ISTANBUL TECHNICAL UNIVERSITY ★ INSTITUTE OF SOCIAL SCIENCES

THEORY AND APPLICATION OF MUSICAL HYBRIDISATION: THE USE OF ATONAL HARMONY WITH TEXTURES, RHYTHMIC PATTERNS AND MUSICAL FORMS OF POPULAR MUSIC

Ph.D. Thesis by
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Department : Music

Programme : Doctoral Programme in Music

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MÜZİKSEL MELEZLEMENİN KURAM VE UYGULAMASI: ATONAL ARMONİNİN POPÜLER MÜZİK DOKU, RİTMİK KALIP VE FORMLARI İLE KULLANIMI

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FOREWORD

Why would I need to create a hybrid of 'popular' and 'contemporary art' music, and even further, to form a theoretical framework to do this? I have to talk about my past musical experiences in order to provide a better view of the conditions that led me to this research and composition project.

As a little boy, I was taking private lessons of piano and electric keyboard. When I played a piano piece from, let's say Beyer, I had to play precisely what was written on the page; it was a major rule in that discipline. When it was another piece, from the 'popular' electric keyboard repertoire (notated as a melody line -probably a widely known one such as the tune from the movie "Godfather"- with chord symbols on top), I was relatively more free: I still had to play the right hand melody part as notated, but the accompaniment at the left hand was to be semi-improvised. I was free to play the given chords in the inversions I liked, and to create the rhythmic structure of the left hand line on my own, which let me experiment with different accompaniment formulas for that single melody. Even at that age, when my music playing experience was highly limited, the two disciplines seemed different to me in this sense. Although I enjoyed playing in both styles, the reputation of classical piano to me was more kind of 'serious' 'studies' or 'planned' 'work', whereas the other style felt more like 'fun'. Perfectly arguable, this feeling might have many reasons other than the music itself: the instructor's differing attitudes while teaching the two different styles, surrounding people's different reactions to these styles or even the general student tendency to prefer the less tiring options. Still, beyond all of these, I think that the musical material was the major element that created this distinction, due to the above-stated differences which I wasn't actually seeing very big.

During the same period, which was the first half of the 1980's, public monopoly in TV and radio broadcasting was still remaining in Turkey, but TRT (Turkish Radio and TV), with its two television and three radio channels receivable at Istanbul, was regularly airing Western music from both of these styles (along the other traditional and/or popular Turkish music genres). On the same television channel, I was watching the video clip of Duran Duran's hit single "Wild Boys" in the evening, and the following morning, "Sunday Concert" programme (presented by conductor Hikmet Şimşek), was bringing one of the State Symphony Orchestras playing Beethoven's Fifth, directly to our living room. Clearly, the symphony orchestra wasn't jumping and screaming, disguised as 'wild boys' and Duran Duran wasn't playing music sitting on chairs, wearing black suites and bow-ties; there was a visible difference, which however, to me, was not an extreme one. All these styles were music from different periods and branches of Western tradition; I was studying pieces from both repertoires with the same instructor, using the same instrument, and watching videos of both styles on the same television channel.

All these instinctive or empirical categorisations that I was making as a child were related to the difference in "composition" notion in popular and serious music contexts and the change of meanings of music (like any other cultural object) when perceived by people from different parts of the world, subjects to be discussed later in this thesis.

Later, in my first year as a teenager classical guitar student at the State Conservatory, I confronted with the bad reputation of guitarists as semi-outsiders who claim to take part in this serious academic place, but who actually weren't cleaned enough of "bad popular music habits". It was undoubtedly linked to the important role of our instrument in popular music styles and its relatively unimportant place in the symphonic-based world of the conservatory. Here, "serious" "Western" music was conceived as only valuable music, offering closed surroundings to people who are "enough intelligent and knowledgeable" to listen to "it" or play "it". All people interested in "it", were part of this world and other people –outsiders, were discriminated for listening to some "primitive" sounds believing that it is music. Although students and even faculty members were occasionally taking part in popular music gigs, the general attempt was to see this as a commercial act committed for unavoidable financial reasons, and unarguably as something to not to talk about nor to be proud of.

During my graduate composition studies which introduced me to a more open minded environment, I listened to and got impressed by works by a number of composers with post-modern qualities, involving effects of different popular music genres to the "serious" music framework: Kurt Weill, Osvaldo Golijov, as well as minimalists like Steve Reich and Philip Glass. Then I started to incorporate some compositional elements which I had used when composing and playing in different rock music styles, to my "serious" compositions, such as: use of riffs (named as "ostinato bass patterns" in this new context, although they are not the same but only similar concepts); use of dissonant doublings (mostly minor 2nd) to blur the lines; use of ostinato bass pattern just like a pedal point on the bass part with independently shifting harmonies on top; modal shifting; "interval colour–based" "free–atonal" harmonic construction in modal context, etc… The resulting music was both impressive and satisfactory to me in the sense it was a fusion of different ways of composition I had practiced before. I feel that there are still many steps to take in this direction, leading to new ways of expression remaining yet unexplored. I hope this thesis will be one of them.

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ABBREVIATIONS

LCP	**:** Lowest Common Multiple
R	**:** Rhythmic Pattern
RC	**:** Rhythmic Combination Pattern
T	**:** Textural Pattern
TC	**:** Textural Combination Pattern

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THEORY AND APPLICATION OF MUSICAL HYBRIDISATION: THE USE OF ATONAL HARMONY WITH TEXTURES, RHYTHMIC PATTERNS AND MUSICAL FORMS OF POPULAR MUSIC

SUMMARY

This work is centred around a hybridisation process aimed at obtaining a cross-over musical style combining compositional aspects of twentieth century Western art music and popular music.

The course of the project can be summarised as a brief discussion on popular music pieces' inner structure based on pre-existing schemes and modular use of rhythmic and textural ideas; followed by analysis of popular music pieces in order to model their rhythmic, textural and formal elements, systematisation and enumeration of principal models found, and finally an original musical composition featuring the use of these models in combination with atonal pitch organisation techniques.

The presented models are supported by a transcribed excerpt from a piece of music which best illustrates them, followed by further listening suggestions. The focus of this work is not to discuss the presence of these models and to prove it using examples. The examples are only explanatory, hence their number is limited.

After the presentation of models, an analytical chapter reveals how these models are used in the featured musical composition. The conductor score and the live concert recording of the composition are given as appendices.

The goal of this work has different aspects. It aims at contributing to the literature of Western music theory by offering information on some popular music composition techniques which enables it to communicate easily with the audience. At the same time, it tries to find a way to make the popular music audience familiar with sonorities related to contemporary Western art music, issued by new harmonic techniques developed in twentieth century and by the related timbral palette. The rhythmic, textural and formal elements modelled from popular music examples are considered as tools to communicate with popular music listeners, making them more open to other stylistic features which they will hear for the first time. Finally, there is also an artistic goal, it is simply to create original compositions featuring fresh combinations and writing techniques not practiced yet.

MÜZİKAL MELEZLEMENİN KURAM VE UYGULAMASI: ATONAL ARMONİNİN POPÜLER MÜZİK DOKU, RİTMİK KALIP VE BİÇEMLERİ İLE KULLANIMI

ÖZET

Bu çalışma, 20. Yüzyıl Batı sanat müziği ve popüler müziğin kompozisyon anlayışlarını yeni bir ara-stilde bir araya getirmeyi amaçlayan bir melezleme işlemi etrafında şekillenmiştir.

Projenin ana akışı, popüler müziğin iç yapısının önceden mevcut şemalar ile ritmik ve dokusal öğelerin modüler kullanımına dayanması üzerine kısa bir tartışma, popüler müzik parçalarının içerdikleri ritmik, dokusal ve formal (biçemsel) özelliklere yönelik analizler, bulunan ana modellerin sistematize edilerek numaralanması, ve son olarak bu modellerin atonal ses organizasyonu teknikleri ile birlikte bir müzik kompozisyonunda kullanılmasıdır.

Analizlerde yer alan modeller, net olarak gözlemlendikleri bir müzikten yapılan alıntının transkripsiyonu ile desteklenmekte ve aynı modelin gözlemlenebileceği başka müzikler de devamında dinleme önerisi olarak sunulmaktadır. Tezin ana konusu bu modellerin varlığını tartışmak ve örnekler yolu ile ispat etmek değildir, bu nedenle örnekler sadece modelleri açıklamak amacıyla verilmiş ve sayıca kısıtlı tutulmuştur.

Modellerin sunumunun ardından, modellerin çalışma kapsamında yazılan müzik eserinde nasıl kullanıldığını açıklayan ve tüm eseri bu açıdan analiz eden bir bölüm yer almaktadır. Eserin şef partisyonu ve konserde canlı olarak gerçekleştirilen ses kaydı ise tezin sonundaki ekler kısmında sunulmuştur.

Bu çalışmanın amaçları çok yönlüdür. Müzikbilimsel amaç, popüler müziğin dinleyici ile kolay ve çabuk iletişim kurmaya yarayan bazı kompozisyon yöntemlerini Batı sanat müziği literatürüne kazandırmak, öte yandan popüler müzik dinleyenleri 20. yüzyılda keşfedilen yeni armoni teknikleri ile elde edilen sonoritelere ve bu tarzda yaygın olarak kullanılan çalgı gruplarının tınısal paletine aşina kılmaktır. Popüler Müzik örneklerinden modellenerek alınan ritmik, dokusal ve forma ait öğeler bu kompozisyonda, popüler müzik dinleyicisi ile iletişim kurarak karşılaştıkları diğer "yeni" öğeleri kabullenmede kolaylık sağlayacak araçlar olarak düşünülmüştür. Bunun yanısıra, şu ana dek denenmemiş yeni karışımlar ve müzik yazma yolları içeren özgün eserler ortaya koymak yönünde bir sanatsal amaç da mevcuttur.

1. INTRODUCTION

1.1 The Aim of the Thesis

Many compositional tools developed in the post-tonal era or namely the twentieth century, offer a lot of new opportunities in sense of musical expression. An important part of these techniques focuses especially on developing new models of pitch organisation beyond conventional tonal or modal practices. Most musical work using post-tonal harmonic techniques featured an abstract or avant-garde structure in other musical aspects as well. This is maybe one of the reasons why post-tonal harmony did not reach big masses. Today, unfortunately, new sonorities provided by these harmonic approaches remain still unknown to most people whose musical literature and aural experiences are formed of either folk and/or popular repertoires. The aim of this thesis is to explore ways to introduce post-tonal harmonic sonorities to popular music listeners by the use of a hybrid music language. A secondary aim is to provide information about the structure of globalised popular music to composers willing to make use of structural popular music elements in their work.

1.2 General Information on Post-Tonal Harmonic Techniques

In Western music, by the most superficial definition, the melody is heard with a background of harmony. “The chords that accompany the melody lend it colour, clarify its direction, and enhance its meaning [...] they define the musical space in which the melody has its being” (Machlis, 1979). Analogically, harmony in music functions like perspective in painting: it simply adds the “element of depth, the third dimension” (Machlis, 1979).

The practice of composing tonal music using chords gradually evolved during the seventeenth and eighteenth centuries. It is different from modal composition in three essential aspects: it treats the chord as a “primary, indivisible unit”, it labels every chord by referring to a single tonal centre, and it divides intervallic dissonances into

the “categories of dissonant chords and notes foreign to the harmony” (Dahlhaus, 2009).

Like any other revolution, the process of leaving tonal framework did not come out of the blue; it has strong roots lying in the late romantic period. During the nineteenth century, increasingly, composers began to search for new harmonic effects, mostly aiming at creating their own individual styles. This process resulted in the parallel increase in use of chromaticism, dissonance, distant harmonic relationships, modal alterations and non-diatonic scales, as well as avoidance of direct use of basic functional harmonic progressions (Lester, 1989). Especially with Wagner and other late German Romantics, tonal harmony was extended by the use of extreme chromaticism, resulting in many cases regions of tonal ambiguity (Schwartz and Childs, 1998). An important symbol of this period is Wagner’s opera “Tristan und Isolde”. “In the prelude to the opera one no longer knows exactly what the key is” (Machlis, 1979).

Chromatic tonal music, typical of that period, can be analysed using the same vocabulary as diatonic tonal music. The difference is the increased number and significance of non-diatonic tones that were once predominated by diatonic ones. The effect of music that is so saturated with chromaticism is that the listener no longer perceives the tonal basis (Kostka, 1999).

Beginning from the twentieth century, the tonality notion has been broadened to allow the use of all twelve pitches around a centre, followed by the rejection of a single tonal centre, coining the term “atonality”. As Béla Bartók defines in his article entitled “The problem of new music”, atonality appeared when composers felt a necessity to equalise the twelve different tones present in the Western scale system vertically and horizontally in any configuration not available in the conventional harmony where some tones were of greater or lesser weight (Bartók, 1920).

In the first period of atonality, “free” atonal pieces were mostly characterised by the lack of a tonal centre. The atonality was achieved by “avoiding the conventional melodic, harmonic, and rhythmic patterns” which all served to establish a tonality feeling in traditional music (Kotska, 1999). Leading name of the Second Viennese School, Arnold Schoenberg composed important early atonal pieces of the twentieth-century repertoire beginning from the first decade of the century.

The new composing techniques required new harmonic vocabulary. The composing process was mostly based on "achieving a certain degree of unity through recurrent use of a new kind of motive" (Kotska, 1999), therefore a brand new vocabulary issued by the numeric definitions of these motives began to be used. Following free atonal compositions, Schoenberg and Hauer independently developed 12-note set structure (Lansky, 2009), and Schoenberg wrote the first dodecaphonic (twelve-tone) piece in the summer of 1921, using the method of "composing with twelve tones that are related only on another" (Kotska, 1999). The core idea was to design a tone-row, "an ordered arrangement of the twelve pitch-classes, with each occurring once and only once" (Kotska, 1999). The row, also called as series, had four forms: prime (original), retrograde, inversion, and retrograde inversion; and it was also possible to use the transpositions of these four basic rows, resulting 48 series at total. Schoenberg explains the motivation behind serial music as the "desire to avoid excessive pitch-class repetition in atonality" (Lansky, 2009). The first generation serial composers, named Second Viennese School, Schoenberg and his pupils Webern and Berg have been the prominent figures in 12-tone serial music. Schoenberg's "revolution" has affected all western art music since 1908 (Griffiths, 1994).

Despite the organic and chronological relations found between tonal and post-tonal music, the general impression was that it was an extreme break with the tradition, and that this break wasn't limited to harmonic field. In an interview given on Radio Vienna on 12 April 1930, composer Alban Berg talks about the meaning of the term "atonality" complaining about the use of this term in an over-broad sense:

> *The designation of atonal was doubtless intended to disparage, as were words like arhythmic, amelodic, asymmetric, which came up at the same time. But while these words were merely convenient designations for specific cases, the word atonal –I must add, unfortunately– came to stand collectively for music of which it was assumed not only that it had no harmonic centre (to use tonality in Rameau's sense), but was also devoid of all musical attributes such as melos, rhythm, form in part and whole; so that today the designation as good as signifies a music that is no music, and is used to imply the exact opposite of what has heretofore been considered music.*

In the following part of the interview, Berg emphasises the strong relations of Second Viennese School with earlier Western music and rejects the use of the term atonality to tag their music as an unmusical rebellion or as anarchy of tones. The discussion about the abstractness in music can be broadened further, but it would mostly fall outside the core subject of this thesis. However, there is a more important

point to emphasise in Berg's words: Music has many different aspects, or parameters. Harmony is, although important, only one of these.

Using the ideas of Second Viennese School as basis, Boulez, Stockhausen and Nono took serial composition idea further, by applying it to "non-pitch parameters and at different hierarchical levels in order to influence progressively larger aspects of musical form" (Wilson, 2009), a process which has been named as total serialism.

Twentieth century saw important composers using post-tonal perspective and yet working with non-serial approaches as well. Stravinsky (although he wrote serial music in his late period) and Western European composers Bartok, Ligeti, Lutoslawski can be cited among them. Their approach to harmony included the identification of both musical materials and the structural relations between from a post-tonal, sharing the concepts such as interval classes, trichords and tetrachords with the Second Viennese School; but still their music was not serial. The allowance of pitch repetition has let them use pre-existing material such as folk music in their serious compositions within a post-tonal framework.

Another approach which appeared in the last quarter of twentieth century is the spectral music approach. Spectral musicians were highly interested in components of sounds and the mathematical relations between them. Since the currently existing tuning system in Western music is a compromise between natural sound relations and the needs of harmonic practices during and after the common practice period, the spectralists had to go beyond the equal tempered system in order to find what they were looking for.

Although many harmonic techniques have been innovated and/or practiced during the twentieth century, the main harmonic approaches are the ones discussed above.

1.3 Structural Aspects of Popular Music

When browsing academic works on popular music, the most surprising thing to note is that a large part of the present literature does not discuss the music itself, but it aims to understand and to describe popular music by examining its relations and interactions with other phenomena in the semantic, sociological, socio-economical and anthropological contexts.

There are undoubtedly important conclusions to draw by looking to any art form, including music, from all these different perspectives; but it is also hard to explain exactly the reason why only a few researchers got interested in examining the musical work itself, its inner structure and nature. However, it is possible to speculate that academicians working in the music theory field may have been influenced for a long period by the old prejudice that popular music is musically simple and therefore not worth being studied in terms of music theory.

This aspect prevails in the approaches intended to define popular music as well. Middleton (1997) cites that Birrer classifies the existing approaches in defining popular music under four groups. First group is the normative approach; its main theme should be represented with the phrase “popular music is an inferior genre”. The second group includes definition approaches using negative mode. It tries to define popular music not by telling what it is, but by telling what it is not: it is not folk music, it is not art music, and alike. The third group includes sociological approaches, trying to define popular music by determining which social groups it is made by or for. The fourth and final group tries to form a definition using technological and economical references: popular music is intended to a wide market and is disseminated by mass media. Middleton (1997) discusses all the problems contained by these approaches and mentions two more recent approaches which are a fusion but, these either, as combinations of the first four, do not include any references to inner properties of music.

Especially the sociological-based definitions fail in explaining the use of common musical language and similar textural structures by artists addressing to different audiences. Remarkable are the number of common elements observable in two examples of music given below in figure 1.1 and figure 1.2, belonging to pieces by pop star Madonna and hard rock band Bon Jovi, two artists that are considered to address mostly different audiences.

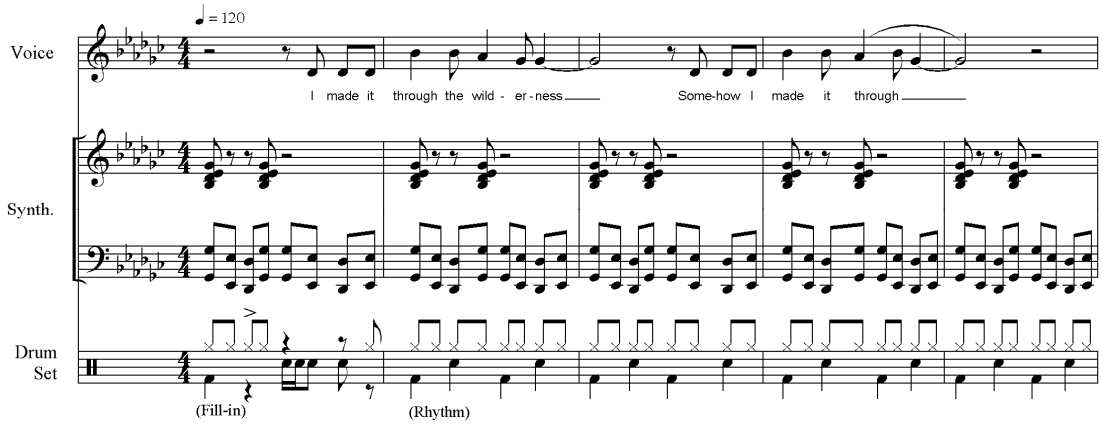

Figure 1.1 : Excerpt, Madonna "Like A Virgin"

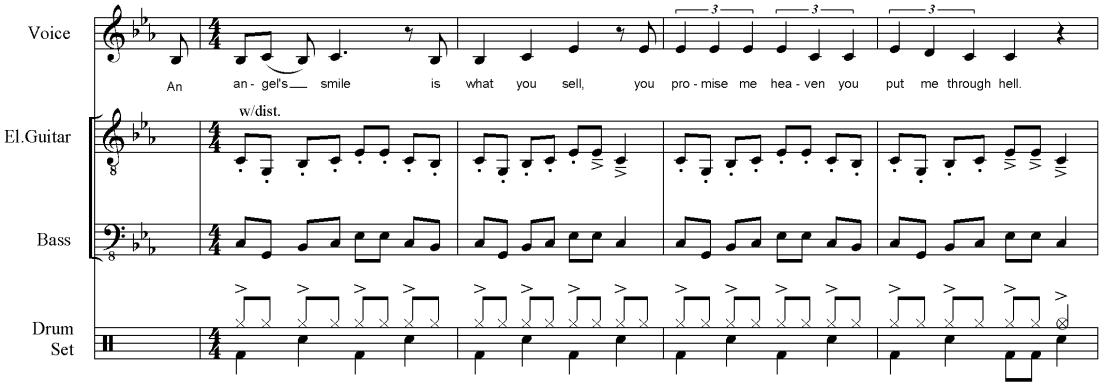

Figure 1.2 : Excerpt, Bon Jovi "You've Give Love A Bad Name"

As similarities that can be seen at the first glance, we could cite the following: both drum parts include the same rhythmic pattern, both accompaniments are based on a repeated bass pattern doubled by another instrument on one octave higher, and both bass patterns are in the pentatonic scale. Due to the current notation system, two excerpts seem very similar, probably because the elements which create the stylistic differences between these two pieces are either not seen on paper or they are hidden in the textual markings given. There is no idea on singer's attitude, very limited information on timbral colours (sounds) and no practical way to mark the dynamics of electronic instruments. Dynamic marks are rather problematic in the notation of popular music because in most cases the volume balance between the instruments is obtained using volume knobs of the electronic instruments and faders of the electronic gear used, namely a sound mixer. Most of the times, there's no use in notating dynamics, because they simply serve to make changes in the timbre, but not in the volume levels governed by other factors. But on the other hand, the same

notation system, by hiding all these elements and features, provides a clear view of the lines, the musical texture itself; which is based on a common grammar valid for most popular music genres.

In his article titled “On Popular Music”, Frankfurt School philosopher and musician Adorno (1941) exposes an approach much more based on the inner structure of music. Adorno’s (1941) work, although frequently criticised for many reasons, notably for using Western art music norms as criteria in evaluating the structure of popular music, has an important place in sense that it brings out an analytical approach towards the basic structure and mechanism of popular music. According to Adorno (1941), the main term in understanding the structure of popular music is standardisation. In Western art music, which he names as “serious” music, there is an organic unity where the whole and the part are in interaction at the structural level. As for popular music, the piece is constructed inside the framework of pre-given and accepted schemes, and the parts of the whole function by filling these. In this sense, a part is interchangeable with another one that could replace it and the music does not suffer from this. Each detail is like a different cog in a machine. What counts is its function and position. Musical complications, for instance harmonically or rhythmically complex passages, may be found in a popular music piece, and they can even make the piece look like it has more advanced features than a basic and simple example of “serious” music; but this impression is superficial. Since the essential is the main scheme, these complex structures do not have consequences even though they are in the piece, they do not function structurally and the music may repeat the same old ideas in the same old way, as if nothing has happened at all. In this sense, because the auditor follows the underlying abstract scheme he is familiar with, comes about an illusion like some complex harmonies are much more easily understood in a popular music piece compared to an art music work. Briefly, the popular music auditor does not have to follow attentively the concrete flow of music, because abstract models underlying the piece provide this flow ready-made. In his other important assessment, Adorno (1941) mentions two needs that popular music has to meet: the first is to provoke the attention of the auditor, and the second is to communicate to him by including the material he would describe as “natural”. This material is musical ideas and elements of any kind which the auditor is familiar with.

There are two conclusions to draw from Adorno's (1941) approach mentioned above. The first one is that popular music is constructed in the framework of generally accepted schemes with modular structure, formed by replaceable and interchangeable elements. The second one is that these elements provide communication with the auditor as far as they seem familiar to him/her. Adorno (1941) considers these as negative factors which diminish or even abolish the artistic value of music, but his perspective should be seen natural for an intellectual who lived in the age of modernism when integrity of a work of art was represented as ideal. It is still possible to benefit from Adorno's (1941) analytical determinations which seem valid today as well, without sharing his opinion.

When it comes to the issue of communicating with the auditor, worth being mentioned is the approach of Peter van der Merwe (1989) centred on musical clichés which he calls matrices. According to Merwe (1989) a matrix can be any musical idea: a rhythmic pattern, a chord progression, or a frequently used form. Even simple features forming the basis of many musical cultures (like construction of music basing upon a series of beats with regular timing) are all matrices. They provide communication between the ones who create and hear the music. Ideally, a matrix is expected to be perceived by the auditor the way it was meant by the composer (or in case of improvisation, by the performer). However, the circumstances are not always ideal: the matrix, although meant by the composer, may not be perceived by the auditor or may be misinterpreted. Sometimes the auditor may even perceive a matrix which is not actually there, in the piece; just like we, people, may read shapes of familiar objects in the clouds. When human brain perceives an unidentified object or phenomenon, it tries to define this new "thing" by means of references to what is already known (Merwe, 1989).

Matrices are very strong. Once learnt, they remain usually unforgotten. A slightest hint is enough to recall the matrix. For instance, when listening to a monophonic song in major mode without any accompaniment, a child familiar with Western music will eventually feel the chords implied by the melody, which is something nearly impossible for a musician who has not heard Western music before (Merwe, 1989).

As very strong communicative tools, matrices related to globally disseminated popular music genres are sometimes used intentionally by local musicians in order to

reach bigger audiences and find a place in the global market (Erol, 2002). The paradox lying behind this process is that in order to get a position in such a scene, the artist has to possess some unique features that differs him/her from the other candidates. On the other hand, he/she has to speak the current global pop language to some extent to meet the industry standards, which actually requires the use of some clichés that are in the fashion at the moment. Thus, it is a balance very hard to find and all is about creating a well mix of matrices that is at the same time functional, original and aesthetical.

Merwe (1989) describes the life of a matrix in analogy with the phases of a living organism's life: birth, growth, maturity, decadence and death. New matrices are formed by the combination of old ones. While the birth process is quicker, decadence and death are relatively longer processes. Matrices may travel from one musical genre to another, or from one place to another, and they can also start a new life in a new context of time/space while dying in another. It is possible even for a completely dead matrix to resurrect after a long period. At that point, Merwe (1989) finds a further similarity with the living organisms, this time in sense of the connection between complexity and durability. According to Merwe (1989), more simple the matrix is, more durable it will be; and the most complex ones will have the shortest lifetimes: Baroque style fugue and late Romantic period harmony had short lives, while playing music with regular beats and perfect fifth interval still survive in various ways.

If we reinterpret Adorno's (1941) determinations about pop music in light of what Merwe (1989) wrote about matrices, we can come to the following conclusions: Popular music pieces are built using various matrices, all functioning inside the framework of a higher-level scheme, which we could call "hyper-matrix". The matrices contained by the hyper-matrix are elements or properties related to different aspects of music, like melody, harmony, texture, rhythmic structure, or timbral characters. In order to make the hyper-matrix work, the composer constructs a mechanism consisting of various matrices.

1.4 Notions of Composition and Arrangement

During the discussion up to that point, the person who creates a popular music piece and gives it its final shape has been called a "composer". However, the production of

popular music is most of the times made by a professional team working in well planned co-operation under the supervision of a producer. Having said that, drawing attention to important differences between the notions of composer and composition in popular music and art music, will reveal that the creation process itself has an important role in the standardisation mentioned by Adorno (1941).

Modern European concept of composition is largely issued by the Ars Nova and Renaissance periods, where an art and theory of counterpoint based on the older theory and practice of Discant were developed. It basically means "the creation and notation of a detailed plan for coordinating the actions of two or more performers, each of whom sings or plays one part within a polyphonic texture" (Blum, 2009).

The composer, in this sense, is a person who imagines the musical work, designs it, and then writes down all information needed to have it performed the way he/she means (such as pitches, durations, dynamics and expression marks). In the late 18th century, instrumental music was created as an "autonomous art" based mostly on "developing musical ideas within self-contained works" (Blum, 2009). Regarding to this new conception, a musical work is fully thought out by its composer. This person is at the same time an artist and a craftsman. By designing the work he gives an artistic performance, and by orchestrating it, he performs a craftwork where creativity and technical knowledge are intertwined. In most cases, he writes the musical score in a very detailed way, including information about which instrument will play which part in which dynamic, with which expression, using which techniques. It is standard especially for the dynamic marks to be marked on the score. Although dynamic markings can be seen on some 16th-century lute music, they began to be used as serious compositional tools with the rise of the violin family. Especially Romantic music featured a wide range of dynamics and dramatic possibilities. Hence, beginning from the Romantic period, it became more important for composers to mark dynamics on their scores as signs indicating composer's intentions (Andrew and Da Costa, 2009)

The composer's dominance and determinacy on music, in the context of Western art, is connected to the "genius composer myth" which considers him committing a divine act. Beethoven has been the figure by which this myth has been embodied in the most evident way. In this respect, an extra meaning is assigned to the act of listening: it is perceived as the experience of getting in direct mental contact with the

composer (Cook, 1998). That is how the composer and the written signs (musical score) representing his work are put in a central position as the creator and the creation, while the performer's role gets reduced to a transmitter. Changing even one single note of the composition is considered as a big disrespect to both the composer and the listener who is supposed to contact him by means of his work; the reason why a such change is not even to think about.

The ground on which was based the untouchable status of the musical work has began to shake when revolutionary novelties in sheet music printing occurred about the end of eighteenth and beginning of nineteenth century. Due to the success of Alois Senefelder and Franz Gleisner who managed to use lithography technique for music printing followed by the invention of quick printing press, it has become possible to print music in many copies and quickly (Wicke, 2004). The edition companies using this technique have firstly began printing and selling a repertoire they formed by determining pieces that were frequently requested by the auditors, aimed at a target mass of musicians. In the same period, as an effect of the French Revolution, the bourgeois class had started to rise. The financial resources owned by this class willing to organise its own musical entertainment events were highly modest compared to what was once owned by the aristocrats. Because hiring professional musicians would undoubtedly be a big expense, this task was to be performed by the gifted ones among the family, young girls in the first place. Thus, pianos were installed in many houses and usual became music performances by amateur soloists, duos or trios for the guests and the rest of the family. This situation meant a new and big market for the music printing companies. It was possible to sell the same pieces in the repertoire over and over again by arranging them for every possible small ensemble setup or solo instruments, for different skill levels. Inside this newly formed market, besides the arrangements of well known parts from some operas, such as a solo flute version of the "Queen of the Night" aria from Mozart's Magic Flute opera, simplified and shortened versions of even some symphonies have been produced and sold. In this chain of production, was born a new profession of re-arranging pre-existing music with various instrumentation possibilities and for different playing skill levels regarding to the expectations of circles of potential clients (Wicke, 2004).

In the last hundred years, during the process which could be summarised as the decline in amateur musicianship related to developments in sound recording technology; it became possible to have recorded versions of performances by professional musicians rather than live performances by amateur ones; also the medium for marketing music to large masses has changed from the printed sheet music to sound recording, and the work environment of the arranger from the printing company to the sound recording studio. While Western art music has preserved its own notions of composer and composition at the professional level until today, the production process of popular music have been heavily influenced by the studio-centred work form. Hennion (1983) writes that the "creative collective", a professional team handling all the work required to produce the popular song, replaced the single song writer. This team shares out the skills and knowledge that were once possessed by the single song writer: artistic personality, musical know-how, knowledge of society and market, technical production, and performance of music. In this way, the final product, the conclusion of continuous exchange of views between the team members, comes out as a fusion of musical objects and the needs of the public (Hennion, 1983).

In this sense, in the glossary of current popular music which has a past with many sources varying from troubadours of middle age Europe to Asian, European and African folk traditions, a composition means in general a monophonic song line and its lyrics. As information related to the accompaniment, sometimes chords are given either in the form of jazz-style chord symbols or a simple piano part, but still it is considered not as part of the original musical core, but as a subsidiary information that may be reinterpreted and changed. Deciding on the instrumentation, orchestrating the music, and sometimes even composing the whole introduction to the song are all activities considered as part of the arrangement, which is subject to change from one performance to the other. A single composition may be adapted from one popular music genre to another by changing elements like timbral characters obtained by instrumentation, the use of rhythmic patterns and textural structures. As properties related to all of these elements, matrices discussed in the previous section have an important role in creating the general musical character issued by the arranging style in different popular music genres.

1.5 Hypothesis and Technique of the Thesis

This work is based on the hypothesis that there is an important mass of potential listeners that music with post-tonal harmonic qualities could reach using a hybrid musical language featuring some references to musical elements familiar to them.

In the theoretical sense, hybridisation will work well when the resulting object includes selected features of the original sources, all functioning mathematically well and in balance in the "new whole" or "new system", to suit the aim of hybridisation. It is important to have all of the elements mathematically functioning in some way inside the new context, no matter if their new functions relate to the old conventional ones or just seems indirectly related or is simply remote. Otherwise, the resulting creature would risk of being a meaningless pastiche or simply a 'kitsch' object.

Popular music has many effective communicative tools such as easily perceivable and widely-known formal structures, steady rhythmic patterns, easily learnable melodies providing instant participation of the listener, mostly concrete and direct meanings given through the song lyrics, rhythmic, textural or timbral qualities suited to use as dance music or daily background music, and pitch organisation that provides either a tonal or modal reference to the listener's ears. Use of these tools to some extent may provide new communicative qualities to contemporary music. However, at the other hand, extreme use of all these elements at once might unavoidably lead to a music that has no place left to accommodate some highly organised and advanced features of twentieth century art music. So, in order to obtain a real hybrid representing some characteristics of both styles, one has to establish a balanced mix where elements from these different sources are used and combined in an optimal way. Hence, the general strategy with this hybridisation process will be to use forms, textural organisation models and rhythmic structures of popular music in combination with the timbral and harmonic features of contemporary art music. Since a source providing the needed information on textural and rhythmic patterns of popular music does not exist, a part of this thesis will be dedicated to popular music analysis revealing models that represent textural organisation formulas and rhythmic patterns of it.

The technique of the thesis is to model formal, rhythmic and textural clichés of popular music by analysing examples from various sub-genres, and to use these models in a musical composition with post-tonal harmonic organisation.

This thesis will include a categorised list of models obtained from the analysed examples of diverse popular music styles, the conductor score of the musical composition based on these models given in the appendix section, analysis revealing the use of models in this composition, and a sound recording of the composition made during its world premiere.

2. ANALYSIS OF MODELS

The models which will be revealed in this chapter represent common rhythmic, textural elements and formal structures found in the globally disseminated popular music in the second half of twentieth century. In other words, these are examples of musical clichés of global pop and rock. Along each model, a short transcription exemplifies the usage of the model and a table suggests other pieces featuring the same model for further listening.

Before discussing the models in details, introduced below are four terms used in this chapter to provide a better classification:

1- Rhythmic Model (R)

2- Rhythmic Combination Model (RC)

3- Textural Model (T)

4- Textural Combination Model (TC)

A rhythmic model (R) represents a rhythmic pattern commonly seen in many pieces, whereas a rhythmic combination model (RC) describes a frequently seen way of combining two or more rhythmic models.

In the same way, a textural model (T) is used to describe a portion of music where the textural character is homogenous and suitable to be represented by a single model; whereas a textural combination model (TC) describes a combination of two or more textural models.

While the rhythmic and textural models provide descriptions for more basic units, the combination models of both types belong to a higher hierarchical level. Combinations can be horizontal or vertical. A horizontal combination is formed of patterns following one another and a vertical combination appears when different patterns of same kind (rhythmic or textural) are used in superimposition.

Regarding to this classification, models will be first coded using the given abbreviations, then numbered one by one. Any variation of a model will be specified

by added letters to the end. For example, rhythmic model number 1 will be tagged as R-1 or second variation of textural combination model number 3, will be tagged as TC-3b.

Rhythmic models may reflect either drum/percussion patterns or rhythmic ostinato patterns played by other instruments. As a result of this, their notation will alternate between traditional five-line drum notation and a simpler one-line rhythmic notation regarding to their origin.

Numbers referring to beat values are indicated with Arabic numerals, such as 16th notes or 4th and 8th notes; whereas numbers referring to the position inside the bar are indicated with text, such as “fourth beat of the bar” or “second half of the third beat”.

Textural models may include an extra melodic line on top, either vocal or instrumental, although not indicated here; unless otherwise specified.

2.1 Rhythmic Models

2.1.1 Model No R-1

This is one of the most common rhythmic characters in popular music. It is simply the straight use of 4/4 meter, with first and third beats accentuated (Figure 2.1). To explain possible enhancements of this model, one has to expand the pattern size to two measures. Sometimes, last 4th or 8th of the pattern is also accentuated with an added kick drum note which also works as anacrusis to the following measure (Figure 2.2 – R-1a). An extra accent may be obtained by an added kick drum note in the second beat (Figure 2.3 – R-1b). A combination of these enhancements is always possible, such as a last 8th note anacrusis followed by a doubled kick drum accent at the beginning of the following measure (Figure 2.4). The pattern usually gets compressed to half measure in mid-tempo and high-tempo settings (Figure 2.5 – R-1c). Especially in 1960 style rock’n’roll, snare drum accent at the third beat is extended to fourth beat with an added snare drum note (Figure 2.6 – R-1d). Example music for R1 can be seen in Figure 2.7, other pieces featuring the use of this model are listed in Table 2.1

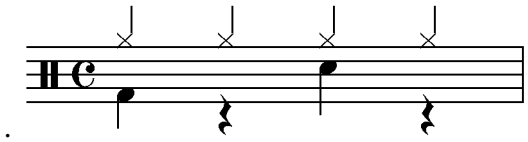

Figure 2.1 : The basic pattern of straight 4/4

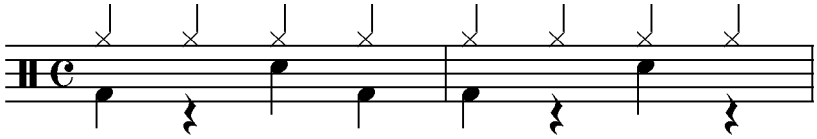

Figure 2.2 : R-1a, Straight 4/4 with added accent to the last beat of pattern

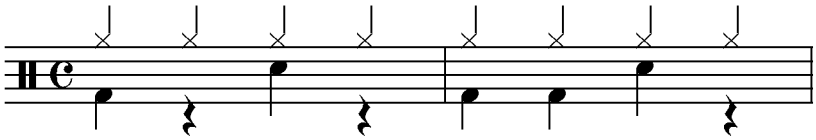

Figure 2.3 : R-1b, Straight 4/4 with double accent in the second measure

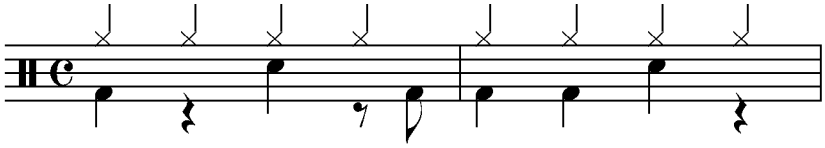

Figure 2.4 : A combination of R-1b and R-1c; straight 4/4 with added accent to the last 8th and double accent in the following measure

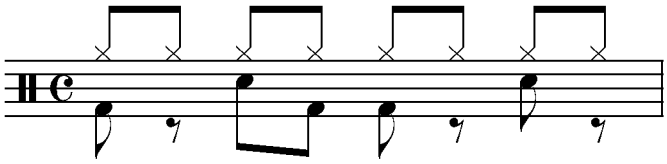

Figure 2.5 : R-1c, Straight 4/4, compressed version with kick drum anacrusis

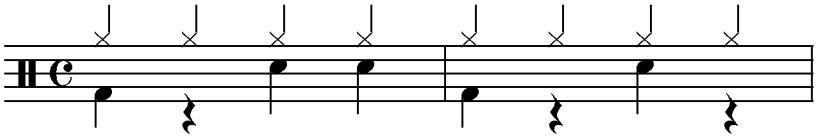

Figure 2.6 : R-1d, Straight 4/4, with double snare drum accent in the first bar

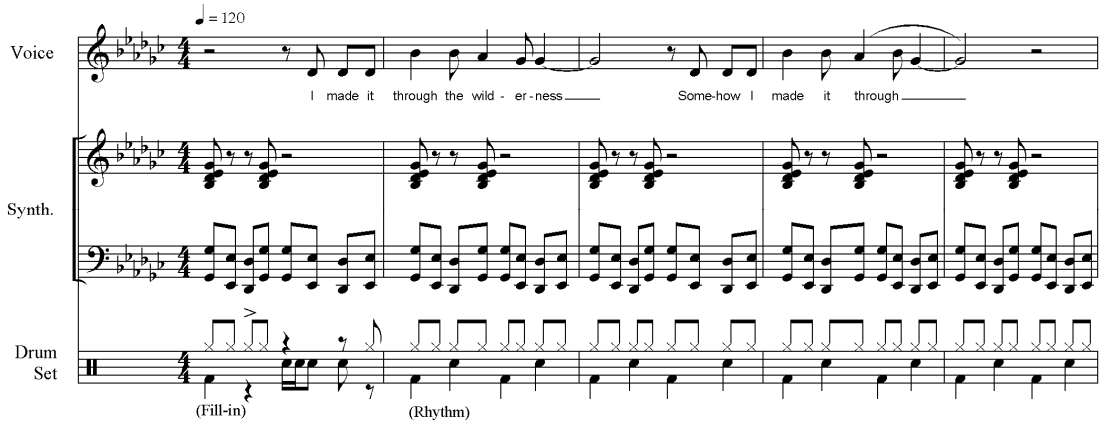

Figure 2.7 : Example music for R-1, "Like A Virgin" by Madonna

Table 2.1: Other music featuring the use of R1

Track title	**Artist**	**Explications**
Please Please Me	Beatles	R-1d as drum pattern
Bridge Over Troubled Water	Aretha Franklin	A combination of R-1b and R-1c as drum pattern
Chain of Fools	Aretha Franklin	R-1b drum pattern
Sitting on the Dock of the Bay	Otis Redding	Basic 4/4
Surfin'USA	Beach Boys	R1
Take On Me	A-HA	Basic 4/4
What's Going On?	Marvin Gaye	Basic 4/4
Stayin' Alive	Bee Gees	Basic 4/4
In the name of love	U2	Basic 4/4
New Year's day	U2	Basic 4/4
With or without you	U2	Basic 4/4
I will follow	U2	Basic 4/4
The Unforgettable fire	U2	Basic 4/4
Baby Be Mine	Michael Jackson	Basic 4/4
Beat It	Michael Jackson	Basic 4/4
Billie Jean	Michael Jackson	Basic 4/4
Pretty Young Thing	Michael Jackson	Basic 4/4

2.1.2 Model No R-2

R-2 is a high-tempo version of Model R-1. When the tempo is too high to play all the 4th or 8th notes in the cymbal part, this line gets reduced to half-time while kick and snare drum parts are kept as they were. It is possible to produce R-2 versions of all rhythms of model R-1 (Figure 2.8). Example music for R2 can be seen in Figure 2.9, other pieces featuring the use of this model are listed in Table 2.2.

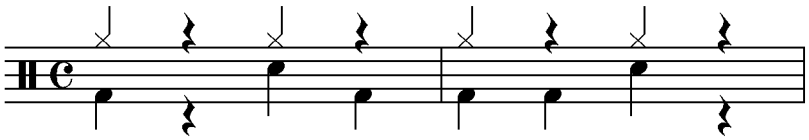

Figure 2.8 : Straight 4/4 with accentuated last beat and double accents in the second measure, cymbal line reduced to half-time.

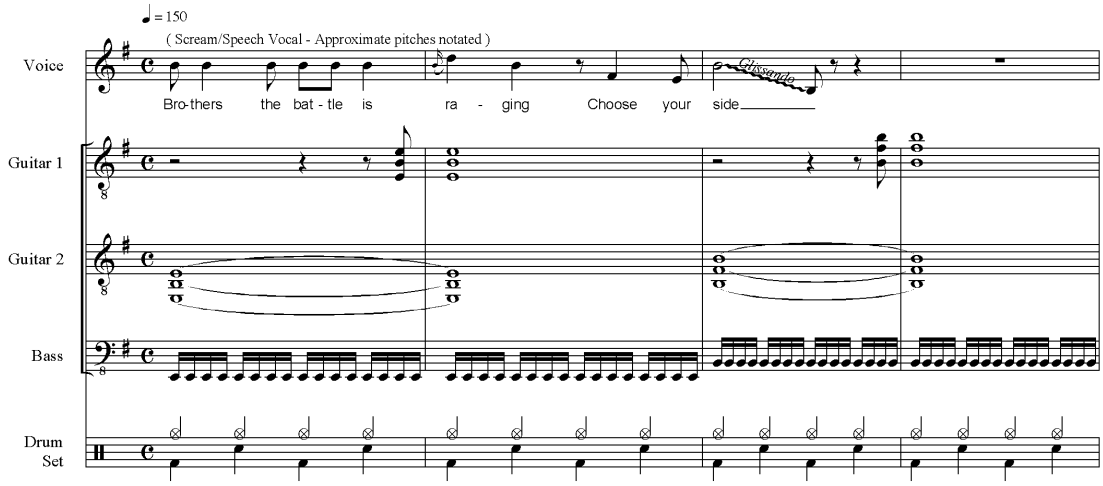

Figure 2.9 : Example music for R-2, "Blood of The Kings" by Manowar

Table 2.2: Other music featuring the use of R-2

Track title	Artist	Explications
Aces High	Iron Maiden	R-2
Bee All, End All	Anthrax	R-2
Future World	Helloween	R-2
Get Me Out	New Model Army	R-2
Ace of Spades	Motörhead	R-2
Holier Than Thou	Metallica	R-2
Hit The Lights	Metallica	R-2

2.1.3 Model No R-3

R-3 is a version of 4/4 with kick accent both in first and third beats (Figure 2.10). It has been widely used in dance music beginning from 1970's disco music. The usual snare note at the third beat may be either played or omitted (Figure 2.11). One could argue that the removal of the extra accent at the third beat turns this 4/4 based rhythmic pattern into a basic 2/4, however, usually the phrase structure of melody line reveals that the song is actually composed in 4/4 character and the percussion part is organised this way only to provide a simple binary "down-up" rhythmic groove for the dancers. That's why this model should still be considered as 4/4.

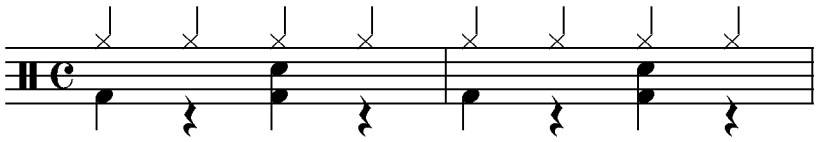

Figure 2.10 : Basic disco rhythm, with snare drum still accentuating the third beat

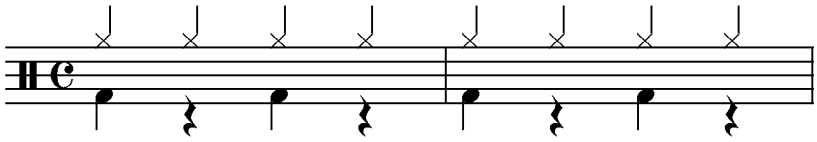

Figure 2.11 : Basic disco rhythm, snare drum omitted

Most of the times, the cymbal part is ornamented, sometimes by dividing either up or down beats into two sub-units (resulting variations R-3a and R-3b, shown on Figures 3.12 and 3.13), or some other times having the upbeats more accented by opening the hi-hat, resulting a "staccato downbeat – accentuated tenuto upbeat" cymbal character which creates an accent alternation between kick and snare drums, which will be tagged as R-3c (Figure 2.14).

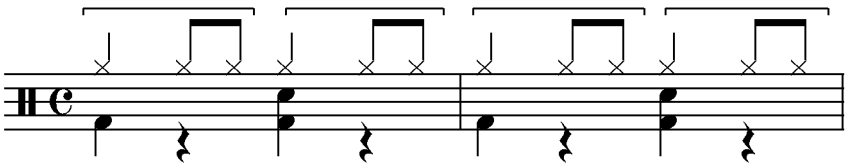

Figure 2.12 : R-3a, disco rhythm, ornamented cymbal (pattern: one 4th – two 8ths)

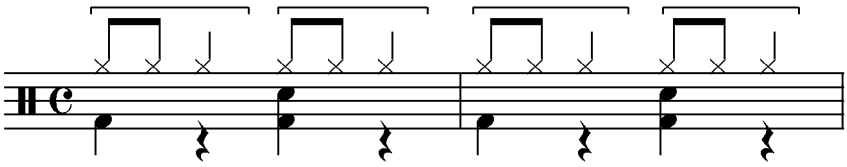

Figure 2.13 : R-3b, disco rhythm, ornamented cymbal (pattern: two 8ths – one 4th)

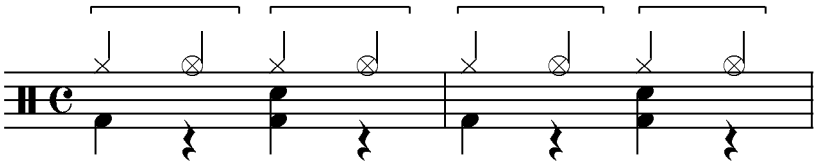

Figure 2.14 : R-3c, disco rhythm, with open hi-hat in the upbeats

A combination of these two cymbal ornamentation solutions is possible as well (Figure 2.15). Example music for R-3 can be seen in Figure 2.16, other pieces featuring the use of this model are listed in Table 2.3.

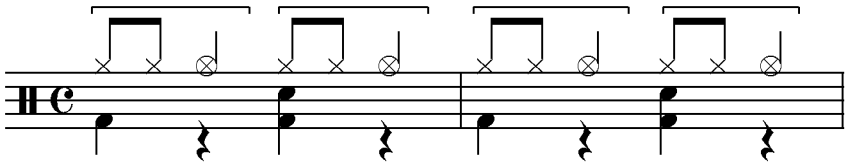

Figure 2.15 : Disco rhythm, with ornamented cymbal part which features a combination of R-3b and R-3c.

Table 2.3: Other music featuring the use of R-3

Track title	Artist	Explications
Saturday Night Fever	Bee Gees	R-3a
Rasputin	Boney-M	R-3
Laissez-moi Danser	Dalida	R-3b
Get Up Off That Thing	James Brown	R-3b
Dancing Queen	ABBA	R-3a
Thriller	Michael Jackson	R-3

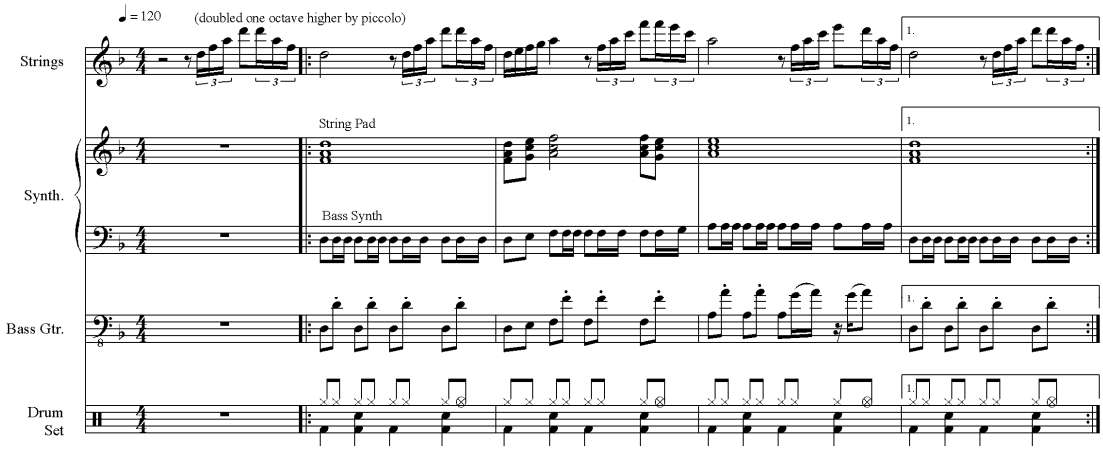

Figure 2.16 : Example music for R-3, “Gimme Gimme Gimme” by ABBA

2.1.4 Model No R-4

Model R-4 is a version of 4/4 with cymbal part in double-time. It is called “sixteen beat” because the cymbal part consists of sixteen 16th notes when 4/4 is notated in double time, which is usually the case (Figure 2.17). Please note that any variation of 4/4 obtained by additional or displaced kick or snare drum beats is available in sixteen beat as well (Figure 2.18). If the tempo is too high to play all sixteen cymbal notes with a single hand, then drummers use two hands for this part, which forces them to omit the cymbal when beating the snare drum (Figure 2.19). Example music for R4 can be seen in Figure 2.20, other pieces featuring the use of this model are listed in Table 2.4.

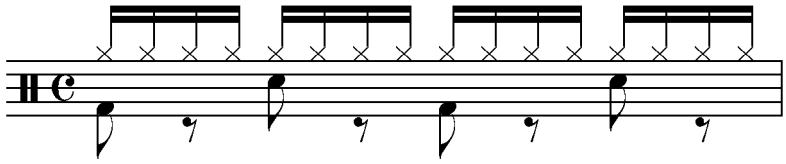

Figure 2.17 : Basic “sixteen beat” pattern

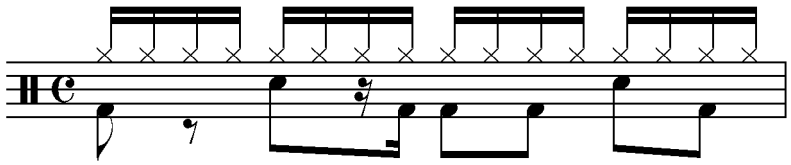

Figure 2.18 : Sixteen beat with kick drum ornamentation

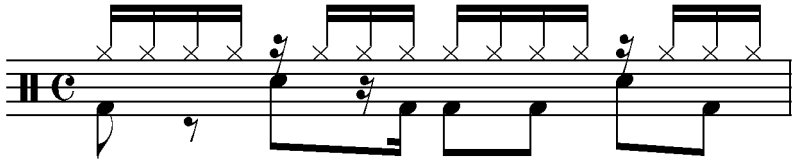

Figure 2.19 : Sixteen beat with kick drum ornamentation, high-tempo version, some cymbal notes omitted when beating the snare drum

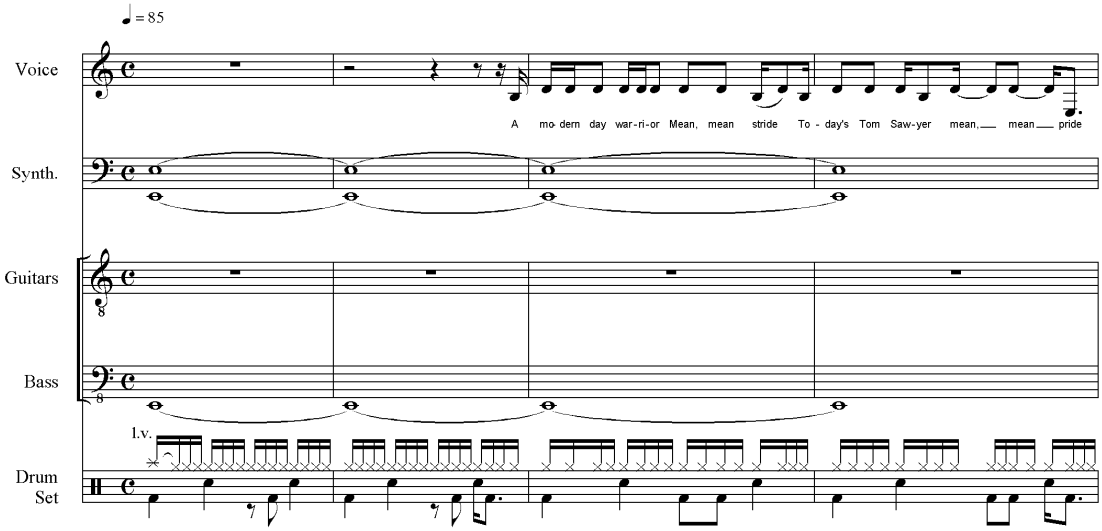

Figure 2.20 : Example music for R-4, “Tom Sawyer” by Rush

Table 2.4: Other music featuring the use of R-4

Track title	Artist	Explications
Love's Theme	Barry White & Love Unlimited Orchestra	R-4
Dancing Machine	Jackson Five	R-4
Sophisticated Cissy	The Meters	R-4
I'm Gonna Love You Just A Little Bit More	Barry White	R-4
Sunday Bloody Sunday	U2	R-4
Sweetest Thing	U2	R-4
Wanna Be Startin'Something	Michael Jackson	R-4

2.1.5 Model No R-5

R-5 can be described as the use of sub-units of quadruple meter (such as 8th or 16th notes) with triple rhythmic grouping, with accents emphasising the group beginnings. The junction of these two rhythmic lines on an upbeat is theoretically not possible before LCP (lowest common multiple) of three and four, which is twelve. In this case, if, for example, the groups are made up of 8th notes, then the junction will take place after six measures of rhythmic displacement. To use this feature as a repeated rhythmic pattern, composers, most of the times, prefer having an earlier junction point usually provided by a last group which is compressed or extended to compensate the difference of phase. The resulting rhythmic division model can also be described as an 8/8 meter with various possible subdivisions. The most basic state of this model, which will be tagged as "R-5a" is displayed in Figure 2.21. Please see Figure 2.22 for a more extended version which will be tagged as "R-5b".

Ornamented versions of both models, obtained by replacing an 8th note in the basic motive by two 16th notes, are also possible (Figures 3.23 and 3.24). A less rhythmic and subtler version of this model is also possible if each group is replaced by a single note with longer value, still keeping the accent character 3+3+2, since strike of each new note functions as an accent (Figures 3.25 and 3.26). A midway between the "long notes" and "succession of 8th notes" formulas is also available by having groups of three 8th notes represented by one 4th and one 8th note, and groups of two 8th notes by a single 4th note (figures 3.27 and 3.28). This rhythmic character is usually used in combination with simple 4/4 patterns, either superimposed (in different parts) or in alternation (in the same part, one following the other). In case of use in the same part, usually the rhythmic displacement formula works as a fill-in or ornamentation, placed inside a straight 4/4 rhythmic flow. Example music for R-5

can be seen in Figure 2.29, other pieces featuring the use of this model are listed in Table 2.5.

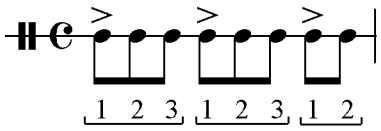

Figure 2.21 : R-5a, 3+3+2=8 grouping (last group compressed to two 8th notes, offering one bar length)

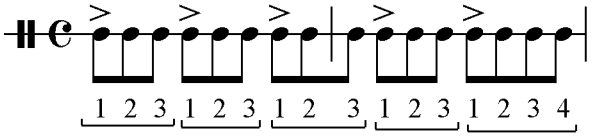

Figure 2.22 : R-5b, 3+3+3+3+4=16 grouping (last group expanded to include four 8th notes, offering two bars length)

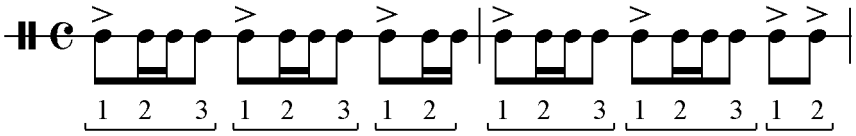

Figure 2.23 : R-5a, 3+3+2 grouping with 16th ornamentations

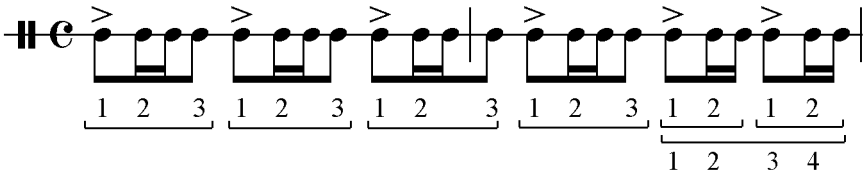

Figure 2.24 : R-5b, 3+3+3+3+4=16 grouping, with 16th ornamentations (also note the 2+2 structure inside the last group)

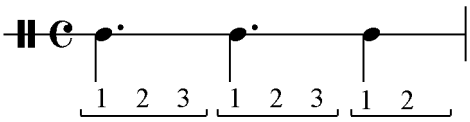

Figure 2.25 : Model R-5a, 3+3+2=8 grouping, with long note values

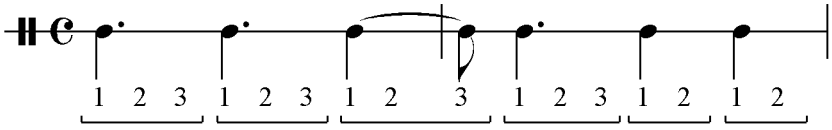

Figure 2.26 : Model R-5b, 3+3+3+3+4=16 grouping, with long note values

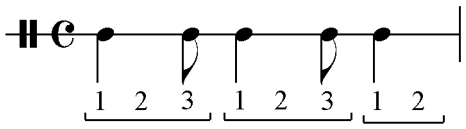

Figure 2.27 : Model R-5a, 3+3+2=8 grouping, note values longer than 4th avoided

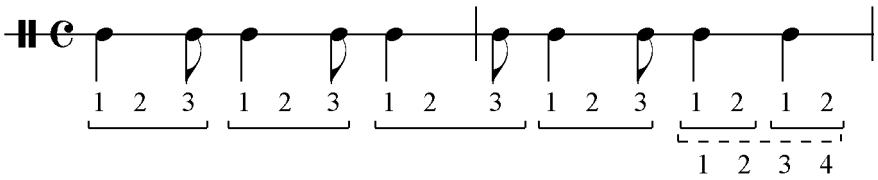

Figure 2.28 : Model R-5b, with 3+3+3+3+4=16 grouping,
note values longer than 4th avoided

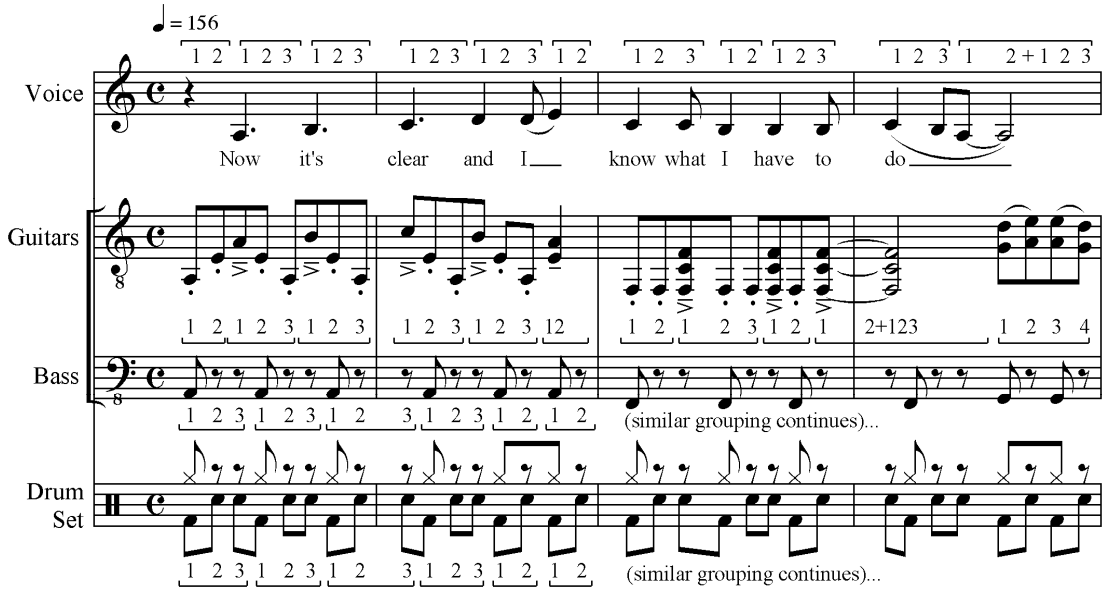

Figure 2.29 : Example music for R-5, “Still Life” by Iron Maiden

Table 2.5: Other music featuring the use of R-5

Track title	Artist	Explications
Move It	Cliff Richards & The Shadows	R-5 in the intro guitar riff
Johnny Be Good	Little Richard	R-5
No Love Lost	Carcass	Accompaniment to guitar solo is made of 3+3+2 pattern
		Guitar Riff accompanying the verse vocals is built on 3+3+2 pattern
Carnal Forge	Carcass	Drum pattern in 3+3+2
Desire	U2	R-5b, whole track
All I Want Is You	U2	R-5a, in guitar accompaniment
Billie Jean	Michael Jackson	R-5 in synthesiser block chords in verse sections

2.1.6 Model No R-6

R-6 is the use of a rhythmic pattern that switches between a quadruple rhythm with regular accentuation and a syncopated version of the same material obtained through rhythmic displacement. The displacement is usually made backwards, bringing all accents one unit (4th or 8th) earlier. In order to offer place to this early arrival, last unit of the original material is omitted. This displacement causes also an early ending at the end of second bar, which, in order to switch back to the original accentuation character, forces the composer to add an extra accentuated unit to the very end, compensating the omitted unit and also serving as an anacrusis to the following non-syncopated material's downbeat (Figure 2.30).

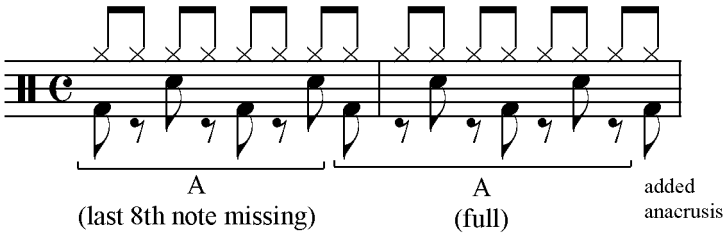

Figure 2.30 : Rhythmic displacement, obvious

Because this permanent alternation of regular and syncopated material may not be easily understood by some listeners, most of the times, musicians prefer to keep the snare drum beating at its usual place, at the 2nd and 4th downbeats, while having the syncopated accents transferred to the kick drum part (Figure 21, transferred notes are marked with arrowheads). Example music for R-6 can be seen in Figure 2.32, other pieces featuring the use of this model are listed in Table 2.6.

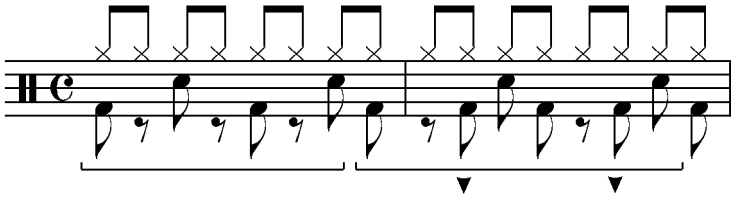

Figure 2.31 : Rhythmic displacement, subtle

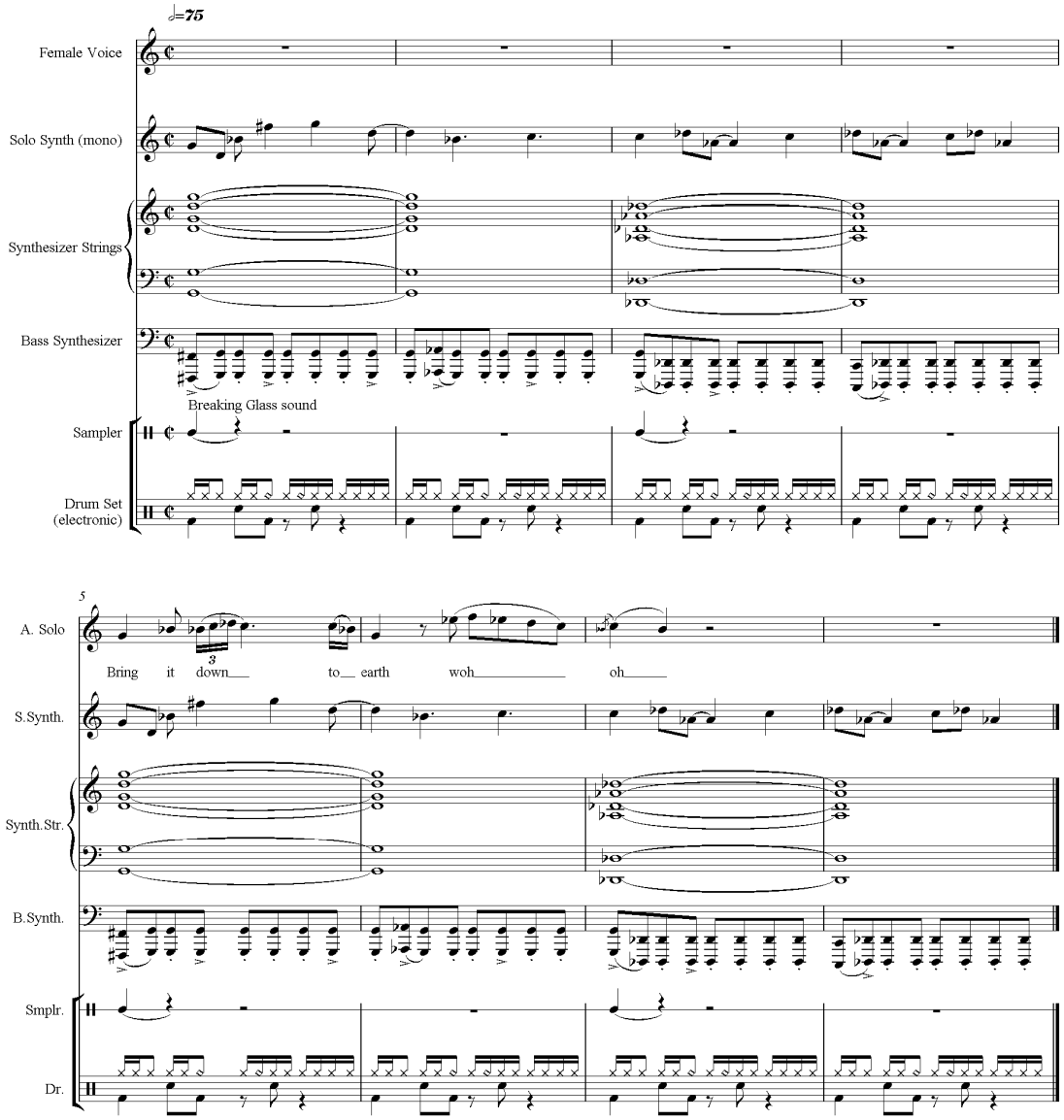

Figure 2.32 : Example music for R-6, “Break and Enter” by Prodigy

Table 2.6: Other music featuring the use of R-6

Track title	Artist	Explications
Love is Dead	Cat Boy	R-6
Hidden	Michael Kovak	R-6
Painkiller	Massive Attack	R-6

2.1.7 Model No R-7

This model is simply what is called a “shuffle” rhythm. The term “shuffle” refers to a rhythmic structure in 6/8 or 12/8 character, mostly in combination with accompaniment or percussive parts adapted from 4/4 character material, which means that the number of beats in each measure is still considered as 4 (as in 4/4), but this time, each beat is formed of three sub-units, basically three triplet 8th notes.

Rather than notating this rhythmic structure using triplets, it is mostly preferred to use 12/8 as meter, still keeping the quadruple grouping structure in the beaming, a practice which also makes the measure look like it's made of four dotted beats (instead of four beats in usual 4/4). It also keeps a strong relation to 6/8 meter found in the European tradition. The most basic form of 12/8 is displayed in Figure 2.33.

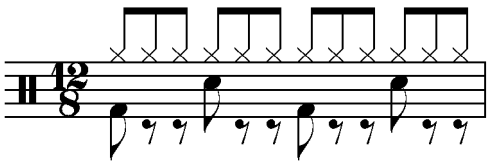

Figure 2.33 : The most basic form of 12/8 rhythm

However, when the music is up-tempo, it becomes impractical to play all of the 8th notes. In this case, instead of all three 8th notes in each group, only first and last are played. One may also relate this choice to general attitude in Western musical tradition in seeing the first and last beats of a triple meter as strong beats. The second 8th is omitted either by transforming the first 8th into a 4th or simply by putting a rest instead. The resulting rhythmic pattern is the most common shuffle rhythm, tagged here as R-7a, displayed in Figures 3.34 and 3.35 with slightly different cymbal parts:

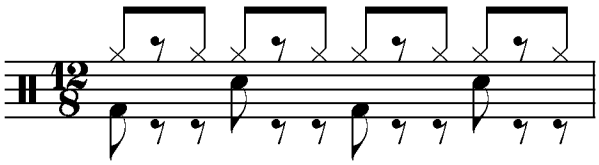

Figure 2.34 : R-7a, most common shuffle rhythm, cymbal formula no.1

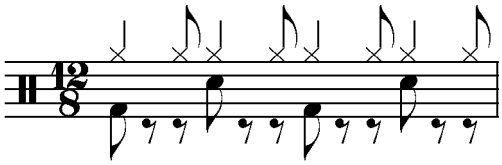

Figure 2.35 : R-7a, most common shuffle rhythm, cymbal formula no.2

If the instruments playing this rhythmic part are not capable of producing long sustained notes (like some percussion instruments) or if they are played using staccato articulation, both patterns actually sound the same.

In settings where hi-hat cymbal is used in open position (usually found in hard rock music after 1980's), the shuffle figure usually gets transferred to the kick drum part, forming the variation R-7b. Please see Figure 2.36 for a few possible variations in

this fashion. Example music for R-7 can be seen in Figure 2.37, other pieces featuring the use of this model are listed in Table 2.7.

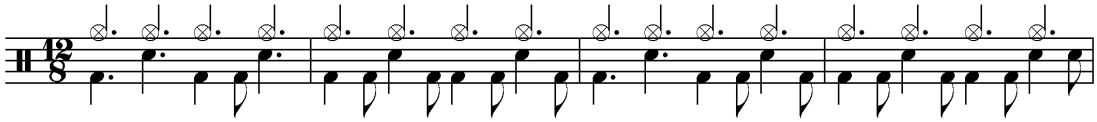

Figure 2.36 : R-7b, shuffle rhythm with straight hi-hat cymbal, as the shuffle figure is played by kick and snare drums in combination.

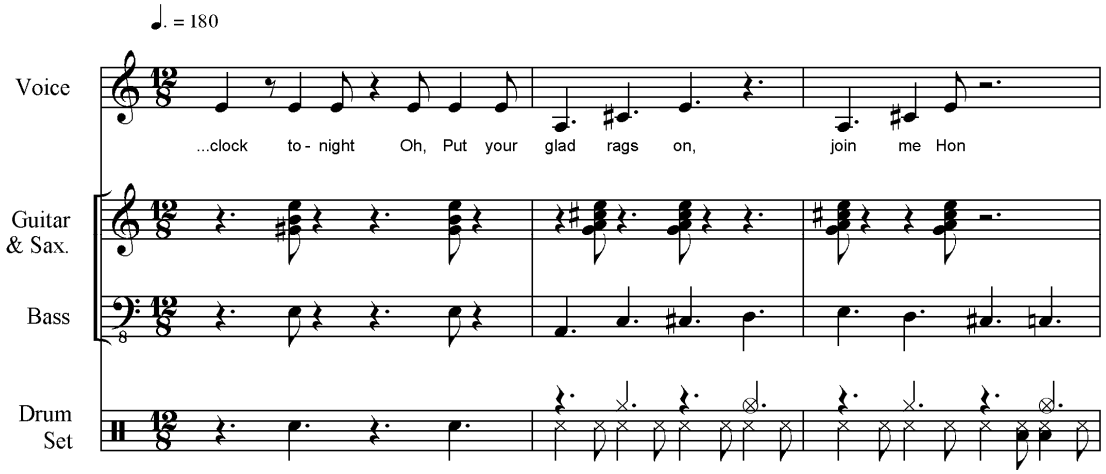

Figure 2.37 : Example music for R-7, "Rock around the clock" by Bill Haley

Table 2.7: Other music featuring the use of R-7

Track title	**Artist**	**Explications**
See you later, Alligator	Bill Haley & The Comets	R-7
Shake Rattle and Roll	Bill Haley & The Comets	R-7
Don't be cruel	Elvis Presley	R-7
I Got A Woman	Ray Charles	R-7

2.1.8 Model No R-8

R-8 is a slow-tempo version of shuffle, in 6/8 or 12/8 character, which used to be called "Slow Rock" rhythm, back in the 1960s where rock'n'roll was mostly shuffle-based (Figure 2.38).

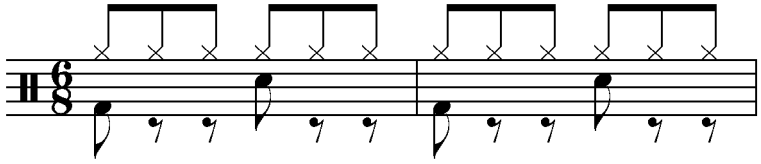

Figure 2.38 : Basic "Slow Rock" rhythm

This rhythm is used with added kick drum accents in the last 8th of measures, providing an anacrusis to the following measure (figures 3.39 and 3.40).

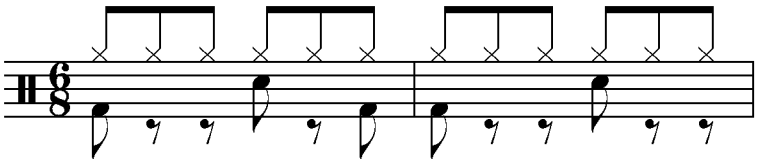

Figure 2.39 : "Slow Rock" rhythm, added kick anacrusis formula no.1

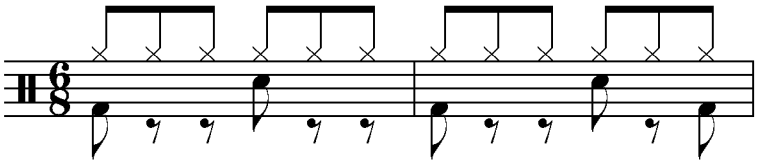

Figure 2.40 : "Slow Rock" rhythm, added kick anacrusis formula no.2

Example music for R-8 can be seen in Figure 2.41, other pieces featuring the use of this model are listed in Table 2.8.

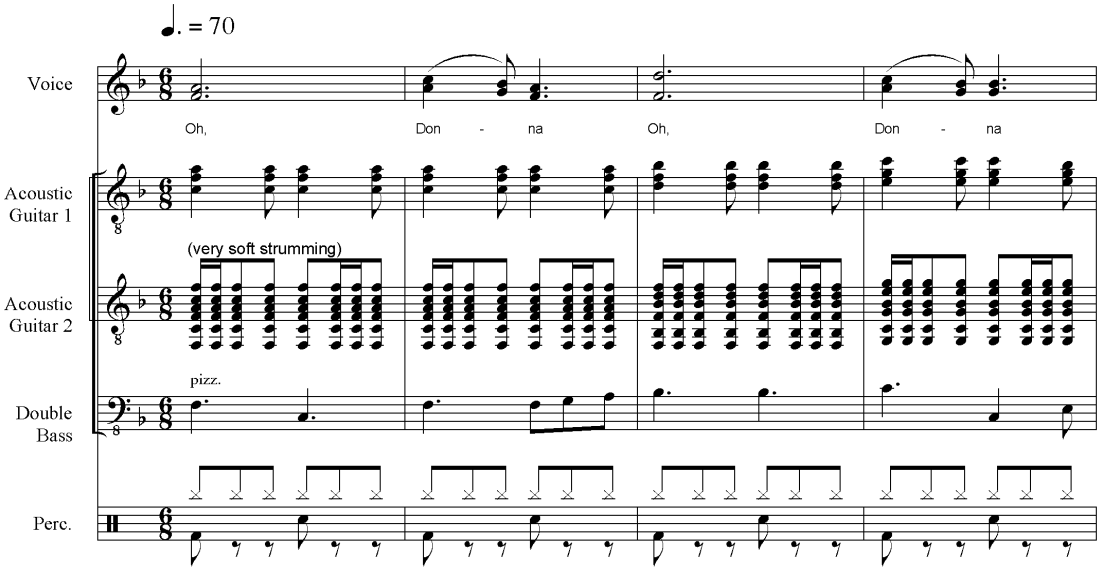

Figure 2.41 : Example music: for R-8, "Oh, Donna" by Ritchie Valens

Table 2.8: Other music featuring the use of R-8

Track title	**Artist**	**Explications**
A Change Is Gonna Come	Solomon Burke	Basic 6/8 drum pattern
Do Right Woman, Do Right Man	Aretha Franklin	Basic 6/8 drum pattern
I Got You Babe	Sonny & Cher	Basic 6/8 drum pattern
We Belong Together	Ritchie Valens	Basic 6/8 drum pattern
It's Crying Time Again	Ray Charles	Basic 6/8 drum pattern
Night Time is The Right Time	Ray Charles	Basic 6/8 drum pattern

2.1.9 Model No R-9

R-9 is the use of a regular triple or quadruple meter with triple subdivisions instead of duple. The resulting rhythmic characters are 4/4 drum patterns placed in a 12/8

rhythmic map, or 6/8 drum patterns placed in a 18/16 rhythmic map, and so on. This is possible when the drummer plays the superficial triple or quadruple frame of the pattern and the triple subdivisions are only heard through “details” such as an added kick drum anacrusis, or a snare drum fill. Some other times, other instrument or vocal parts may also give the listener a clue about the triple subdivision. This practice is highly common in soul music, blues and 1950s style rock’n’roll. Example music for R-9 can be seen in Figure 2.42. Here, all 16th triplet notes reveal the triple subdivision. Other pieces featuring the use of this model are listed in Table 2.9.

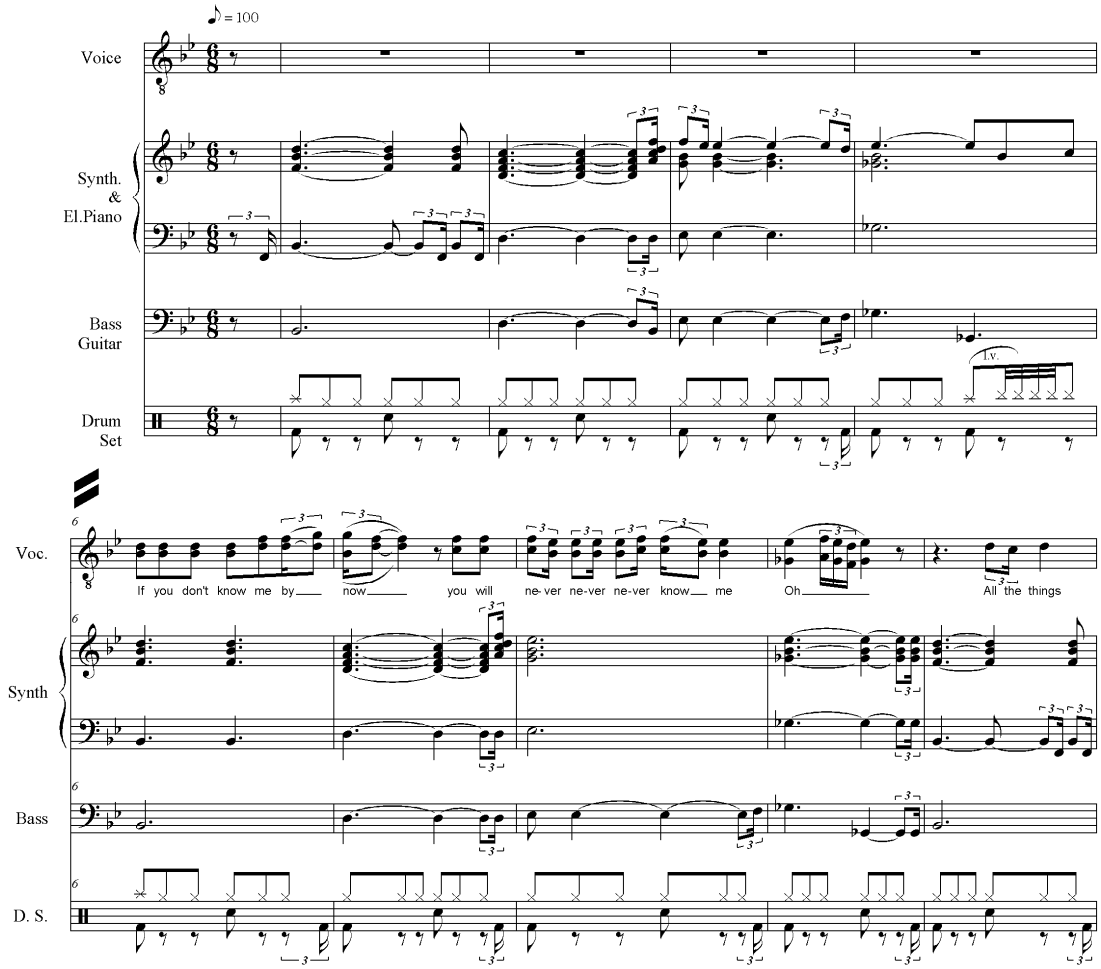

Figure 2.42 : Example music for R-9, “If you don’t know me by now” Simply Red

Table 2.9: Other music featuring the use of R-9

Track title	Artist	Explications
Love me do	The Beatles	12/8 disguised as model no R2 type 4/4 meter. The triple meter shows itself sometimes, with added kick drum and snare strikes
A Natural Woman (You Make Me Feel Like)	Aretha Franklin	18/8 disguised as model no R8 type 6/8 meter slow-rock.
One More Try	George Michael	18/8 disguised as model no R8 type 6/8 meter slow-rock.
Take It To The Limit	The Eagles	18/8 disguised as model no R8 type 6/8 meter slow-rock.

2.1.10 Model No R-10

Usually in extreme sub-genres of metal music, drummers generally use two kick drums instead of one in order to obtain more bass register sound from the drum set. Generally, the hi-hat cymbal part of existing drum patterns get transferred to the kick drums, and the cymbal part becomes more simplified.

2.2 Rhythmic Combination Models

2.2.1 Model No RC-1

RC-1 is the use of different variations of R-1 or R-2 type 4/4 in horizontal combination. This combination may serve to build new hybrid patterns. Example music for RC-1 can be seen in Figure 2.43, other pieces featuring the use of this model are listed in Table 2.10.

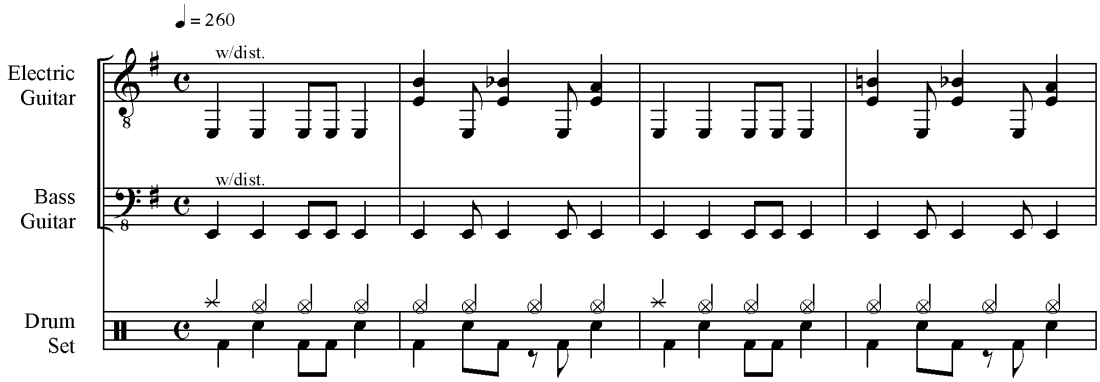

Figure 2.43 : Example music for RC-1, “Ace of Spades” by Motorhead

Table 2.10: Other music featuring the use of RC-1

Track title	Artist	Explications
Headhunter	Krokus	RC-1
Starlight	Accept	RC-1
Alexander The Great	Iron Maiden	RC-1

2.2.2 Model No RC-2

RC-2 is the use of R-5 type syncopated rhythm in horizontal combination with R-1 type straight 4/4 rhythm. This combination may serve to build new hybrid patterns. Example music for RC-2 can be seen in Figure 2.44, other pieces featuring the use of this model are listed in Table 2.11.

