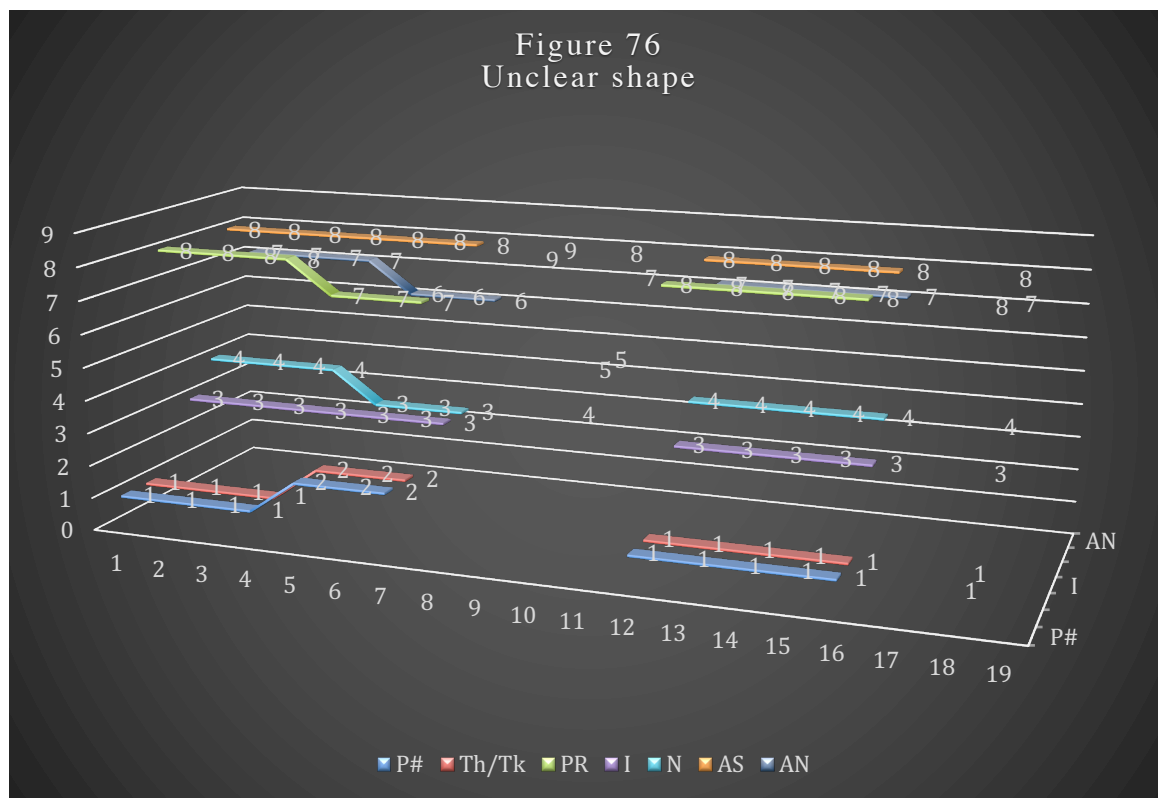


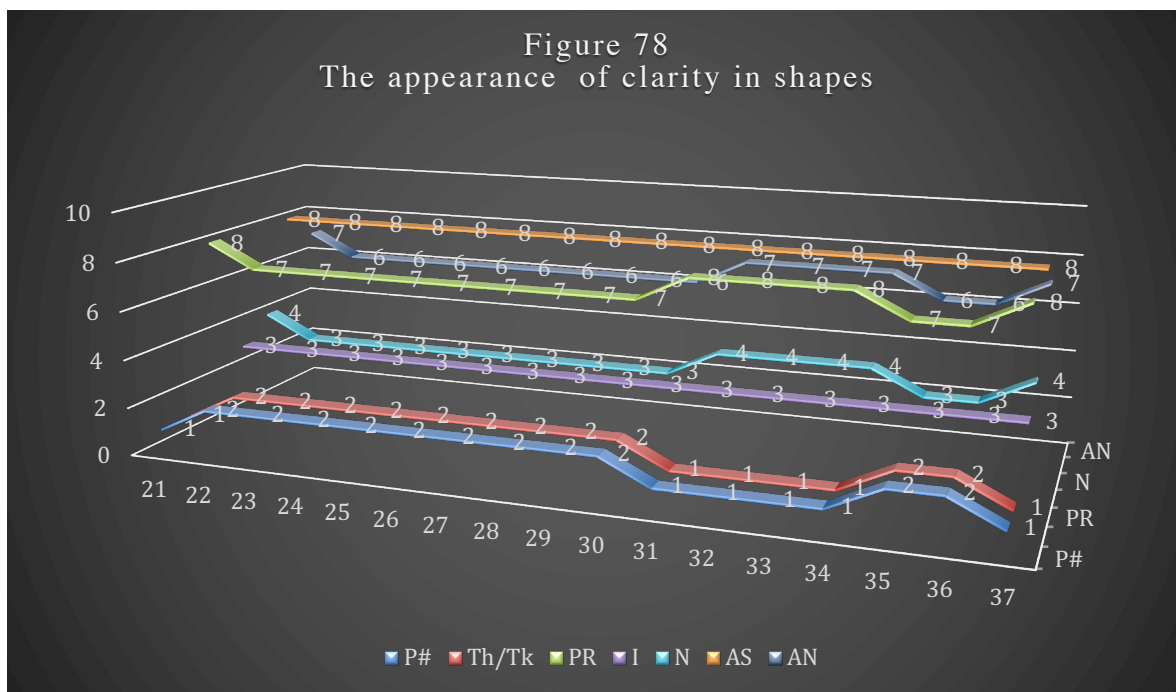
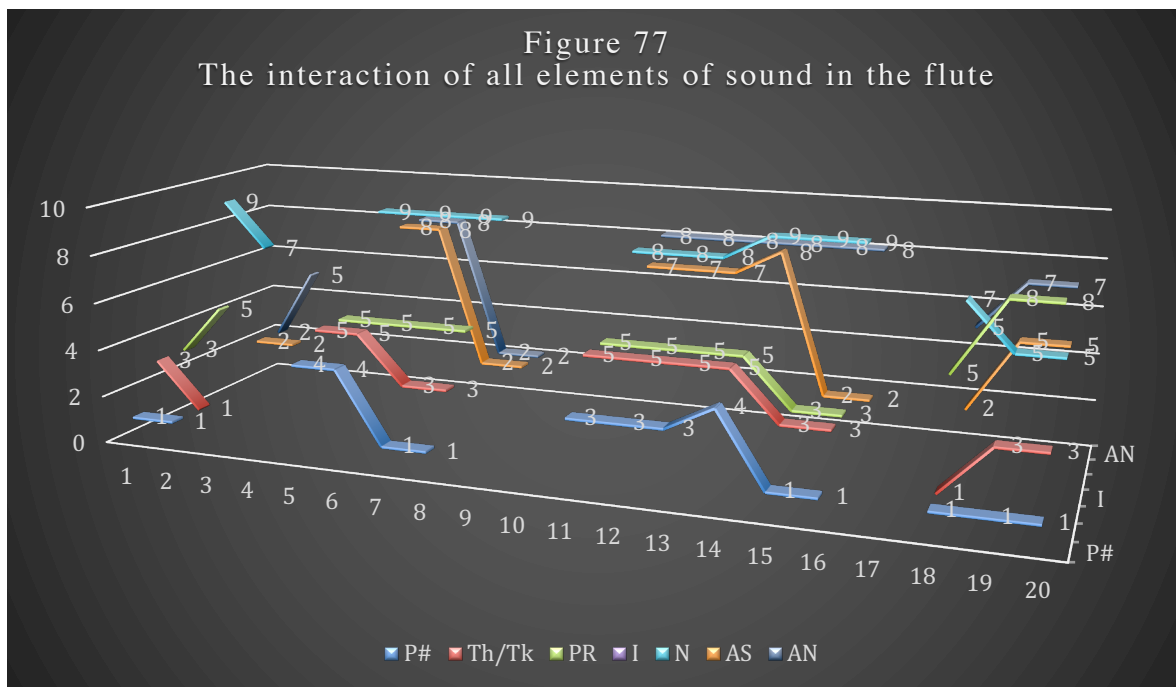
## Chapter 8: The Importance of Piano

### Introduction:

Of all the instruments in Crama, the piano is the only instrument which uses pitch-oriented materials, appearing for about 66 out of 170 bars. In this chapter, I will apply all seven contributing elements to the quality of sound to the piano part.

