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Master of Music Research Report

The Creation of the „Naus-Mouth“: Incorporating North Indian rhythm in Vocal Jazz

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Table of Contents

1. Abstract 4

2. The story of my research 5
  2.1. Motivation 5
  2.2. Research Question 6
  2.3. Goals 6
  2.4 Discoveries 6
  2.5 Development 7

3. Description and documentation of the artistic result 9
  3.1. Description of the artistic result 9
  3.2 Documentation of the artistic result 9

4. Reflection on the artistic result and the process 10
  4.1. Reflection on the artistic result 10
  4.2 Reflection on the process 11

5. First intervention cycle 12
  5.1 Explanation 12
  5.2 Starting point 12
  5.3 Process 12
  5.4 Reflection 17
    5.4.1 Analyzing and comparing solos 18
  5.5 Feedback 19

6. Second intervention cycle 21
  6.1 Explanation 21
  6.2. Starting point 21
  6.3 Irregular time signatures in Jazz 22
  6.4 Composition no. 1: „Apoligitis“ 23
    6.4.1 Analysis and Reflection 25
  6.5 Composition no. 2 „Dha Dhin“ 26
    6.5.1 Analysis and reflection 28
    6.5.2 Comparing „Comfort Ye“ and „Dha Dhin“ 30
  6.6 Feedback 30

7. Third intervention cycle 32
  7.1 Explanation 32
  7.2 Starting point 32
  7.3 Process 32
  7.4 Analyzing and comparing solos 36
  7.5 Feedback 38

8. Conclusion 39

9. Glossary 40

10. Appendix A – First intervention cycle 42
  10.1 Index of Youtube-video about the first intervention cycle 42
  10.2 Melodic tihais 44
  10.3 Transcription of solo before 45
  10.4 Transcription of solo after 47

11. Appendix B – Second intervention cycle – “Apoligitis” 49
  11.1 *Rupak* build-up No. 1 49
  11.2 *Rupak* build-up No. 2 51
  11.3 *Rupak* build-up no. 3 53
  11.4 *Rupak* build-up no. 4 55
  11.5 Score of “Apoligitis” 57

12. Appendix C – Second intervention cycle – “Dha Dhin” 70
12.1 *Chakradaar* rhythmically 70
12.2 *Chakradaar* melody 71
12.3 *Chakradaar* with mutes 72
12.4 Score of composition “Dha Dhin” 73
12.5 Score of arrangement “Comfort Ye” 92

13. Appendix D – Third intervention cycle 95
13.1 Transcription solo before 95
13.2 Transcription solo after – version 1 99
13.3 Transcription solo after – version 2 101
13.4 Index of Youtube videos about the third intervention cycle 105

14. Appendix E – Summary of interviews 109

15. Appendix F – Track list of audio/video recordings 110

16. Appendix G - List of sources and network 111

1. Abstract

In this research I investigate how to apply Indian rhythm in modern jazz compositions as well as in the improvisation on these compositions and traditional jazz standards.

The first phase of my research focuses on using rhythmical patterns from Indian music in my improvisation in jazz. I therefore transcribed tihais from *santoor*[1]-player Shiv Kumar Sharma and *tabla*[2]-player Zakir Hussain and practiced them in jazz standards. This enriched my rhythmical language in improvisation.

I then shifted my focus towards composing in irregular time signatures with the help of Indian rhythm. I used a basic groove and its subdivisions from Indian music to - together with its rhythmical layers and existing rhythmical compositions - gain more freedom in the approach of an irregular time signature.

In the final phase of my research I combine both steps mentioned before, which leads to improvisation in my own composition. I chose one of my compositions and worked on improvising on its solo scheme. In the end, my improvisations contain rhythmical patterns from the first phase and show more rhythmical freedom and variety. This last phase was set up as an experiment, where I recorded my progress during the practicing sessions.

During my research I received valuable feedback from experts like Niti Ranjan Biswas, Henri Tournier, Shai Maestro, Oded Tzur, Oene van Geel, Jarmo Hoogendijk and Sebastiaan van Bavel.

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[1] **Santoor:** An Indian hammered dulcimer.
[2] **Tabla:** Emblematic percussion of Hindustani music.

2. The story of my research

2.1. Motivation

Since Indian music is modal music in which musicians improvise on a single scale for an extended period of time, its rhythms are often more complex than in other styles, which use chord changes, such as traditional jazz music. An important topic in Indian music is the use of *tihais*[3], which will be explained in Chapter 5, when introducing my first intervention cycle. These rhythmical patterns act as a guideline for improvisations and there are countless possibilities to create them. Besides *tihais*, the Indian music tradition also contains a number of fixed compositions (*Chakradaar-Tihais*[4]*, Qaidas*[5]*, Gats*[6]*, Tukras*[7], etc.). My interest lies in finding out how all these rhythmical structures can help me improve rhythmically in general and how they can add rhythmical diversity to my music.

I have often wondered and am often asked aswell, why I chose this particular research topic and the answer has become clear to me: It is simply because I fell in love with it! I was introduced to Indian rhythm prior to my studies at Codarts and was immediately fascinated by it. The fact that there are different syllables for every sound on the *tabla* (called "*bols*[8]"), to be able to sing what is also being played, gave me the feeling of practicing poetry, instead of complicated rhythms and it helped me figure out rhythms that I thought I could never play or sing.

I have always been interested in rhythm, but as a singer one usually doesn't work on this topic as analytical as most instrumentalists do. We usually work on phrasing and combine this with the lyrics, thinking about how phrasing can help us emphasise the meaning of the words we sing. Additionally, I learned how to sing in irregular time signatures during my bachelor studies, but only by keeping a basic pattern and adapting the melody to that. We were trying to survive in an irregular time signature, rather than learning how to "own" it. Instrumentalists on the other hand approach rhythm in a more analytical and mathematical way, by thinking and practicing different groupings of 2 and 3. They usually do not take lyrics into account and through that are free to focus only on the notes and rhythms they want to play. Playing in irregular time signatures and using crossrhythms is therefore implemented in their studies way earlier than it is in the studies of most singers, which often causes the last group to fall behind on that topic.

In my *tala* [9] lessons with Niti Ranjan Biswas, I got to know a way inbetween the lyrical approach of most singers and the mathematical approach of instrumentalists. Here, we worked on irregular time signatures, shifting patterns and crossrhythms in an analytical and mathematical way, but always combined it with the lyrical aspect of the *bols*. For example: Instead of thinking 5 in a group of 2 and a group of 3, I'm thinking "Taki Takite". I am aware of the subdivision I am creating by using these syllables, but can apply it more easily through this lyrical approach.

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[3] **Tihai:** (*tin:* three); concluding rhythmic pattern repeated three times, finishing most often on the first beat of the cycle (*sam)* or before the starting point of the composition; used in the vocal, instrumental, solo drum and solo dance repertoires.

[4] **Chakradaar tihai:** (from *cakra:* circle); a tihai in which each phrase is a tihai in itself.

[5] **Qaida:** (Persian and Urdu word meaning law, principle); one of the typical elements of the *tabla* solo, kind of very short compositions, developing variations built on the *theka*, the basic rhythmic sequence.

[6] **Gat:** (*gait:* walk); specifically instrumental composition, in given *raga* and *tala,* where metre plays an important role.

[7] **Tukra:** A small composition containing a small body and a tihai.

[8] **Bol:** (speech, language); the mnemonic syllabi of tabla.

[9] **Tala (or taal):** (*tala:* hand clapping); rhythmic cycle. Particular system of rhythmic cycles, whose conception is very close to the metre in poetry. Each cycle is composed of a certain number of beats, regrouped into groups landmarked by specific handclaps.

A lot of different rhythmical patterns are “hidden” in the compositions that Indian musicians play, so by learning and practicing these compositions, one internalizes these different rhythmical features. It is always helpful and important to analyse what you are singing (instead of just singing “Taki Takite”, also knowing that this is a 2-3 subdivision of 5), to gain full awareness of the rhythm and being able to apply it properly. When I got to know this approach, I was absolutely convinced that this was something that I wanted to investigate and develop further.

2.2. Research Question

Based on my first experiences in Indian rhythm, I asked myself the question: “How can I incorporate aspects of North Indian rhythm in my improvisation and composition in vocal jazz music by studying and analyzing how instrumentalists use rhythmical concepts such as basic talas and fixed rhythmical ideas and compositions?”

2.3. Goals

Modern jazz music is heading towards an era with more and more rhythmical diversity and a growing number of musicians are looking into different musical styles, attempting to enrich their music. Indian rhythm is becoming increasingly popular among jazz musicians, which motivates me even further to research this topic. Besides being on stage with my own band, performing original compositions with my own lyrics, I would also love to be invited as a guest singer for musicians who want to use vocals as an orchestral instrument in their music, which is already happening more and more in modern jazz (for example Tigran Hamasyan).
I want to develop a sound that is outstanding and unique, so people will recognize me, immediately. I hope to achieve this not only through the actual "sound" of my instrument, but also my way of using it. My goal is to, more and more, reach the same level as an instrumentalist regarding the understanding of rhythm, harmony and improvisation to be able to connect with them fully and let myself fall into the music completely; to create something greats together with my fellow musicians!

2.4 Discoveries

One thing that became clear to me very early on, through my own findings as well as conversations with Niti Ranjan Biswas, Oded Tzur, Shai Maestro, Jarmo Hoogendijk and Sebastiaan van Bavel is that improvisation is all about the preparation. Improvisation needs a good foundation and a lot of study. One needs to have a broad knowledge of harmony and rhythm to, within these two parametres, create a new melody. This is done by studying scales and licks; transcribing, analyzing and playing solos from other musicians and even preparing your own solos or parts of them. Jazz musicians practice licks in all keys and apply them in their solos; some solos practically solely consist of prepared licks. But once you have build an entire dictionary with “lick-vocabulary” for yourself, your solos get more divers and it will become easier to let go and trust your instincts. By practicing the same lick over and over again, using it in different songs on different spots it becomes part of your natural musical language. The same thing happened with the *tihais* I was working on. Endlessly repeating them made me feel more and more comfortable with these rhythmical structures and made them pop up in my mind at other moments, too. All experts I spoke to agreed on this finding: It is all about repeating the same thing in different circumstances until at a certain point it becomes natural to you.

Another interesting finding is that all the structures I used on a 4/4 time signature can be used in any other time signature, too. You only have to recalculate your starting point. However, it can occur that a certain *tihai* fits better on a particular time signature due to its subdivision. On an even time signature you would rather want an uneven *tihai* and on an uneven time signature you would prefer an even *tihai* in order to create more tension by shifting the pattern. When it comes to compositions one has to be more careful, since for example a *Qaida*, *Fermaishi Chakradaar* [10]or *Kamali Chakradaar* [11]follow certain rules that cannot be maintained when trying to change the time signature underneath.

The last important lesson I learned while working on my compositions with the aim to gain more freedom in how to approach an irregular time signature is that it is very difficult for jazz musicians to play a different sub division than they are used to. That is why all the musicians in a band should be familiar with a *tala* and its layers when playing one of my compositions. The *theka* [12]can be very helpful when kept in mind while playing and studying some variations on the *theka* can also improve the freedom of a player. Therefore, I could state that only playing the composition is not enough to gain the rhythmical freedom that I am looking for. It requires more dedication and research from a traditional jazz player than expected.

2.5 Development

First of all, I have gained a lot of knowledge about Indian music and its rhythm. Indian music does not use the aspect of harmony in the way that we use it in our Western music. In the Western music we often change the harmonic center within a song, whereas in Indian music a whole song evolves around one tonal center. An instrument such a *tanpura*[13] plays a drone[14] and the melodic and rhythmic improvisations evolve around that, always leading back to the tonic and the first beat of the cycle. Instrumentalists choose a pitch according to their instrument (for example Hariprasad Chaurasia plays in E on his *bansuri*[15], Shiv Kumar Sharma in D on the *santoor*), singers choose a pitch according to their natural vocal range. This causes a whole performance to be in the same pitch, whereas in Western music we try not to play two tunes in the same key after one another. This means though, that the melodical and rhythmical development in Indian music goes deeper than in Western music. The challenge lies in finding the space in Western music to implement some of these ideas of Indian music.

I learned to approach an irregular time signature in the form of a *theka* and practicing it in its layers. This means that the basic pattern in the first layer (quarter notes) is being clapped, while the same pattern is recited for example double time (in eighth notes), in triplets, sixteenth, or the other way round, in half time. Thus, I gained a more analytical and mathematical approach of a time signature and a growing awareness of different rhythmical cycles. I am faster in recognizing irregular time signatures and their subdivisions or rhythmical patterns, when listening to performances and sometimes combine this with creating a *theka* in my head. Through that, it is easier to follow what is happening withing the music, which leads to me being able to hear more musical layers. Additionally, it has opened my ear for what is happening while playing with my own band. Through this, I learned to feel more comfortable, secure and relaxed in irregular time signatures and being able to phrase more freely. This means that I do not have to adapt my melody to a basic rhythmical pattern anymore, but I am able to alter a melody more diversely by keeping the basic *tala* in my head (or hands) and switching between different rhythmical layers.

In a jazz standard in a 4/4 time signature I also gained the ability of creating patterns and shifting them, whether this turns out as a *tihai* or not. I am able to create crossrhythms and interact with my musicians better. The freedom of letting go of time, while the rhythm section stays steady and then coming back to time is a very powerful tool for a melody instrument and especially a vocalist, since the lyrics could ask for such an interpretation. Since I started being involved with Indian rhythm, this has also improved very much.

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[10] **Fermaishi-Chakradaar**: A *Chakradaar tihai*, in which the last stroke of each sub-*tihai* coincides with the *sum* of the *tala*.

[11] **Kamali Chakradaar:** A *Chakradaar tihai* in which the first stroke of the first sub-*tihai* and the second stroke of the second sub-*tihai* coincide with the *sum* of the *tala*, and the entire *tihai* also ends on the *sum* of the *tala*.