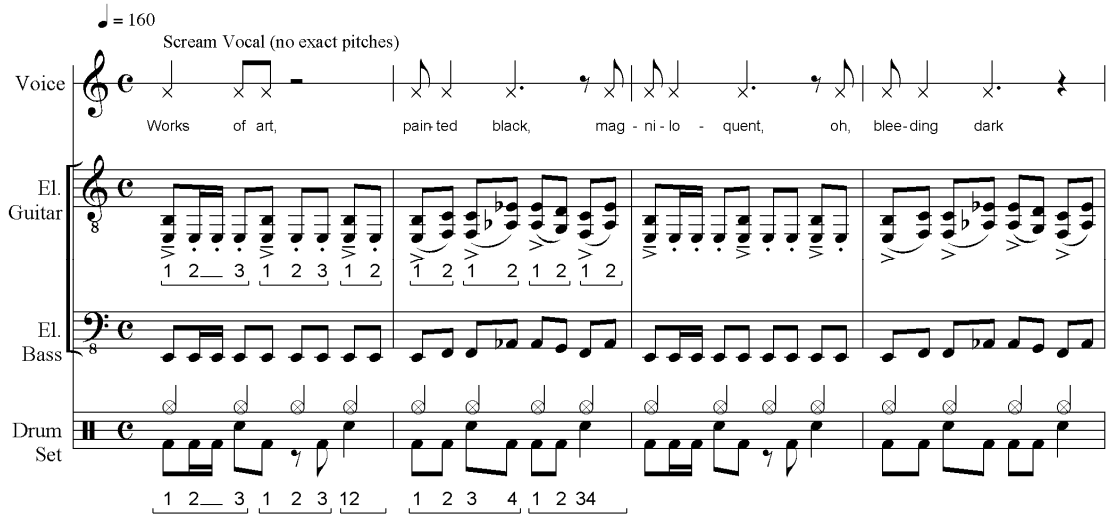

Figure 2.44 : Example music for RC-2, "Heartwork" by Carcass

Table 2.11: Other music featuring the use of RC-2

Track title	Artist	Explications
Extreme Aggressions	Kreator	RC-2
You Shook Me All Night Long	AC/DC	RC-2
Malpractice	Faith No More	RC-2

2.2.3 Model No RC-3

RC-3 is the use of R-5 type syncopated rhythm in vertical combination with straight 4/4 rhythm patterns like R-1, R-2, R-3 or R-4. Usually chord-playing instruments play percussively the R-5 syncopations while the drum kit keeps the regular duple or quadruple beating; but the reverse is also found occasionally. This model is often found in funk, disco and electronic dance music styles. Example music for RC-3 can be seen in Figure 2.45, pieces featuring the use of this model are listed in Table 2.12.

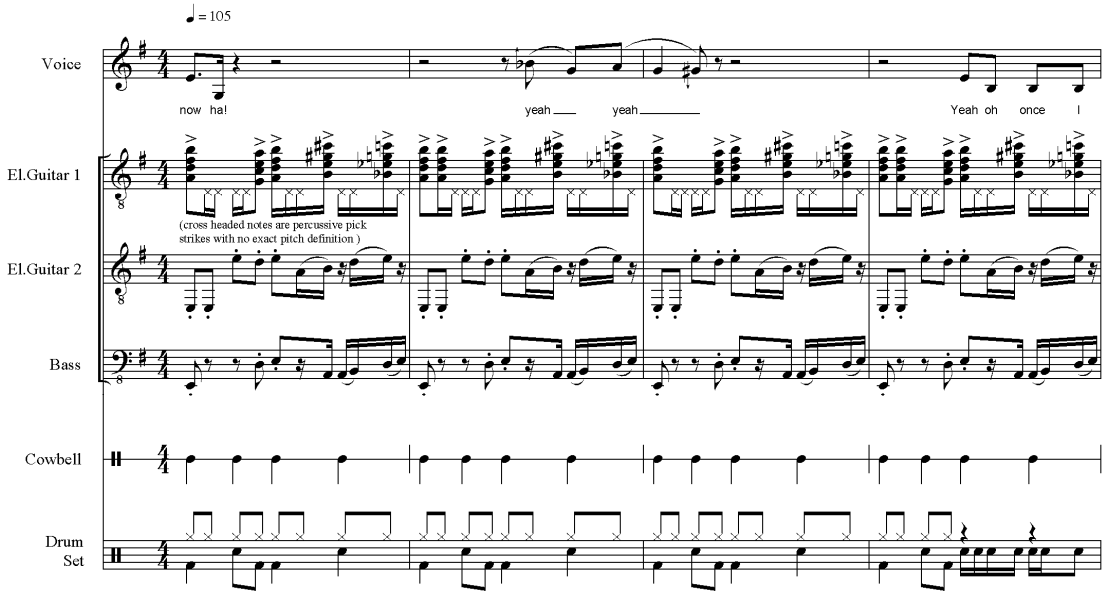

Figure 2.45 : Example music for RC-3, "Play That Funky Music White Boy" by James Brown

Table 2.12: Other music featuring the use of RC-3

Track title	Artist	Explications
Give It Away Now	Red Hot Chili Peppers	RC-3
Two Princess	Spin Doctors	RC-3
What Time Is It?	Spin Doctors	RC-3

2.3 Textural Models

The textures cited here can be categorised as complete and incomplete textures. A complete texture features percussion, bass and chord parts accompanying a melody line, as a minimum. The melody line is sometimes heard through higher pitches of a chordal part.

2.3.1 Model No T-1

T-1 is a texture consisting of a singer (or solo instrument) and only a bass as accompaniment instrument. While the bass provides a harmonic ground, the lack of any upper-register instrument draws the listener's whole attention to the lead part or to the singer. This texture may be enriched by an added soft percussion line. Example music for T-1 can be seen in Figure 2.46, other pieces featuring the use of this model are listed in Table 2.13. (For a drum set added version of T-1, see model T-4).

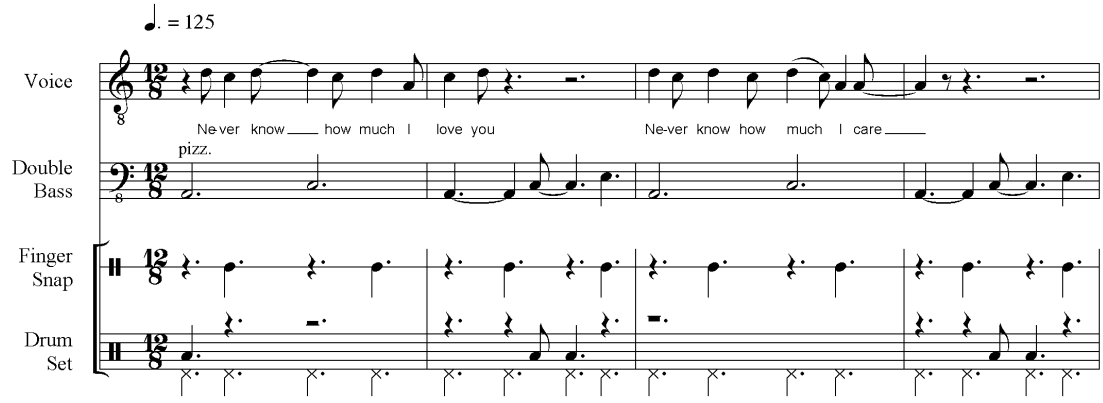

Figure 2.46 : Example music for T-1, "Fever" by Peggy Lee

Table 2.13: Other music featuring the use of T-1

Track title	Artist	Explications
Strange	Joe Satriani	RC-3
Dawn Patrol	Megadeth	RC-3
Stand By Me	Ben E. King	RC-3

2.3.2 Model NoT-2

T-2 is a texture consisting of a singer (or solo instrument) and a chord playing accompaniment instrument. Four sub-types of this model can be differentiated regarding to the textural character of the accompaniment part:

T-2a: Block chords sustained with homogenous dynamics. Played usually with a synthesizer pad simulating woodwinds, horns or strings, in piano dynamic

T-2b: Block chords sustained with sforzando dynamic on note strike. Played usually with an acoustic or electric piano, or occasionally with a guitar

T-2c: Block chords used in a percussive manner, using a rhythmic pattern. Played usually with a guitar

T-2d: Arpeggiated chords. Played usually with a guitar

These sub-types may also be used in horizontal or vertical combination. As long as the combination will not feature more than one instrument, it will still be categorised as T-2. It is also possible to have these accompaniment ideas without any melodic line on top, especially as an introduction section or an instrumental passage. Music examples for all sub-types of T-2 are given in Figures 3.47, 3.47, 3.49 and 3.50; other pieces featuring the use of this model are listed in Table 2.14.

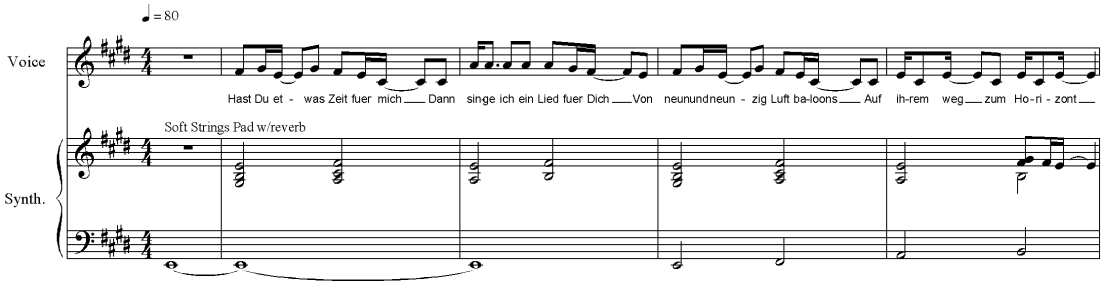

Figure 2.47 : Example music for T-2a, “99 Luftbaloons” by Nena

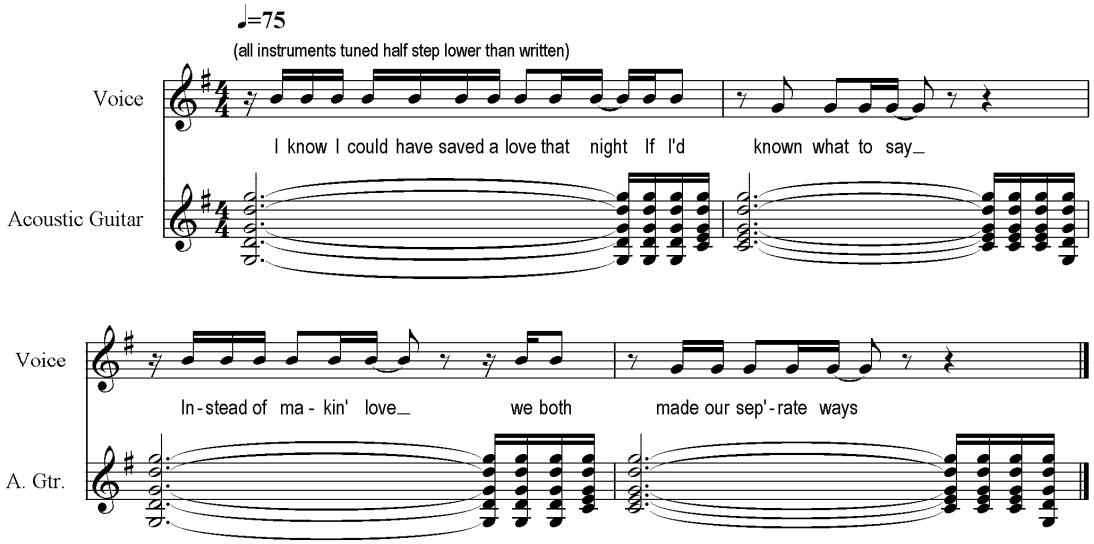

Figure 2.48 : Example music for T-2b, “Every Rose Has Its Thorn” by Poison

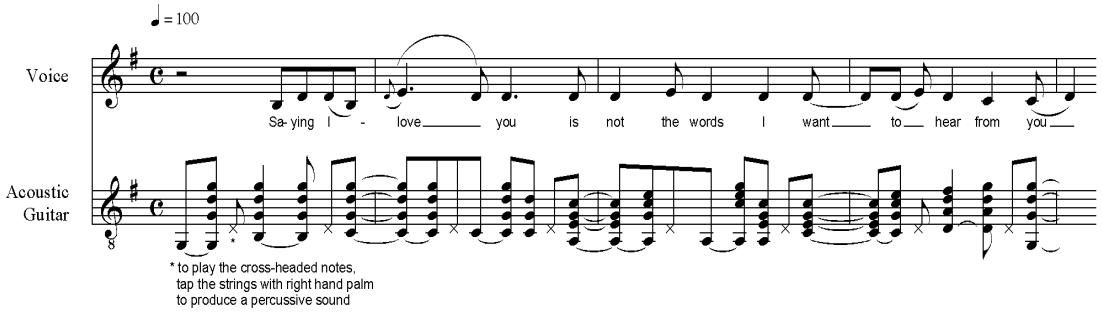

Figure 2.49 : Example music for T-2c, “More Than Words” by Extreme

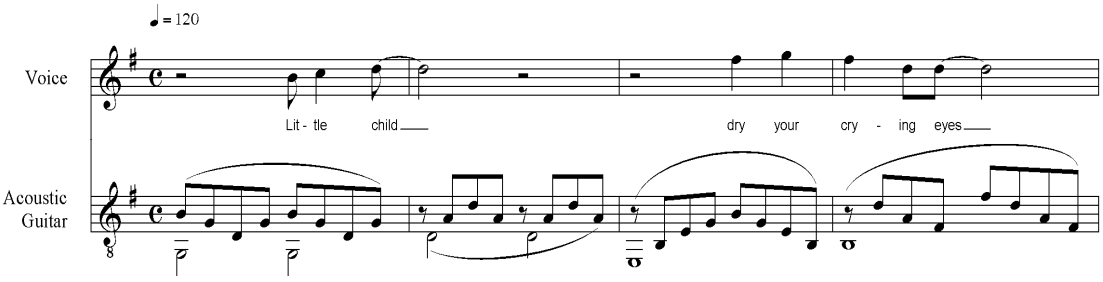

Figure 2.50 : Example music for T-2d, “When The Children Cry” by Whitelion

Table 2.14: Other music featuring the use of T-2

Track title	Artist	Explications
Chain of Fools	Aretha Franklin	Electric guitar accompaniment using T-2c and T-2d models, enhanced with tremolo effect
Do I know you?	Kylie Minogue	T-2a
After The Rain	XYZ	Acoustic guitar arpeggios in verse sections and strumming in the chorus
To Be With You	Mr. Big	Strummed acoustic guitar chords during the whole piece
Nothing Compares To You	Sinead O'Connor	Synthesiser chord pad during the first turn of the song
If I Could	Paul Simon	Strummed guitar chords during the whole piece
All I Want Is You	U2	T-2b, in the first verse section
Bad	U2	T-2, very beginning of the song
Now and Forever	Richard Marx	T-2d, acoustic guitar arpeggios during the whole piece as the main accompaniment

2.3.3 Model No T-3

T-3 is a texture consisting of a singer (or solo instrument) and a percussion line, which may vary from a simple one-beat-per-measure formula to an elaborate Latin rhythm section. A pop and rock music cliché related to this texture is the moment in a live performance where all instruments stop and the lead singer starts singing only in accompany of the drum set or percussion instruments, asking the crowd to clap and sing along. Example music for T-3 can be seen in Figure 2.51, other pieces featuring the use of this model are listed in Table 2.15.

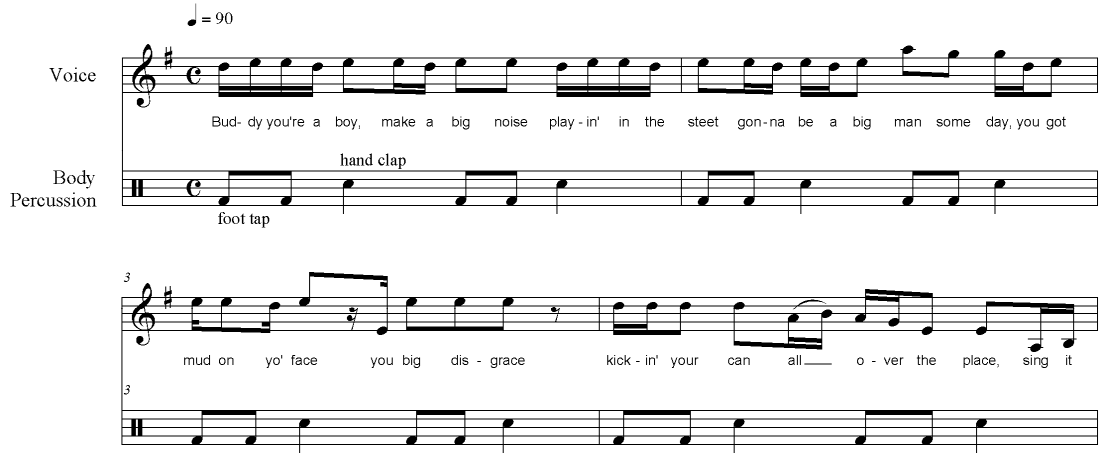

Figure 2.51 : Example music for T-3, "We Will Rock You" by Queen

Table 2.15: Other music featuring the use of T-3

Track title	Artist	Explications
Chain of Fools	Aretha Franklin	T-3 style texture with added percussive vocal chords.
Never Gonna Give You Up	Rick Astley	T-3 style texture before the last bridge and refrain
Wanna Be Startin' Something	Michael Jackson	T-3 before the last section

2.3.4 Model No T-4

T-4 consists of a singer (or solo instrument), a drum kit and a bass line which may vary from a straight rock bass with steady 8th notes or a funk style bass playing mostly on kick drum strike points. Example music for T-4 can be seen in Figure 2.52, other pieces featuring the use of this model are listed in Table 2.16.

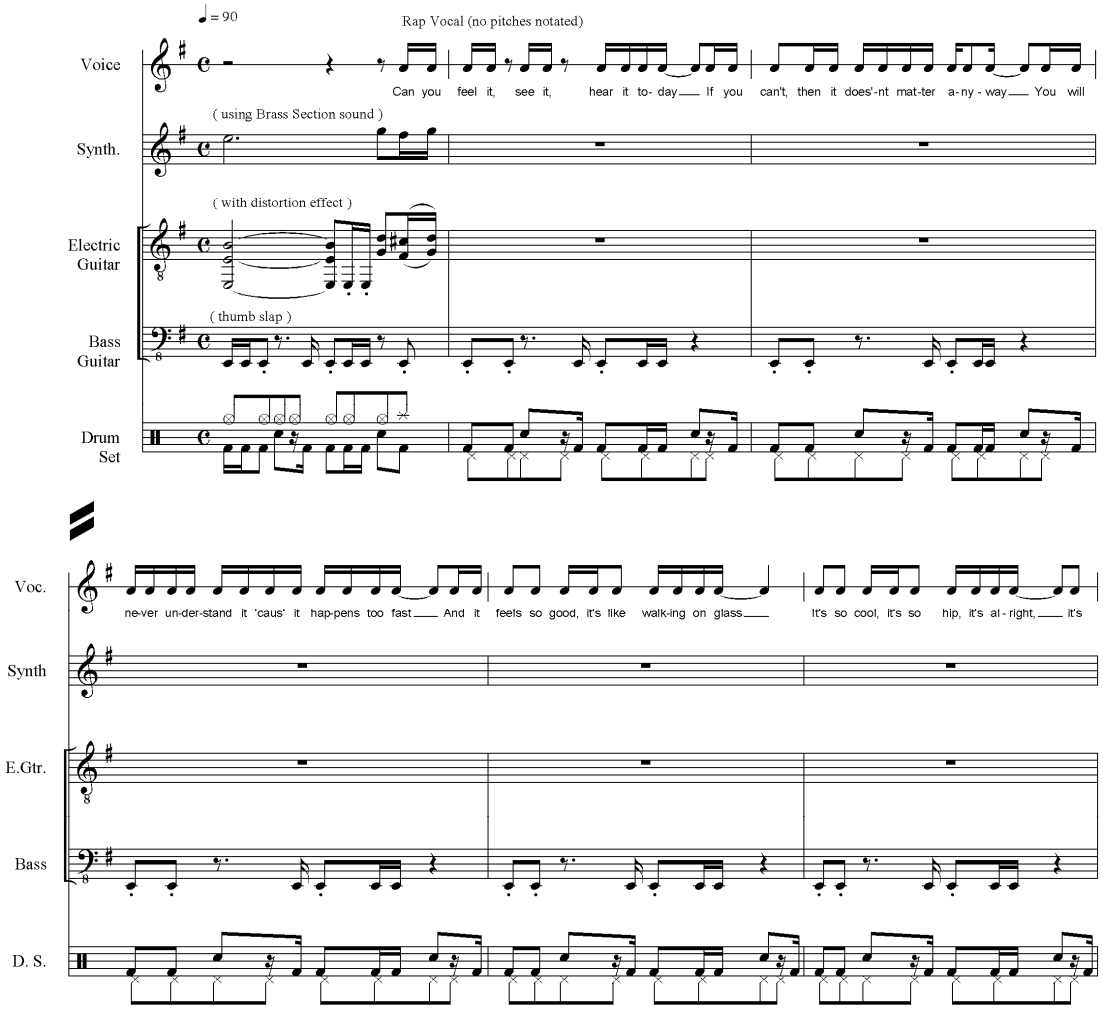

Figure 2.52 : Example music for T-4, "Epic" by Faith No More

Table 2.16: Other music featuring the use of T-4

Track title	Artist	Explications
Chain of Fools	Aretha Franklin	T-4 style texture with added percussive vocal chords.
Where The Streets Have No Name	U2	T-4 in the first verse section

2.3.5 Model No T-5

T-5 is a texture consisting of a dry, non-ornamented percussion line, a bass line usually having the kick drum part as its accentuated points and either a model T-1a style soft chord pad (avoiding heavy attacks), or T-2b style block piano chords accompanying the singing voice or a soloing instrument. This is perhaps the most basic texture found in popular music. In more rhythmic settings, it can also be a softly strummed acoustic guitar. This texture is mostly preferred in low or mid-tempo songs, though it is perfectly usable in high-tempo settings as well. Example music for T-5 can be seen in Figure 2.53, other pieces featuring the use of this model are listed in Table 2.17.

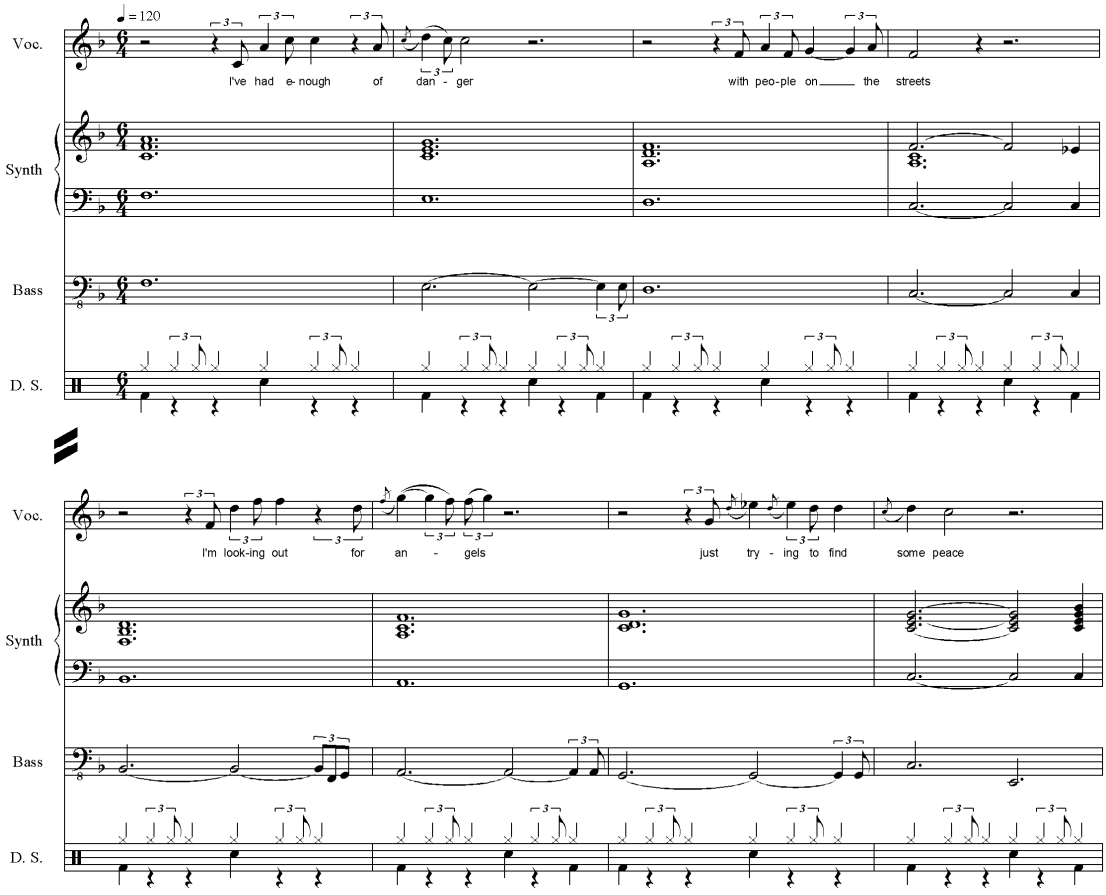

Figure 2.53 : Example music for T-5, “One more try” by George Michael

Table 2.17: Other music featuring the use of T-5

Track title	Artist	Explications
If You Don't Know Me By Now	Simply Red	Texture T-1 with electric piano and synth pad combination as T1b-style chord instrument, throughout the whole track except the bridge section where an extra contrapuntal guitar part is added to provide energy build-up
The Unforgettable Fire	U2	T-5 in verse sections
The Girl Is Mine	Michael Jackson	T-5
Beat It	Michael Jackson	T-5 in verse sections

2.3.6 Model No T-6

T-6 is a T-5 style texture having a T-2c (percussive block chords) or T-2d style (arpeggiated chords) chord-playing instrument. It is preferable to T-5 in more rhythmic settings. The chord instrument is usually a strummed or plucked acoustic guitar. This model is usually seen in soft-rock or folk-rock styles. Example music for T-6 can be seen in Figure 2.54, other pieces featuring the use of this model are listed in Table 2.18.

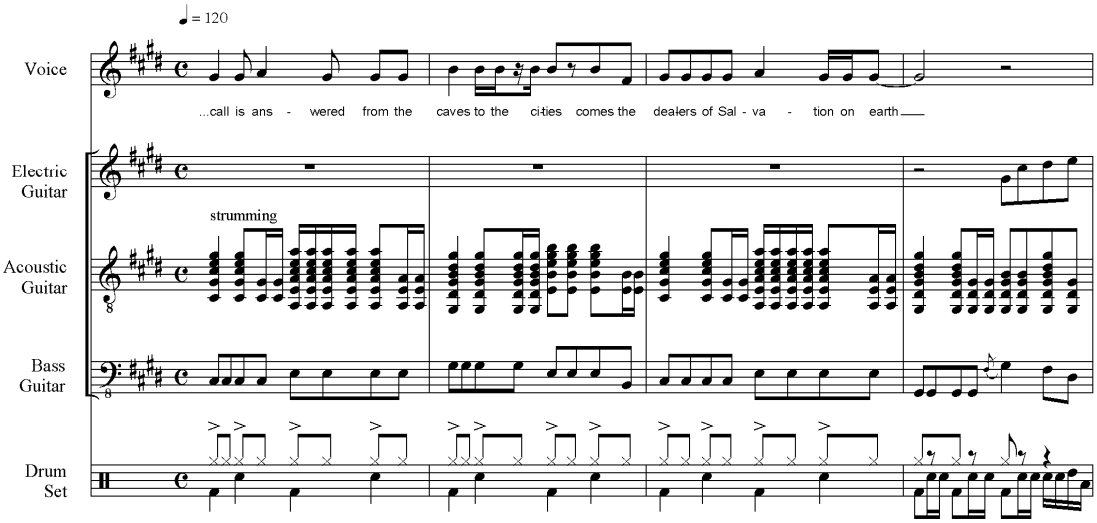

Figure 2.54 : Example music for T-6, "Purity" by New Model Army

Table 2.18: Other music featuring the use of T-6

Track title	Artist	Explications
Love Me Do	Beatles	T-6 style texture with harmonica and polyphonic vocals on top
In The Name Of Love	U2	Verse sections with T-2d chordal element, chorus sections with T-2b
Sunday Bloody Sunday	U2	Verse sections with T-2d chordal element, chorus sections with T-2b
I Will Follow	U2	T-6 in chorus and verse sections
The Unforgettable Fire	U2	T-6 in chorus sections
Diamonds And Rust	Joan Baez	T-6 with arpeggiated chords and block chords

2.3.7 Model No-7

T-7 is a rhythmically vivid texture consisting of an ornamented percussion part, an energetic bass line based on kick drum accents and/or sometimes featuring riff playing, with percussive block chords. Beyond these characteristic elements, the texture may be enriched with chord sustaining instruments and/or melodic lines either accompanying or alternating with the vocal line. This model is very characteristic for American Funk style music. Example music for T-7 can be seen in Figure 2.55, other pieces featuring the use of this model are listed in Table 2.19.

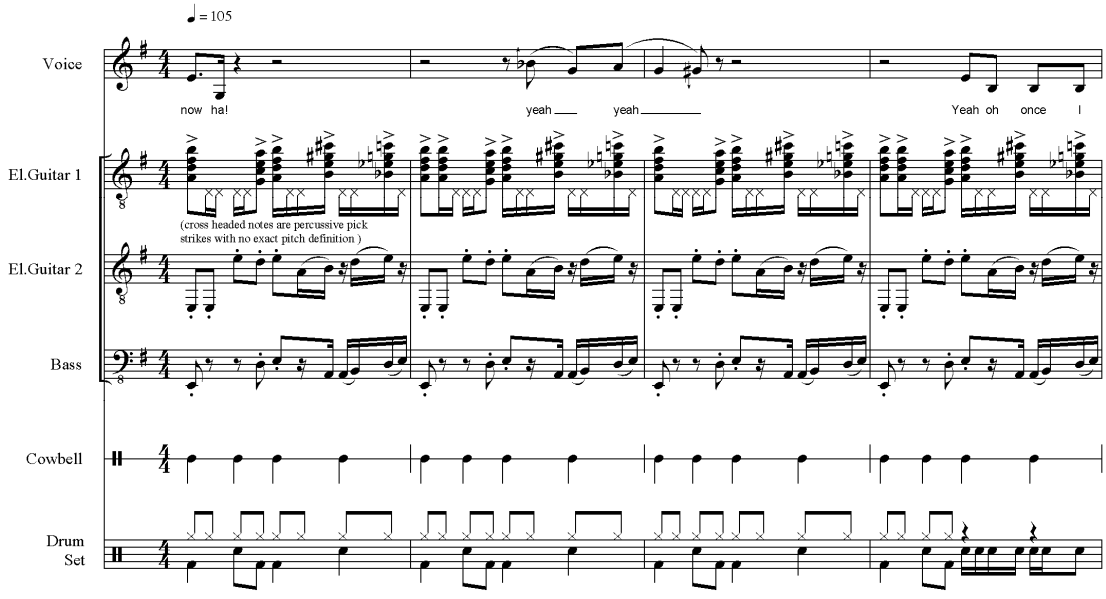

Figure 2.55 : Example music for T-7, "Play That Funky Music White Boy", James Brown

Table 2.19: Other music featuring the use of T-7

Track title	Artist	Explications
Chain of Fools	Aretha Franklin	T-7 style texture with riff-playing bass and added ornamental elements: an electric guitar alternating between arpeggios and riffs, and a choir inserted between lead vocal phrases
Wanna Be Startin' Something	Michael Jackson	T-7
Baby Be Mine	Michael Jackson	T-7
Thriller	Michael Jackson	T-7
Pretty Young Thing	Michael Jackson	Simple T-7 in verse sections and enriched version in pre-chorus and chorus sections

2.3.8 Model No T-8

T8 is formed of a basic R-1 or R-2 type 4/4 drum pattern and a bass line consisting of series of either 8th or 16th notes played regularly without any rests. The bass line is usually doubled one octave higher by an electric guitar, played staccato. This is one of the most common rock music textures and it can be enhanced by an added chord-sustaining element, such as a synthesizer or a second guitar. Example music for T-8 can be seen in Figure 2.56, other pieces featuring the use of this model are listed in Table 2.20.

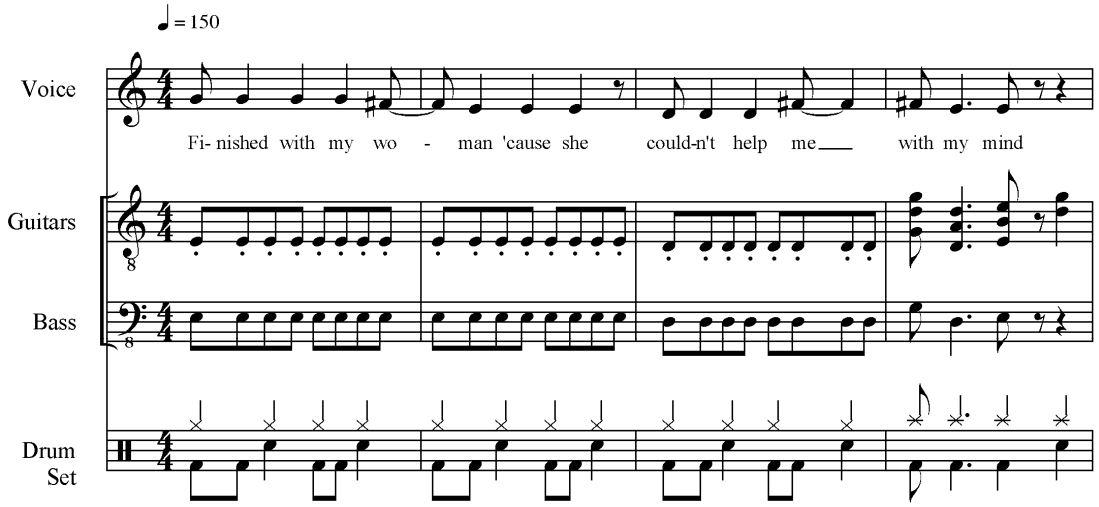

Figure 2.56 : Example music for T-8, "Paranoid" by Black Sabbath

Table 2.20: Other music featuring the use of T-8

Track title	Artist	Explications
Breaking The Law	Judas Priest	T-8
Inner Self	Sepultura	T-8
Enter Sandman	Metallica	T-8
True Belief	Paradise Lost	T-8

2.3.9 Model No T-9

Main characteristic feature of T-9 is a bass riff (a bass ostinato pattern to be repeated) used as a pedal note with changing chords on top. Such a bass line usually emphasises tonal or modal centre, mostly at the first downbeat of the pattern. Example music for T-9 can be seen in Figure 2.57, other pieces featuring the use of this model are listed in Table 2.21.

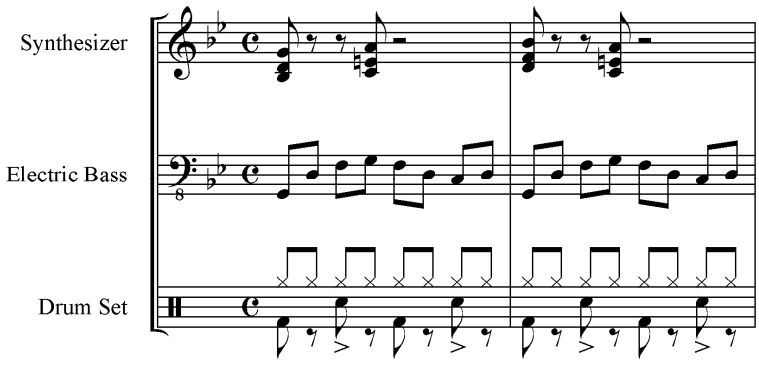

Figure 2.57 : Example music for T-9, "Billie Jean" by Michael Jackson

Table 2.21: Other music featuring the use of T-9

Track title	Artist	Explications
You Give Love A Bad Name	Bon Jovi	T-9
Under A Glass Moon	Dream Theater	T-9
6 O'clock	Dream Theater	T-9
Land Of Sunshine	Faith No More	T-9
Conversation Piece	Savatage	T-9
Space	New Model Army	T-9
Thriller	Michael Jackson	T-9
Beat It	Michael Jackson	T-9 in chorus sections

2.3.10 Model No T-10

T-10 is characterised by the use of a contrapuntal line usually with legato character, in order to enhance the comeback of a repeated melody, especially in refrain sections. This added line is most of the times in a higher register than the melody, namely the singer; but the opposite is possible as well. Example music for T-10 can

be seen in Figure 2.58. The string ensemble part here is added in order to enhance the accompaniment to the second verse. Other pieces featuring the use of this model are listed in Table 2.22.

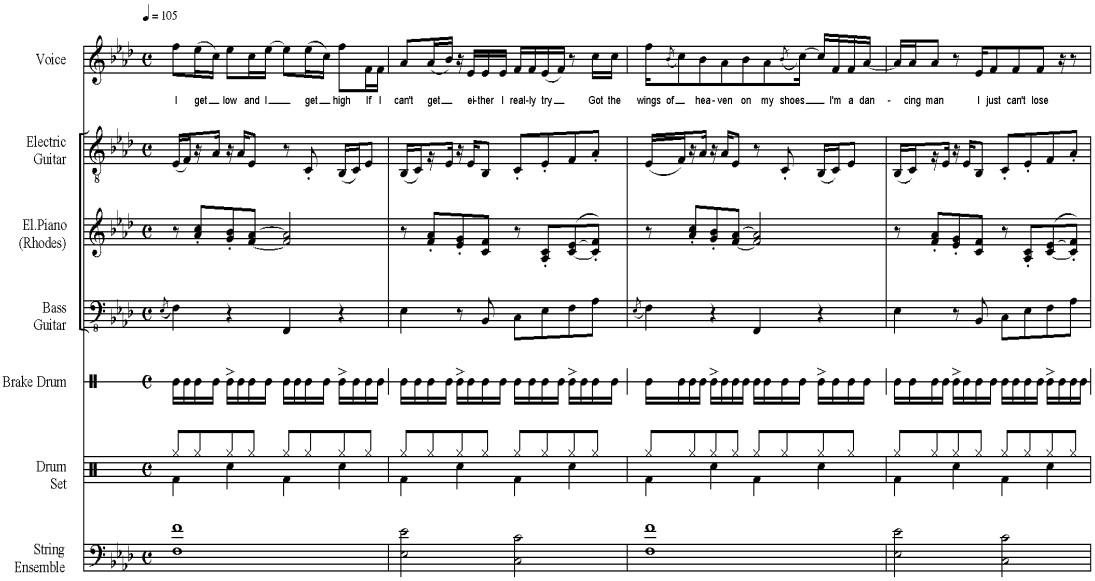

Figure 2.58 : Example music for T-10, "Staying Alive" by Bee Gees

Table 2.22: Other music featuring the use of T-10

Track title	Artist	Explications
Where Did I Go Wrong?	Kenny Loggins	T-10 style enhancement in the chorus near the end of the piece
The Girl Is Mine	Michael Jackson	T-10 in second part of chorus sections

2.3.11 Model No T-11

T-11 is characterised by an added element to the accompaniment part in a repeated section to avoid monotony. It can be a contrapuntal line, or repeated percussive chords, or just a continuous chord pad. This technique is generally used either to enhance the comeback of verse section after the refrain (at the beginning of the second turn of the song), or when the verse is repeated twice, with different lyrics. Example music for T-11 can be seen in Figure 2.59, with added-in string part; other pieces featuring the use of this model are listed in Table 2.23.

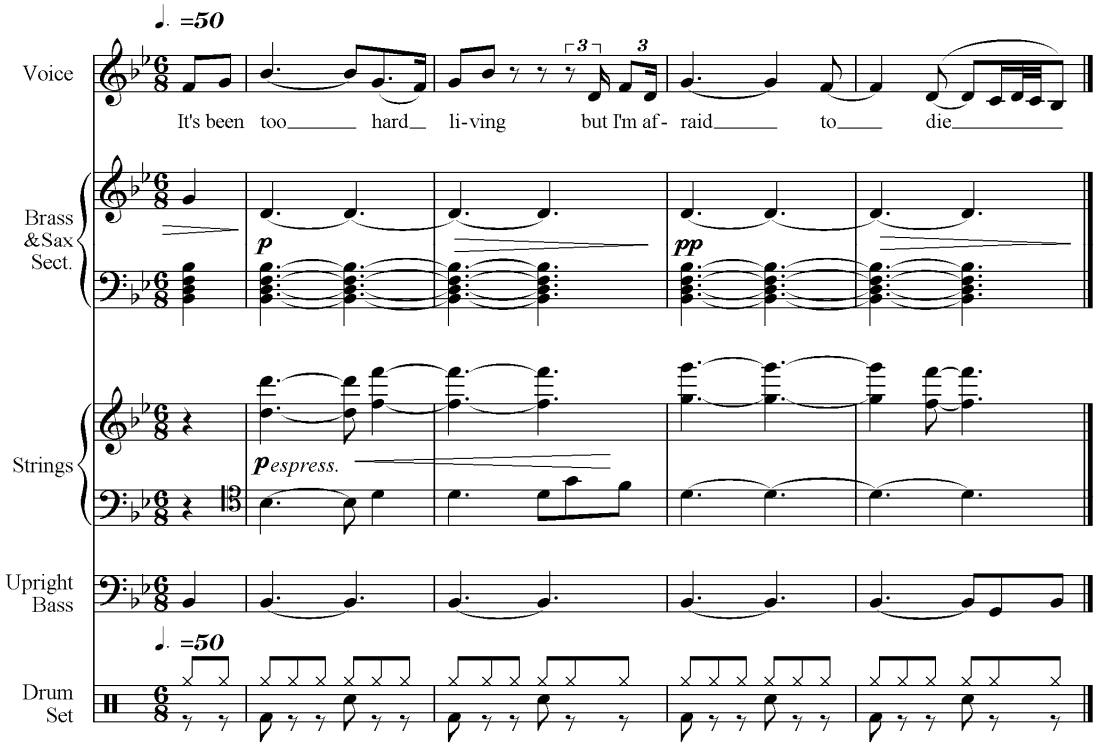

Figure 2.59 : Example music for T-11, "A Change is Gonna Come" by Sam Cooke

Table 2.23: Other music featuring the use of T-11

Track title	Artist	Explications
Don't You Feel Like Crying	Solomon Burke	Added back vocals in Verse 2
Now And Forever	Richard Marx	Added synthesiser strings in Verse 2

2.3.12 Model T-12

T-12 is an alternation or a question-answer relation between the vocal line and an accompaniment figure. This accompaniment is, most of the times, a bass or baritone register riff (like a bass or guitar), or a chord-sustaining element in higher register some other times (like brass instruments). When the vocal line is active, the accompaniment is monotonous and it waits for the moment of rest in the vocal line to attract the listener's attention with elements such as bigger gestures, increasing melodic activity, louder dynamics. In the micro scale, this technique can be used at the end of each line in a verse or in a chorus. In the macro scale, it can be used to obtain enhancement and better connection when passing from one section to another. Example music for T-12 can be seen in Figure 2.60, other pieces featuring the use of this model are listed in Table 2.24.

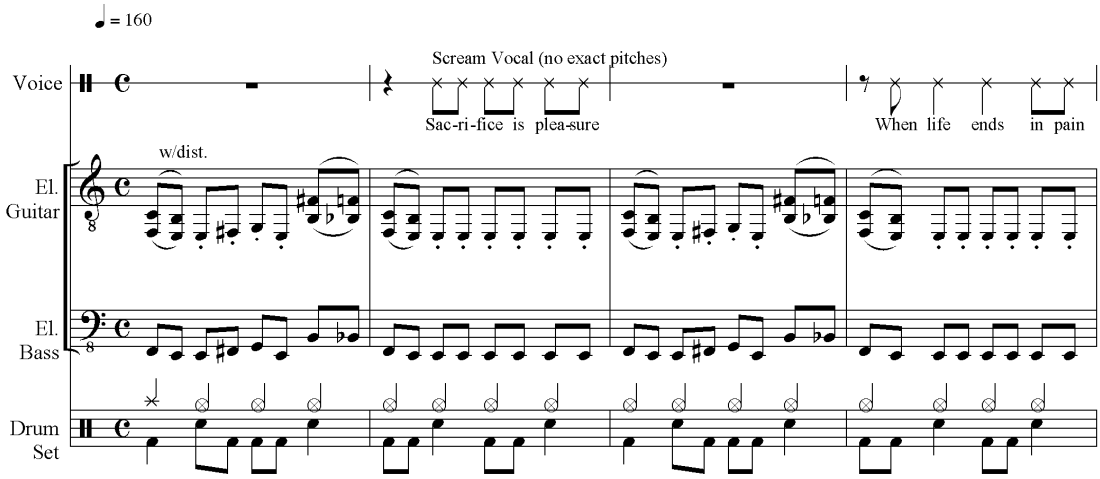

Figure 2.60 : Example music for T-12, "Desperate Cry" by Sepultura

Table 2.24: Other music featuring the use of T-12

Track title	Artist	Explications
Send Me Some Loving	Solomon Burke	T-12
		T-12
Oh, Donna	Ritchie Valens	Clean electric guitar heard in alternation with lead vocals

2.4 Textural Combination Models

2.4.1 Model No TC-1

Main feature of TC-1 is the introduction to the verse section in acapella. It can directly introduce the piece as well. Following the acapella, accompaniment instruments enter either very softly or with full energy. This technique provides a full focus to the vocal line's entrance and it also creates important energy in the latter case by using the contrast between a very thin texture consisting only of melody and a full-sized texture following it. The technique can be repeated each time the section featuring it comes again, though it won't be as surprising and effective as the first time, and the risk of redundancy may appear if it is repeated too much. It is adaptable to instrumental settings or passages and it can be used also to emphasise the final line of the lyrics as well, providing a finale to the song. Example music for TC-1 can be seen in Figure 2.61, other pieces featuring the use of this model are listed in Table 2.25.

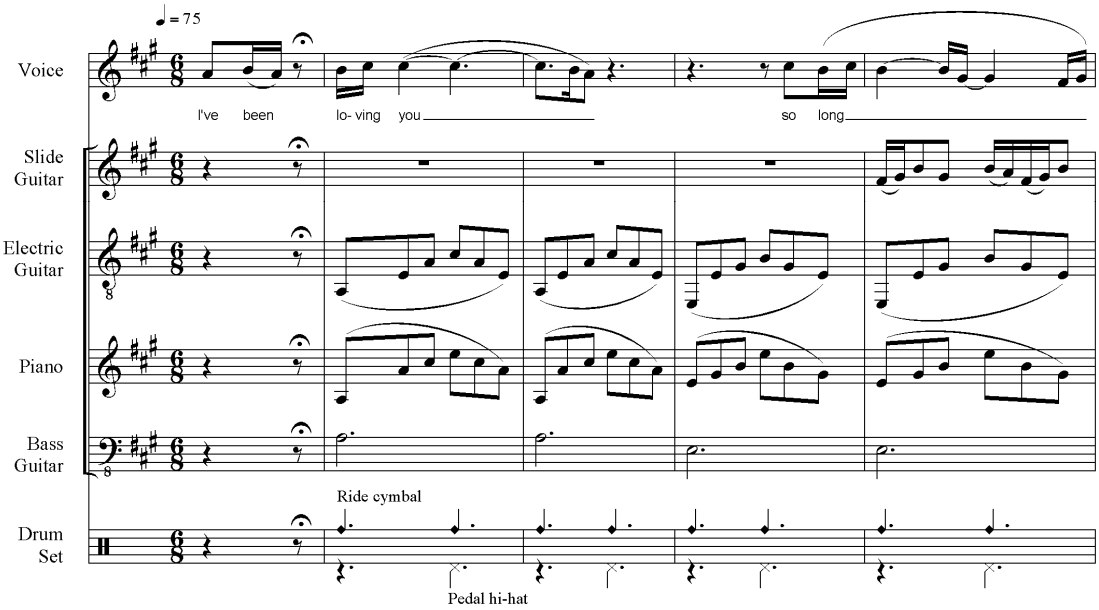

Figure 2.61 : Example music for TC-1, "I've Been Loving You" by Otis Redding

Table 2.25: Other music featuring the use of TC-1

Track title	Artist	Explications
Send Me Some Loving	Solomon Burke	Introduction to Verse 1
		Introduction to Verse 2
		Introduction to Verse 3
		Introduction to instrumental passage
		Emphasising final line
You've Give Love A Bad Name	Bon Jovi	Introduction to the song

2.4.2 Model No TC-2

TC-2 is also characterised by a sudden stop in the accompaniment part, usually at the beginning of the verse section, but this time, instead of omitting the accompaniment totally, only some downbeats or accented beats are played 'sforzando' to provide harmonically and rhythmically important beats. First two or four lines are sung on top of this accompaniment consisting of some sudden accents interrupting the rests. Occasionally, a thick accompaniment element (such as a chord line with percussive character, playing all the 8th s or 16th s) may support the vocal line against the unstable "chord accent – rest" formula that reigns the lower lines and percussion. For the following part of the verse, the accompaniment instruments enter in 'tutti' this time, using the energy collected to give a higher momentum to the song. Example music for TC-2 can be seen in Figure 2.62, other pieces featuring the use of this model are listed in Table 2.26.

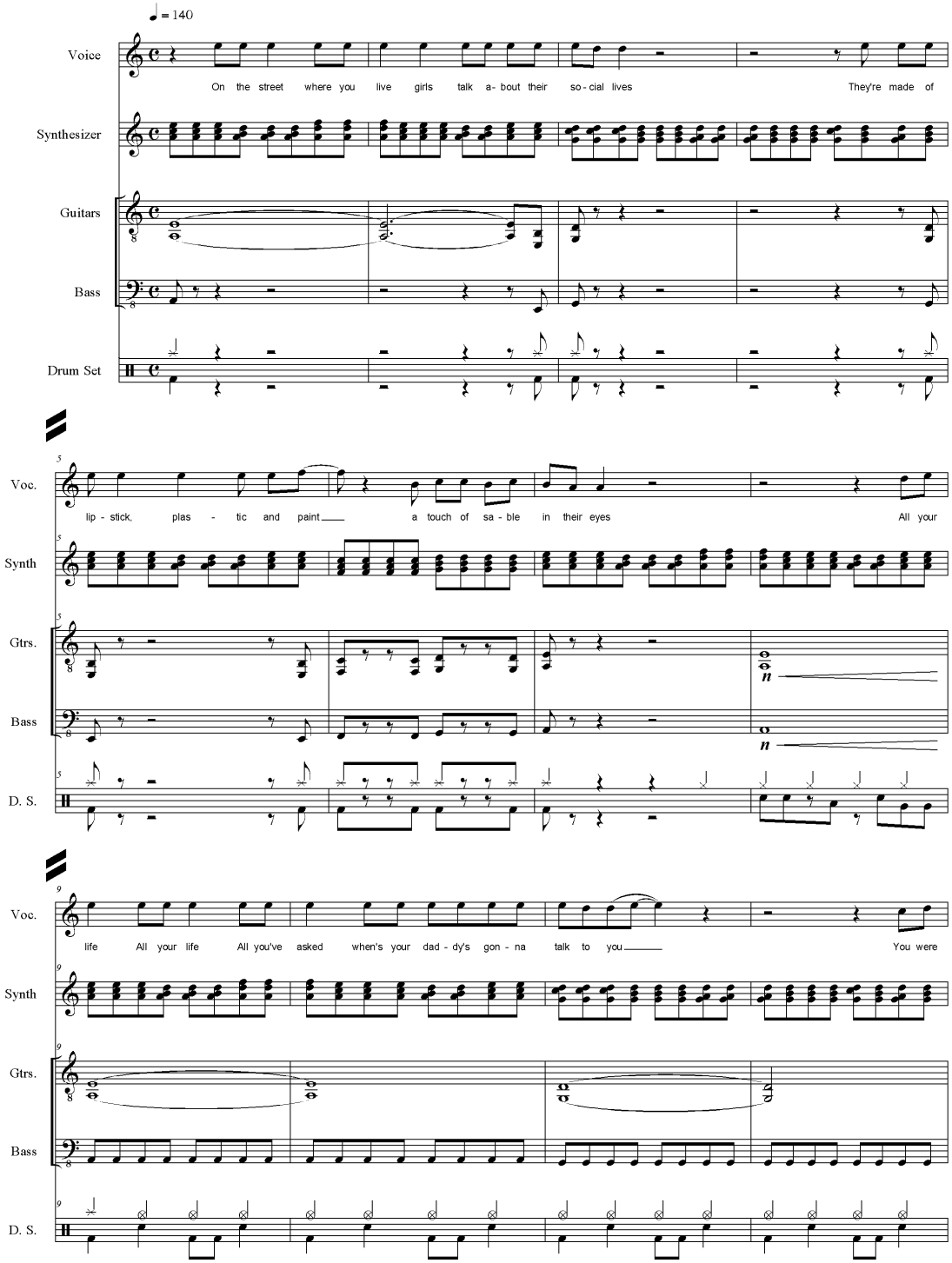

Figure 2.62 : Example music for TC-2, “Runaway” by Bon Jovi

Table 2.26: Other music featuring the use of TC-2

Track title	Artist	Explications
22 Acacia Avenue	Iron Maiden	TC-2

2.5 Information About Form In Popular Music

As discussed earlier, form in popular music is probably the most obvious pre-defined material and Adorno links this to the "standardisation" concept (Middleton, 1999). As a result of this fact, terms related to popular music song form are familiar to many non-musician listeners from all around the world.

The prevailing form in popular music is strophic structure (Chew, 2010). Strophic song form has its roots going back not only to folk songs but also to theatre song, broadside ballad, romance and lied (Middleton, 2009). Going even further, one can trace back the history of strophic songs until the "fixed forms" of 14th century music in France and Italy. A general adjective describing most popular music forms in Western history could be "sectional" (Middleton, 2009). Through-composed popular music songs are very rare.

Concerning the musical form and lyrics relation, it is very hard to make broad generalisations. When looking to the origins and evolution of popular song structures, it is clear that there is an obvious impact of text properties on music, such as rhyme scheme, line length, stanza structure and so on (Middleton, 2009). Today, in most cases where the pre-existing musical form is not seen as a highly re-shapeable element, the lyrics are written in a way to fulfil the needs of the form; whereas in some other cases where expansions or even re-structuralisation of the form are considered as possibilities, lyrics may be written more freely and music may be shaped to suit the lyrics.

In today's strophic popular song structure, the most basic form components are verse and chorus sections. The chorus refers to the refrain of a song, a part which most of the time contrasts with the verse section, having a bigger and sharper orchestration. The chorus is generally repeated many times. The verse, on the other hand, is the part which has relatively more modest orchestration, serving as the area to sing the lyrics that doesn't belong to the chorus or pre-chorus sections. Pre-chorus or bridge is a section most of the times with lyrics, providing a transition from verse to chorus, often including changes in harmony. It is also very common to have instrumental sections such as introduction themes or passages dedicated to instrument solos.

During 1920 and 30s, a form formulated and called as AABA form was very common in American popular music, especially related to Tin Pan Alley songs. This is a structure where a real distinction between verse and chorus sections doesn't exist. Instead, the A section which is longer than a usual verse, is repeated twice, followed by a more elaborate B section where orchestration gets bigger, harmonic changes occur and the singer goes to an upper register. The AABA form saved its popularity until the end of 1960's (Wilder, 1972).

Especially after the 1950's with early Rock'n'Roll, a faster version of the traditional 16 bar blues form entered the mainstream popular music scene. This is a form where a single verse section featuring a standard 12 bar blues chord progression (I-I-I-I; IV-IV-I-I; V-IV-I-V) is repeated over and over, with different lyrics and slight musical changes.

By the late 1960s, all these forms have been combined to form the today's standard: the repeated use of Verse-Chorus or Verse-Bridge-Chorus sequences.

Cases where the standard forms of mainstream pop music get broadened can be classified as two main groups: the work of some progressive rock bands released as concept albums featuring a non-stop flow of music, making use of sometimes through-composed or improvisatory structures; and electronic dance music where the composition is based on the use of sampled sounds as loops, creating a form which sounds more like a process (Middleton, 2009).

3. MUSICAL COMPOSITION BASED ON MODELS OBTAINED

3.1 General Information

The song suite "Puslu Şarkılar" (Hazy Songs) is composed using the models revealed in chapter 3, with mostly free atonal harmonic organisation. Its general character can be roughly described as a music in song form, featuring atonal pitch organisation, with lead vocal lines as concrete as it is possible to get in this harmonic context and accompaniment using clear rhythmic patterns. The instrumentation is a soprano singer accompanied by a chamber ensemble providing timbral qualities of all instrument families used in symphonic music. The instrumentation list is, in score order: flute, Bb clarinet, bassoon, trumpet, percussion (one player using: triangle, snare drum, alto drums, suspended cymbal, glockenspiel, vibraphone and xylophone), piano, voice (soprano), two violins, viola, cello and double bass. The lead singer choice is a female jazz singer in the soprano register, as a midway between the two source styles.

While in some sections of the songs, harmonic construction is organised basing on intervallic colours, or it is bi-tonal, or in some others it is shaped regarding either to the "regional 12-tone" idea which proposes to use 12-tone series by separating them in sub-groups and assigning these to specific parts during a specific number of beats, allowing pitch repetitions inside each region.

The conductor score of the work is provided in Appendix A.

The sound recording of the work is provided as a compact disc in Appendix B.

3.2 Analysis Revealing Models Used in the Composition

The following analytical section reveals the rhythmic, textural and formal models of pop music used in the composition provided in Appendix A. Since the purpose of this analysis is to give further and concrete explanations on the usage of the models obtained, the harmonic aspects of the composition will not be discussed.

3.2.1 Movement 1

Movement 1, entitled “Çok Akıllıyım Sanma” (Don’t Think You Are Smart) begins with an eight-measure introduction idea featuring the statement of the chorus’ melodic and accompaniment ideas. The chorus theme is in periodic construction. Rhythmically, it relies on the contrast of duple and triple sub-divisions inside a quadruple framework, which is Model R5. In bar 1, the rhythmic structure in soprano part is clearly 3+3+2 while bar 2 consists of regular 2+2+2+2 grouping. The contrasting idea in bars 3 and 4 has a relatively more complex rhythmic structure featuring irregular sub-grouping, syncopation and rhythmic displacement. Because a tie rhythmically merges the melody in these two bars, it would be better to give the rhythmic sub-grouping without firstly without considering the barline: 3+2+2+2+3+2+2. When given in this form, the rhythmic sub-grouping clearly shows where the rhythmic displacement starts and ends. The first group of 3 starts the rhythmic displacement which lasts for three duple sub-groups until the second triple sub-group.

The accompaniment idea is rhythmically made up of simulation of a single rhythmic line featuring for kick and bass drums. It is a two-bar pattern with R-6 structure: first bar uses R-1 and second bar features R-5. The register difference between the two drums is symbolised with the contour of the chords changing mostly with parallel motion, and the hi-hat cymbal part is omitted, in order to create a simpler basic introduction. Texture in this first eight-bar section is a hybrid of models T-2c and T-3, the symbolised drums would form a T-3 style “melody and percussion” texture while the resulting music, including string instruments instead of percussion, creates a T-2c texture. This first section is relatively thin when compared to the next eight bars featuring the real introductory melody, played by the trumpet. Again, the theme given in this line is in periodic construction and the rhythmic structure of all two-bar ideas is identical: 3+2+3 / 3+3+2. While the accompaniment is same as the first eight bars, its texture is enriched by new elements and doublings. The cello line is doubled in unison by the bassoon and in one octave lower by the bass, and two violin lines are doubled in one octave higher by the piano. Flute and clarinet, playing on second and fourth downbeats of each bar, emphasise the beats where snare drum would be hit. Finally, xylophone plays on each downbeat, simulating a closed hi-hat cymbal. In other words, whole ensemble except the trumpet simulates a drum set in this

section. Beginning from bar 17, the introductory theme in the trumpet line is restated with bigger rhythmic drive in the accompaniment created by 8th notes replacing the 4th notes in the xylophone part.

At bar 25, the verse section starts. The first eight-bar statement of the verse comprises of three textural elements: an accompaniment motif in alto register in left hand part of the piano followed by an added chord in soprano register in right hand part; the strings and xylophone still simulating a drum set part, and finally the melody sung by the soprano. The accompaniment motif in alto register has a question – answer relation with each vocal phrase, forming a clear example of Model T-12. The lowest pitch of this alto register motif, A, is repeated twice, implying a sustained pedal A. In this sense, the subtle chordal change given in the higher part of piano combined with the alto register motif, forms a Model T-9 style textural structure. The very low bass register is left empty to create a Model TC-3 effect with the following eight-bar section. The rhythmic structure of the vocal line includes use of Model R-5. Beginning from bar 25, vocal line's rhythmic structure can be stated as: rest+3 / 3+2+3 / rest+3 / 3+3+2 / 2+rest+3 / 3+2+3 / rest+3 / 3+3+2 / 2. [...]. Similar Model R-5 style rhythmic sub-grouping is kept as the common rhythmic character of vocal line throughout the whole movement. At bar 33, the introduction of double bass to fill the empty lower register accomplishes the Model TC-3 effect. The A pedal and Model T-9 become more obvious when the double bass part is added-in. The chordal change on the higher part of the piano gets transposed one octave lower and becomes more percussive with added repetitions in order to keep its strength against the added bass.

Beginning from bar 41, a new section starts. Although it is structurally a developed version of the preceding section, with the changes in melodic contour and phrasing of the vocal line, and introduction of new timbral colours, namely woodwinds, it functions like a pre-chorus section. The chords are now distributed to a few parts. Piano plays the chords in baritone register as repeated 8th notes answering the main accompaniment motive, using an accentuation based on R-5 style rhythm. Flute and clarinet also play chordal pitches, creating a woodwind pad, while bassoon doubles the successive 8th notes of the piano with similar accentuation, emphasising a line in the chordal succession descending by steps. Xylophone starts playing successive 8th notes instead of 4ths, creating an increase in the rhythmic drive.

Beginning from bar 49, the pre-chorus idea gets repeated with bigger tension, due to Model T-11 style processes. Flute part gets transposed one octave higher and is played using flutter-tongue tremolo, bassoon parts features repeated intervals rather than repeated pitches, trumpet enters to support bassoon, xylophone, first violin and second violin parts get transposed one octave higher as well. At bar 75, a climactic two-bar bridge section puts an end to this build-up. In this section, while woodwinds and xylophone keep the straight quadruple rhythmic structure, strings and piano play Model R-5b grouping, 3+3+3+3+4. The last three 8th notes of the measure serve as an appogiatura to the upcoming chorus section.

The chorus section is repeated twice, with different texture and instrumentation. The first take is similar to what is heard at the very beginning of the movement, this time orchestrated using flute, clarinet, xylophone and piano instead of strings. Two violins only emphasise the beginning of each two-bar vocal phrase by playing on the last beat of preceding bar and on the first beat of the phrases. At bar 65, the texture gets simplified to Model T-2c, creating a Model TC-2 effect with the gradual entrance of instruments to start the second stating of the chorus in bar 67, where all ensemble but the trumpet accompany the singer with a similar texture already heard at bar 9, with a different xylophone part playing successive 8th notes instead of 4ths.

The introductory trumpet solo section comes back at bar 75, to conclude the chorus part. This time, it is not repeated twice, and its orchestration is identical to the version at bar 17, where it was heard for the second time.

At bar 83, the second verse section begins. It is similar to the first one except the vocal part set to suit the second verse lyrics, and in order to create a Model T-11 style variation, a contrapuntal line to be played by clarinet is also added in. The following pre-chorus, bridge and chorus sections are identical to the preceding ones. At bar 133, the trumpet solo section comes back, this time functioning as a closing section. A new vocal melody is intertwined with the trumpet solo. Insisting on emphasising two pitches, it supports the section's coda-like formal function. In bar 149, successive 8th notes played by strings, bassoon and percussion announce the final beat of piece coming at the beginning of bar 150.

3.2.2 Movement 2

Movement 2, entitled “Kukla” (Puppet), begins with a one-bar introduction gesture. The real introductory theme, played by trumpet, starts at bar 2. The accompaniment made of block chords has a Model RC-3 style rhythmic character: the first three chords are on the beat while after the last 8th of bar 2, they are rhythmically displaced until the last beat of bar 3. The trumpet solo also has a similar rhythmic character. At bar 6, the introductory idea gets repeated with a Model T-11 type variation, obtained by added sustained chords in vibraphone part, enhanced by accentuated 8th notes on each downbeat played by flute and clarinet. Since the block chords have an obvious rhythmic displacement coming every two bars, the steady downbeats emphasised by flute and clarinet form a Model RC-3 type rhythmic combination.

Following a short bridge at bar 9, the verse section begins at bar 10. Verse section has a Model T-8 type texture, consisting of a vocal melody, a two-bars-long bass figure and a percussive figure symbolising kick and snare drums played by piano. In order to emphasise the register difference between these two drums, the notes symbolising snare drum are also supported in a higher register by the vibraphone. The bass figure consists of consecutive 8th notes, including a simple motive in the first two of them. The motif is emphasised not only by its intervallic difference from the following consecutive 8ths, but also it is played tenuto with extra accent, rather than being staccato like the others, and it is supported in the higher register by the rhythmically parallel piano chords doubled by flute and clarinet as well. This motive creates a Model T-12 type relation with the vocal part. The piano part features Model R-6 type rhythmic structure, thus creating a Model RC-3 type rhythmic combination with the consecutive 8th notes figure. The verse vocal line is built using Model R-5 type rhythmic sub-grouping. Beginning from bar 10, rhythmic sub-grouping is the same for each phrase: rest+3 / 3+3+2. At the second part of the verse coming at bar 14, the bass figure gets transposed a perfect fourth higher and its introductory motive is supported in by trumpet in addition. These small changes create a Model T-11 style variation.

Following the verse section, at bar 18, a two-bar bridge provides connection to pre-chorus section. The bridge idea has a Model R-5b style rhythmic sub-grouping: 3+3+3+3+2+2. The pre-chorus section starting at bar 20 has its own four-bar

introduction where the new accompaniment character is presented. Here, whole ensemble simulates a drum set playing a hybrid rhythm of 4/4, consisting of its regular and double-time statements. Each two-bar cell is made up of one regular and two double-time rhythm, enriched by consecutive 8th notes of flute and clarinet, thus forming Model R-4 with the regular rhythm and Model R-1 with the double-time. At bar 24, the block chords in the vibraphone part become arpeggiated to announce the real beginning of the pre-chorus, supported by a short articulation change in flute and clarinet parts, from staccato to legato. Rhythmic sub-grouping in the pre-chorus vocal line is still the same as the verse section: rest+3 / 3+3+2. The second part of pre-chorus section beginning at bar 32, is enhanced to form a Model T-11 style variation which builds up gradually. Added staccato notes in violin and viola parts replace rests, still keeping the rhythmic character by octave transfer, and an extra contrapuntal line in trumpet part rhythmically parallel with the vocal line enriches it. The last two phrases of the pre-chorus, starting at bar 36, gets even more dense with consecutive 8th note staccatos appearing in cello and bassoon parts and in the last two measures of the section, the staccato flute and clarinet figure also becomes legato in order to add further dynamic power. At bar 40, a bridge section made up of restatement of the last two measures of the introduction idea connects the pre-chorus to the chorus section coming at bar 42.

Chorus section includes two rhythmic figures used in superimposition in the accompaniment parts. Piano's lower part has a two-bars-long R-5 style rhythmic character with 2+2+2+3+3+2+2 sub-grouping. Although the higher piano part is made up of consecutive staccato 8th notes, same rhythmic character is given through accentuation. Block piano chords form a T-2c style accompaniment figure. The other rhythmic figure is played by viola and cello. It is a model R-6 type simple upbeat-downbeat alternation obtained by rhythmic displacement which begins at the same time with the first triple sub-group of piano's rhythmic idea and ends at the last downbeat of bar 43. A bass figure having nearly the same rhythmic character supports the idea; it only has a longer rhythmic displacement lasting until the end of bar 43, providing an impulse for the each return of accompaniment patterns. The bass figure also simulates snare and bass drums through a slight difference of register obtained by the interval of fifth. Vocal line also features rhythmic displacement figures starting at the second half of the second beat of each vocal phrase, starting at

bars 42, 44 and 46, except the last one beginning at bar 48, with a rhythmic displacement coming at the second half of the third beat. The return of chorus idea coming at bar 50 is enhanced by the introduction of a contrapuntal addition to viola-cello figure in a higher register, played by violins, with parallel rhythmic structure, thus forming a T-11 style textural change.

The second part of chorus section beginning at bar 58 has a vocal part consisting of long notes. While the same accompaniment figures continue in bassoon, piano and string parts, T-2b style sustained chords in vibraphone part is introduced as a new textural element to form another T-11 style textural enhancement. At bar 62, a new melodic element is heard in the clarinet and trumpet parts. It is made of chromatic transpositions of 024 trichord, alternating between ascending and descending versions, thus providing a triple grouping inside a quadruple framework, forming a R-5 style rhythmic displacement. The triple grouping is further emphasised by accents put on the first note of every two groups. Normally, such displacement goes on for three bars until both rhythmic lines come together at their lowest common multiple. Here, because the new melodic element starts after an 8th rest, at the second half of the first beat of bar 62, the two rhythmic lines meet only two bars later, at the beginning of bar 64, where the rhythmic displacement restarts instantly and goes on until the third beat of bar 65, where the last two groups are compressed into two beats as 8th triplets in order to have the higher pitch of the line (last note of the ascent) at the first downbeat of bar 66. Another melodic element formed by chromatic transpositions of 0156 tetrachord enters at bar 66, again after a half beat rest. This new element, which is played by flute and violin in unison, features also rhythmic displacement. When the rhythmic unit is taken as 16th, note durations give values as 6-6-7-7-5-6-5 in bars 66, 67 and 68. Beginning from bar 69, last quarter of first beat, all the durations get fixed to six 16ths, or 1.5 beats; the whole passage until the end of bar 72 remains rhythmically displaced, where the last note is seven units long in order to fulfil the measure. Beginning from bar 70, both melodic figures are heard in superimposition, providing a textural densification and orchestral crescendo leading to the climax point at bar 74, where the rhythmic impulse is still held by the steady 8th notes in bassoon part.

At bar 75, the second verse section starts, followed by pre-chorus and both chorus sections. All are written as exact repetitions of the originals except the vocal line.

Following the second chorus' end, an instrumental section starts at bar 140. While two violins provide steady 8th notes accentuating the downbeats by having them played at a higher register, bass part played by piano left hand and bassoon suggest a R-5 type different rhythmic grouping: 3+3+4+4+2. These two rhythmic elements, the former simulating a hi-hat cymbal and the latter kick and snare drums, form together a RC-2 type combination. When the T-2b style chordal element in piano right hand and the accompanying double bass part get added to this rhythmic background with clarinet solo on top, this instrumental section shows a T5 style textural character. At bar 144, the melody line gets transferred to trumpet enhanced by a parallel line played by vibraphone. This texture gets widened and enriched on bar 148, where a new melodic idea is introduced by the violins in addition of a contrapuntal line played by viola and cello, forming a T-10 style enhancement. The steady 8th notes of violins are transferred to flute and clarinet, still keeping the same accompaniment character with other instruments, all playing the harmonies now a perfect fourth higher or perfect fifth lower. The new melodic idea shows characters of 8-bar period. The basic idea presented in bars 148 and 149 has a R-5 style rhythmic grouping: 3+2+2+2+3+2+2. The contrasting idea coming in the following two bars features a similar rhythmic displacement: 3+2+2+2+2+3+2. On bar 152, comes the consequent phrase with the basic idea repeated and a new contrasting idea concluding it. The new contrasting idea is also rhythmically displaced, this time showing a typical R-5b pattern: 3+3+3+3+2+2. This time, the melody is doubled in both one and two octaves lower and played by all string instruments except the bass. At bar 156, the instrumental section has its end with the two-bar bridge section originating from bar 18, providing connection to pre-chorus and chorus sections concluding the piece.

3.2.3 Movement 3

The third movement entitled "Pişman Olacaksın" (You Will Be Sorry) starts directly with the first verse section. The introduction motif played by first violin, piano right hand and glockenspiel forms a T-12 style with the vocal phrases. Any use of bass register is omitted to create a contrast with the upcoming section, thus creating a TC-3 style textural combination. This section doesn't feature any line with steady rhythm to reinforce this contrast. The following eight bar section with no lyrics, where the singer uses the vowel "a", comes with the energy created by these contrasts: although not in the real sense, bass register is now in use by the cello and bassoon; string

instruments and piano left hand play steady 8th notes; and finally more syllabic vocal line with lyrics becomes a melismatic one sung using vowels. It is a passage providing an atmospheric enhancement between two verse sections. Although it features a vocal part still sounding, it works like an instrumental passage in sense of form. The monotony created by 8th notes is broken due to some slight touches: the accented harmonic change displaced to the last 8th note of bar 9, the register difference in first violin part at the beginning of bar 11, and the chord-rest formula in bar 12 with its beginning displaced to the last 8th of bar 11. Similar structure is repeated with slightly different ending in the following four bars in order to prepare the comeback of second verse section starting at bar 17.

The second verse features elements of a drum pattern arranged for different instruments as an added element to enhance the comeback of the section, forming a T-11 style textural change. The pattern is based on a R-5 style syncopation: 2+3+4+4+3. The kick and snare drums are represented in clarinet, viola and cello parts while flute supports snare drum and bassoon and double bass reinforce kick drum simulation. The high register steady 8th notes in piano right hand part represent a cymbal part which makes the drum kit simulation accomplished. Following the second verse, the instrumental-like passage comes again, as expected; but this time double bass fulfils completely the bass register.

The pre-chorus starts in bar 33. The accompaniment figure in this section is based on the alternation of a four-note motif and block chords. The motif is used before each vocal phrase creating a T -12 style structure; and block chords are placed after, to provide harmonic background for the vocal part. The motif is played by all instruments which are active in this section. The parts with block chords have two different accompaniment elements: the chords including a rhythmically parallel bass part played by all string instruments; and a drum kit pattern of type R-2, simulated by the other instruments. Piano represents kick and snare drums while woodwinds work like a cymbal part. In the second take of this section with different lyrics coming at bar 41, a few new elements provide a T-11 style enhancement: for the motif, string instruments play 16th tremolo and flute, clarinet and trumpet use flutter tongue articulation, supported by added cymbal accents; for the vocal phrase with block chords part, the snare and kick drum ideas played by piano is rhythmically more elaborate while vibraphone traces an harmonic contour of the vocal line.

Following the pre-chorus, chorus section starts in bar 50, after a one-measure passage gesture where the music is taken from the upper register to the lower. The accompaniment in this section is based on a R-5a style rhythmic figure with sub-grouping 2+3+3 ornamented using minor second trills. The figure is played by the string instruments. It starts in the lower register, in cello and viola parts. It continuously goes towards upper register during the first four bar of the chorus, and then it is transferred to respectively second and first violin parts, keeping its ascent. From bar 54 to 57, a crescendo in all instruments supported by the orchestral crescendo obtained by the entrance of violins creates tension along with the trills. Another important element forming the accompaniment is the bass figure played by double bass and bassoon. It has a RC-2 type pattern: first measure is strict 4/4, while the second has 3+3+2+6+2 grouping if one counts the 16th notes as rhythmic unit. The second take of chorus starts at bar 58. Here, while two violins keep the ascending trills figure, the other instruments simulate a drum set and an electric guitar. Bassoon, viola and cello represent a kick and snare drums, double bass supports only kick drum strikes in the lower register and vibraphone block chords on each downbeat completes the pseudo drum set by simulating a cymbal part. The rhythmic character of the played pattern is an elaborate version of the one originating from the previous eight-bar section. The guitar chords idea played by piano has a similar pattern as well, this time a simplified one still keeping the accents on third beats of measures where snare drum is virtually struck and the bass drum rhythmic figure at the beginning of bar 59. An additional figure introduced in flute and clarinet parts in bar 62 creates more tension leading to the climactic section starting at bar 66. Trumpet and piano parts at the last one and a half beats of bar 65 provide the passage to the new section which works as a postlude concluding the first “turn” of the piece. In this section, the drum part is not simulated in any sense, it is directly played by drums and suspended cymbal. In order to prevent the monotony of steady 8th notes, the second beat and the last 8th of the first bar are accentuated, the latter forming a rhythmic displacement. The piano chords also support these accented points while trumpet firstly joins the two 8th notes preceding the accented second downbeat and then breaks the steady 8th notes by playing triplet quarter notes against them. The second take of the section begins at bar 74, in a more rhythmic setting obtained by changes in percussion and piano parts, forming a T-11 style textural change: the pace of snare drum hits gets doubled while bass tom-tom simulates a kick drum, forming

altogether a rhythmic pattern of type RC-1 and piano supports the new rhythmic figure. The melody is doubled by soprano and each idea is answered by added violin phrases. The section ends with an additional four-bar section working as a full-energy preparation for the climax coming at the second half of bar 85, which is also echoed by flute, trumpet and strings in the following half measure, in 2/4. This final section has a melodic line in R-5b rhythmic character, 3+3+3+3+4, played by flute, violins and viola. The last quadruple sub-group is also supported by trumpet. The steady 8th notes in the previous section are transformed to 16th notes, in clarinet, bassoon, cello and double bass parts, also played by the bass tom-tom simulating a kick drum playing in R-10 style, in order to add further tension. Piano plays a guitar rhythm figure with straight quadruple character. All elements form a RC-3 type rhythmic combination.

Following the climax, second verse section starts in bar 87. In order to enhance the repeat, a soft bass support with staccato character is added to the measures where the instrumental motif of verse section is played, leaving the bass register empty in the measures with vocals as it was in the first verse. The fourth verse starting at bar 95 is identical to the second one.

The second pre-chorus and chorus sections come both in their original settings, followed by two climactic sections. The first climactic instrumental section has a slight change in the melody played by violins: half step up and down glissandos replace long notes of the original section, creating a T-11 style textural enhancement. As a second change, an instrumental passage simulating a guitar solo section is inserted between two climactic sections. This new section starts at bar 161. Here, flute, clarinet and trumpet simulate the guitar solo. While trumpet works as the leading part, flute doubles it in one octave higher and clarinet plays the same line a major second lower in order to add a constant soft dissonance symbolising an electric guitar with distortion effect. Bass tom-tom keeps playing steady 16th notes representing a R-10 style heavy metal kick drum and bassoon, viola, cello and double bass support it in alto and bass registers with similar rhythmic character. Piano emphasises first and third downbeats of each measure with chord attacks, each one sustained until the next chord, creating a solid base. Violins play a rhythmic line comprising of two different patterns used in horizontal combination: first one, seen on bars 161 and 162, has a R-5a style rhythmic grouping 3+3+2 if one counts quarter

notes as units; second one, seen on bars 163 and 164, is a simpler rhythmic displacement with a long syncopation. The solo part features many triplets and sextuplets forming a rhythmic contrast with the prevailing quadruple structure. This section has T-8 type textural character. With the last gesture of the solo, the second climactic part starts at bar 177, it comes in its original setting except the beginning where the last solo gesture is arranged to provide a passage.

At bar 182, the verse section comes back with a simpler accompaniment, featuring the lyrics of the second verse; and its end is arranged to pass directly to the chorus section. Following the chorus, the climactic parts come as expected, but this time to conclude the piece.

3.2.4 Movement 4

The fourth movement entitled “Bitsin” (Let It End) starts directly with the first verse section. In the first eight measures, the accompaniment consists only of block chords with two different dynamic characters, resulting as different textural elements: while string instruments produce a T-2a style chord pad, piano and vibraphone add T-2b style chord attacks, with a soft dynamic. Vibraphone chord is played on first downbeat and piano echoes it in one octave higher on the following beat. The little gesture formed by the combination of these two attacks give the listener a clue about the tempo and works like a T-12 style textural element, coming before each vocal phrase. The second stanza begins at bar 9, where piano chords are replaced by straight 8th note arpeggios and double bass marks the beginning of each two-bar phrase with a pizzicato note strike. Beginning from second half of bar 13, the piano arpeggios are enhanced with additional either descending or ascending figures in the vibraphone part. String chords are played as unmeasured tremolos starting from bar 17 where the arpeggiation stops and block chords idea return. Clarinet plays short motives connecting vocal phrases, flute echoes the last notes of clarinet motives. At bar 25, whole accompaniment section becomes steady 8th notes in all string instruments, clarinet and bassoon, enhanced with a decrescendo-crescendo effect.

At bar 29, with the last note of vocal line on top, starts an instrumental section where piano simulates kick and bass drums. After the first two measures of this section which provide a smooth passage, the new texture shows itself with bar 31: the piano simulates drums, pizzicato cello and double bass support it, vibraphone plays T-2b

style chords and fragments of melody are played by a few different combinations of instruments. These combinations are, respectively: clarinet and trumpet; flute, clarinet and first violin; and finally, flute, clarinet, trumpet and violin. The rhythmic pattern used in piano part is a RC-2 type horizontal combination of straight 4/4 and a syncopated version of it. Following the chromatic build-up in the second half of bar 36, comes a more elaborate setting of the instrumental section. Flute and violins play the melody, enhanced by a contrapuntal line in viola part. The rhythmic pattern becomes straight 4/4, a combination of R-1b and R-1c type enhancements; with added accent to the last 8th and double accent in the following measure. It is played by piano left hand, cello, and double bass while piano right hand and vibraphone form a chord pad. Further rhythmic action is added to this texture by steady 8th note arpeggios in clarinet and bassoon. The section has its ending between bars 41 and 44.

The second verse section starts in bar 45. The accompaniment has a different setting this time. The kick and bass drums figure is added to the verse section in order to save the rhythmic energy attained in the previous section. It is placed in piano left hand and double bass parts. Piano right hand plays sustained block chords while vibraphone plays the “one octave away chords in first and second downbeats” idea originating from the first verse section. Small melodic figures are inserted between these, creating a question-answer relation between vocal and vibraphone parts. In the second part of the section, this function starts being fulfilled by rhythmically parallel wind section gestures, all featuring a crescendo emphasising the third downbeat of each two-bar cell, adding extra energy. String instruments start playing as accompaniment element after bar 56, with mostly staccato quarter notes, while winds have a relatively more complex structure: in addition to the question-answer function, they also accompany vocal phrases. From bar 65 to 68, all instruments emphasise the drum set pattern. Beginning from bar 69, comes a four-bar build up where woodwinds play a 3+3+2 rhythmic pattern and strings play steady 8th notes with rhythmic pattern 3+2+2+2+2+2+3. Following the climax coming at the beginning of bar 73, 8th triplet figures are introduced in order to prepare the start of the upcoming instrumental section in 12/8 character, notated as triplets. In this section, string instruments play steady 8th notes working as the main accompaniment element along with bass line in the double bass part made of long sustained notes. Piano plays a drum set pattern in the left hand part while right hand part features

chords rhythmically parallel with the virtual drums, resting every two bars. The melody is given in the trumpet line while flute and clarinet enrich it. Similar accompaniment is kept for the upcoming vocal section in bar 91 as well, but this time piano chords are played without one-bar long rests. The ending idea of the first instrumental section of the piece is used here once again, this time to conclude the climactic vocal section. Following a few phrases originating from verse 1, an ending idea comes at bar 116.

3.2.5 Movement 5

The fifth movement entitled “Kırık Kalpler Bulvarı” (Boulevard of Broken Hearts) start with a statement of its chorus idea in rubato tempo, accompanied by T-2b style piano chords. The general outline of the vocal melody is also emphasised by vibraphone. The real introduction comes at bar 9. After a one-bar lead-in, the introduction theme starts being played by flute, vibraphone and first violin. It is enhanced by a contrapuntal yet rhythmically parallel line played by clarinet and second violin. The general rhythmic character is, R-5a: 3+3+2. Bassoon, viola, cello and double bass play steady 8th notes. The melody is concluded from bar 18 to 21 where violins and viola point out R-5 character once more: 3+3+3+2+2+3 / 3+3+2 / 3+3+2.

The first verse section starts at bar 22. The verse accompaniment is formed of a piano arpeggio of 8th notes and a vibraphone figure of 16th notes supporting it. A two-bar lead-in at measure 31 provides contrast before the second verse coming at bar 33. The second verse has staccato flute and clarinet notes emphasising each downbeat and a drum kit figure played by bassoon featuring rhythmic displacement.

The chorus section follows, coming at bar 42. As accompaniment to the chorus section, all string instruments represent a drum kit pattern of type R-1, while flute and clarinet play staccato notes on each downbeat, symbolising a cymbal part. The bassoon plays a bass line consisting of steady 8th notes and piano and vibraphone play the material they used in the very beginning of the piece. The second take of chorus comes at bar 50. A few slight touches are made to ensure the variety: trumpet plays a contrapuntal line of long notes and flute and clarinet play a little motif instead of repeating pitches.

At bar 58, last vocal notes of the chorus is superimposed with the intro melody coming back. The melody changes register and gets back to its original octave when repeated. The third verse section is similar to the first one, and it is followed by second chorus which also has a similar accompaniment to the original. After the instrumental section, fourth verse comes at bar 107. The verse accompaniment is arranged to provide an obvious change: piano sustains long notes while vibraphone plays staccato on each downbeat. As expected, chorus and instrumental sections follow, and the lead-out works as ending idea.

3.2.6 Movement 6

Movement 6, entitled "Günah Keçisi" (Scapegoat) starts with a four bar introduction idea and its elaborated reprise. The introduction idea is first played by string instruments. The rhythmic character is clearly R-5b: 3+3+3+3+2+2, whereas piano and bass tom-tom parts suggest a regular quadruple rhythmic framework by giving the first and third downbeats with their preceding 8th note antecedents; thus altogether forming a RC-2 type rhythmic combination. The second statement of the idea starting at bar 5 features similar material with more energetic versions: the two 16th one 8th pattern of the introduction idea now becomes four 16th notes with an antecedent 16th note added to first violin and trumpet parts; in the piano part, instead of first and third downbeats, all the downbeats get accentuated; and xylophone provides steady 8th notes.

Following an introductory gesture coming at the second half of the third beat of bar 8, the real instrumental theme of the song starts at bar 9. The rhythmic character of this section is based on R-5a model: 3+3+2, given prominently by the piano part and supported by the xylophone. The melody line played by violins and doubled in major 7 lower by the viola, supports also this rhythmic sub-grouping. The bass line played by bassoon, cello and double bass provide accents on each downbeat, like a disco bass drum in R-3 style rhythm. This superimposition can be categorised as a RC-2 style rhythmic combination since R-3 and R-1 have both straight quadruple character. Following the smooth entrance of flute and clarinet along bars 15 and 16, the instrumental theme is replayed beginning from bar 17, with small enhancements providing a T-11 style textural change: the melody is doubled one octave higher by the first violin and the accompaniment is enriched by the added flute and clarinet parts.

The first verse section starts at bar 25. The accompaniment to the singer comprises of two elements: while the woodwind instruments play T-2c style staccato block chords on each downbeat, violins, viola and piano provide a T-2a style chord pad, featuring the outline of vocal part as its top voice. A one-bar melodic figure coming at bar 28 provides connection between two vocal phrases, forming a T-12 type question-answer relation with them. Following the second phrase, a slightly different version of the same melodic figure comes at bar 32, leading the music to the pre-chorus section.