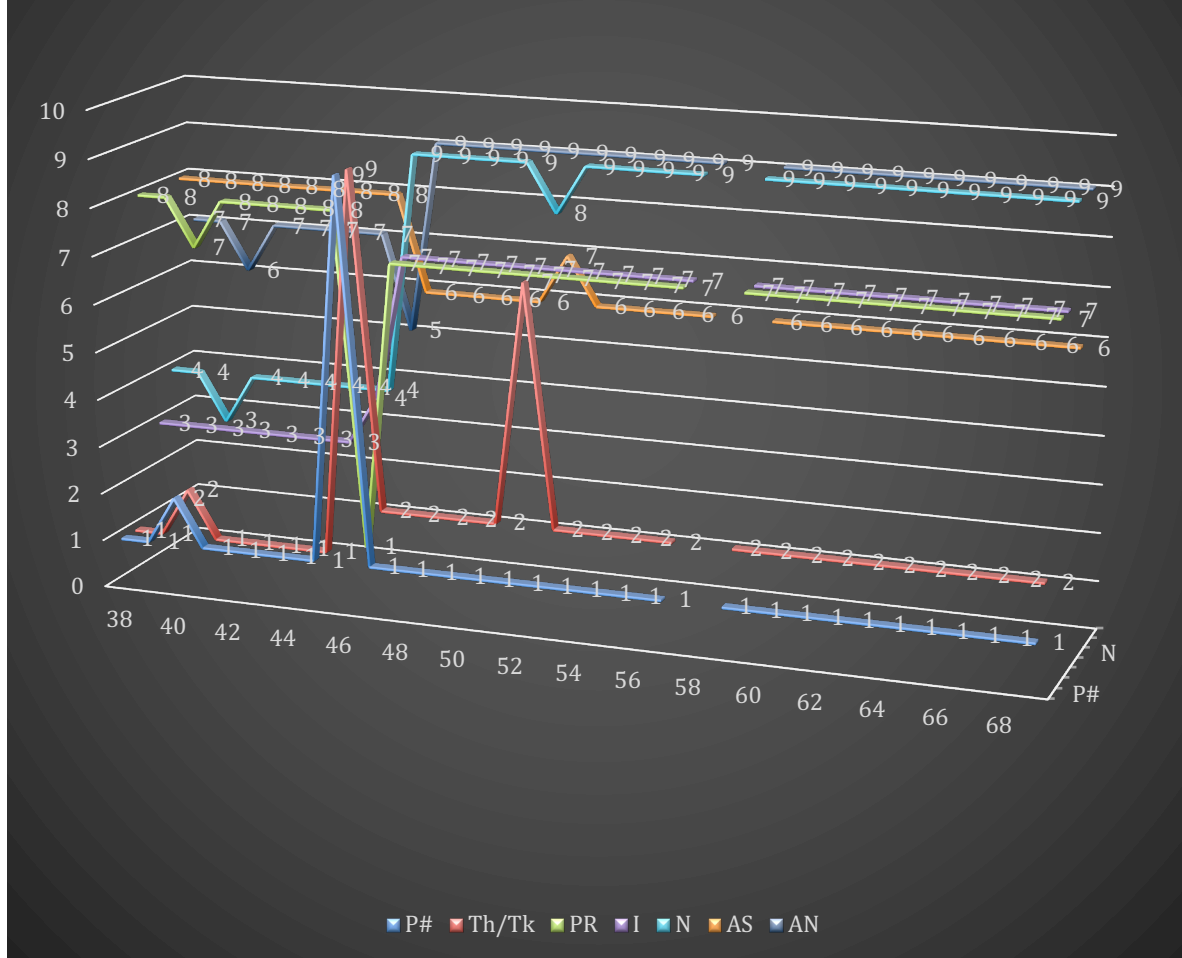


Due to the repetition of stagnant parallelism, Figure 76 does not demonstrate phrase, shape, or a clear form. While the formless character of Figure 76 is similar to Figures 35, 52, and 55, it contrasts with Figures 64 and 77. The appearance of a definite form is not common in the opening sections of different instruments in Crama. In the absence of form, repetition is the primary tool to construct a shapeless opening section in a sound-based composition such as Crama.