[12] **Theka:** Rhythmic basic sequence, or pattern of percussion strokes, characteristic of a given rhythmic cycle (*tala*) and of its metres; this is a particular sequence of drumbeats, which is memorized by all musicians in a form of sequence of onomatropoeias.

[13] **Tanpura**: A long necked, stringed instrument for providing the drone.

[14] **Drone**: The sounding of a constant melodic pitch or pitch sequence that underlines an elaborate melodic improvisation.

[15] **Bansuri** : A bamboo flute.

Moreover, I learned to be more patient when it comes to a musical piece or improvisation. Listening to North Indian classical music, I noticed that especially live performances often last for more than one hour, playing the same raga and tala (basically one song). The raga and tala are introduced slowly and then elaborated within a long musical form, usually speeding up gradually after each section. This changed my way of thinking in form whilst composing and my way of building up whilst improvising. In my opinion, it is important to adapt a musical form to what you feel the music needs at that point and I have the feeling that the rules in North Indian classical are mostly very much in line with the natural flow of the music. As an improviser it is very important to take the time to build up your solo towards a climax and a lot can be learned about that from listening to players like Shiv Kumar Sharma.

The last striking thing I developed is how to study. By hearing stories about the traditional Indian way of studying in which you for example live with your guru for several years, start practicing very early in the morning and repeat just one *theka* or composition for days or weeks, I started thinking about my way of studying. I always tried to get fast results, which led to forgetting or losing information and skills very fast. In order to really internalize the material and being able to use it for years, one has to practise it in detail and repeat it often. In detail means slowing it down, analyzing it, looking at it from various angles. This realization has completely changed my way of studying in a positive way. I am more focused and better structured now.

Overall, I gained more rhythmical freedom and an overview of what is happening withing a band, a song and a rhythmical cycle. Studying Indian *talas*, practicing *tihais* and learning various compositions has given me an overview on rhythm and especially irregular time signatures and shifting patterns.

3. Description and documentation of the artistic result

3.1. Description of the artistic result

The result of my research are two original compositions, which are based on a rhythmical cycle of Indian music and in which I also use other rhythmical elements such as layerings, *bols* and fixed compositions.

The composition „Apoligitis" (Track 04; bit.ly/2p4H6MS) is based on *Rupak-taal* [16]- a rhythmical cycle of seven beats - and focuses on having a different layer of the *theka* in each instrument. This means that for example the bass plays the pattern in quarter notes, the piano in eighth nothes and the vocals in triplets. Especially in the solo scheme, the rhythm section is free to play with the different layers, thus creating more freedom in the approach of the rhythmical cycle and stepping out of the repetitive pattern.

The same basic idea is used in the song „Dha Dhin" (Track 05; bit.ly/2o4qmRp), which is based on *Jhap-taal*[17], a rhythmical cycle of ten beats. Additionally, in this song I used *tabla bols* instead of lyrics for the melody. The first theme of the song is a *tihai* and I composed a melody on a *Chakradaar* to function as a transition back to the theme. The last soloist should prepare the *Chakradaar* in his solo, using certain elements of it to build up towards this fixed composition. This is what I can also show myself already. I am able to improvise on the chord scheme, creating *tihais* for whenever I'm not the last soloist. If the function of last soloist is mine, I am also able to improvise based on the *Chakradaar*, building up towards it.

3.2 Documentation of the artistic result

The two intervention cycles in which I worked on improvisation were both documented with videos. I recorded parts of every study session and reflected on them myself and together with experts. I made notes for myself to keep track of what did or did not work and to monitor my development. Additionally, I transcribed a solo at the beginning of each intervention cycle as well as at the end of it and compared the versions. (The analysis of the solos from the first intervention cycle can be read in chapter 5.4.1 (Appendix A, chapter 10.3 and 10.4); solos from the third intervention cycle are being analyzed in chapter 7.4 (Appendix D, chapter 13.1-13.3).

For the composition process I wrote a brief analysis of the pieces (chapters 6.4 and 6.5) in which I explain my aim, why I made certain decisions and whether I think I have achieved my goals. To clearly show the improvement on my use of irregular time signatures, I compared the score of my arrangement of „Comfort Ye" (which I perform in the reference recording) with the score of „Dha Dhin", since these rhythmical cycles - one being 5 beats, the other 10 - can be compared easily. (Chapter 6.5.2)

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[16] **Rupak-taal:** Seven-beat rhythmic cycle (3+2+2).
[17] **Jhap-taal:** ten-beat rhythmical cycle (2+3+2+3)

4. Reflection on the artistic result and the process

4.1. Reflection on the artistic result

I am partly satisfied with my artistic result. When it comes to the compositions, I think I have found a great way to fuse two styles and by that create my own unique sound. Through the use of a certain *theka* with its *taali* [18]and *khali*[19], the approach and subdivision of a rhythmical cycle sounds unusual and new to the ear of a traditional jazz musician. Adding the different layers makes a player gain more freedom in maintaining the rhythmical cycle without getting stuck in a repetitive pattern. I did come the conclusion though, that it takes a lot of time and dedication from my musicians, because for them this approach is also new and in the beginning the use of a *taal* and its layers does not necessarily lead to more freedom. In fact, it was very difficult for the musicians to get used to the new subdivisions and they often turned them around (which can be heard on the recording of "Dha Dhin" where in the solo scheme the band decided to go to a 3+2+3+2 subdivision). This leads to more insecurity and sticking to a certain pattern to maintain the original subdivision. This is of course not what I wanted. After spending more time on the *theka* and its layers and practicing these together with the musicians and repeating the compositions more often, everybody is slowly gaining more freedom though, which for me proves that it does work.

When it comes to the improvisation, in my opinion, I have made a good start, but it does need more hours of practicing and is still "work in progress". The doubts that I had after my first intervention cycle about my melodic improvisation not being well enough yet to keep on researching in this field were in my opinion right. Although I did enjoy the third intervention cycle a lot and am convinced that it will work someday, I do notice that my melodic limitations hold me back and I had to spend a lot of time on being able to sing over the changes before being able to focus on the rhythmical aspects. I am working on my melodic improvisation, which is clear when comparing the reference recordings. However, this is also a process, which needs more time to develop and when gaining more abilities in the melodic field, the use of rhythm and implementing Indian rhythm will also profit from that.

Tihais barely come to me naturally. If I want to sing a *tihai*, I need to think about it, calculating a starting point and in some cases even a melody to fit the chords. This means that I am not able yet to start soloing without knowing beforehand which *tihai* I am going to sing. Whether this is good or bad is something that I am not sure about, yet. On the one hand, improvisation is about freedom and creating something new on the spot, on the other hand, I also learned that it is all about preparation and to have a certain *tihai* as a goal to work towards during your solo helps you to structure it. Additionally, when my solo is based on a *tihai* or a rhythmical composition, I do use more interesting rhythms such as different layers and groupings with various subdivisions. Therefore, one could say that working with a prepared *tihai* at the end of your solo improves it.

The use of Indian *bols* instead of jazz syllables is something that I just recently started experimenting with and which still needs more attention. It adds an extra level of rhythmical complexity, since it helps me to sing more difficult and interesting rhythms more easily. I did discover though, that Indian *bols* do not work well on jazz standards, since they are not really compatible with a swing feel. For this reason, I would not recommend using them when playing that repertoire. When trying it on my own composition ("Dha Dhin") it worked well and it could be a great personal feature, since I haven't found any other singer using this. Therefore, I do have the feeling that my research could be interesting for a lot of vocalists, as implementing Indian rhythm in singing has – to my knowledge - not been done this way before and my findings can enrich their musical language as well.

I grew up listening to pop- and rockmusic and learned about jazz in my teenage years and during my bachelor studies at the Conservatory of Utrecht. In that later period my interest in Western classical music also increased. Now, during this research, I have found yet another musical style to influence me. Therefore, one can state that my artistic result is not only a fusion of jazz with Indian music, but a fusion of all the different styles that have influenced me over the years. This can clearly be heard in my compositions. That is why, I believe that my way of implementing Indian rhythm in my music is not as artificial as one might think. Of course I have chosen to use certain aspects of Indian rhythm, deliberately. Otherwise, this would not have been a research. Nevertheless, a lot of the ideas came to me naturally, which became clear especially during the composition process. Here it was difficult for me to monitor the creative process, since this felt artificial and would have gotten me out of my focus and creative zone. Thus, the artistic result is, in my opinion, very authentic.

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[18] **Taali:** Hand clapping marking the cycle structure or *tala.*

[19] **Khali:** (lit. "empty") open beat (palm upwards) in the cycle, with a very specific role: it is a marker often placed in the middle of the cycle, generally announcing a series of high-pitched or curt sounds.

4.2 Reflection on the process

What I learned from the research process is that it is very helpful to record your study sessions or at least parts of them and reflect on these recordings later, also with the help of colleagues or teachers. Listening to or watching a recording makes you look at your study material from another angle and - together with the input from others - results in improving your way of studying and playing.

I realize that the documentation of the second intervention cycle was insufficient. A lot of the composition process took place inside my head, without taking notes, or directly on the computer without saving the old versions. That is why I had to write an analysis and describe why I made certain decisions in retrospective. If I had done this better, I would have been able to learn more about the composition process. This is what I could improve when composing again.

All in all, one could say that through the research I learned a lot about how to monitor and document my study and findings, thus working more efficiently.

5. First intervention cycle

5.1 Explanation

For my first intervention cycle I decided to focus on the use of *tihais* in improvisation. These are rhythmical patterns, which you repeat three times before landing on the first beat, creating interesting subdivisions and shiftings. The last note of the last pattern hits the first beat (*sam*[20]) of your basic rhythmical cycle. The interesting part is that in Indian music one counts backwards, meaning that you calculate where you have to start your *tihai* by going backwards from the beat on which you want to land. For example: You have a pattern of three consecutive eighth notes, which you repeat three times in a 4/4 time signature. This means you have nine eighth notes, the ninth note being the first beat. Now you calculate backwards to see where to start. The ninth eighth note is the first beat, so you subtract that one, leaving eight eighth notes. As we know, in one 4/4 bar fit exactly eight eighth notes, so you have to start your *tihai* exactly one bar before you want to hit the first beat, on the 1. This is how you could visualize it:

Tihai: **1 2 3 1 2 3 1 2 I 3**

4/4 : **1 + 2 + 3 + 4 + I 1**

This is only one (and probably the most simple) example. As you can imagine, there are countless possibilities to create *tihais*.

The idea of the intervention cycle is to get a first basic vocabulary of *tihais*. Like "licks" in Jazz music, a *tihai* has to happen in the moment and does not work if while playing you have to think too much about where to start the pattern. By building up a vocabulary of *tihais* and practicing them in various settings, the point of them coming to me naturally will come closer and closer.
Of course this takes a lot of time and the first step is to analyze how other players use *tihais* and reproduce this. The second step is to create a *tihai* myself and then use it, before at a certain point I - hopefully - won't have to think about it anymore and I just do it.

5.2 Starting point

As a first reference recording (Track 01, bit.ly/2oo7nDp) I chose to sing the standard “What is this thing called love” and improvise on it. There is, however, no use of Indian rhythm, yet. Therefore, me and teachers, peers and experts agree, the solo is quite boring. Rhythmically, there is nothing happening yet. There are mostly long lines.

For my first intervention cycle I have used the strategy of a case study, to be able to investigate and explore the music myself, before asking other people. I chose *santoor* player Shiv Kumar Sharma and *tabla* player Zakir Hussain to be my first sources and found seven CDs on which they play together. I transcribed several *tihais* from these recordings and then checked my findings with tabla player and teacher Niti Ranjan Biswas, before using those exact *tihais* in an improvisation on a jazz-standard. In the end, I even wrote a *tihai* myself.

5.3 Process

I listened to five different recordings of Shiv Kumar Sharma and wrote down special moments I recognized at first listening. Later, I checked those moments again and then decided whether it was a *tihai* or not and whether is was worth transcribing for me (for example too complicated *tihais*, or *chakradaar tihais* were too difficult to start with).
For the *tihais* played by Shiv Kumar Sharma, I decided to transcribe the melody, too, so I could later try to stay to this idea as close as possible.
The moments in **BOLD** are the ones I decided to transcribe.

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[20] **Sam:** (from *sama*: balance); first beat of a cycle, meeting and concluding point.

1) “The Pioneer Of Santoor” (Chhanda Dhara,1991) (bit.ly/1IVVpow)

Tihai moments in *tin-taal*[21]: 46:27 (Together) (bit.ly/2p7e1Oi)

2) “Raga Ahir Bhairav: The Glory Of Dawn” (The Gramophone Company Of India Ltd., 1985)

Tihai moments: 0:35 (Zakir); 1:25 (Together); 2:30 (Shiv Kumar); 2:45 (Together); 7:22 (Zakir); 10:45 (Shiv Kumar) ; **11:25 (Zakir)**; 17:10 (Zakir); **17:32 (Shiv Kumar)**; 20:06 (Together!)

3) “The Flow Of Time” (Navras Records, 2002) (bit.ly/2p4KvLN)

Tihai moments: Raga Hameer, Gat in Teentaal: **4:44 (Zakir)**; Raga Kaushik Dhwani, Gat in *tin-taal*: 9:46 *Chakradaar tihai* (Together)

4) “Classical Santoor (Live at Sawai Gandharva)” (bit.ly/2osh84R)

Tihai moments: **1:06 Zakir first (Shiv Kumar follows)**; **24:12 (Shiv Kumar)**

5) “An Audience with: Pandit Shivkumar Sharma” (Navras Records, 2009) (bit.ly/2ooht75)
Raga Guardi Todi

Tihai moments: **Shiv Kumar at 1:06 & 3:40**

After having the *tihais* I transcribed checked by *tabla* player and teacher Niti Ranjan Biswas, two of them appeared to be in another *tala*, not *tin-taal*. This means I had five *tihais* in *tin-taal* with which I could work.