The pre-chorus section starts at bar 33 with bigger rhythmic impulse provided by steady 8th notes played by all string instruments and piano left hand, forming a T-2c style chordal accompaniment supported by T-2b style sustained chords of piano right hand and vibraphone. The upper register instruments playing the chords alternate between two figures, one made of steady 8th notes and the other consisting of one rest – one note formula saving the note strikes to the upbeats. The instruments playing the bass part stick to the steady 8th notes idea, providing a solid background in the lower register.

In the chorus section starting at bar 41, the accompaniment is mainly based on a RC-1 style rhythmic pattern including simulation of kick and snare drums obtained through register difference. The pattern can be seen in all woodwinds, cello and double bass parts in measure 41 and 42. The accompaniment gets complete by the sustained long chords in piano right hand. As elements supporting and enhancing the vocal melody, its outline is played by first violin in one octave higher and a contrapuntal line moving in the opposite direction is played by viola, given also as a two-bar melody in the trumpet part in a more elaborate fashion. The chorus section comprises of two bar phrases. The first two bar of the chorus is repeated four times, each followed by a different two-bar vocal phrase enhanced with arpeggio-like figures played by woodwinds.

Following the end of chorus section in bar 57, the instrumental theme comes again, providing a passage to the second verse section starting at bar 74.

Although the second verse section has similar structure to the first one, a bass figure simulating a kick and snare drum and a contrapuntal line in trumpet's low register is added in, in order to enhance the comeback of verse ideas, creating a T-11 style

textural change. This new bass figure, played by bassoon, cello and double bass has a R-6 style rhythmic displacement: 3+4+4+4+4+1.

The second verse is followed by pre-chorus and chorus sections starting respectively in bars 82 and 90, both restated in their original versions.

An instrumental section starts after the second chorus, in bar 107. It has the rhythmically displaced bass figure of the second verse as its accompaniment idea, this time played by all strings with pizzicato articulation. Although some melodic fragments are dispersed in piano right hand and vibraphone parts, accompanied by long sustained notes in trumpet line, a real melody doesn't exist in first eight bars of this section. This relatively atmospheric material turns out to be an accompaniment to the clarinet solo starting in bar 115. The percussive flute part entering at bar 119 adds extra energy to the second half of clarinet solo, using a rhythmic pattern with clearly R-5 style 2+2+2+3+3+2+2 sub-grouping. In bar 123, starts the last part of the instrumental section where string instruments quit pizzicato and violins play the melody. The rhythmic idea of the former section is now transferred to woodwinds while viola and cello play steady 8th notes giving more tension. Double bass opposes to this energy by long sustained notes, creating more tension; and piano, vibraphone and trumpet continue playing the same figures, keeping the connection with previous parts. Please note that the melody played by violins features rhythmic displacements as well, bearing an organic relation to the rhythmic ideas found in this section.

The pre-chorus section comes back at bar 133, with slightly changed accompaniment parts. The woodwind and string instruments play only on specific points, providing sudden accents and retarding the release of energy collected during the previous section, creating a T-2c style texture. These accents get more and more frequent to add extra tension until the beginning of the last chorus coming at bar 141, where the energy gets released.

The last chorus section is repeated twice. In the second take, vocal part is made up of variations of chorus' melodic ideas in order to prevent monotony. The end of the chorus section is adjusted to provide an appropriate ending.

3.2.7 Movement 7

Movement 7 entitled "Kirli Yağmur" (Dirty Rain) starts with a 16 bar introduction section with added 2 bar extension. The melodic material is given in flute and

clarinet parts, also heard as the upper voice in piano chords. Because it is a line made of long sustained notes, an extra figure of 8th notes is inserted between melody notes' attack points. This figure is played by sul ponticello violins and is doubled in the vibraphone part. The two intertwined melodic ideas are placed on top of a bass ostinato pattern simulating brutal heavy metal guitar riffs, played by viola and cello, supported by bassoon in one octave and double bass in two octaves lower. The second repeat of this section starts in bar 9, where soprano begins doubling the melody as an enhancement of type T-11. The section is extended for two extra measures where the preceding material is repeated in transposition. The accompaniment of the upcoming second instrumental introduction starts in bar 19. After two measures of preparation, the melodic material enters in bar 21, played by trumpet and clarinet. All other instruments play the rhythmic figure of type RC-1, obtained through displacement. The section ends in bar 38 where a two-bar passage prepares the verse section.

The verse section accompaniment has three elements: piano plays T-2b style chords, all string instruments play a T-2a style chord pad and vibraphone plays T-2d style arpeggiated chords.

The first pre-chorus section begins in bar 48. Accompaniment features slight changes: string instruments start playing a rhythmic idea of type R-1, symbolising kick and snare drums; piano chords switch to a lower register; and vibraphone arpeggios become little melodic phrases. In the second take of this section coming at bar 56, staccato quarter notes in woodwind instrument parts get added to the texture, accomplishing the drum kit simulation.

The second pre-chorus starts in bar 64. Here, while piano simulates the drums with R-1 character, strings and bassoon play a clearly R-5b idea with sub-grouping 3+3+3+3+4, creating altogether a RC-3 style combination. The second take of this section starting at bar 72 features a contrapuntal clarinet line added-in, later supported by the flute, in order to embellish the comeback.

As an unusual feature of form, a third pre-chorus section comes at bar 80. Its general structure is formed of a two-bar forte idea and its six-bar continuation with steady rhythmic formulas. Piano and vibraphone keep long sustained chord pads while the R-1 style rhythmic character is given by string instruments and bassoon supported by flute and clarinet providing steady staccato quarter notes. The section gets repeated

beginning from bar 88 with slight changes: the rhythmic pattern becomes R-2, piano left hand joins the rhythmic pattern, and trumpet enhances the staccato quarter notes of flute and clarinet, altogether forming a T-11 style textural enhancement.

Chorus section begins in bar 96, based on a bass figure with R-5b rhythmic character, 3+3+3+3+4, played by cello and piano left hand. Double bass only fills its register without any rhythmic activity while bassoon supports the bass riff accents. Violins and viola add a further tension with tremolo chords. Flute and clarinet enrich the vocal melody: they both accompany and answer vocal phrases. The second take of chorus beginning at bar 104 features a contrapuntal trumpet line as an enhancement, creating a T-11 style textural change.

Following the chorus, both instrumental introduction ideas return, this time without repeats avoiding too much redundancy. The second verse starts at bar 131. Although with different lyrics, it is very similar to the first one, except the added woodwind answers to vocal phrases providing variety. The first pre-chorus section follow with its original settings, but the second one is heard only once, in its more elaborate form originating from its second take, leading to the third pre-chorus used again in its original setting.

The last chorus section comes at bar 179, following which the piece is concluded with a short two-bar ending idea.

3.2.8 Movement 8

Movement 8, entitled “Yeni Ben” (The New Me), starts with an eight bar long instrumental introduction. While the first violin plays the melodic material, strings piano, and percussion play long block chords. The chords are left to vibrate for nearly two measures after a very loud attack, with a notated decrescendo for the string instruments and a natural one for the piano; then the accented attacks come back to precede a sudden silence in all accompaniment parts, creating a sharp contrast, as a typical application of model TC-2. The second part of the idea is enhanced by the added flute and clarinet parts featuring staccato quarter notes and joining the crescendo and decrescendos. In bar 8, the idea is cut one measure before its natural length in order to offer place to a one-bar transitional figure played by viola and cello. The introduction idea restarts in bar 10, this time with a regular rhythmic accompaniment. A rhythmic pattern in R-5 style with 2+2+3+2+3+2+2

sub-grouping is played by bassoon, piano, cello and double bass which are altogether simulating a kick and snare drum. Clarinet and viola play a contrapuntal melodic figure in middle register, enhancing the melodic lines of violins. The melody is played by both violins in unison and is supported by flute on its accented points. The part of the section is more energetic due to the added staccato trumpet notes. As it was with the first take of the introduction, the second part is also cut one bar earlier, creating place for the passage idea played by first violin.

The first verse starts at bar 18. In this section, while piano plays a simulation of kick and snare drums featuring a rhythmic pattern of type R-6. Flute, clarinet and violin support the vocal melody in a few different combinations. The pre-chorus section comes at bar 26 where the texture starts to become relatively dense. The rhythmic piano part is doubled by bassoon and cello, vibraphone plays a steady 8th notes figure where each downbeat is accentuated by staccato quarter notes of the flute; and double bass forms a solid ground made of long sustained notes. In the second half of this section, clarinet starts playing legato 8th notes, and respectively trumpet and high strings trace a general outline of the vocal melody, leading to the first chorus starting in bar 34.

The chorus section includes two ideas used in succession. They are both based on the general shape of vocal melody: first one is descending, and the second one comprising of two strongly connected motifs is ascending. Their accompaniments are contrasted as well: first motif is accompanied by a strong accent followed by a rest. Flute, clarinet, violins and viola enrich the vocal motif with rhythmically parallel lines featuring the vocal line doubled in octave higher on top. The rhythmic character of this bar is clearly R-5: 2+3+3. The following measure contains two block chords and an anticipation figure formed of steady 8th notes leading to the upcoming second idea accompaniment, with the first two notes of the idea on top. This measure has a R-5 type structure as well: 3+2+3. Bar 36 and 37 include steady 8th notes played by string instruments with R-5 rhythmic character given by the accents: 3+3+2 / 3+2+3, emphasised by the bassoon. Vocal melody also supports these accents and it is reinforced and somehow blurred by flute and clarinet doubling it in octave in a relatively abstract way. Piano simulates kick and snare drums, playing a pattern which looks like type R-1 in the first glance, but kick drum part clearly supports R-5 accents as well. Similar use of these two elements in alternation continues until the

end of chorus section followed by the comeback of instrumental introduction idea at bar 50, this time heard with a simpler setting: melody on first violin part enhanced by the little touches of flute, drum pattern simulated by the piano and the contrapuntal part played by clarinet. Second half of the section is orchestrated as it was in the second take of the introduction before the first verse, this time leading to the second one.

The second verse, starting at bar 58, is a repetition of first one with different lyrics. It is followed by the pre-chorus and chorus sections starting respectively in bars 66 and 74.

After the second chorus, an instrumental section starts at bar 90. It is based on a theme that insists on the use of limited variations of a single "note – neighbour note – back to note" motif, played by piano right hand and clarinet. While piano left hand provides an accompaniment consisting of steady 8th notes, flute plays staccato on each downbeat, both emphasising the quadruple framework. Here, bassoon is the only sound in bass register and it simulates kick and snare drums playing a pattern featuring hybrid use of R-5 and R-6 type syncopation and rhythmic displacement models. In bar 98, the same passage is repeated with wider and varied orchestration: Flute part goes one octave higher, first violin joins piano right hand and clarinet playing the melody, rhythmic bassoon part gets doubled by the cellos and the piano left hand part is supported by the second violin and viola playing steady staccato 8th notes featuring also a crescendo – decrescendo effect. The section is repeated for the third time beginning from bar 106, in a more tense style with the addition of a mostly staccato trumpet part and snare drum tremolo with crescendo dynamic, leading to a bigger build-up. Following the climax at bar 118, the third chorus section starts. Although it is nearly similar to the previous ones, added trumpet phrases answering the vocal line provide a T-11 style textural enhancement implying that the end of the piece is close.

The last chorus is concluded by a coda-like instrumental passage starting at bar 135. It is a mix of elements from two different instrumental sections found in the piece used in superimposition. The thematic material of the introduction is placed on top of material coming from the instrumental passage after the second chorus, and it is simplified by the systematic omission of some notes in order to work with its new

accompaniment, providing also a fade away effect which prepares the end of the piece.

3.2.9 Movement 9

The last movement of the suite is entitled “Dinlemeyeceğim Dediklerinizi” (I Won’t Listen To What You Say) begins with an introduction made up of ideas belonging to its chorus section. Following a two-bar entrance gesture, the introduction section starts at bar 3. Here, accompanying the vocal line, all string players are asked to tap their feet and clap hands in order to simulate kick and snare drums playing a RC-2 style hybrid rhythm. Vibraphone and piano keep sustaining T-2b style chords while wind instruments add further action: flute and clarinet play staccato quarter notes, bassoon and trumpet play legato 8ths. The instrumental introduction theme follows at bar, played by trumpet and accompanied by piano and finger snaps again asked from string players. Piano play a rhythmic pattern emphasising second and fourth beats, where the fingers are snapped as well. The trumpet melody features a two-bar long rhythmic pattern, first bar reflecting the piano accents and second one having R-5a style 3+3+2 structure. The second take of this section is more elaborate: piano accompaniment is doubled by pizzicato strings and vibraphone, and trumpet melody is enhanced by woodwinds.

After a two bar passage with R-5b rhythmic grouping, 3+3+3+3+4, the first verse section starts at bar 29.The two main accompaniment elements are given in piano part: rhythmic idea coming from the introduction section goes on in left hand part while staccato quarter note chords form the right hand, sounding together as a drum set, namely kick and snare drums and a cymbal. Bassoon, cello and viola double the left hand rhythmic figure while violins and viola play the right hand chords. Vibraphone enhances the vocal line in addition. The second statement of the verse section is more elaborate. Instruments playing the bass line switch to long notes, flute and clarinet enter playing high register staccato 8th notes with 2+3+3+2+3+4 grouping, violins are transferred to an upper register with 3+2+3 grouping.

The pre-chorus starts at bar 45. It is based on the alternation of two contrasting ideas, both two-bars long. The first idea features vocal line accompanied by instruments playing legato. The second one is a figure based on block chords, having a R-5b rhythmic character: 3+3+3+3+4. Another instrumental passage at bar 59 and 60

concludes the first pre-chorus section, leading to the second one comprised only of piano and vocal line, creating a sharp contrast with the full texture of the previous section.

Chorus section comes at the last beat of bar 68. It includes melodic and accompaniment ideas already heard before. First take of the chorus doesn't include any wind instruments where the second take is enhanced through the addition of flute and clarinet arpeggios.

Following the chorus, the introduction with trumpet solo comes back in its elaborate setting to avoid extra repeats. It is followed by the second verse and then by the first pre-chorus, both coming in their original settings. The second pre-chorus has extra elements: woodwinds answering the vocal phrases and vibraphone playing long notes.

The last chorus starts at the last downbeat of bar 134. Its simple and more elaborate versions are heard in order, as it was in the first turn of the piece. Then start extra repeats enhanced by trumpet solo. The piece has its end with the introduction trumpet melody this time avoiding strict rhythmic motor to create an ending feel

4. CONCLUSIONS AND RECOMMENDATIONS

While this work provides an analytical perspective on the inner structure of popular music pieces defined by pre-existing schemes and modular use of rhythmic and textural ideas, it also reveals some broadly used ones among these by modelling them, proposing that they could serve as compositional tools for hybridisation of contemporary art music and popular music.

The writings of Adorno (1941) and Merwe (1989) give information about the structure of popular music. According to Adorno (1941), popular music is constructed inside the framework of pre-given and generally accepted schemes. The scheme defines the general functions required to form the whole, and the parts of the whole work by fulfilling these functions. In this sense, a part is interchangeable with another one fulfilling the same function and the music does not suffer from this. Adorno (1941) also mentions two needs that popular music has to meet: to provoke the attention of the auditor and to communicate with him or her by including musical ideas and elements of any kind which he/she is familiar with.

Merwe (2002) writes about musical clichés which he calls matrices. A matrix can be any musical idea. Even simple features forming the basis of many musical cultures (like construction of music basing upon a series of beats with regular timing) are all matrices. They provide communication between the ones who create and hear the music. Matrices are very strong. Once learnt, they remain usually unforgotten. A slightest hint is enough to recall the matrix.

The notion of composition is different in popular and art music contexts. The production process of popular music got heavily influenced by the studio-centred work form. Hennion (1983), writes that a professional team has replaced the single song writer. In the glossary of current popular music, a composition means in general a monophonic song line and its lyrics. All other elements may change from one performance to another and it is still considered as the same music. A single composition may be adapted to different genres by altering the instrumentation, rhythmic patterns and textural structures, in other words, by interchanging an

important part of its matrices with others belonging to a different style. Matrices have an important role in creating the general musical character issued by the arranging style in different popular music genres.

Reinterpreting all these determinations, following deduction can be made: Popular music pieces are built using various matrices, all functioning inside the framework of a higher-level scheme, which we could call “hyper-matrix”. The matrices contained by the hyper-matrix are elements or properties related to different aspects of music, like melody, harmony, texture, rhythmic structure, or timbral characters. In order to make the hyper-matrix work, the composer constructs a mechanism consisting of various matrices. There are matrices common to many popular music genres whereas there are also ones that recall specific styles and sub-genres.

The musical composition made using these models and the related analytical explanations provided in this thesis show that rhythmic models, rhythmic combination models, textural models and textural combination models of popular music are all transformable to orchestration ideas to be used in composing Western art music. Rhythmic ideas, especially drum set patterns can be represented by non-percussion instruments. A drum set pattern is formed of different sub-patterns assigned to various parts of the drum set. An ensemble of non-percussion instruments can simulate a drum set when these sub-patterns are used as rhythmic figures to be played by different parts of the ensemble. Respecting the original registers of the sub-patterns reinforces the similarity between the original and transformed versions. Most of the times, even one single piano can completely simulate a drum set pattern. Similar transformation formulas are applied to other popular music elements like guitar arpeggios, electric guitar riffs, synthesiser chord pads. A textural simulation is obtained through the combination of simulations representing all elements forming the original texture.

Most of the movements in the composition are based on the usual verse-chorus model, since this is the most common form used in pop music. The use of AABA form is also exemplified in movement number four. Usual extensions to song form, such as introductory sections or instrumental passages, are represented as well. The forms perfectly work in this new context.

Models obtained in the analysis represent musical ideas that are familiar to, therefore providing communication with, large audiences from all around the world, because

these ideas belong to a musical repertoire disseminated globally using the full power of mass media. At the same time, the models illustrate how structurally connected are different genres of popular music dating from different decades. The music composed as the final stage of this work demonstrates compositional possibilities offered by the use of these models.

The application of these models is explained in details in the analytical part of this thesis. The musical score of the composition and a sound recording made during the concert performance are given as appendices.

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APPENDICES

APPENDIX A: "ATONAL POP SUITE: Puslu Şarkılar (Hazy Songs)" Complete Musical Score

APPENDIX B: "ATONAL POP SUITE: Puslu Şarkılar (Hazy Songs)" Complete Sound Recording (provided on the compact disc inside the back cover)

APPENDIX A

"ATONAL POP SUITE: Puslu Şarkılar (Hazy Songs)" Complete Musical Score

Composer: Eray Altınbüken

Instrumentation:

Flute
Bb Clarinet
Bassoon
Bb Trumpet
Percussion (one player using: triangle, drum set [only snare drum and bass tom], suspended cymbal, glockenspiel, vibraphone and xylophone)
Piano
Voice (soprano)
Two violins
Viola
Cello
Double Bass

Approximate Durations:

Mov.1 "Çok Akıllıyım Sanma": 4'20"
Mov.2 "Kukla": 5'15"
Mov.3 "Pişman Olacaksın" 6'50"
Mov.4 "Bitsin": 6'00"
Mov.5 "Kırık Kalpler Bulvarı" 5'20"
Mov.6 "Günah Keçisi": 5'20"
Mov.7 "Kirli Yağmur": 6'15"
Mov.8 "Yeni Ben": 5'00"
Mov.9 "Dinlemeyeceğim Dediklerinizi" 5'40"

Total Approximate Duration: 50 minutes

This is a transposed score.

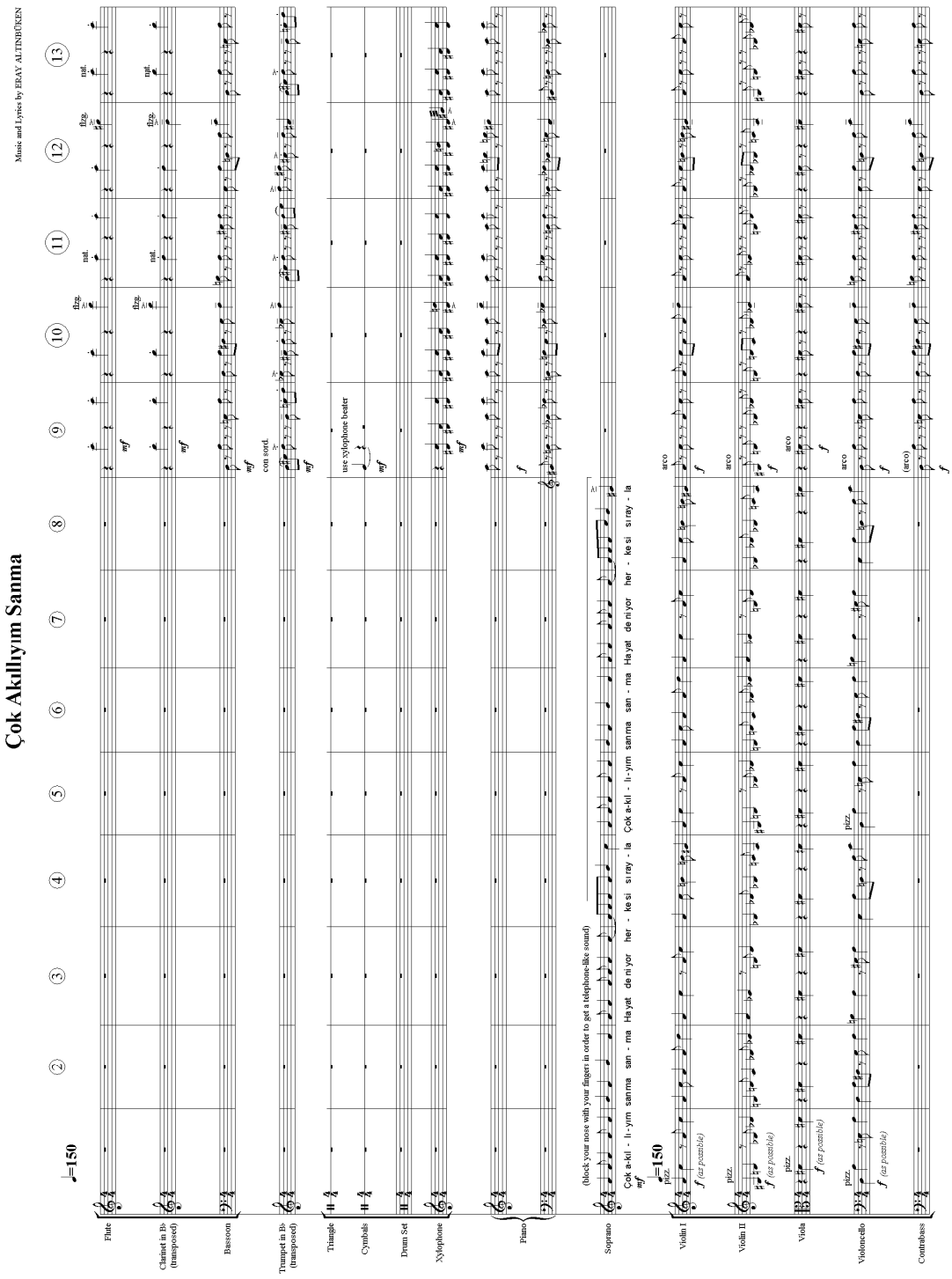
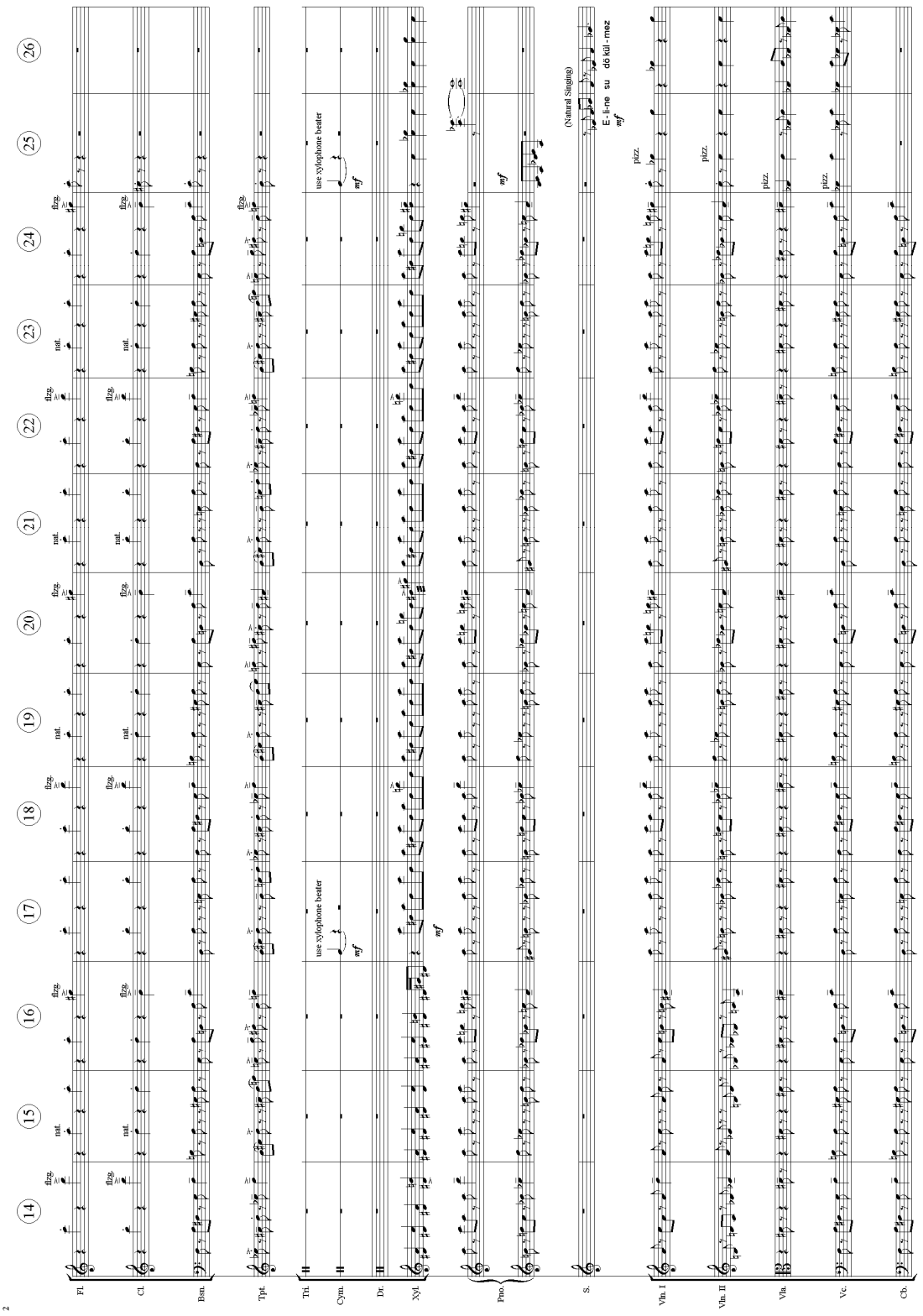


Figure A.1 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 1, page 1



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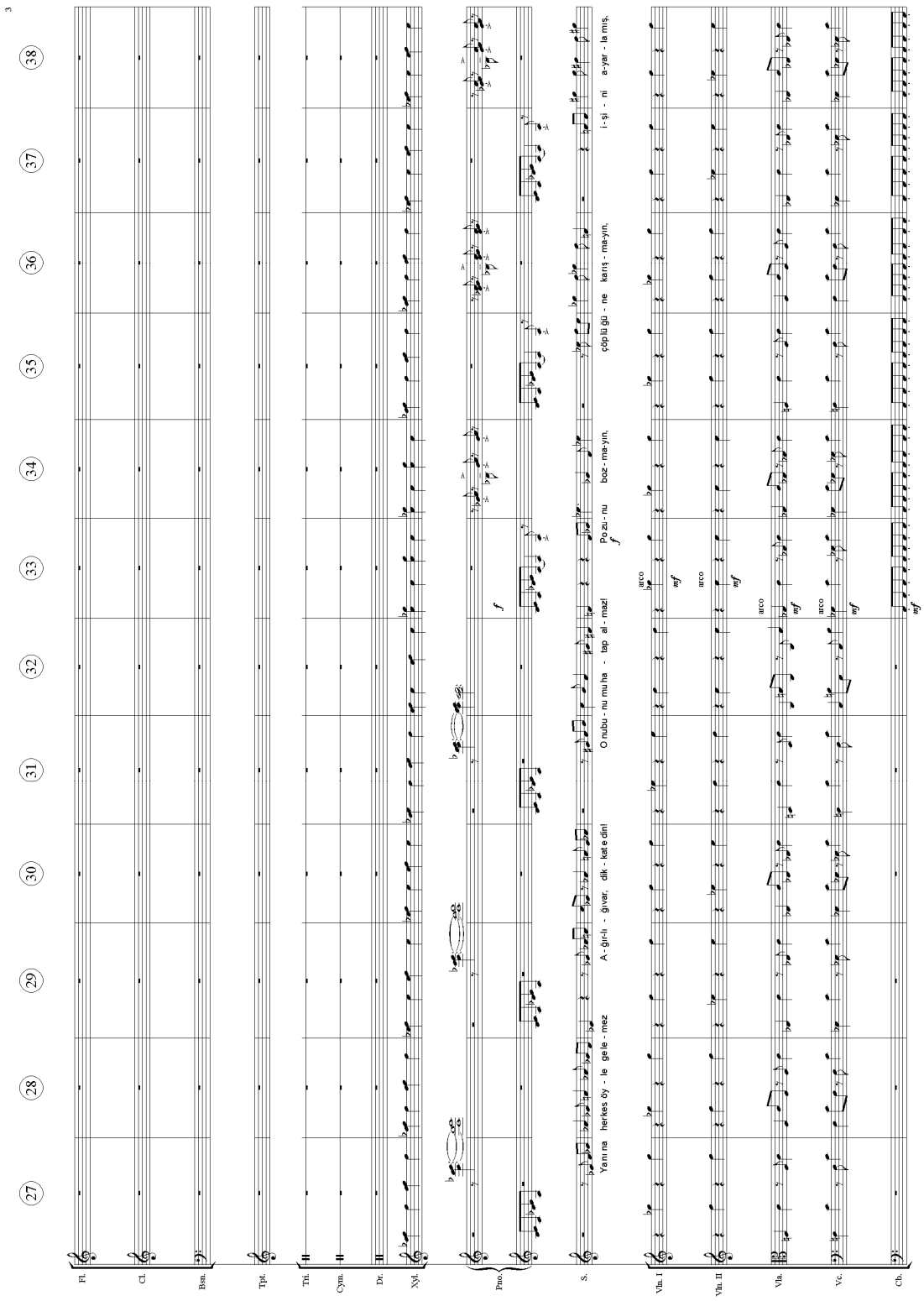

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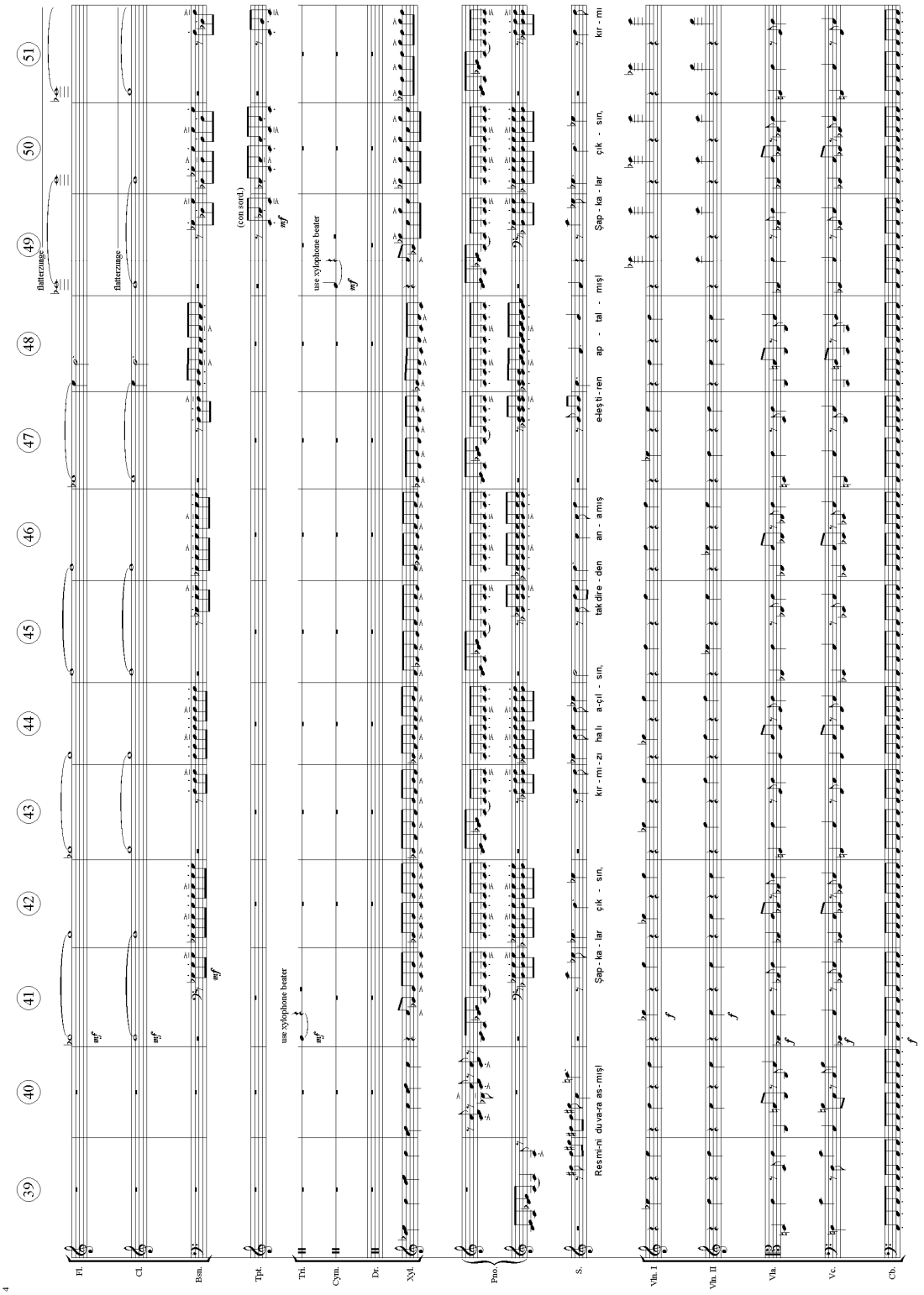

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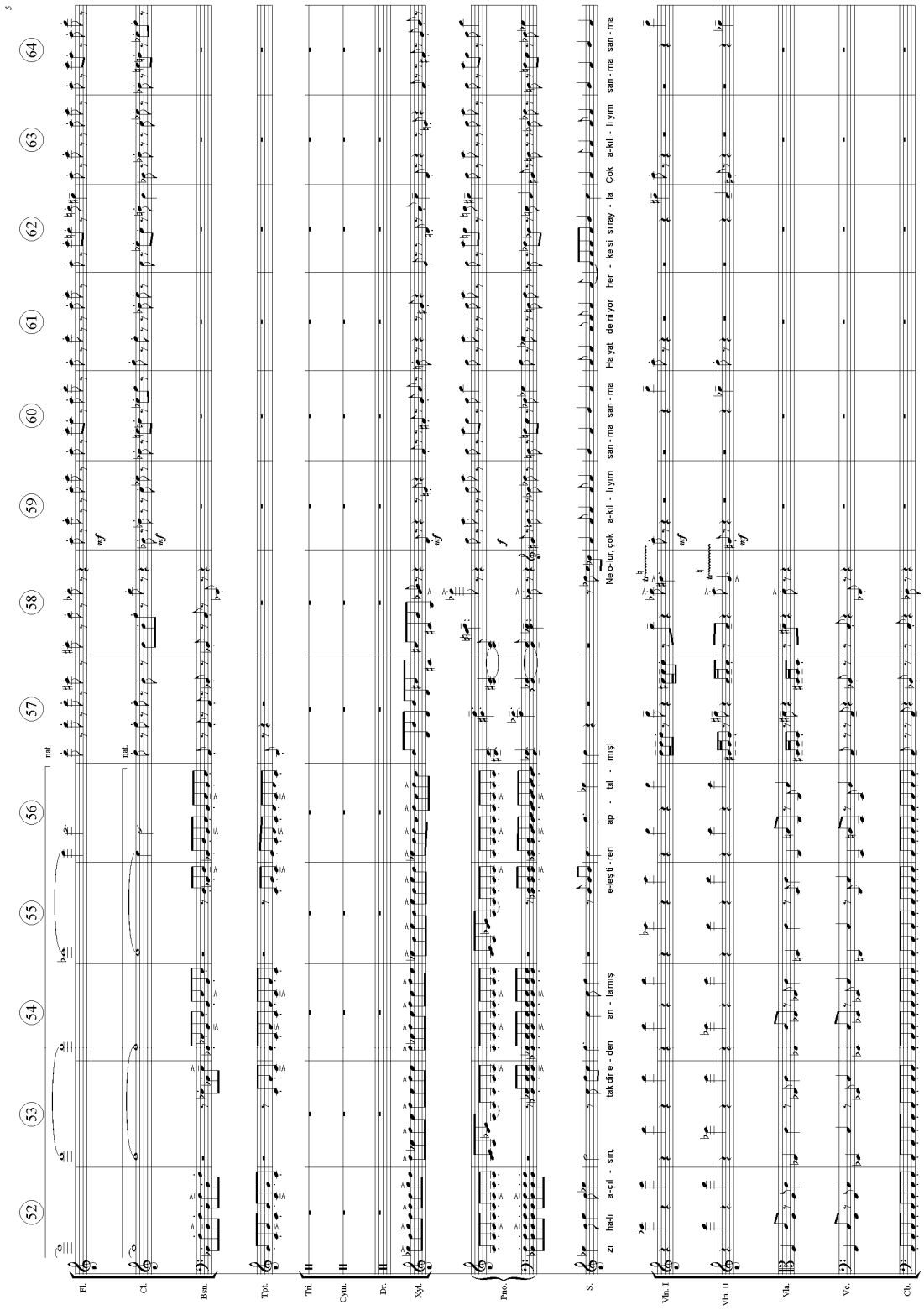

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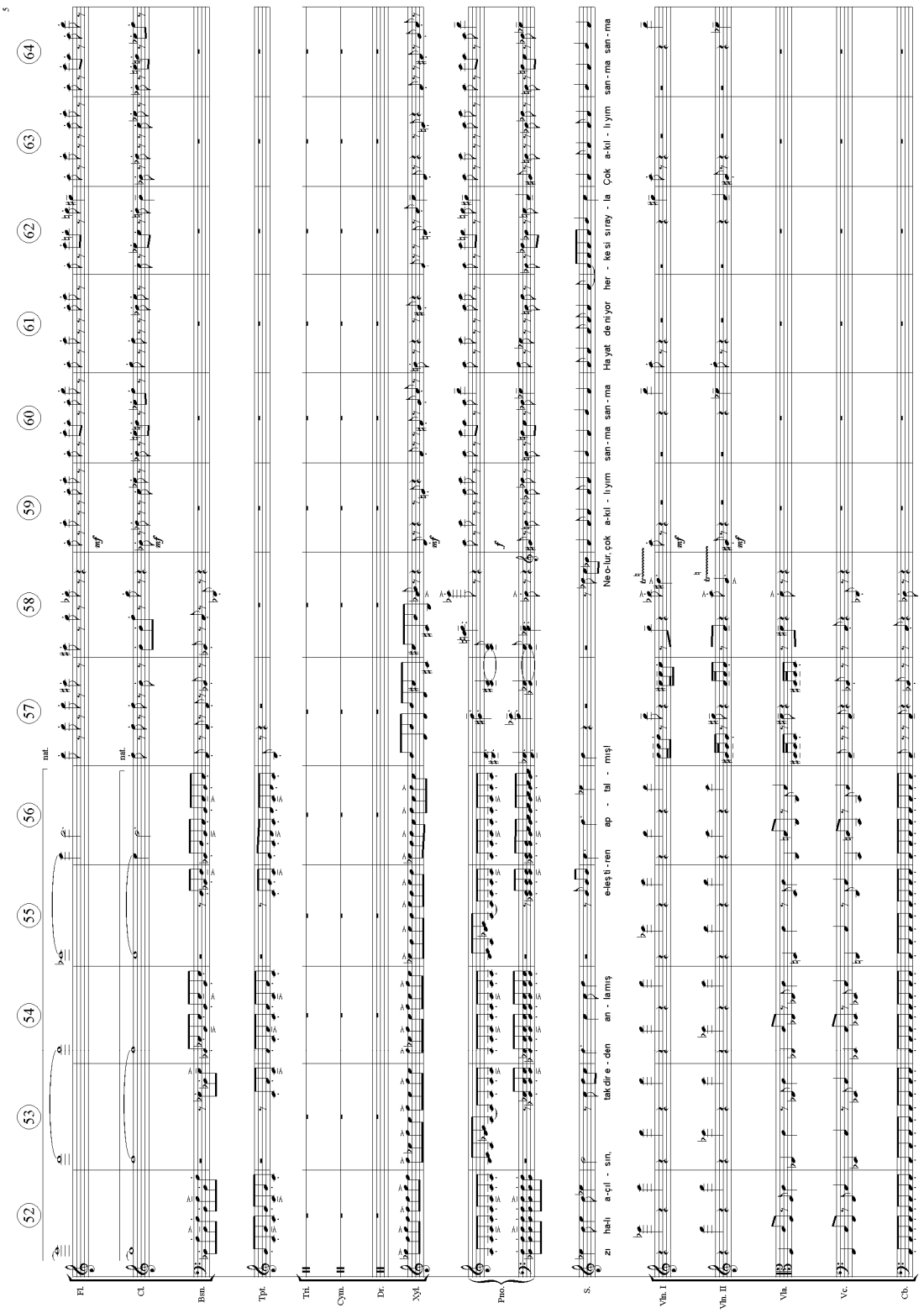

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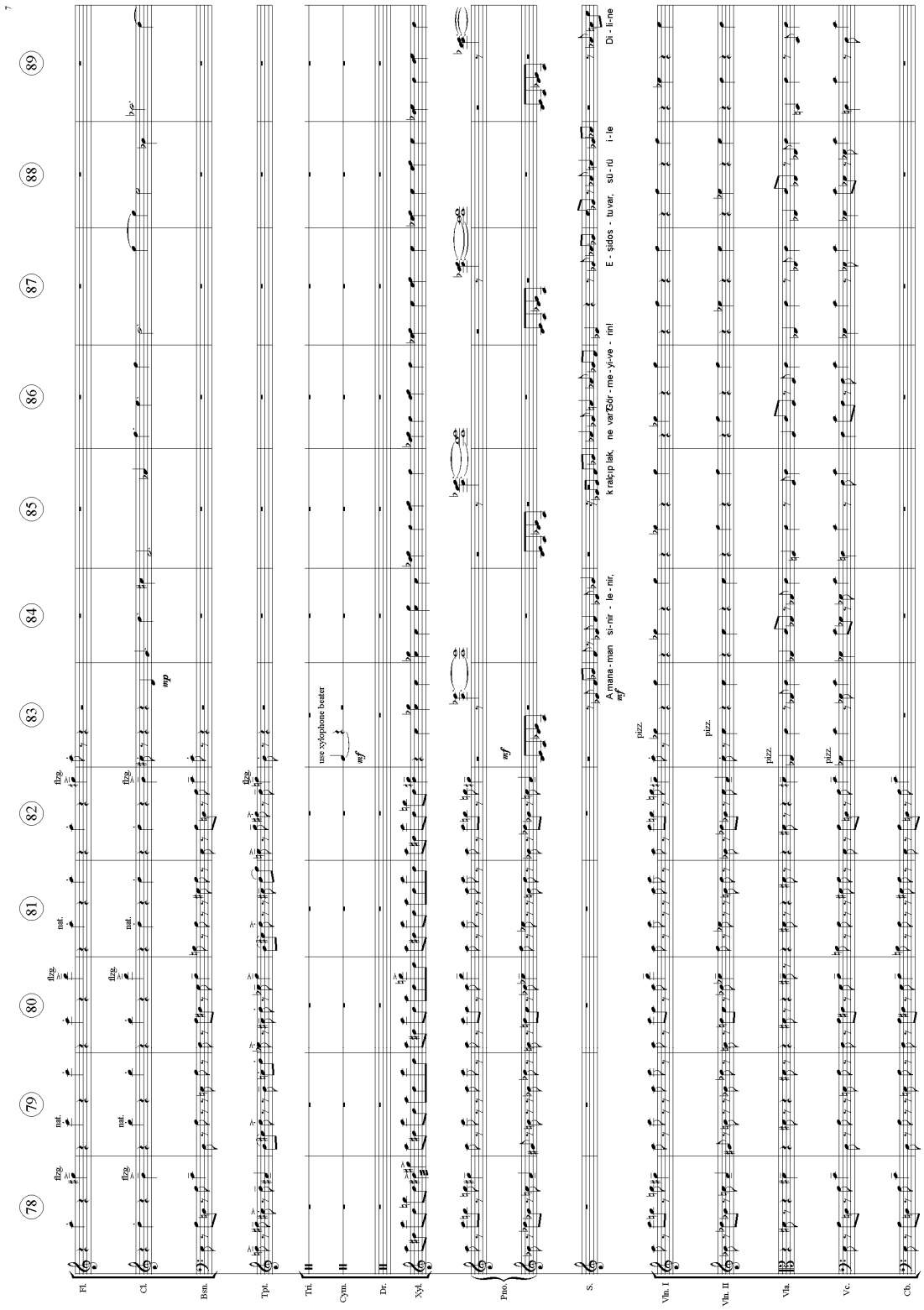

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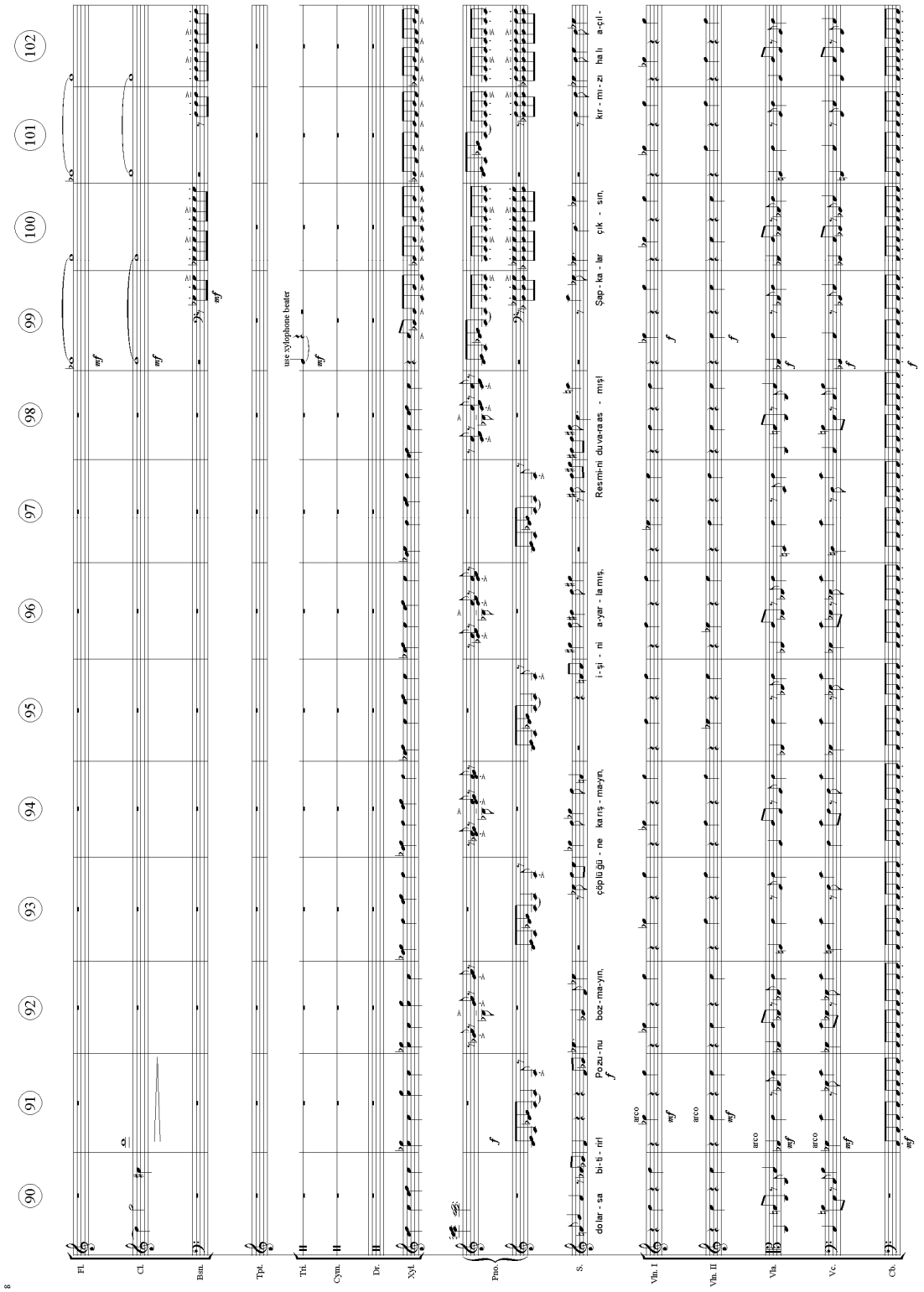

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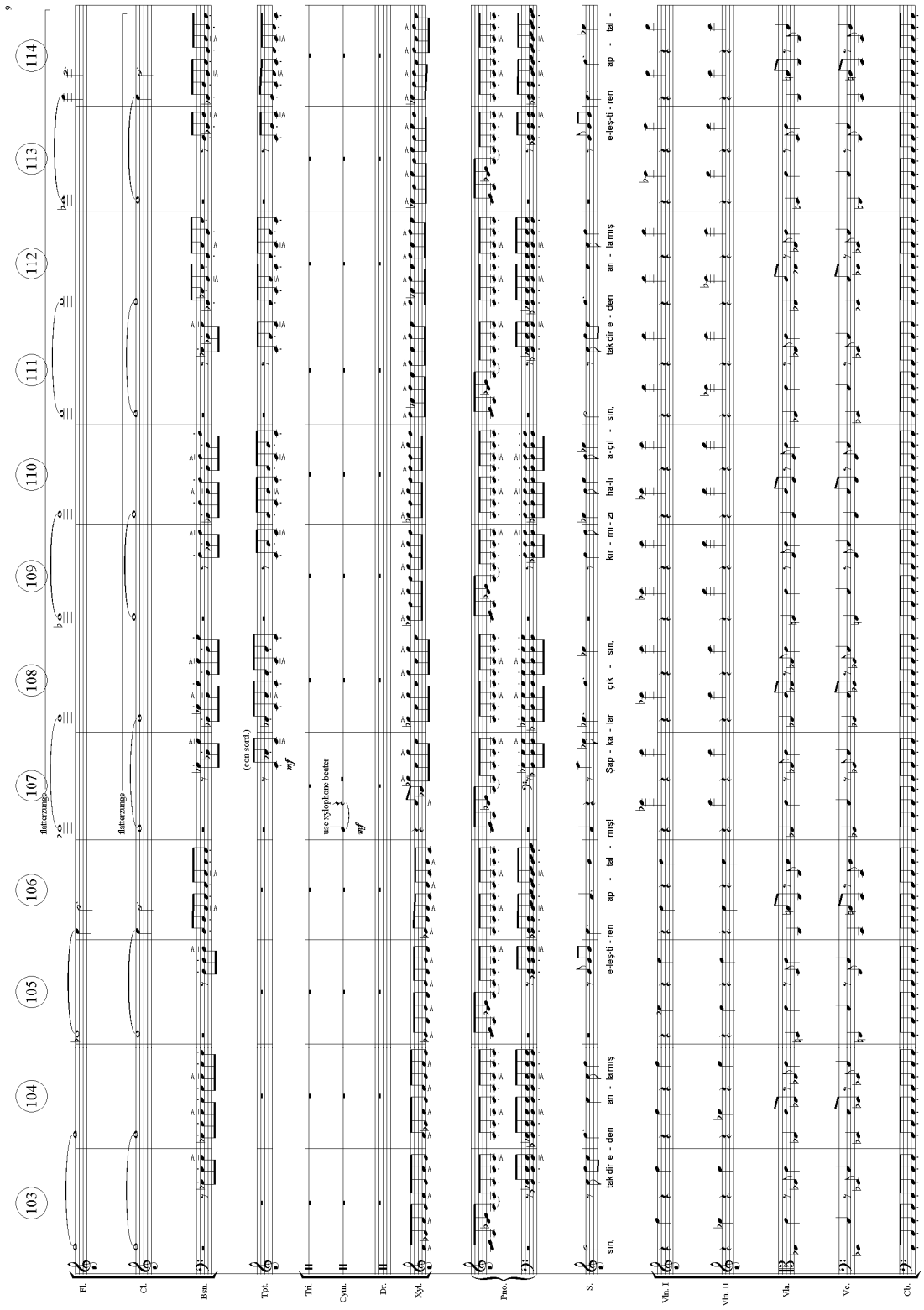

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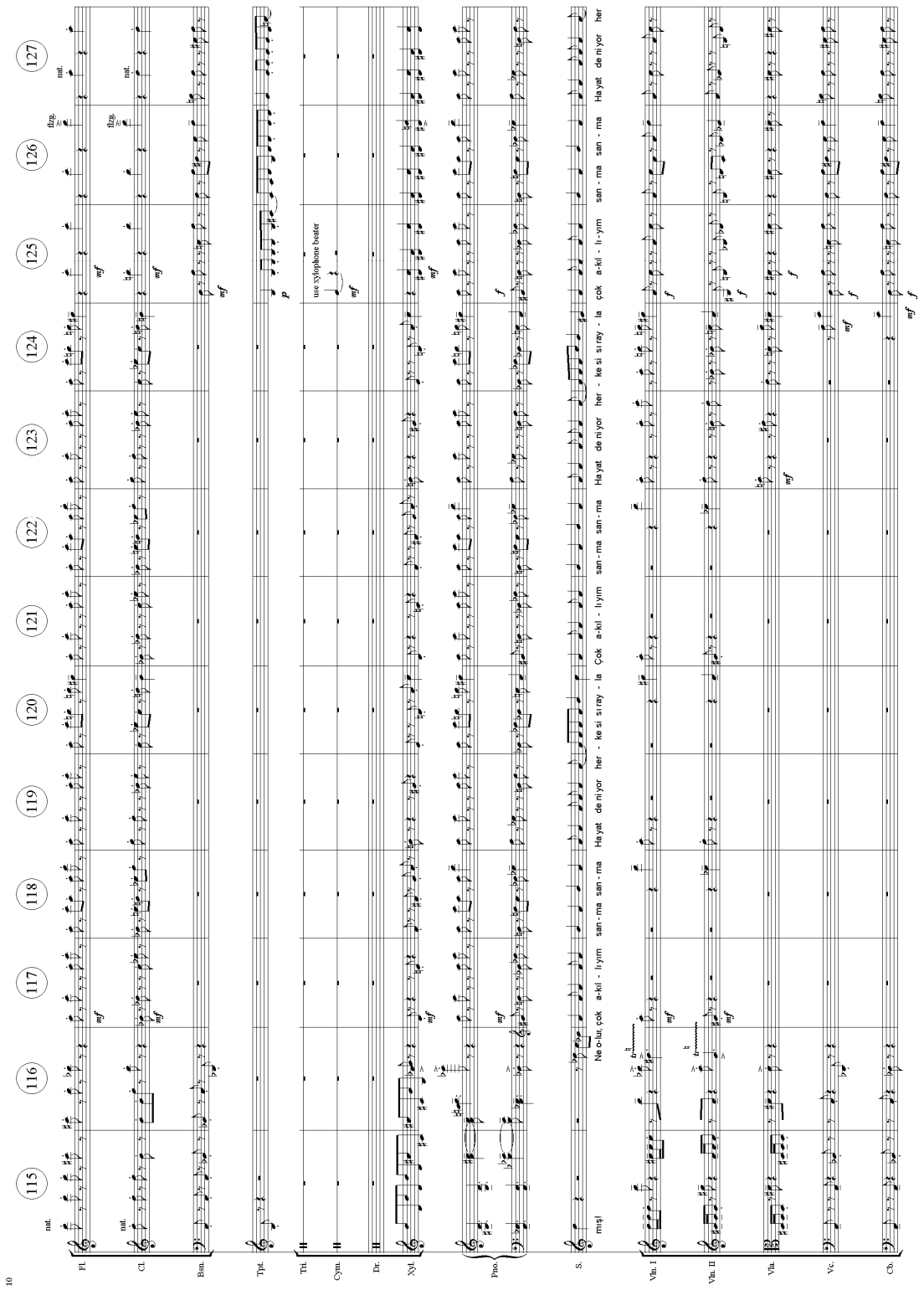

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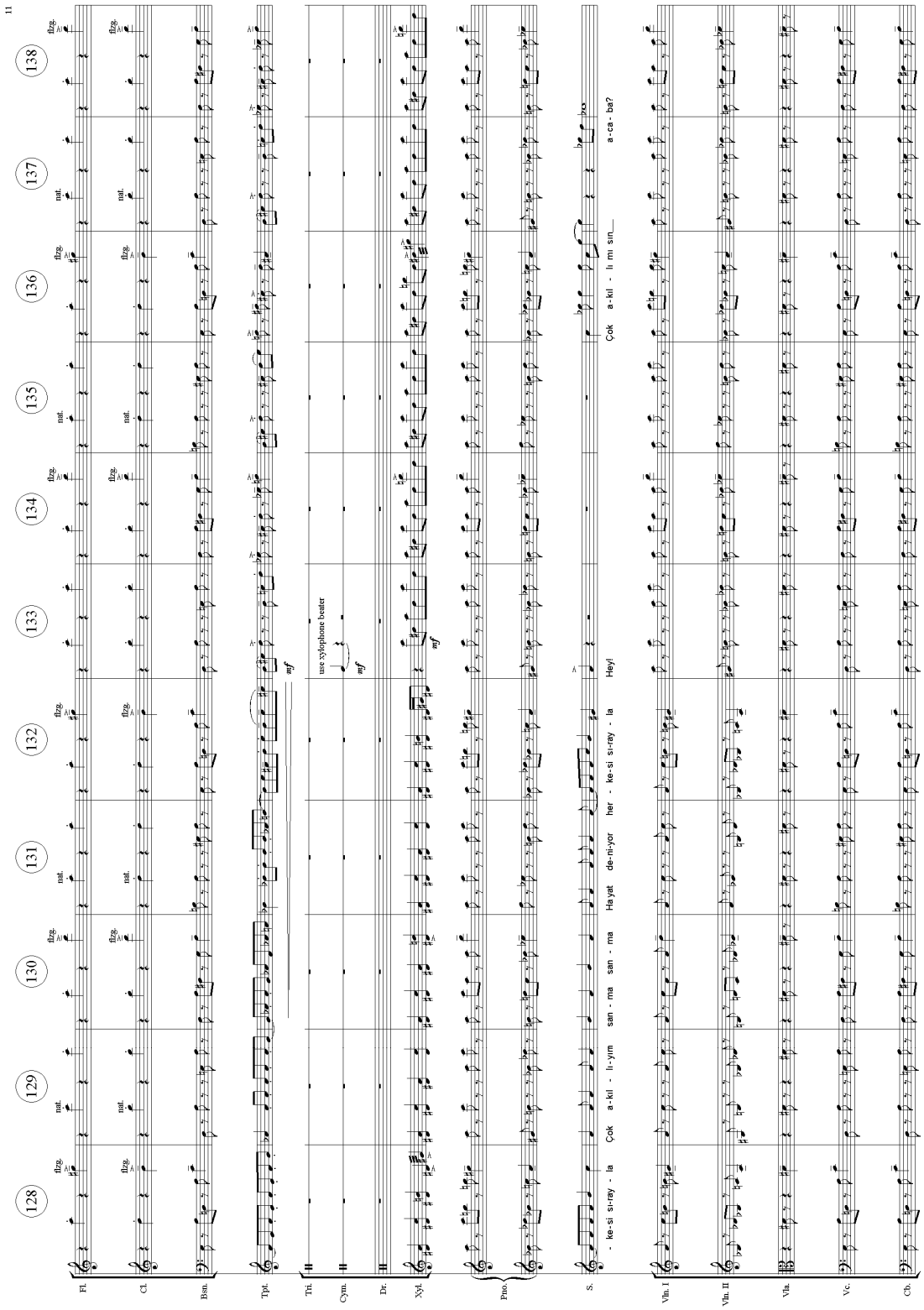

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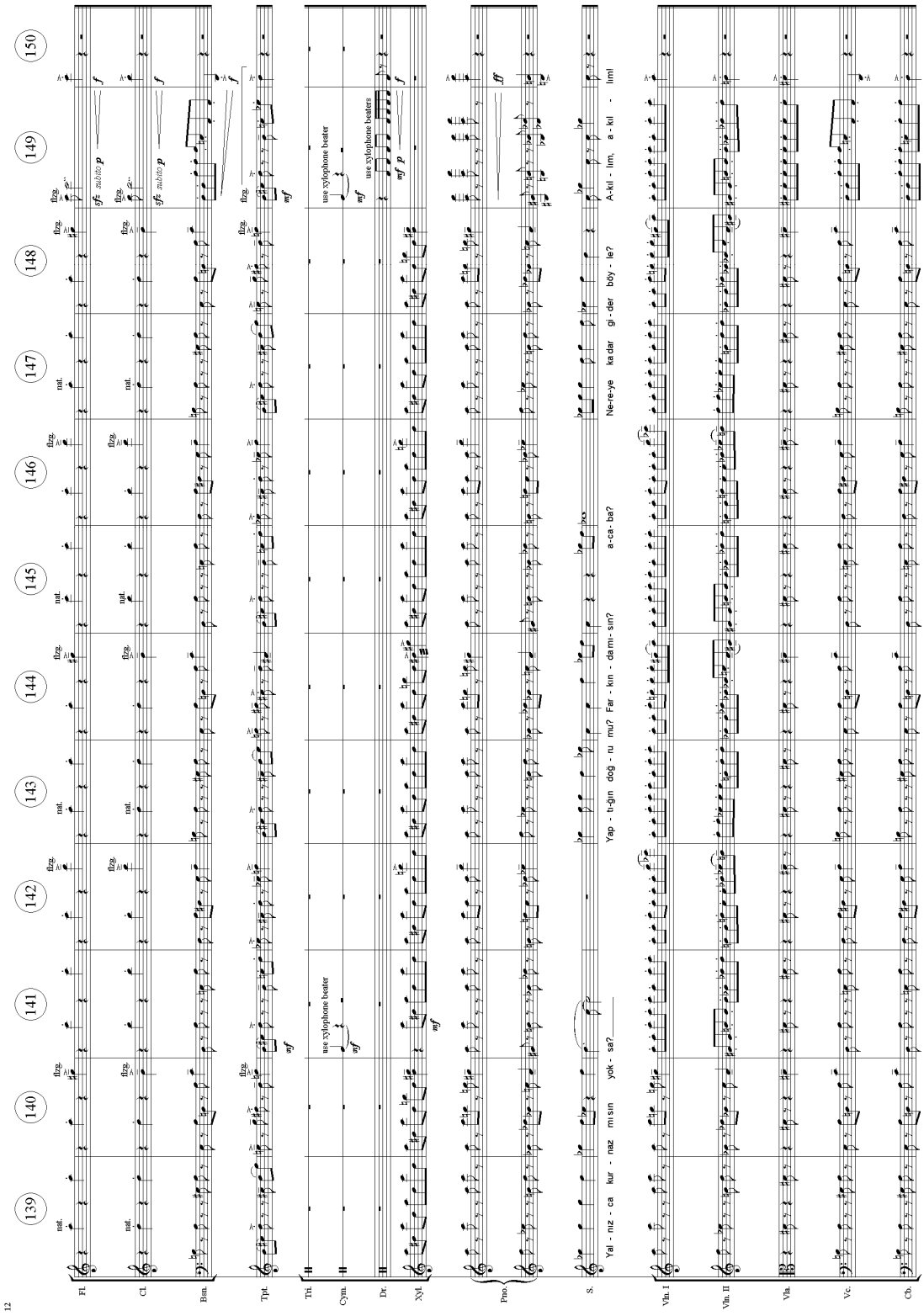

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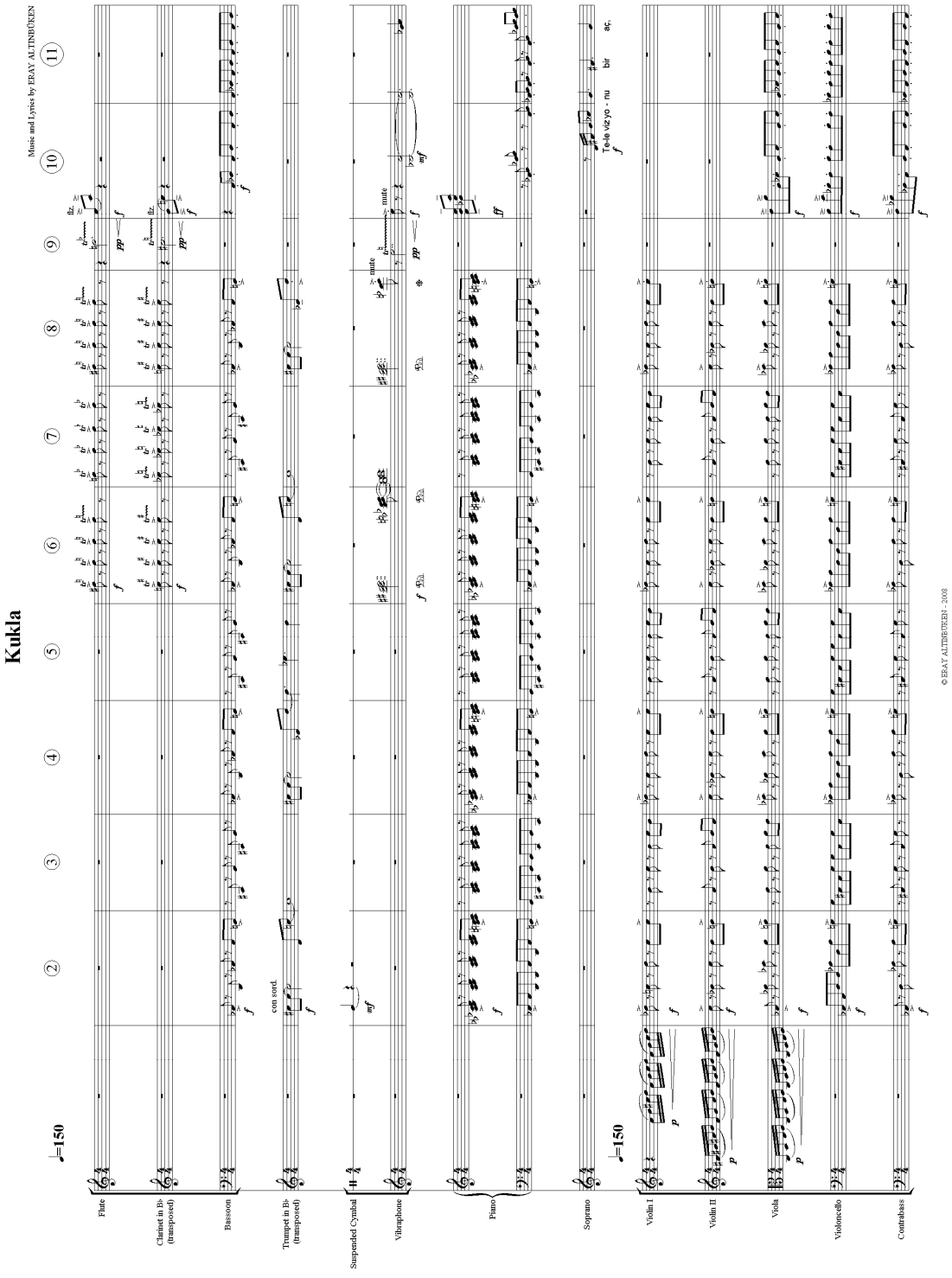

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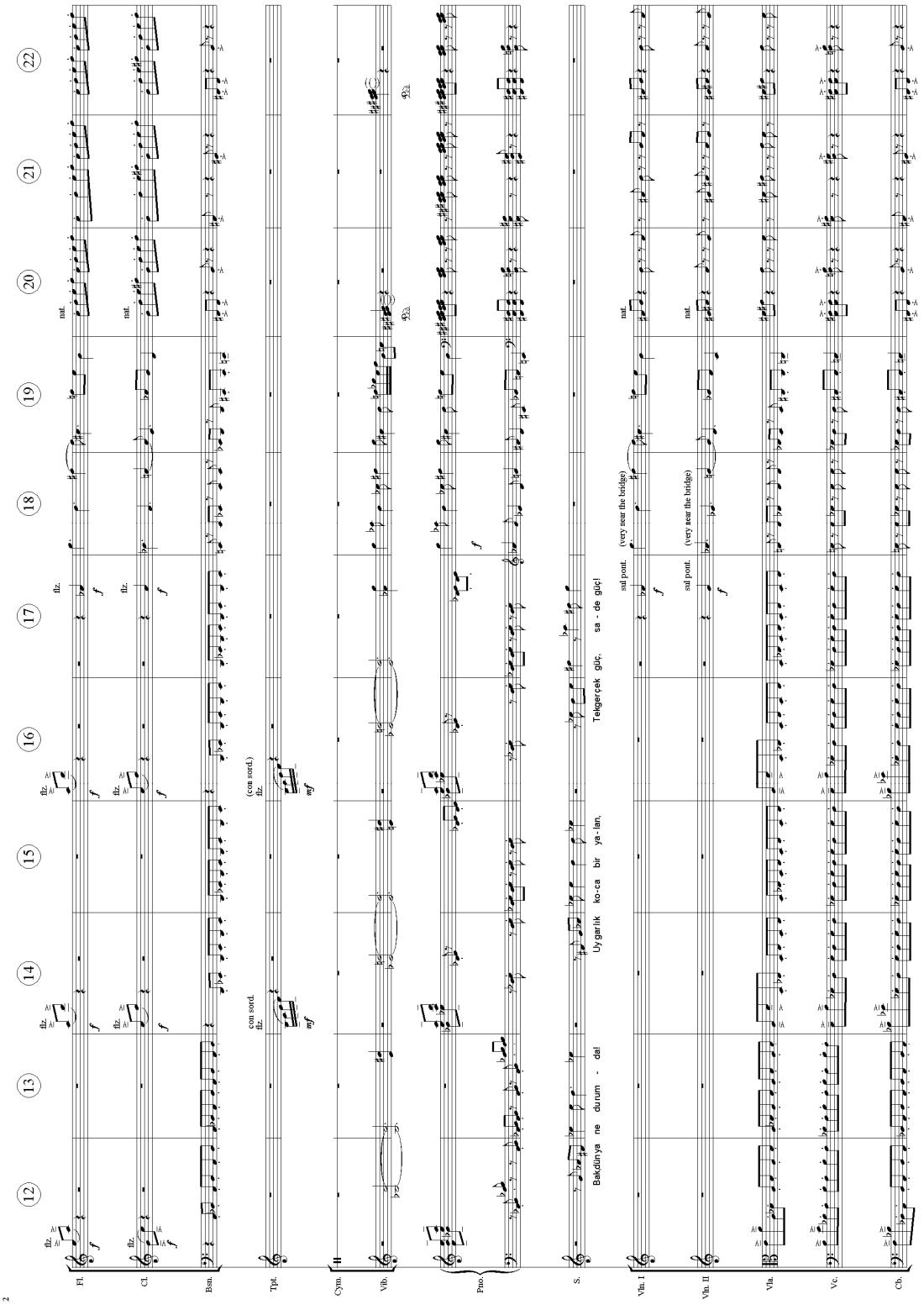

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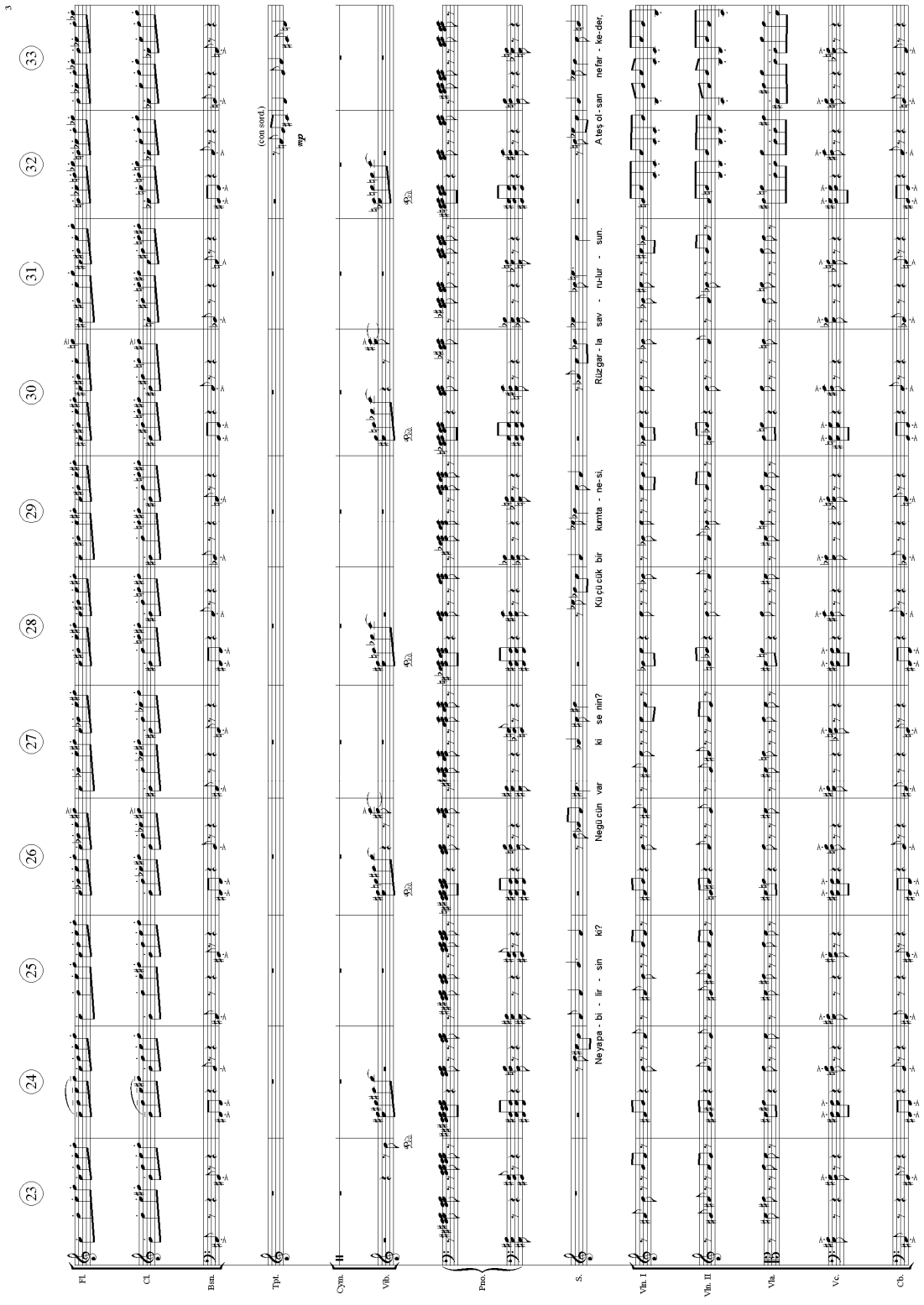

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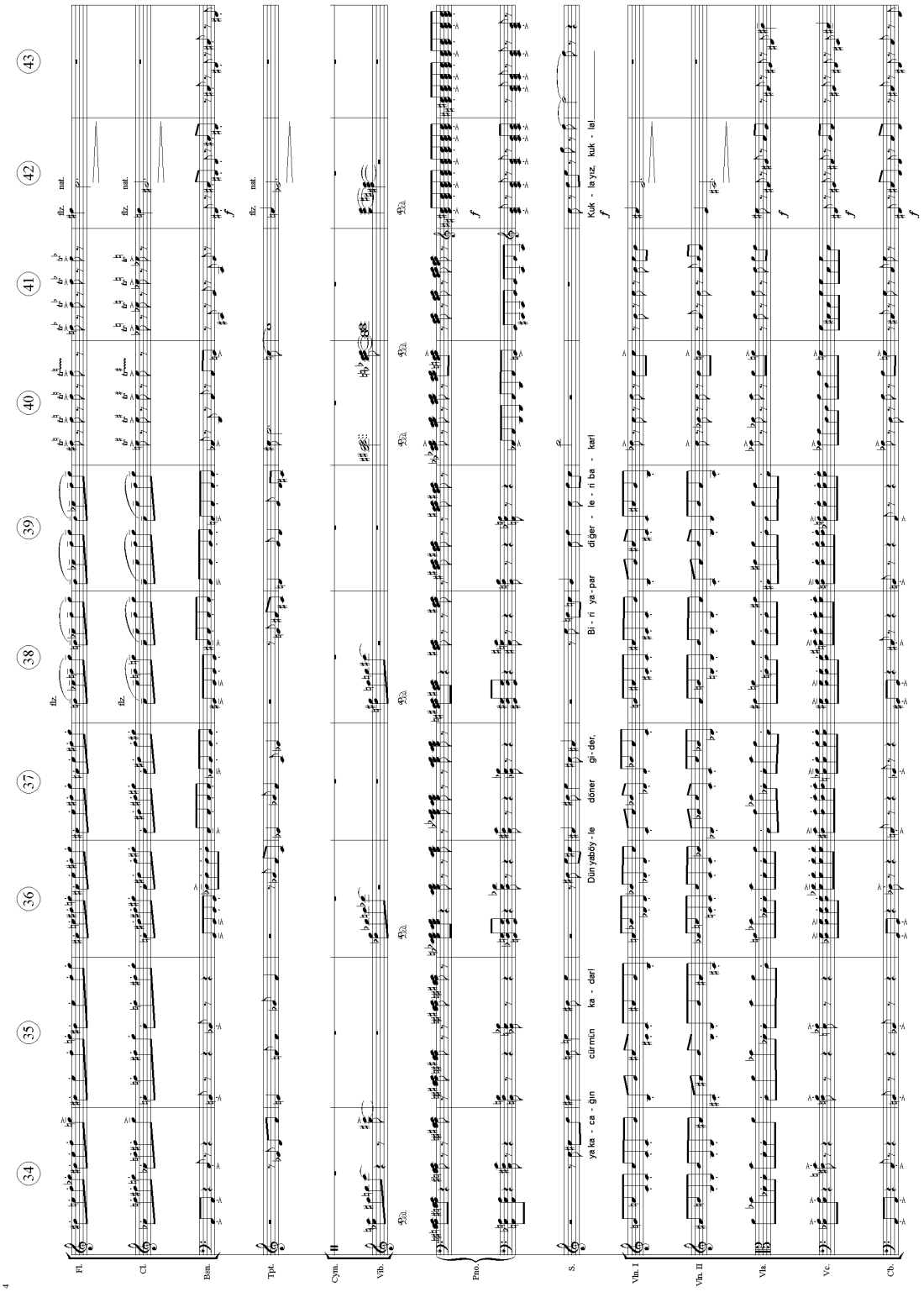

Figure A.16 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 4

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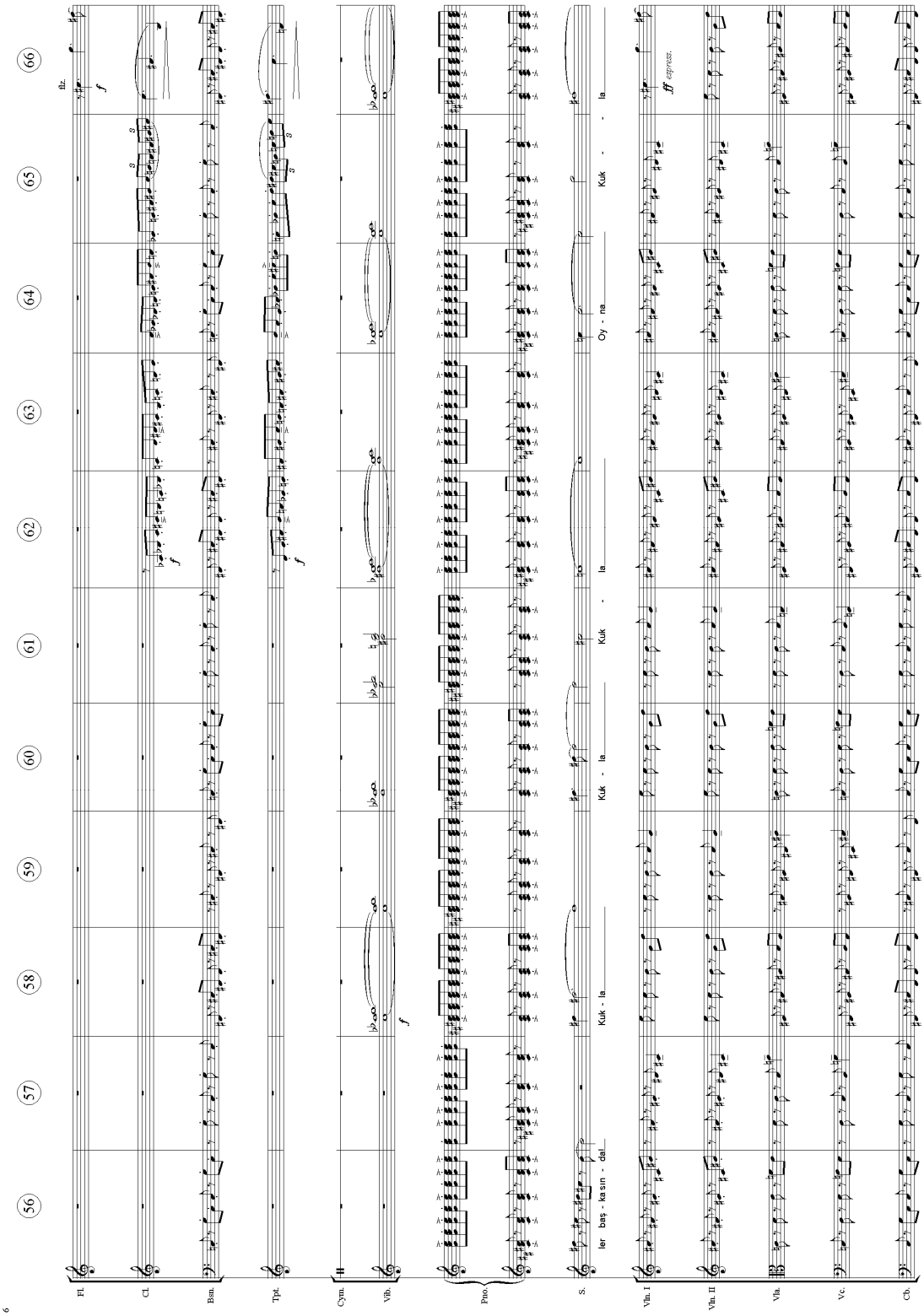

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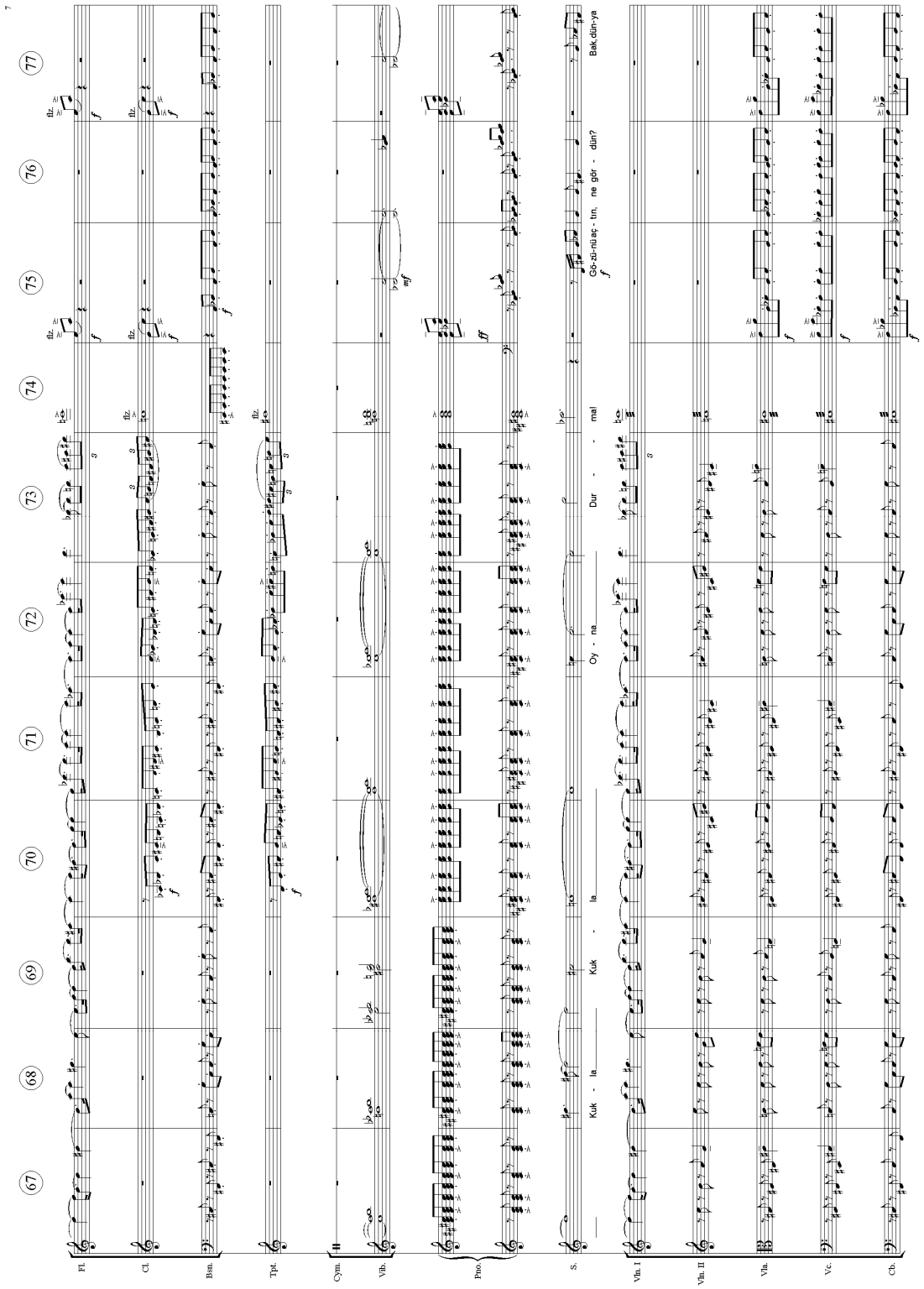