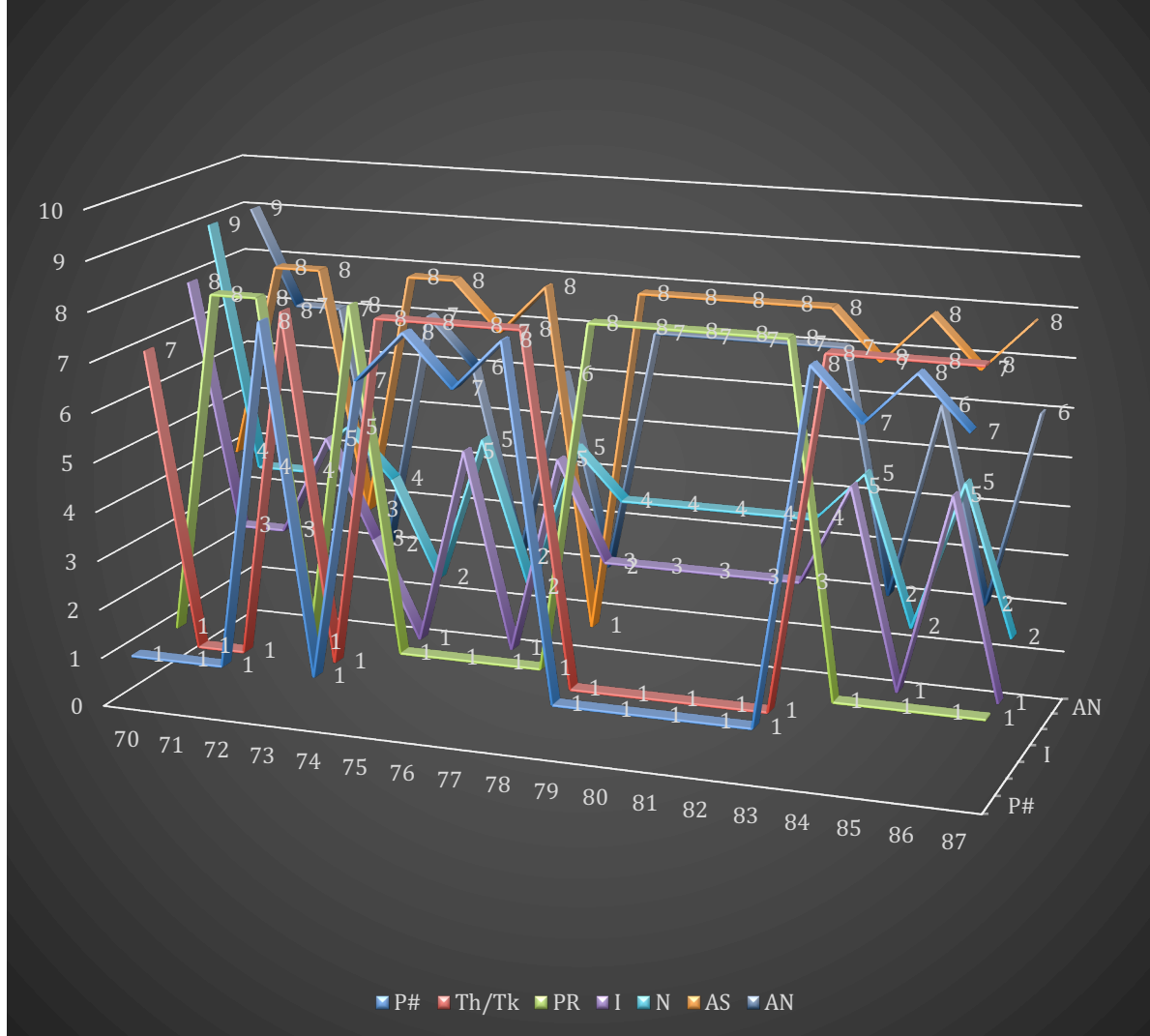
As form evolves, the shapes of contributing elements of sound become clear. Phrases appear in bars 30 – 35. This long and extended stagnant parallelism and soft transition to phrases bars 30 – 31 and 34 – 35, is in contrast to bars 21 – 37 of all the other instruments thus far.

Figure 79  
More Parallelism and less contrast



In this section, there are only three instances which demonstrate a contrast between different contributing elements of sound: bars 39 – 41, 45 – 47, and 51 – 53. Conversely, there are 26 bars of stagnant parallelism between different elements of sound. This large ratio between stagnant parallelism and contrast in Figure 79 is not present thus far among the other instruments in Crama. This ratio suggests that there is less contrast between the timbre of piano and other instruments within bars 1 – 69, and, as a result, piano blends with the timbre of the other instruments within bars 1 – 69.

Figure 80  
Extreme contrast compare to others



The amount of imitation in spikes, drops, and stagnant parallelism dramatically increases in Figure 80. This increase suggests a contrast between Figure 80 and Figures 70, 76, and 78. This section also shows the first time that the evolution of timbres completely varies in shape, in the piano, which contrasts Figure 80 with the other sections in the piano thus far. As a result of this contrast, timbre in Figure 80 contributes to the form in Crama.