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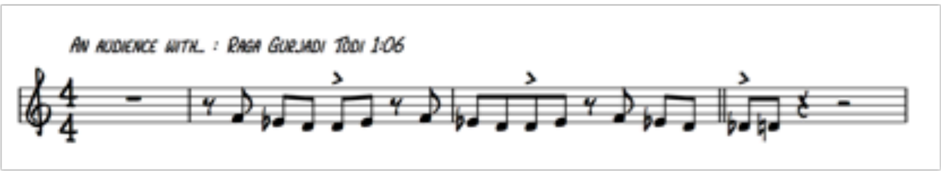
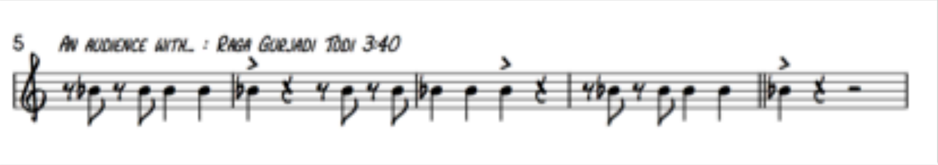
[21] **Tin-taal:** Major rhythmic cycle of Hindustani music; a sixteen-beat cycle (4+4+4+4), played in multiple forms, and at tempos from extremely slow to extremely fast

Transcribed Tihais

(played by Shiv Kumar Sharma & Zakir Hussain)


An audience with.. : Raga Gurjari Todi 1:06
4
4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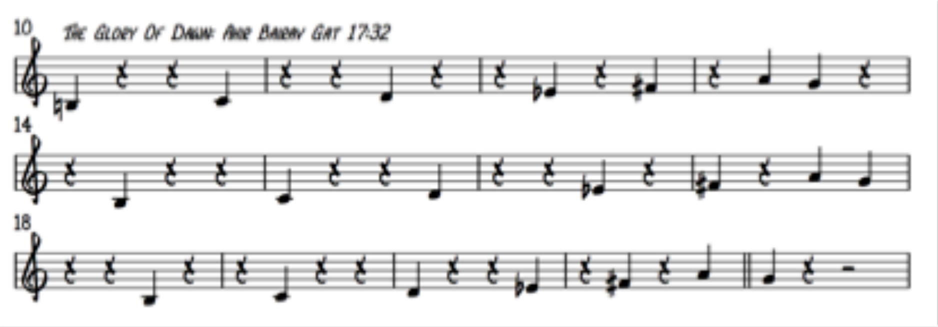
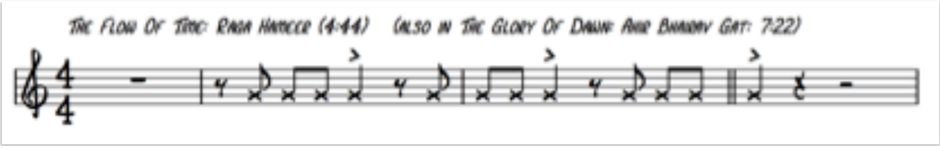
An audience with.. : Raga Gurjari Todi 3:40


10
The Glory Of Dawn: Ahir Bairav Gat 17:32
14
18


The Flow Of Time: Raga Hameer (4:44) (also in The Glory Of Dawn: Ahir Bhairav Gat: 7:22)
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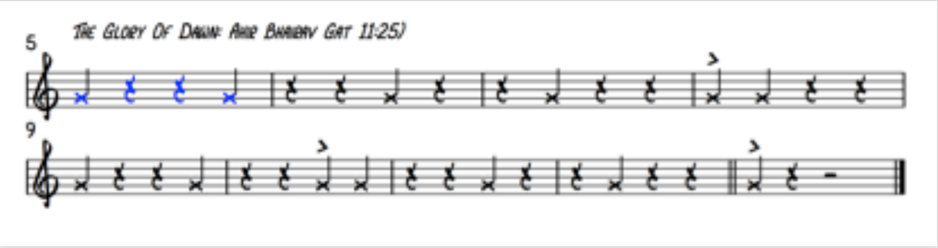
4


The Glory Of Dawn: Ahir Bhairav Gat 11:25)
5
9

FIRST STEP:

After finding and transcribing the *tihais*, the next step was to sing them. I experimented with different chord progressions, tempi, syllables, melodies, straight versus swing feel and I made notes about what worked in my point of view and what did not.
I made recordings during my practicing sessions and put them into a video that you can see here: bit.ly/2o4oxDZ (Track 02)

Tihai 1:
- Sung on a major II-V-I (Cm7 - F7 - Bbmaj) and minor II-V-I (Dm7b5 - G7 - Cm7)
- Syllables: "badudndaba" or "dududndaba" (the second one accentuates only the actual accent you want to have. The first one creates another accent at the beginning of the phrase. Both are possible, but I prefer the second one, especially because the *tihai* for me already isn't that strong, due to the last eighth note that is there, but is not the accent that lands on the first beat.
- Big difference between straight and swing, but both beautiful (Video 0:05-1:32) (bit.ly/2oy7RsJ)

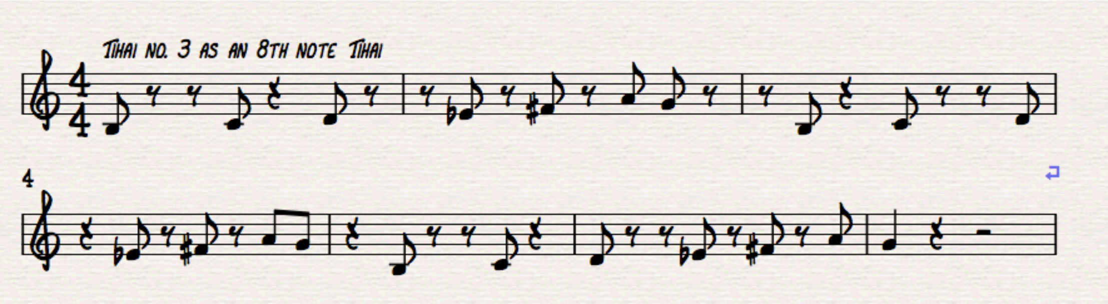
Tihai 2:
- Sung on the chord progression Dm7b5 - G7 - Cm7 - F7 - Bbmaj
- Original *tihai* only on one note. I used the note F on that chord progression, since it fits every chord. I found that there is not a lot of tension in using only a single note. A higher tempo makes it a little better, but I still wanted to alter the melody.
- Ascending melody C Eb G Bb D works great
- Syllables: Straight: "dubadududau" ; Swing: "Duljadududa" (Video 1:33-2:34) (bit.ly/2os0G4I)

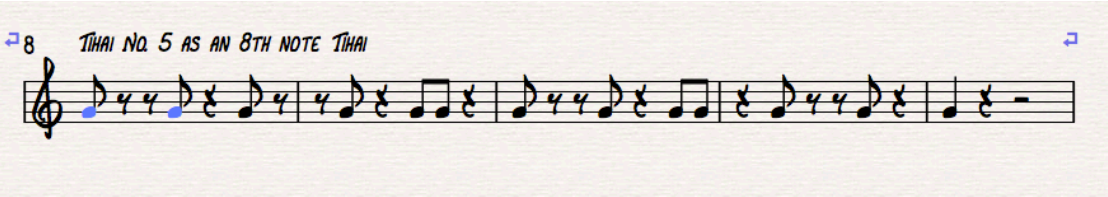
Tihai 3:
- I first had to figure this *tihai* out rhythmically.
- Because it is a quarter note *tihai*, it should be used it in a very fast tempo (at least 230 bpm.). Otherwise it is rather boring. This gave me the idea to turn it into an eighth note *tihai*.
- Chord progression used: F#m7 - B7 - Em7 - A7 - Dm7 - G7 - Cmaj
- Is a great *tihai* when done in a fast tempo. I love it! (Video 2:35-4:34) (bit.ly/2nDEiXo)

Tihai 4:
- Is only a rhythmical *tihai*, so I can manipulate it melodically to fit all kinds of progressions
- Works well with ascending and descending melodies, straight and swing
- Preferred swing syllables: "Badudnda "
- Sung on major and minor II-V-I (Video 4:35-5:53) (bit.ly/2psIGF9)

Tihai 5:
- Like *tihai* 4, this one is originally only rhythmical, so I can come up with my own melodies
- Works best if melodically the accent is the highest note. I first tried to sing the pattern on one note and descend with the chords, but then I miss the tension, also in a faster tempo. It is way better with the other melody.
- Again, this is a quarter note *tihai*, so it requires a high tempo to sound nice. That is why I also wanted to turn this one into an eighth note *tihai*. (Video 5:54-7:17) (bit.ly/2oWJnKy)

As you can see, *tihais* number three and five did not work well, as they were quarter note patterns. I decided to rewrite them, so they became eighth note patterns and then recorded again.





Tihai 3 (with eighth notes):
When turned into an eighth note *tihai*, it fits beautifully into several swing tempi. It creates a great syncopation. It is a rather long *tihai* though, so one has to think well of where to start it when soloing. This is more difficult than the use of shorter *tihais*. (Video 7:18-8:26) (bit.ly/2p79H1m)

Tihai 5 (with eighth notes):
Like *tihai* 3, this one also works fantastic when turned into an eighth note pattern and it brings the same kind of syncopation with it, only shorter. Especially with the two notes up front, that officially are not part of the *tihai* it is a lot of fun, because in the first moment the listener might be a little confused, which makes it very exciting. (Video 8:27-10:16) (bit.ly/2oXa6XB)

SECOND STEP:

Next, I wanted to put the *tihais* at the end of a standard. Musicians in Indian music prepare the *tihai* by playing around with the pattern and then making a *tihai* with it. I wanted to try this, too and I think it works very well. It immediately helps you to structure your solo.
I sang the B-part of the standard „It could happen to you“.

Tihai 1:

- When singing this in my low range it did not have a lot of effect, so I tried singing it in my higher range. This gave more energy and tension.
- I still had the feeling that this *tihai* was not as effective as I would have liked, because of this last eighth note. (Video 14:22-14:54) (bit.ly/2o4aQ8a)

Tihai 2:

- This one works very well, with the ascending line that also goes up with the different chords. You feel the tension that builds up towards the climax. Imagine a band playing it and maybe a slightly higher tempo and I am convinced it could work really great. (Video 15:09-15:39) (bit.ly/2osp6uX)

Tihai 3:

- As an eighth note *tihai*, this one is very special, because of its syncopation. Although it is rather long, which means you have to be very aware of where to start it, it creates a great climax. (Video 15:40-16:10) (bit.ly/2os1QNK)

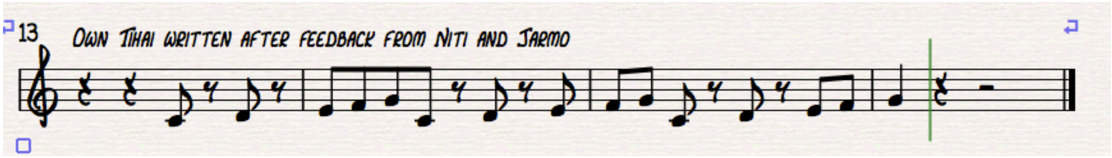
Tihai 5:

- As an eighth note *tihai*, this one also works very well. It has the same kind of syncopation as *tihai* 3, but it is much shorter. On the one hand this is a pity, because you get to enjoy the syncopation for just a short period, one the other hand, this *tihai* is easier to use, because of its shortness. (Video 16:11) (bit.ly/2psCZqJ)

As you might have noticed, I also experimented with where to place the climax. *Tihais* 1 and 2 end on the Ebmaj of the *turnaround*[22], which is two bars before the *head*[23]. The other two *tihais* end on the Ebmaj of the *head*, so on the first bar or the theme. I did this to see if there is any difference in the experience of the climax. When I suggested ending the *tihai* before the *head*, both of the experts I talked to said that a soloist should never end on that point, although I think there are enough examples of soloists doing that. The reason why I wanted to end on the *turnaround* was especially meant for the situation of being the last soloist and going back to the theme. Landing your tihai on the first beat of the *head* and immediately having to get back to the theme would, in my point of view, debilitate both the *tihai* and the beginning of the theme. That is why I think the last soloist should try to end on the *turnaround*. In the recordings I made it is not disturbing to me, or to the experts to finish the solo on that point. However, I have to admit that I do not know how this feels when playing with a whole band.

After sharing these results with experts, I got a lot of positive feedback. They agreed with a lot of my opinions and findings and thought the *tihais* were well implemented and fit beautifully in the jazz idiom. Niti Ranjan Biswas, the expert on Indian rhythm was still missing the feel of a *tihai* though. The *tihais* were correct, the placing was proper and I was preparing them nicely, but the real feeling of building of towards a climax was still missing. I did agree with this, but I could not find another explanation for this than it being a result of not being confident in the matter, yet. There was still a lot of practicing to be done, more *tihais* to be learned and used.

Niti also gave me the tip that in jazz music *tihais* that consist of an uneven number of eighth notes (5,7 etc.) work best, because it creates the syncopation. This is exactly what happens in *tihais* number 3 and 5, that were also the favorites of jazz-improvisation expert Jarmo Hoogendijk. This is why I decided to write my own *tihai*, theoretically consisting of seven consecutive eighth notes. I muted the second and the fourth eighth note though, which creates the syncopation. It is a nice, short tihai and an example of how easily you can create one yourself. (Video 11:20-14:21) (bit.ly/2oXamWz)



5.4 Reflection

After this first intervention cycle, I was able to sing the investigated *tihais* and use them in a solo. I still had to learn more *tihais*, get more familiar with them and through that become able to deliver the intension of a *tihai* more convincingly.