Figure A.19 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 7

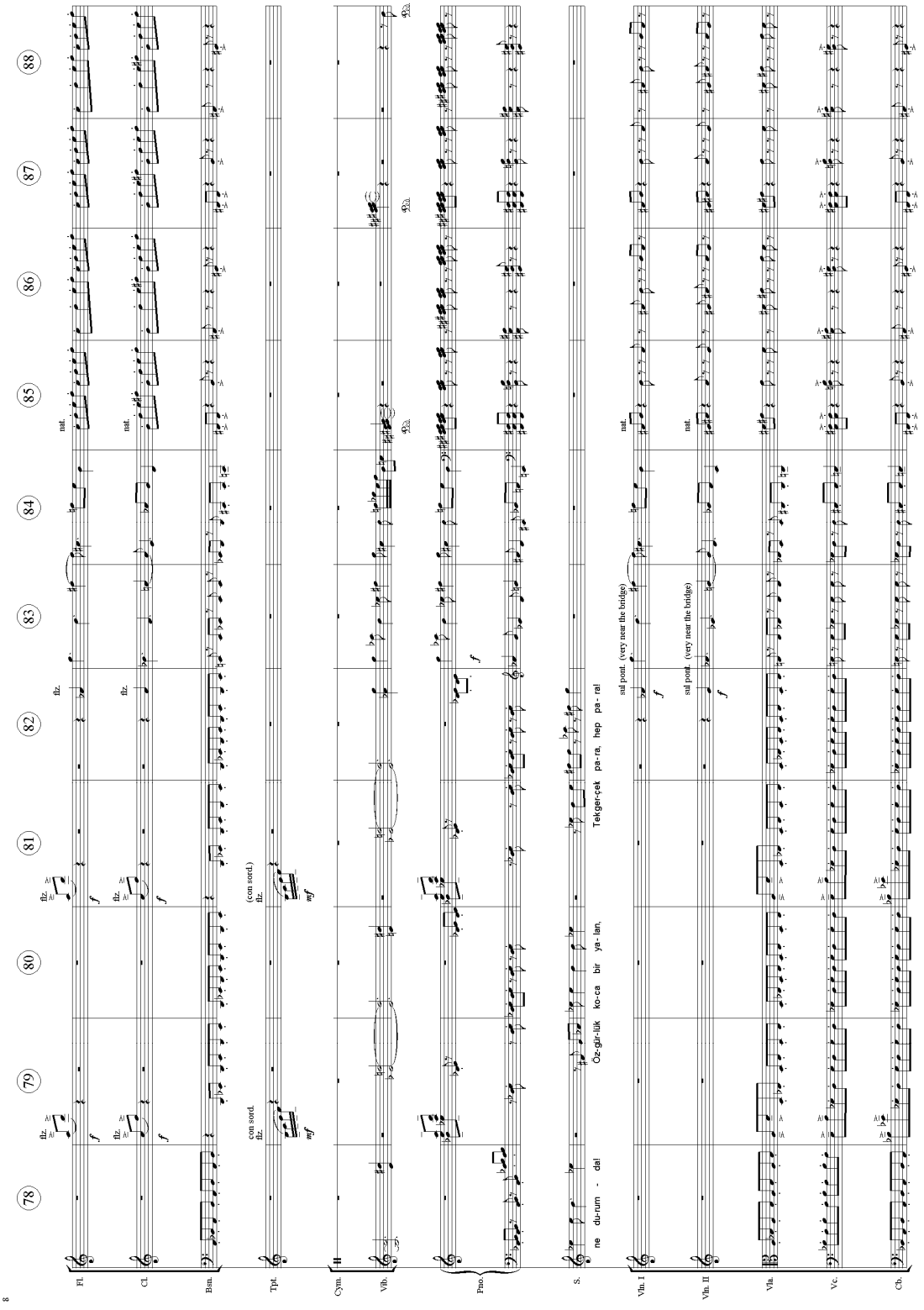

Figure A.20 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 8

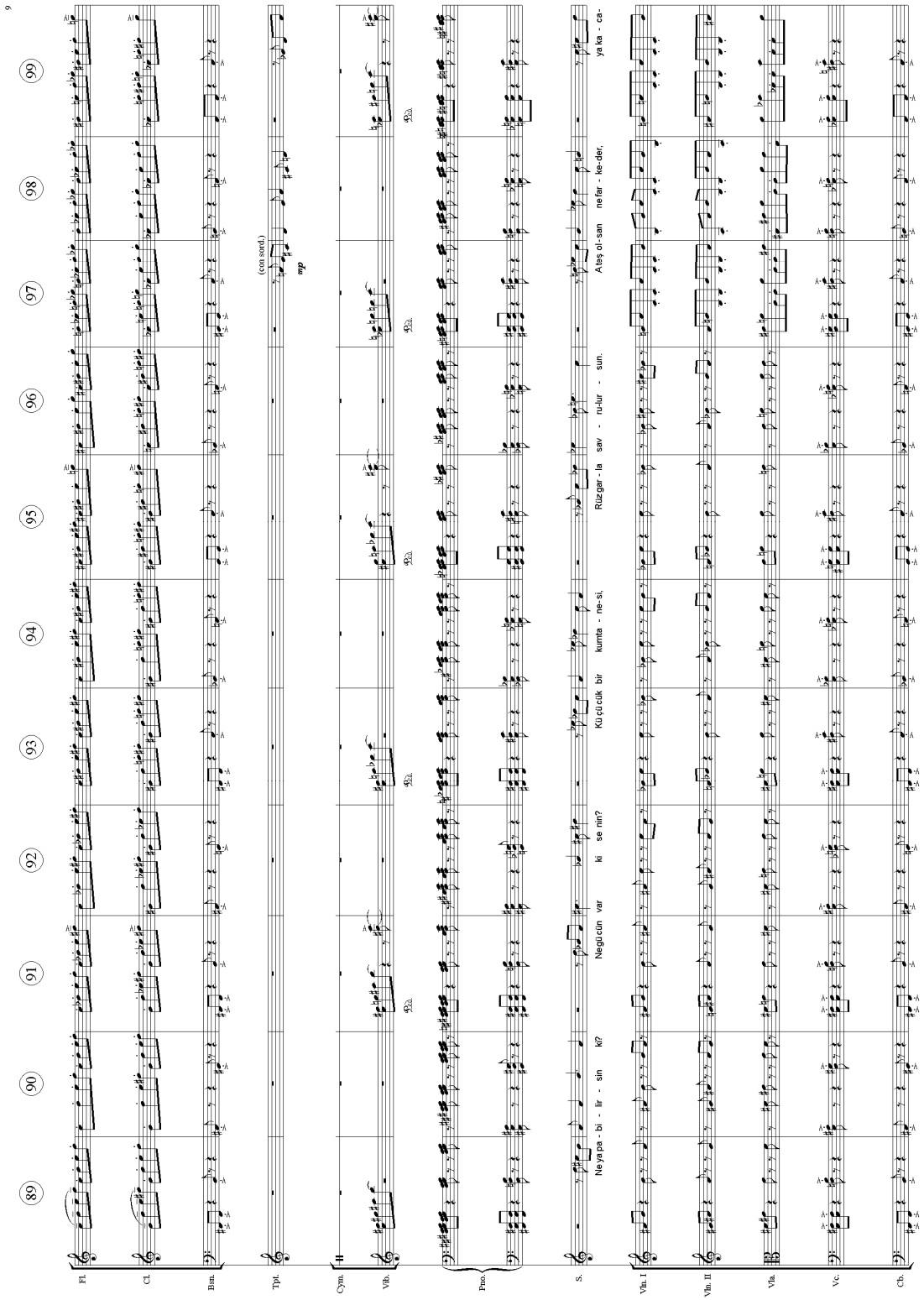

Figure A.21 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 9

Figure A.22 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 10

Figure A.23 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 11

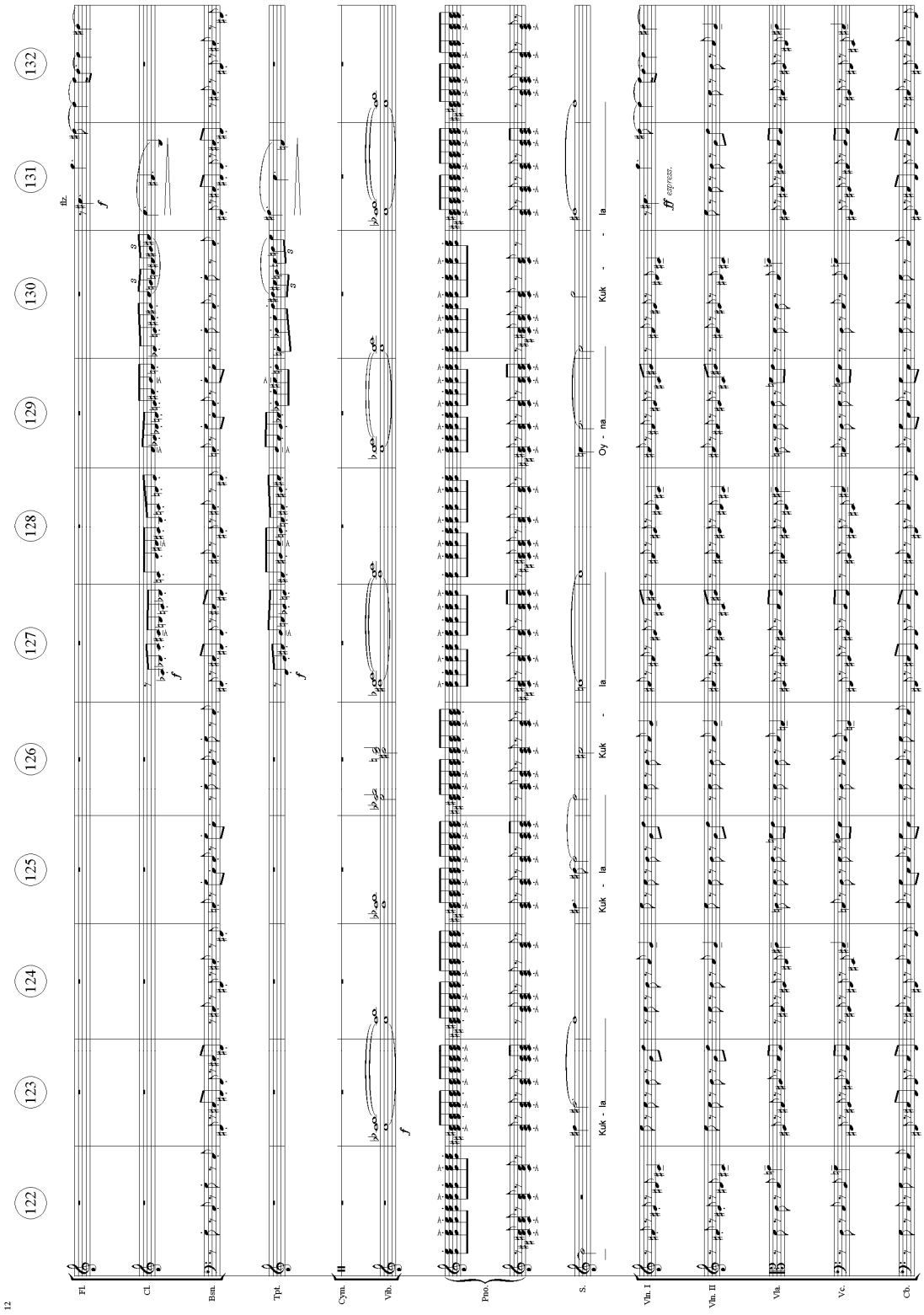

Figure A.24 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 12

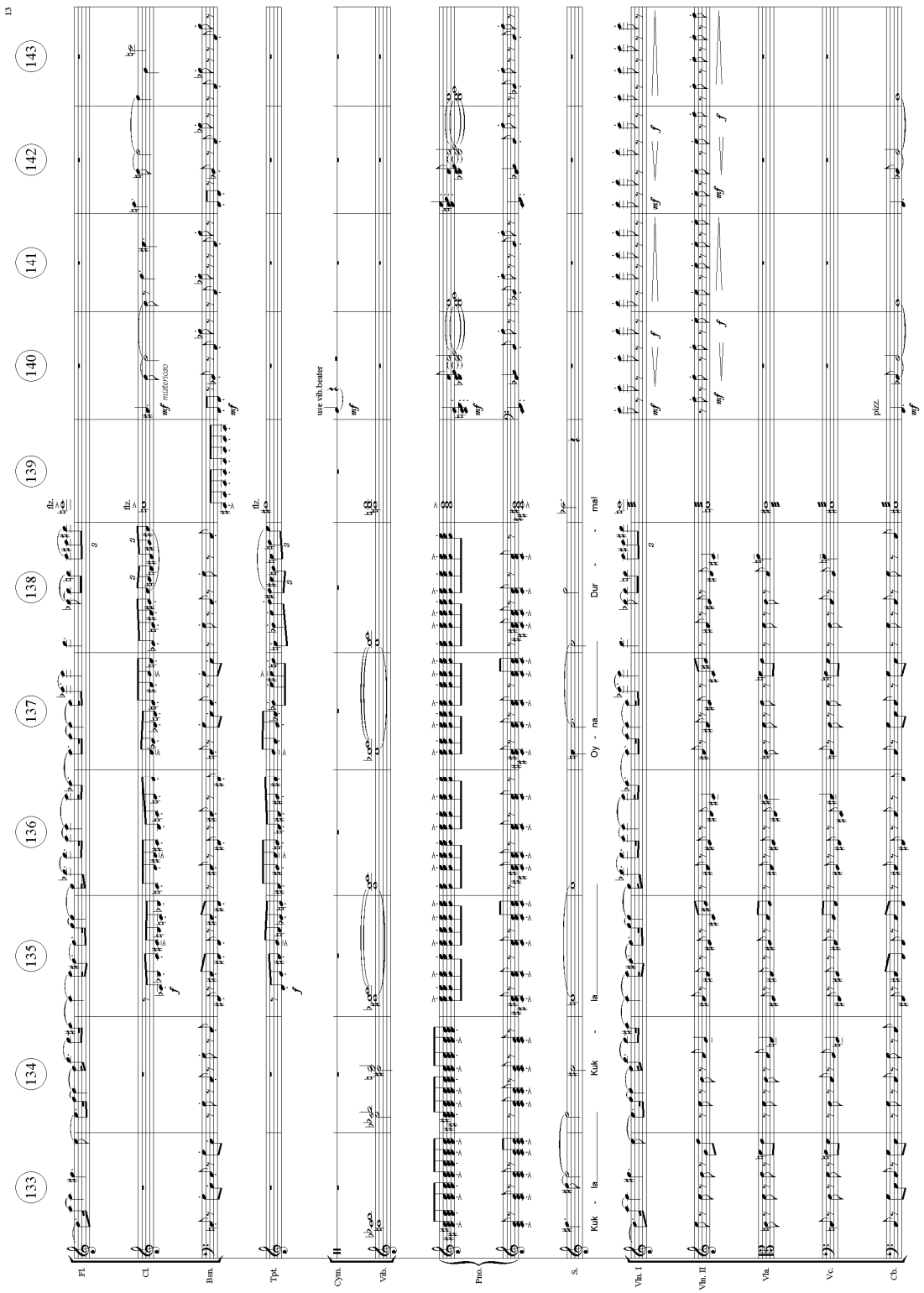

Figure A.25 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 13

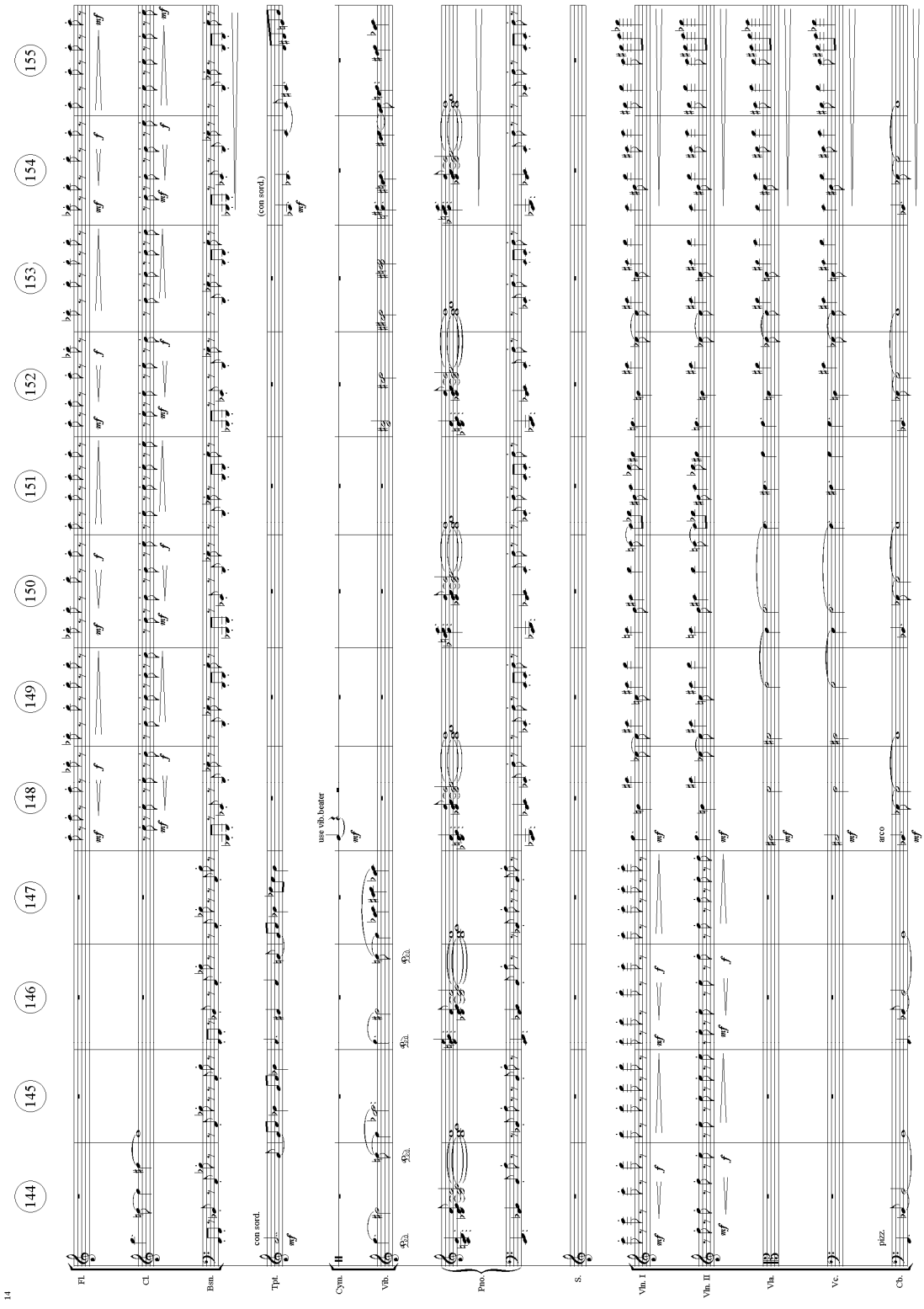

Figure A.26 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 14

Figure A.27 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 15

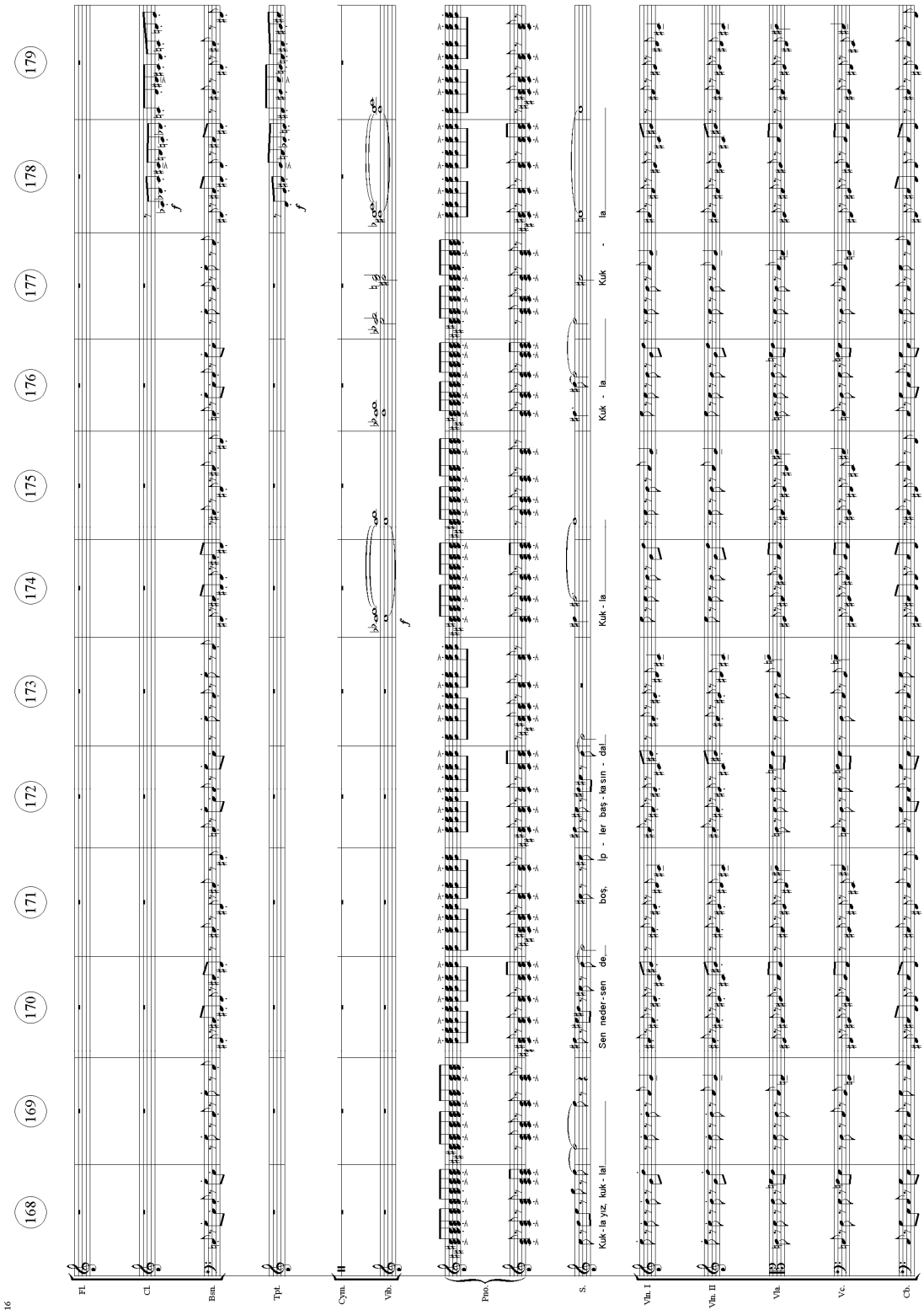

Figure A.28 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 16

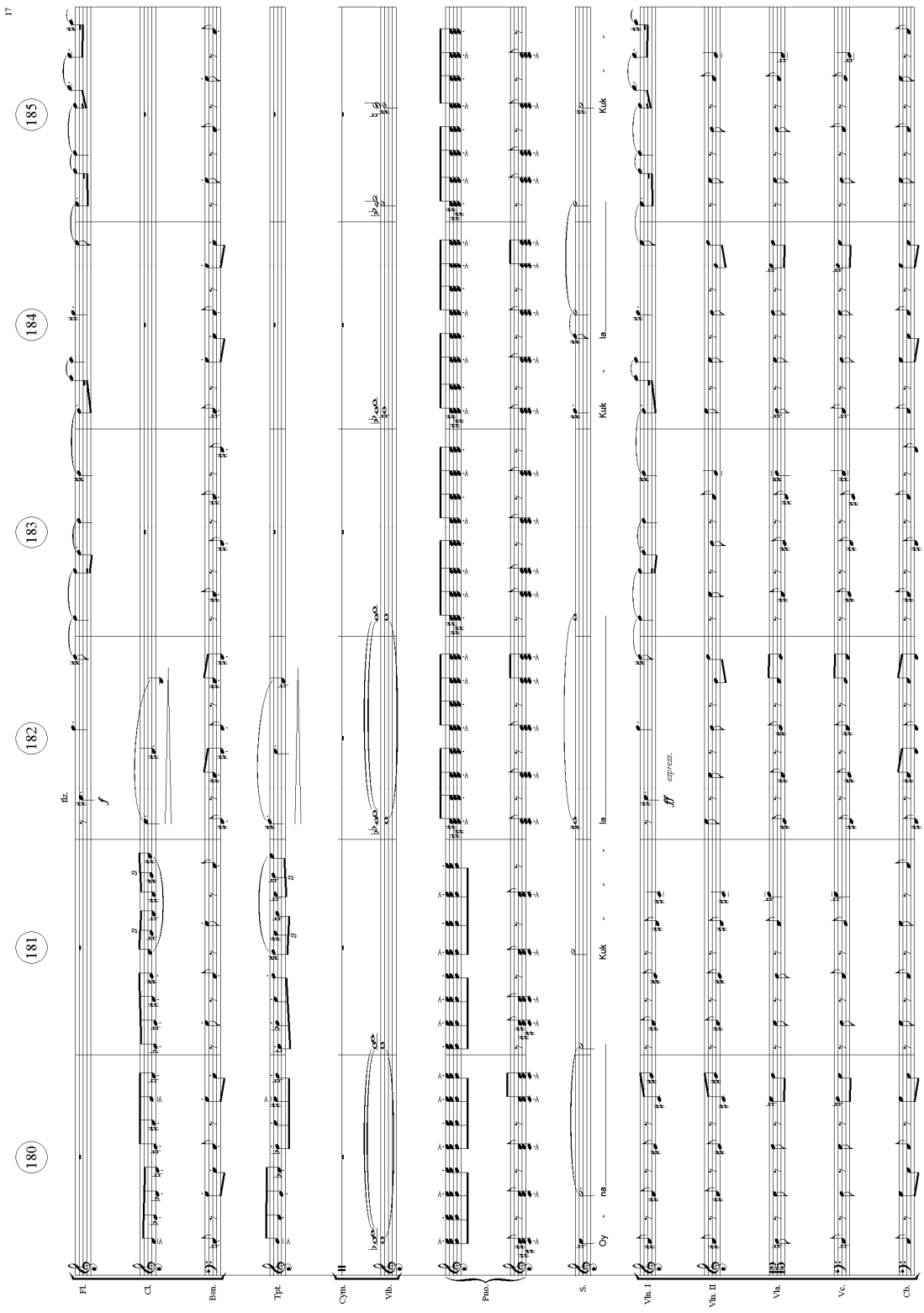

Figure A.29 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 17

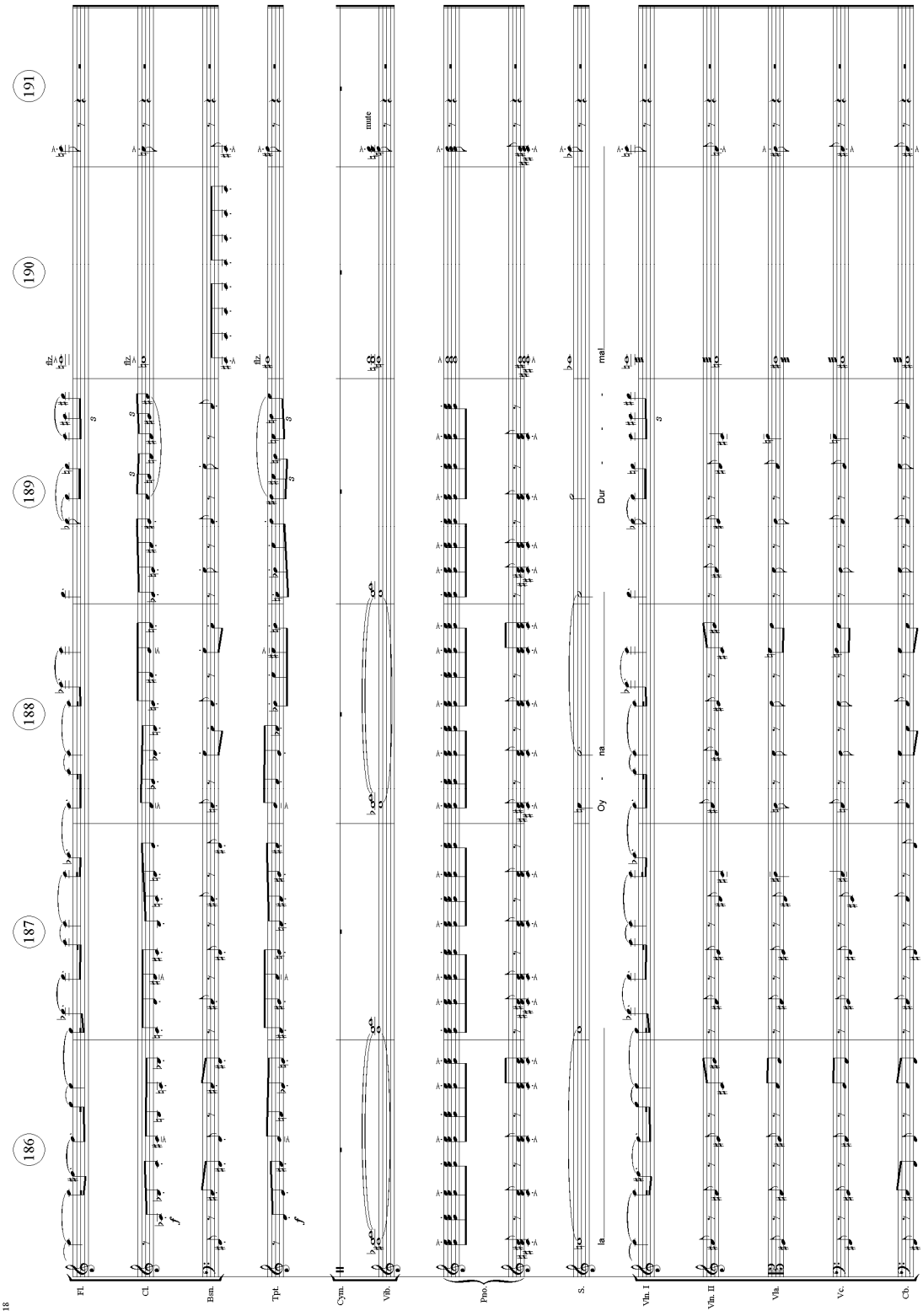

Figure A.30 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 2, page 18

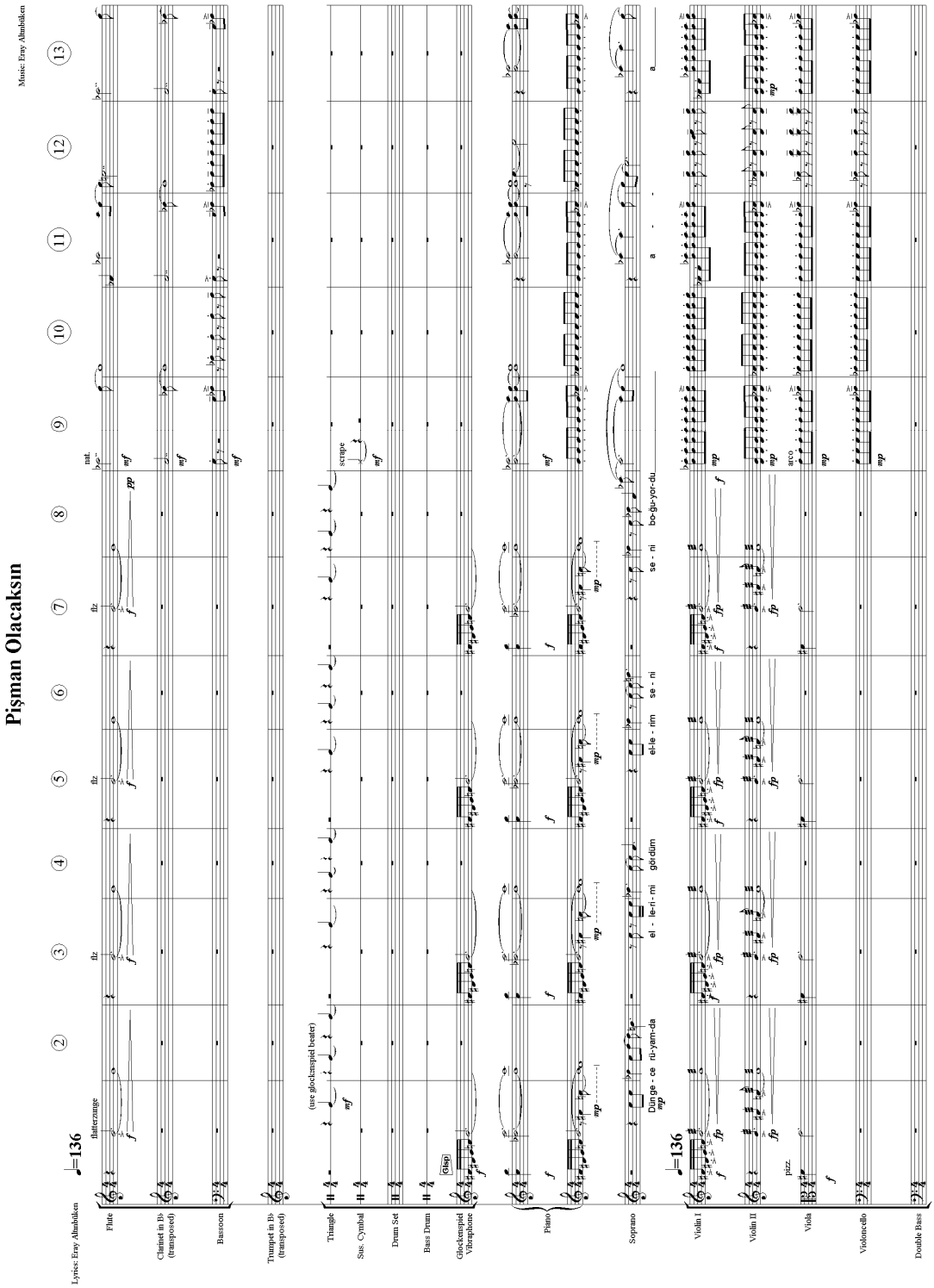

Figure A.31 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 1

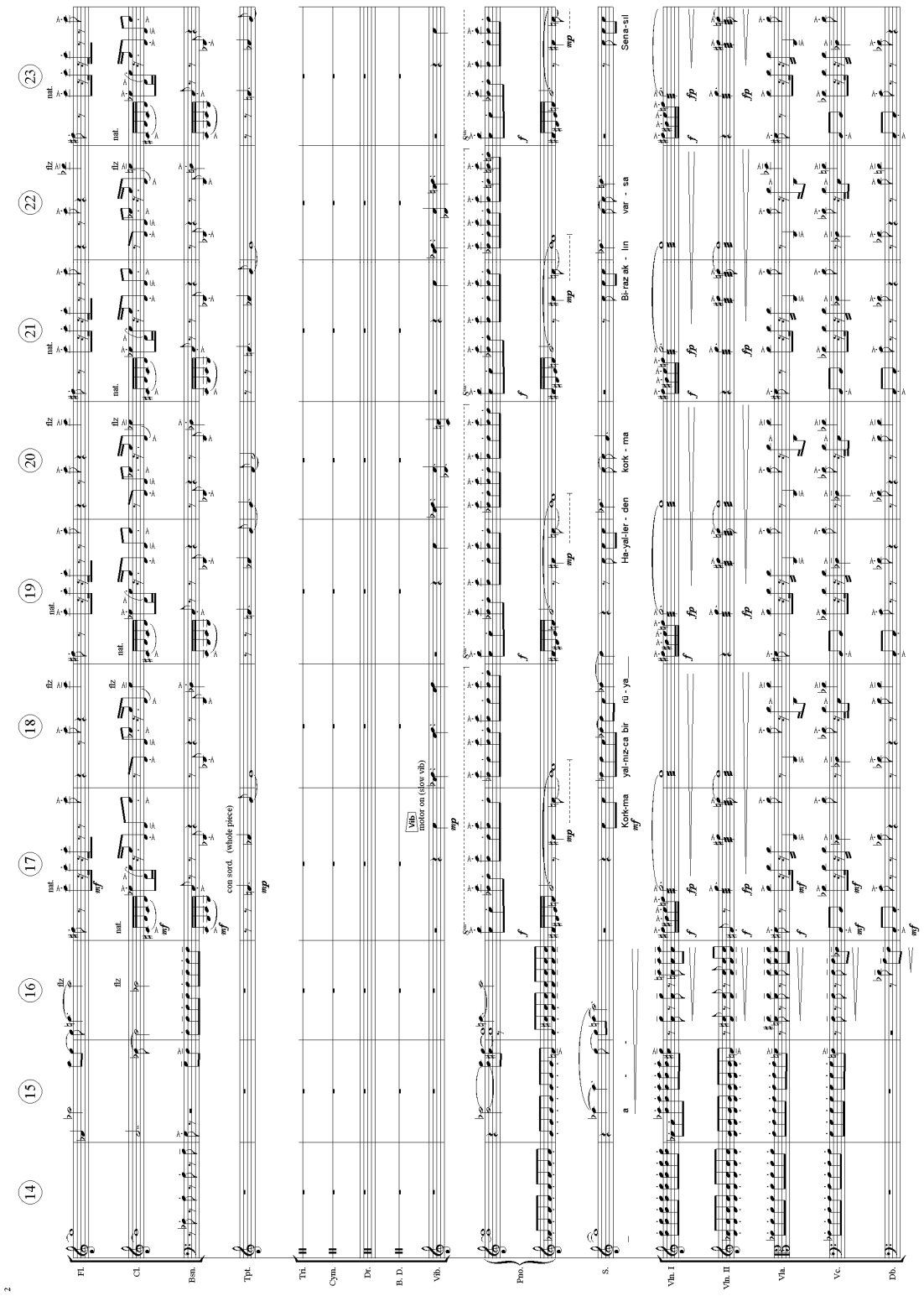

Figure A.32 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 2

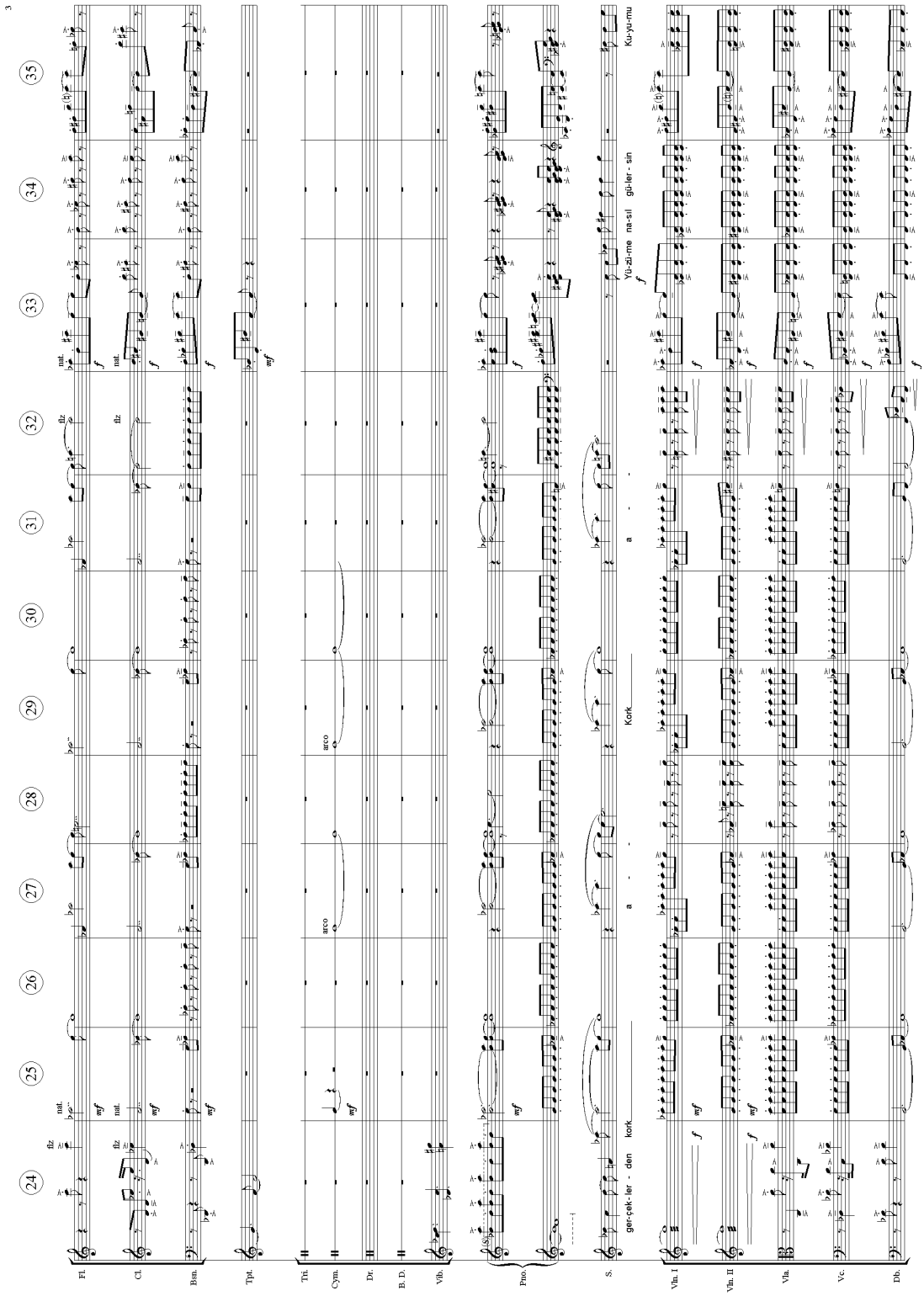

Figure A.33 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 3

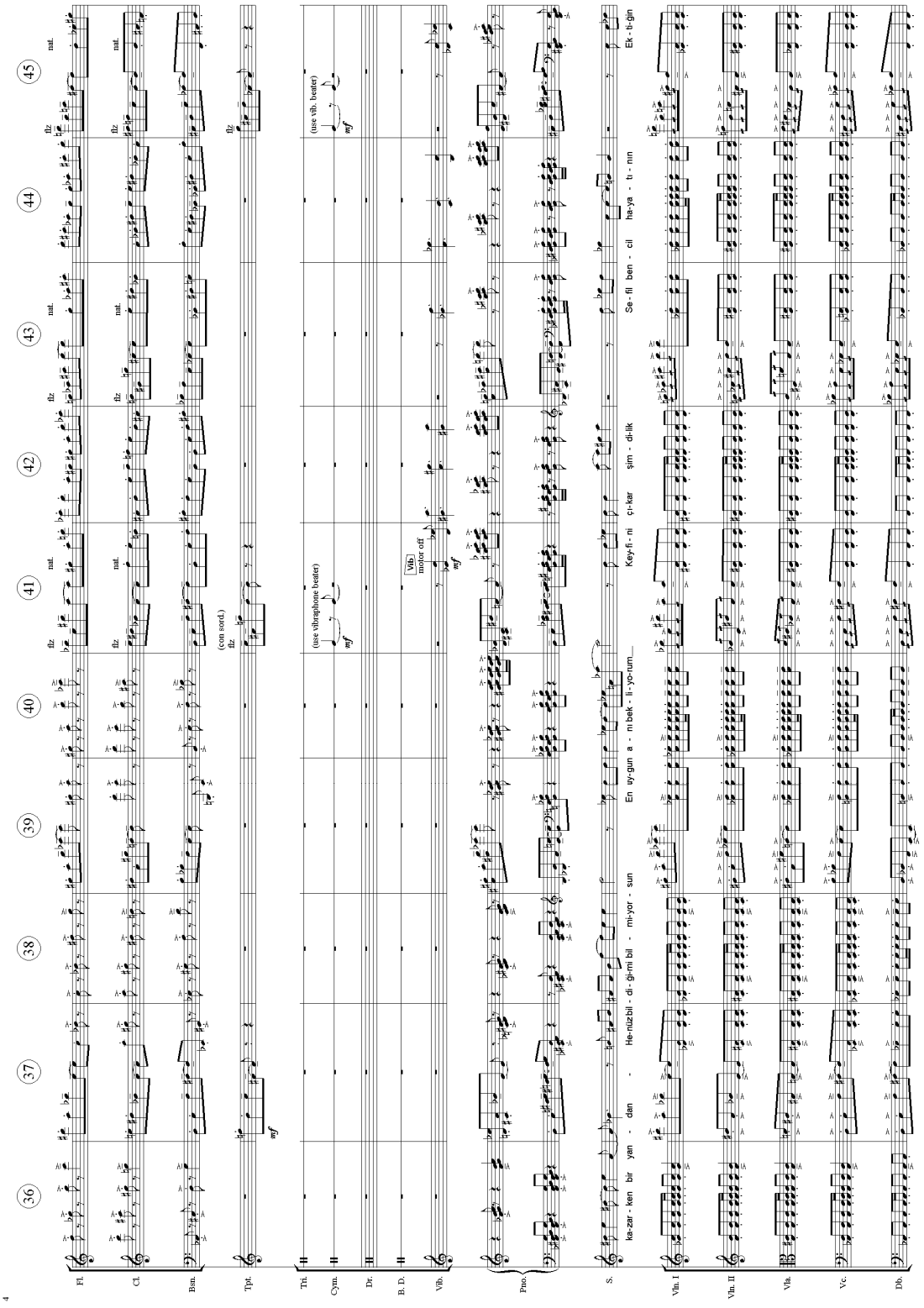

Figure A.34 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 4

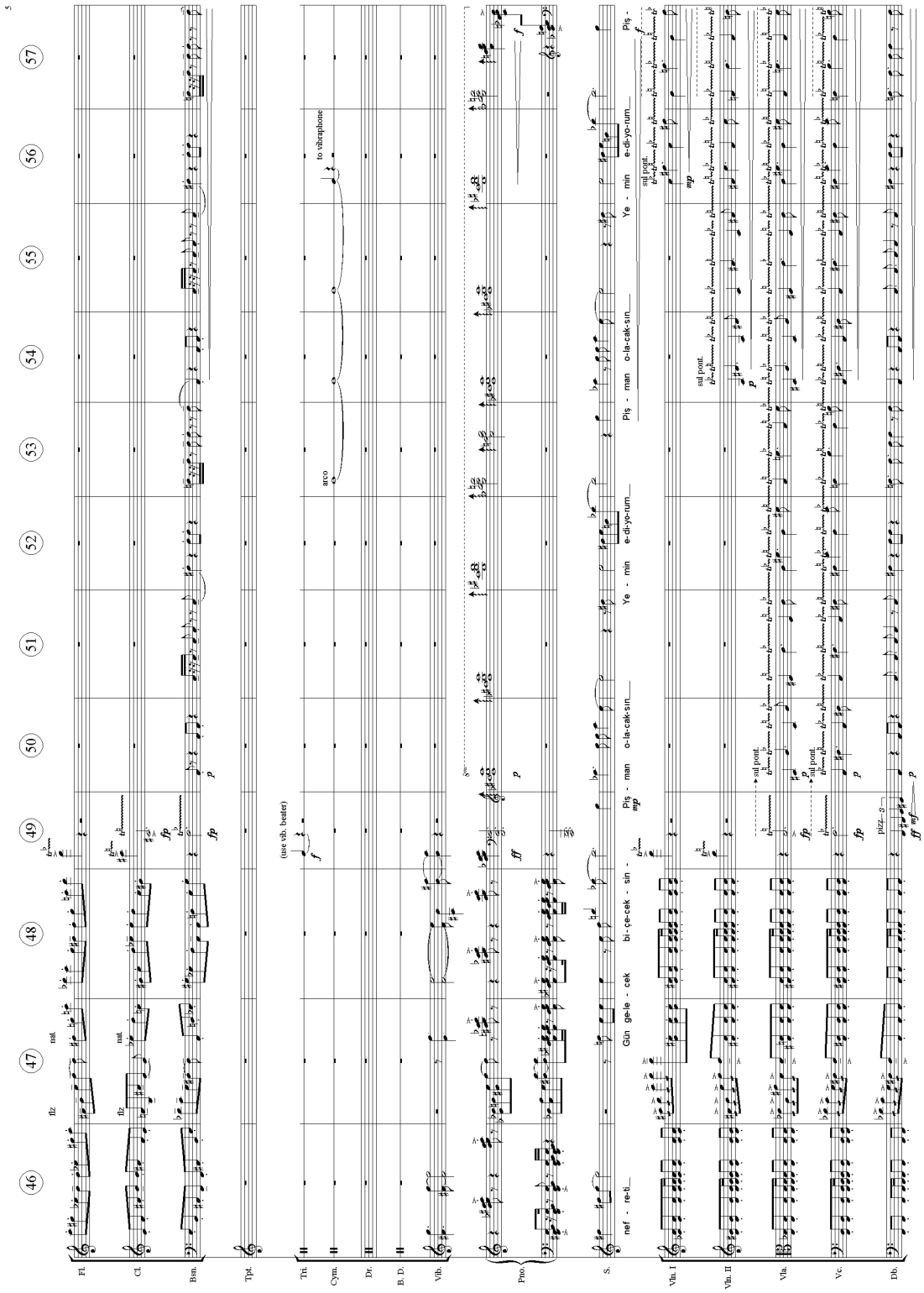

Figure A.35 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 5

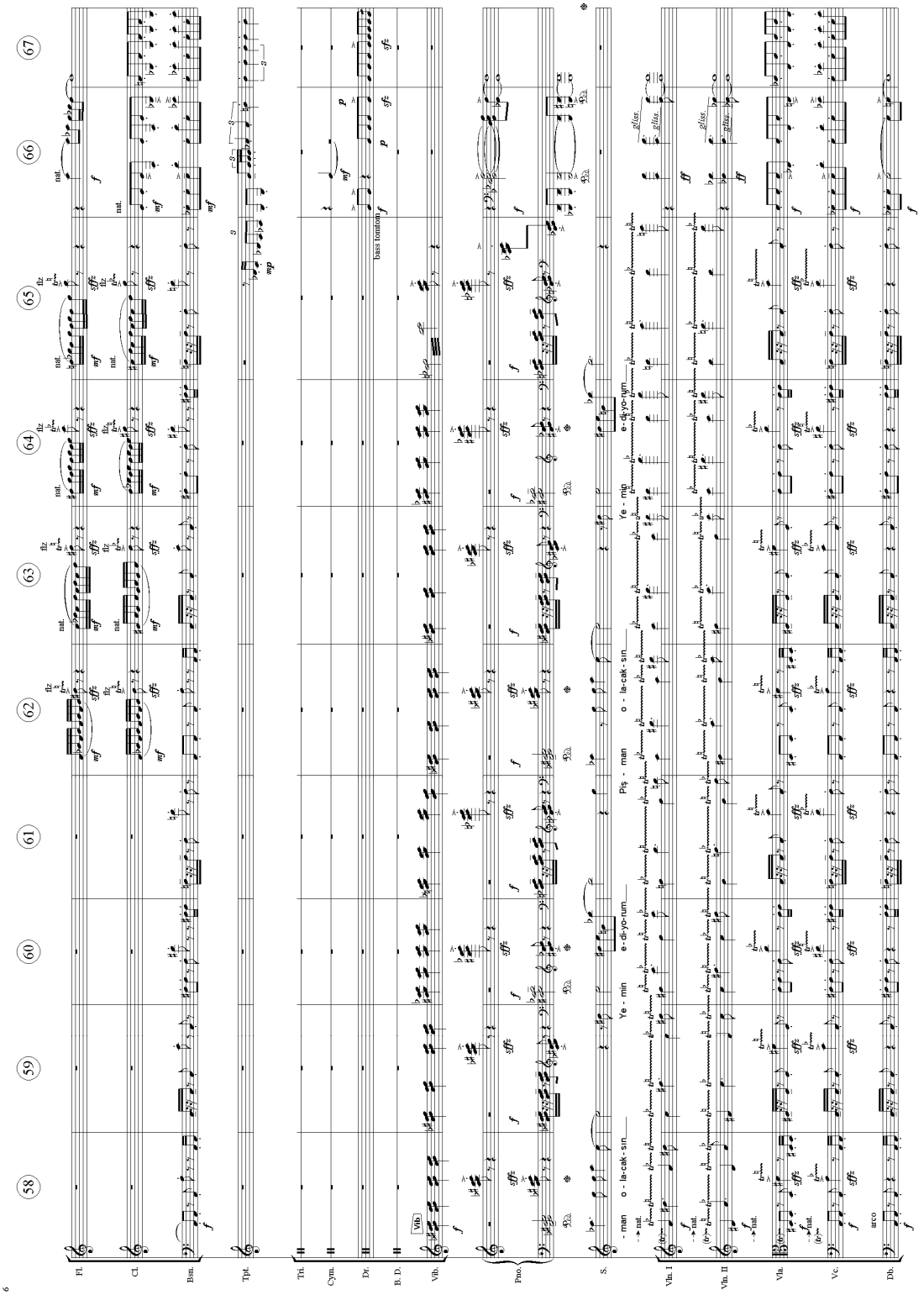

Figure A.36 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 6

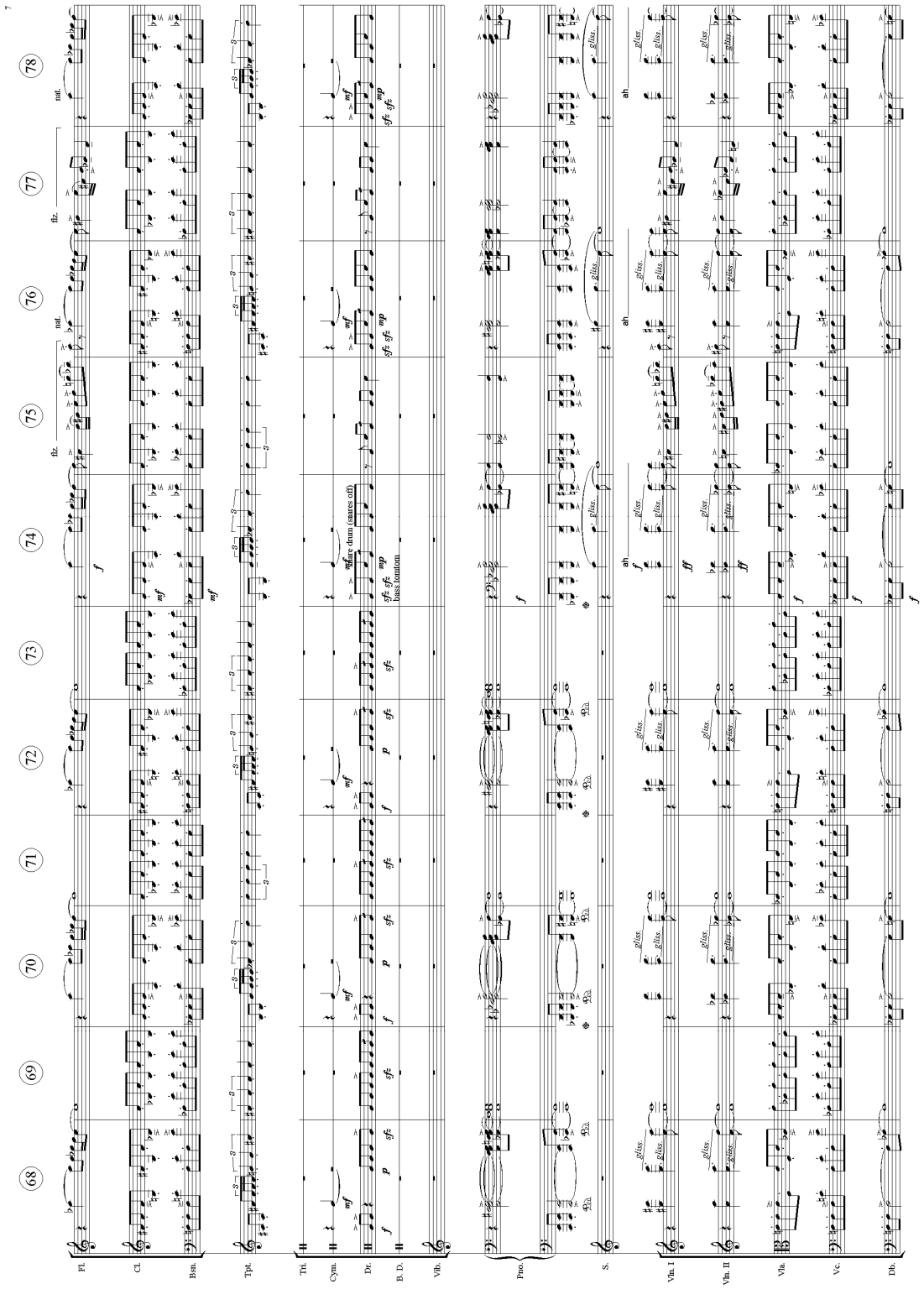

Figure A.37 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 7

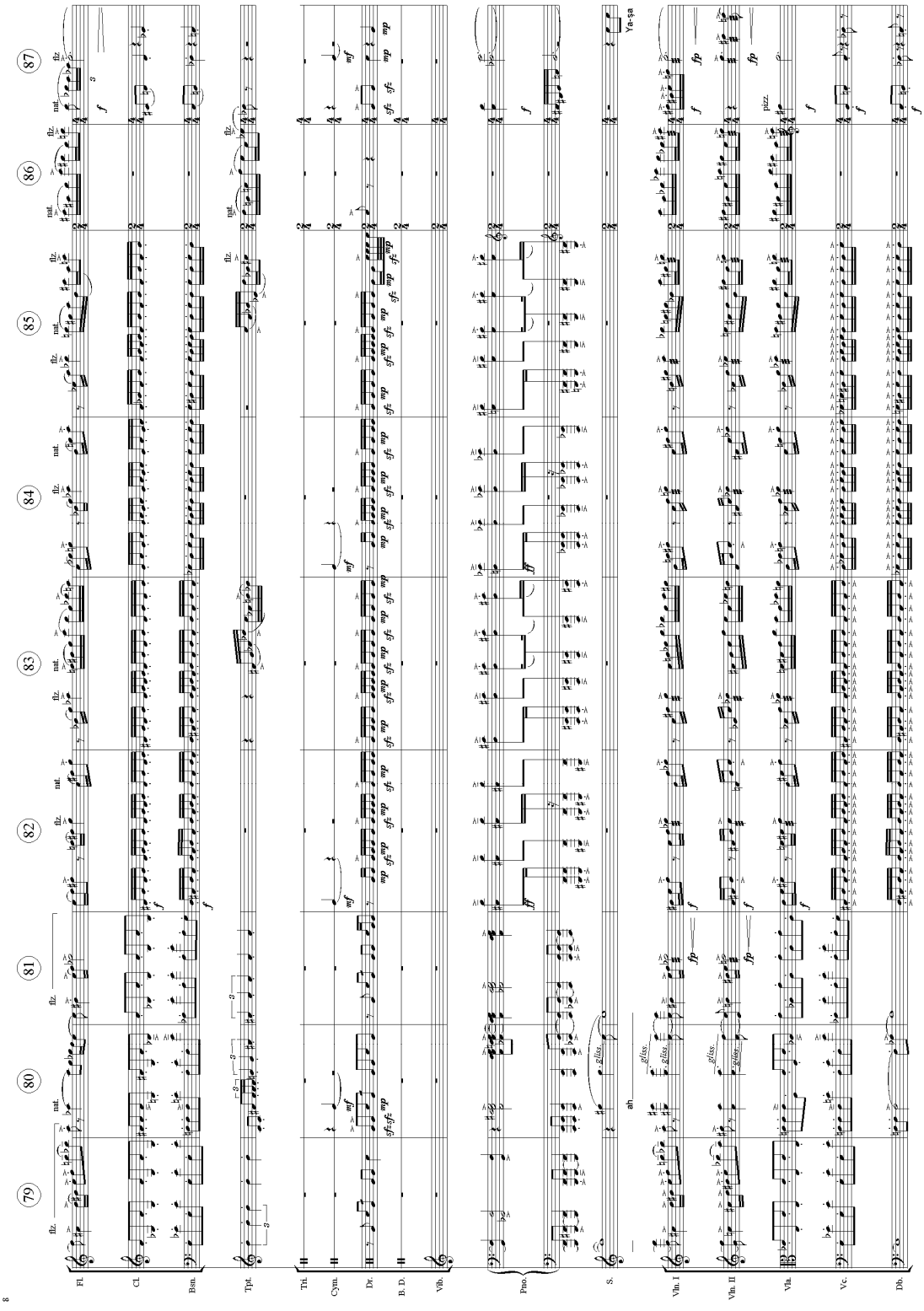

Figure A.38 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 8

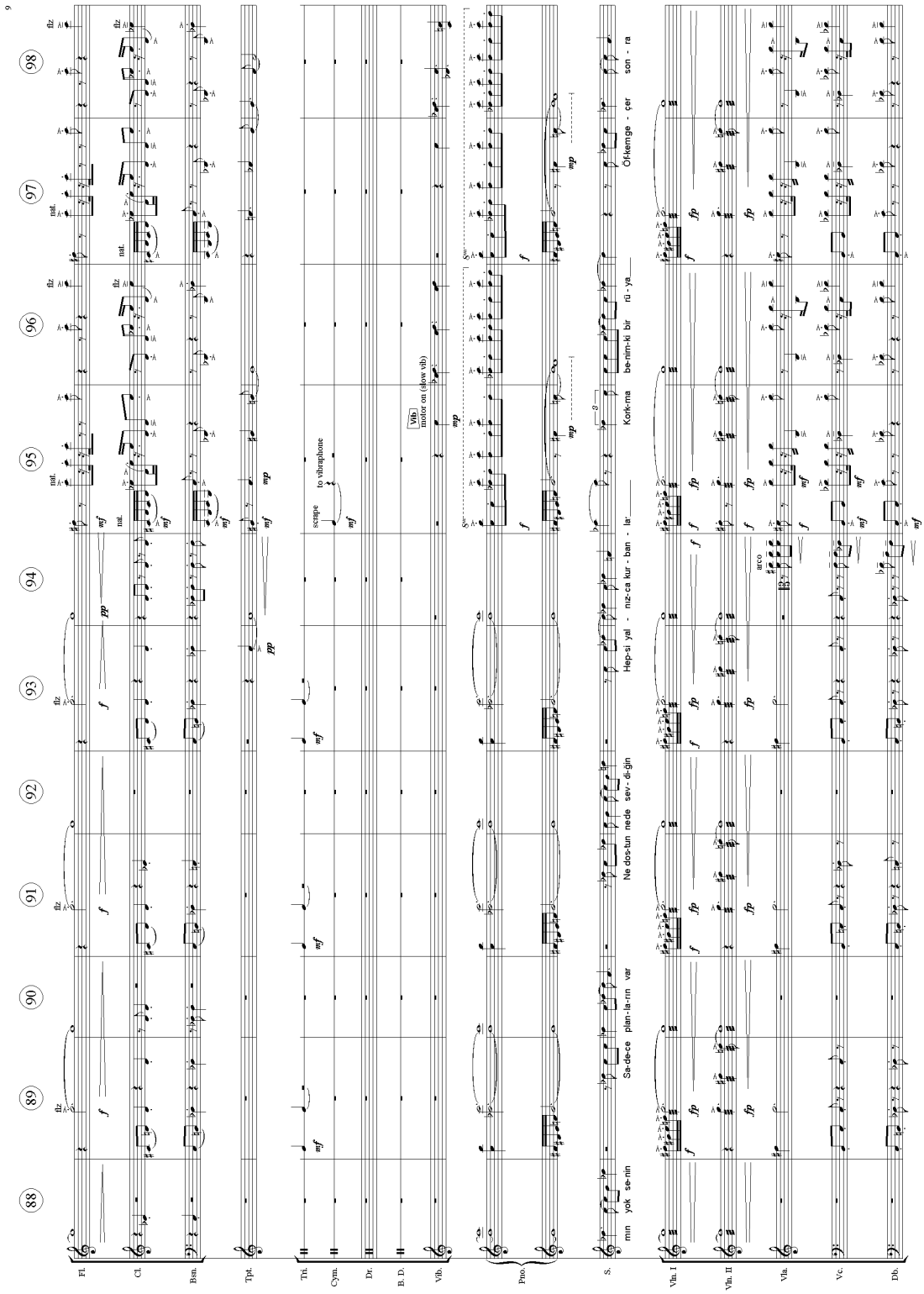

Figure A.39 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 9

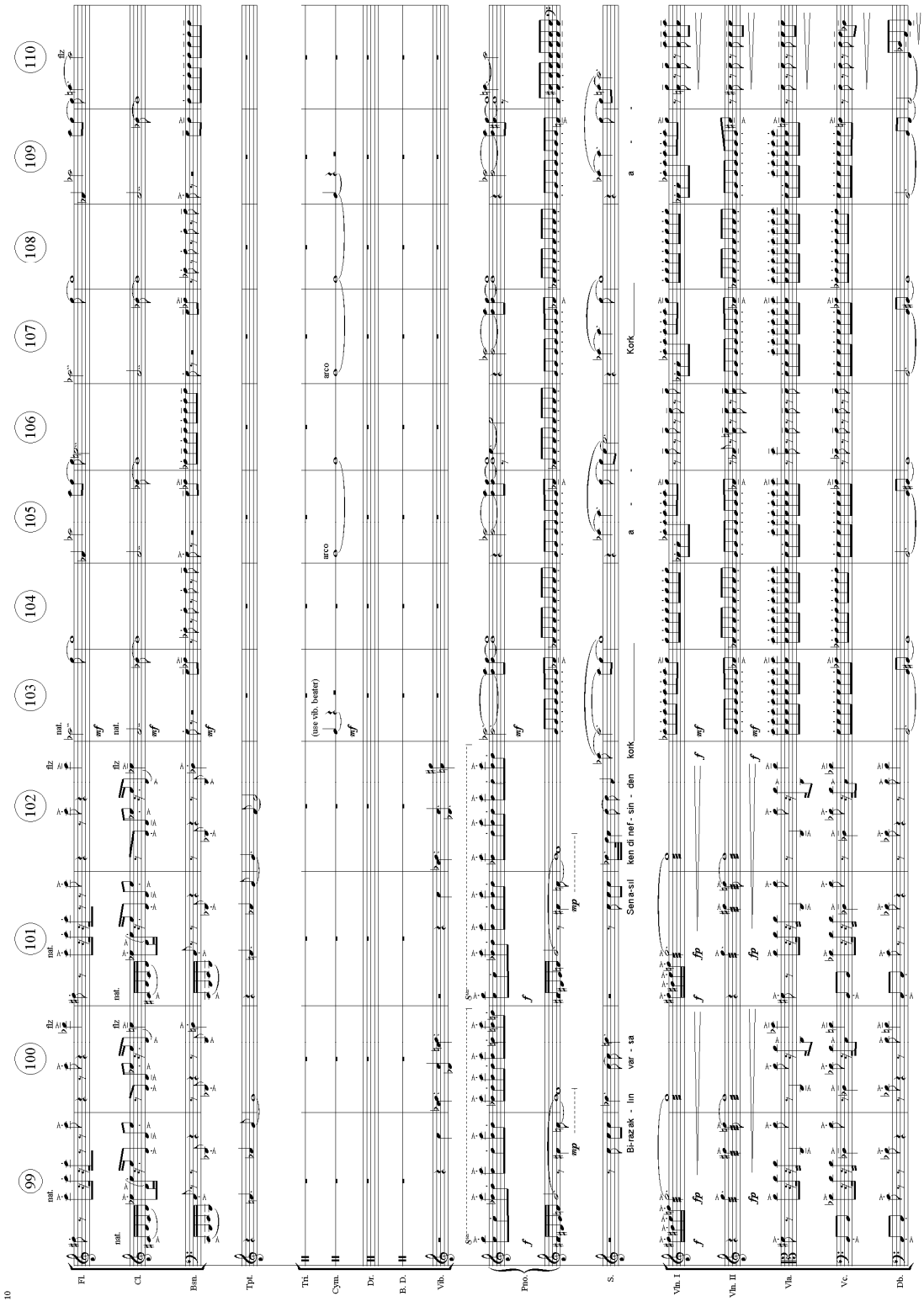

Figure A.40 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 10

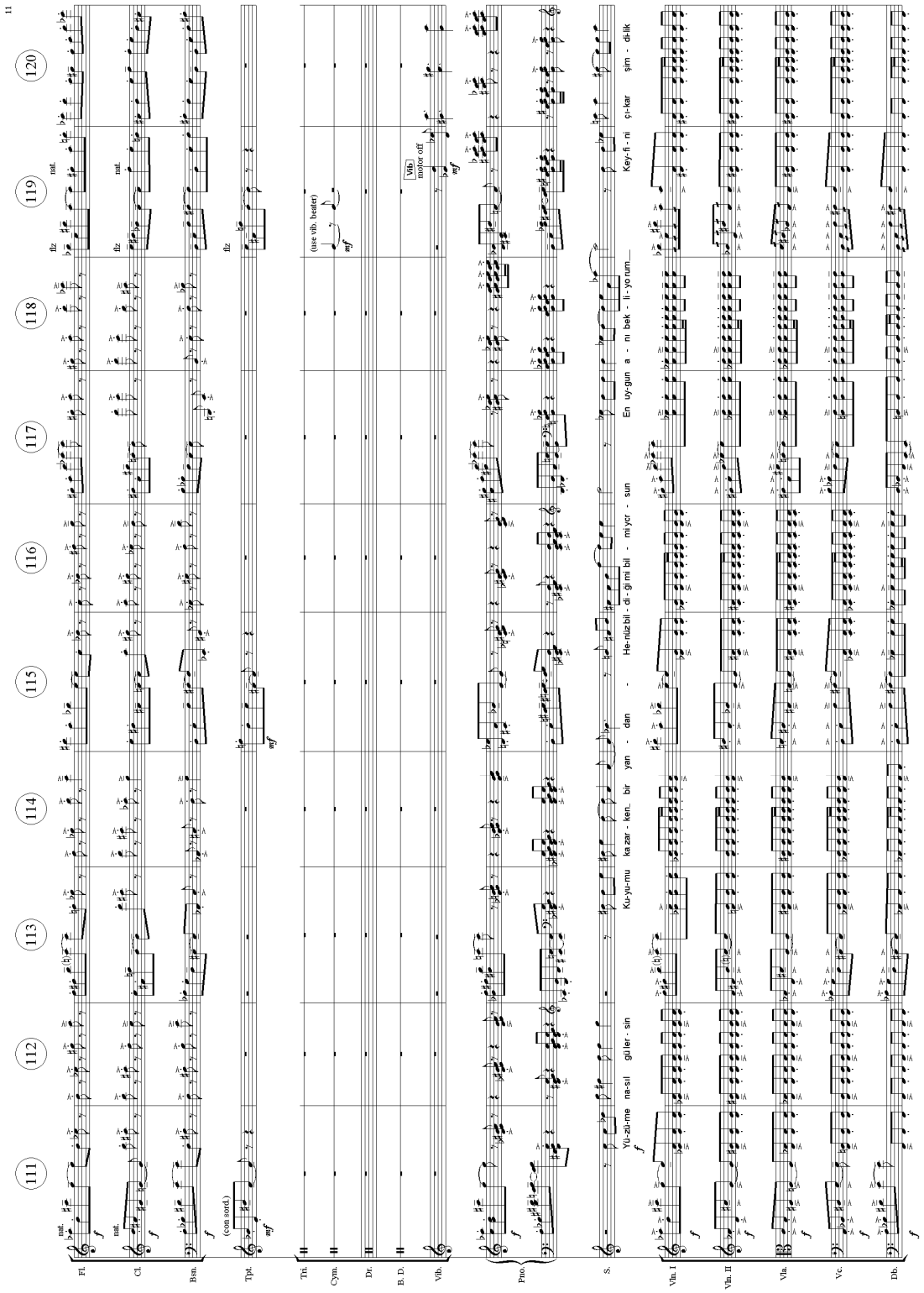

Figure A.41 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 11

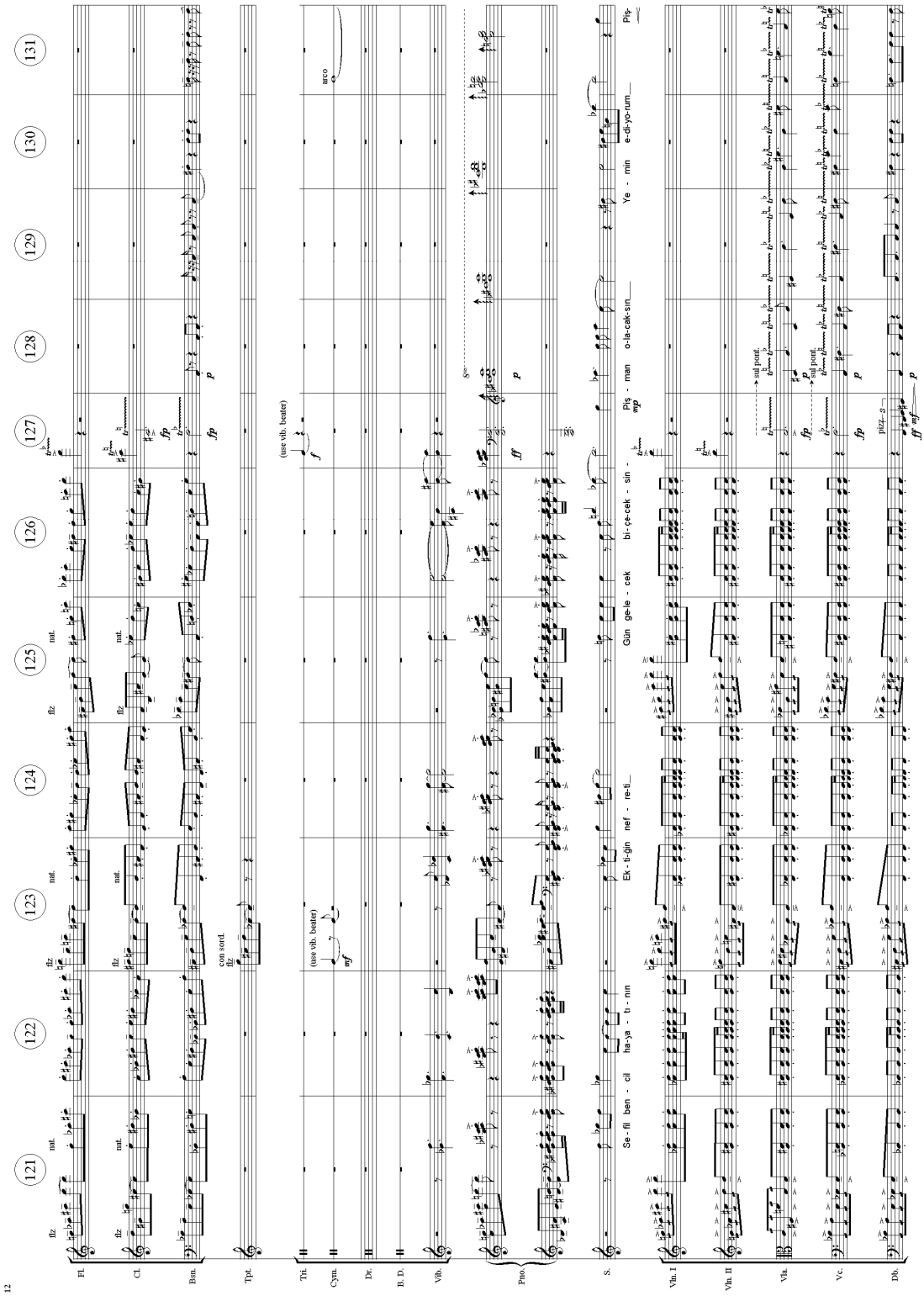

Figure A.42 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 12

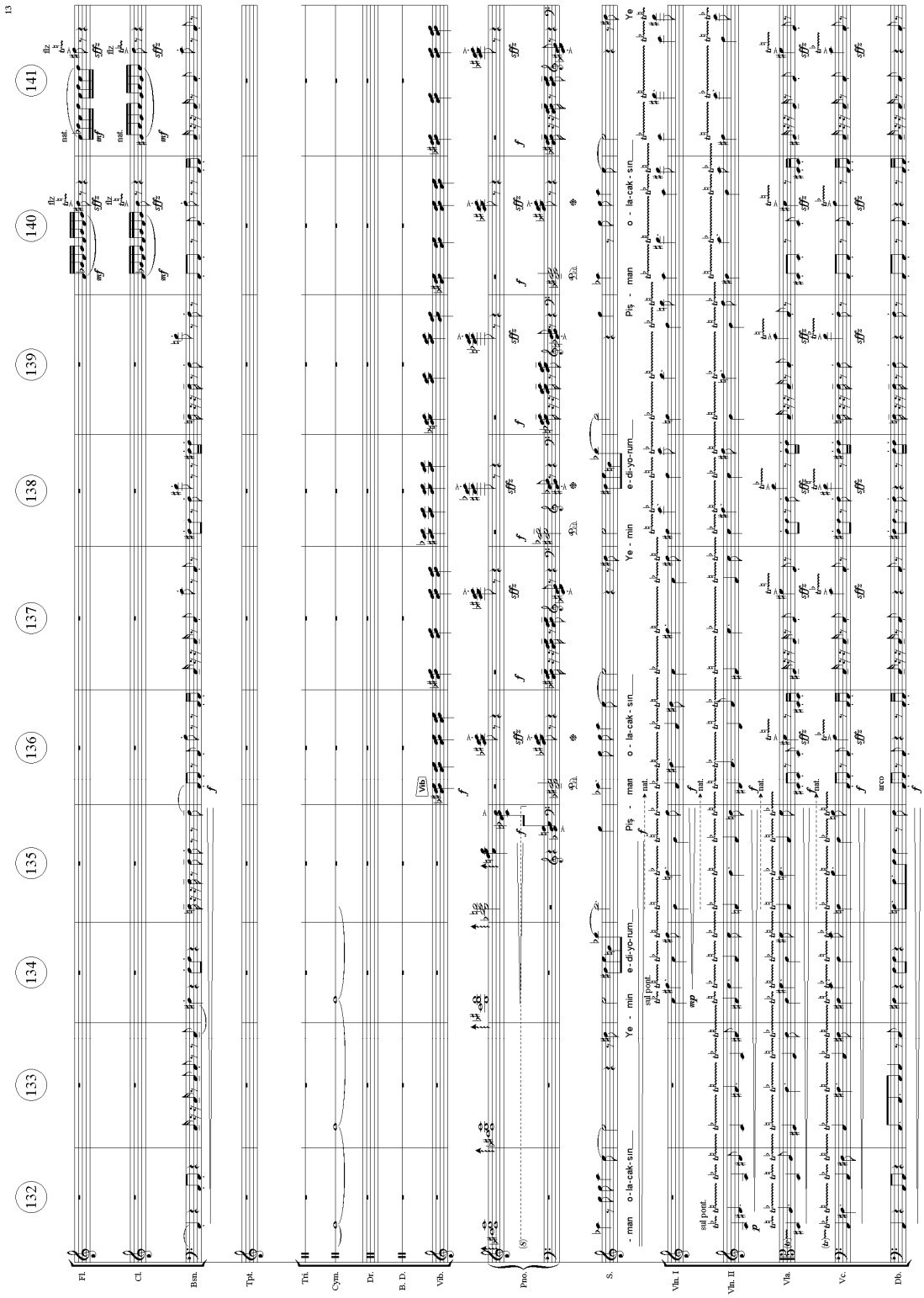

Figure A.43 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 13

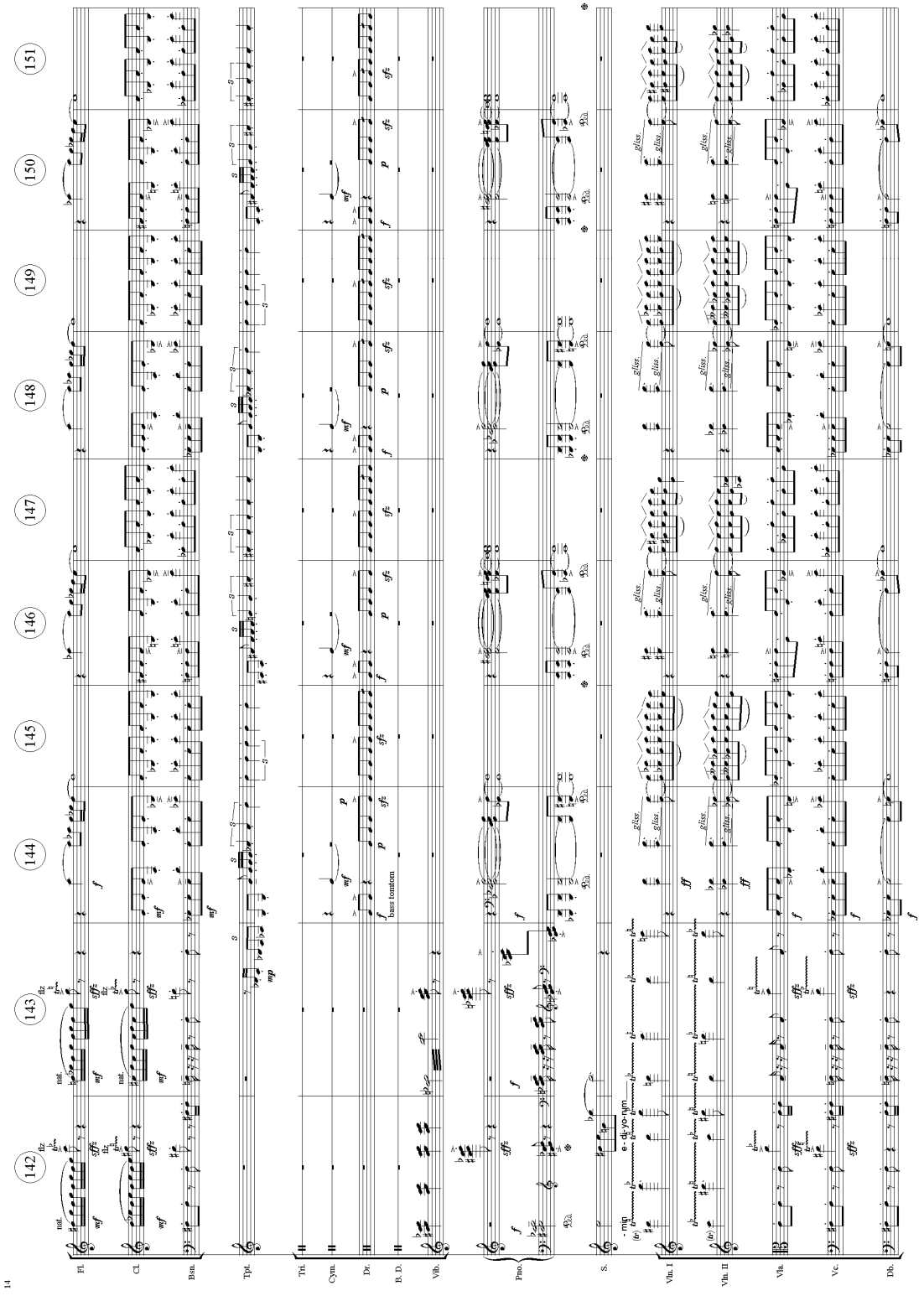

Figure A.44 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 14

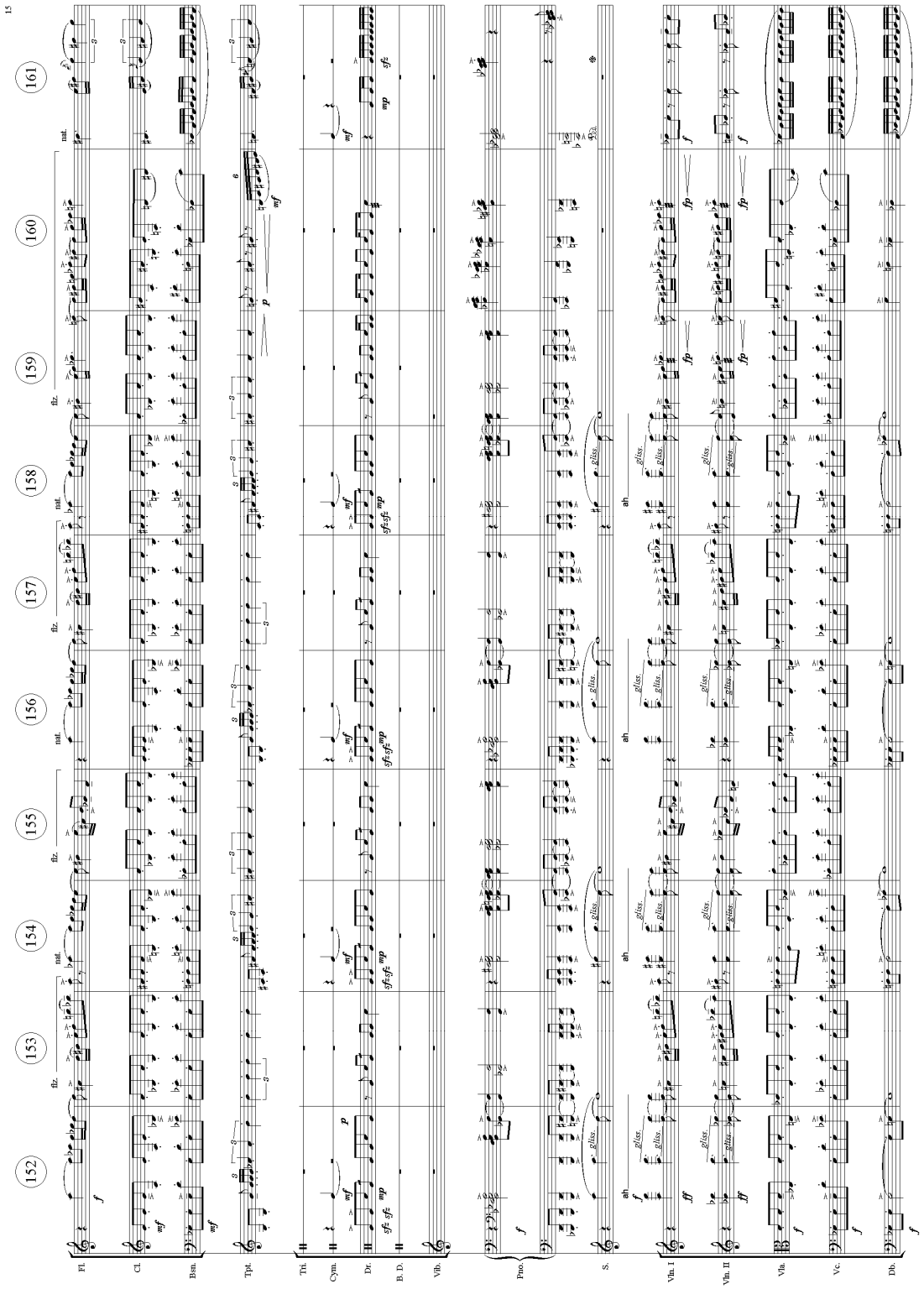

Figure A.45 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 15

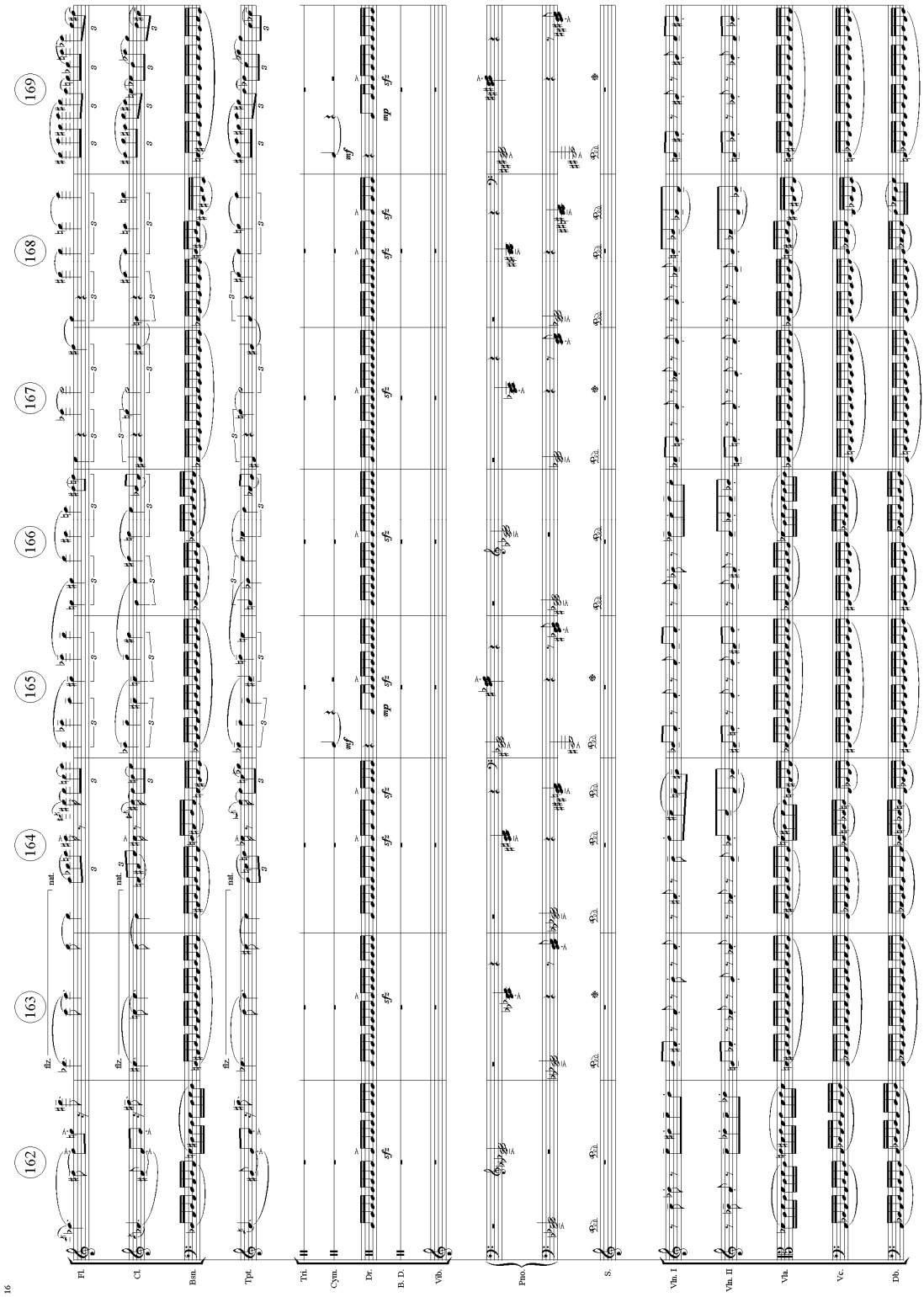

Figure A.46 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 16

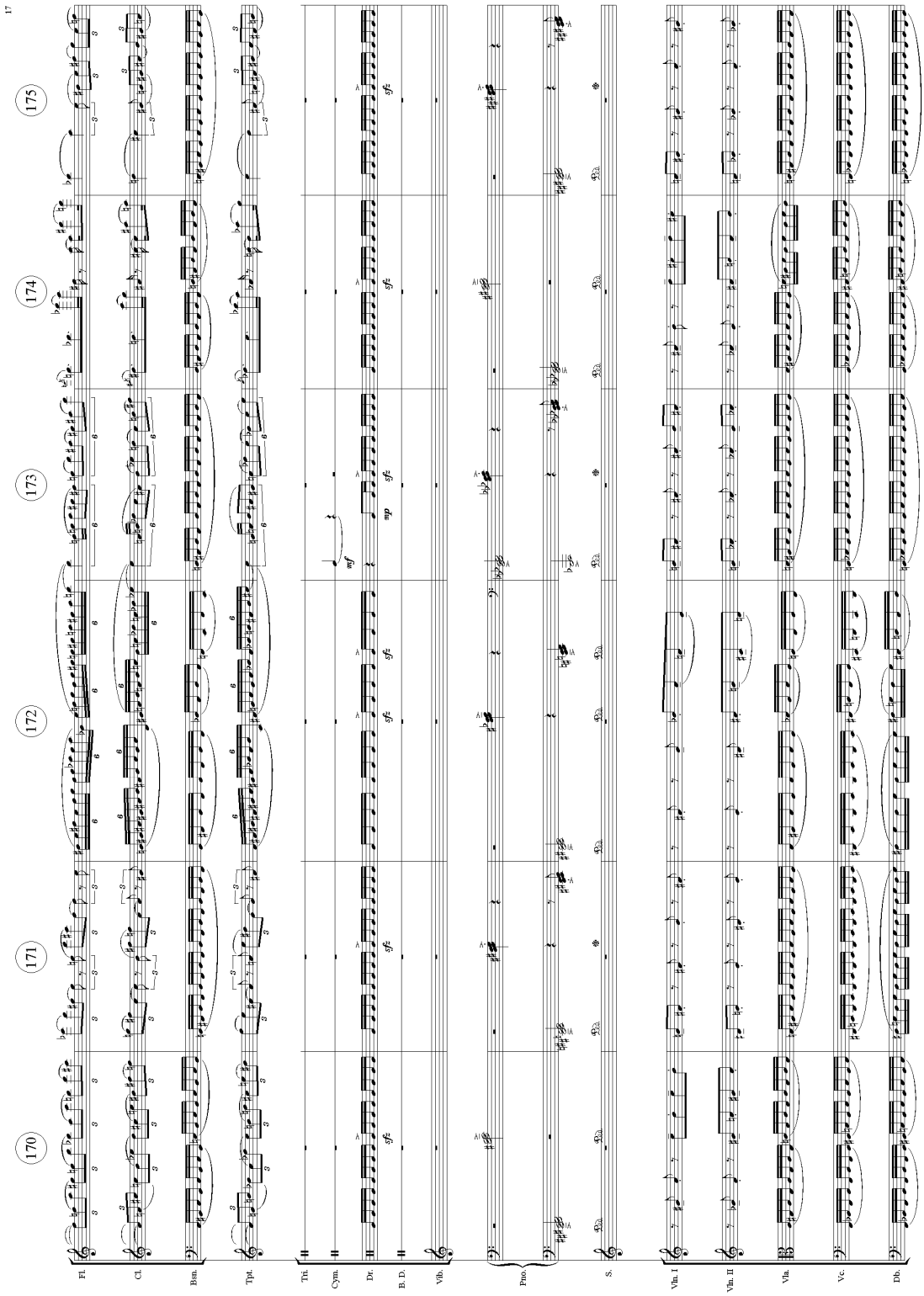

Figure A.47 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 17