Figure 81  
Similarities to the same section in the vl, vla, and vc  
bars 88 - 134

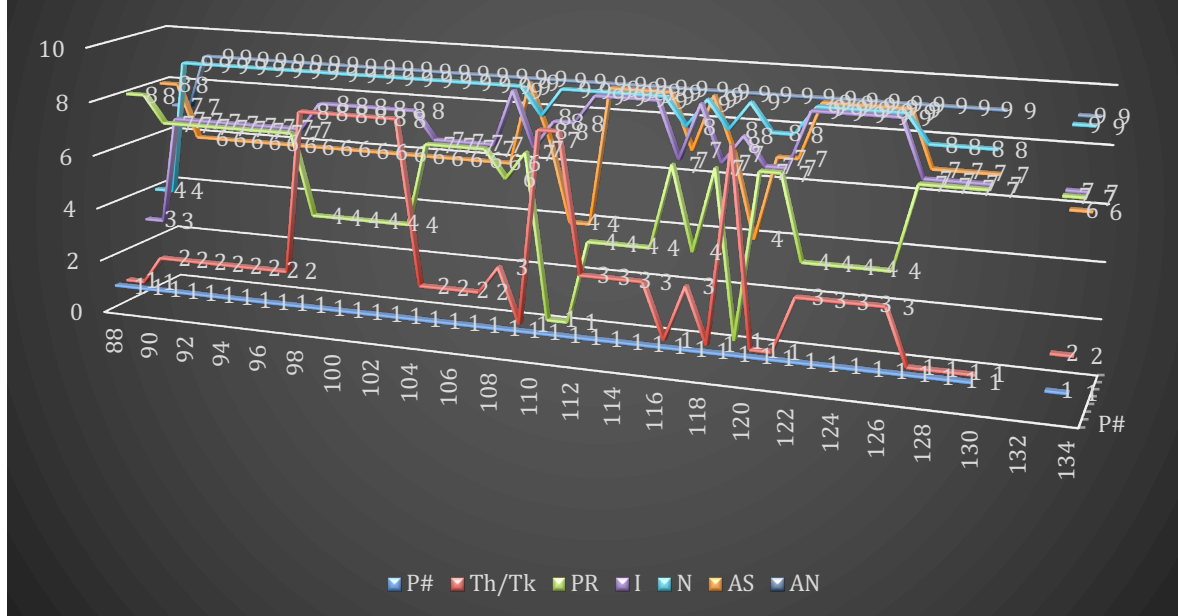
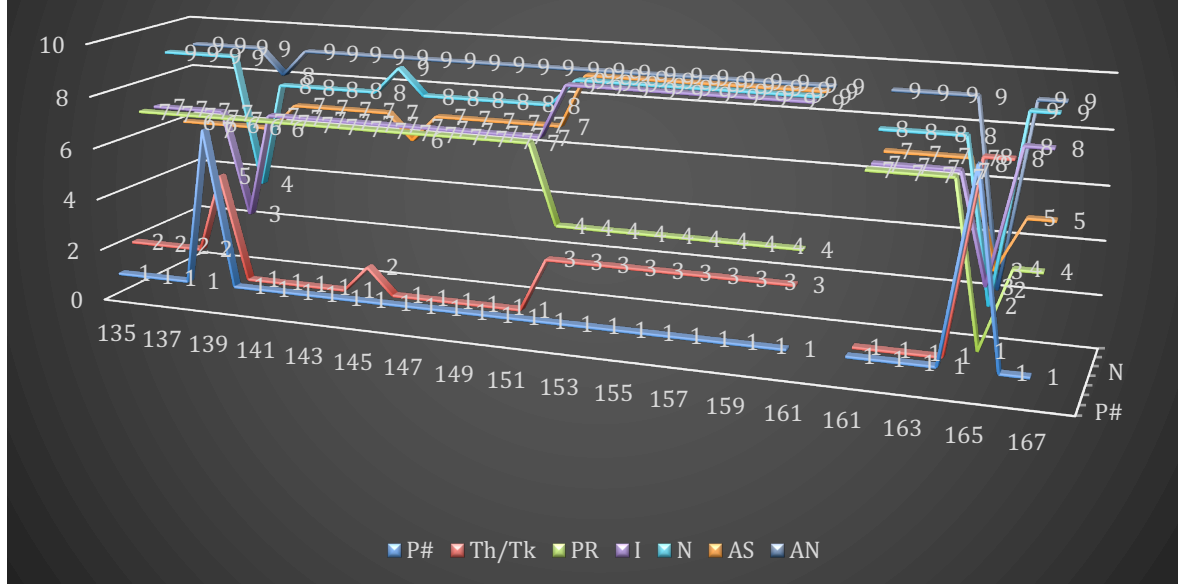