While listening to CDs from different Indian artists and watching some live performances, it had become clear to me, that a perfect *tihai* is not necessarily a common thing in Indian music. The artists miscalculate quite often. (I guess it is more a wrong instinct, rather than a miscalculation, because they are probably not busy doing the math in the moment.) Often you hear them starting a *tihai*, playing the same pattern twice, but then having to alter it the third time to actually make it land on the *sam*. This shows that they are not over-thinking the *tihais*. The players make them happen in the moment and that is my final goal of course. Additionally, it is a sign that it is not a shame if you cannot make the perfect *tihai*. It happens to all players. It is your intention that matters most.

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[22] **Turnaround** (in Jazz): A sequence of chords that forms a cadence at the end of a section of a tune; definitively establises the tonic key and leads back to the opening chord of the next section, or to the top. Tyoically, the turnaround chords are I - VI - ii – V, with half a measure apiece.

[23] **Head** (in jazz): The first (and last) chorus of a tune, in which the song or melody is stated without improvisation or with minimal improvisation.

The use of the *tihai*, and especially the preparation of it, helps structuring a solo. You force yourself to stick to a rhythmical pattern and, thus, avoid slipping into endless eighth note scales. It enriches the solo rhythmically and creates a great climax at the end. When using the jazz scat syllables instead of the *bols* it suits the jazz idiom very well; it doesn't sound odd. The most interesting *tihais* are the uneven ones, because they shift in a 4/4 bar and together with rests, they result in beautiful syncopations.

As you can see in my research question, as well as in other parts of my report, I didn't want to focus only on improvisation. When talking to Jarmo Hoogendijk about my results, he was very interested in the use of longer *tihais*. I then expressed my doubts about that, as this would eventually lead to more and more preparing, and thus: arranging. That was one of the reasons I wanted my second intervention cycle to be about the use of Indian rhythm in composing in modern jazz music. This includes rhythmical compositions I mentioned before like *gats*, *chakradaars* and *tukras*.

Eventually, I hoped this would lead to an original sound and a merge of Indian rhythm and jazz music in a complete and unique way. Why only use it in the arrangement, **or** the solo? In my opinion, taking the arrangement into account next to the improvisation fitted my needs the best.

5.4.1 Analyzing and comparing solos

The scores that go along with this paragraph can be found in Appendix A, chapters 10.3 and 10.4.

To better monitor my improvement, I transcribed the solo from my reference recording (on "What is this thing called love") and a solo that I recorded at the end of my first intervention cycle (on "It could happen to you"). After that, I analyzed both solos and compared them. Unfortunately, I did not record the version of "What is this thing called love" that I sang during my AR2 exam, which would have been a better reference. During this AR2 exam I received the feedback that I should transcribe my solos to be able to demonstrate my improvement. Much later I decided to actually do that for the first intervention cycle, aswell as the third one, but at that point it was too late to record another version of "What is this thing called love" because I had already developed further. That is why I have to compare the first reference recording to a solo on another piece, which is only half a chorus long. Although there are a lot of differences in the length of the solo, the tempo and the chord changes, it is still obvious that there has been change.

Looking at the solo from the reference recording on "What is this thing called love" (Track 01,1:06; bit.ly/2o4pUm5) you can see (Appendix A, chapter 10.4 b) that I use a lot of long notes (marked yellow) and the entire solo consists mostly of quarter and eighth notes, with four times the use of quarter note triplets (in bars 10, 13, 26 and 30). There is a lot of emphasis on the beat, which is marked by dark blue lines. Furthermore, only little syncopation can be found (green circles), which is always combined with long, tied notes. Throughout the solo one can see that the phrases often have a similar length and the same starting and ending point. Bars 1, 9 and 21 start on the first beat (orange boxes) and bars 3, 5, 17, 25 and 29 start on the 2+ (red boxes). Moreover, the phrases always stay within three to four measures, leaving a lot of rest at the end of every fourth bar, which is indicated by the purple boxes. The solo is based on several themes that reoccur (first theme in bars 1, 9 and 25; second idea in bars 5-7 and the third idea in bars 7, 12-13, 14-15 and 17-24). The melody stays very functional, using mostly the fifth or third as target notes, although some nice functions and alterations such as an eleventh (in bars 1, 5, 18, 25, 29) a ninth (in bar 4) or a flat-nine (in bar 6 and 9) can be found. The range of the melody is rather small, except in bars 26 to 27. The syllables could be more smooth, since now, every note is almost equally emphasized and there are no „ghost"-notes or embellishments.

Looking at the solo that I sung on the second half of "It could happen to you" at the end of my first intervention cycle (Track 02, 15:40; bit.ly/2os1QNK), one can see (Appendix A, chapter 10.5b) that there is a lot more use of short eight notes compared to the long and often tied notes in the first solo. There is only one passage with long notes, indicated by the yellow markings and the phrases go over the bar more, instead of staying in patterns of four bars. This happens especially during the *tihai*, which is indicated by the grey box. Because the solo is based on this particular *tihai*, in which the pattern shifts and creates syncopation, the amount of syncopation (green circles) throughout the entire solo has increased. The phrases in bar 1 and 3 are clearly based on the *tihai*. Another theme can be found in bars 2, 4 and 8. Only the phrase in bar 1 starts on the first beat, but there are several phrases (in bars 8, 9 and 11) that start on the 4+ and therefore with an up-beat leading towards the first beat (blue circles). The use of syllables has not changed yet.

5.5 Feedback

Sebastiaan van Bavel:

Sebastiaan is a pianoplayer, who graduated from Codarts. In his bachelor paper, he himself did research about incorporating Indian rhythm in his improvisation. When showing my results to him, he agreed with a lot of my opinions (for example the fact that ascending melodies seem to work best, together with an open syllable (e.g. an „a"-sound) on the accent). He also saw the problem of the quarter note *tihais* and approved of my idea to try rewriting them. He gave me the tip to check out the endings of different song schemes and singing the *tihais* on them to get to know the material in as many different situations as possible.

Jarmo Hoogendijk:

Trumpetplayer Jarmo Hoogendijk is an expert in jazz improvisation and a teacher on this subject at Codarts. He was very enthusiastic about my findings. To him it sounded outstandingly rhythmical and not as if taken from any foreign rhythm. It seemed to fit in perfectly. Especially the *tihais* that brought along syncopation fascinated him. He wished for me to dig deeper into those kinds of *tihais*, also longer structures. We then had a conversation about that, since I had doubts about the use of long *tihais* in improvisation because they take up a lot of bars and preparation. This would lead to less space of improvisation; it would turn into some kind of arrangement, wouldn't it? Yet another reason to focus on arranging in my second intervention cycle.

Oded Tzur:

Oded Tzur is a saxophone player who himself studied at Codarts with Hariprasad Chaurasia. He developed a technique for playing Indian music on saxophone and currently lives in New York, touring around the world with his own band. I had a long conversation with him in which he told me that also he in the beginning was only interested in the rhythm of Indian music, but soon discovered that the impact of *ragas* [24]was incredibly big and that made him fully dive into Indian music for a while. When it comes to rhythm, he shared with me how he draws a rhythmical cycle for himself and his musicians to visualize it, its subdivisions, *taalis* and *khalis*. He then thinks of *tihais* from different starting points in this drawing. He practises *tihais* to learn a rhythmical cycle, deepen it and get familiar with it to its full extend, but he does not feel the need to focus on using these *tihais* in an improvisation, though he admits it does add to the rhythmical complexity of a solo. However, a *tihai* has to come from a natural flow, rather than a forced idea. In his opinion, my understanding of a *tihai* is good and also my way of practicing them and preparing them during a solo.

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[24] **Raga:** Indian musical mode.

He advises to keep on studying like this and go deeper; solo for an hour with only one pattern until I don't know what to do with it anymore. He is very interested in my idea of moving to composition and is curious how I can make it sound not copy-paste, but make it a nice fusion of both styles. He thinks that focusing on composition could lead to a full extend of the rhythmic complexity of Indian music which I cannot do in my improvisation, but he also expresses his doubts about the tastefulness of this. A very thin line!

6. Second intervention cycle

6.1 Explanation

In my second intervention cycle my focus lied on composition. I listed several reasons for this change of course:

The first reason was that, although I found it very interesting and challenging to go deeper into researching how to use Indian rhythm in improvisation, I believed that I was too limited in my melodic improvisation in jazz to be using more complicated rhythms. I wanted to first develop my melodic language further and then come back to implementing Indian rhythm. Looking back, it might have been better to start with using the rhythms in composing and as a second (more difficult) step go to the improvisation.
When it comes to using *tihais* in jazz improvisation, I believe that the only way to use them is the way that I researched in the first intervention cycle. There is no other spot in which a *tihai* could be used with the right intention than the ending of a solo. Yes, there are endless variations of *tihais* and they could be longer and more complicated, but remember: The longer and more complicated the *tihai*, the more and longer the preparation should be. Also, I could have come up with a lot of *tihais* from different sources, but the way of practicing and using them would not have changed. It was just a matter of practicing a lot of different *tihais* on various chord progressions. That is why at that point the next logical step for me was to be looking at more complicated rhythmical concepts and I felt that I was not going be able to make use of the full beauty of Indian rhythm in my improvisation, at that point.

Secondly, I was working on an album in which I was implementing North Indian rhythmical concepts in my compositions, which made this topic better fit what I was actually actively doing as a musician at that time. It made a lot more sense to me to focus on composing and I could benefit from that more at that moment.

To finish, I had been talking about this "whole package" of Indian rhythm in modern jazz ever since the beginning of my research and I thought the best way to get rid of the "copy-paste" image and the belief of me taking only one little thing from a musical culture that is so rich and just putting it in jazz, which had been criticized a couple of times, was to be using Indian rhythm in my compositions as well as in the improvisation. Only then, I believed, would I be able to reach the fusion I was looking for.

6.2. Starting point

What I found interesting was the use of irregular time signatures and how the Indian rhythmic system could help me with that. As a reference recording I used a recording from December 2012. It is recorded at the “Lustrum”-festival of the Conservatory in Utrecht, for which all faculties collaborated to perform Händel’s “Messiah”. I got a “carte blanche” to be arranging one of his pieces as a contribution of the jazz department and decided to arrange the piece “Comfort Ye” for double bass, flügelhorn and vocals. I used a 5/4 time signature in the beginning and the ending of the piece.

bit.ly/2p4Armc (Track 03)

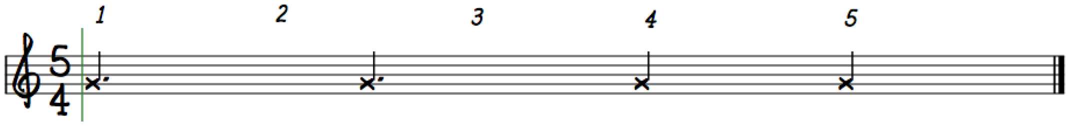
A score of this arrangement can be found in appendix C, chapter 12.5.

What you hear is the typical subdivision of a 5/4 which we use in jazz, deriving from the jazz standard “Take Five” and although in this piece it is a nice bass pattern, which does not repeat for too long, I remember that one of the reasons I switched into a 4/4 bar was that I did not know how to write in 5/4 without using this continuous bass pattern. I believe this happens quite a lot when we play jazz in irregular time signatures: We get stuck in a certain pattern.

6.3 Irregular time signatures in Jazz

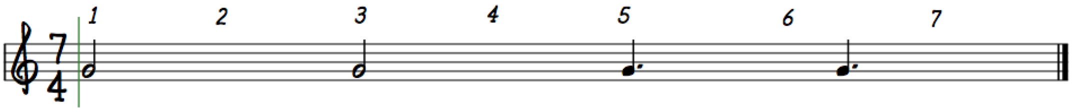
When we look back to the beginning of the use of irregular time signatures in jazz, one can see that there are particular patterns and subdivisions that are typical for the use of for example 5 or 7 in jazz music.

Dave Brubeck's „Take Five" (bit.ly/1oGlsbw) , which I mentioned before is the most famous example and this pattern is still being used when playing a 5/4.



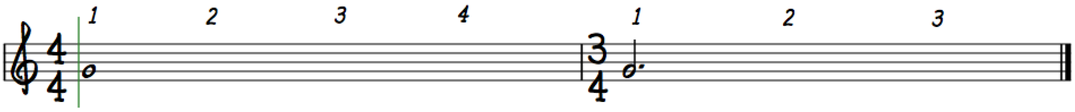
The subdivision is 3+2, but the first three beats are divided again into two dotted quarter notes and the last two quarter notes are both being played, leaving actually a 1,5+1,5+1+1.

Remarkably, this subdivision gives you four accents, which also happens in the most common subdivision of a 7/4 beat in jazz music. A typical example in music could be Don Ellis' „Whiplash". (bit.ly/1MplsZa)



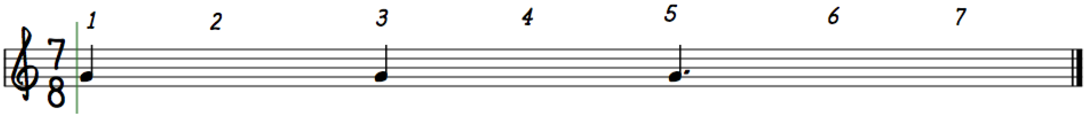
The subdivision is 2+2+3, and again the three beats are divided in two dotted quarter notes, leaving 2+2+1,5+1,5. One could speculate that dividing these irregular timesignatures in a way that there are still four beats made it easier for jazzmusicians that were used to play in a 4/4 time signature.

Another common way of playing a 7/4 in jazz is by seeing it as constantly switching between a 4/4 and 3/4, which happens for example on Cannonball Adderly's „74 Miles Away". (bit.ly/2oo9nLD)



A last typical way of using 7 in Jazz is a 7/8 with the subdivision 2+2+3, but to me this seems to show influences from other music styles such as balkan music.