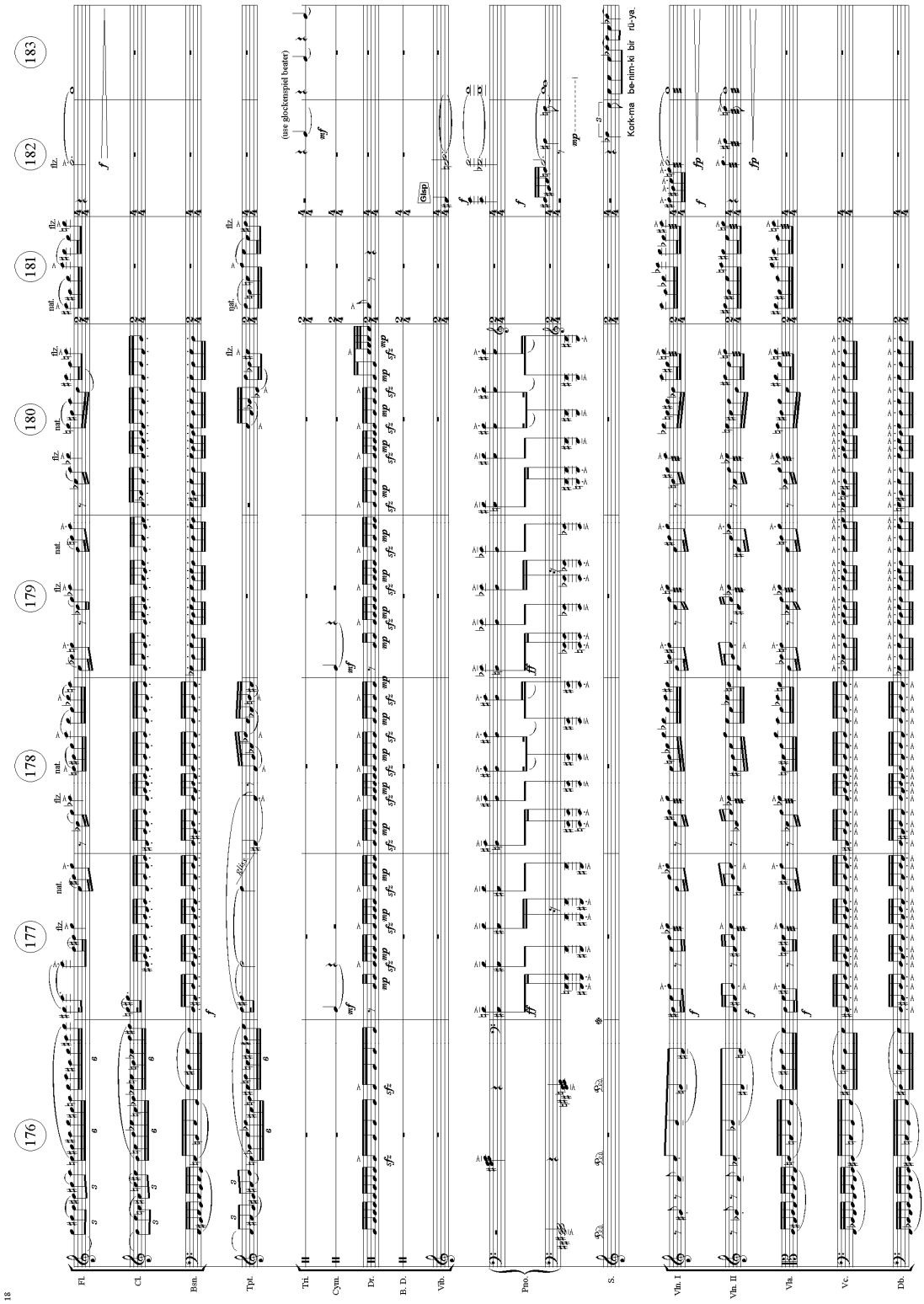

Figure A.48 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 18

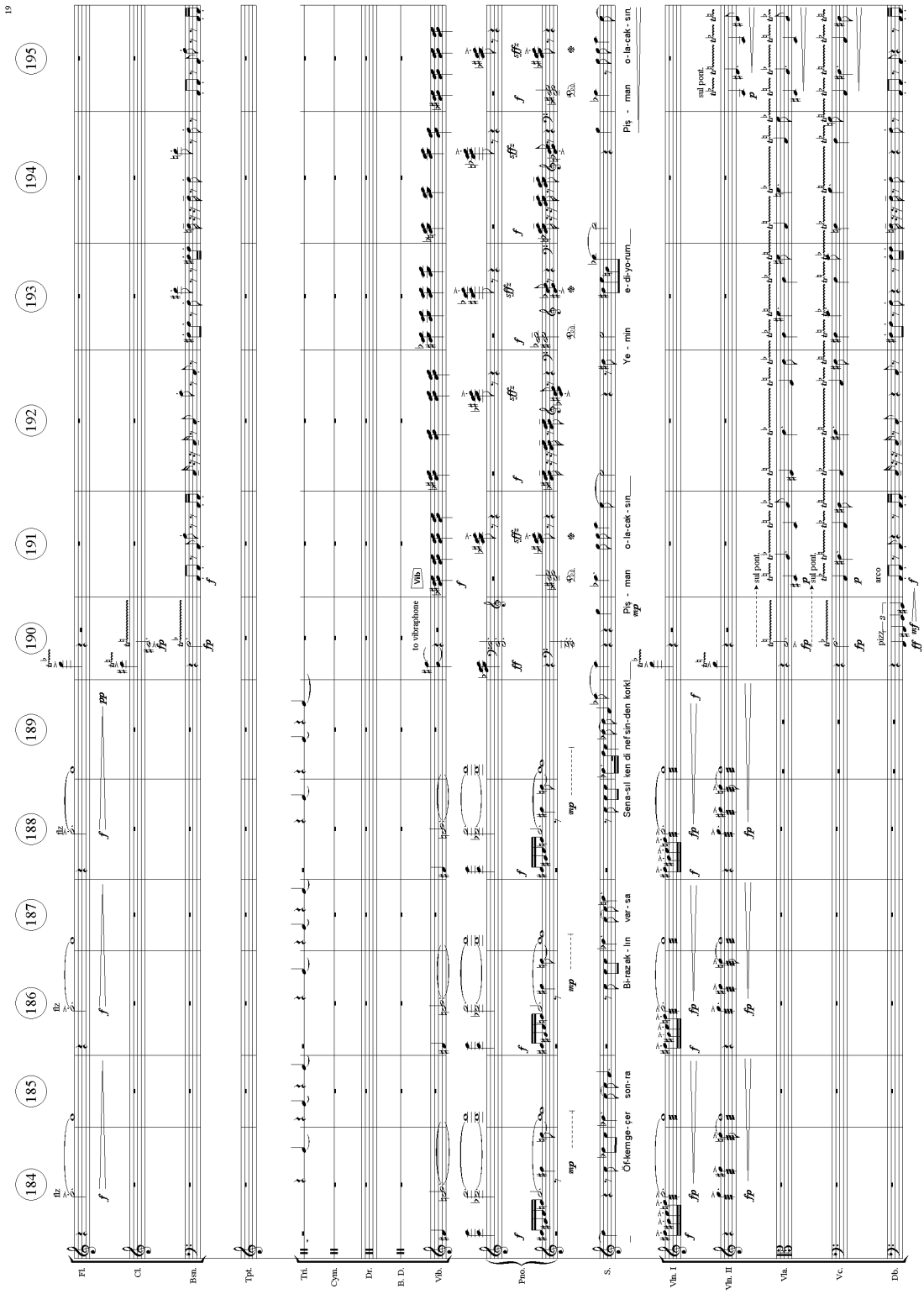

Figure A.49 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 19

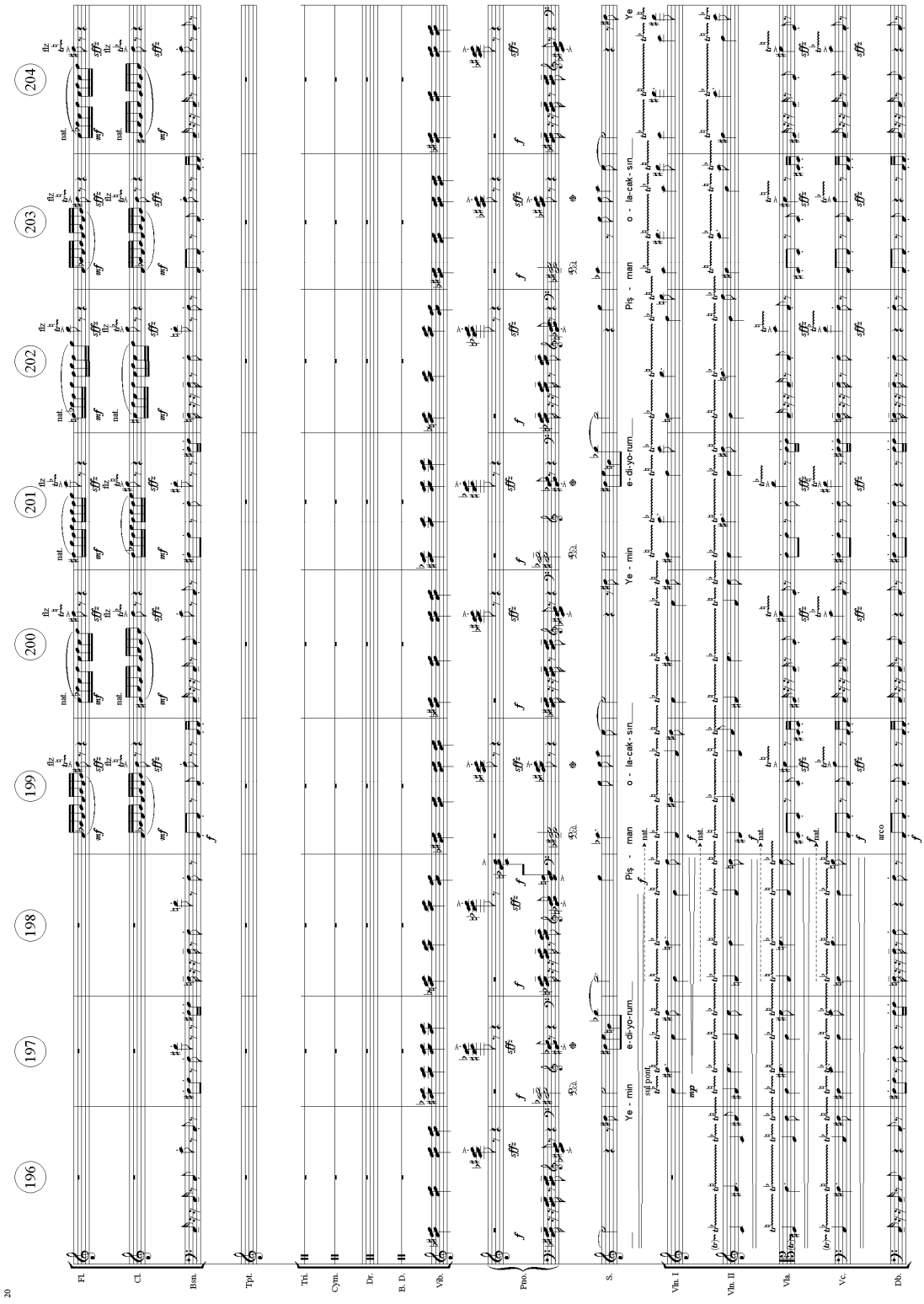

Figure A.50 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 20

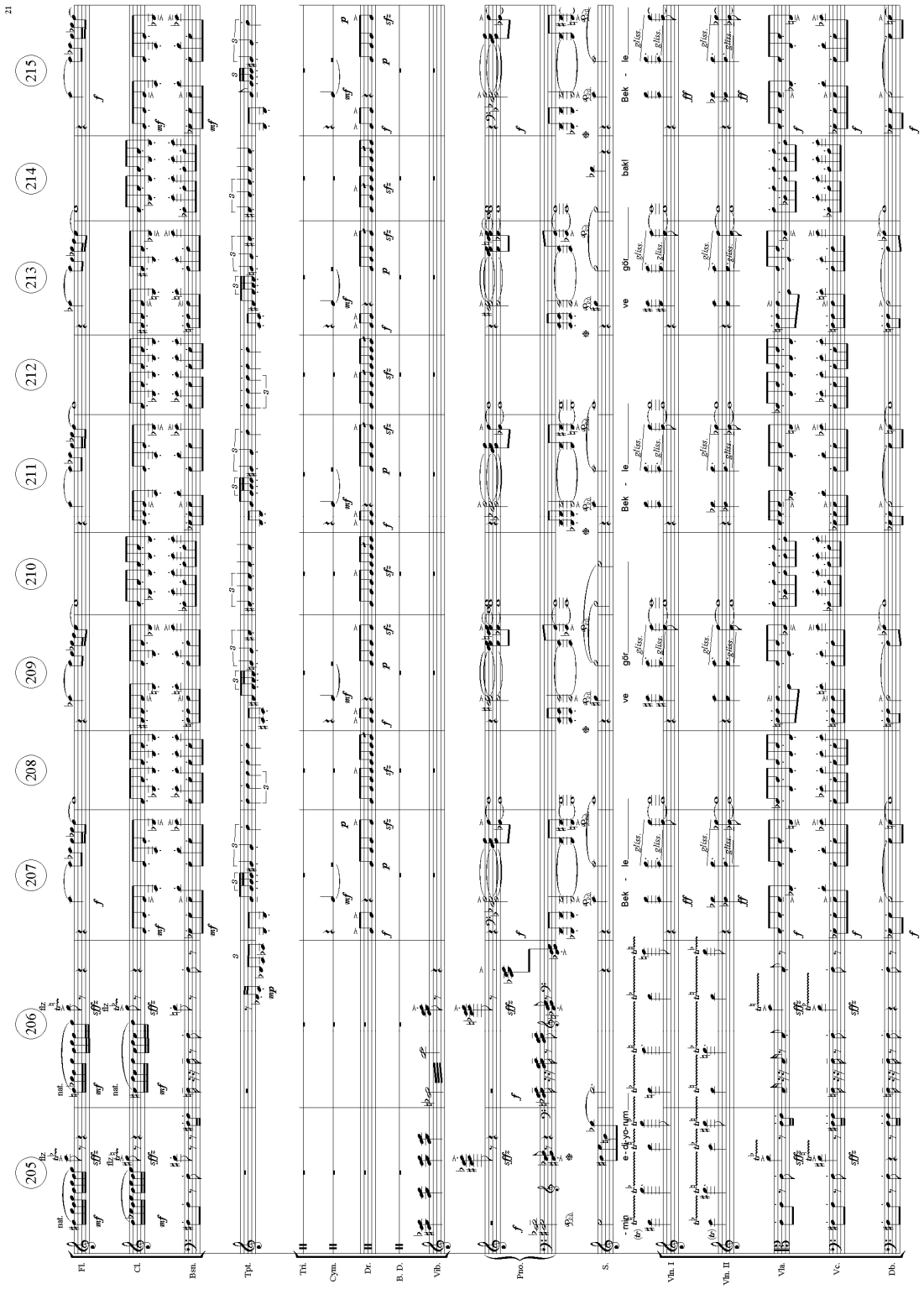

Figure A.51 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 21

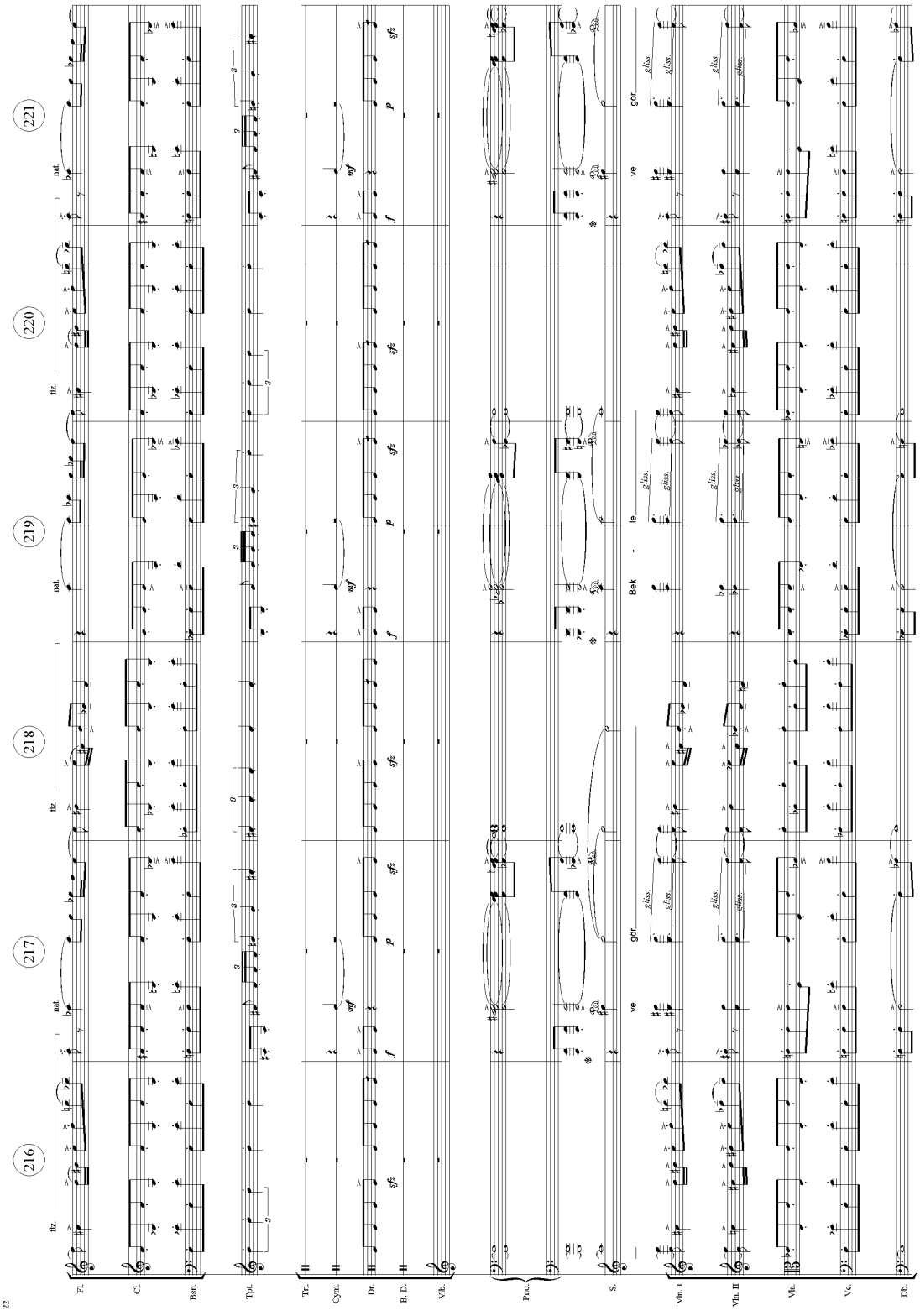

Figure A.52 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 22

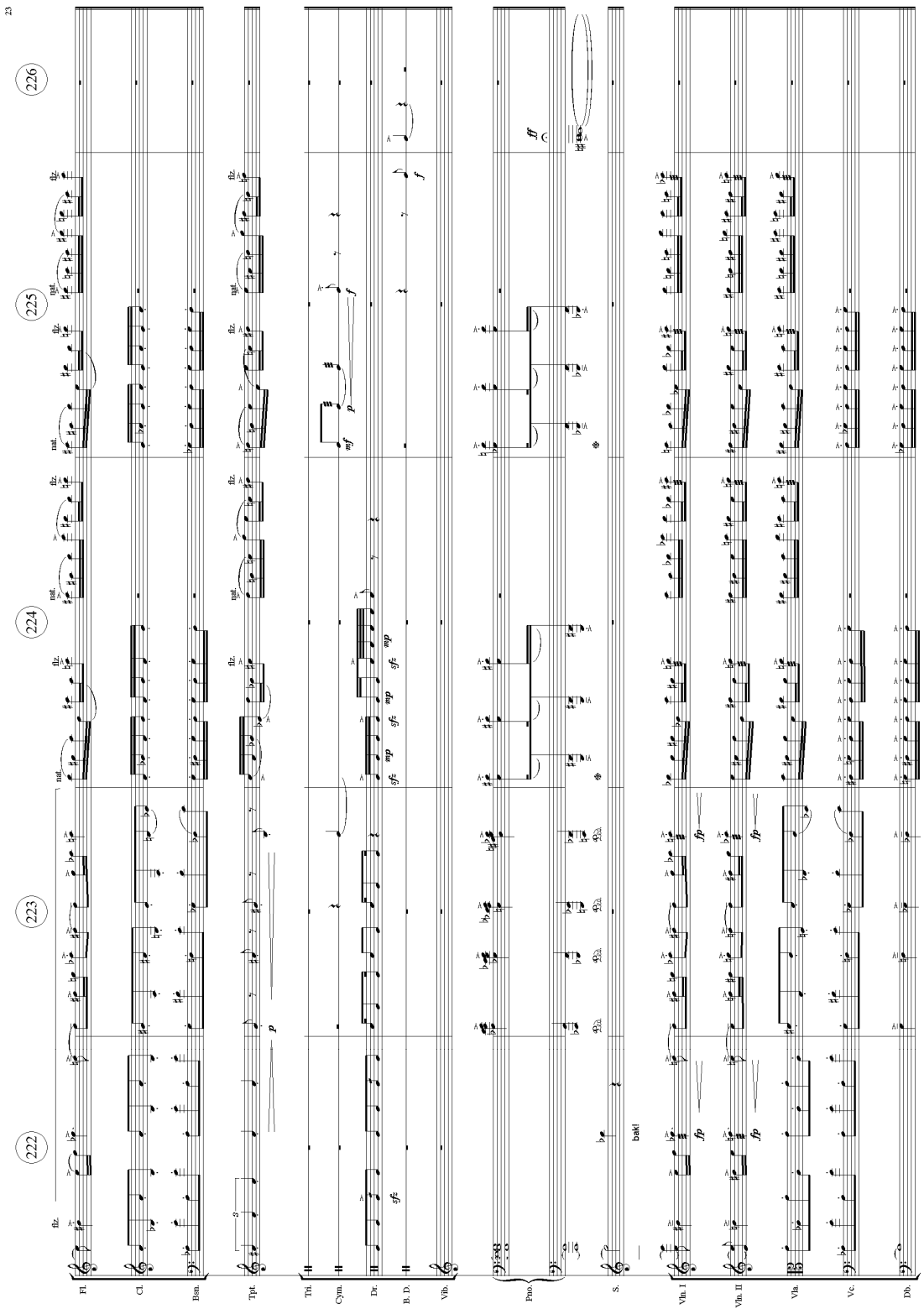

Figure A.53 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 3, page 23

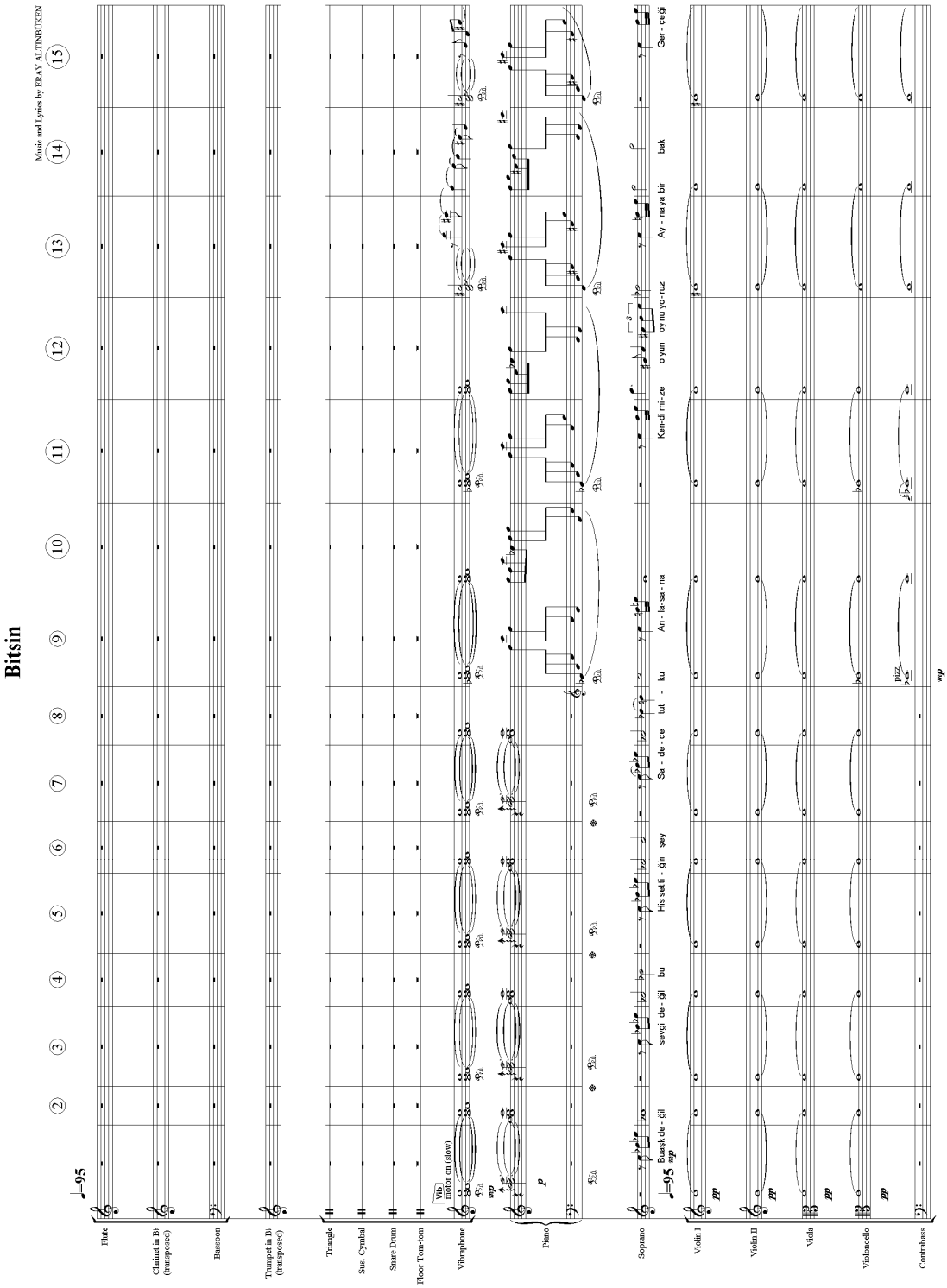

Figure A.54 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 1

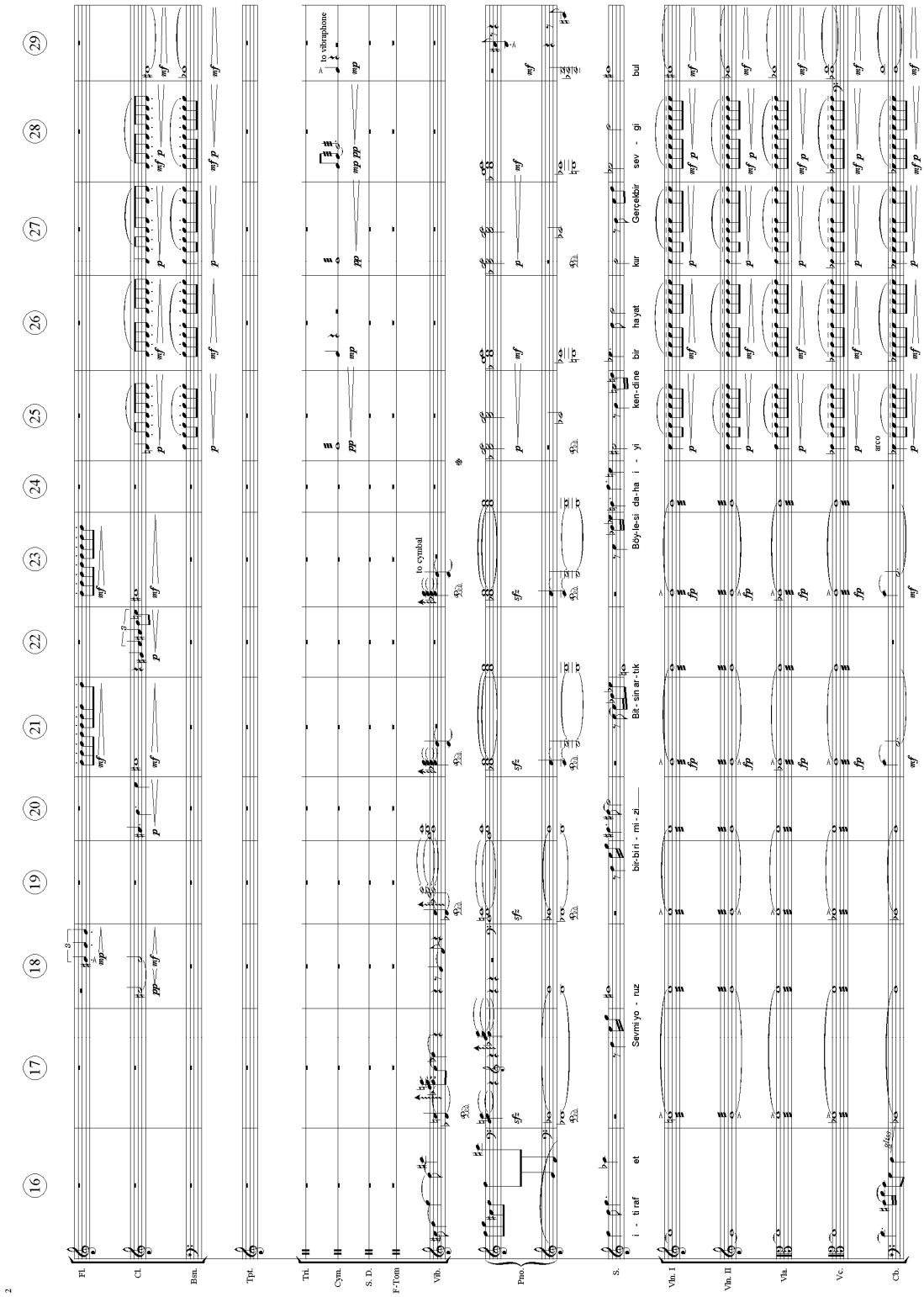

Figure A.55 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 2

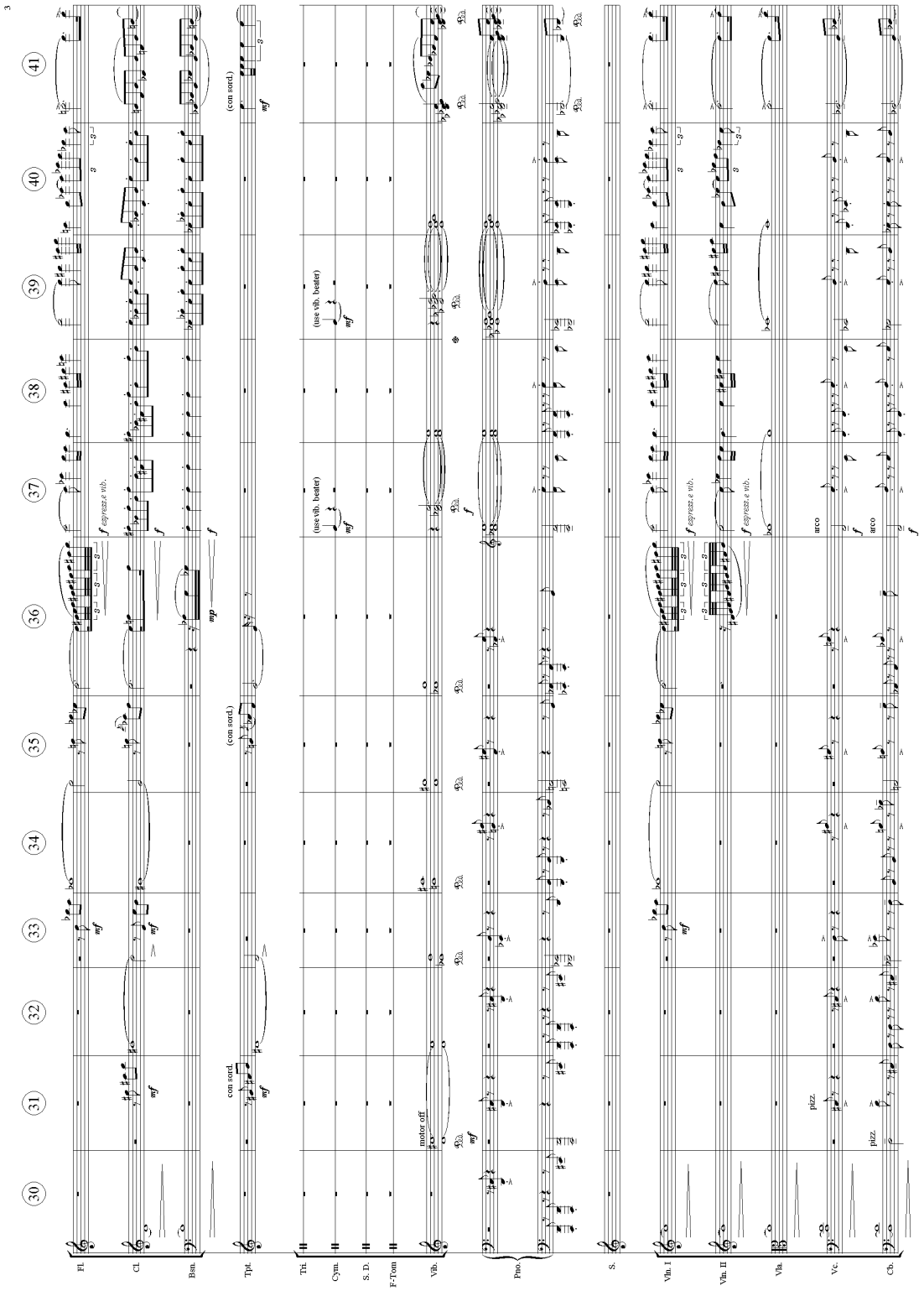

Figure A.56 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 3

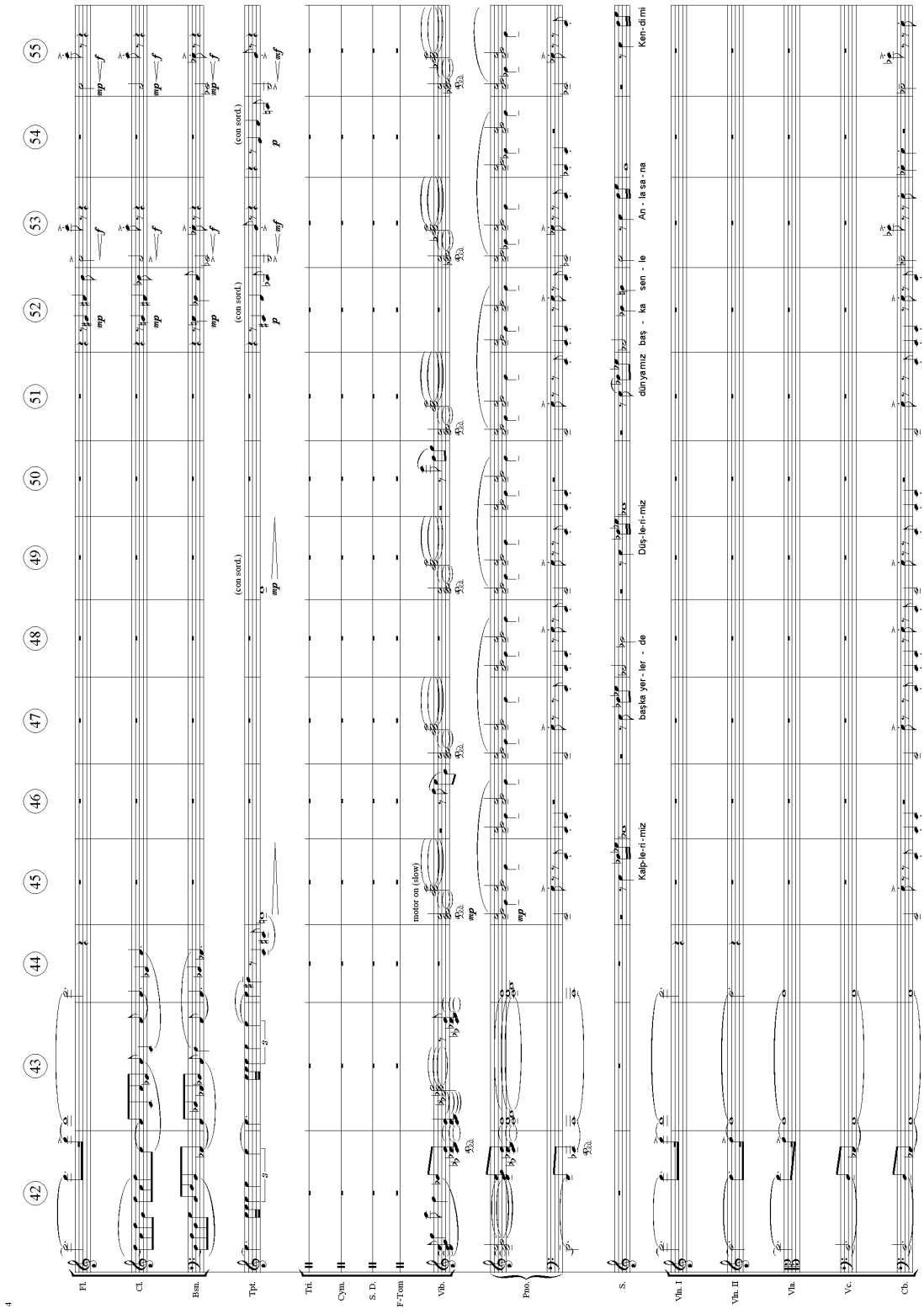

Figure A.57 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 4

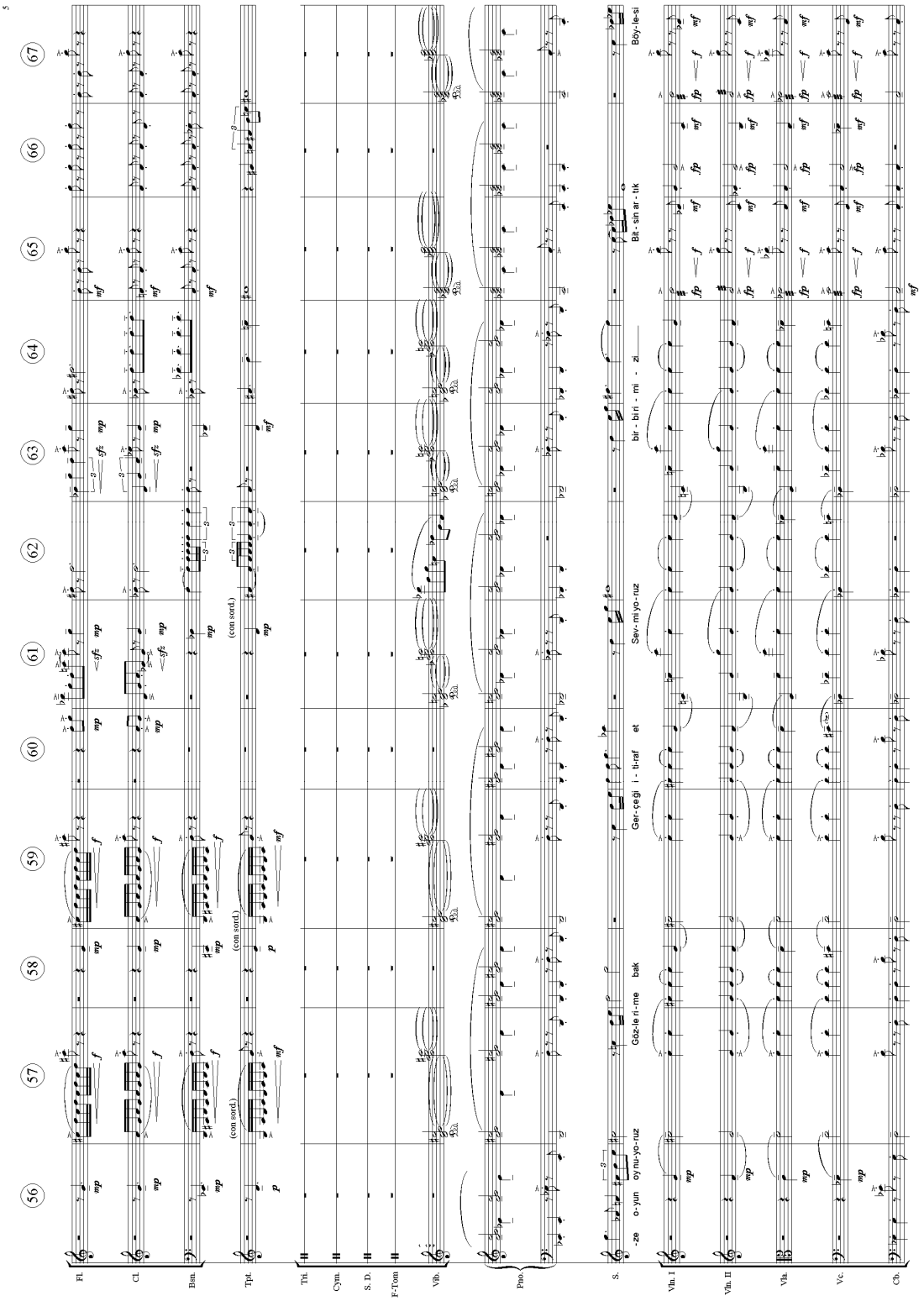

Figure A.58 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 5

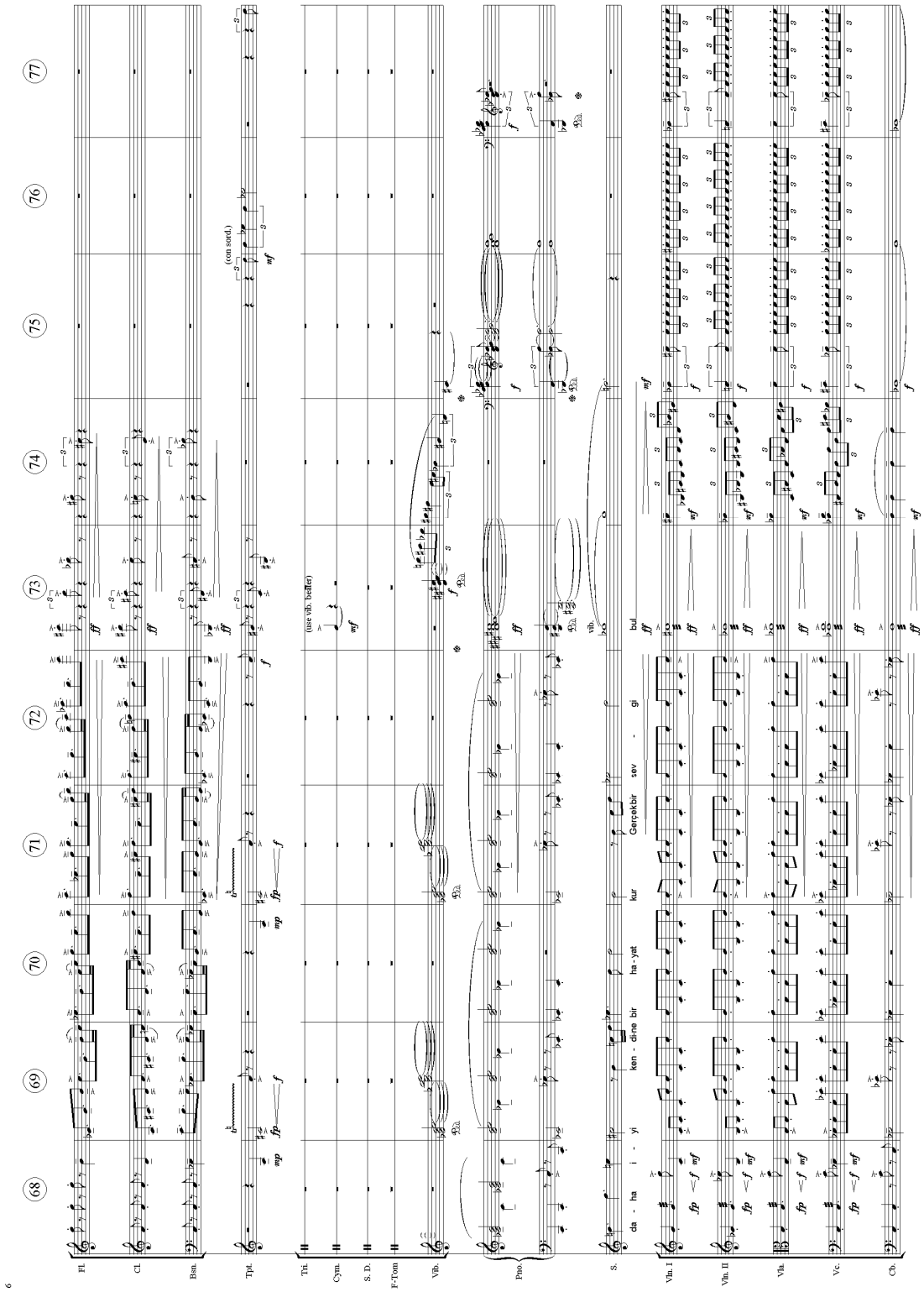

Figure A.59 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 6

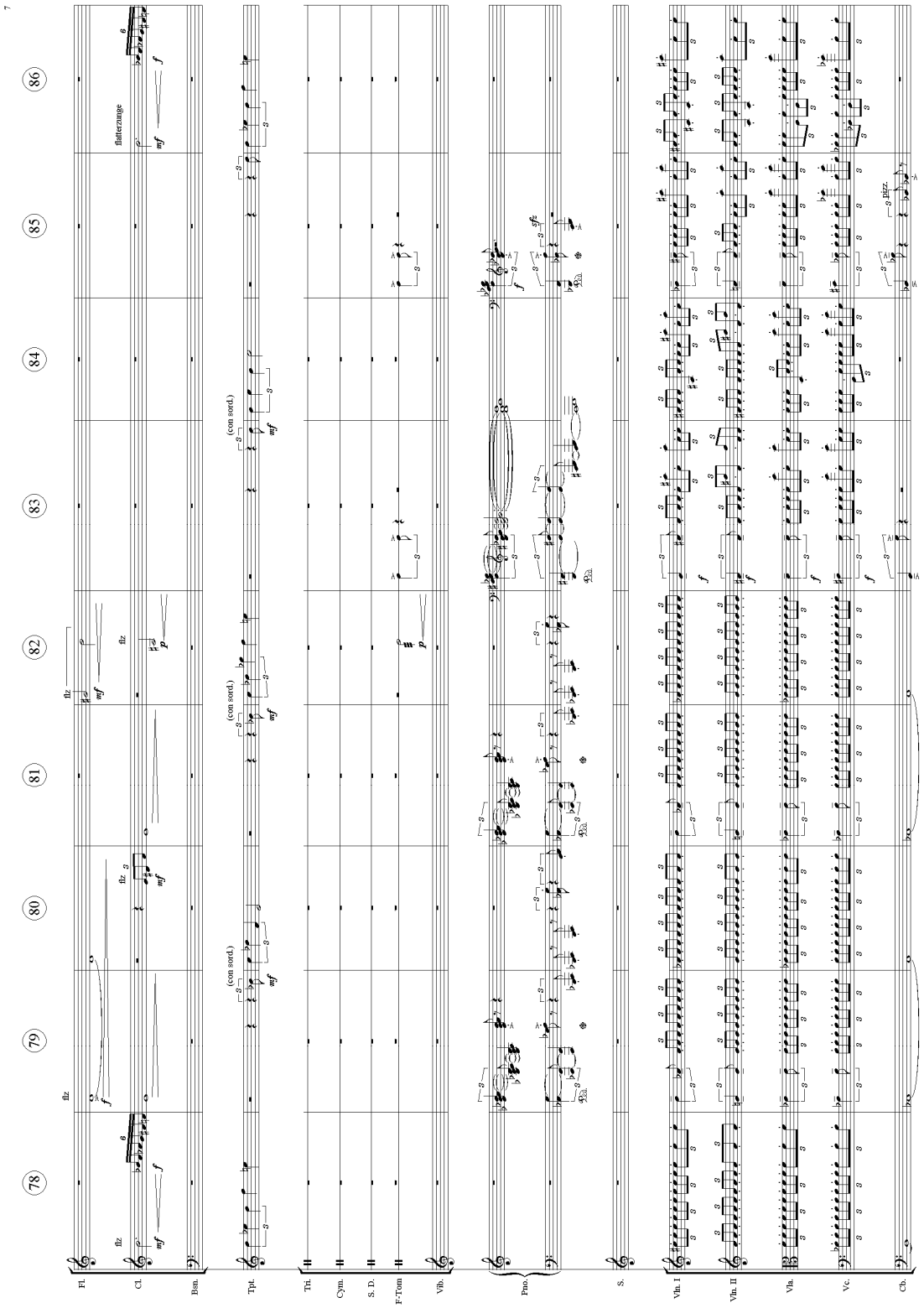

Figure A.60 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 7

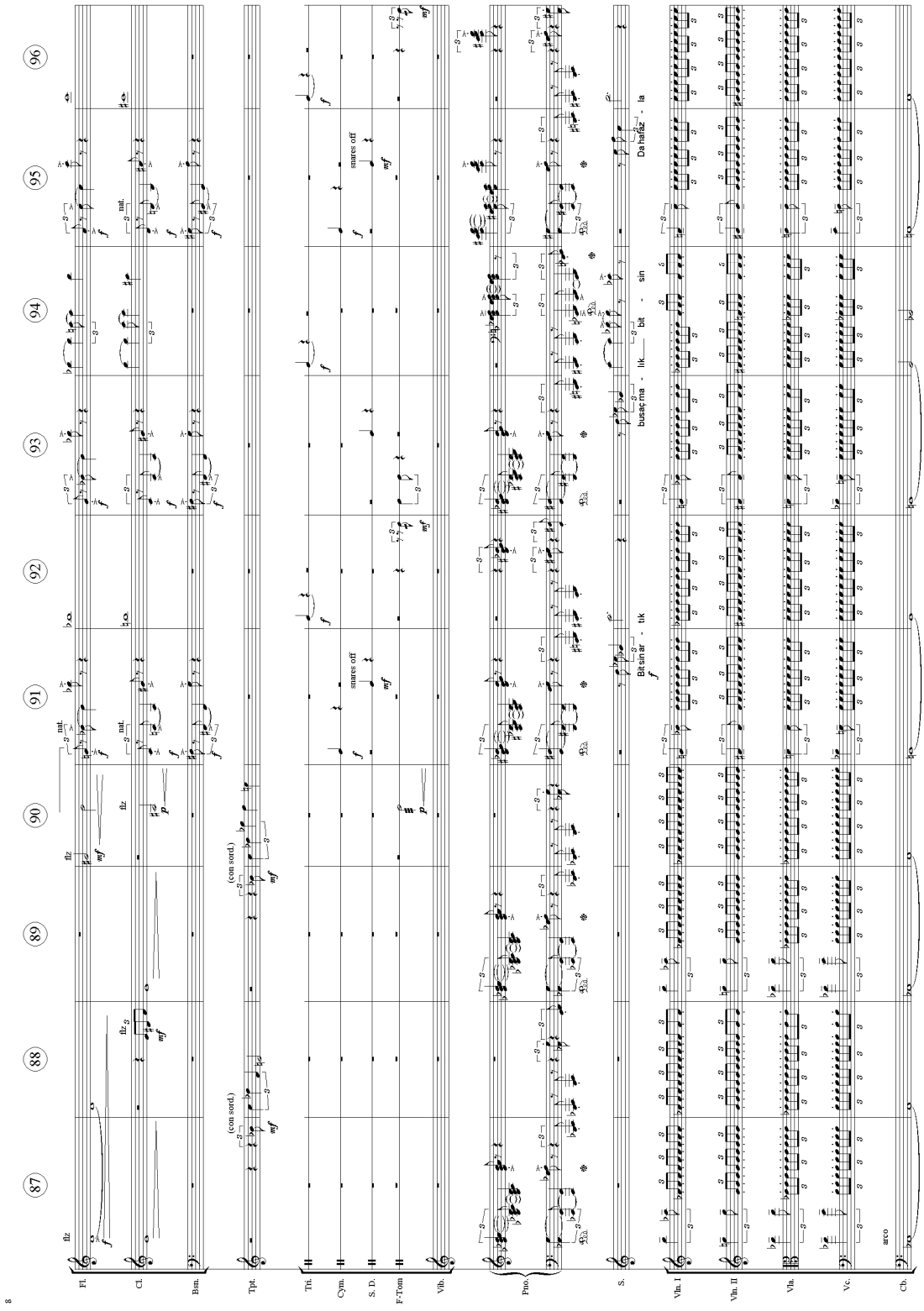

Figure A.61 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 8

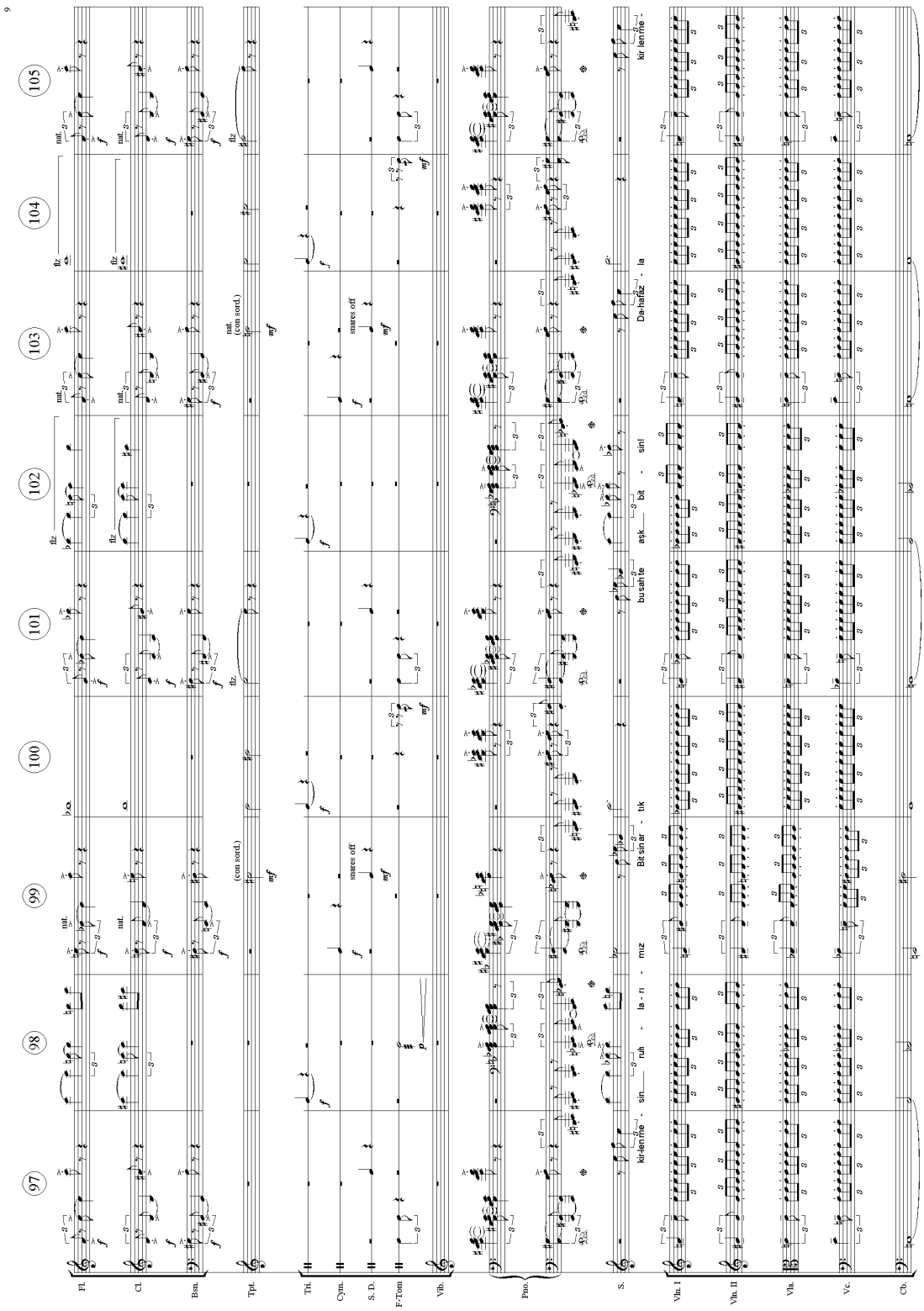

Figure A.62 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 9

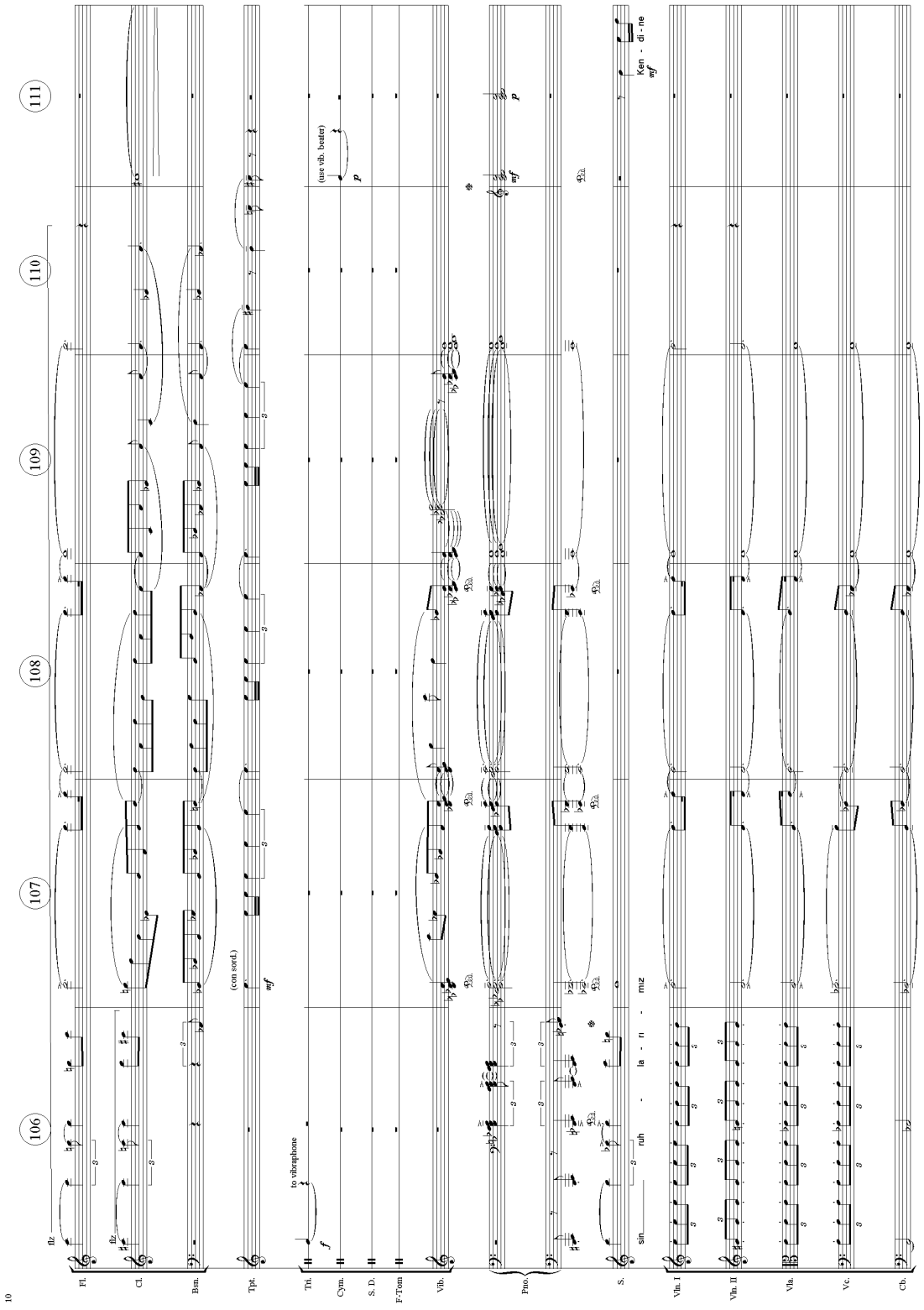

Figure A.63 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 10

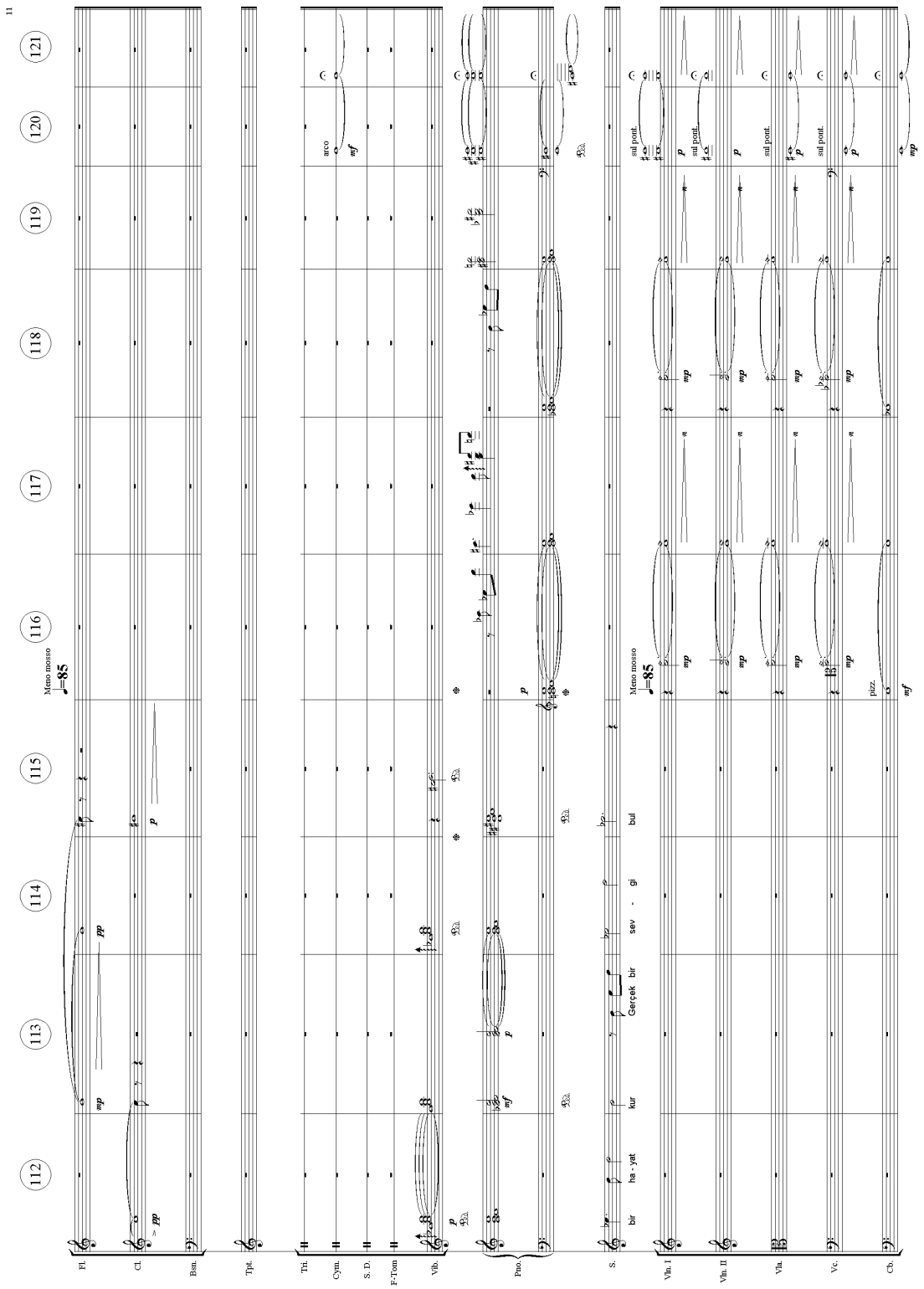

Figure A.64 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 4, page 11

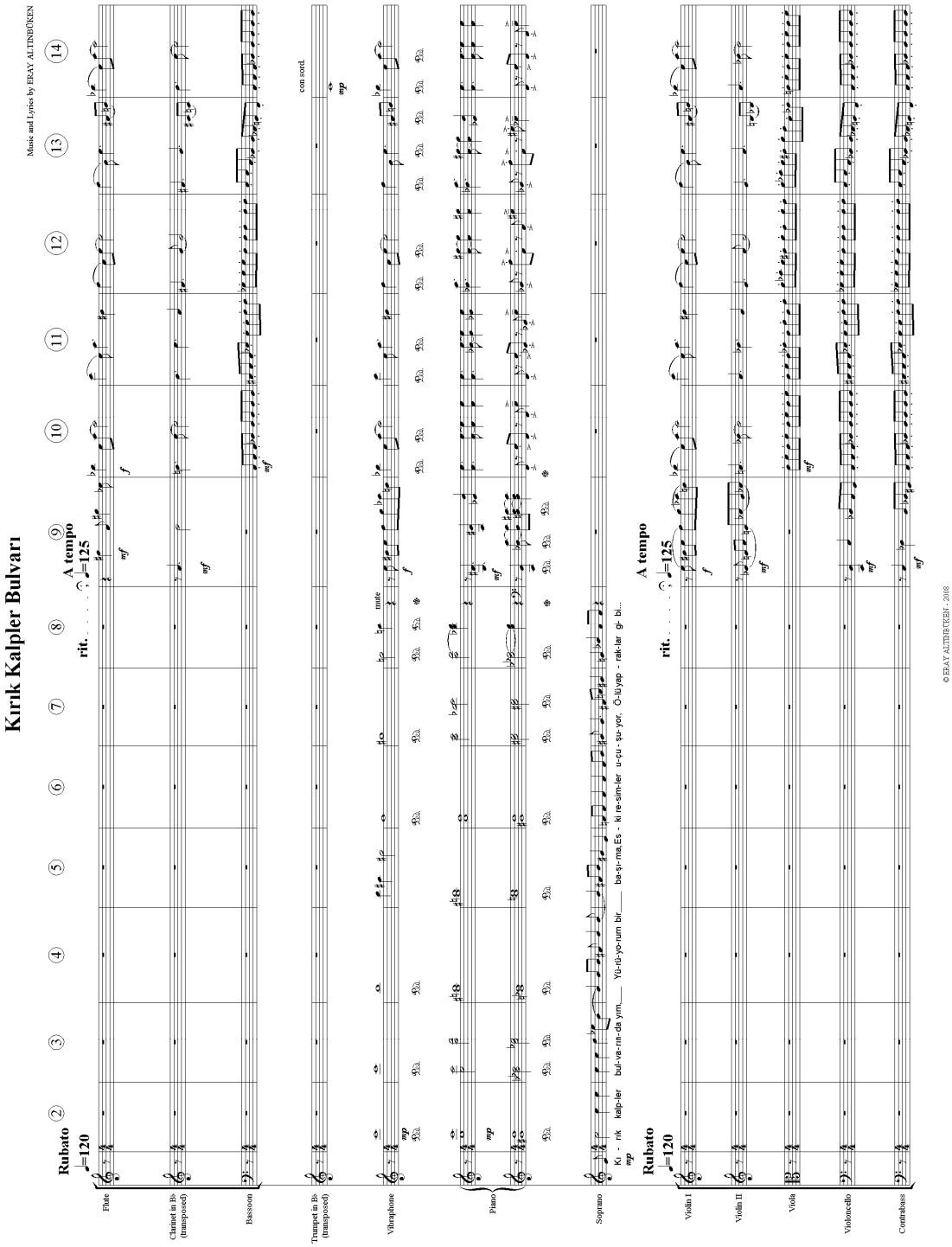

Figure A.65 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 1

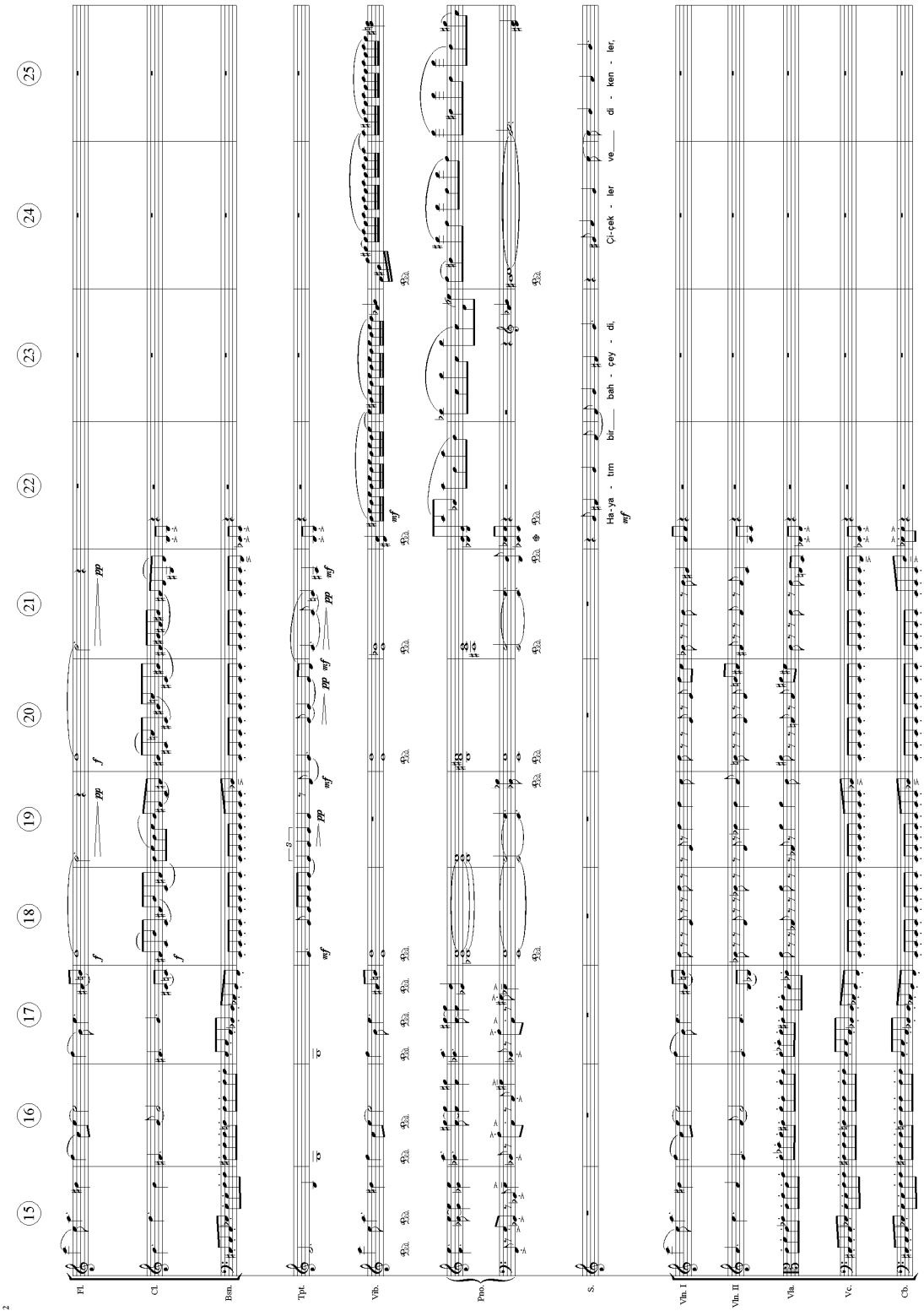

Figure A.66 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 2

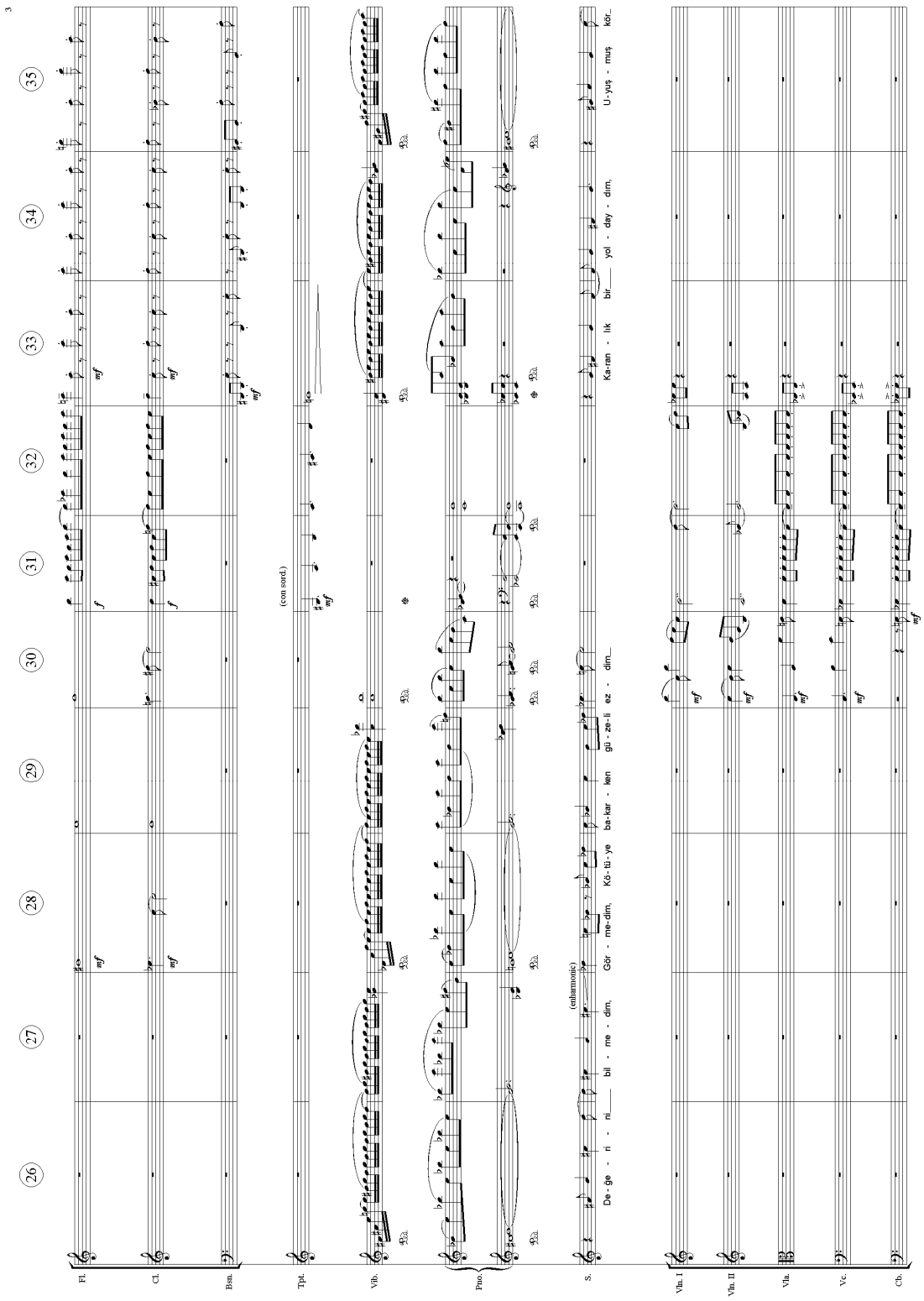

Figure A.67 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 3

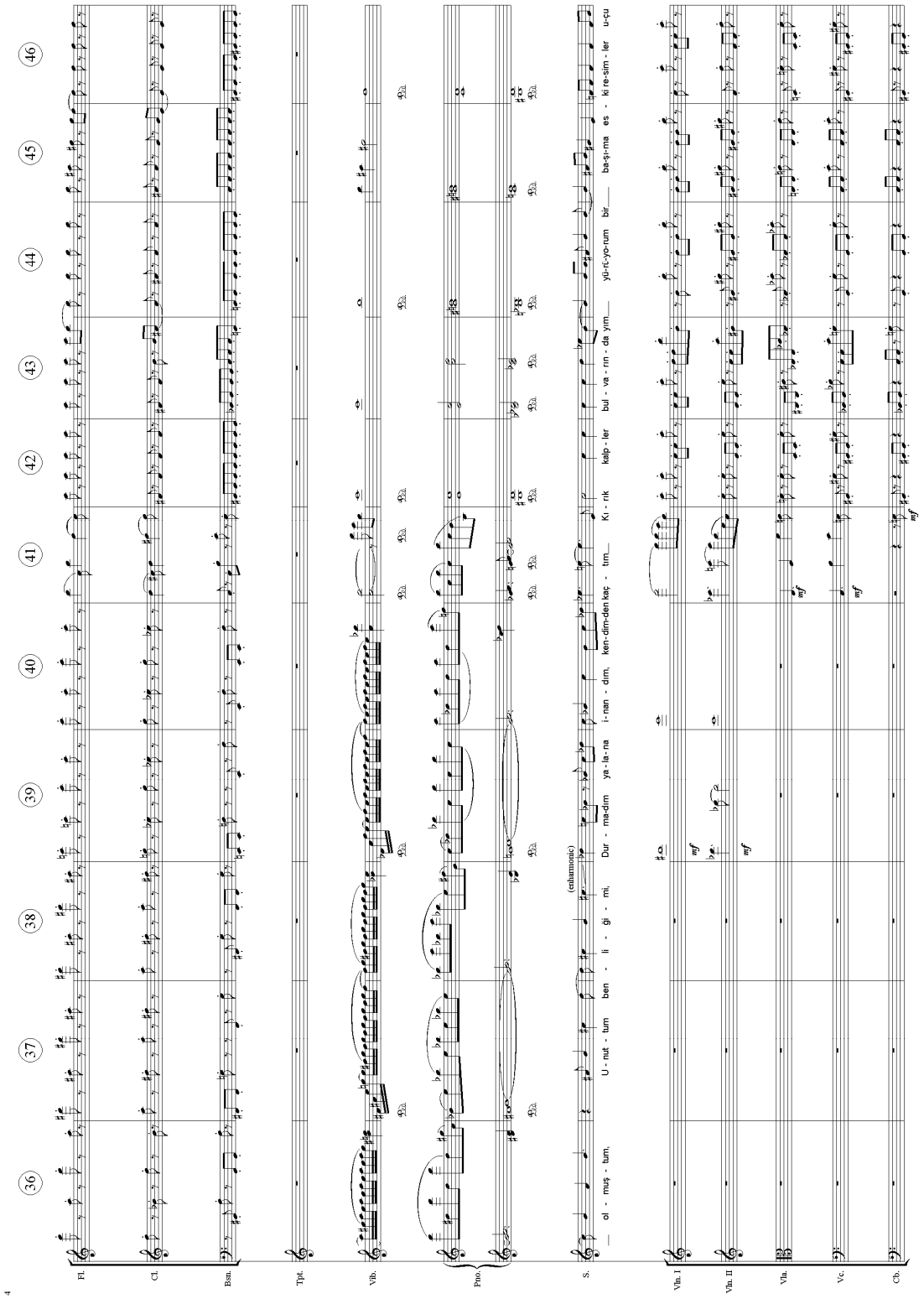

Figure A.68 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 4

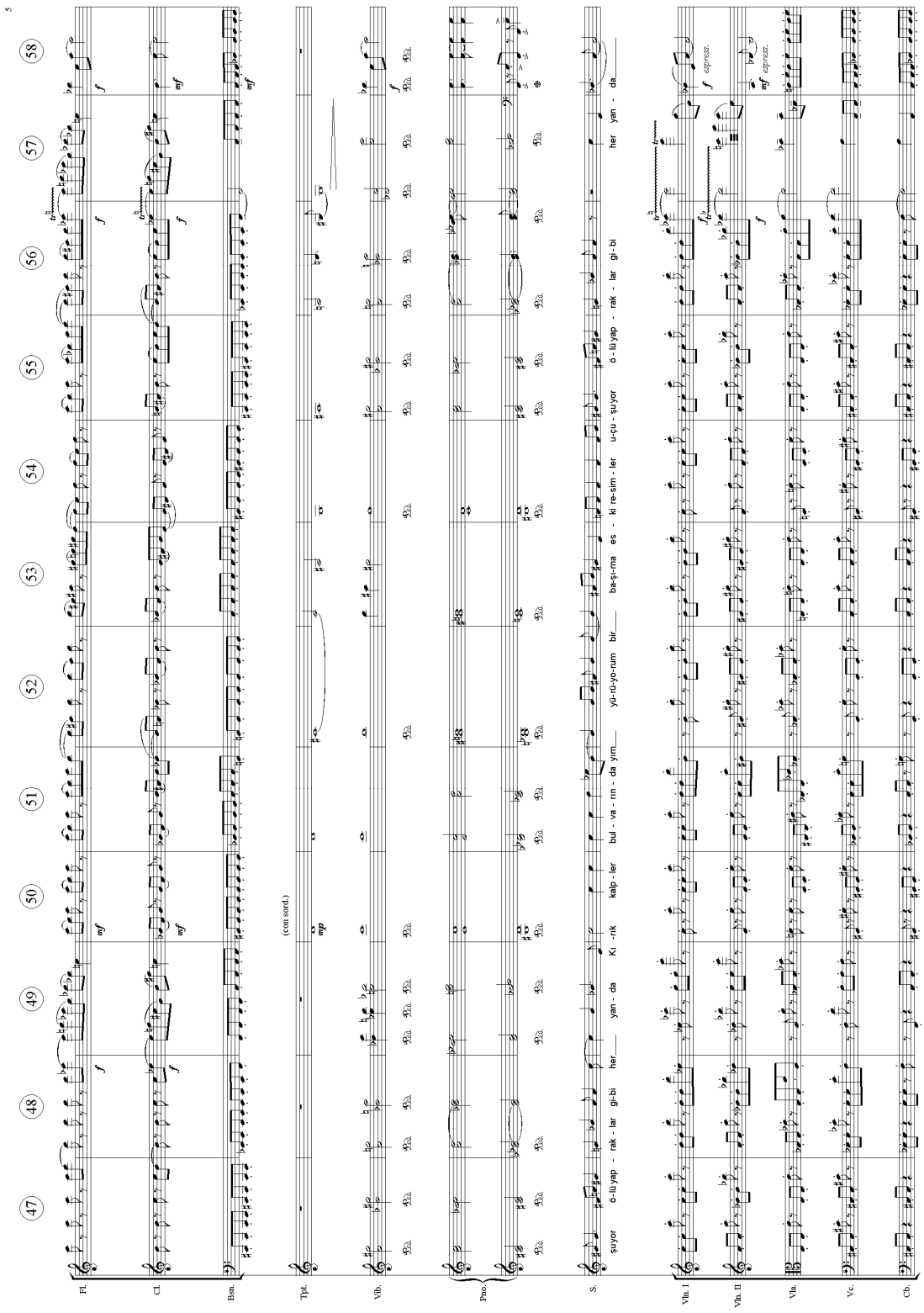

Figure A.69 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 5

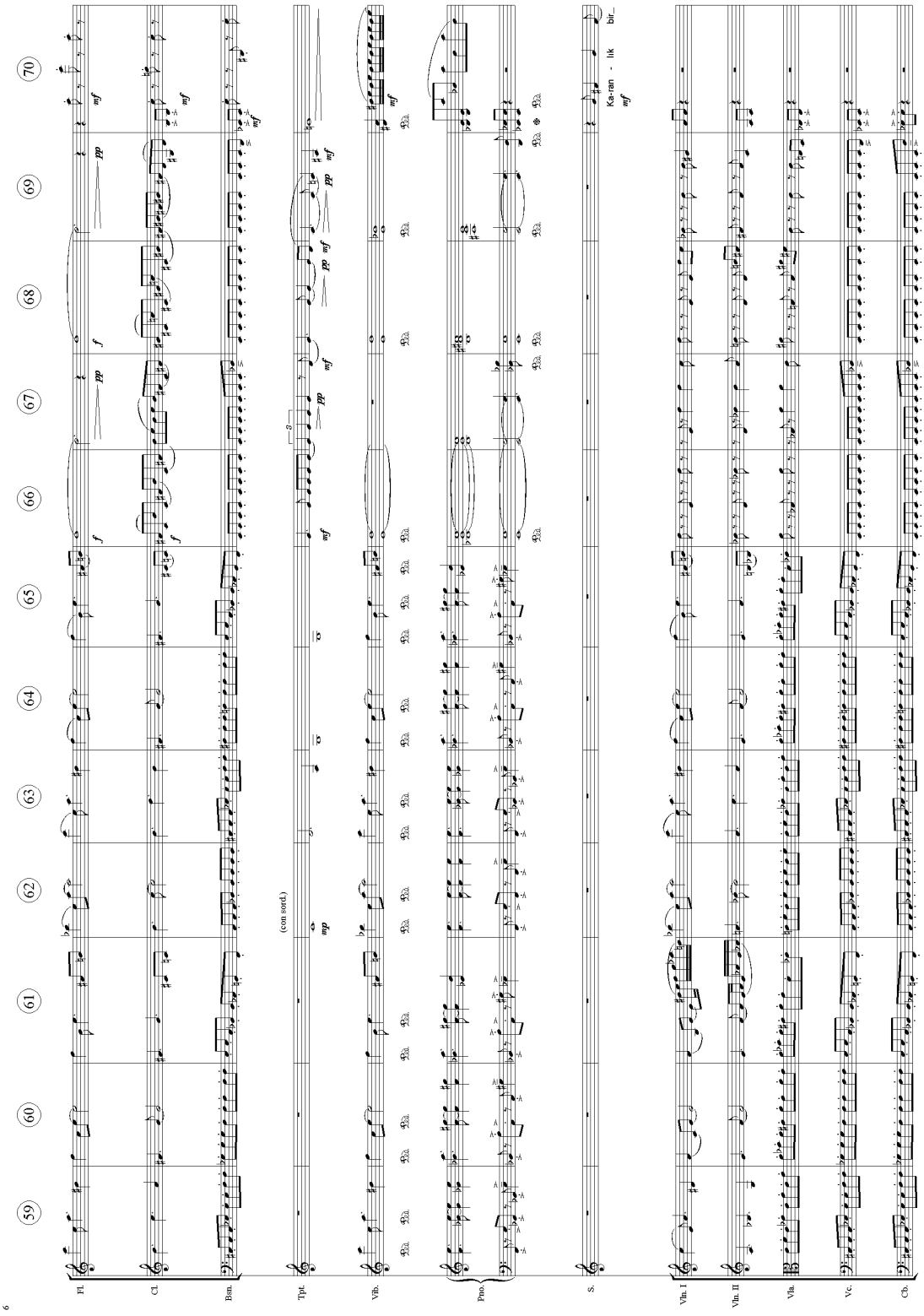

Figure A.70 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 6

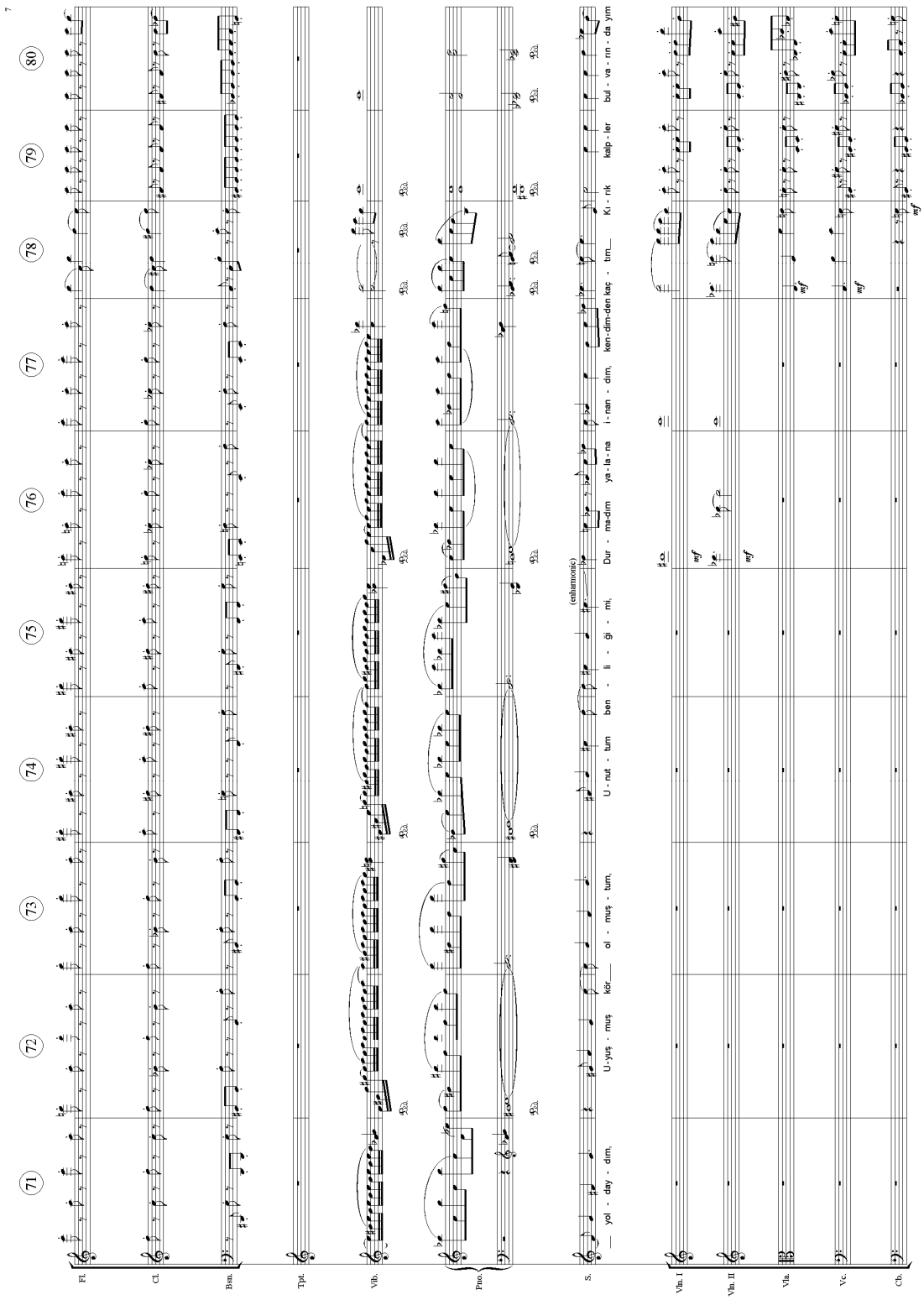

Figure A.71 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 7

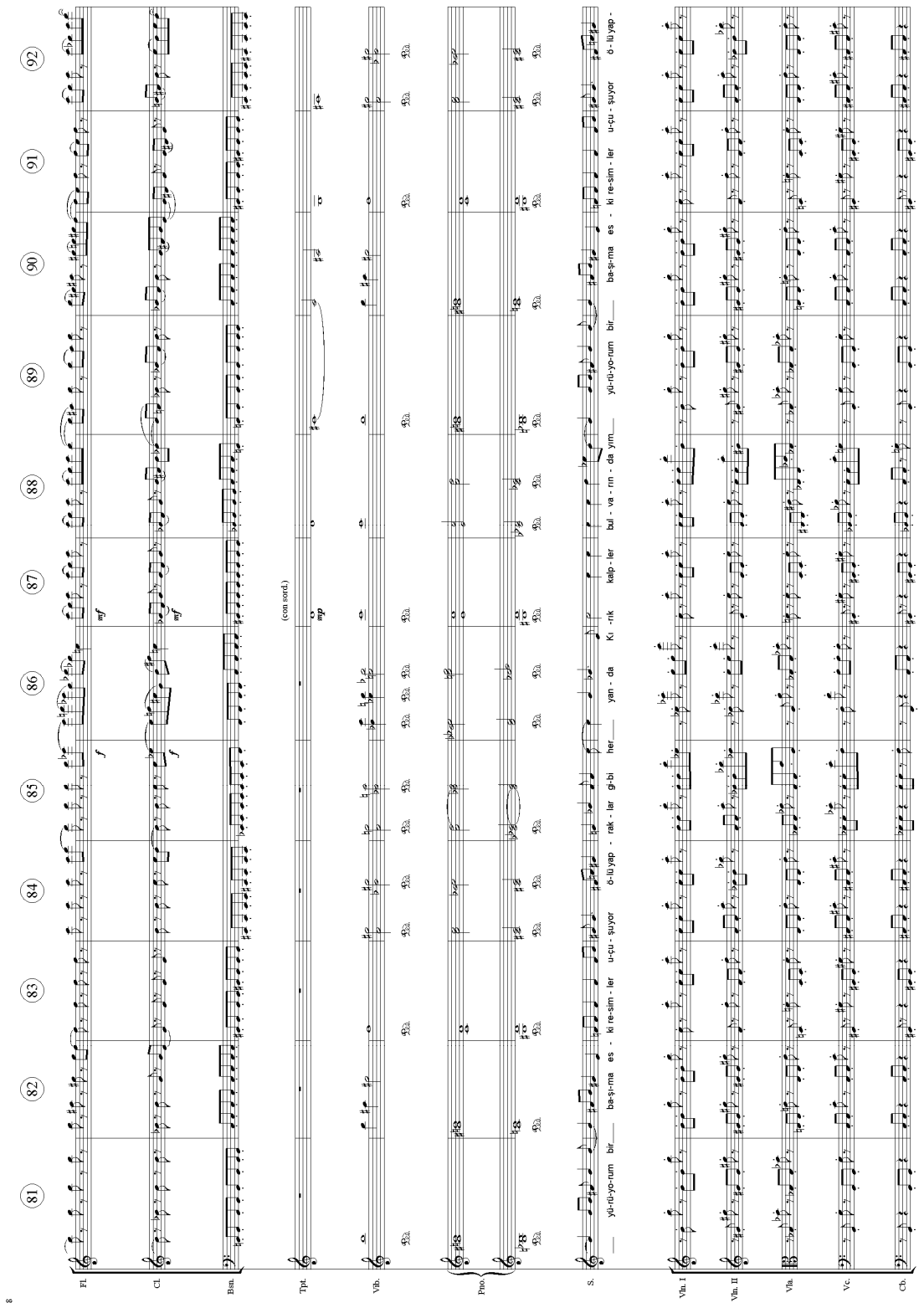

Figure A.72 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 8

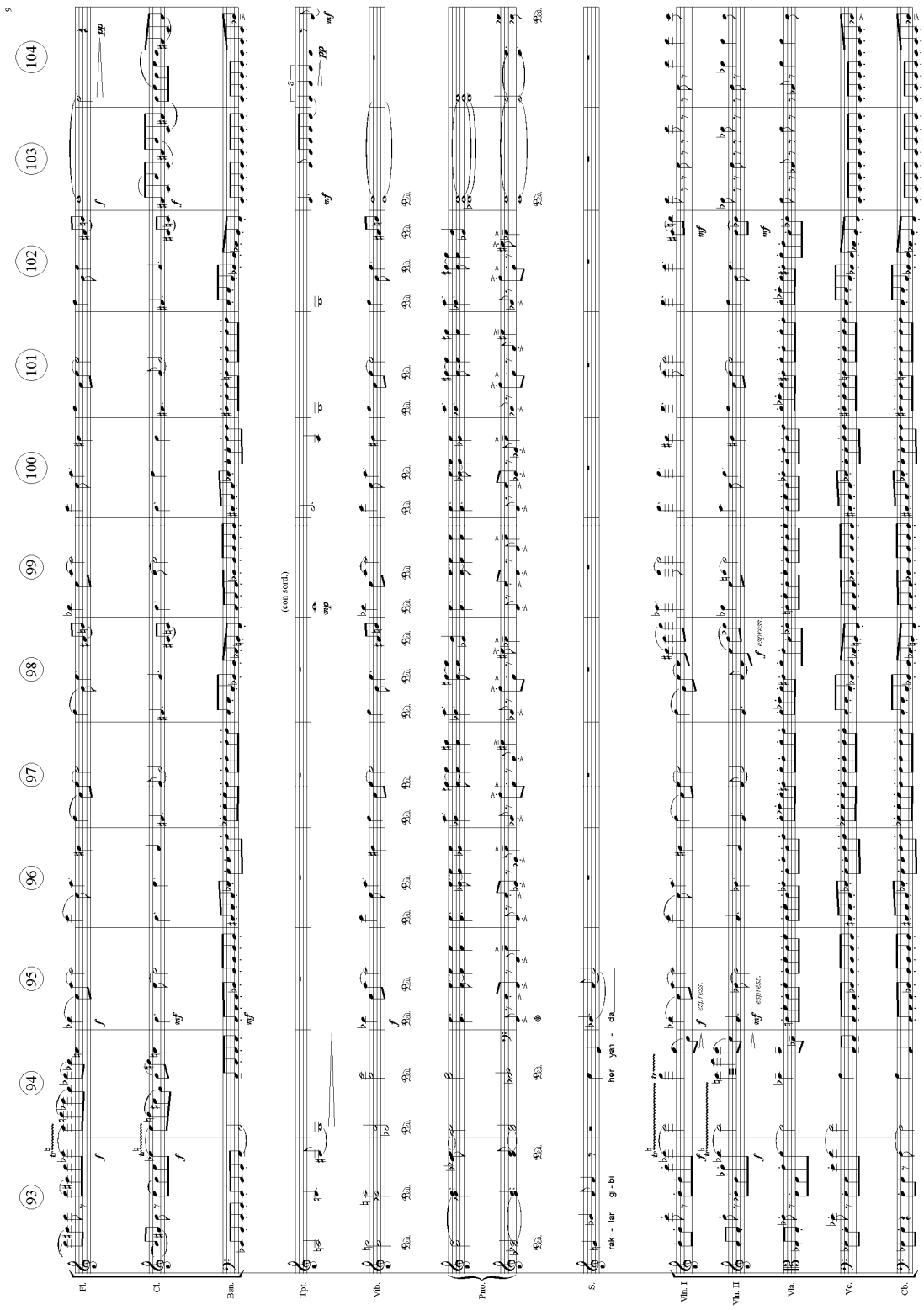

Figure A.73 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 9

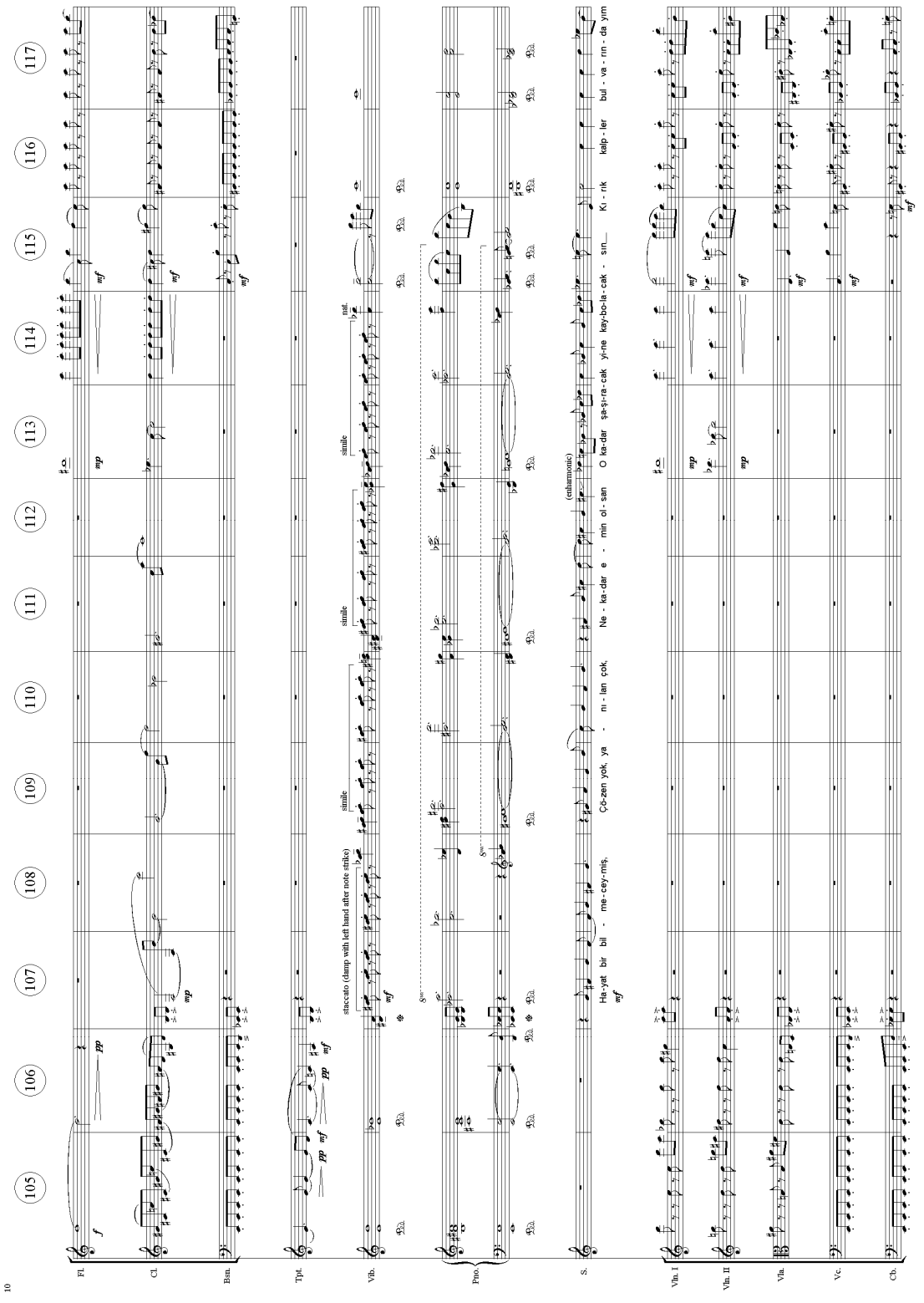

Figure A.74 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 10

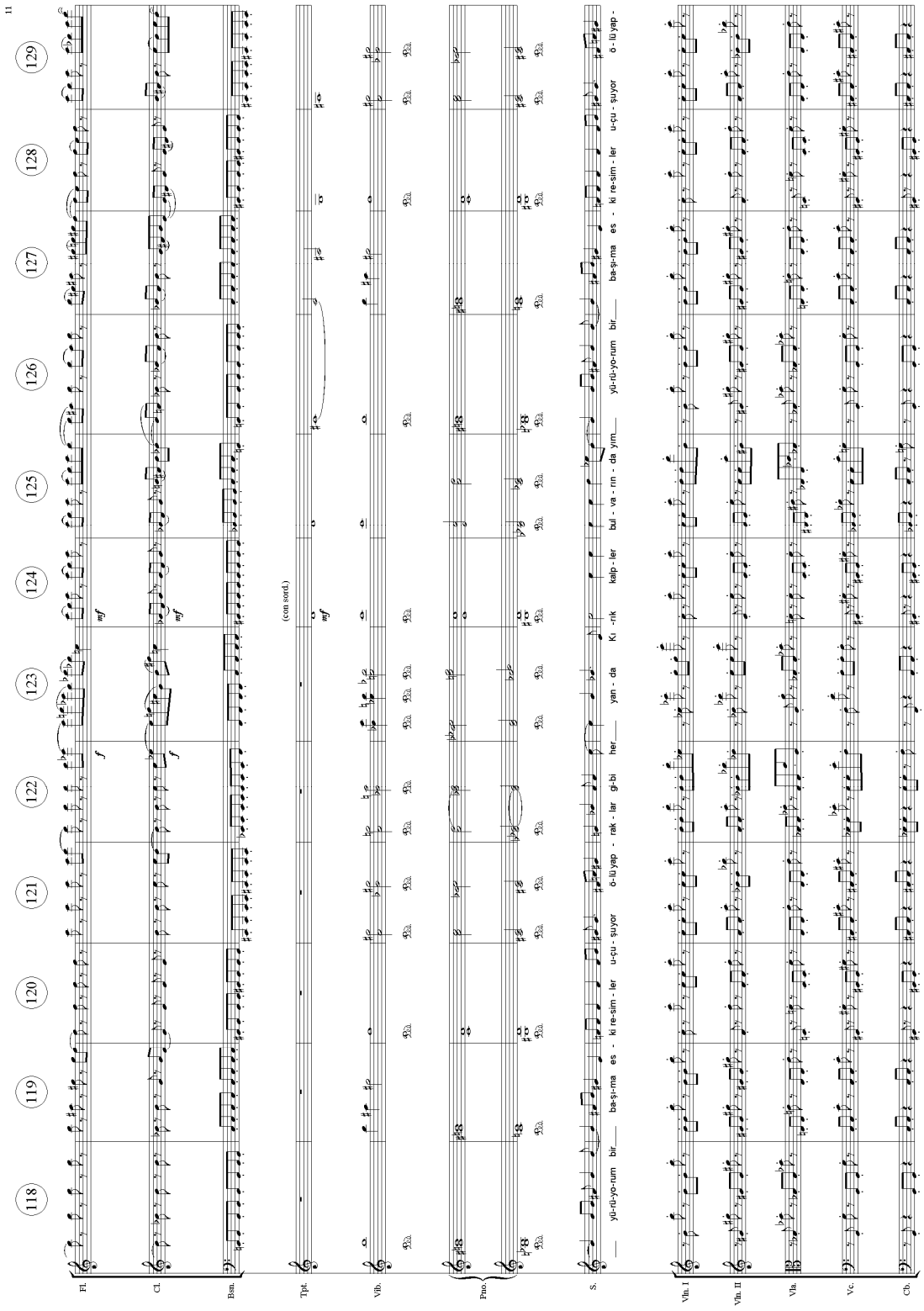