Figure 82  
Similarities to the same section in the vl, vla, and vc  
bars 135 - 167



In terms of interactivity between different elements of sound, Figure 82 is similar to Figures 49, violin, 58, viola, and 68/69, cello. Figure 82 suggests interactivity between all the categories except the thinness and thickness of the sound category. Notice that the number of partials is in its lowest value, one, and the noisiness of attack is in its highest value, nine. The number of partials and the noisiness of attack category show stagnant parallelism within bars 88 – 162, which is similar to Figures 49, violin, 58, viola, and 68/69, cello. The similarities and contrast between this Figure and others suggest a timbral correlation or imitation between piano and the string instruments in Crama. In other words, the string section imitates the sound of the piano, and, as a result, these imitations form a section. For example, the piano projects the “roar sound,”<sup>30</sup> which is paired with “ring sound,”<sup>31</sup> in cello in bar 99, the “clang sound,”<sup>32</sup> which is paired with col legno battuto in the viola and cello in bar 108, and the “saw sound,”<sup>33</sup> which is paired with pulsed “ring sound,” in violin, viola and saw sound in cello in bar 154. All of the above create the similarities between Figure 82 and Figures 49, violin, 58, viola, and 68/69, cello, and 162 of the string sections. Timbral imitation between different instruments thus contributes to structuring phrases, sections, and form in a sound-based composition like Crama.

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<sup>30</sup> “ROAR SOUND: [b.108] This usually follows the clang sound and in fact is like the release of the previous. The sound should be obtained by pressing and moving faster the plectrum at the beginning and then decrease the speed to slow the pressure to normal and the dynamic to decrescendo.” From page 2 of the preface in Crama.

<sup>31</sup> “RING SOUND: square notehead followed by triangle line. Hold firmly the note down and bow slowly with some pressure at the [xST] area. The sound obtained better on 1st open string and at the frog of the bow. The further from the frog of the bow the less bright and resonant the sound becomes. [b.45]” From page 2 of the preface in Crama.

<sup>32</sup> “CLANG SOUND: obtained by bowing with pressure with the hairs of the bow flat to the string. It is best achieved at the frog of the bow. The sound produced is broken, irregular and syncopated. NOTE: The notated values on the score are one possibility and should not be followed. The result of this gesture is always slightly different in terms of rhythm although there is always a particular and distinctive articulation.” From page 4 of the preface in Crama.

<sup>33</sup> “SAW SOUND: The 16th notes indicate the rhythm of the gesture. Within each up and down movement (ca. 1cm width) of the plectrum along the string several 'clangs' will be played. The guitar plectrum should be hard type (not soft). Hold firmly and deeply the plectrum almost vertical to the string. The fingers might touch the string. It should not sound as a plastic card clanging along the string. The sound produced is a very raspy and coarse tone and resembles the sound of hand sawing.” From page 4 of the preface in Crama.

Figure 83  
Appearance of all elements except irregularity of sound in  
the flute  
for the entire piece