An example could be Dave Brubeck's „Unsquare Dance". (bit.ly/1z5vyTm)



Of course the use of irregular time signatures has developed tremendously over the last years and jazz music is influenced more and more by other musical cultures, which are more experienced in the use of irregular time signatures. Listening to for example Brad Mehldau's version of „All The Things you are" (Spotify album: The Art Of The Trio, 4-Back At The Vanguard) or Kenny Werner's version of

„Nardis“ (Spotify album: Form & Fantasy) – both in 7 – one can notice that although they hold on to the 2+2+1,5+1,5-groove, they are also able to let go of it, which shows their extraordinary level of playing, since this is the most difficult for the traditional jazz player. How come it is so difficult to be more free? Is it because of the way we instinctively try to create a pattern to turn it into something that is still 4? Also, all the options I mentioned so far had the subdivisions 2+2+3 (in 7) and 3+2 (in 5).The questions is: Why not turn this around?

Musicians like Tigran Hamasyan and Shai Maestro have mastered these skills, but they have a background of armenian/israeli music. Additionaly, it is known that they have also worked on Indian rhythm.

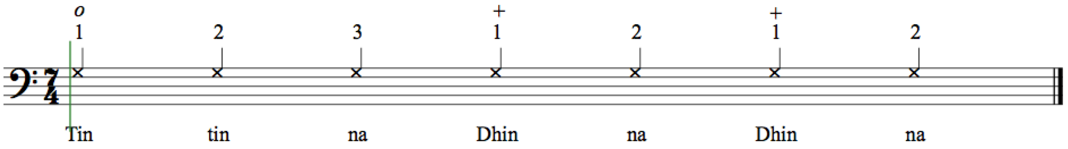
When reading about the history of jazz rhythm, I came across „The Jazz Book“ by Joachim-Ernst Berendt and Günther Huesmann, in which it is stated that Don Ellis used Indian talas for his compositions „332221222“ (bit.ly/2oyiR9o) and „New Nine“ (bit.ly/2oy5K8f) but when I listened to them I could not define it as „using Indian tala“. Maybe a certain tala had inspired him, but I could not here a clear *theka*, with *taalis* and *khalis*. So we see, that in the history of jazz, there has definitely been interest in using Indian rhythm and in modern music it is happening more and more, but I haven’t been able to find a record yet, that uses a tala in a way I would imagine.

6.4 Composition no. 1: „Apoligitis“

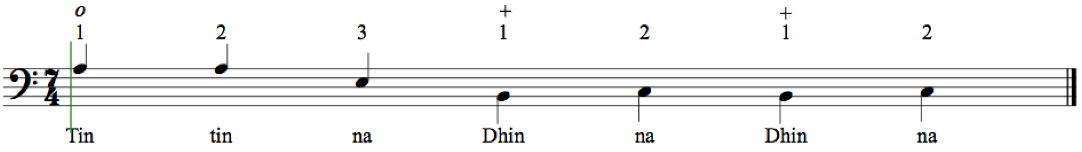
When looking at typical subdivisions in Indian music - considering we want to write in 7 and 5 - the first *talas* that come to mind are *Rupak-taal* (7) and *Jhap-taal* (10). I started with *Rupak-taal*, since I was more comfortable in this *tala* at that moment.

Rupak-taal is subdivided in 3+2+2. In Indian music one distinguishes a *taali* (heavy, low, male accent) from a *khali* (light, high, open, female accent). The *Rupak-taal* starts (very uncommonly) on the *khali* and after that has two *taalis*.

The *bols* used are „Tin-tin-na-Dhin-na-Dhin-na“, leaving this *theka*:

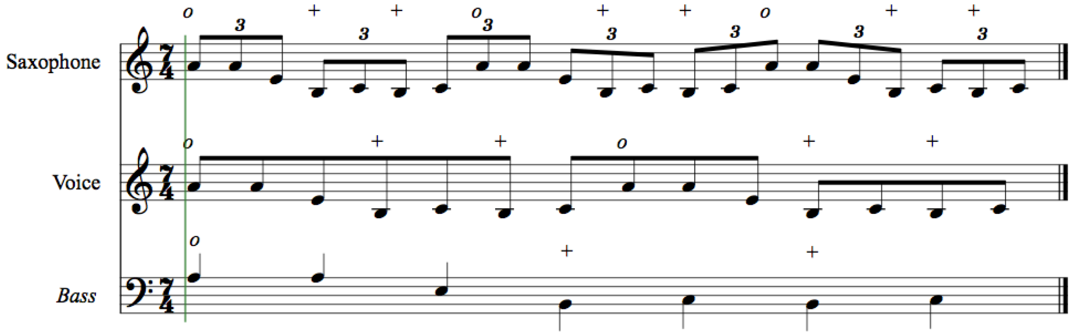


Since I had the idea of using this as a foundation for my composition, I composed a melody on the *theka*, that would fit the *taali-khali*.

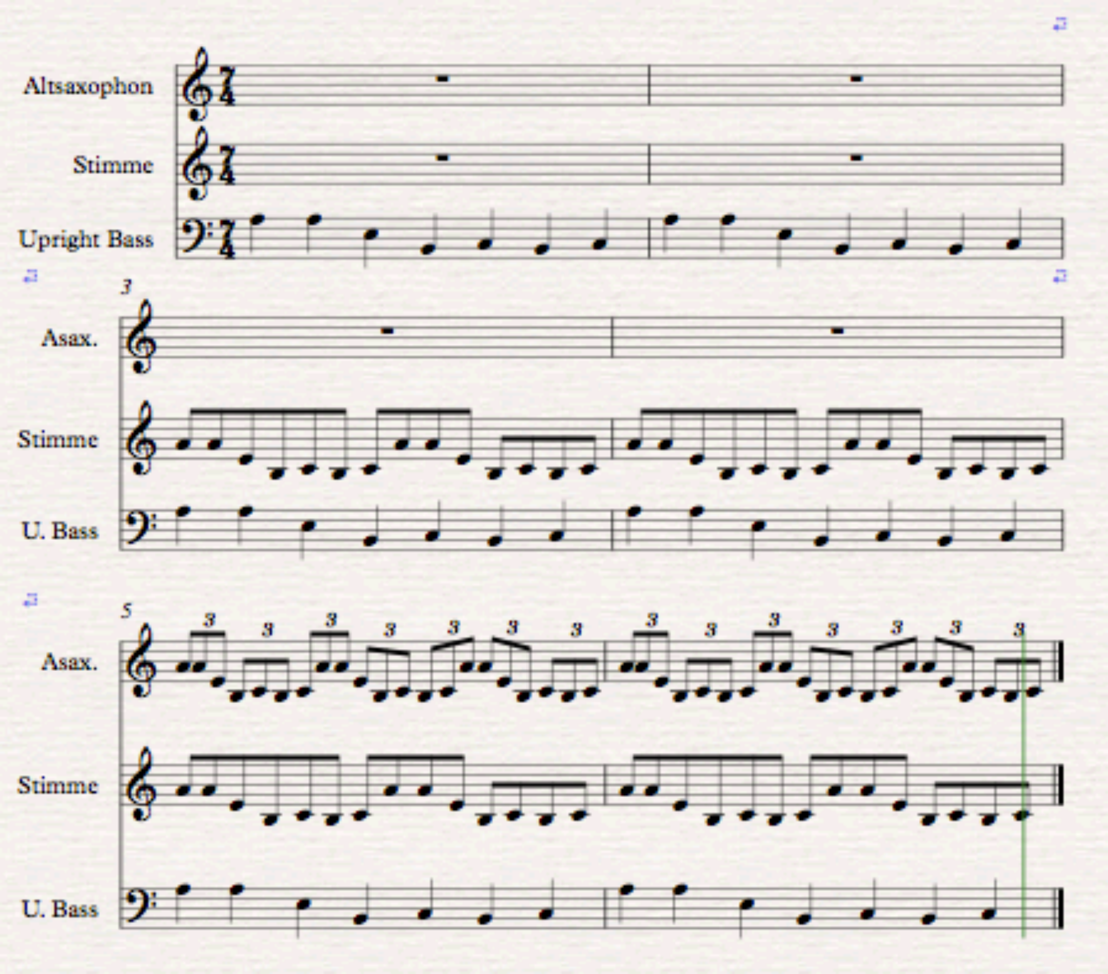


You can see that the melody starts on a high note (*khali*) and the lowest notes are on the *taalis*, which give these an extra heavy accent.

It is common to practise a *taal* in layers, clapping the basic *taal* with your hands and then speaking it double time, 1,5 etc. Why not use this in my composition? Maybe through that it will appear to be more free.


Saxophone
Voice
Bass
o
+
3

Here you can see that the bass is playing the basic *tala*, the vocals are singing the same pattern in double time, and the saxophone in triplets. However, if I want to use this for example as an intro, the listener would get too much information at once. That is why I came up with the idea of building it up. Let the bass start with the basic pattern and add the other layers one by one:


Altsaxophon
Stimme
Upright Bass
Asax.
Stimme
U. Bass
3
5

Now I had the feeling that I was giving away the feeling of the song too early, I wanted the listener to feel the tension of not recognizing the time signature immediately. That is why I was thinking of muting notes. I could for example build up the pattern itself, too. Let the bass start by only playing the first two notes, then three, then four etc., until the whole pattern is build up, then do the same thing with the other instruments. (Appendix B, Score 11.1)

When I did this, it seemed to me that the build-up took too long. So I decided to mute some notes, but not in an obvious build-up. I muted the third, sixth and seventh note first, then added the sixth, then the third and the seventh at the end, doing the same thing with all the instruments. I liked it a lot when the bass began, but especially when this was played in the third layer by the saxophone, it sounded too chaotic. (Appendix B, Score 11.2)

That is why I decided to keep this build up for the bass, to limit the predictability, but let the second and third layer build up in the first manner (1+2;1+2+3;1+2+3+4 etc.) which sounded very good to me. (Appendix B, Score 11.3)

Another nice option would be to start with the second layer, then add the bass and then the third layer. This gives another dimension of being unpredictable, since the basic feel of the song is even more unclear. (Appendix B, Score 11.4)

To use this as an intro in my point of view is a very nice idea, but it would be even better to let the use of different layers go on throughout the composition.

6.4.1 Analysis and Reflection

Aim: Write a piece in 7/4, without using the „standard“ rhythmical pattern that is typical in jazz and through that gain more freedom in the approach of a cycle in 7.

How:

- Use the *theka* of an Indian *taal* as basic (in this case *Rupak-taal*)
- Use the different layers, which you practise when learning a taal

Rupak-taal: 7 beats, 1 *khali*, two *taali*; starts on *khali* (which is unusual); subdivision: 3+2+2

1) I started with the *theka* of *Rupak-taal* in its first layer and composed a melody that would fit the *taali-khali*. I then started to experiment with little excercises, dividing the three layers over three different instruments. Here, I wanted to find out how to nicely introduce the *taal* and its layers, without giving it away immediately or overdosing the listener from the start. In this intro (measures 1-12), the drummer plays the first layer and as you can see in the score can choose for himself which notes to mute. After the suggestion from Niti to make the intro longer and give it a kind of *peshkar*[25]-idea, I think it would be nice to give the drummer more time during a live concert to build up the *theka*. On the recording he immediately plays the full *theka* (unfortunately with the wrong *taali-khali*) and with that gives it away too early.

The vocals (second layer) come in on the third bar, gradually building up the *theka* and when the vocals have reached the point of singing the entire *theka*, the piano enters in the third layer, having the same build-up as the vocals (bar 6). The bass enters on bar 8 in the first layer, to make the statement that this definitely is the basic tempo of the song, but also builds up, muting some notes. I decided not to let the bass build up in the same way the vocals and piano do because the intro would have taken too long then.

---

[25] **Peshkar:** (lit. "introduction") An introductory movement similar to *qaida* but with a different system of permutation.

2) When it comes to the theme (bar 13), the bass and the drums are making the groove, the bass keeping the fundamental groove and the same *theka* in its first layer, whilst the drummer plays in the second layer. You can read in the score that he is supposed to stay in the second layer, but „play around“ with it, meaning that he is free to mute notes or add fills. On the recording he is not going to the second layer and not „playing around“, but this is due to the fact that he is not familiar with the Indian idiom and his preparation time for the recording was very short.

The function of the piano is to add colours, by laying down chords with sustain.

The vocals are now in the third layer and the melody starts with quoting the *theka*-melody, but then changes, due to the lyrics. The fact that the melody plays the third layer gives it a kind of swing-feel.

3) The switch to a 6-feel in bar 18 is because I wanted a bluesy-feel, which fits the lyrics.

4) In the B-part I let go of the Indian-rhythm; the focus lies less on the rhythm, but rather on the lyrical melody in the bass

5) During the solo (bars 32 – 39) the bass and drums are free to choose their own patterns, but they are supposed to „play around“ with the *theka* in its layers. For the bass I wrote down a bassline, to illustrate what this could look like. You can see that I mostly think in the second layer, since there are two *khali's* in each measure, but there's a use of quarter-notes, eighth-notes and triplets. This bassline is quite busy and can be used when the solo is at a phase of more energy, or some lines can be quoted, like the bass player in the recording does. If the player doesn't want to use any of the example bassline it is also fine.

6) The C-part (bars 40 – 46) can be seen as the „tail“ of the solo, which means that the band stays in the same feel, the energy is building up, but the vocals are introduced again, to prepare for going back to the theme.

7) During the outro (bar 64) the idea of the intro is coming back, using the *theka*-melody in different layers. The vocals talk over it in a natural, non-rhythmical way. Niti suggested to make the talking also rhythmical and maybe create a *tihai*, but I was a little worried that this would take away the effect of „natural“-talking. Maybe I could try to first speak in a rhythmical way, with a *tihai* and then move to speaking freely.

The recording of „Apoligitis“ can be found here: bit.ly/2p4H6MS (Track 04)

The score to the composition can be found in appendix B, chapter 11.5.