Figure A.75 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 11

Figure A.76 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 12

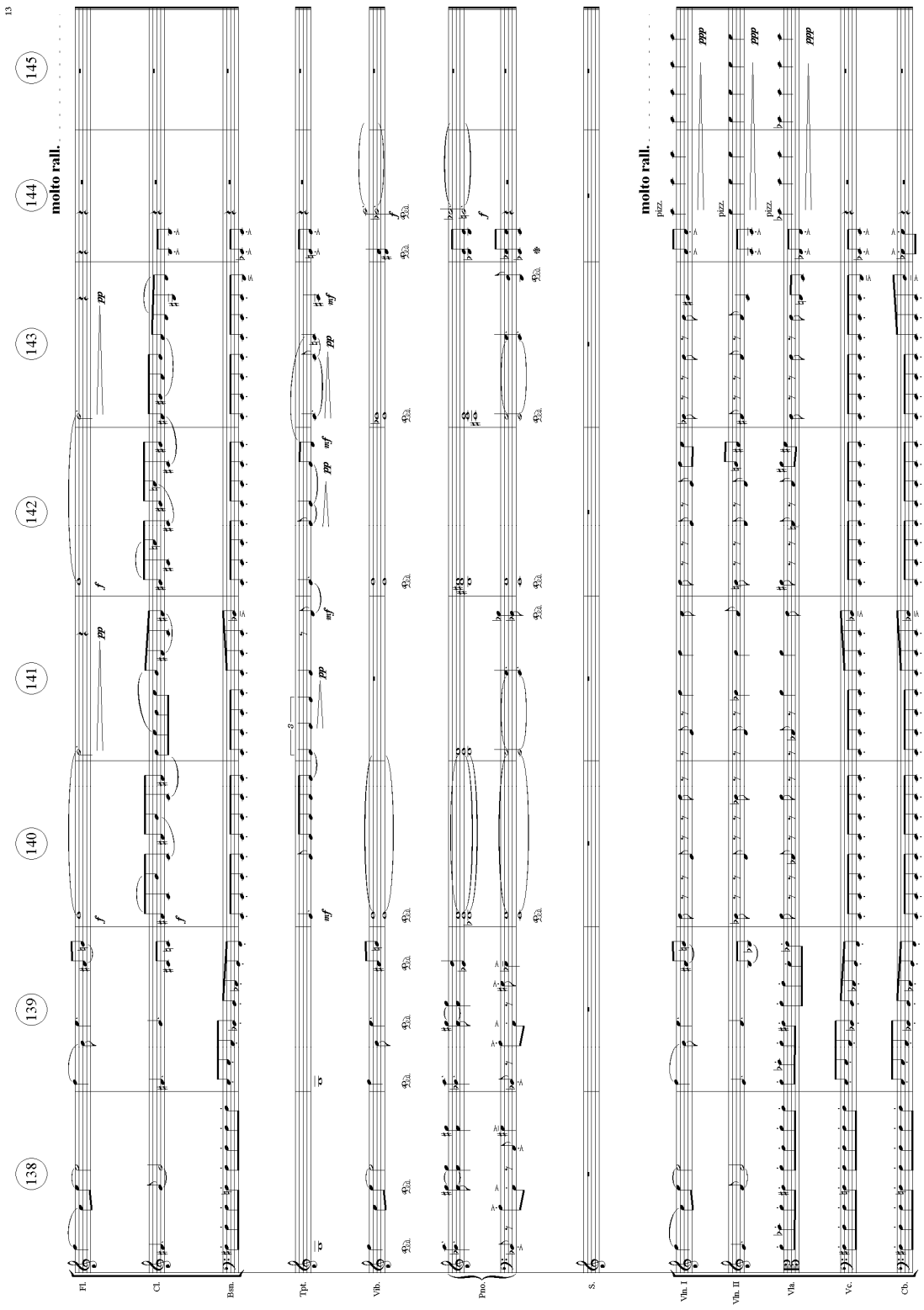

Figure A.77 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 5, page 13

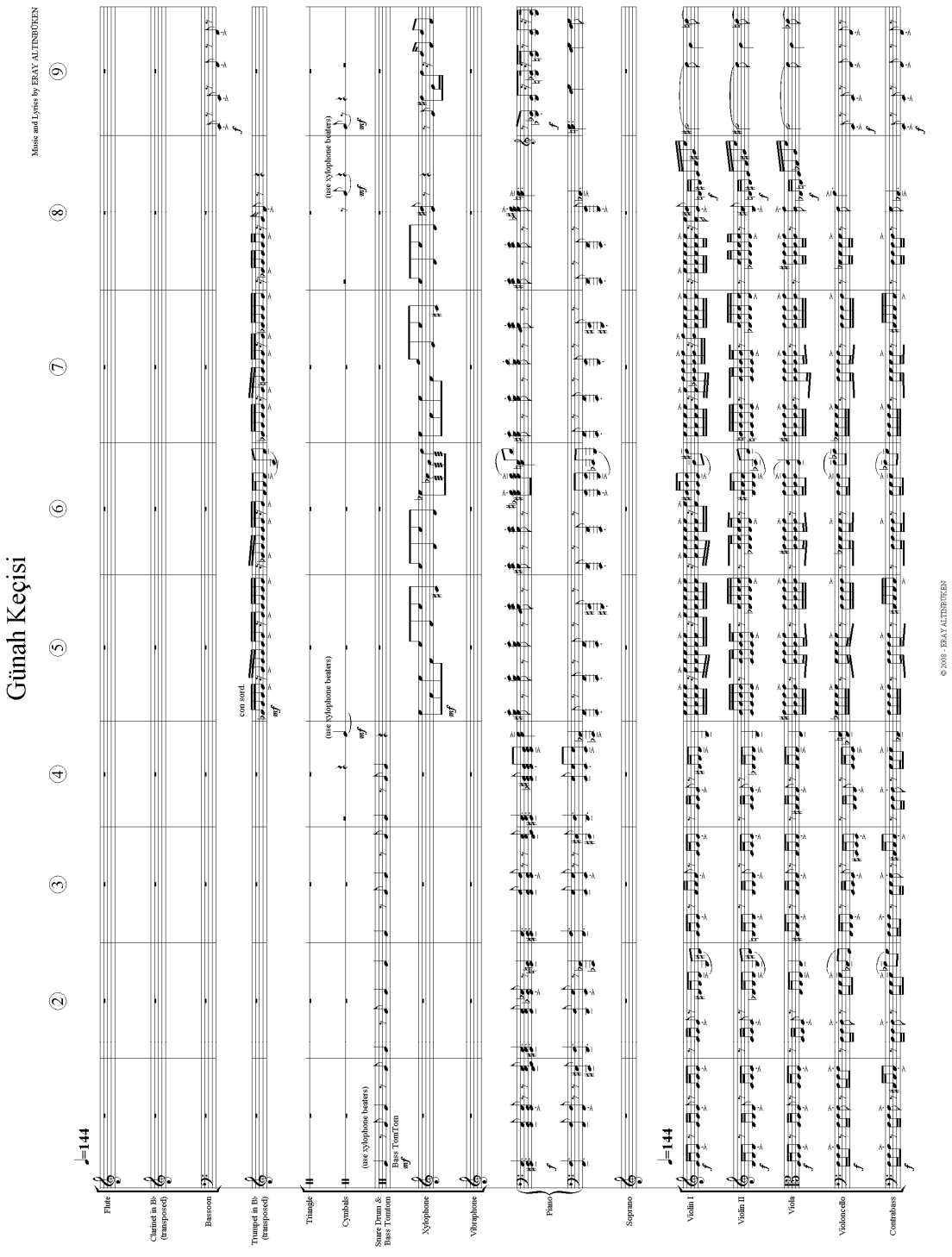

Figure A.78 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 1

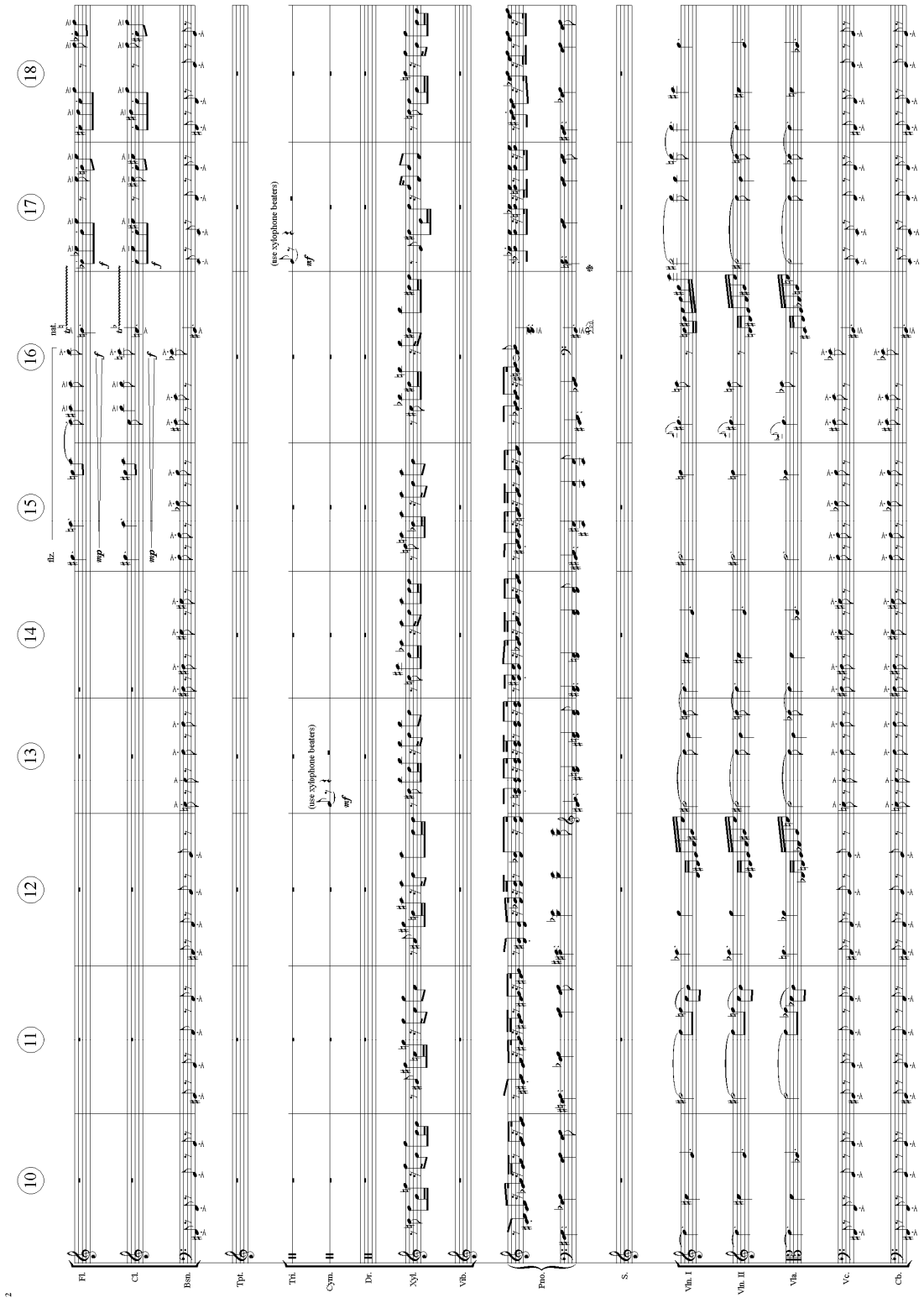

Figure A.79 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 2

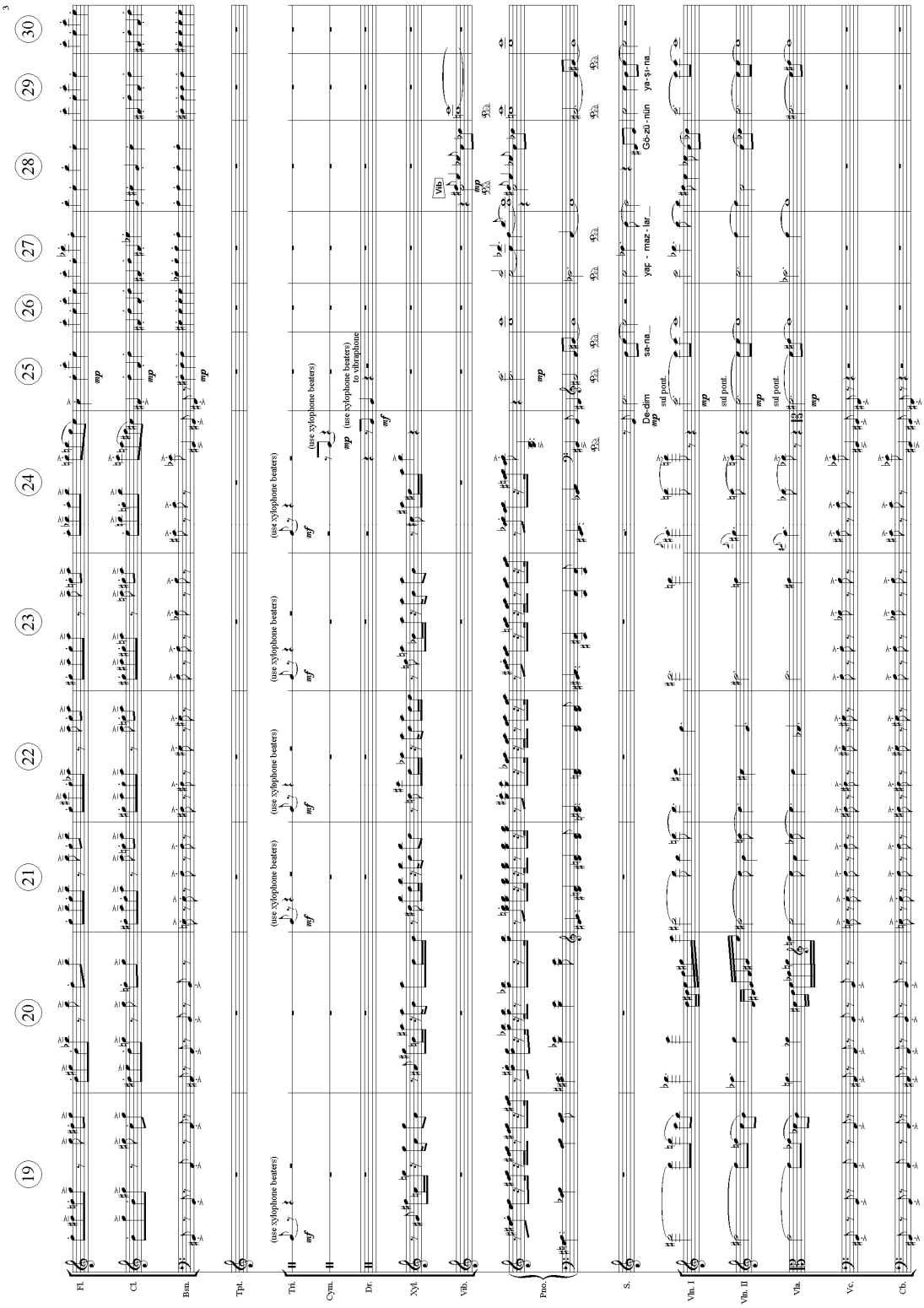

Figure A.80 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 3

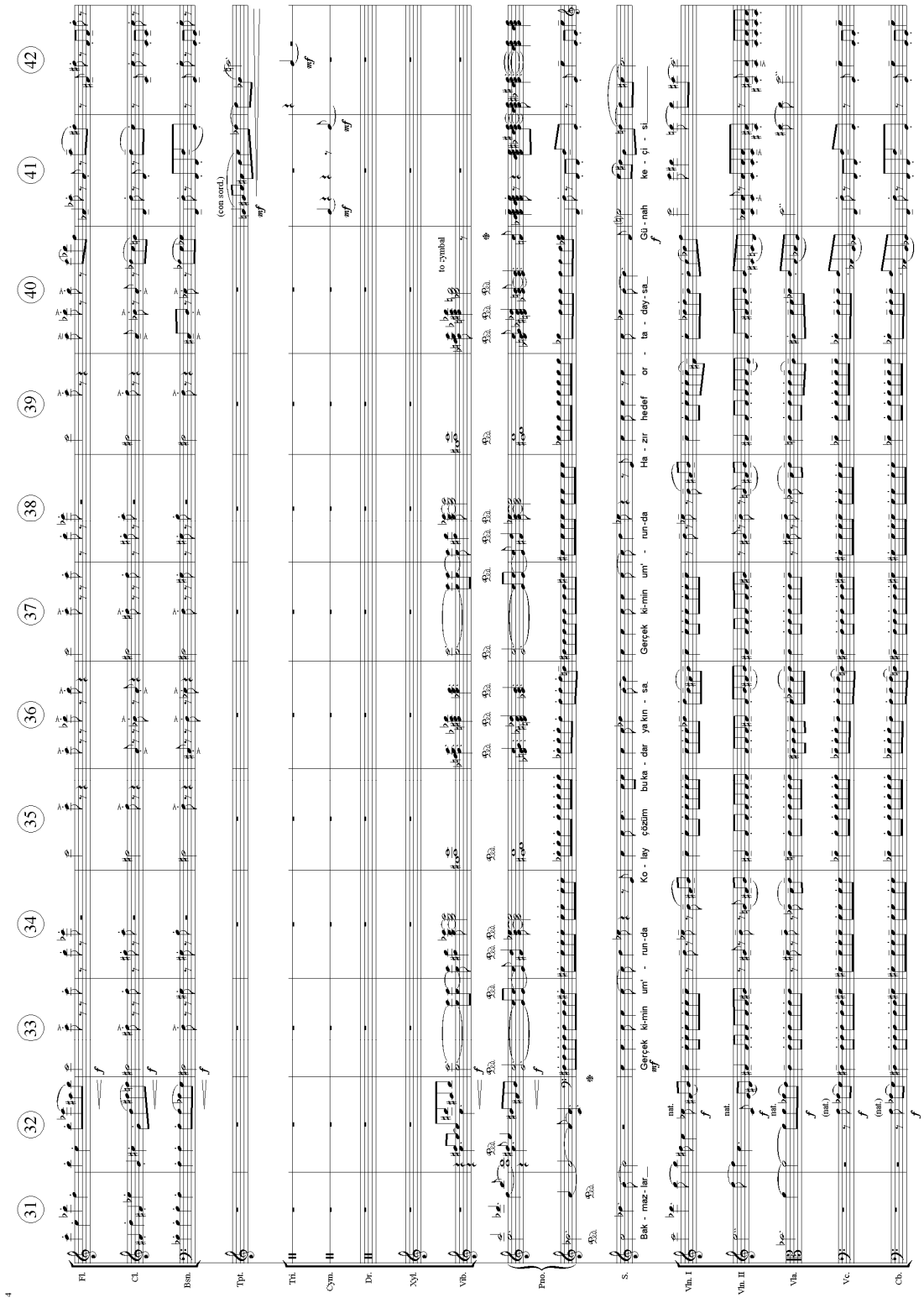

Figure A.81 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 4

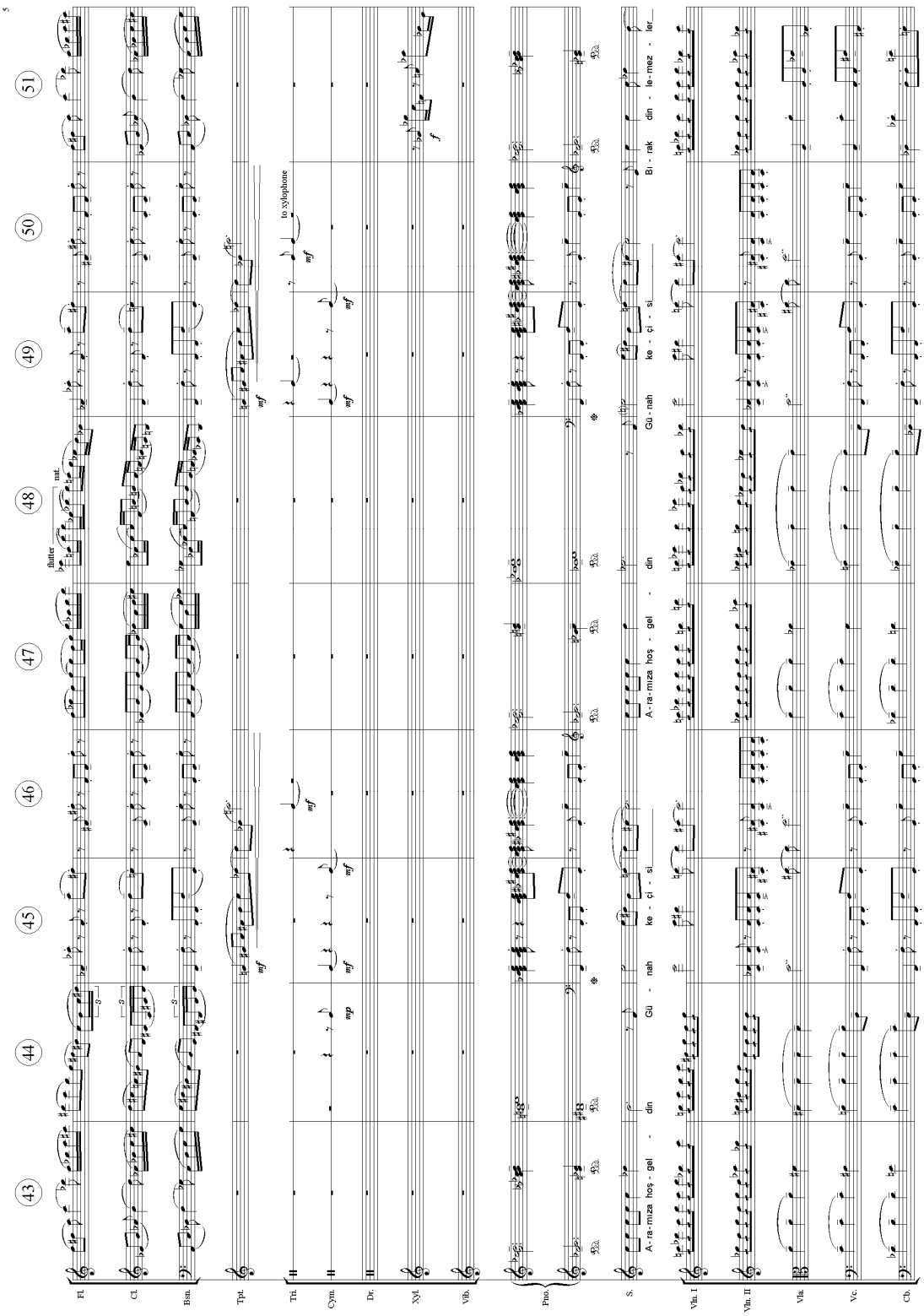

Figure A.82 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 5

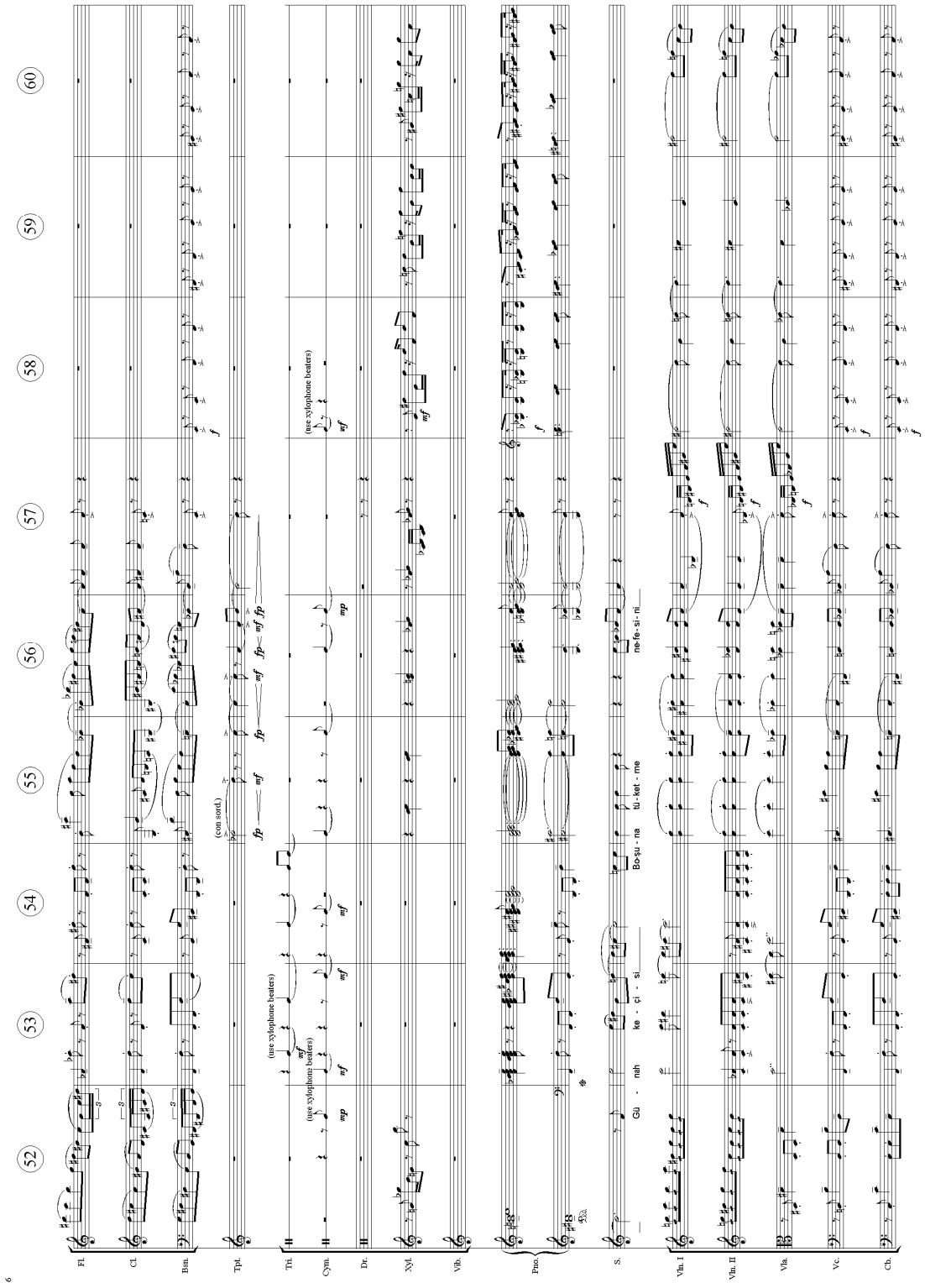

Figure A.83 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 6

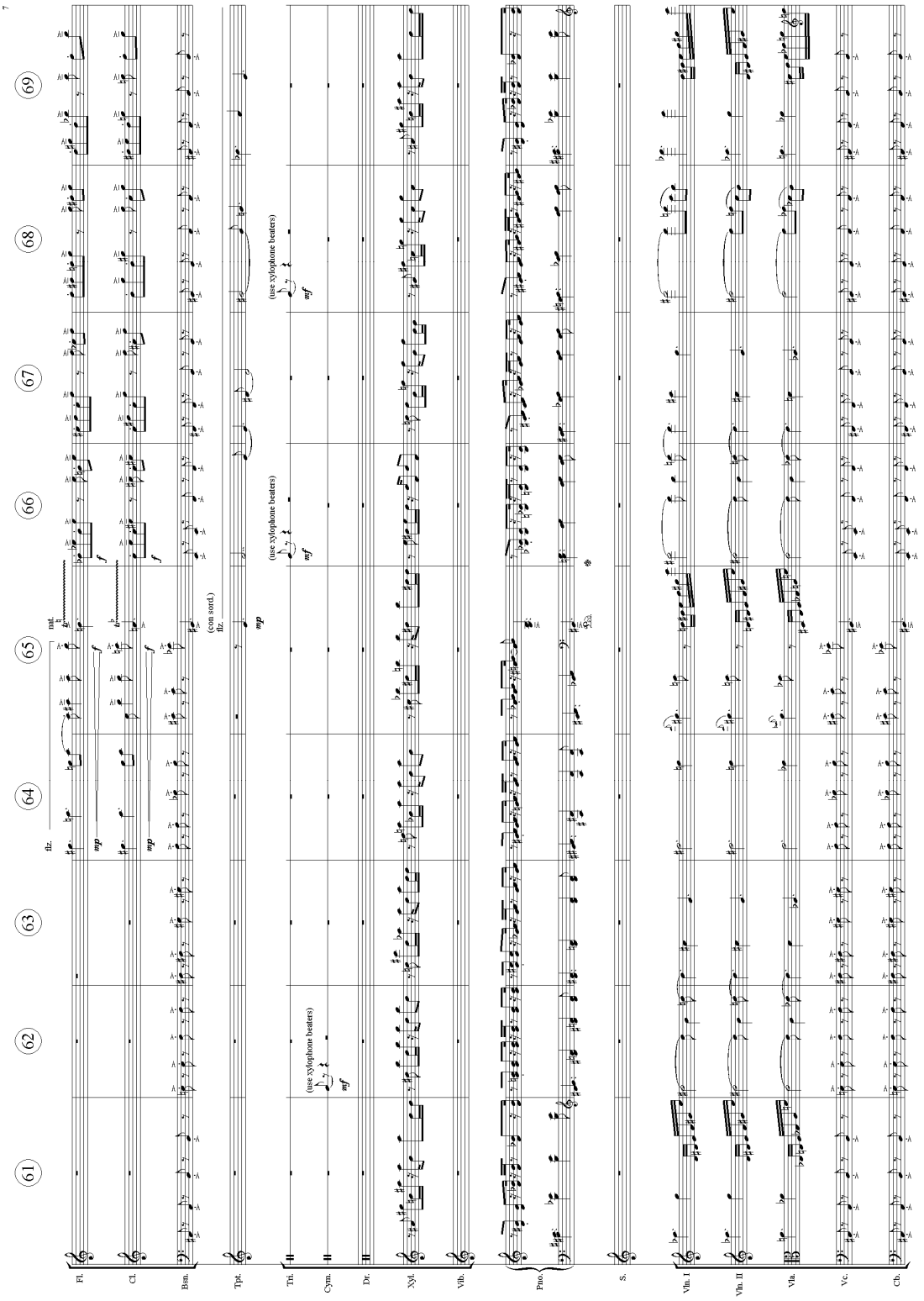

Figure A.84 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 7

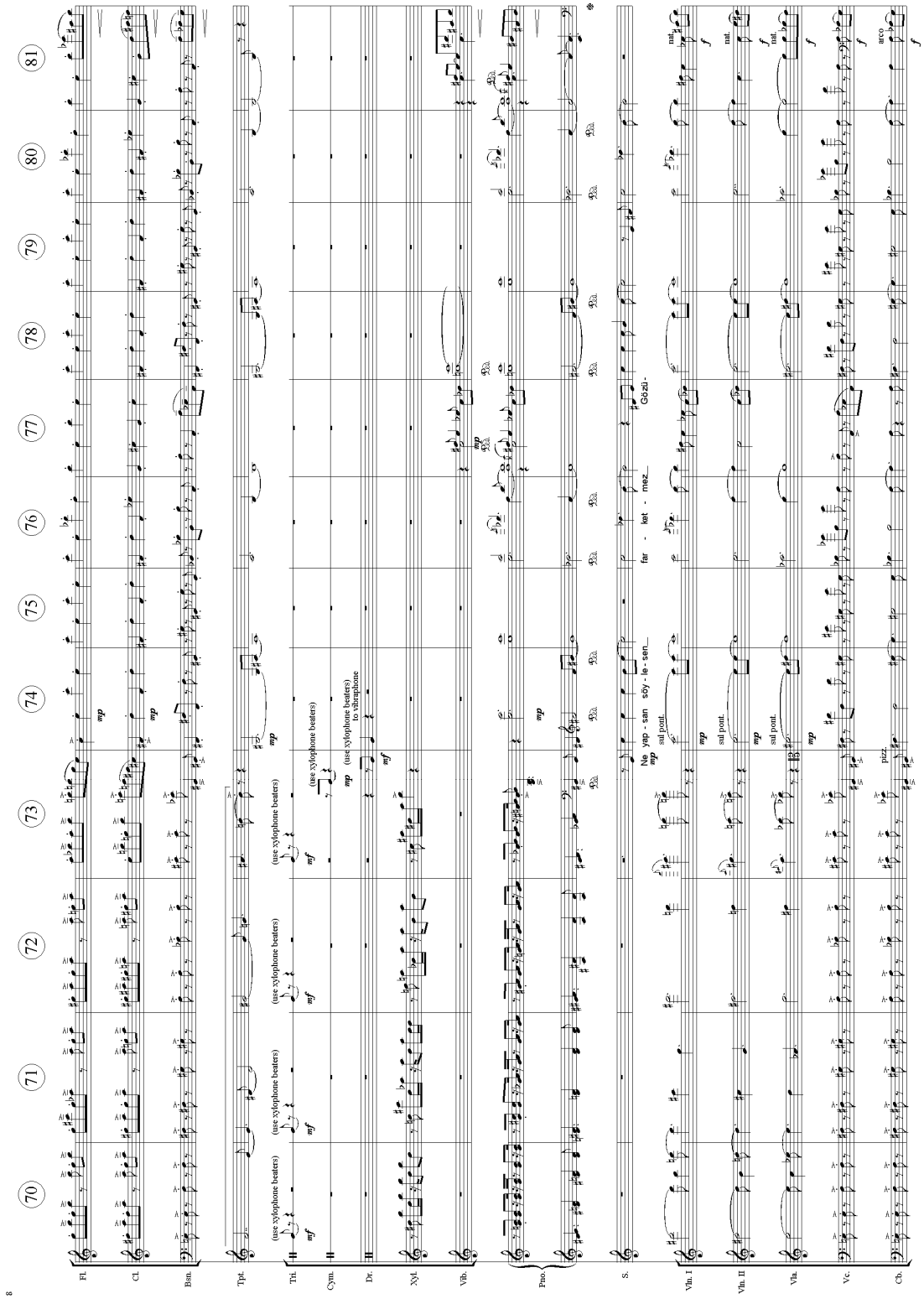

Figure A.85 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 8

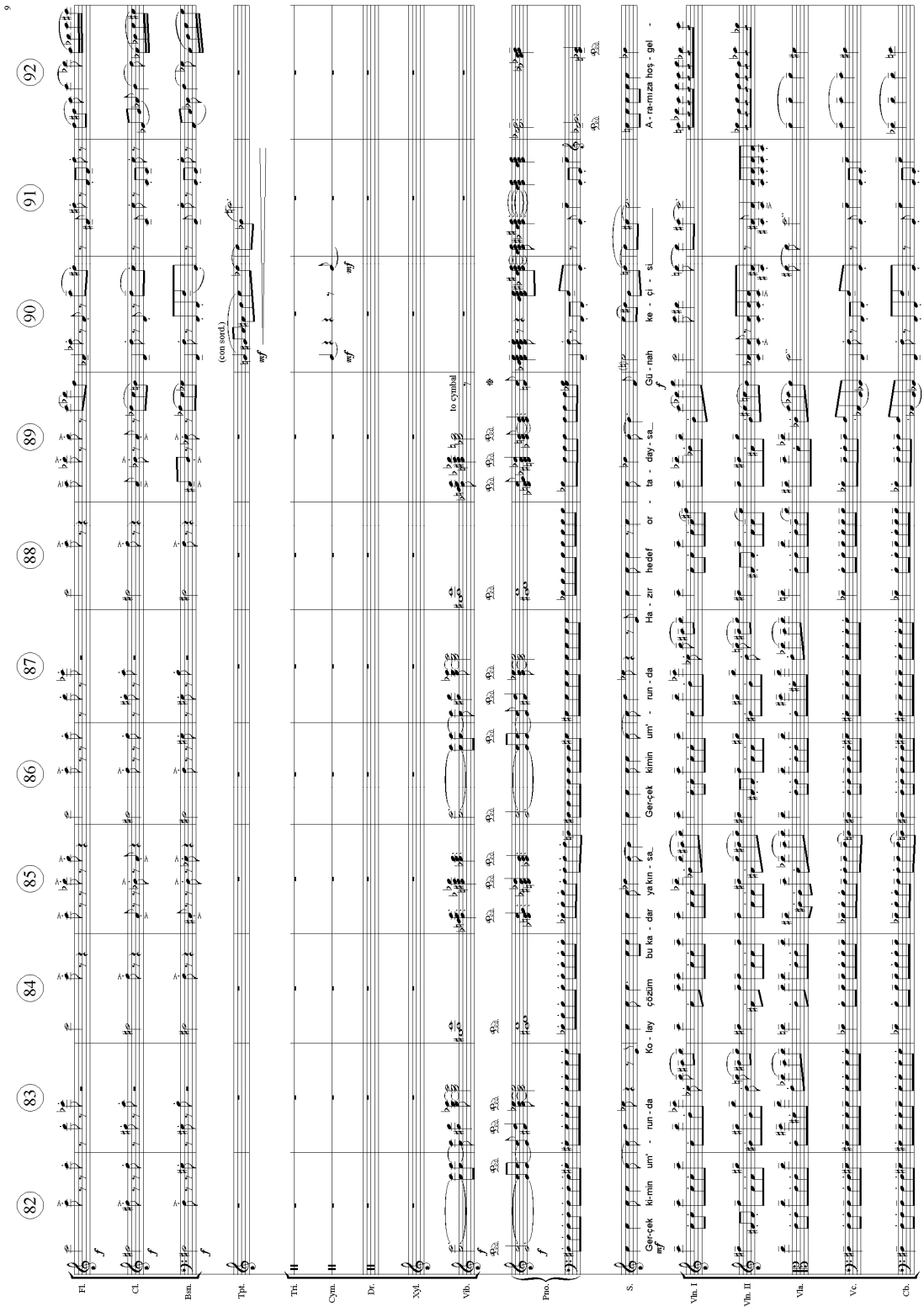

Figure A.86 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 9

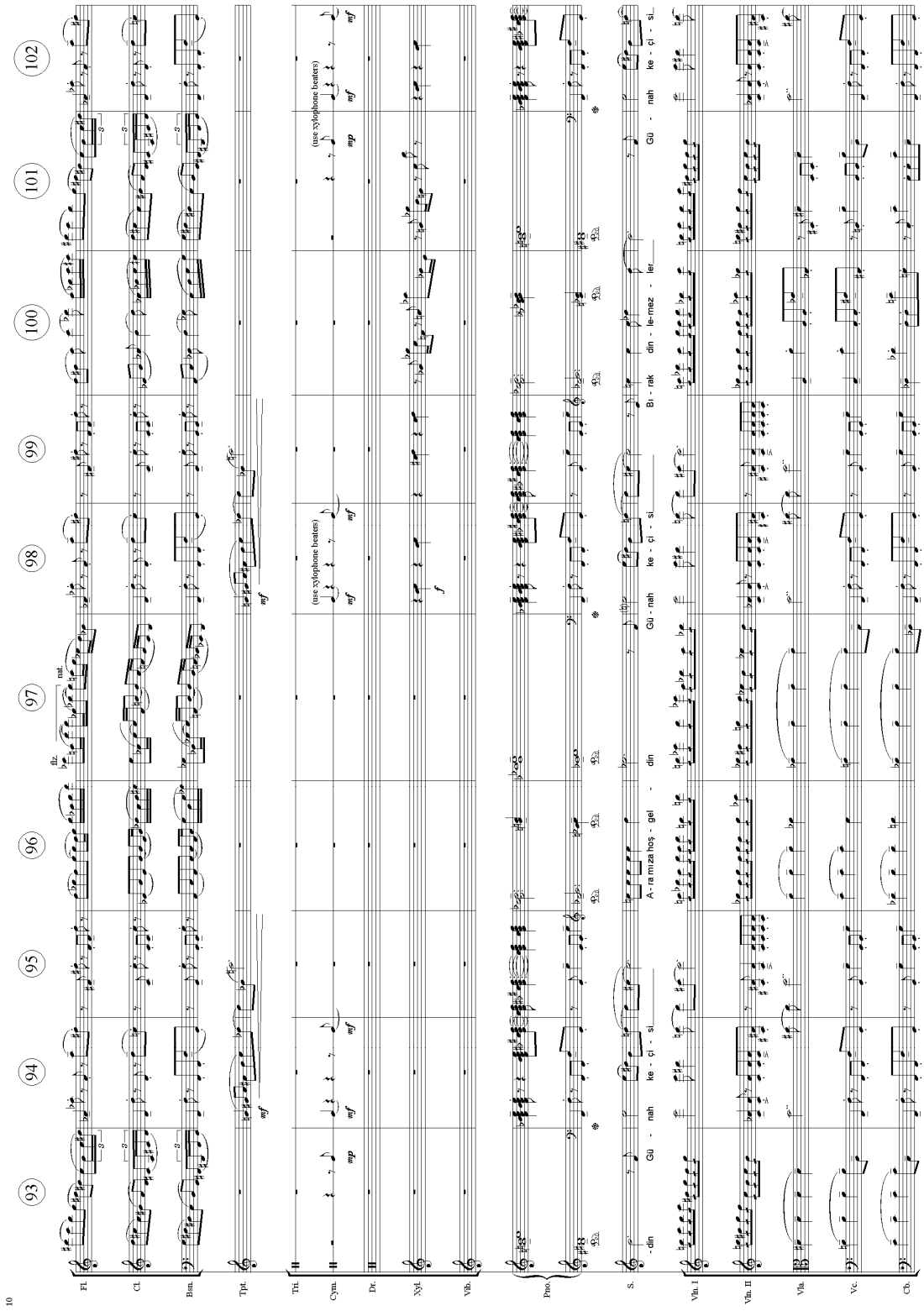

Figure A.87 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 10

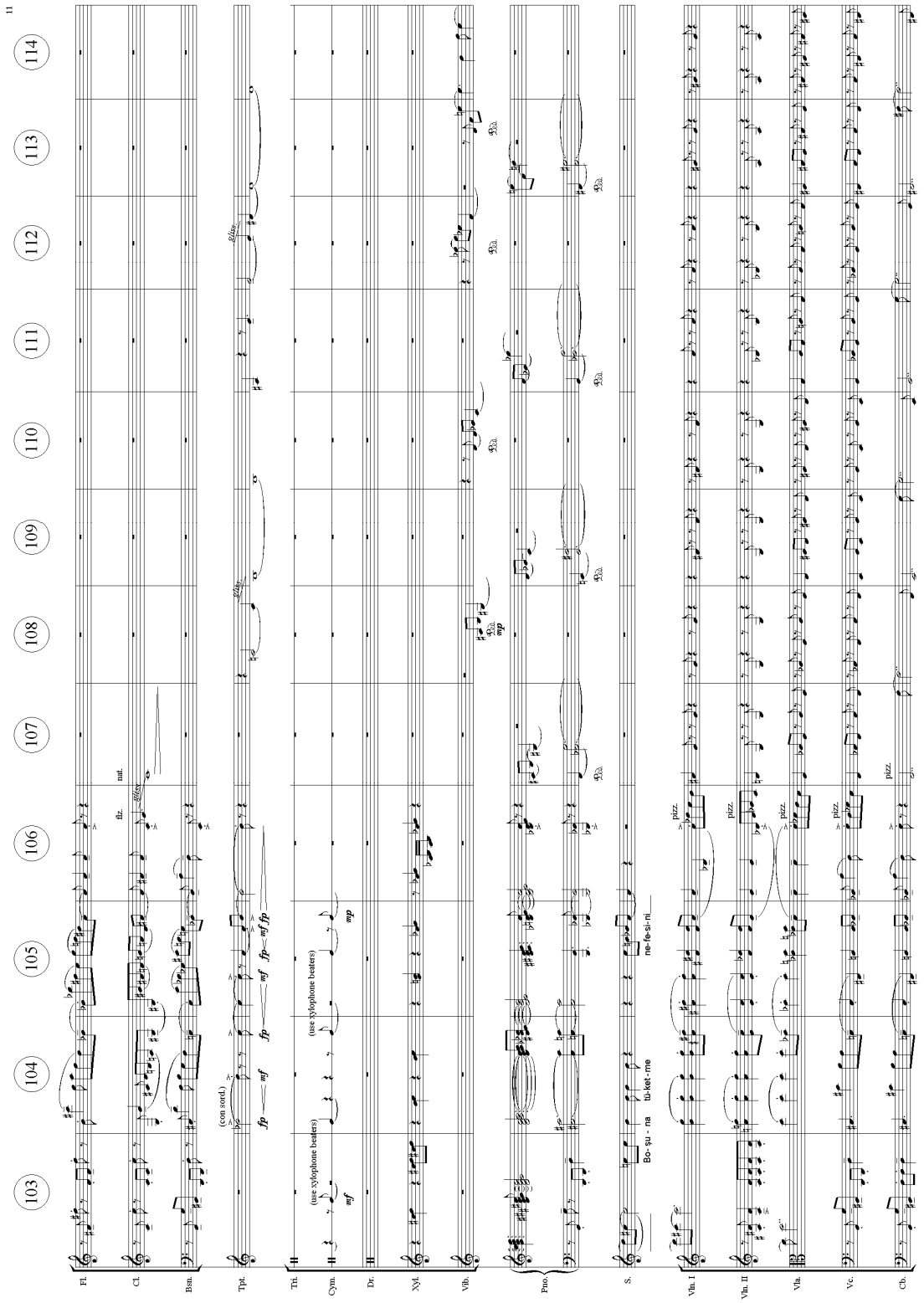

Figure A.88 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 11

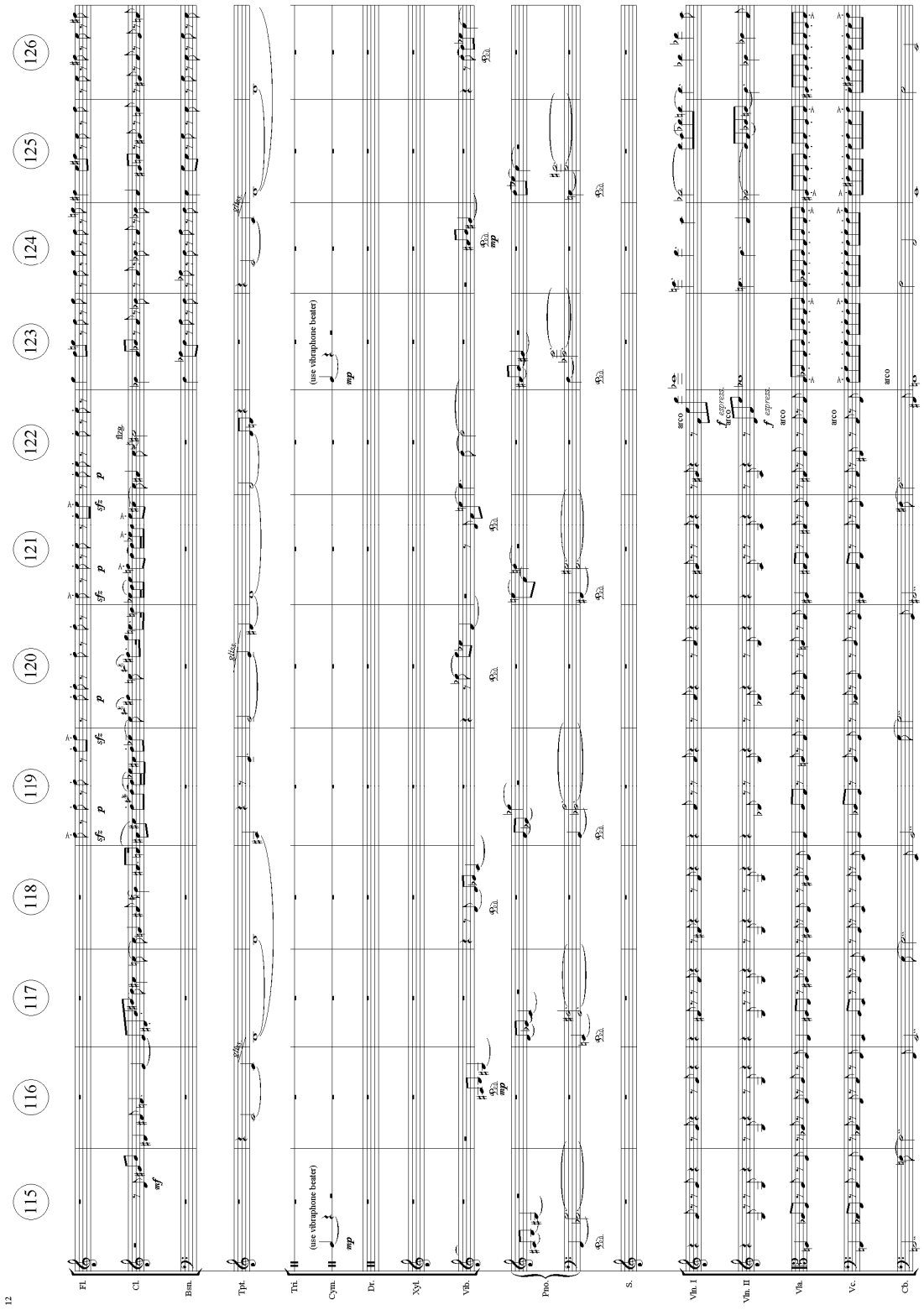

Figure A.89 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 12

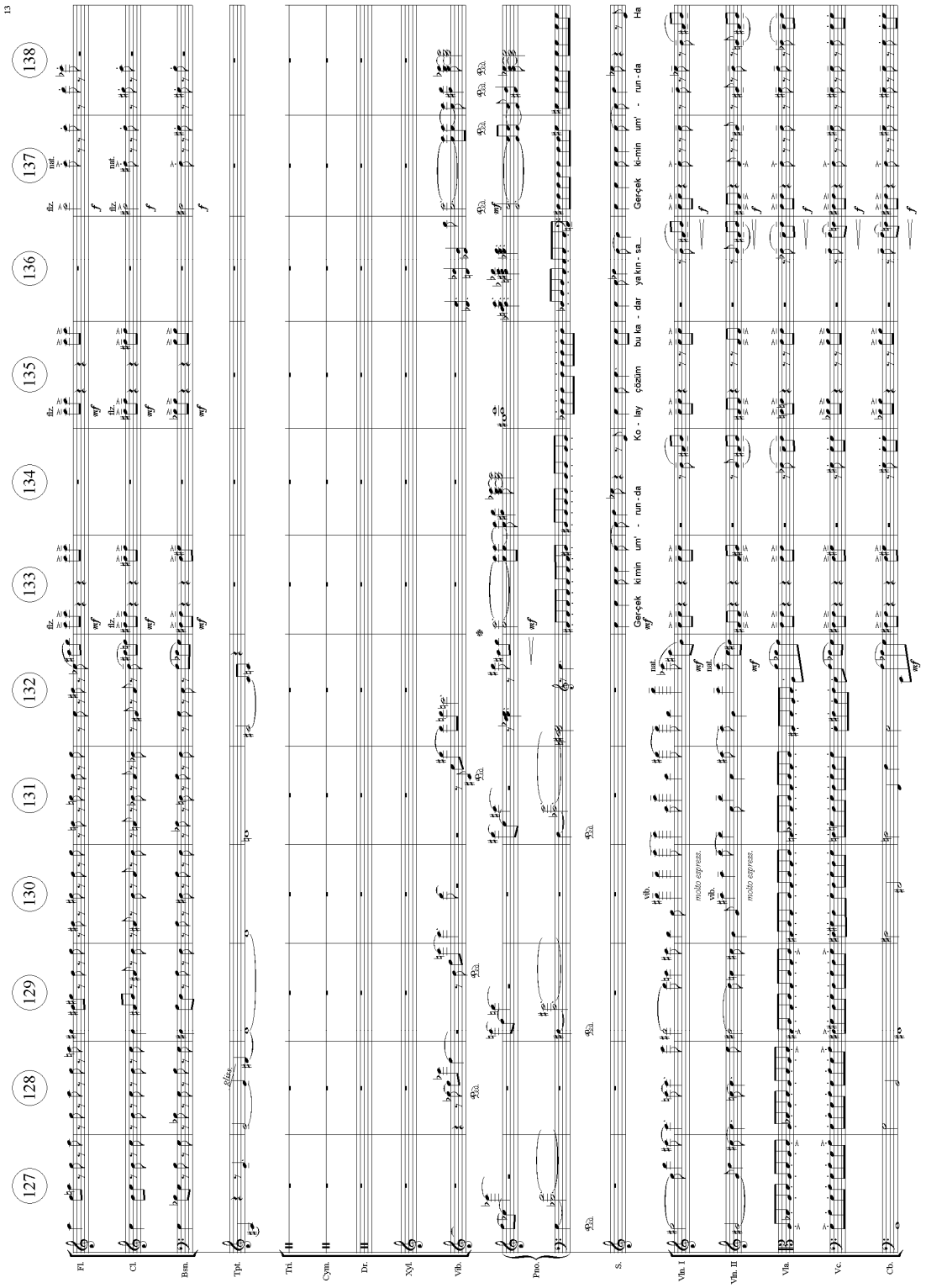

Figure A.90 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 13

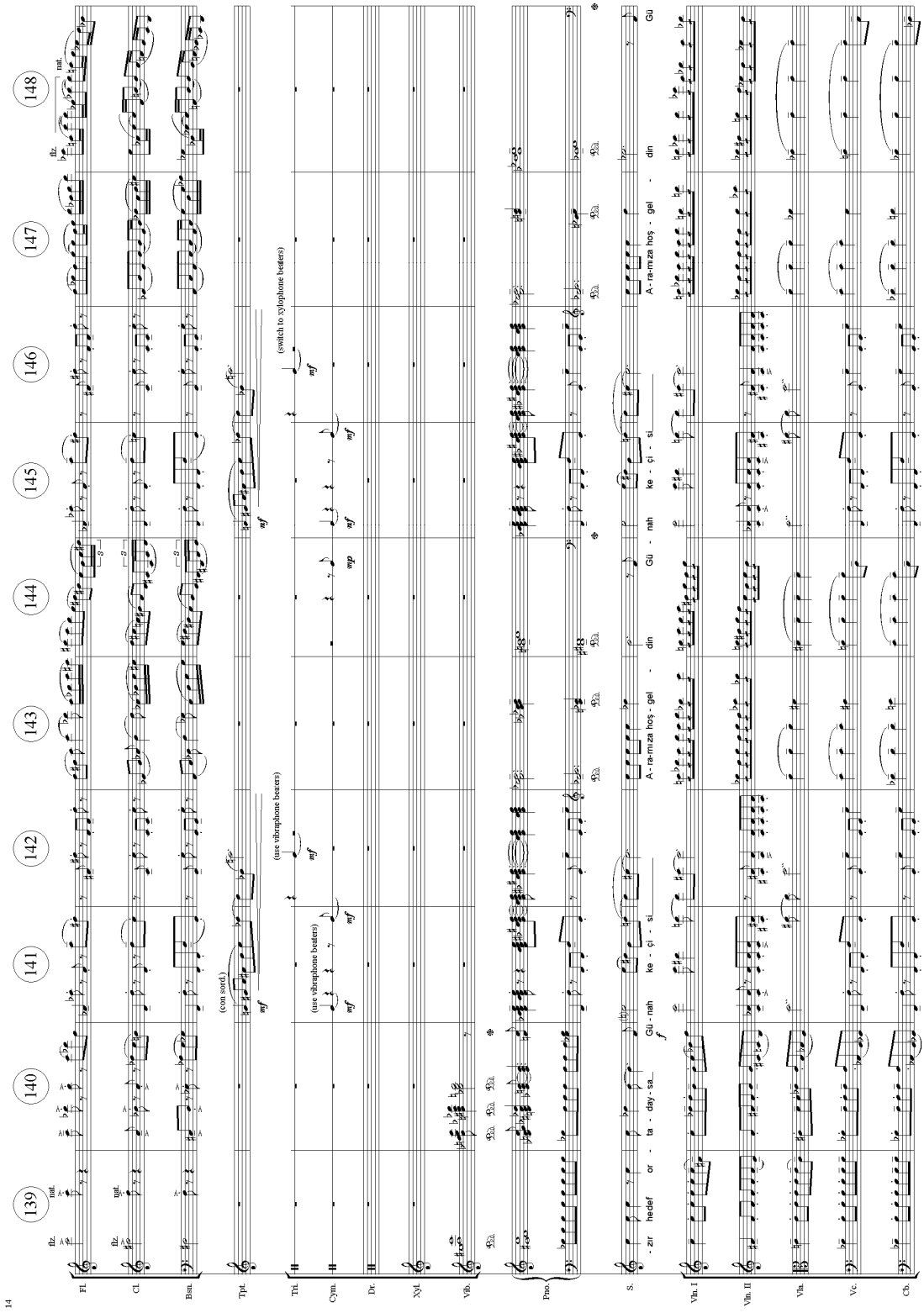

Figure A.91 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 14

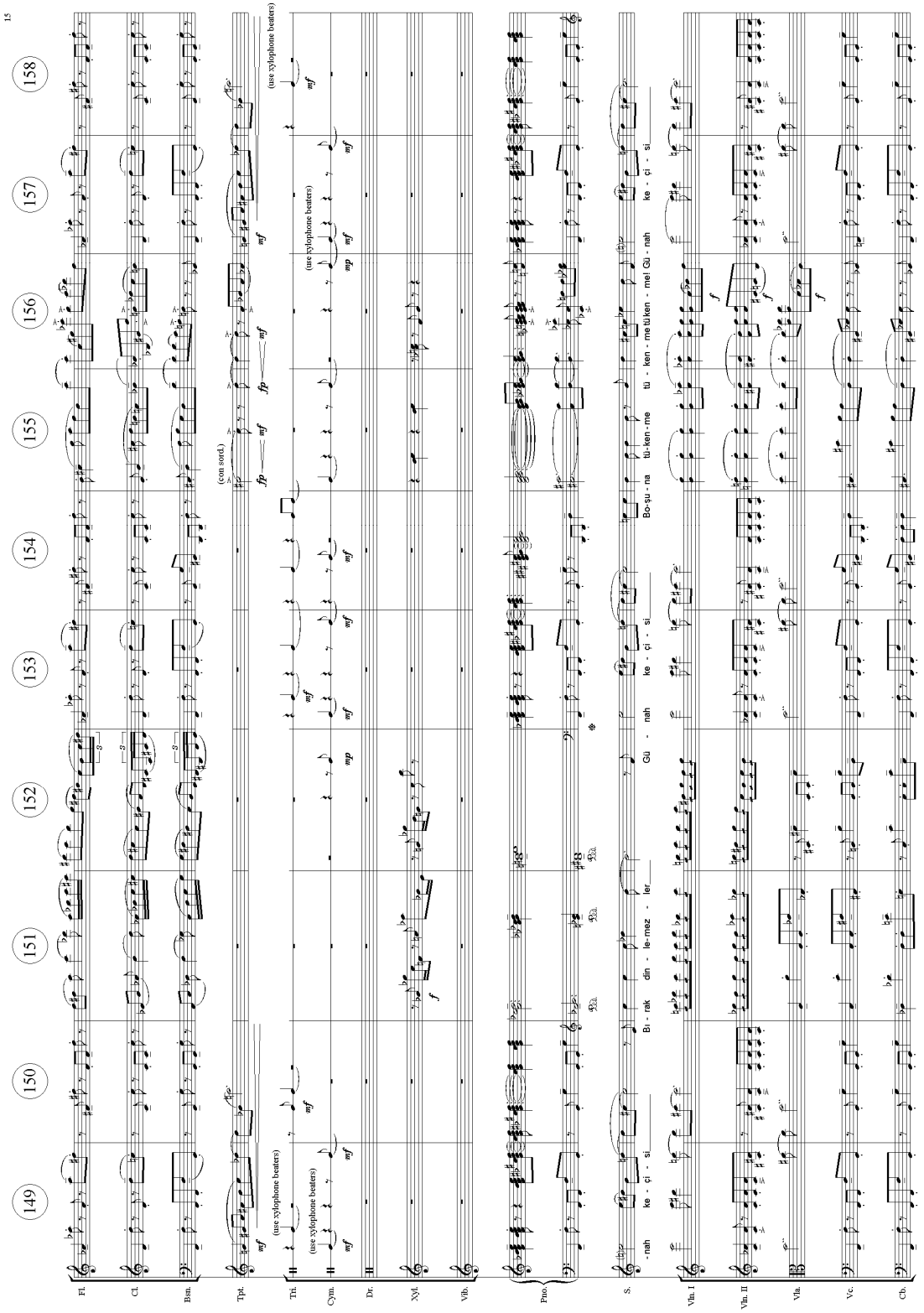

Figure A.92 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 15

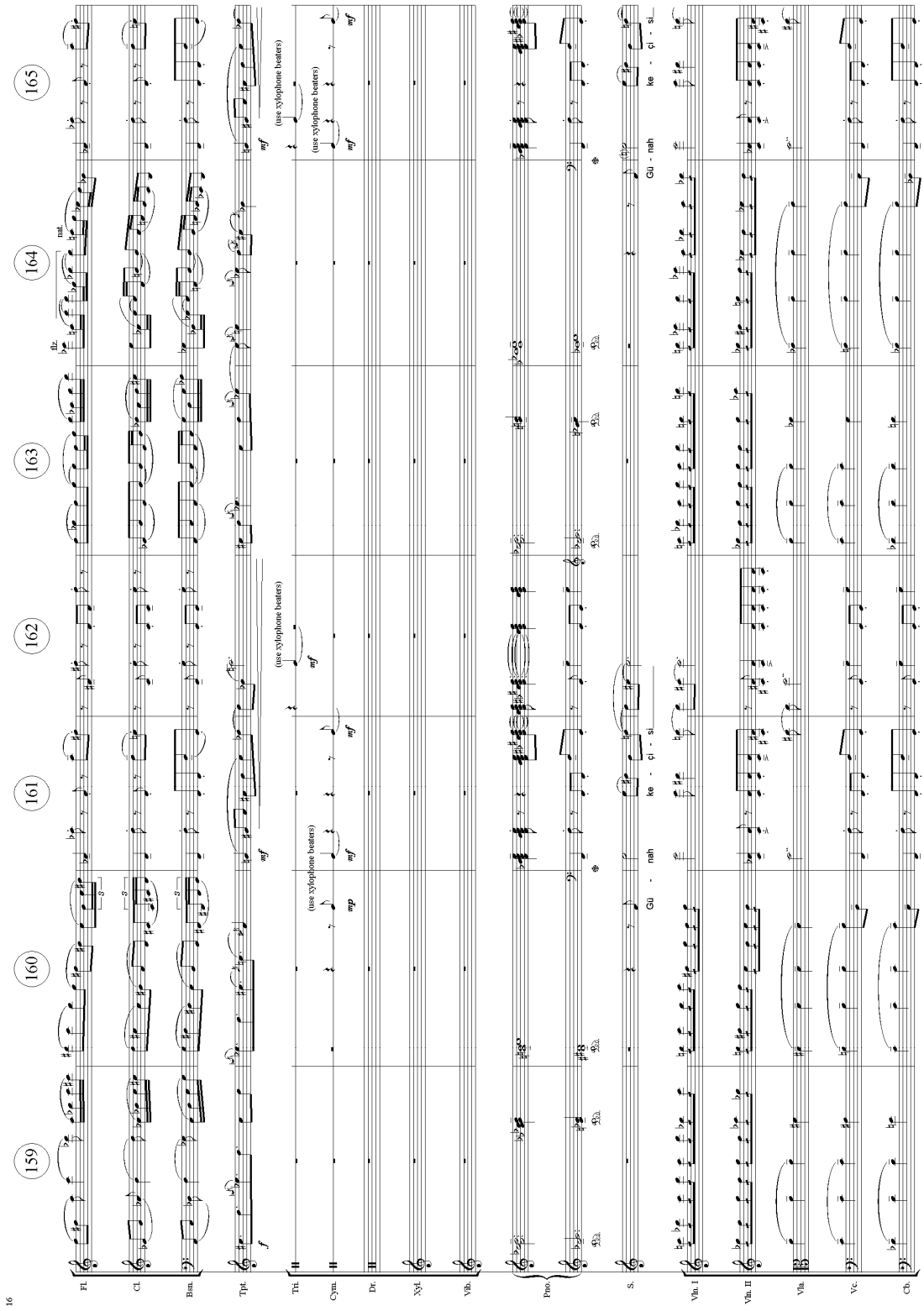

Figure A.93 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 16

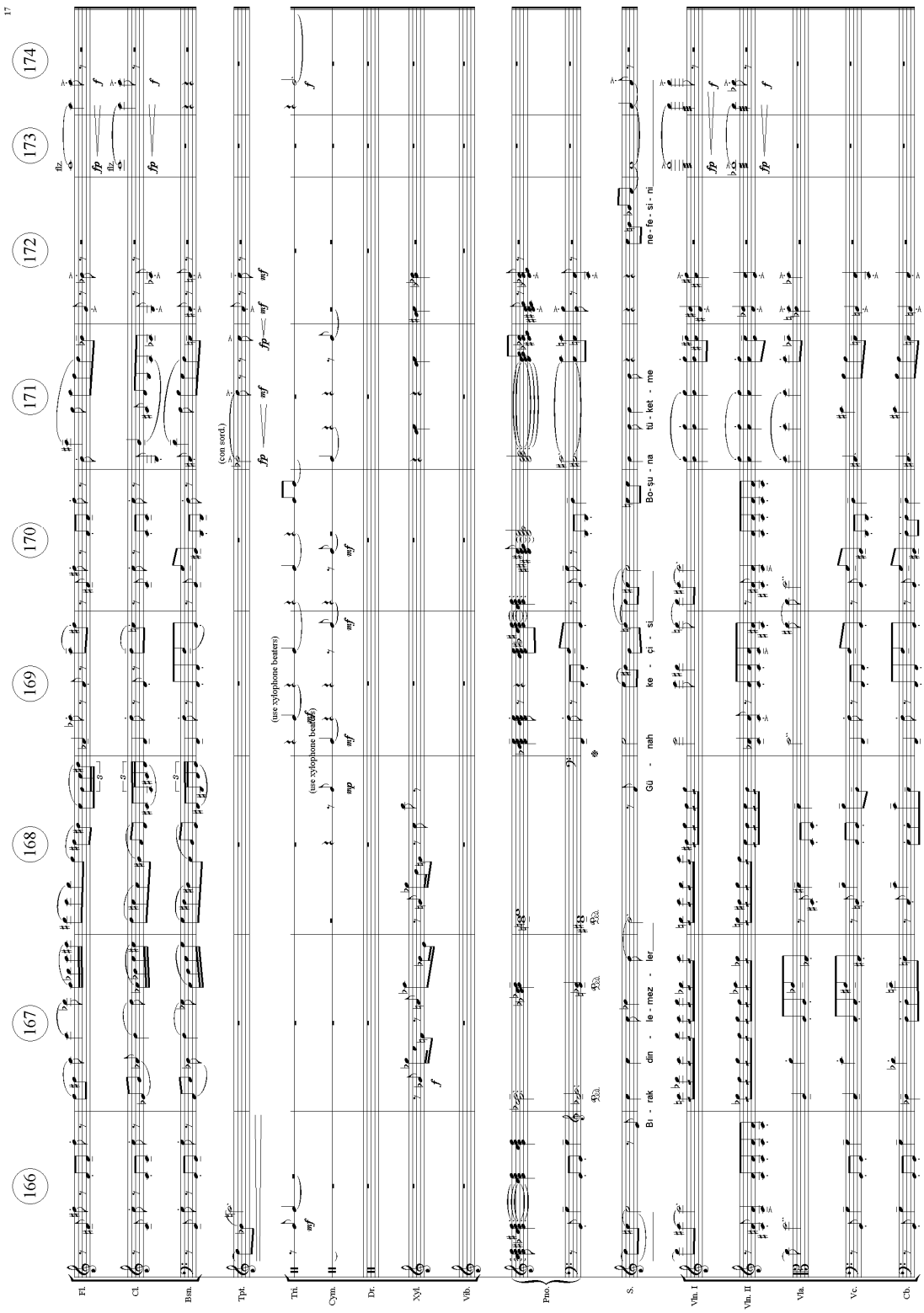

Figure A.94 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 6, page 17

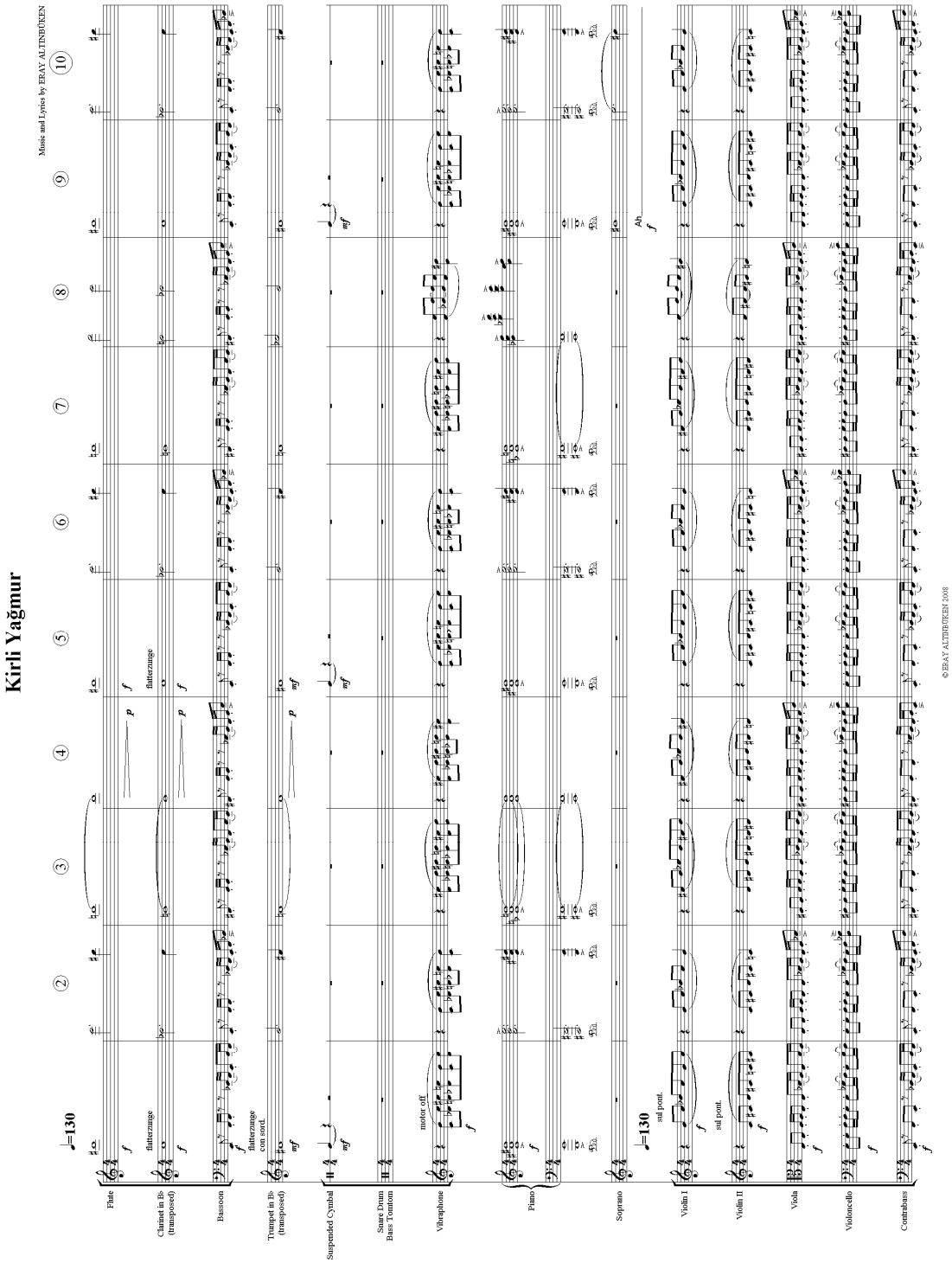

Figure A.95 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 1

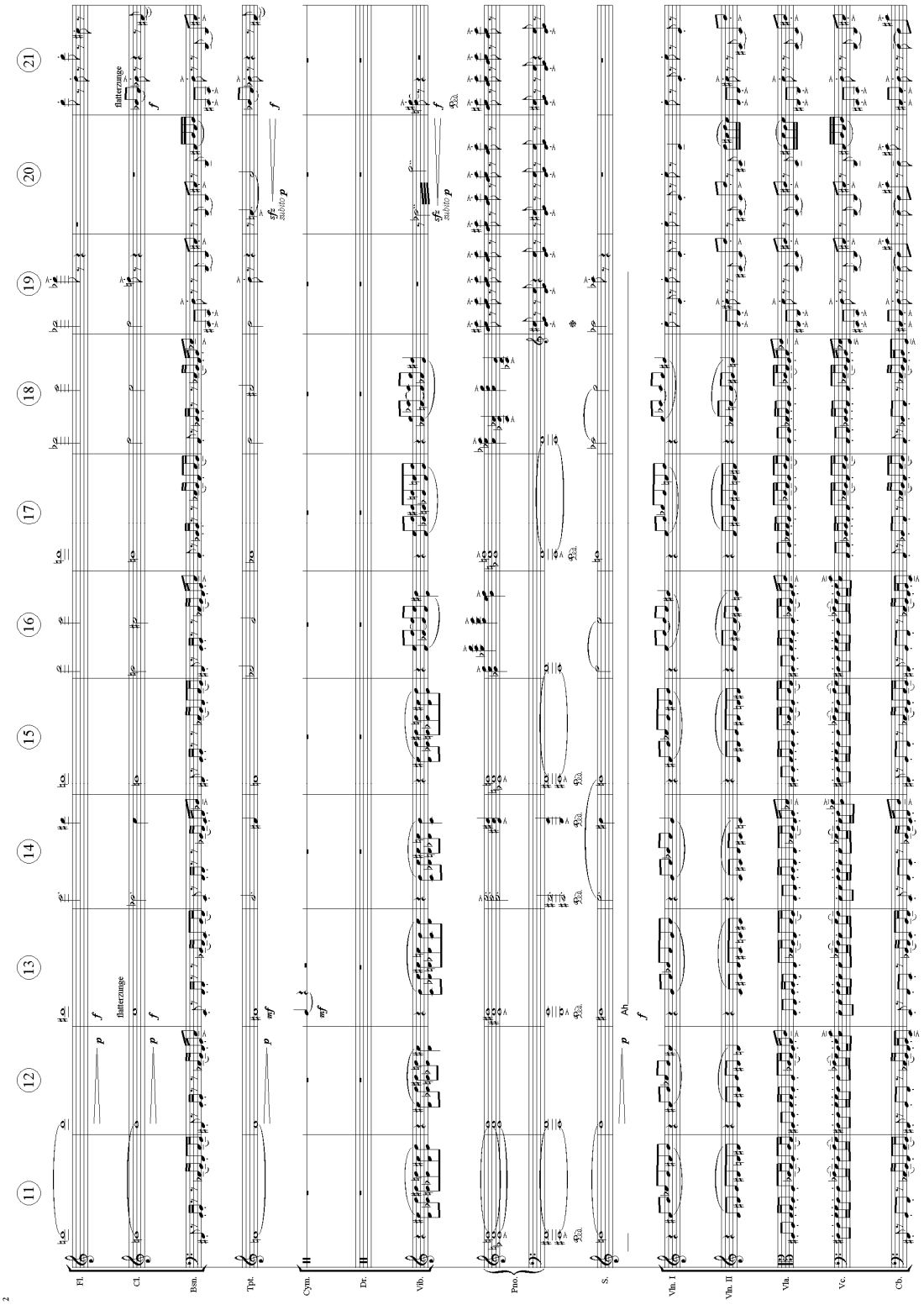

Figure A.96 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 2

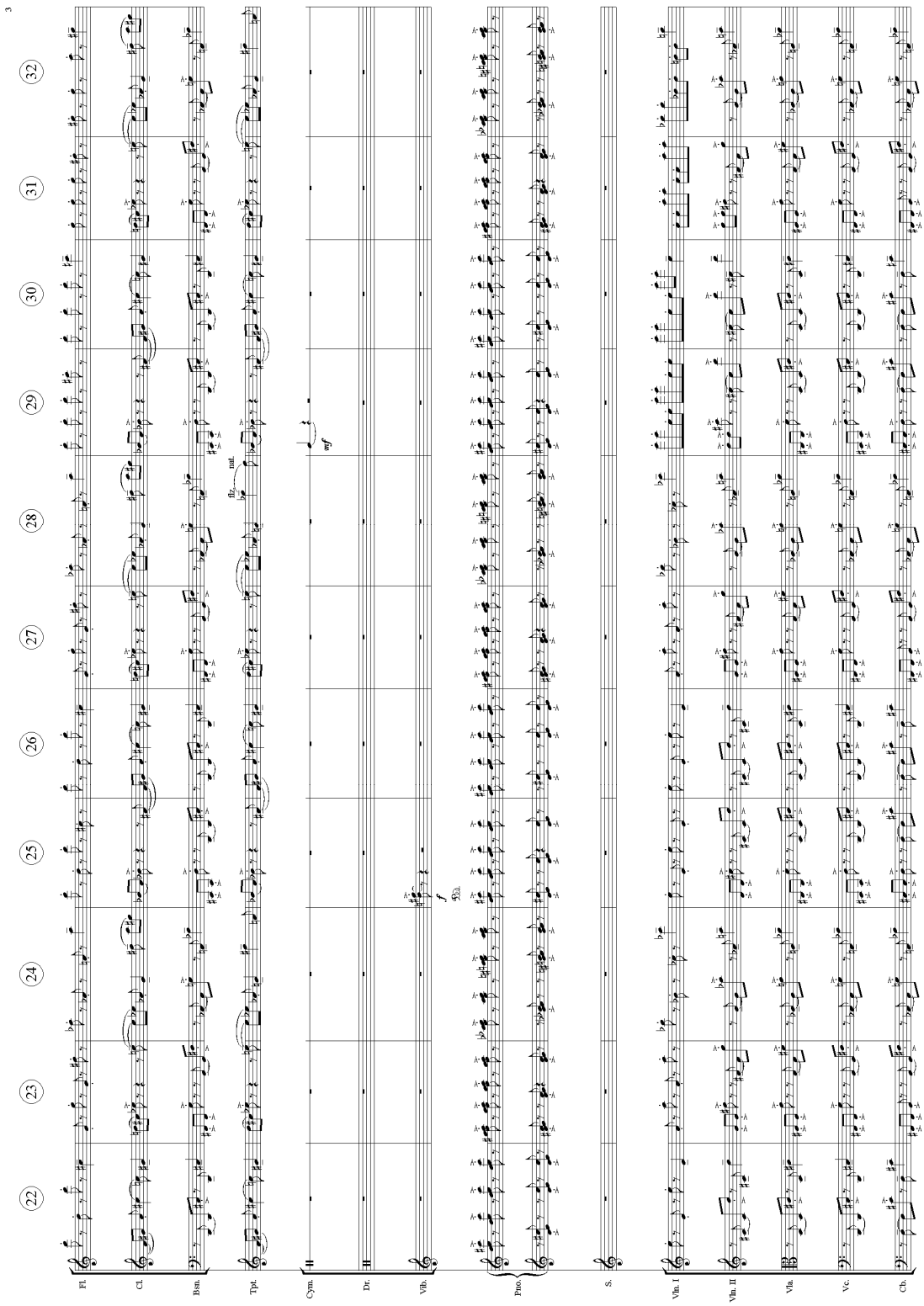

Figure A.97 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 3

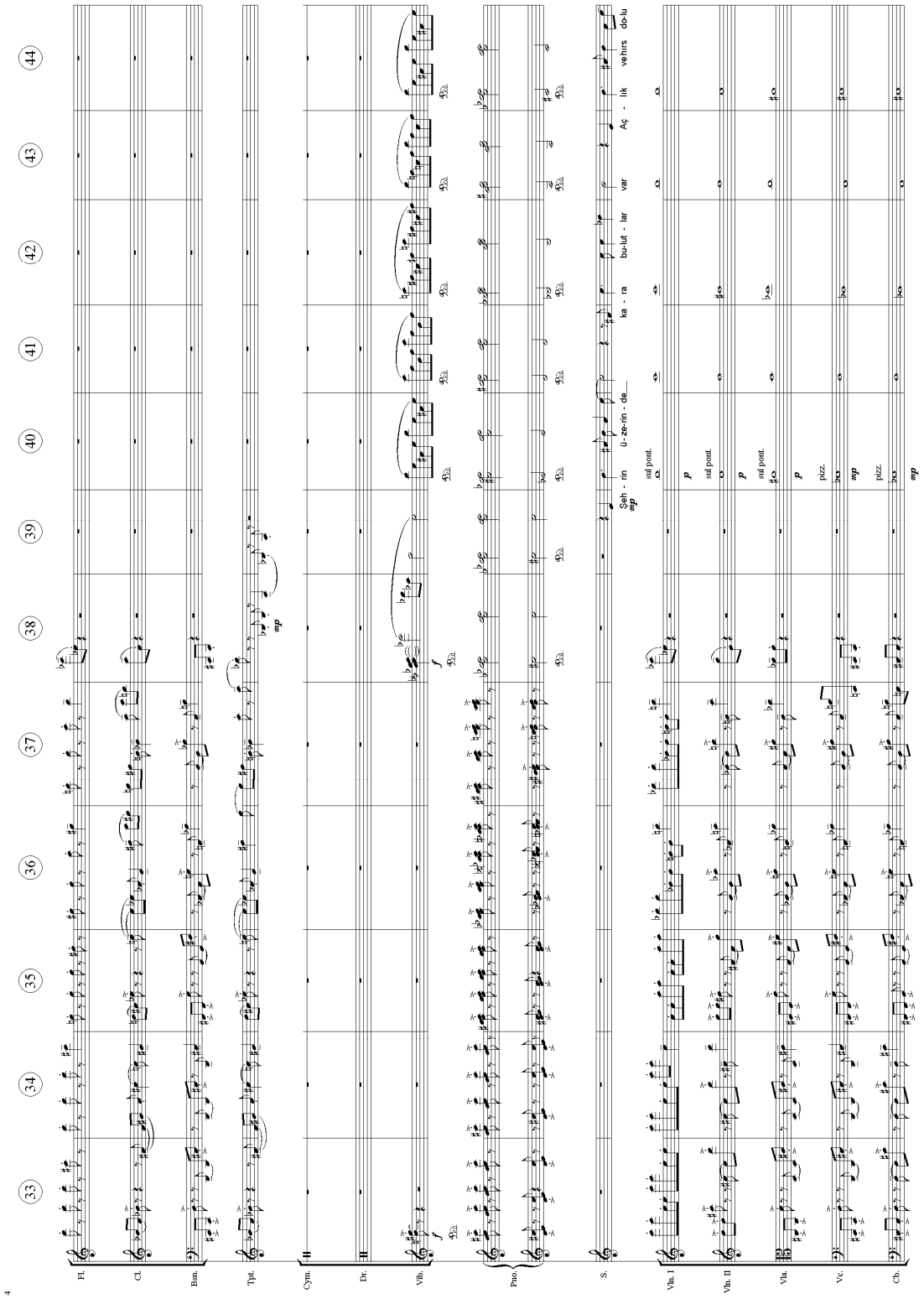

Figure A.98 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 4

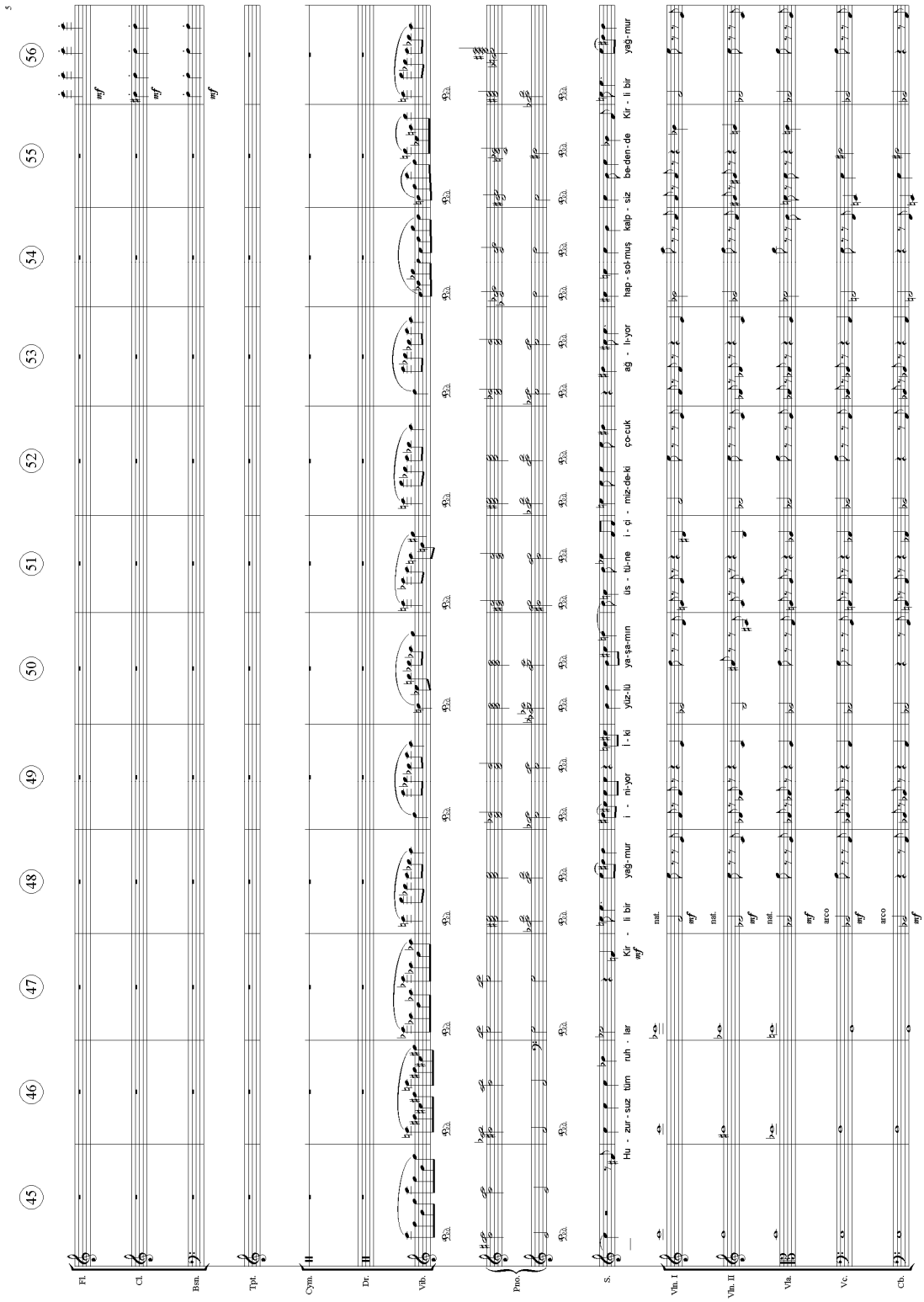

Figure A.99 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 5

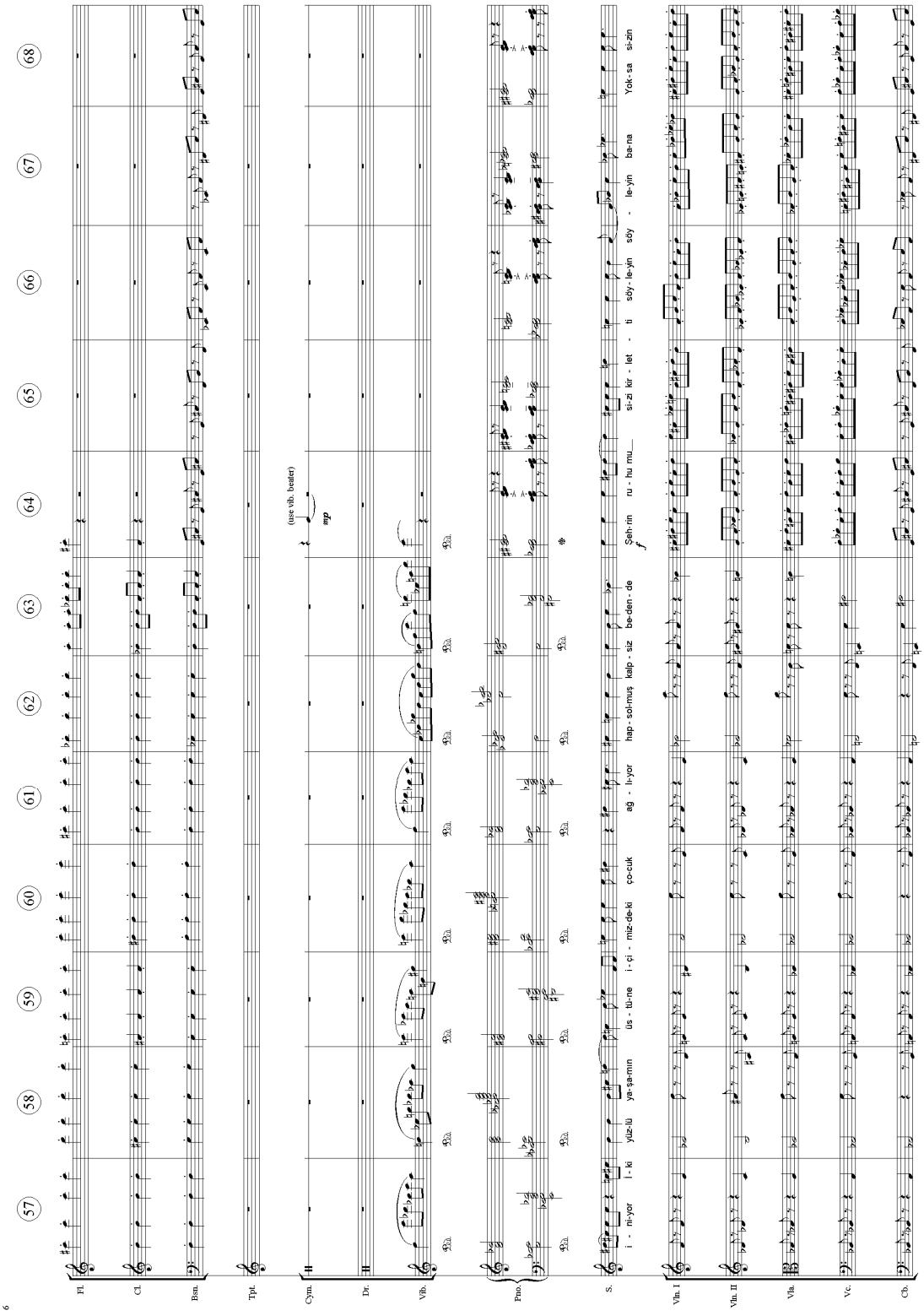

Figure A.100 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 6

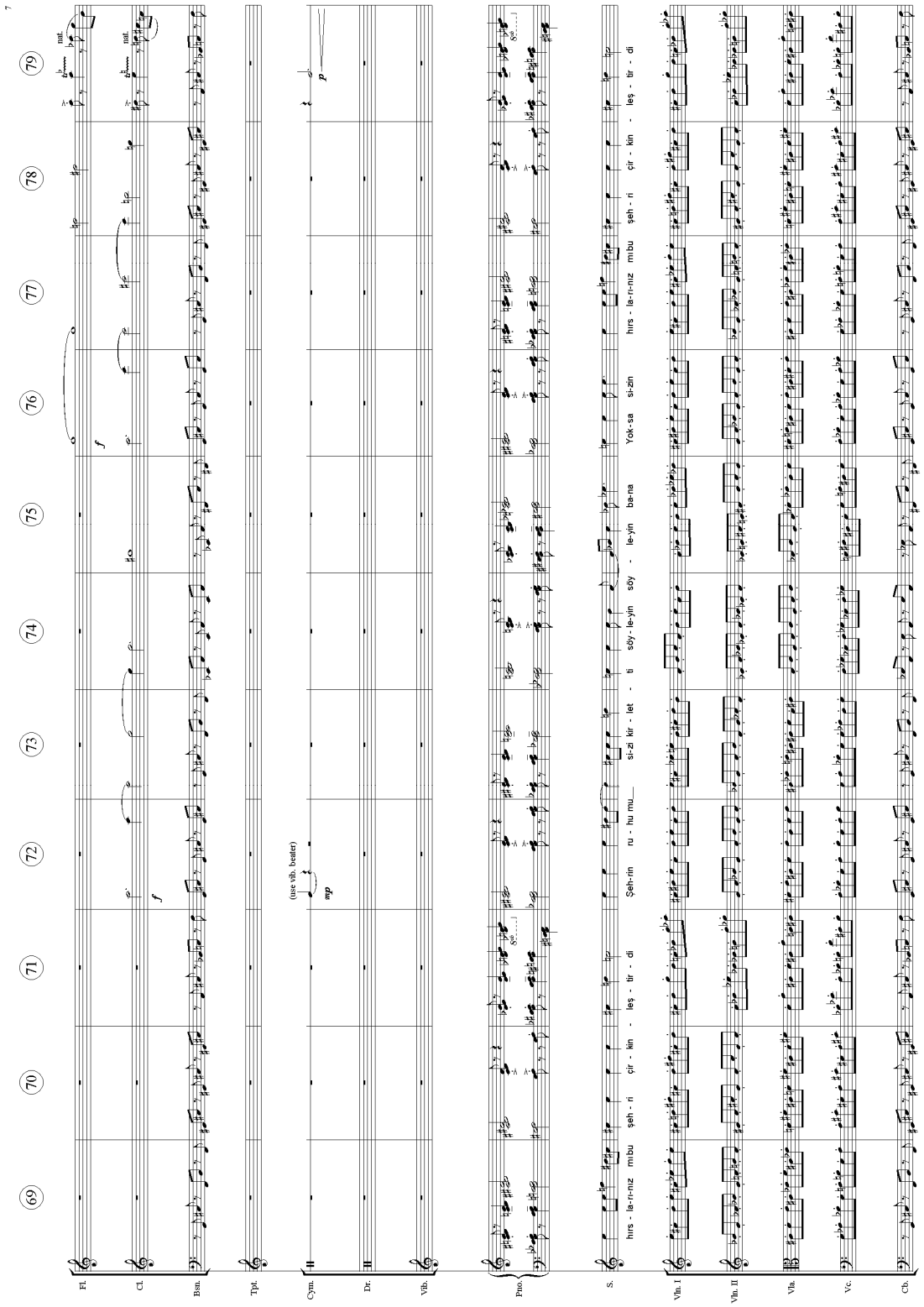

Figure A.101 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 7

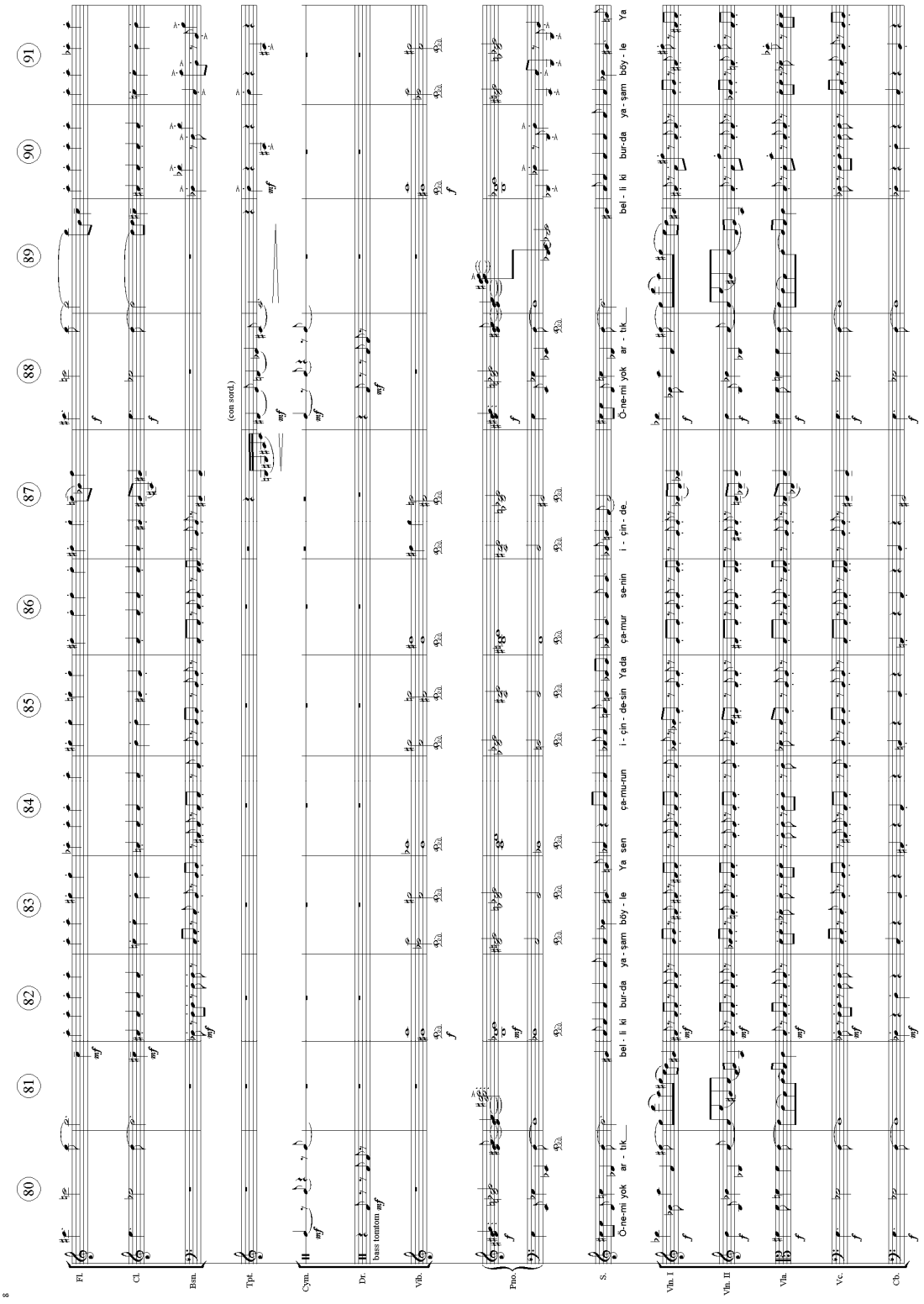

Figure A.102 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 8

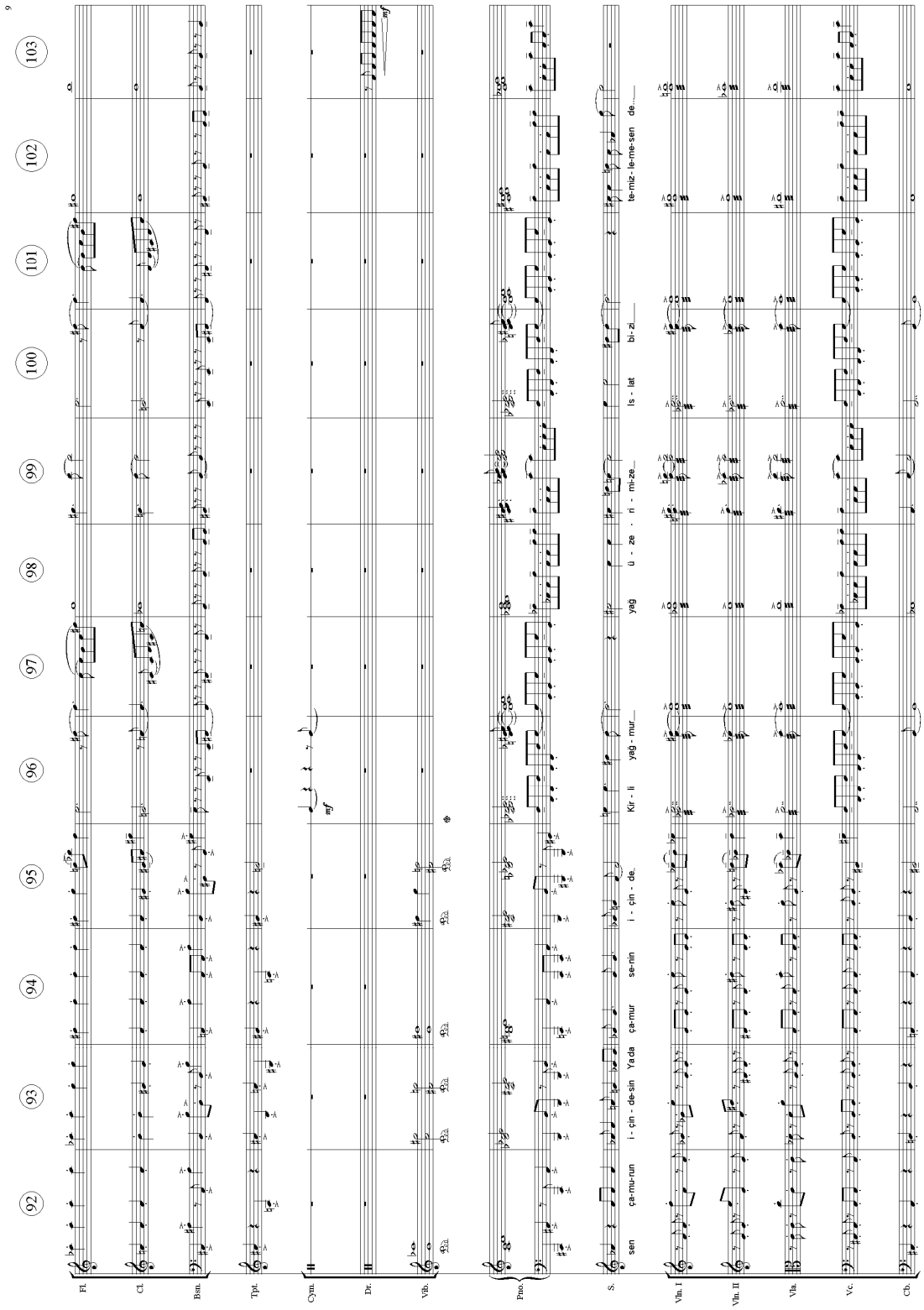