Figure 84  
Appearance of all elements  
in the clarinet in the entire piece

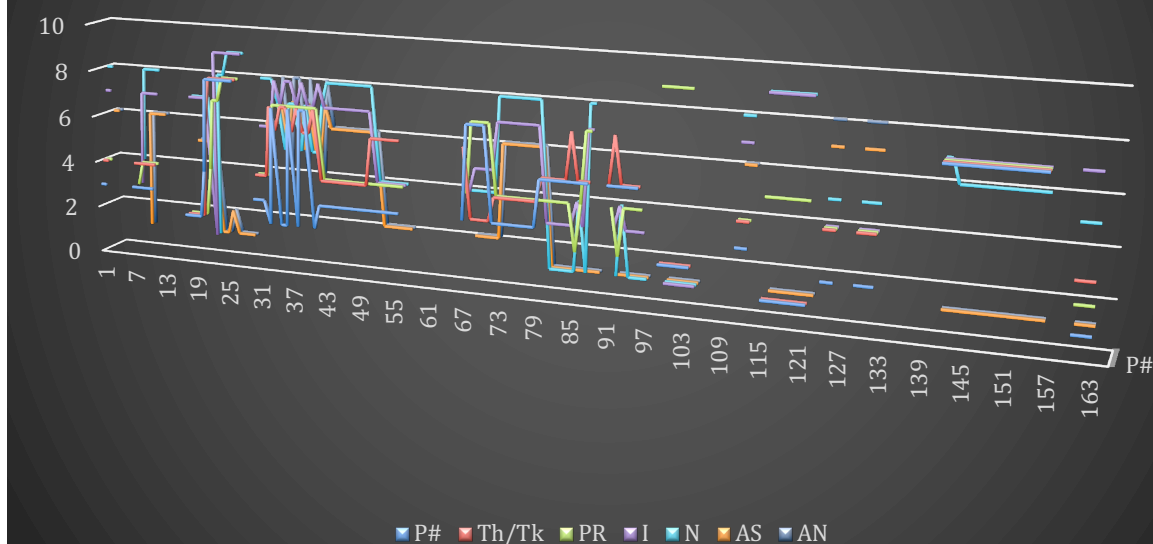


Figure 85  
Appearance of all elements  
in the violin for the entire piece



Figure 86  
Appearance of all elements in the viola for the entire piece

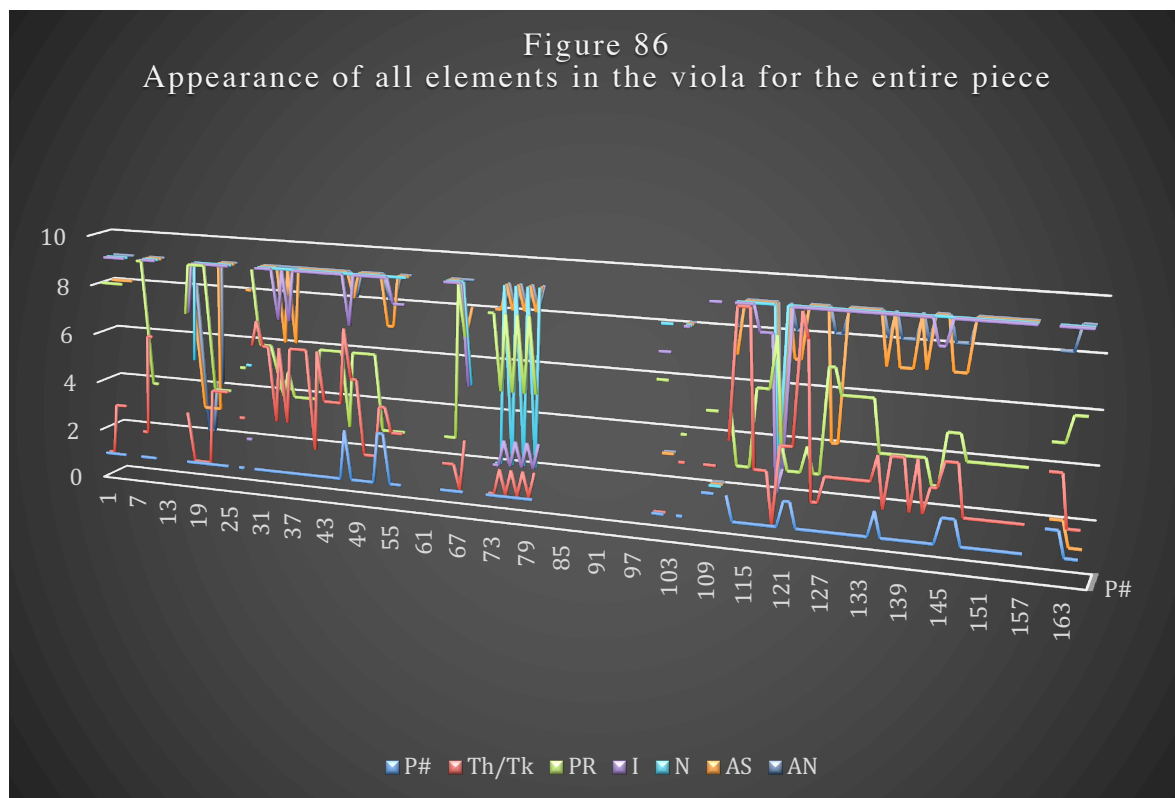


Figure 87  
Appearance of all elements in the cello for the entire piece

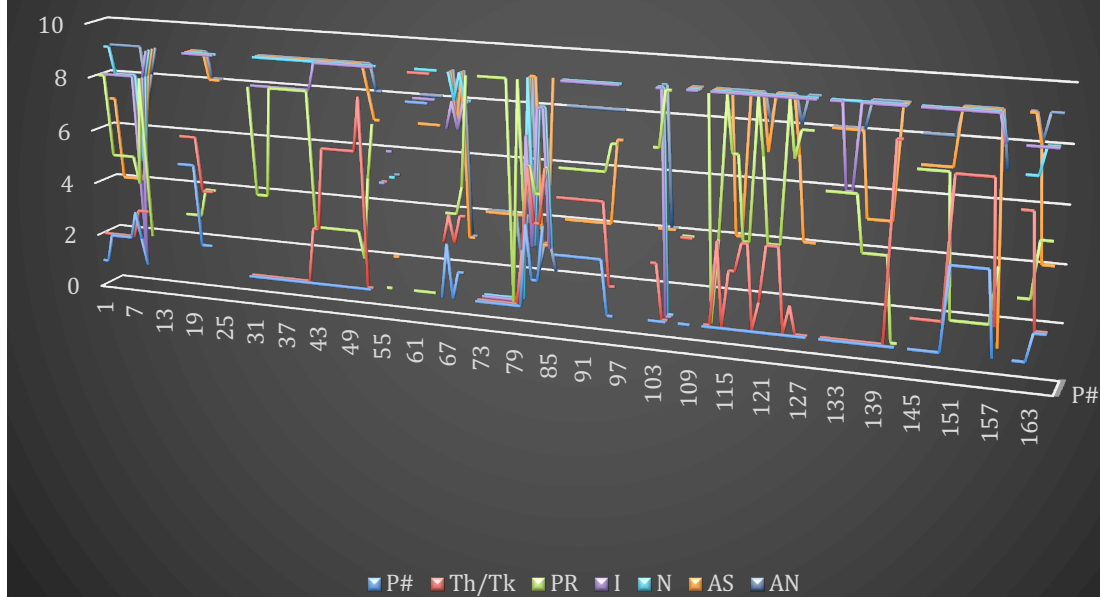
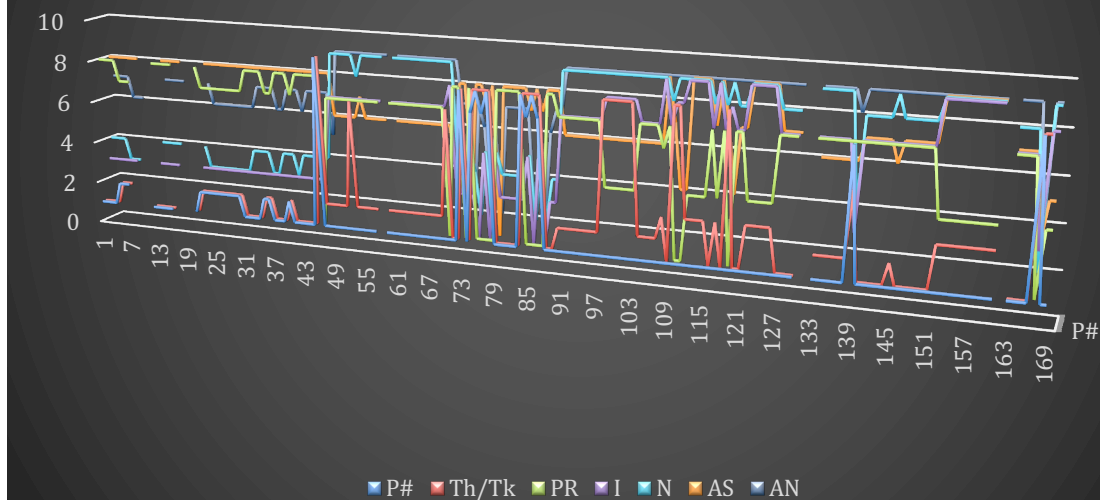


Figure 88  
Appearance of all elements in the piano for the entire piece



**Conclusion:**

The piano begins with no shape or form, but then its shape becomes clear as Crama evolves. The piano evolves and creates a contrast with the previous section until, ultimately, it becomes the principal aspect in creating Figure 82. In other words, the piano begins as an instrument that is less important than the other instruments before it gradually evolves and transforms into a leading timbral role that the string section imitates. This imitation creates a section, and Figure 82 creates contrast with all the other sections in the piano, which do not play an essential role, bars 1 – 87. Overall, the piano plays a vital role in structuring the form of Crama.