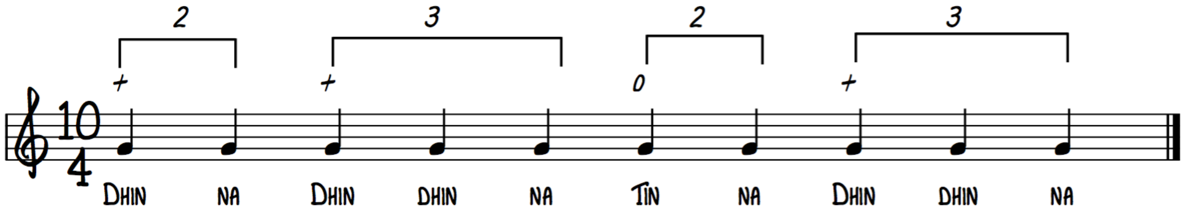
Reflection:

I certainly think that by playing with the different layers, each musician gains more freedom in the 7/4, but it is also obvious that it needs practise and was not fully gained yet at the moment of recording.

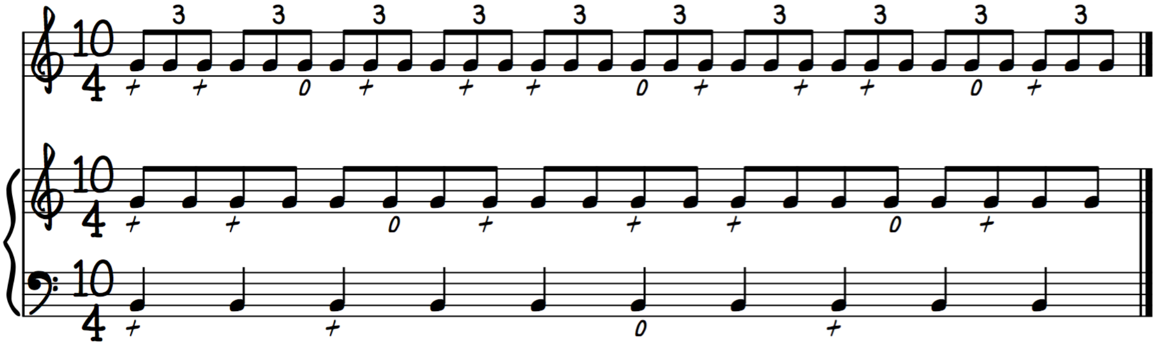
6.5 Composition no. 2 „Dha Dhin“

For my next composition I used *Jhap-taal* (10 beat cycle), which can be seen as an equivalent for another common irregular time signature in jazz: 5/4.
Here, I did not only want to use the layers of the *tala*, but also see how I could use other rhythmical ideas from North Indian music, for example a rhythmical composition such as a *Chakradaar-tihai* and see whether I could write a melody using the *bols* as lyrics.

I again start with the *theka* of the *tala* as a fundament. *Jhap-taal* has a subdivision of 2+3+2+3, three *taalis* (+) and one *khali* (0). The *bols* are “Dhin-na-Dhin-dhin-na-Tin-na-Dhin-dhin-na”.

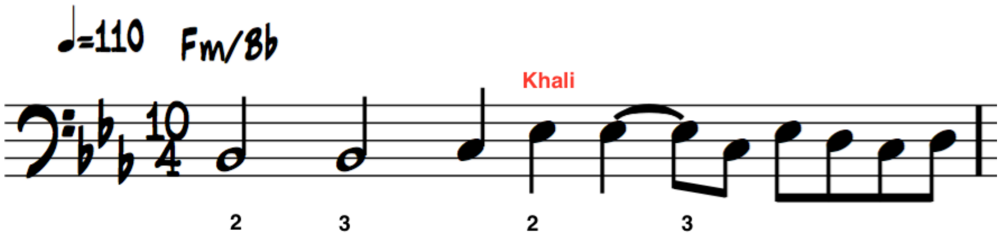

2
3
2
3
+
+
0
+
Dhin
na
Dhin
dhin
na
Tin
na
Dhin
dhin
na

These are three layers of *Jhap-taal*:

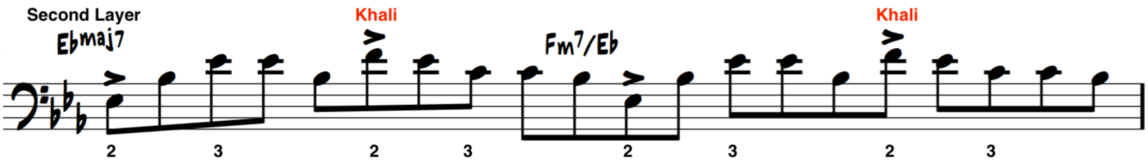


Also in this song the bassline plays an important role and sticks to the *taali-khali*, but it switches between the first layer in the part where the vocals sing the *tihai* (intro/bridge/outro) and the second layer (A parts).

Intro (first layer):


♩=110
Fm/Bb
Khali
2
3
2
3

A-parts (second layer):


Second Layer
Ebmaj7
Khali
Fm7/Eb
Khali
2
3
2
3
2
3
2
3

Another important feature from Indian rhythm is the fixed rhythmical composition that I decided to implement: the *Chakradaar*. This *Chakradaar* is being recited and played by Dan Weiss on his CD "Jhaptaal Drumset Solo" (Track 32). I transcribed this *Chakradaar* and had it checked by Niti Ranjan Biswas, which led to this result. I transcribed the following:

Dhin na Dhin na Na ne Na ne Takite Takite Dhakitedhikite Ghirenage Dhina
//: Dhirekite Dhirekite Dharekite Dharekite De Kran Dha :// 3x (repeat whole composition three times)

When I checked this with Niti, there appeared to be more syllables. It's supposed to be:
Dhin na Dhin na Na ne Na ne Takite Takite Dhakitedhikite Ghirenage Dhina
//: Dhiredhire Kitetake Dhiredhire Kitetake Dhatirakitetake Dhatirakitetake De Kran Dha :// 3x (repeat whole composition three times)

Because I was not able to pronounce these fast lines, I decided to stick with what I had written out, which in fact now was a simplified version of the original composition.
(What it looks like when translating it to our notation system can be found in appendix B, chapter 12.1). Due to its lenghth, the *Chakradaar* did exactly fit into one round of my solo scheme!

The next step was writing a melody on the *Chakradaar*. (Appendix B, chapter 12.2)

When I tried to sing this, I recognized that it was almost impossible. I could not find time to breath and it sounded too restless. This is why I decided to mute some notes. Moreover, I thought muting the *tihai* in different places each time could add some extra spice. This means that the phrase "Dhirekite" appears as follows:
1st time Dhi re - -
2nd time Dhi – ki –
3rd time Dhi - - te
(now reverse)
4th time Dhi - - te
5th time Dhi – ki –
6th time Dhi re - -
(now building up)
7th time Dhi re - -
8th time Dhi re ki –
9th time Dhirekite

In appendix B, chapter 12.3 you can see what the *Chakradaar* looks like with the mutes.

Like this, the *Chakradaar* was sing- and playable and even sounded better, because of the effect the mutes in the *tihai* have.

6.5.1 Analysis and reflection

Aim: Write a piece in 5/4 (10/4), without using the „standard" rhythmical pattern that is typical in jazz and through that gain more freedom in the approach of a cycle in 5 (or 10). Additionally, I wanted to create melodies that underline the combination of Indian music and jazz, by using rhythmical phrases from Indian music without the tonal modality that usually goes with it.

How:

- Use the *theka* of an Indian *taal* as basic (in this case *Jhap-taal*)
- Use the layers of the *taal*
- Use the *bols* of *tala* as lyrics
- Use an existing rhythmical composition

Jhap-taal: 10 beats; 3 *taali*, 1 *khali*; subdivision 2+3+2+3

1) I started with the bassline of the intro (bar 1-5), in which I didn't want the 10 to be too clear right away, but nevertheless wanted to stick to the subdivision and the *taali-khali*. The „C" on the fifth beat is misleading, since it gives the impression of being a 1 (or a downbeat) and by binding the seventh and the eighth beat, there is no clear third *taali* (downbeat). By using a pedal in the bass with different chords on top, I combine a „modal" feel from Indian music with chord changes from jazz.
2) After the bassline, I started thinking of a nice vocal line and had the *theka* of another *taal* called *Dipchandi* [26]stuck in my head („Dha dhin – Dha dha tin – Ta tin – Da dha dhin-„). I wrote a melody with this idea and kept repeating it, until I found out that I could turn it into a *tihai*, by starting on the 2nd beat.
3) I now wrote a piano part to introduce the „*tihai*-theme" and echo it. The intro is a reoccuring theme throughout the song.
4) After the intro (bar 5) the bass goes to the second layer of *Jhap-taal*, creating more movement and more groove. Moreover, the pedal-idea continues, the piano having the function of colouring.
5) For the vocal melody, I decided not to use lyrics, but *tabla bols*. During my lessons with Niti I had build up some vocabulary and learned several phrases . With the second layer groove in my head I started to write down phrases that popped up in my head. I then wrote a melody on it and decided to make it a call and answer between the vocals and the trumpet. The melodic line itself doesn't have a lot of breathing points and keeps on going, but it becomes more organic by dividing it between the two instruments. Also, there is a funny effect in using the same rhythmical pattern in the second A (bar 14) , but then turning it around, having the trumpet start and the vocals follow.
6) When it comes to the solo (bar 22), the idea is the same as in the previous piece: The players are free to choose their own patterns, but should stick to the *taali-khali* and use the different layers. The bassline that is written in the score is an example. Since my musicians were not all secure in the subdivision of 2+3+2+3 when we had to record and they constantly lost each other during the solo, because there wasn't enough time to practise, we decided to - in the solo - let go of the *taal* and its *theka*. That is why on the recording the subdivision during the solo is 3+2+3+2. The solo is supposed to build up, the pianoplayer preparing the following *Chakradaar*.
7) The special (bar 30-38) is a *Chakradaar*, which I transcribed from an album of drummer Dan Weiss, on which he plays only compositions in *Jhap-taal*. I transcribed the composition, had it checked by Niti and then composed with it. It turned out to be an endless phrase, with no time to breathe for me and the trumpet and that is why I decided to mute some notes. Additionally, I muted different notes in each round to create an interesting effect. This adds some rhythmical spice to the whole. On the recording the dynamics could be even more extreme to underline the rhythmical tension and release created by the composition. The *Chakradaar* functions as a transition from the solo, back to the theme (bar 40).

The recording of „Dha Dhin" can be found here: bit.ly/2o4qmRp (Track 05)

The score that goes with it can be found in appendix C, chapter 12.4.

Reflection:

It is difficult for musicians to play in a subdivision that they are not used to, but I believe that by practising this repetitively and playing the tune more, everybody will get increasingly comfortable with it and gain more freedom. In my opinion, the use of Indian *bols* works very well in this piece, but is not something I want for every piece, since I am also very fond of using lyrics. The *Chakradaar* could maybe be better prepared. The solo could be longer during a live performance, giving the piano player more time to build up and prepare the special. The *Chakradaar* itself, from my point of view, could also sound more organic and natural. Maybe this will already be the case when there are more extreme dynamics. All in all, I think this is the most succesfull fusion of the two styles that I have made so far.

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[26] **Dipchandi:** fourteen-beat rhythmical cycle (3+4+3+4)

6.5.2 Comparing „Comfort Ye“ and „Dha Dhin“

Looking at my arrangement of „Comfort Ye“ (Appendix C, chapter 12.5) one can see that in the first theme in 5/4 the bass continuously plays the same pattern (two dotted quarter notes plus two single quarter notes) (bars 1-11). Equally stuck in this pattern is the vocal melody, which quotes this rhytmical pattern in bars 3, 5, 7 and 9. In bars 11 and 13 all instruments follow the same rhythm, which is just the basic subdivision of the 5/4: a dotted half note and a single half note (which shows the 3+2 subdivision). After that, the song switches to 2/2. When coming back to the 5/4 in bar 43, the theme is played exactly like the first time, only the trumpet has been added. Also this instrument is stuck in the same bass pattern and subdivision. However, in bars 48, 52 and 54 the tied eighth notes to the fourth beat loosen it up a little.

When focussing on the freedom in the basic bass pattern and subdivision, one can see that a lot has changed in the composition „Dha Dhin“ (Appendix C, chapter 12.4), compared to the arrangement of „Comfort Ye“. In general, this composition follow a 2+3 subdivision, taken from an Indian *tala*. The bass sticks to that subdivision very much. In the A-parts (bars 5-1, 14-17 and 40-43) the bass goes to playing a double-tempo pattern in eighth notes. In the solo part (starting in bar 22) he has more freedom. He is supposed to stick to the 2+3 subdivision, since together with the drummer he is fundamental for keeping the time, but is free in his choice of how to move around this subdivision. When looking at the right hand of the piano (bars 1-2 and 46-48), the kicks in the band (bars 11-2, 18-19 and 44-45), the *tihai* melody (bars 3-4, 20-21, 46-48) and the general melody of the vocals and trumpet in the A-parts, one can see that all these melodies are not ON the beat or the subdivision. One can say that the subdivision gets clear through the bass and the drums and the melody instruments are very free to play around that. To conclude, this shows that my writing in an irregular time signature has improved tremendously, when it comes to the freedom in approaching a 5/4 measure.

6.6 Feedback

Sebastiaan van Bavel (on „Apoligitis):

„The use of the 3+4 subdivision instead of the 4+3 works very well and because the first three beats are light (up-beats), we really get a new rhythmical concept. The idea of an other heavy-light (*taali-khali*) relation can be further implemented by for example using *Dhamaar-taal*[27], with a 5-2 subdivision. You can of course implement this as far as you want, but the most important thing is – what you did very well – depart from a certain starting point from which you know it works, in this case: Indian rhythm. This works a hundred times better than randomly coming up with time signatures and subdivisions, which will, in my opinion, always sound conceptual.