Figure A.103 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 9

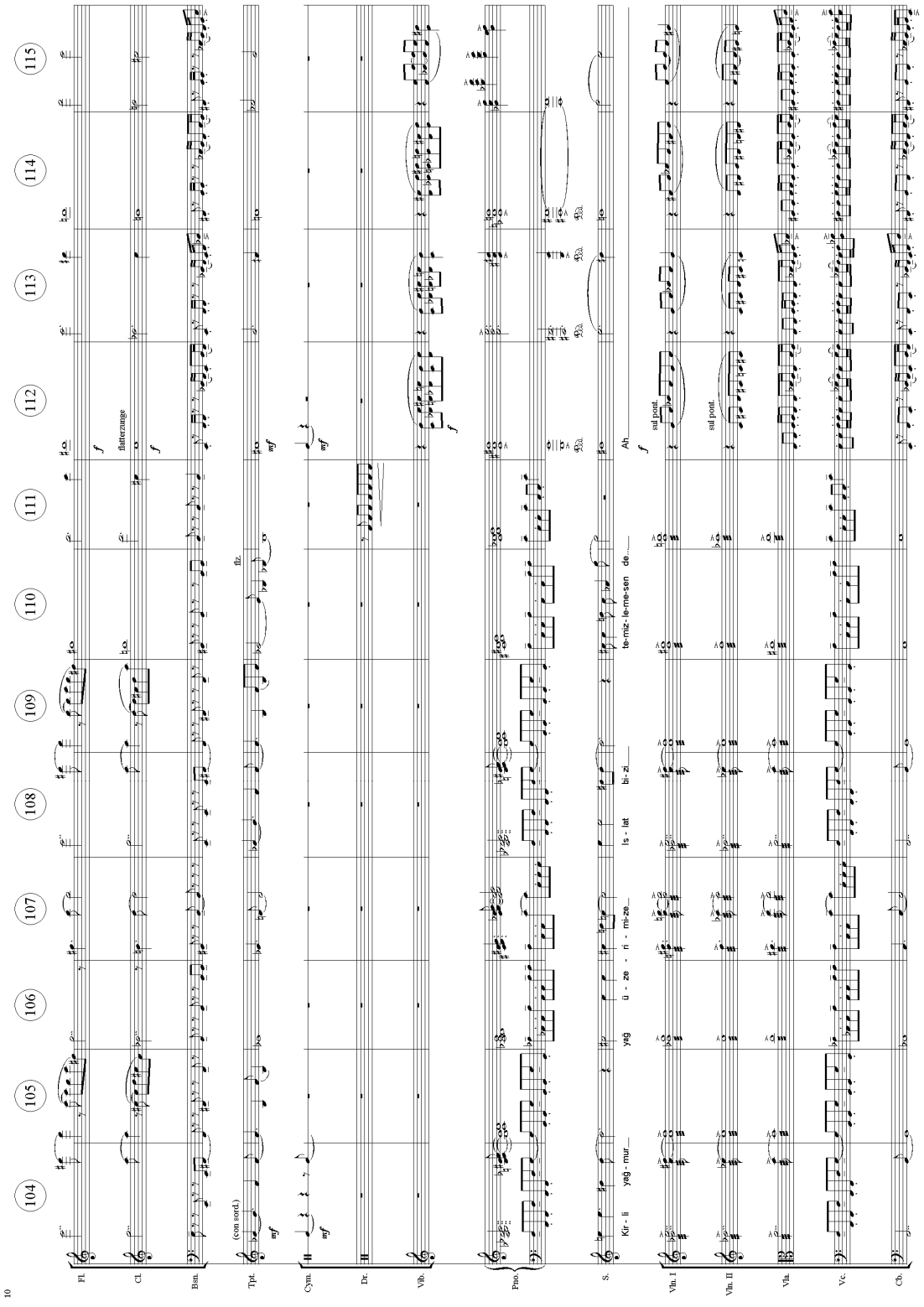

Figure A.104 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 10

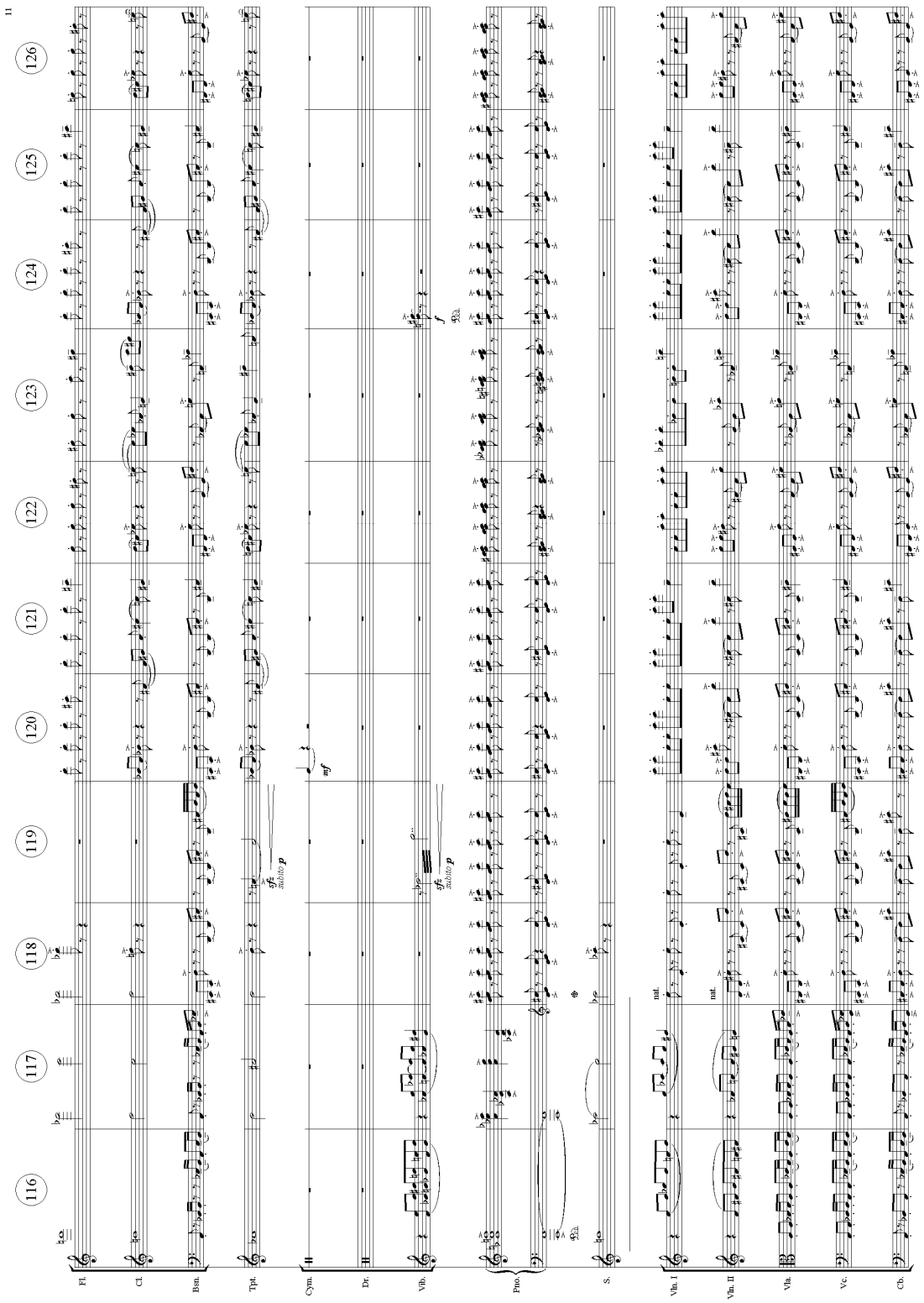

Figure A.105 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 11

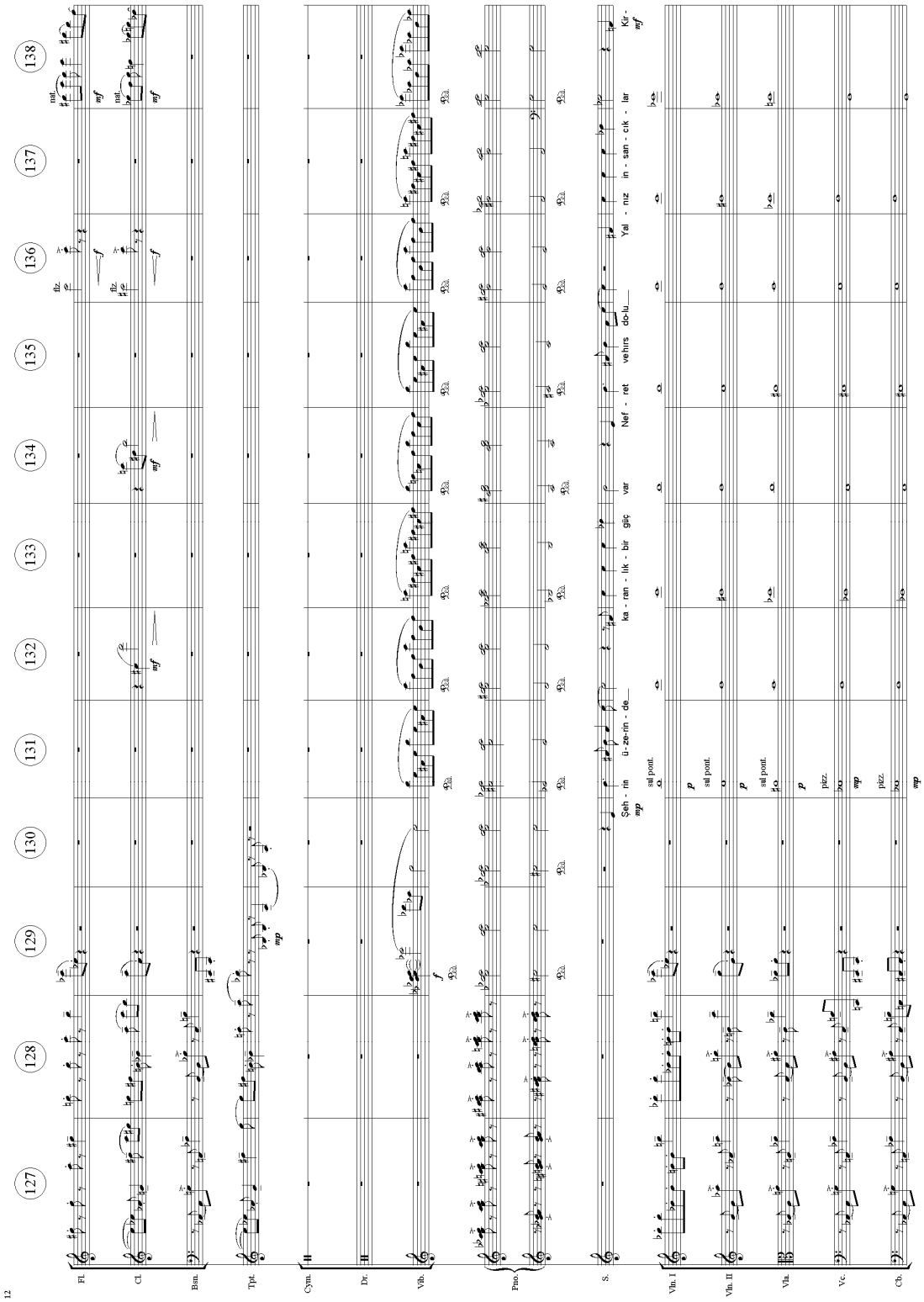

Figure A.106 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 12

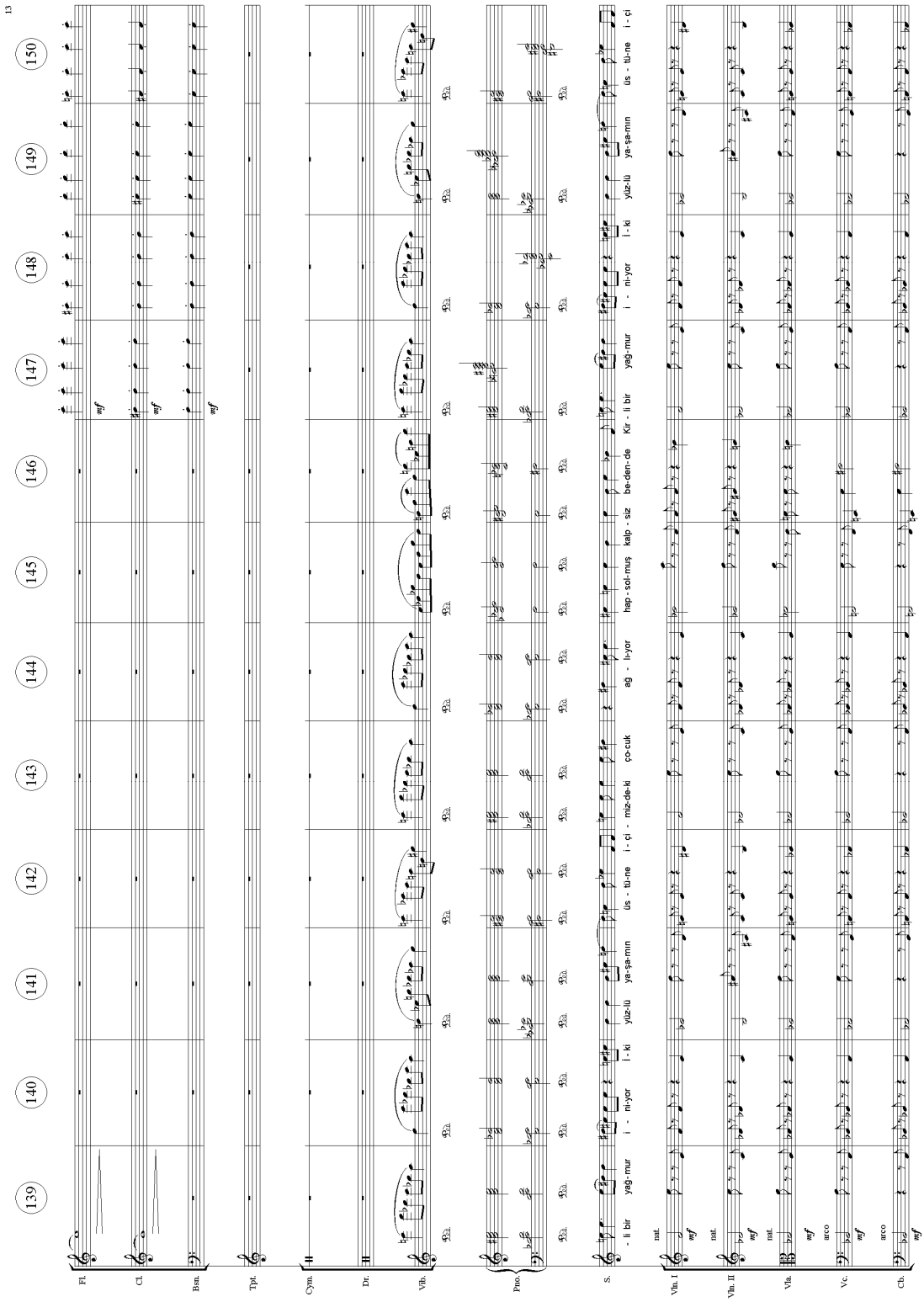

Figure A.107 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 13

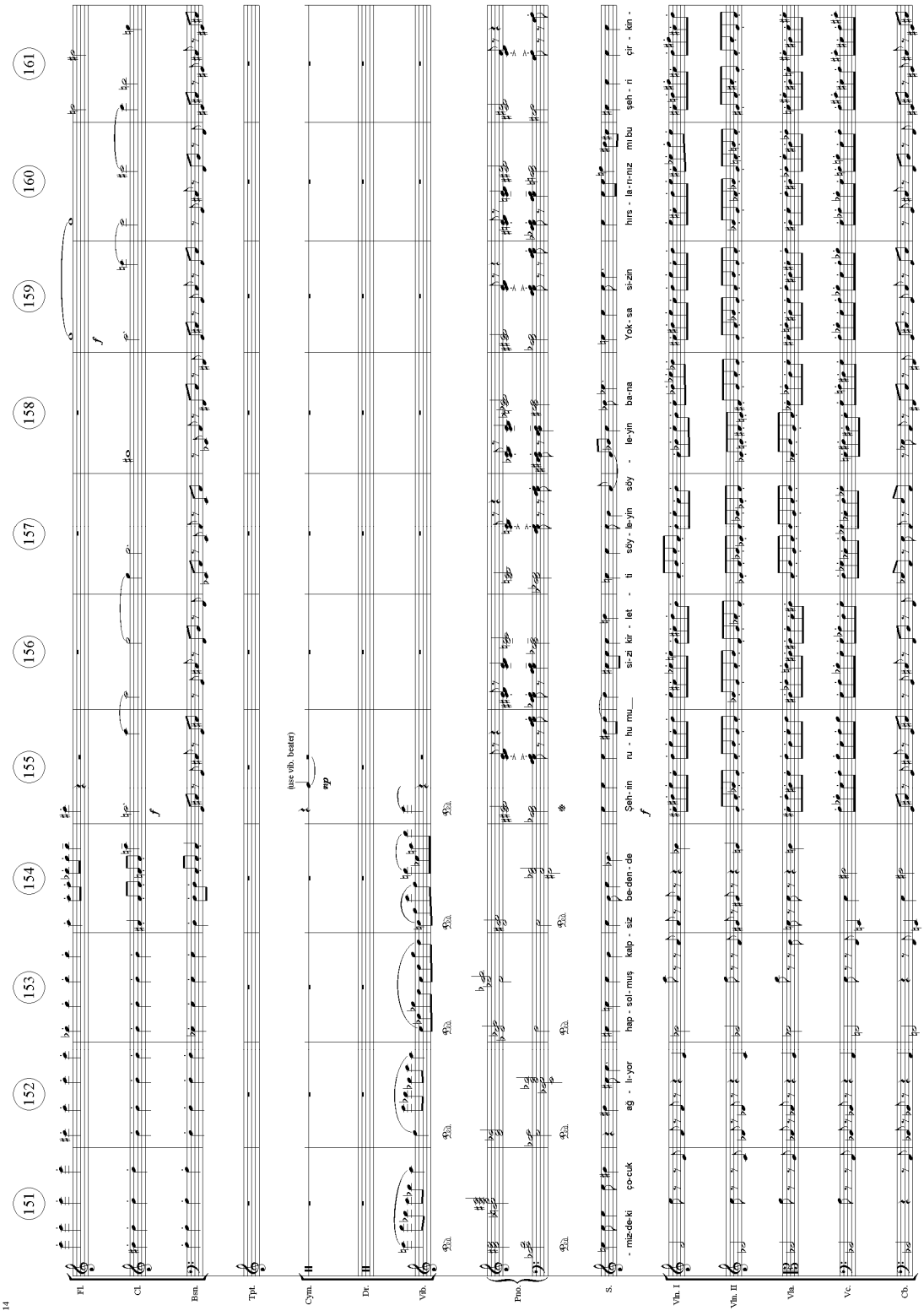

Figure A.108 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 14

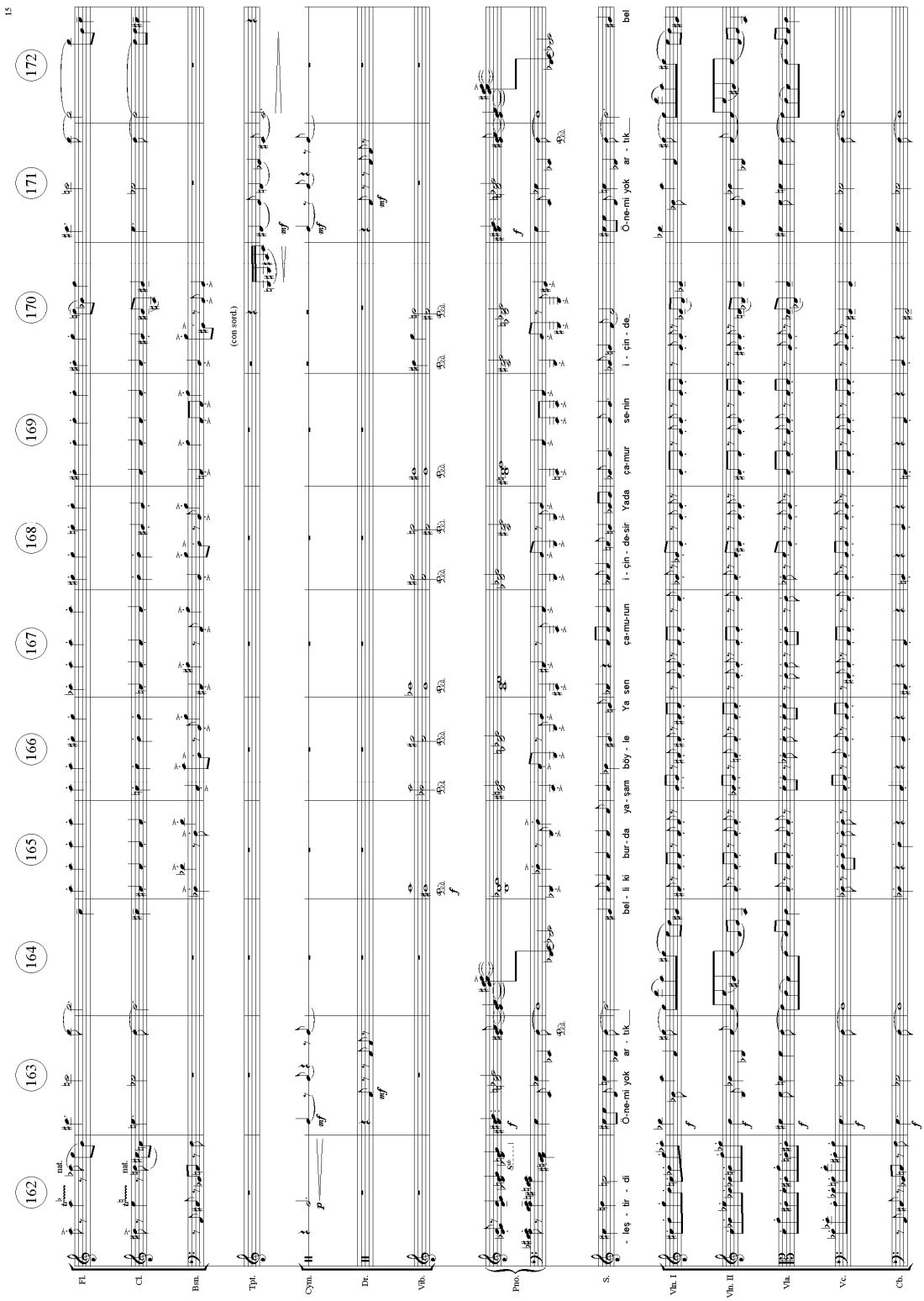

Figure A.109 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 15

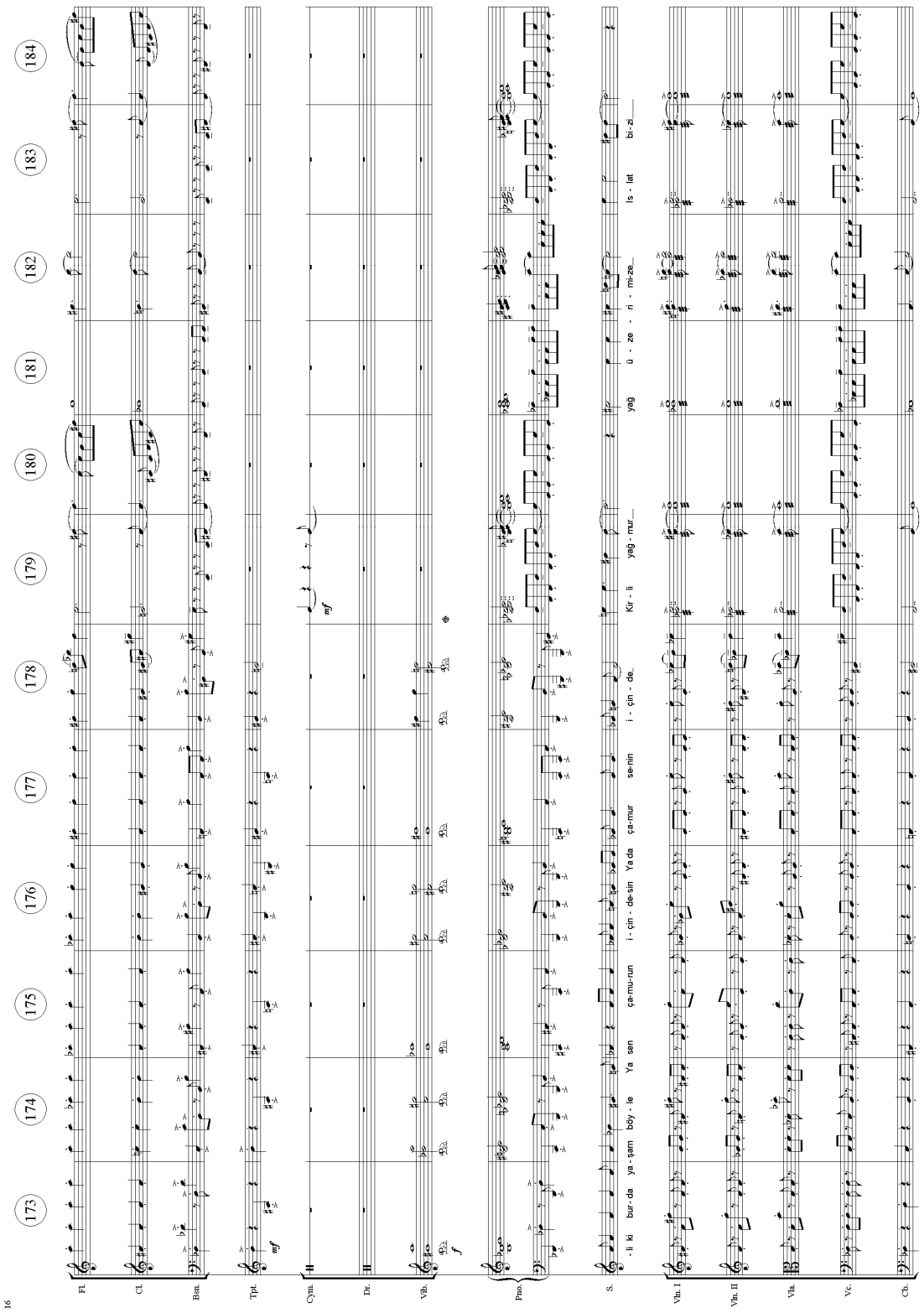

Figure A.110 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 16

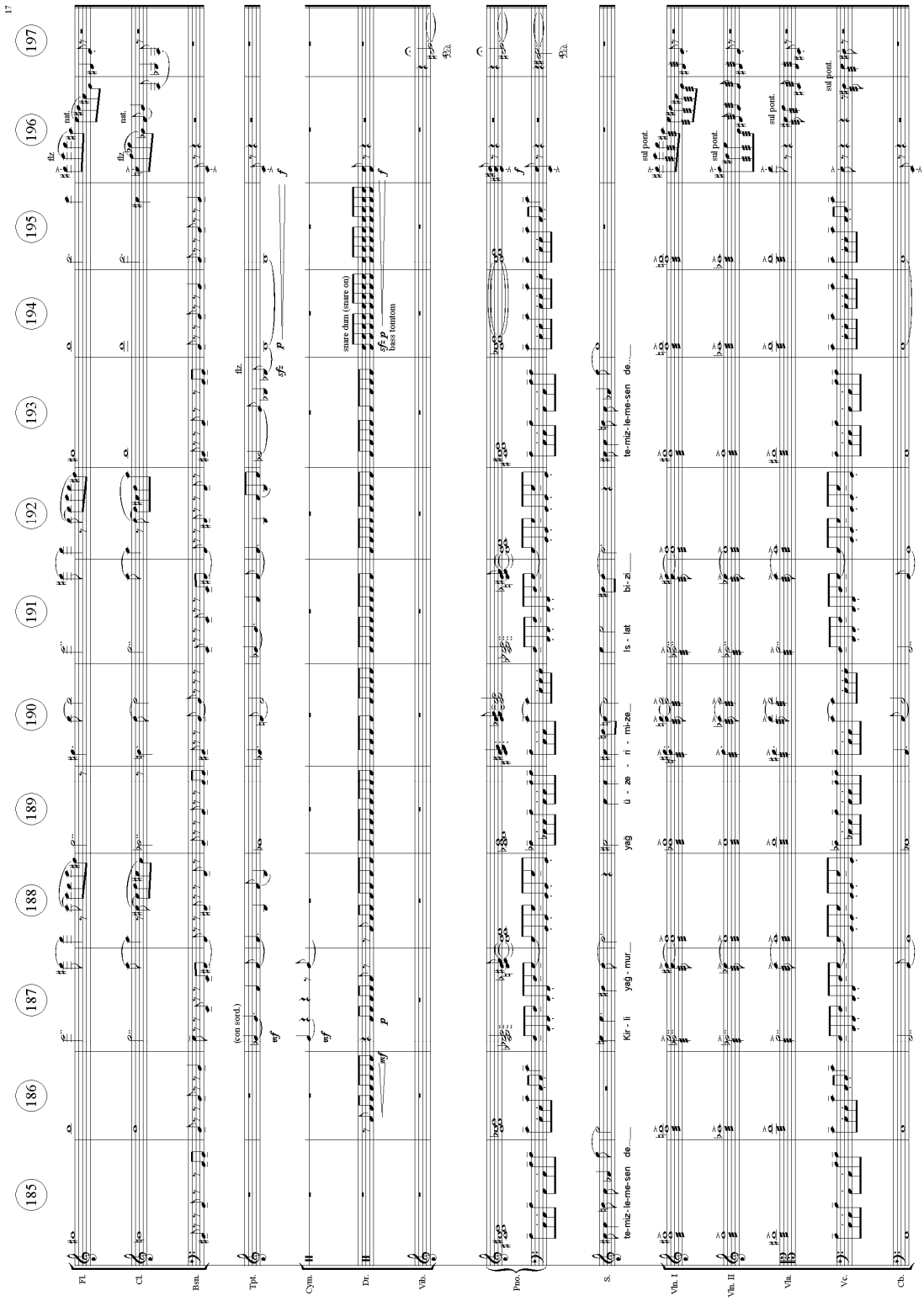

Figure A.111 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 7, page 17

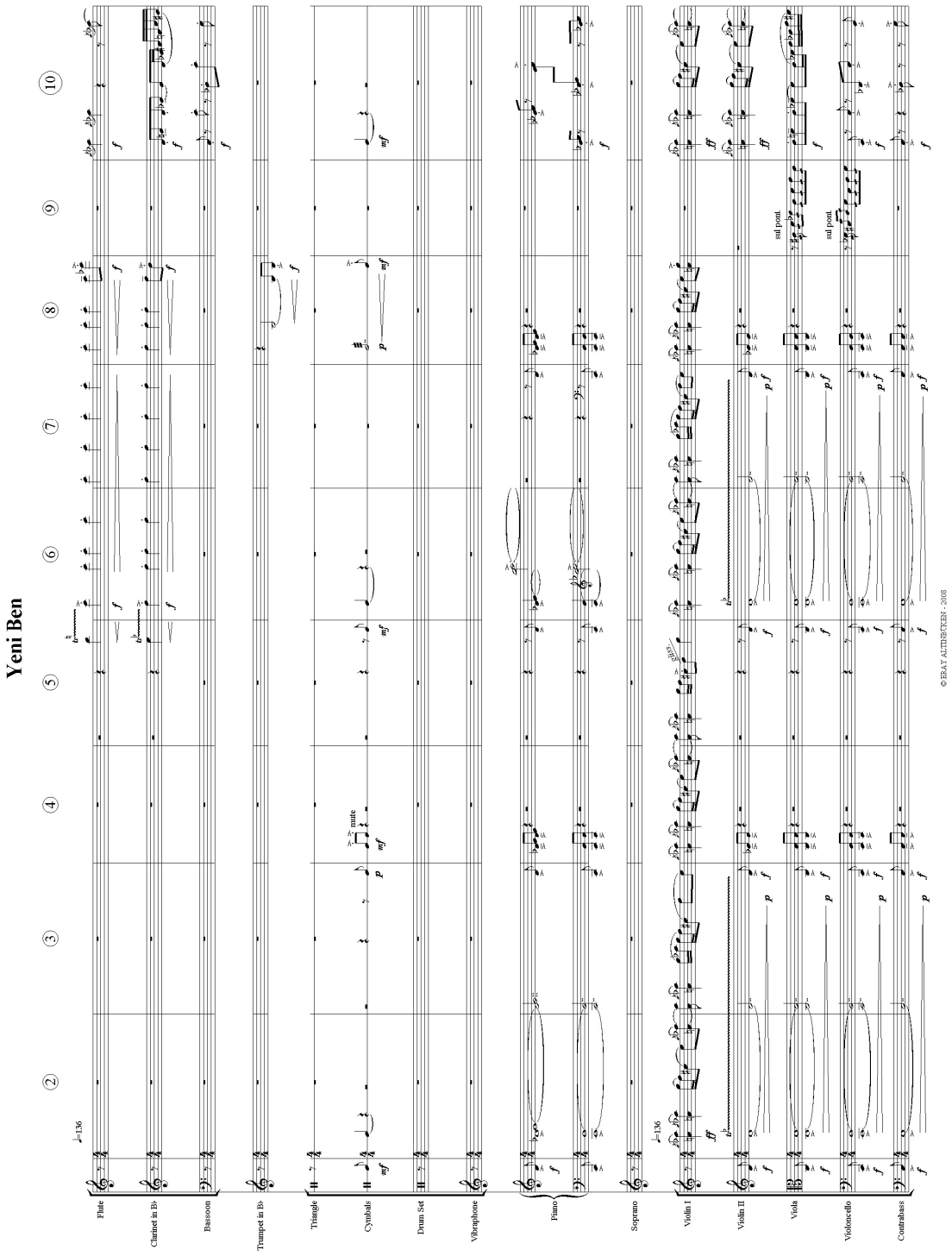

Figure A.112 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 1

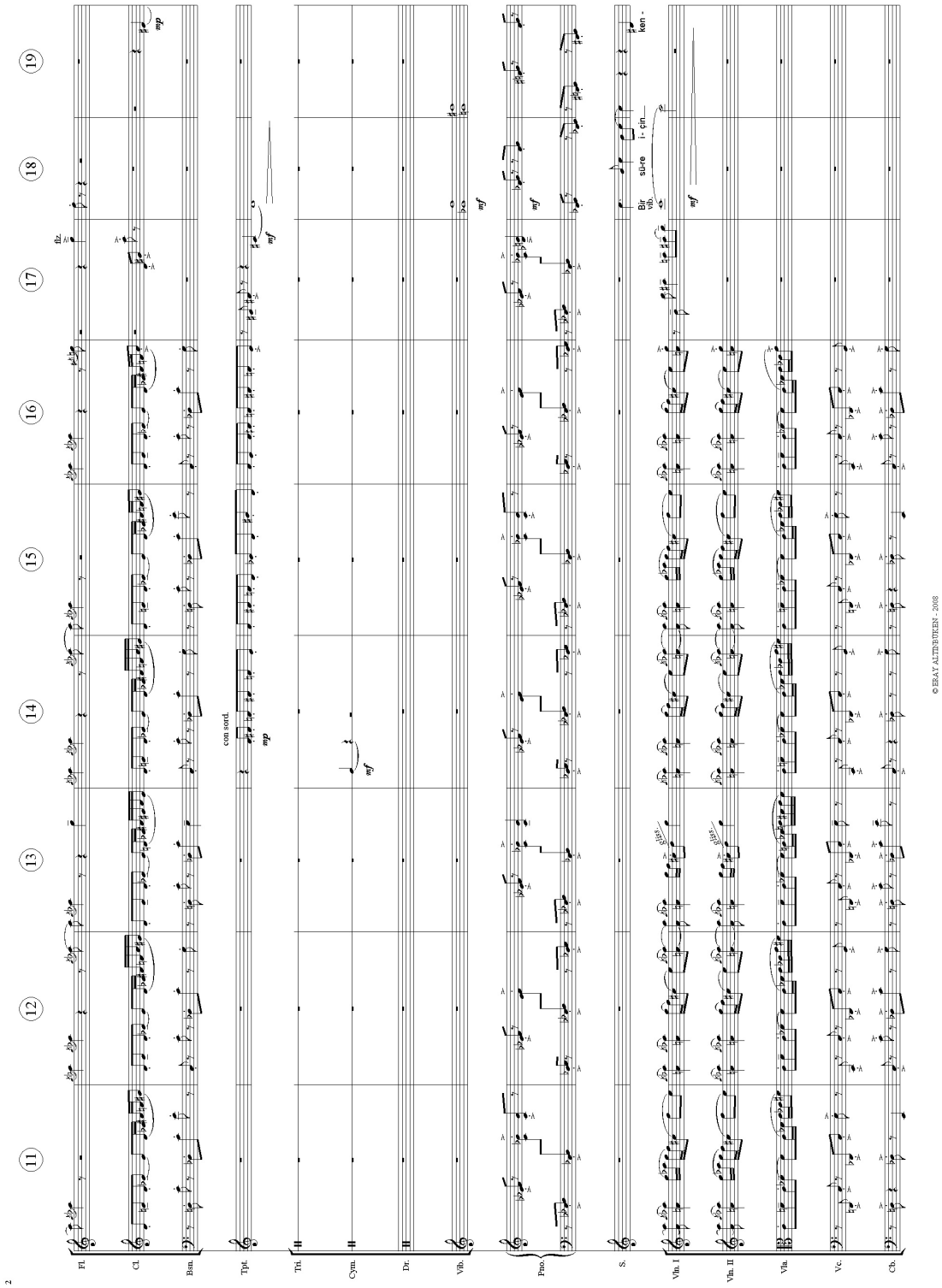

Figure A.113 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 2

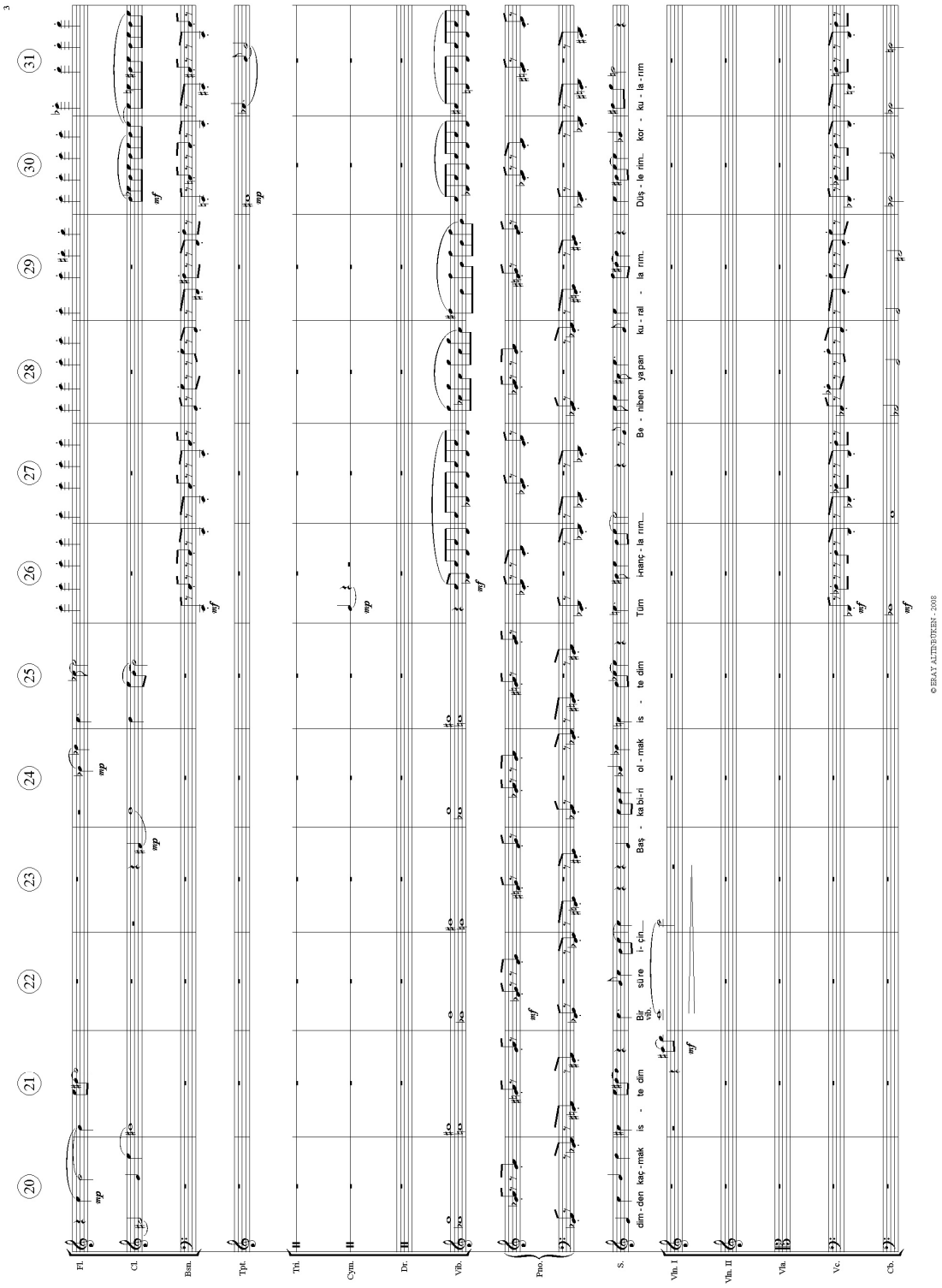

Figure A.114 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 3

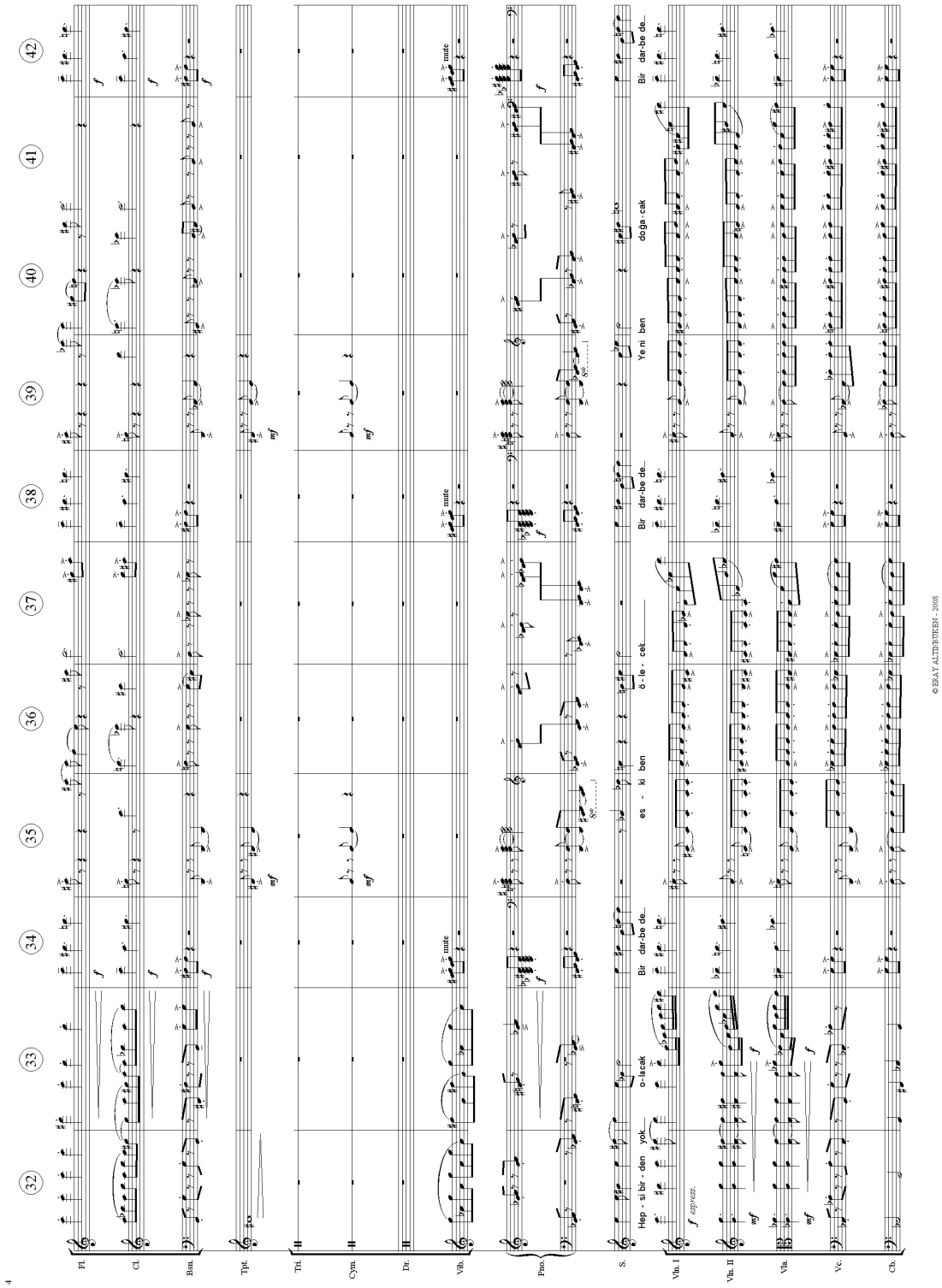

Figure A.115 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 4

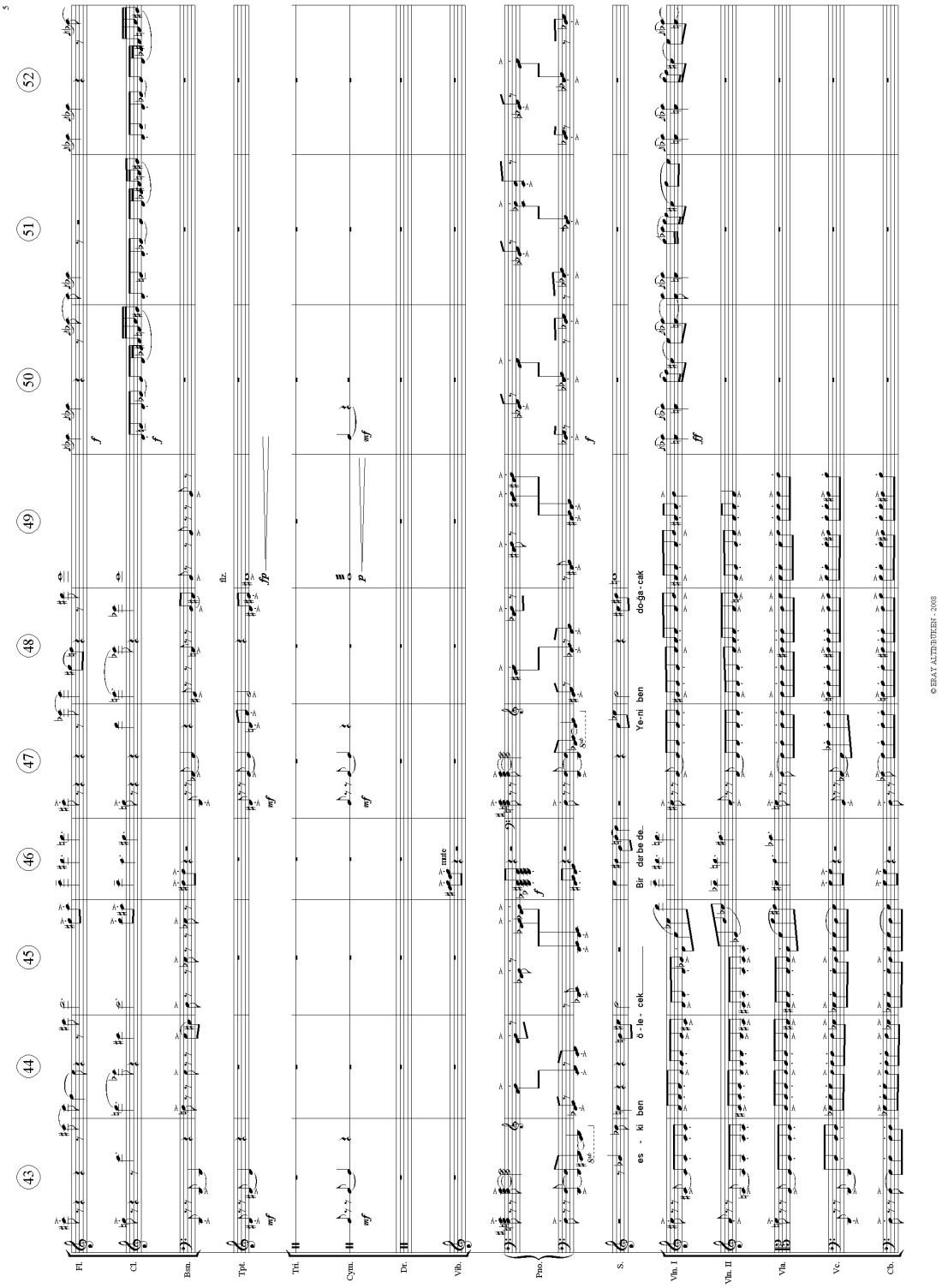

Figure A.116 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 5

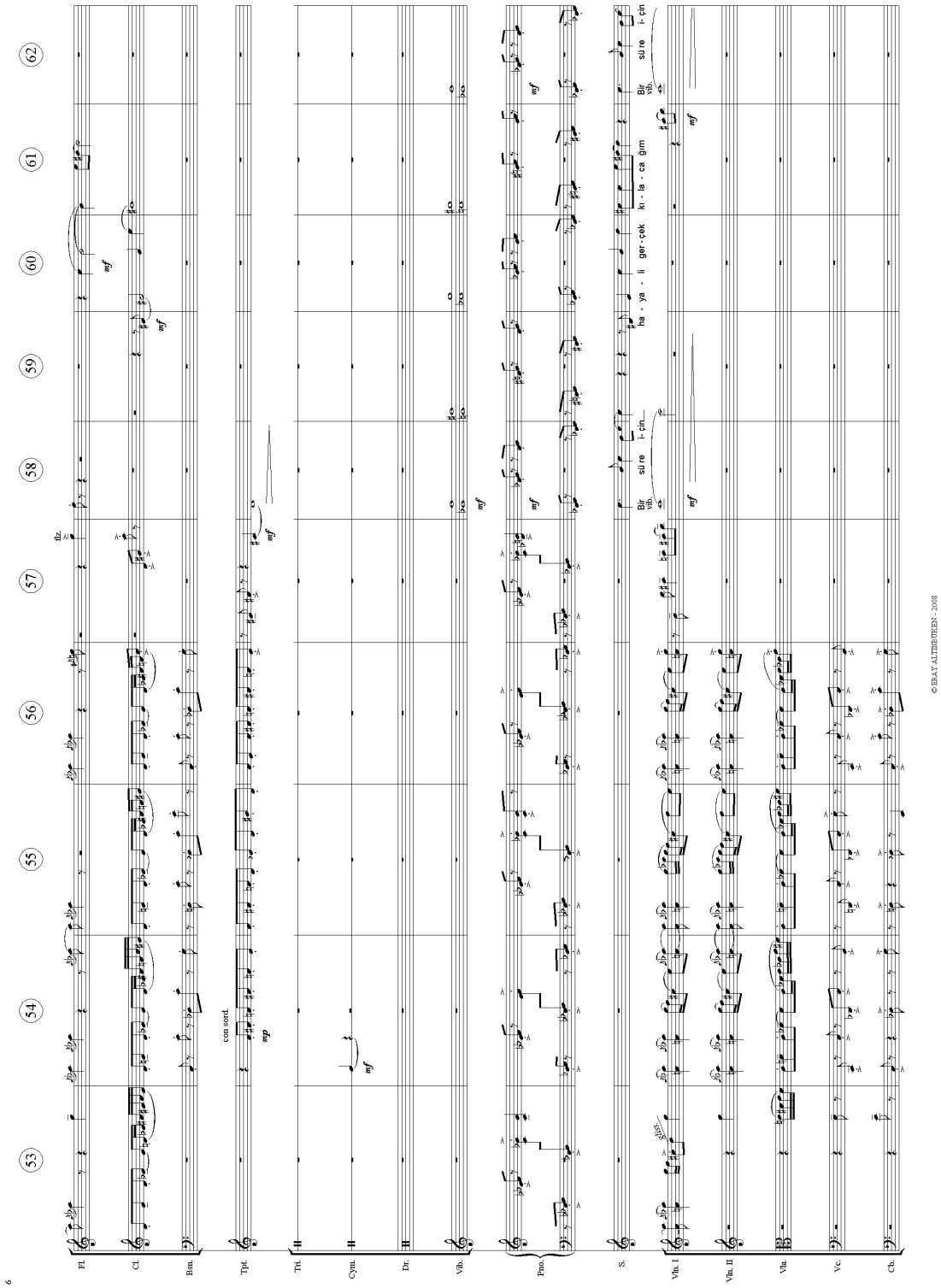

Figure A.117 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 6

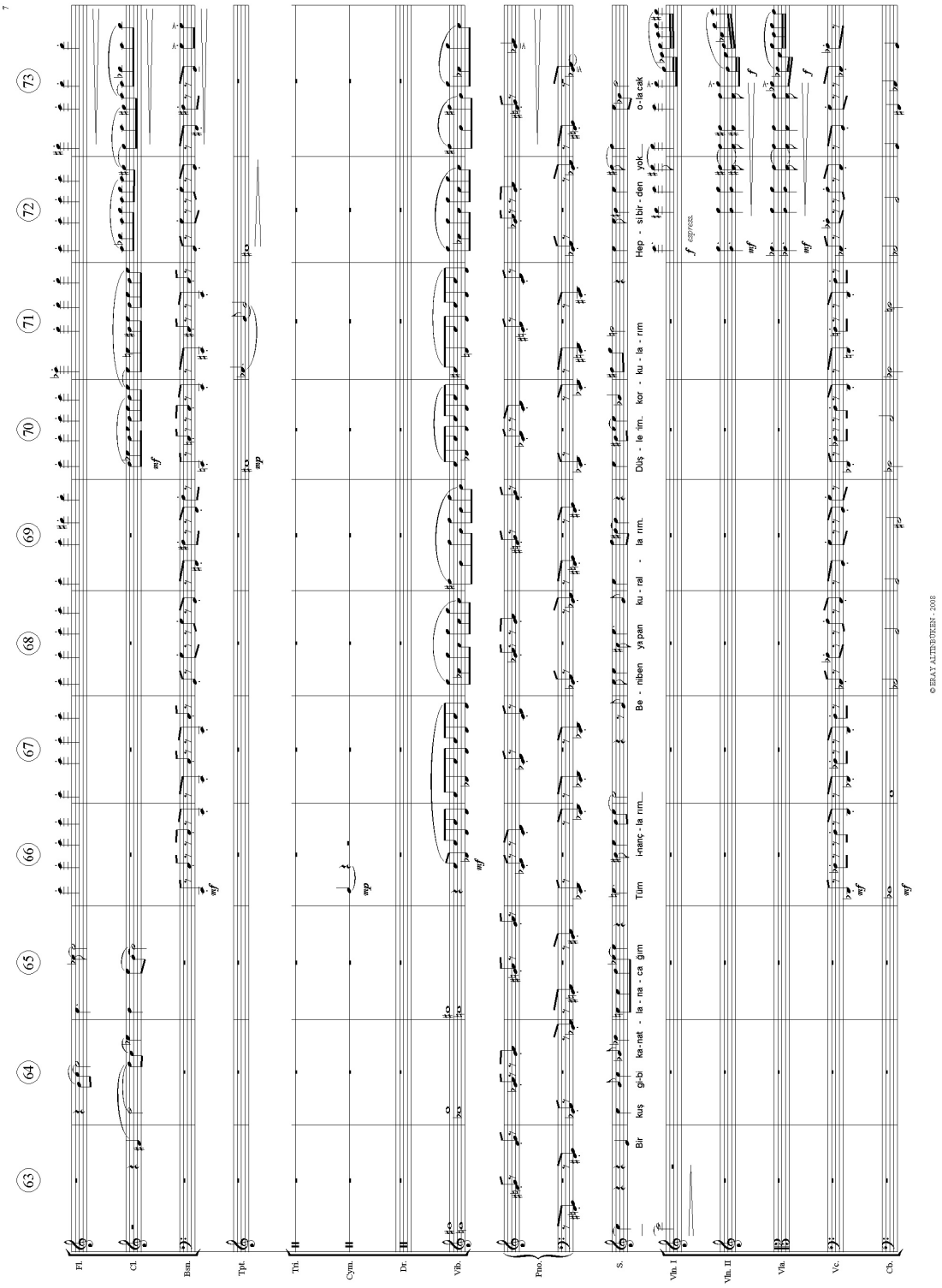

Figure A.118 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 7

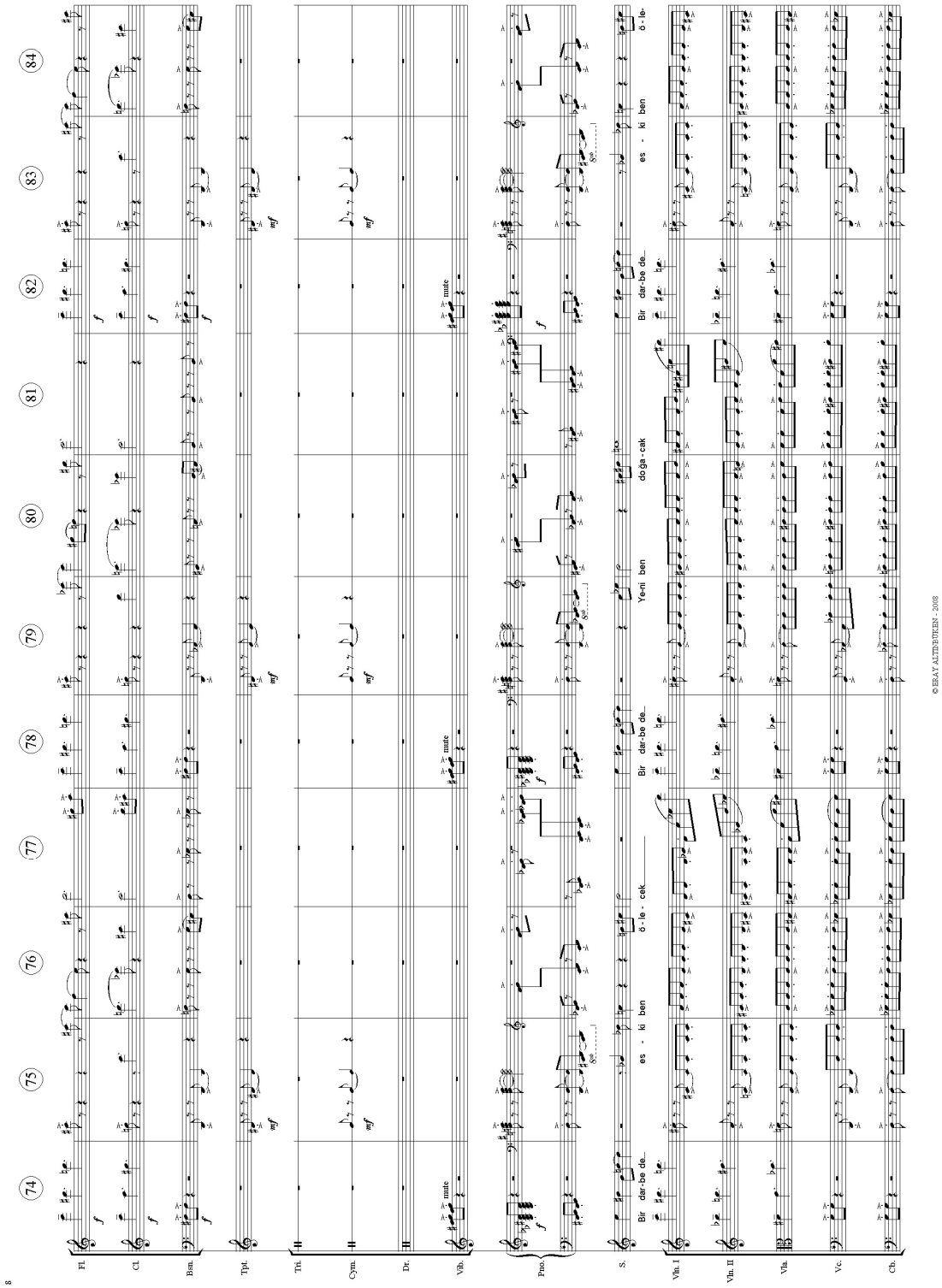

Figure A.119 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 8

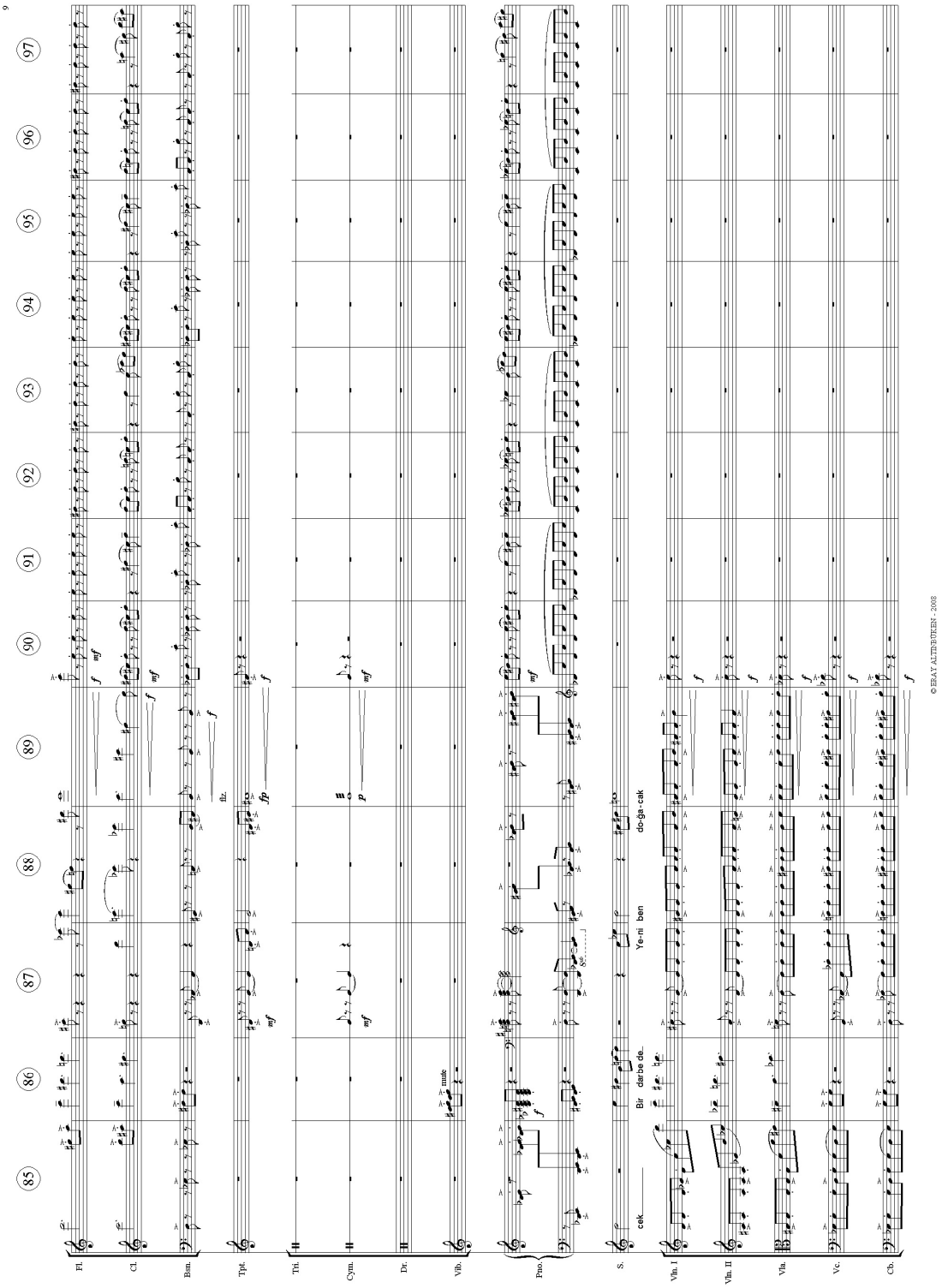

Figure A.120 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 9

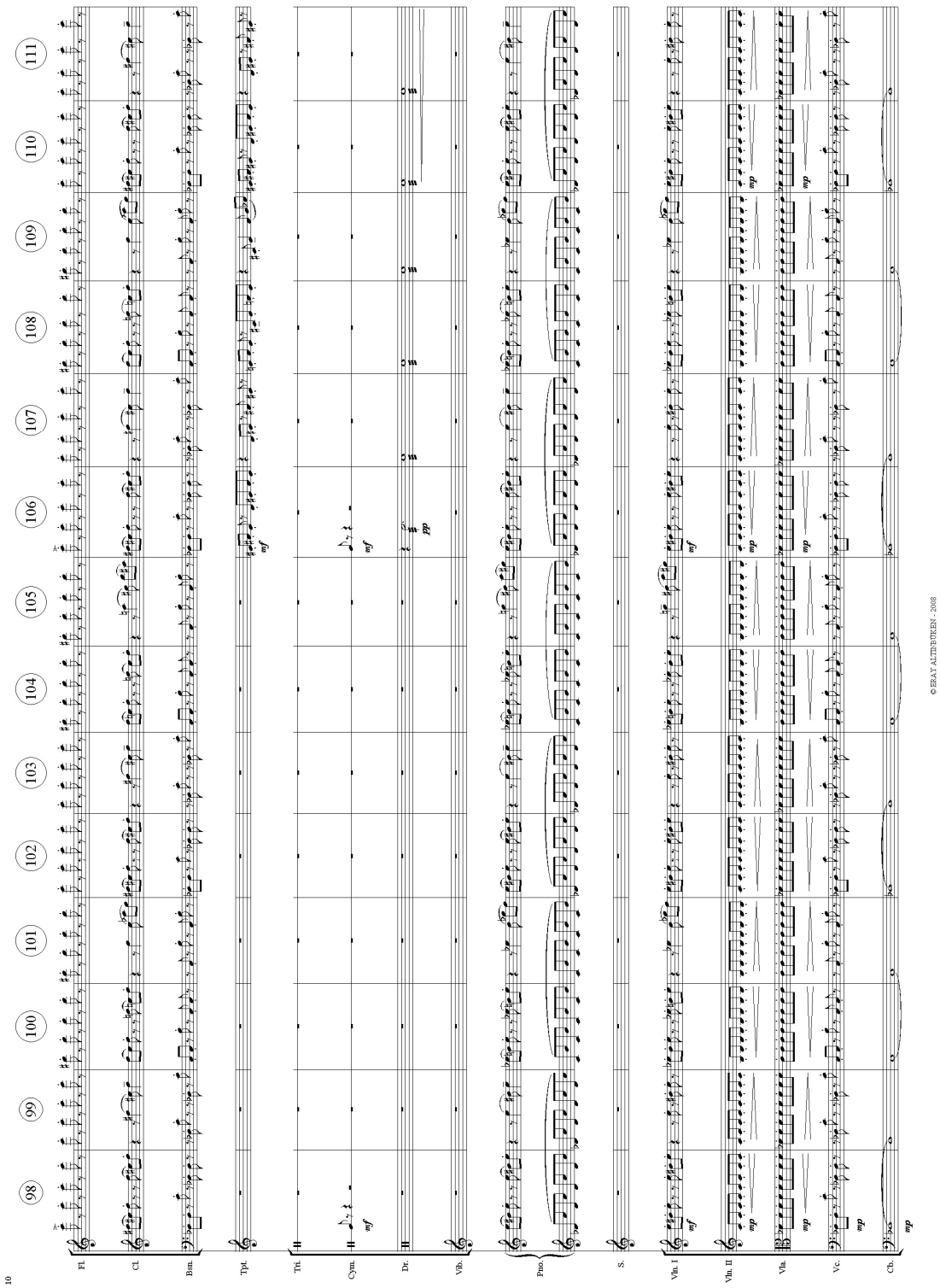

Figure A.121 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 10

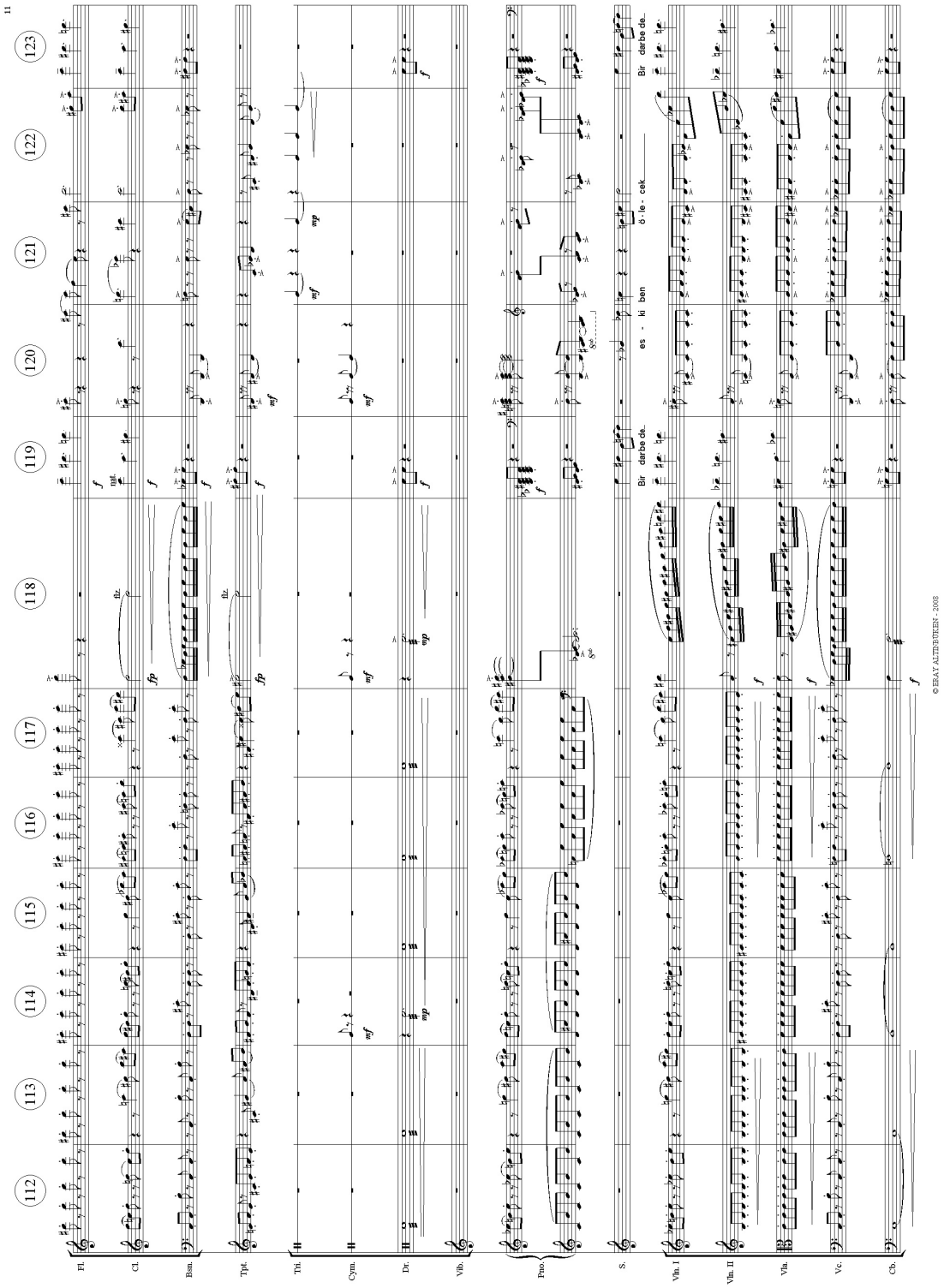

Figure A.122 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 11

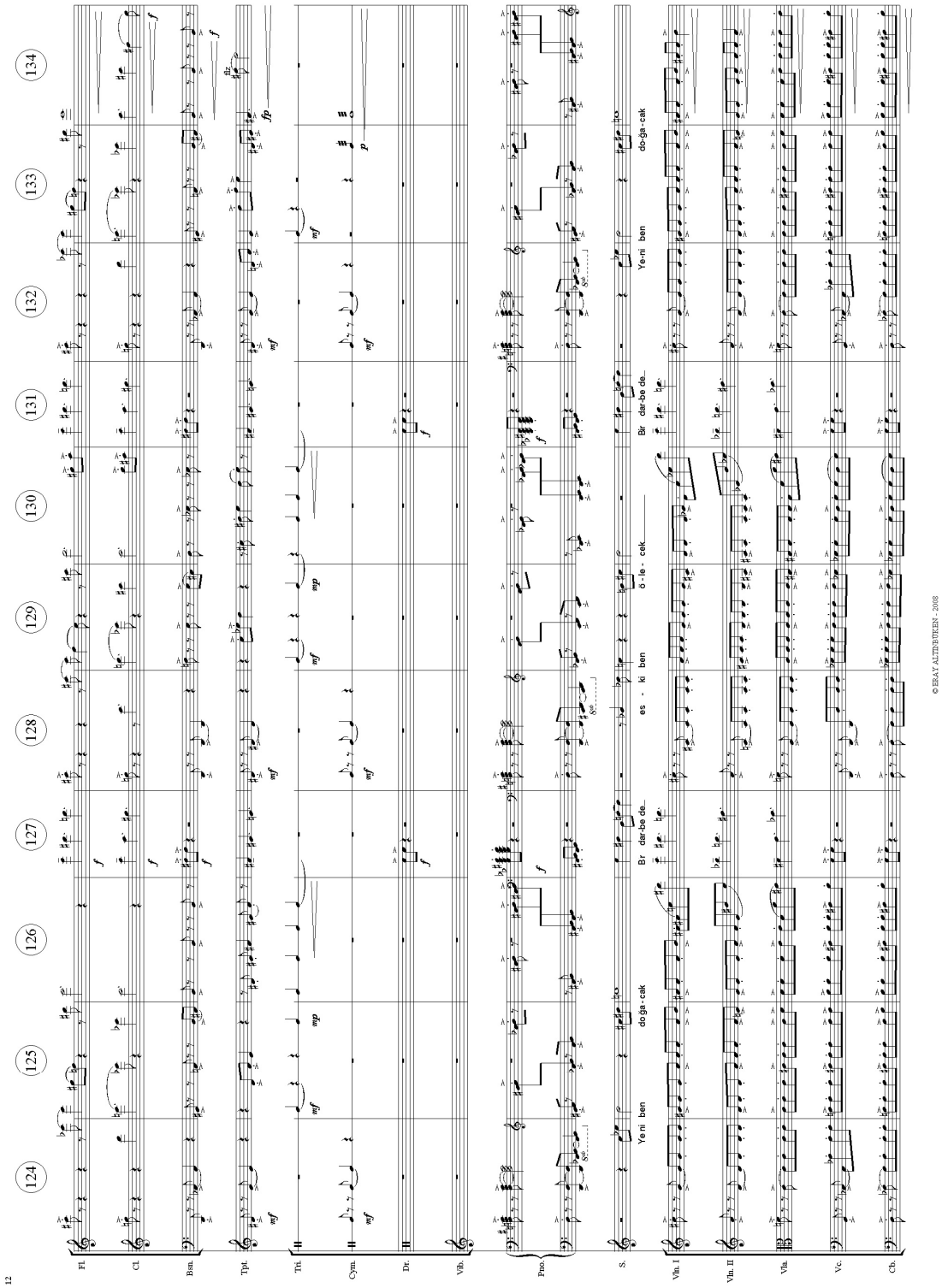

Figure A.123 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 12

Figure A.124 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 13

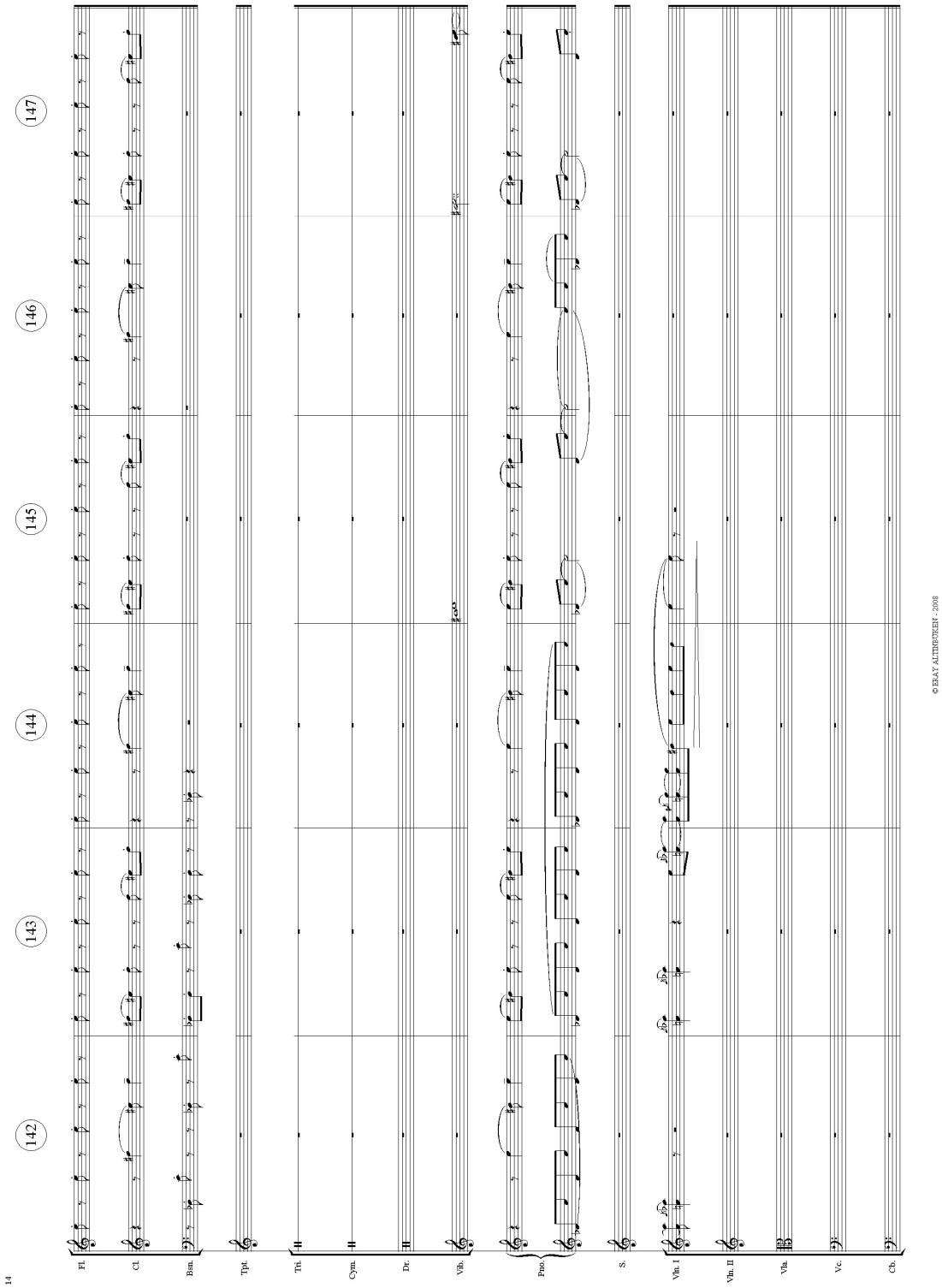

Figure A.125 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 8, page 14

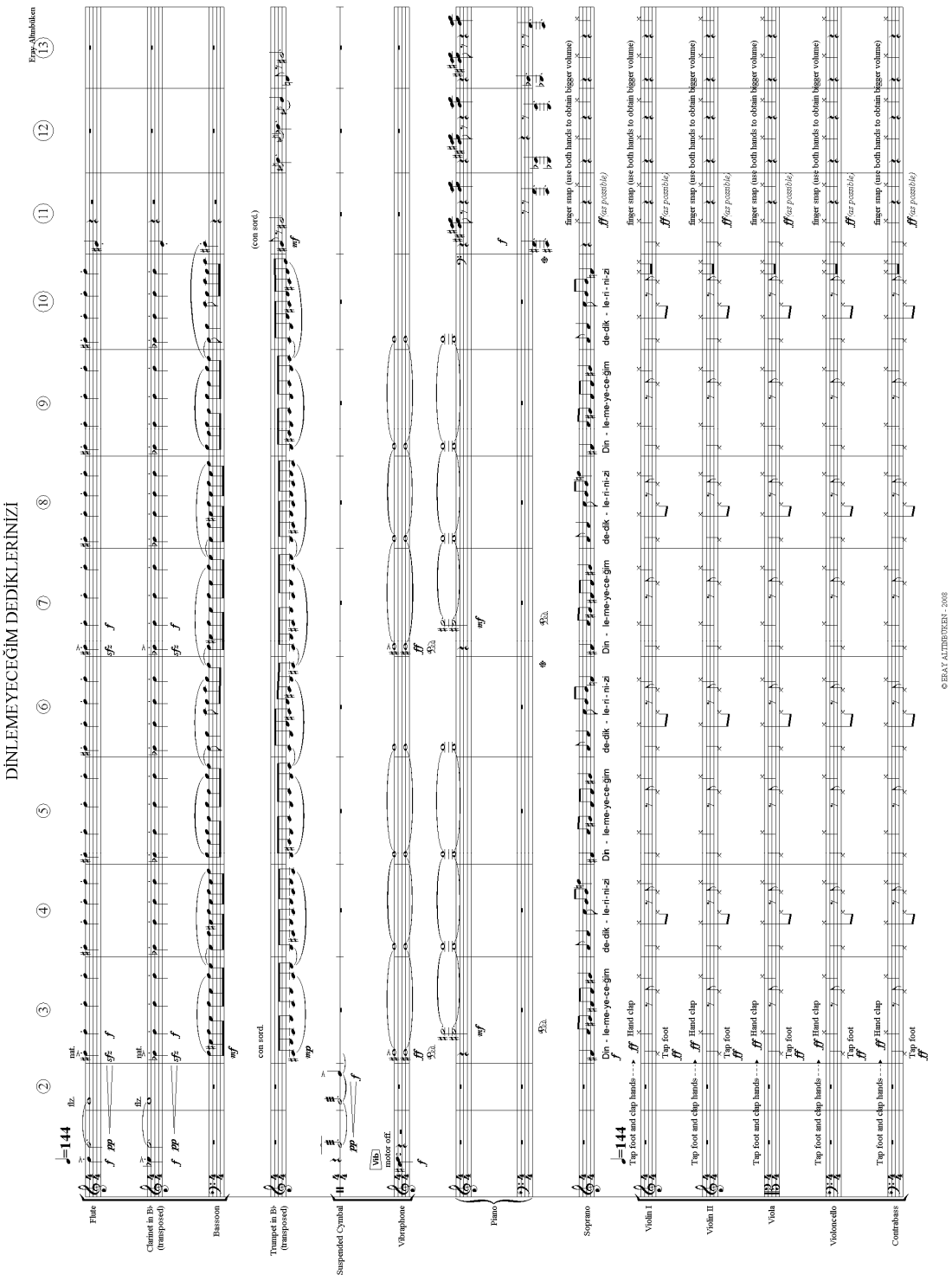

Figure A.126 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 1

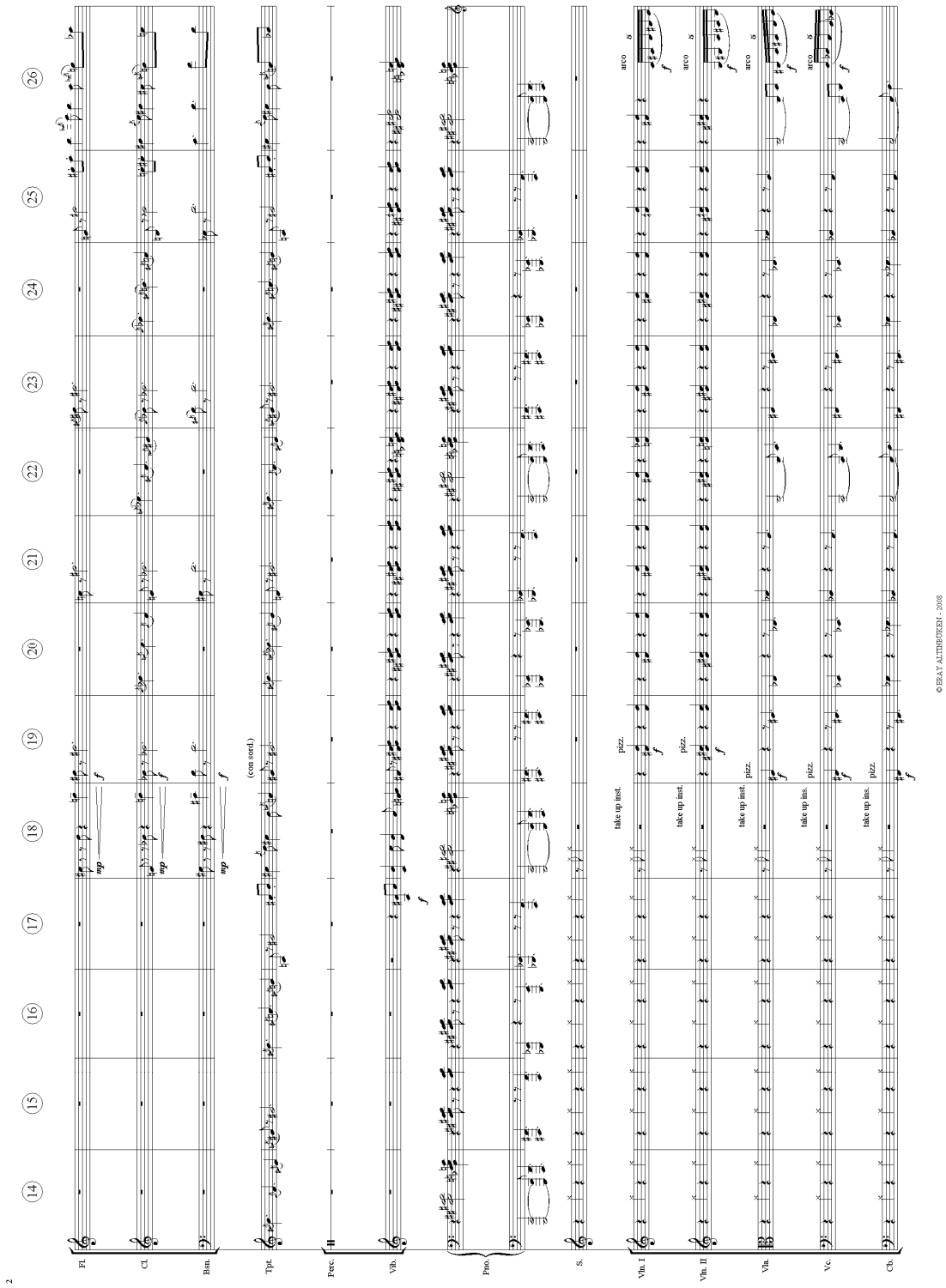

Figure A.127 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 2

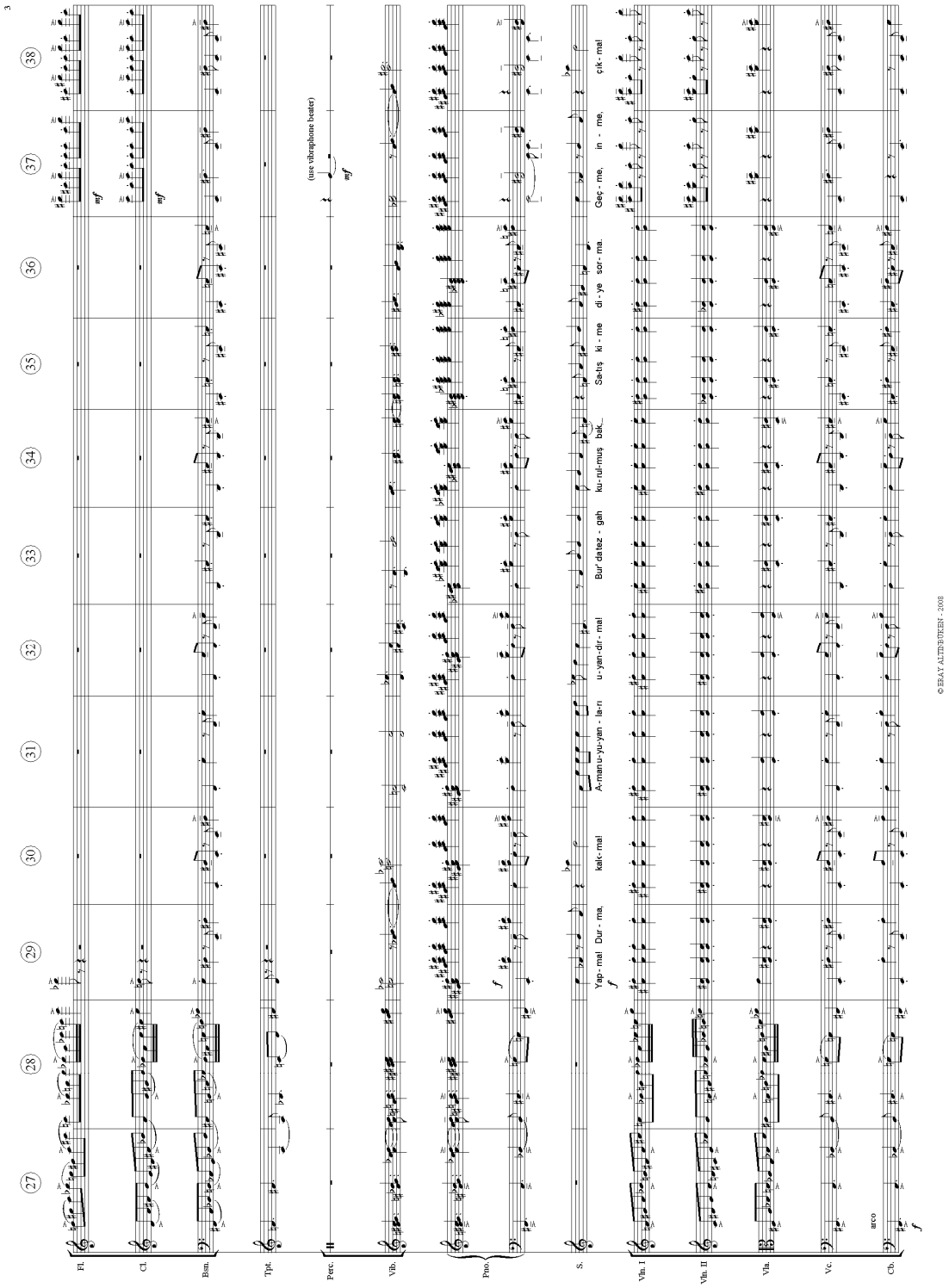

Figure A.128 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 3

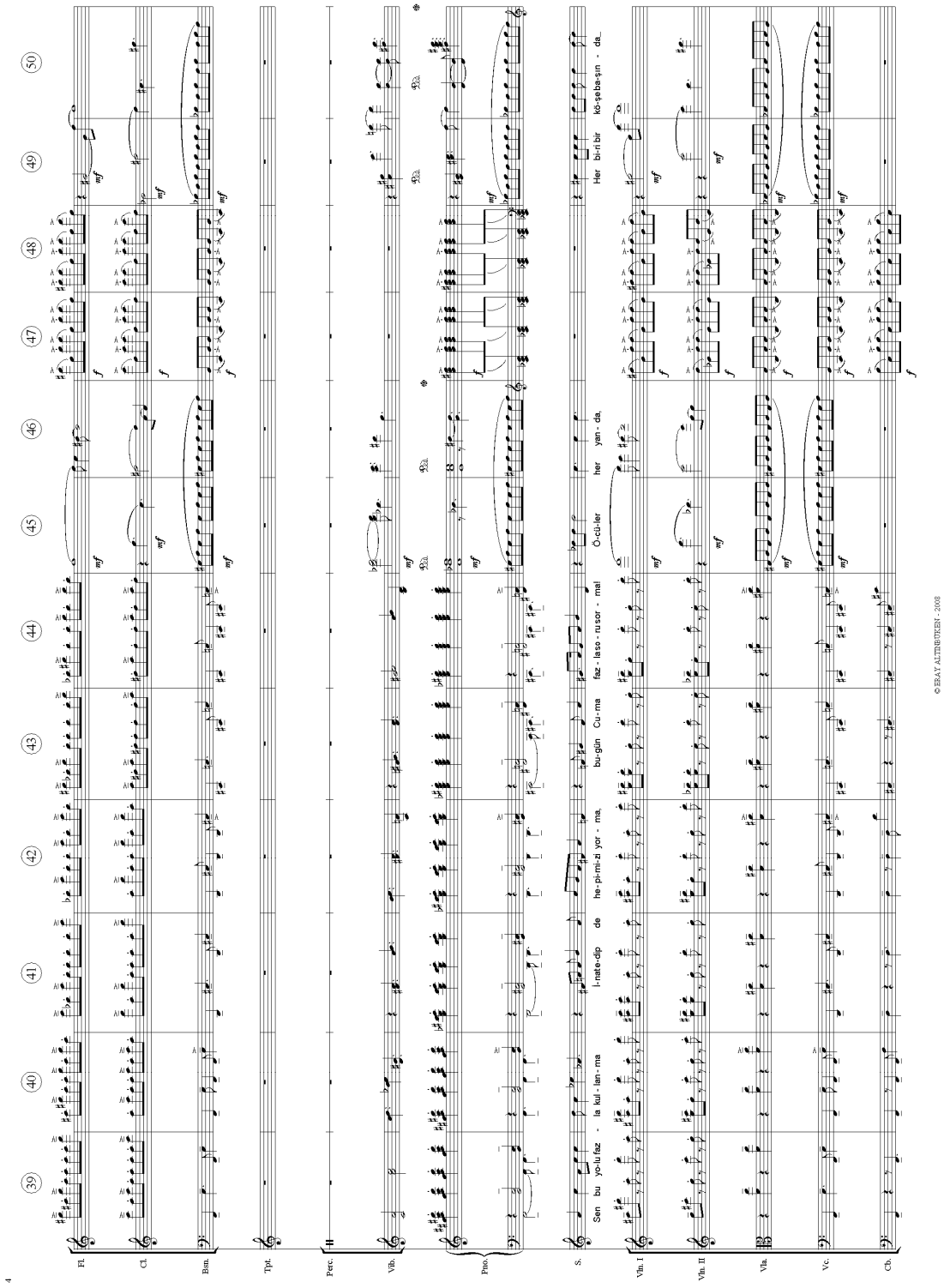

Figure A.129 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 4

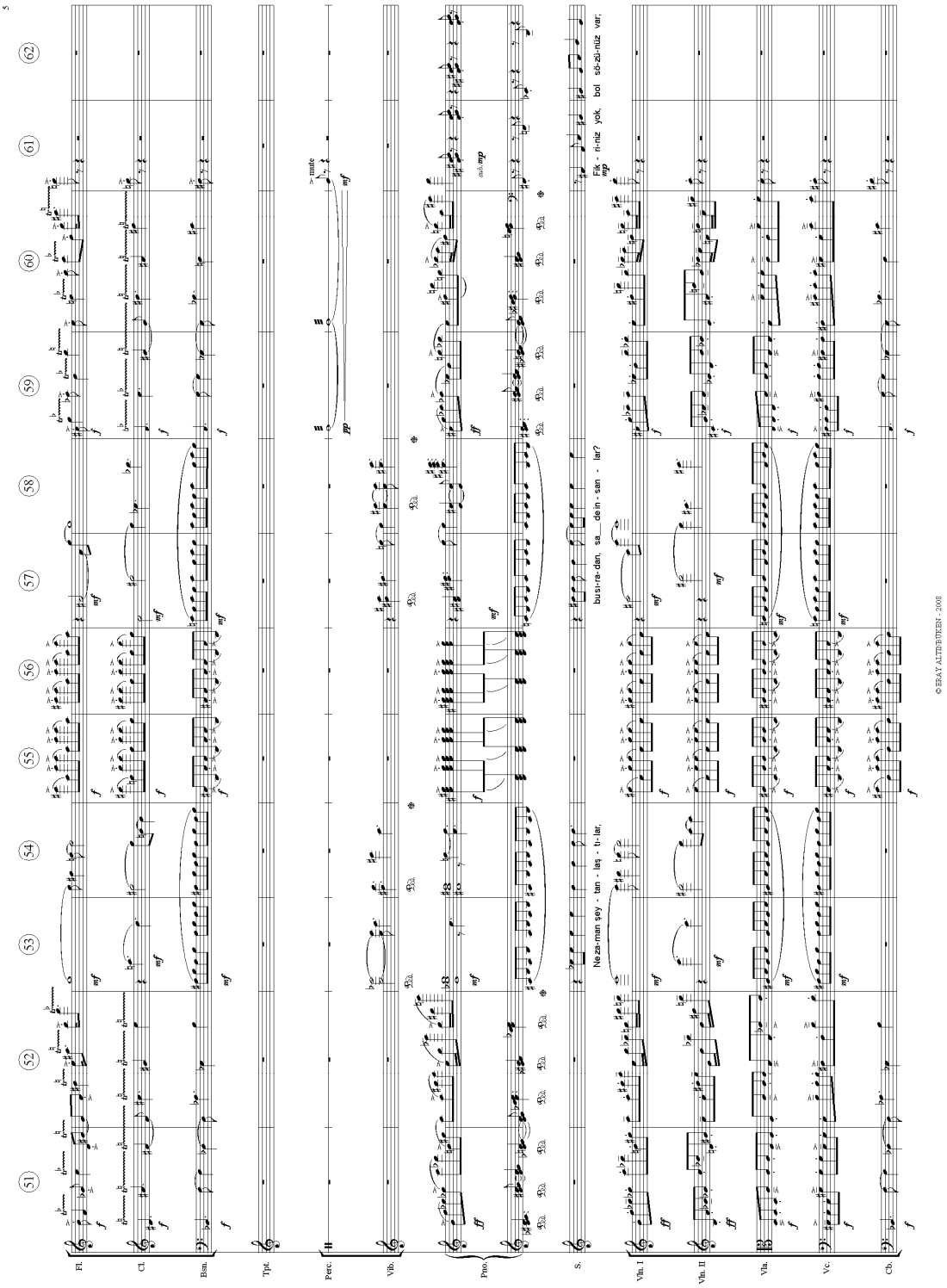

Figure A.130 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 5