It is good that the composition does not stay in 7, but switches when it is needed. The whole idea of this Indian rhythm that we are studying is to open up the music rhythmically by injecting new ideas. I could even imagine that at a certain point you don’t even think in a *theka* anymore, but start writing in a time signature and your own *theka* comes up by itself. Also, the form of the composition (AABCBA) is very interesting and striking. I do not know to which extend Indian rhythm might have also influenced your concept of form.

The subdivisions work well, but as said before, could be more. The *theka* does not come forward as much as one would like because of what is being played by the drummer. This shows that applying the idea is not easy. New concepts are always difficult to explain to bandmembers and you cannot expect them to being able to play everything immediately. Inevitably, this takes time.“

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[27] **Dhamar:** fourteen-beat rhythmic cycle with a particular asymmetric contruction (5+2+3+4); also: a name given to a vocal genre inspired by folk music.

Sebastiaan van Bavel (on “Dha Dhin”):

“It is great to see how the rhythm has influenced your melodical lines. This is something that you will probably affirm; the melodic lines become different because there is another length of the rhythmical cycle.
The composition works well and is well proportioned; the difference between the long alternating lines vocals/trumpet and the accents that are played tutti. The *Chakradaar* works very well because it is a small, composed piece of music, which functions as the end of a solo. In jazz we always compose an intro, theme, the backings or the outro, but never a composed line in a solo section. The solo could relate more to the *Chakradaar*, but this is also a process, which needs to grow. To come up with lines that have an equal melodic character as the *Chakradaar* is not easy.
Very strong to end with the same thing you start with: The *tihai*. Great discovery! “

Niti Ranjan Biswas:

“I have listened to both songs. This was a pleasant surprise; during our lessons I had no idea that this would be the result!
Dha dhin: composed in *Jhap-taal*: a lot has happened with South Indian *konnakol* [28]phrases (by other people), but your attempt to use the North Indian *tabla* sounds is commendable! The use of *Jhap-taal* and different phrases is very good. From your lyrics/score a *tabla* player could immediately translate your phrases to his instrument, because you use typical phrases.
Apoligitis is based on *Rupak-taal*. Your depth in the *talas* and different time layers is impressive!
Listening to Dha Dhin, I thought maybe some lyrics would suit, and then I hear Apoligitis- the combination of *Rupak-taal*-sounds and lyrics! It is for sure 'work in progress'! You are experimenting with different options and you are definitely on the right track. You have a good sense of application (applying Indian elements), which will enable you to find your own path.”

Henri Tournier:

“Great, very original music! I am so happy to see the quality of work you did since the last time we met. I listened to your music and looked at your scores and text with pleasure.
The music is great and very personal, nothing I would suggest you to change or improve; you will find your own way.

For the text part what I think you could improve:
When you compose your own music including Indian music do not forget to describe your artistic goal, it must not give the feeling that you could have used them for a kind of fashion, it must be to get a very meaningful result, and that is the case in your two songs.
You can describe this artistic goal more clearly.”

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[28] **Konnakol** is the recitation of *solkattu* in South Indian (*carnatic*) music - the vocal syllables related to the sounds of the Mridangam drum; comparable to the use of bols in North Indian music.

7. Third intervention cycle

7.1 Explanation

After my compositions were finished, I was thinking about how I could build a bridge between the first two intervention cycles and my coach suggested to improvise on my own compositions. Though being doubtful about whether I would be able to succeed in this, I thought it was a very challenging idea and decided to give it a try.

I chose "Dha Dhin" as a song to improvise on, since during that period I was also working on Jhap-taal in my classes with Niti Ranjan Biswas. Additionaly, the chord scheme of the solo is not too complex, so melodically it would be easier to improvise on.

7.2 Starting point

As a starting point I used the recording of me improvising over "Dha Dhin" on the first day of my intervention cycle. (Track 07, bit.ly/2nDC2iN)

This recording clearly shows that there were insecurities in the melodic improvisation and that I lost track of where I was in the rhythmical cycle at some points. Although I had been going through the chords scheme before in 4/4 and in a very slow tempo, which I could master, when adding the 10/4 with the playback track it was very difficult for me because now I had to focus on two things at the same time: Following the chord changes AND the 10/4 with my melody. Nevertheless, there were some points on which it worked and on which you hear that I (probably through working on Jhap taal with my composition and in the lessons with Niti) did have a feeling for the 10/4.

This last intervention cycle is set up as an experiment, in which I recorded myself during each practicing session and reflected on these recordings.

7.3 Process

First Day:

Since I am insecure about my melodic improvisation and often have difficulties with the changes in a chord scheme, I first went through the chord scheme of the song slowly, in a 4/4 bar, not paying any attention to rhythm, but rather singing some lines up and down to get used to the sound of the chord changes (Track 06, bit.ly/2p7t1eP). One can hear that this works quite well. Nevertheless, to strengthen my knowledge about the chord scheme, I decided to practice a bass line in 4/4 (Track 06, 2:18; bit.ly/2nITrqh) and also in 10/4 (Track 06, 3:01; bit.ly/2oDhyGd) with the subdivision 2+3+2+3. After this, I tried to improvise over "Dha Dhin" for the first time, which became my reference recording (Track 07; bit.ly/2nDC2iN)

Reflection:

I was able to go through the chord scheme in 4/4, but while doing that, I also played the piano, which gave me a good overview and the opportunity to every now and then "give" myself a certain note. This was also the case when practising the basslines in 4/4 and 10/4. When a bar had only one chord, a 10/4 bassline was more a 5/4 repeated twice. Maybe I could try to really sing a 10 instead of two fives. Also it would be good to be able to sing the bass line without the help of the piano or any accompaniment at all.

When improvising with the playback track, one notices that I missed the support of the piano. Also, I still lost track of my rhythmical cycle every now and then. Having to combine the 10/4 with singing a good melody over the chord changes pushed me beyond my limits and was still too hard for me. You hear an overall insecurity in melody and rhythm, but I was always able to find my way back, which is positive.

Feedback from Jarmo:

Jarmo was convinced that it would work. He agreed on my attempt to first get more comfortable with the chord scheme before implementing *tihais* or other rhythmical ideas from Indian music. However, he suggested that rather than singing bassnotes, I should focus on singing more melodies. Singing basslines was okay, if I had the feeling that it would help me, but he would rather zoom in on the problematic spots, which together we decided were the progressions “Am7b5 D7 - Gm7“ and “C7 - Dm7 G7”. I should practise different lines on them.

Second Day:

After Jarmo’s feedback on the first day I decided not to record myself singing basslines anymore. I did practise this again at the start of the day, but soon moved to the next step, which was singing lines on the problematic spots that I had detected together with Jarmo. I decided to be aware of using different starting notes and melodies moving up or down. Again I did this in a 4/4 bar first.
On the “Am7b5 D7” I used the starting notes C, Eb, G, A, Bb and sang melodies up or down with the aim to being able to sing a melody on this progression, regardless which note I come from (Track 08; bit.ly/2nDKlLw). The same thing goes for the “Dm7 G7”-progression, on which I used the starting notes C, D, F, A (Track 08, 3:03; bit.ly/2oWYjlv). After having done this in 4/4, I did the same thing in 10/4, first tackling the “Am7b5 D7” again (Track 09; bit.ly/2oy9ir2) and then the “Dm7 G7” (Track 09, 3:19; bit.ly/2psO4bj).

As a last step of this day, I improvised on “Dha Dhin” with the playback. (Track 10; bit.ly/2p7j6Gb)

Reflection:

There was clearly some improvement in my melodic lines after having checked the problematic spots in detail, but it still needed some work and more practice. Due to the fact that it did improve, I suggested to repeat this practice the next day.

Third Day:

On the third day I practiced the same thing as on the second day, but did not record this to save time and unnecessary information. I did record four takes of improvising on “Dha Dhin” though. (Track 11; bit.ly/2oWYXWx)

Reflection:

The learning effect from day two to three was not very big, but there was still some improvement. The “Dm7 G7”-progression was now definitely the most difficult element. I decided to spend the next day only practicing and not recording to see if the grow I would experience would be bigger then. Additionally, I was thinking of starting to implement rhythmical elements soon, since firstly, I was running out of time for the deadline and secondly, I thought it might even help me in the improvisation.

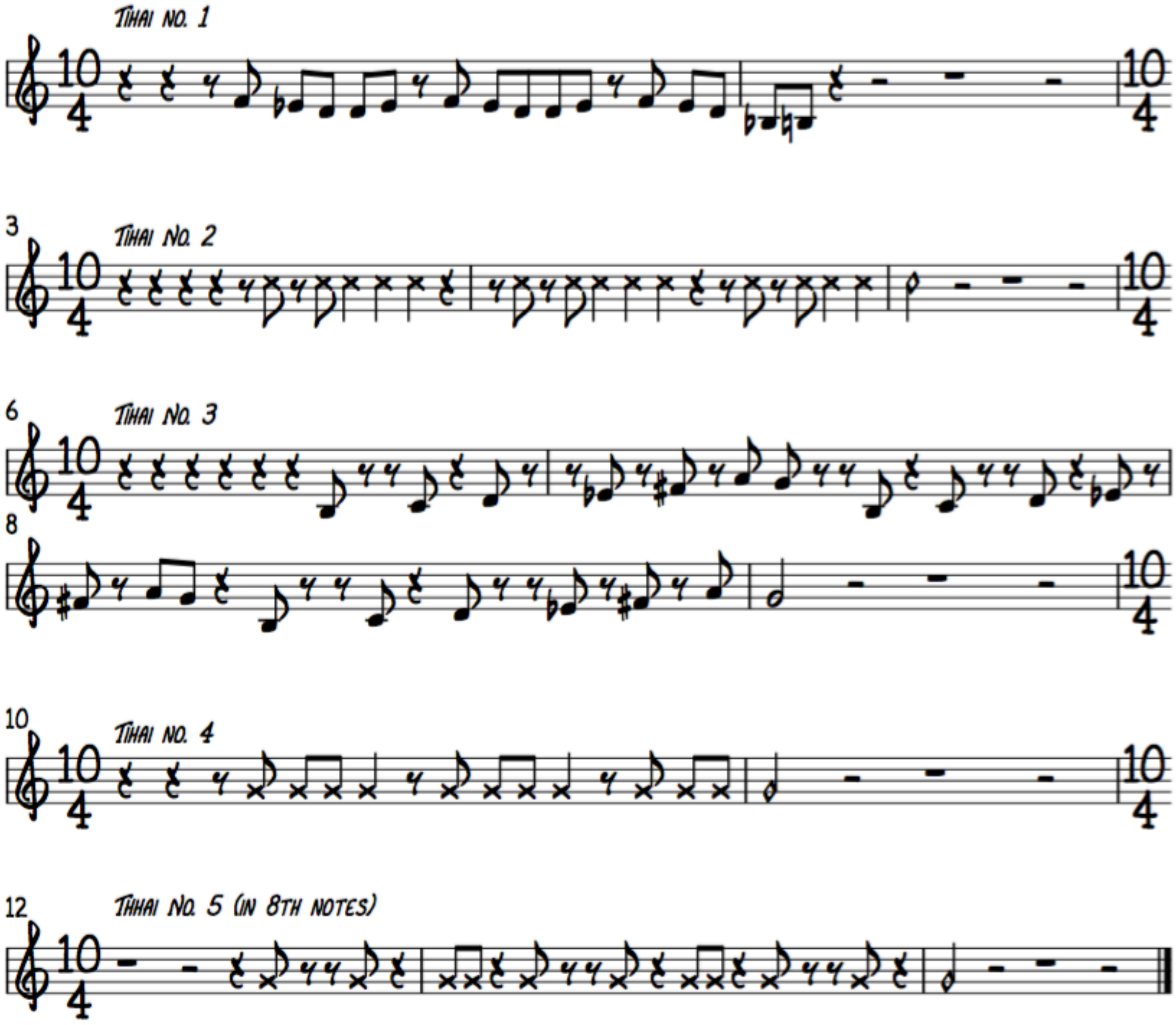
Fourth Day:

Practice without documentation and then improvise again (Track 12; bit.ly/2p7nsx2)

Fifth day:

I now decided to start implementing *tihais* and started with looking at the patterns that I had transcribed in the first intervention cycle and translate them to the 10/4. The idea was to sing a solo based on the *tihai* and then end the solo with it, so the first step was to see where the *tihai* had to start. These were the results:

TIHAIS IN 10/4


Tihai No. 1
10/4
3
Tihai No. 2
6
Tihai No. 3
8
10
Tihai No. 4
12
Tihai No. 5 (in 8th notes)

Tihai no.1: bit.ly/2nDF8n7 (Track 13)

Tihai no. 2: bit.ly/2o4ECd0 (Track 13, 0:28)

Tihai no. 3: bit.ly/2o4IFpB (Track 13, 1:00)

Tihai no. 4: bit.ly/2oye6g8 (Track 13, 1:28)

Tihai no. 5: bit.ly/2oXc7CL (Track 13, 1:58)

Reflection:

The *tihais* fit and the starting points were clear, although I was worried that they might be a bit boring in this tempo. Nevertheless, I wanted to - in the end - base a whole solo on a *tihai* and end it with the same one.

Sixth Day:

I sang *tihais* number one, two and three in my solo.

One: bit.ly/2oyoLY6 (Track 14)

Two: bit.ly/2osjctW (Track 14, 2:29)

Three: bit.ly/2nDGduY (missed the *tihai*) (Track 14, 5:09)

bit.ly/2oX9uRK (too early) (Track 14, 7:45)

bit.ly/2oyacnq (right *tihai*) (Track 14, 10:20)

Seventh Day:

I sang *tihais* number four and five in my solo.

Four: bit.ly/2oX9AIT (Track 14, 12:59)

Five: bit.ly/2ookLHo (Track 14, 15:32)

Reflection of the sixth and seventh day:

To base a solo on a *tihai* still works well (as I have already found out in my first intervention cycle). However, I find that these *tihais* do not fit in this tempo. I would like them to be a bit faster. I did work on quite some *tihais* and compositions in *Jhap-taal* with Niti, also in this tempo, so I would like to try implementing some of those examples. The melodic improvement is still not very big and needs some extra attention aswell.