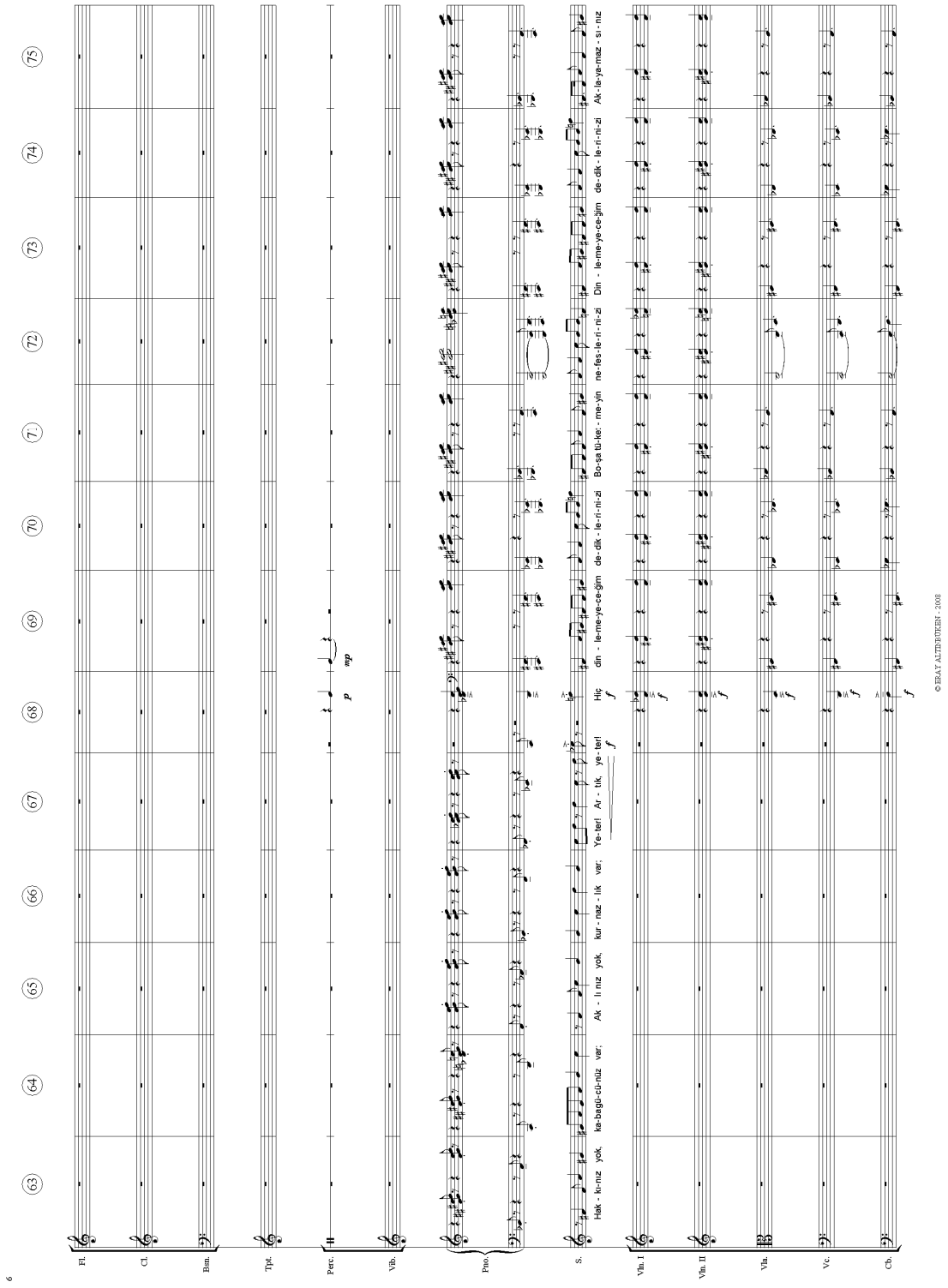

Figure A.131 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 6

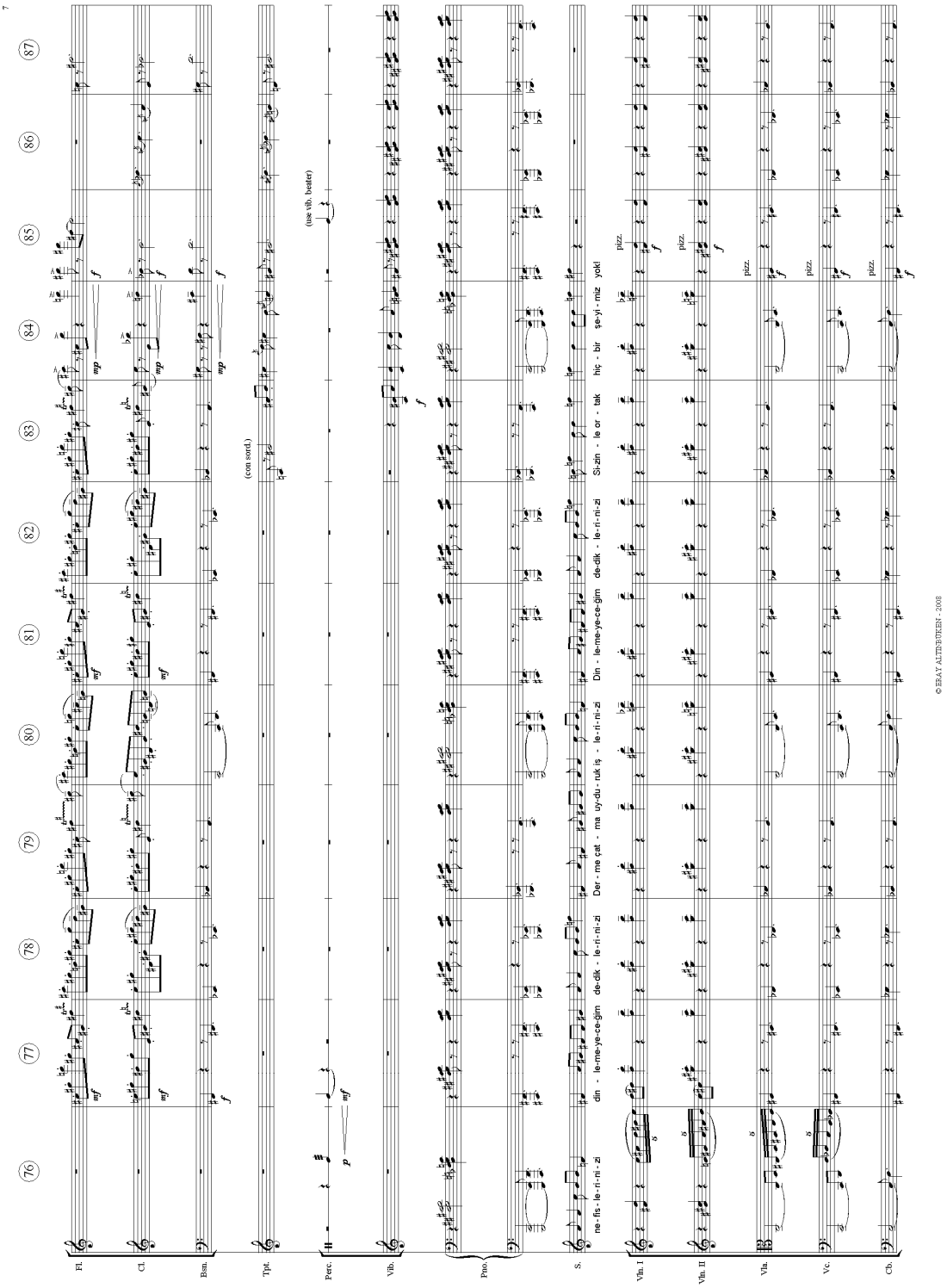

Figure A.132 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 7

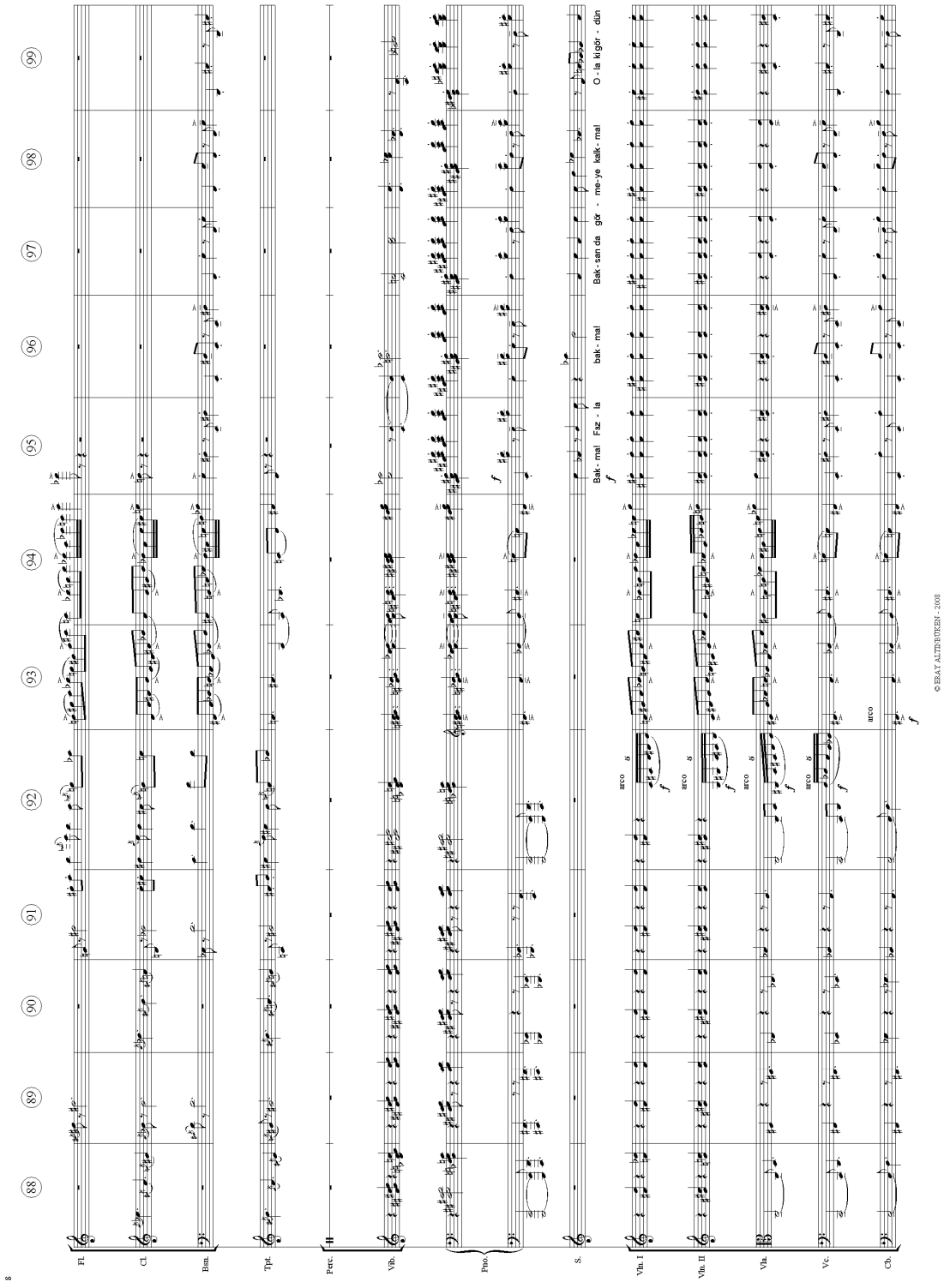

Figure A.133 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 8

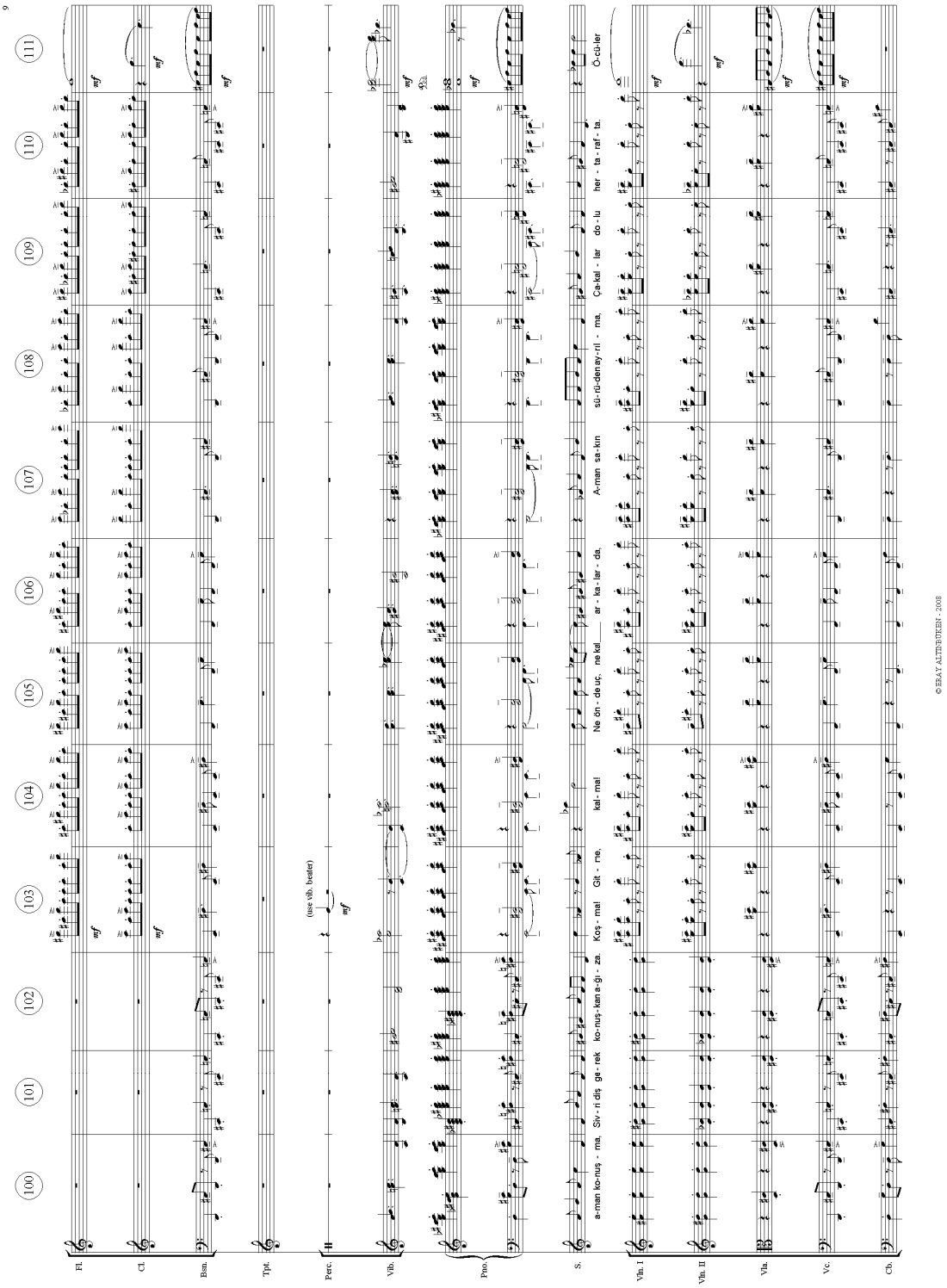

Figure A.134 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 9

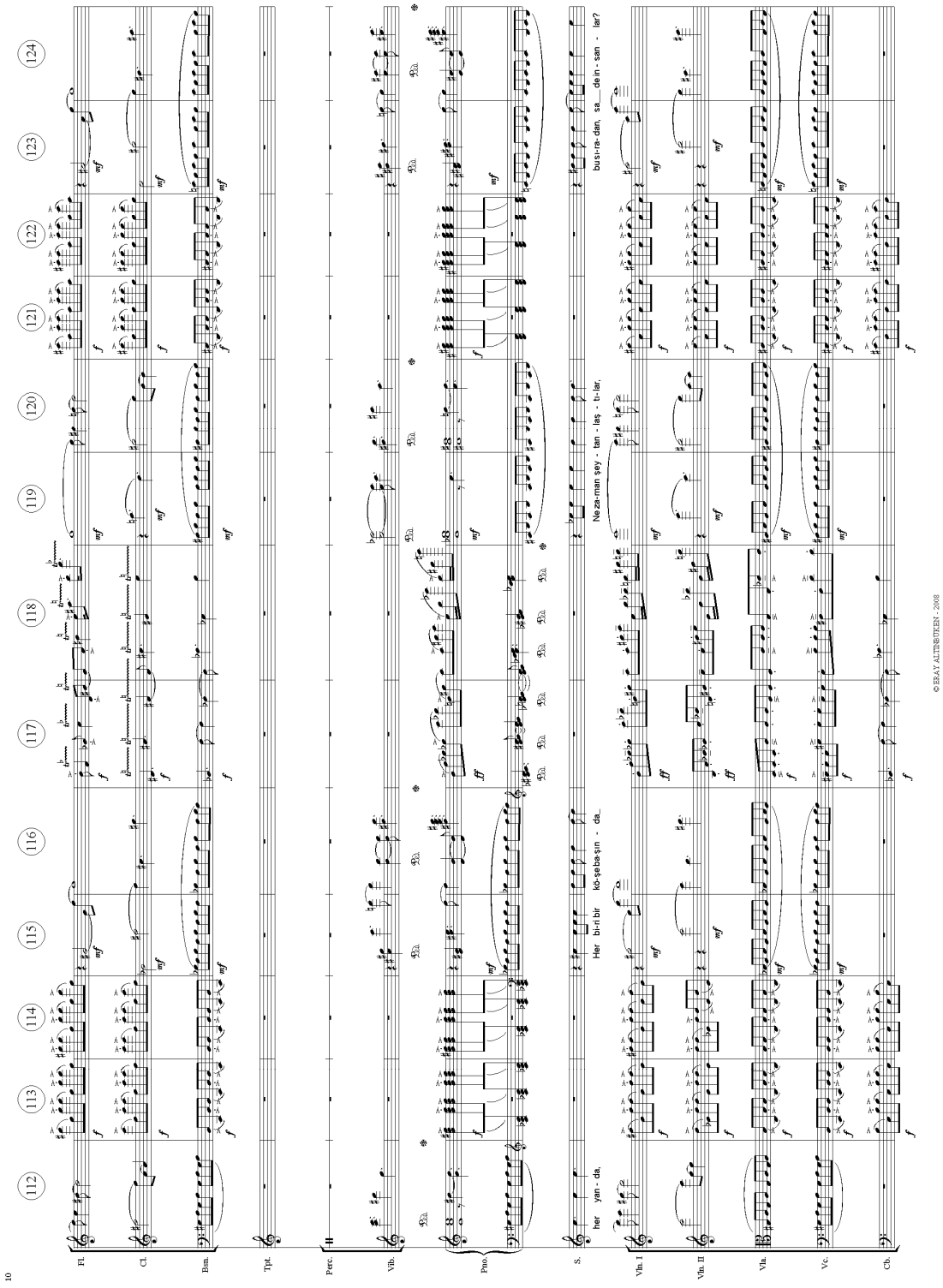

Figure A.135 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 10

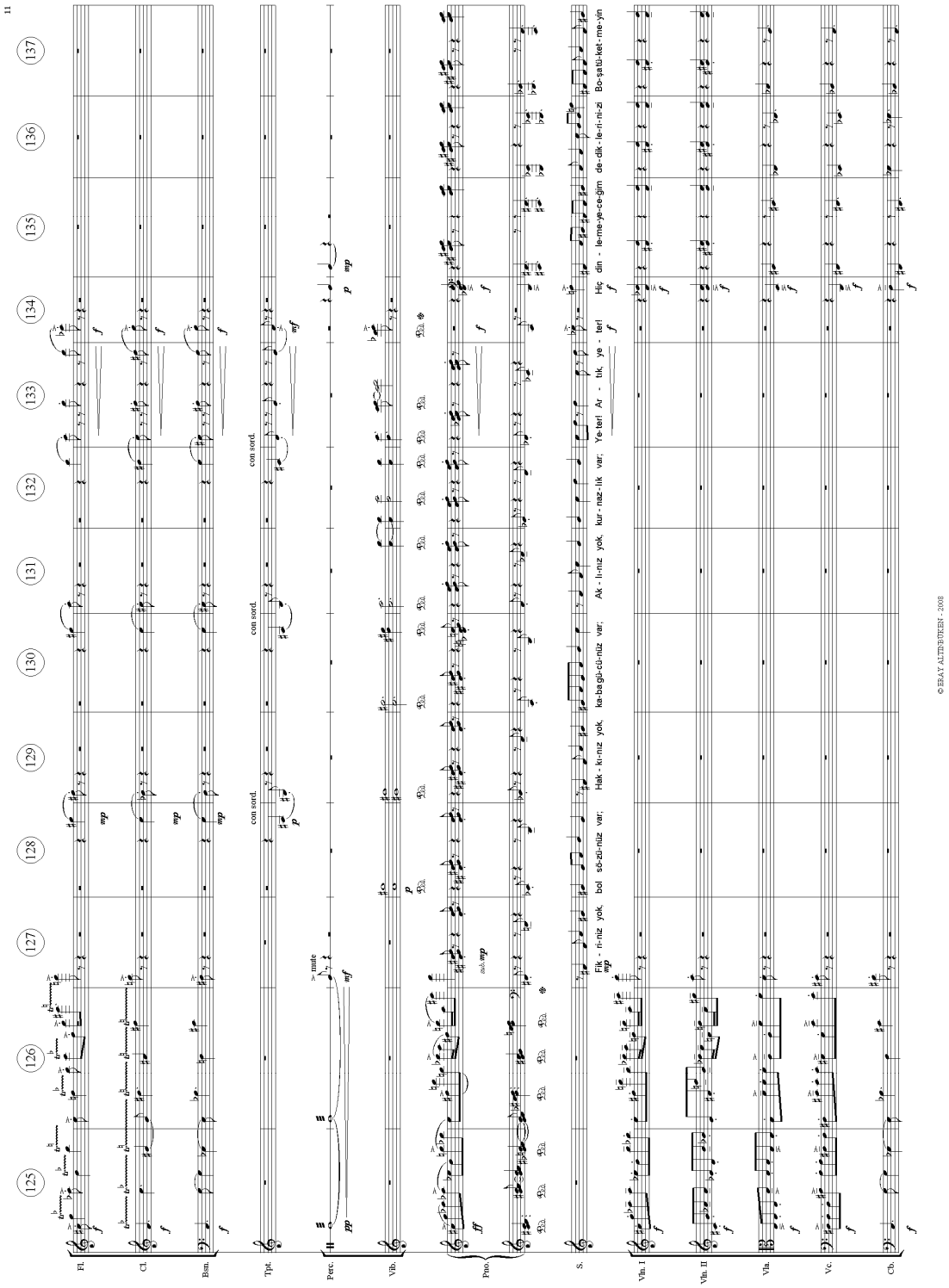

Figure A.136 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 11

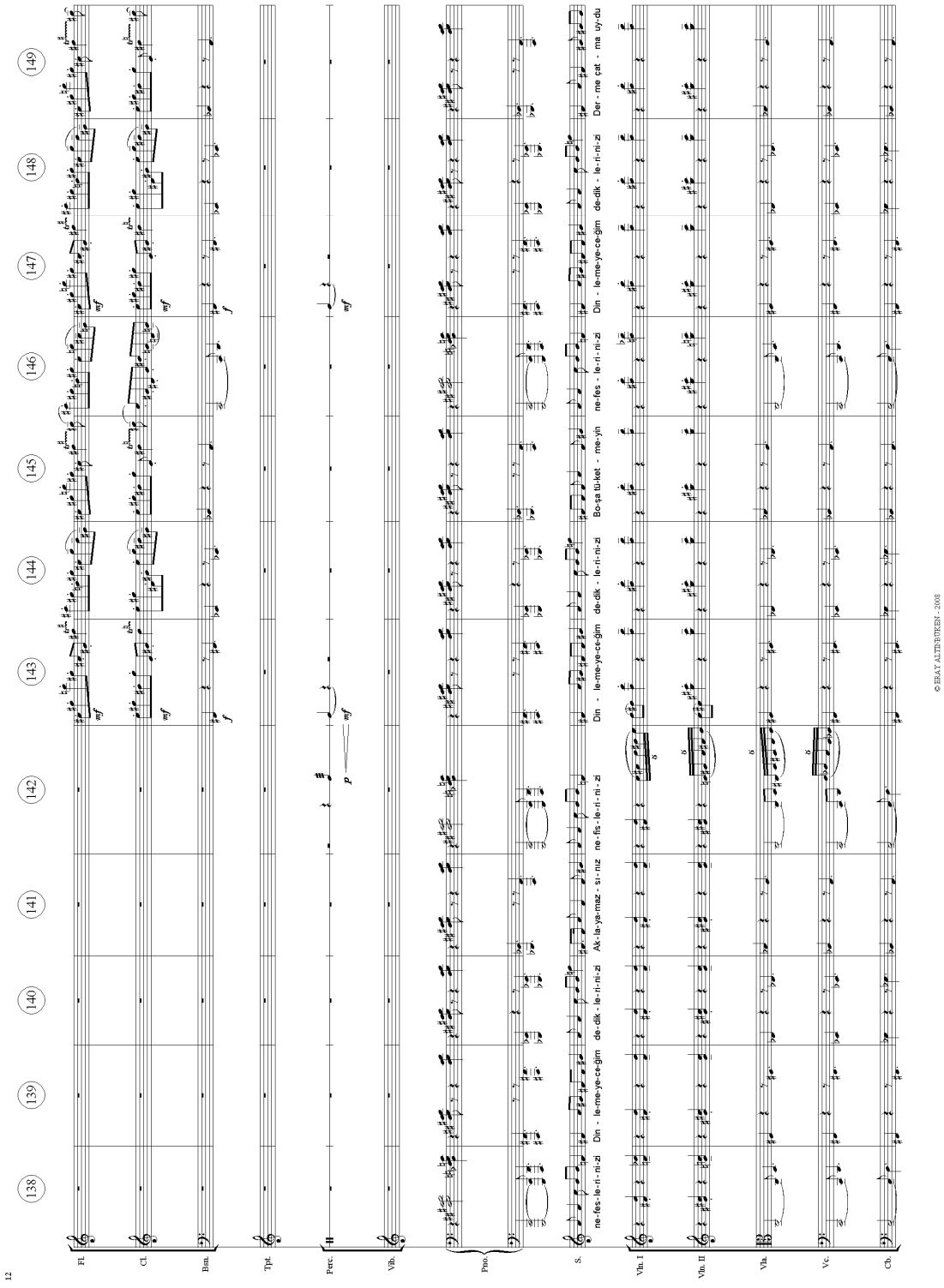

Figure A.137 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 12

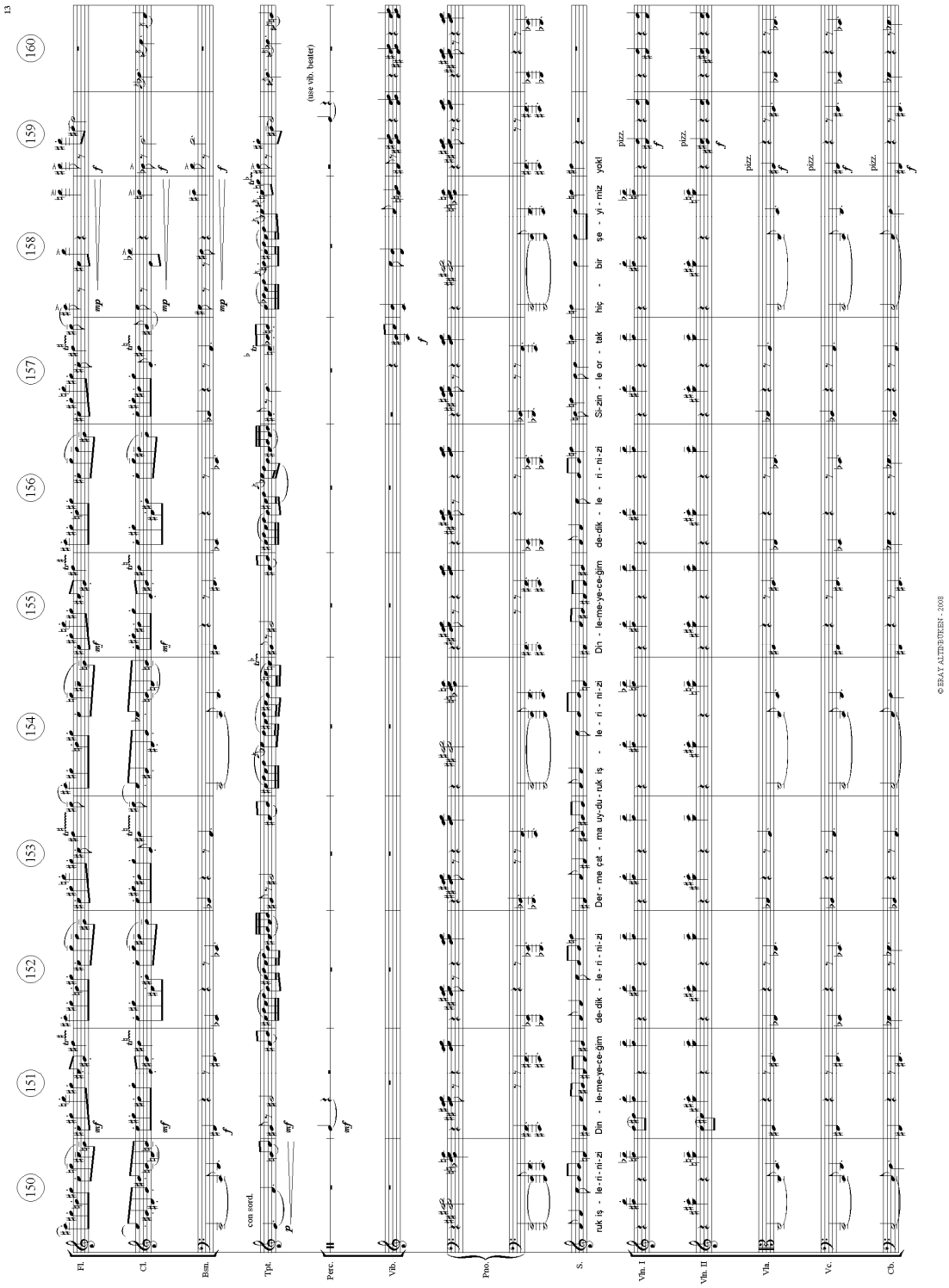

Figure A.138 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 13

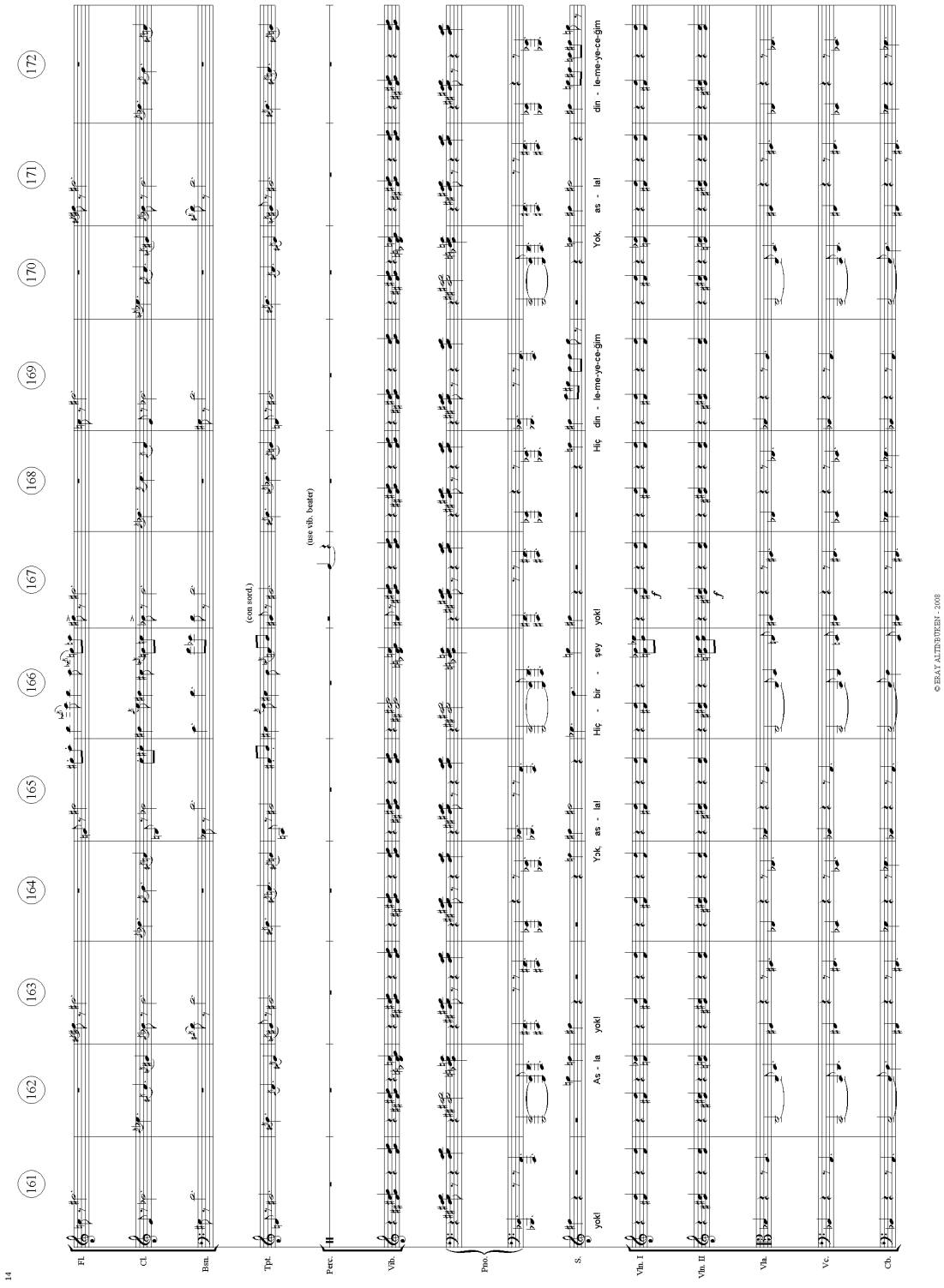

Figure A.139 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 14

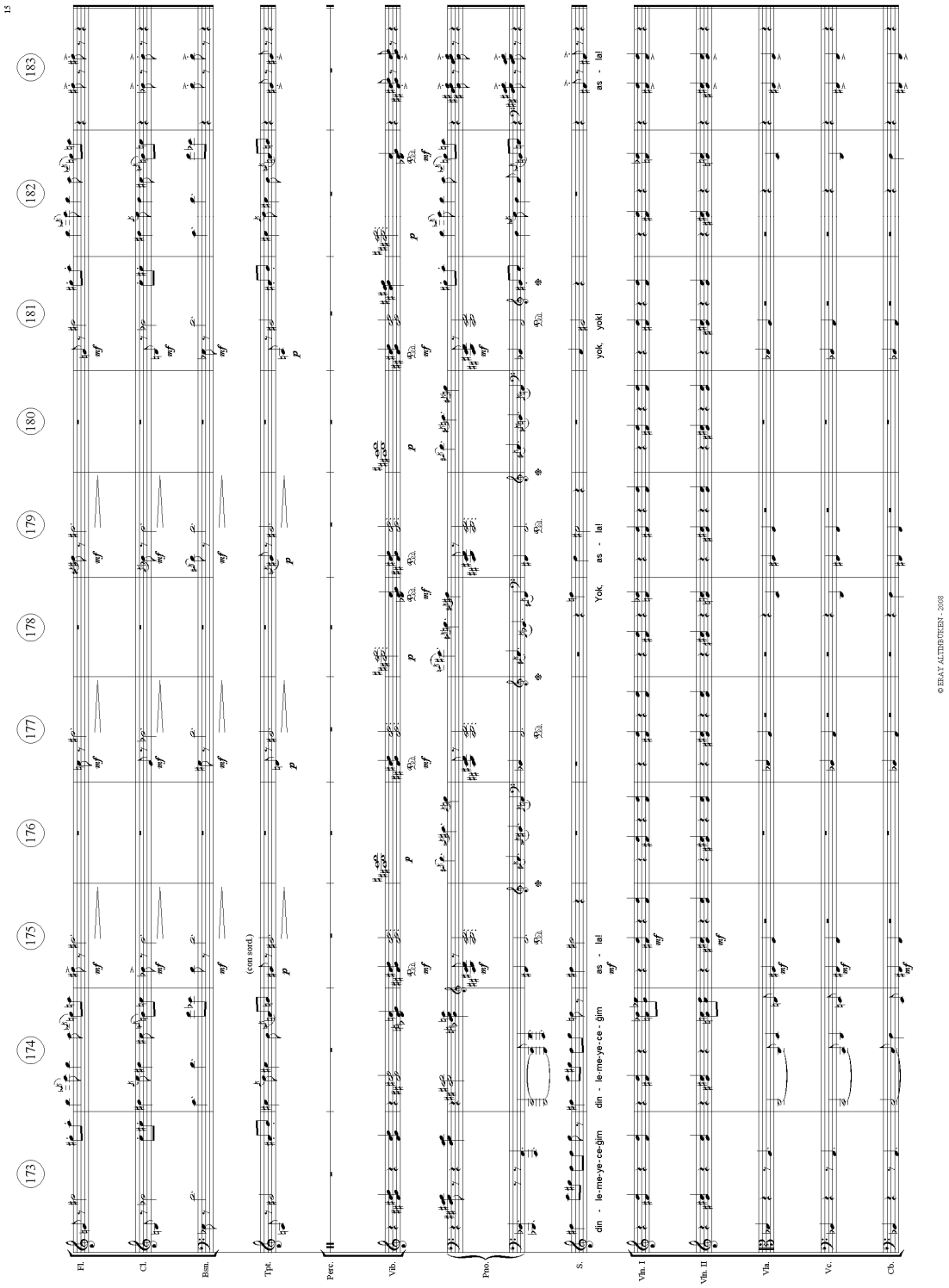

Figure A.140 : Atonal Pop Suite: Puslu Şarkılar (Hazy Songs), mov. 9, page 15

APPENDIX B: "ATONAL POP SUITE: Puslu Şarkılar (Hazy Songs)" Complete Sound Recording (provided on the compact disc inside the back cover)

Recording Info:

Conductor: Erdem Çöloğlu

Soloist: A. Seren Akyoldaş, soprano

Ensemble:

Aysu Zehra Sulu Şanver, flute
Ebru Mine Sonakın, clarinet
Aziz Baziki, bassoon
Onurcan Çağatay, trumpet
Kerem Öktem, percussion
Müge Hendekli, piano
Sevil Ulucan, violin
Eylem Arıca, violin
Gül Eylem Ersoy Pluhar, viola
Rahşan Apay, cello
Aycan Bilginer Beşikçi, double bass

Recording Engineer: Can Karadoğan
Mastered by: Eray Altınbüken

Recorded Live in Mustafa Kemal Auditorium, Istanbul Technical University Maçka Campus, in 04.12.2008.

CD Track List:

Track 1 – Mov.1 "Çok Akıllıyım Sanma"
Track 2 – Mov.2 "Kukla"
Track 3 – Mov.3 "Pişman Olacaksın"
Track 4 – Mov.4 "Bitsin"
Track 5 – Mov.5 "Kırık Kalpler Bulvarı"
Track 6 – Mov.6 "Günah Keçisi"
Track 7 – Mov.7 "Kirli Yağmur"
Track 8 – Mov.8 "Yeni Ben"
Track 9 – Mov.9 "Dinlemeyeceğim Dediklerinizi"

CURRICULUM VITAE

Candidate's full name: Eray Altınbüken

Place and date of birth: Istanbul, 07.08.1975

Permanent Address: Istanbul Teknik Üniversitesi Türk Musikisi Devlet Konservatuarı, Kompozisyon Bölümü, İTÜ Maçka Kampüsü, 34357, BEŞİKTAŞ - ISTANBUL

Universities and Colleges attended:

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Istanbul Technical University, Social Sciences Institute, Master's Programme in Music (MIAM), concentration area: Composition

Marmara University, Faculty of Communication, Radio Television and Cinema Department

Istanbul University, State Conservatory, Classical Guitar Department

Publications:

Altınbüken, E., 2010. Atonal Pop Süitin Anatomisi, in *Andante*, vol.44, Feb.2010, Istanbul.

Altınbüken, E., 2008. Kumdaki Kan, in CD presented with *Spectral World Musics: Proceedings of the Istanbul Spectral Music Conference*, eds. Reigle, R. and Whitehead, P., Pan Publishing, Istanbul.