Eighth day:

Since I was presenting my research at the research festival at Codarts I wanted to be able to show my latest findings live. That is why I decided to take one of the *tihais* as an example and practiced it again. (Track 15; bit.ly/2oomZXe) Additionally, the last soloist should base his composition on the Chakradaar that is the transition from the solo section to the theme. That is why I decided to also practice this. (Track 15, 4:14; bit.ly/2p51a1K)

Reflection:

There clearly is growth and both ways of improvising work. Using the *bols* to improvise adds a level of difficulty, but in doing so I also gain more interesting rhythms. There has been improvement melodically as well as rhythmically, but it still needs further attention. It is a matter of practicing. Unfortunately, I am running out of time and won't be able to show more improvement in this report. A new idea came to mind to also use other rhythmical compositions on the spot where the *Chakradaar* is now. This means I would compose melodies on for example a *Tukra* and a *Qaida*, just as I did with the *Chakradaar*. This way we would have several transitions and the last soloist could choose on which one he wants to base his solo. In doing so, we would gain more freedom in being creative in the solo and could play different versions in each concert.

Ninth day:

The performance at the research festival at Codarts:

Improvisation based on *Tihai* no. 3: bit.ly/2pd5xoK (Track 16, 13:07)

Improvisation based on the *Chakradaar*: bit.ly/2pxDVtJ (Track 16, 16:49)

7.4 Analyzing and comparing solos

As already done in the first intervention cycle, I also transcribed solos from the third intervention cycle, to see more clearly if and how my improvisation has developed.

Looking at a solo that I recorded at the beginning of my study sessions (Track 07; bit.ly/2nDC2iN) (Appendix D, chapter 13.1), it is very clear that there is only use of quarter and eighth notes (except the use of sixteenth once in bar 6, circled in light blue) and barely any syncopation or anticipations- shown in green circles - can be found. There are a lot of long notes (yellow) and a lot of open space with rests, indicated by the purple boxes. There is a lot of emphasis on the beat (shown with the dark blue lines). One could say that this shows the awareness of where the beat is, but it should be less and only be shown occasionally. However, in this stage I was still getting to know the 10/4, which explains why I hold on to being on the beat so much. Nevertheless, there are quite some variations in the length of the phrases and their starting points. Only in the second half of the solo a lot of phrases start on the third beat (orange boxes). There is a use of the same or similar phrases throughout the solo (bar 2, the end of bar 3, leading to 4; 6, 9, 11 and 12 (in bar 12 there is even a repetition of the same pattern, once in quarter notes and then in eighth notes), 14-15, the end of 16, leading to 17; 18 and 21). Basically, the entire solo is build on just one idea, with longer or shorter eighth note-phrases leading towards it. This can be called the strenght of a solo, but in this case I can imagine that it would have been better to have some more variation. The melody is still very functional, mostly leading to target notes on the fifth, third or tonic. Occasionally, there is use of an eleventh or ninth, though this is probably because I am staying in the Eb-major scale. Also, the rather unwanted notes in bars 14 and 22 (an eleventh on F7 and a sixth F7), which are not very flattering, are probably due to staying in the Eb-major scale. In bar 23 there is a wrong note (the A should have been an A-flat). The flat-thirteen in bar 21 is a very good alteration though. Compared to the solos from the first intervention cycle, my syllables have become much better and there is use of „ghost“-notes with „n“ and smoother words like „dulja“ to tie notes. This is probably the result of my improvisation lessons with Jarmo Hoogendijk and to singing along with a lot of solos from trumpet – and saxophoneplayers.

At the end of the third intervention cycle I performed at Codarts' research festival. The first solo I sang was based on a *tihai* (Track 16, 13:07; bit.ly/2pd5xoK) (Appendix D, chapter 13.2). You can see a lot of eighth notes and more syncopation (green circles). Also the use of sixteenth notes has increased (light blue), whereas the use of long notes (yellow) has decreased. As a result, there is less open space with rests. Additionally, less emphasis on the beat can be detected (dark blue), but it is clear that the awareness of the beat is still there. The big amount of syncopation and patterns around the downbeat make it appear less heavy and stiff. The variation in length and starting point of the phrases is good, though there is a tendency to start on the 2+ (orange boxes) or 1+ (red boxes). However, the phrases go over the bar nicely and are clearly based on the *tihai*, which occurs in bars 14-17 in the grey box. In bars 5-8 there is already an attempt to sing the *tihai*, but because of a mistake in rests in bar 7, this does not land on the first beat. That is why I decided to improvise a second chorus. Equal rhythmical patterns can be found in bars 1-2 and 7-8. Also bars 3 and 4, the end of bar 2 and bar 9 show the same idea. The pattern of two eighth notes following eachother, the first one being higher, consistingly appears throughout the solo, in eighth notes aswell as in sixteenth notes. This can be seen in the purple boxes in bar 3, 13-14 and bar 16. They all build on this pattern and shift it. The sixteenth patterns in bars 2 and 9 (thinner purple boxes) are related to this. Although the rhythm has clearly improved, the melody is still targeting fifths, thirds and tonics mostly. The A in bar 7 should have been an A-flat.

Besides the solo based on the *tihai*, I sang a solo based on the *Chakradaar* composition, using the *bols* of Indian music (Track 16, 16:49; bit.ly/2pxDVtJ) (Appendix D, chapter 13.3). Also in this version there are less long notes (yellow) and less open space compared to the first solo. If you compare solos two and three, there are definitely more long rests in this last version (purple boxes), though they can be interpreted as natural breathing points of a solo. A big variety of note-lengths is being used in this solo: quarter notes, eighth notes, sixteenth notes (light blue boxes), eighth note triplets (orange boxes), quarter note triplets (red box) and dotted eighth notes. The last one (bar 2) can be seen as one of the rhythmical "specialties" of the solo (orange filled boxes). The other "specialty" can be found in bar 9, where a five-accentuation (2+3) is created ("TakiTakite"), first in eighth notes and then in triplets. There is less syncopation (green circles), but this is compensated by other rhythmical features and shifting accents (green dots). The emphasis on the beat has increased compared to the second solo (dark blue), probably due to the new use of *bols* as syllables. During the solo same patterns often follow eachother in a different layer or with other rests. The length and starting points of phrases vary a lot and the phrases go over the bar nicely. There is still a small range of the melody and in this solo there are more repetitive notes than in the solos before. However, an increase in the use of functions, like the seventh and the ninth can be detected. Insecurity could be the cause though, rather than being aware of singing these functions. As in the other two solos on "Dha Dhin", also here there is a wrong note (in bar 11 the E should have been an E-flat or an F-sharp).

Conclusion:

My improvisation has definitely improved. I have the feeling that my insecurity about the melodic improvisation has not completely been well founded, since these solos show that I sing very functional and most of the times am aware of that. The melodic improvisation has improved in the sense of movement around and towards target notes, which is still very diatonic though. I wish for more alterations, but that is a matter of practice and being secure in the diatonic improvisation first. What is also a matter of practice is, that it is obvious that on certain difficult points I always use the same licks and/or target notes (e.g. on the Am7b5 always the Eb and D). This shows that I am insecure about these spots and hold on to what I know. I should practice more alternatives and repeat them more often. On the whole, this experiment has shown that also the melody can improve through studying rhythm and that a good use of rhythm can make a good solo, even without a lot of alterations or wild notes and jumps.

7.5 Feedback

Sebastiaan van Bavel:

“The only conclusion I can draw from the improvisationprocess is that it absolutely opens doors to new rhythmical as well as melodic ideas. To apply it in an organic way is, unfortunately, not possible yet. The process that you started a while ago and are still working on – trying out new concepts to internalize the matter – are the first necessary “artificial” steps we need to take to really internalize something and make it our own and that is going very well! Good job! I once read a quote from Ravi Shankar in which he said that whenever he learned something very quickly he also forgot it soon. Learning something very slowly makes it stick in your memory forever and this relates to your practice!”

8. Conclusion

Although there is still a lot of work to do when it come to implementing North Indian rhythm in my improvisation, I think that I made a good start. It is something very new, a foreign language and this needs a lot of time and practice to develop. I am aware of that, but am convinced that it can help me and other singers to be more comfortable in irregular time signatures and more creative rhythmically. It opens up the musical communication with your band members and brings you closer to them. The use of *bols*, *tihais* and fixed compositions in improvisation does need more research and this will continue even after my graduation.

When looking at the feedback I got concerning my compositions I could not be happier. All the experts were very positive, Shai Maestro and Oene van Geel even answered only by congratulating me with the compositions. My work on implementing Indian rhythm in my compositions will also continue, since I have the feeling that it is adding to my sound. I have the feeling that I have found a good way of fusing two different styles into one, without dishonouring one of them. I hope that musicians from all musical styles open themselves up for fusions, because other traditions can add so much to your own language and we could all profit from eachother's knowledge and traditions.

9. Glossary

Asam: Before the first beat (*sam).*

Bansuri: A bamboo flute.

Bol: (speech, language); the mnemonic syllabi of *tabla*.

Chakradaar tihai: (from *cakra:* circle); A *tihai* in which each phrase is a *tihai* in itself.

Dhamar: fourteen-beat rhythmic cycle with a particular asymmetric contruction (5+2+3+4); also: a name given to a vocal genre inspired by folk music.

Dipchandi: fourteen-beat rhythmical cycle (3+4+3+4)

Fermaishi-Chakradaar: A *Chakradaar tihai*, in which the last stroke of each sub-*tihai* coincides with the *sum* of the *tala*.

Head (in jazz): The first (and last) chorus of a tune, in which the song or melody is stated without improvisation or with minimal improvisation.

Gat: (*gait:* walk); specifically instrumental composition, in given *raga* and *tala,* where metre plays an important role.

Jhap-taal: ten-beat rhythmical cycle (2+3+2+3)

Kamali Chakradaar: A *Chakradaar tihai* in which the first stroke of the first sub-*tihai* and the second stroke of the second sub-*tihai* coincide with the *sum* of the *tala*, and the entire *tihai* also ends on the *sum* of the *tala*.

Khali: (lit. “empty”) open beat (palm upwards) in the cycle, with a very specific role: it is a marker often placed in the middle of the cycle, generally announcing a series of high-pitched or curt sounds.

Peshkar: (lit. "introduction") An introductory movement similar to *qaida* but with a different system of permutation.

Qaida: (Persian and Urdu word meaning law, principle); one of the typical elements of the *tabla* solo, kind of very short compositions, developing variations built on the *theka*, the basic rhythmic sequence.

Raga: Indian musical mode.

Rupak-taal: Seven-beat rhythmic cycle (3+2+2).

Sam: (from *sama*: balance); first beat of a cycle, meeting and concluding point.

Santoor: An Indian hammered dulcimer.

Tabla: Emblematic percussion of Hindustani music.

Tala (or taal): (*tala:* hand clapping); rhythmic cycle. Particular system of rhythmic cycles, whose conception is very close to the metre in poetry. Each cycle is composed of a certain number of beats, regrouped into groups landmarked by specific handclaps.

Taali: Hand clapping marking the cycle structure or *tala.*

Tanpura: A long necked, stringed instrument for providing the drone.

Theka: Rhythmic basic sequence, or pattern of percussion strokes, characteristic of a given rhythmic cycle (*tala*) and of its metres; this is a particular sequence of drumbeats, which is memorized by all musicians in a form of sequence of onomatropoeias.

Tihai: (*tin:* three); concluding rhythmic pattern repeated three times, finishing most often on the first beat of the cycle (*sam)* or before the starting point of the composition; used in the vocal, instrumental, solo drum and solo dance repertoires.

Tin-taal: Major rhythmic cycle of Hindustani music; a sixteen-beat cycle (4+4+4+4), played in multiple forms, and at tempos from extremely slow to extremely fast.

Tukra: A small composition containing a small body and a *tihai*.

Turnaround (in Jazz): A sequence of chords that forms a cadence at the end of a section of a tune; definitively establises the tonic key and leads back to the opening chord of the next section, or to the top. Tyoically, the turnaround chords are I - VI - ii – V, with half a measure apiece.

10. Appendix A – First intervention cycle

10.1 Index of Youtube-video about the first intervention cycle

bit.ly/2o4oxDZ (Track 02)

- *Tihai* no. 1 slowly on a min II-V-I (0:05) (bit.ly/2oy7RsJ)
- *Tihai* no. 1 on a min II-V-I, other syllables (0:17) (bit.ly/2oyr2lW)
- *Tihai* no. 1 on a min II-V-I in swing feel (0:29) (bit.ly/2osBJGt)
- *Tihai* no. 1 on a min II-V-I, swing, other syllables (0:40) (bit.ly/2pt4ctp)
- *Tihai* no. 1 on a maj II-V-I (1:02) (bit.ly/2oXk7UI)
- *Tihai* no. 1 on a man II-V-I, other syllables (1:18) (bit.ly/2o4EVVi)

- *Tihai* no. 2 on one note (progression: Dm7b5 - G7 - Cm7- F7 - Bbmaj7) (1:33) (bit.ly/2os0G4I)
- *Tihai* no. 2 on one note, faster tempo (1:42) (bit.ly/2p7EMCe)
- *Tihai* no. 2, melodically altered (1:54) (bit.ly/2p5d4c0)
- *Tihai* no. 2, melodically, other syllables (2:05) (bit.ly/2psVoUc)
- *Tihai* no 2, melodically, faster tempo (2:26) (bit.ly/2oyprNf)

- *Tihai* no. 3, only vocal, slowly (2:35) (bit.ly/2nDEiXo)
- *Tihai* no. 3, only vocal, faster (2:55) (http://bit.ly/2p5jSqa)
- *Tihai* no. 3, slowly with irealb-playback (progression F#m7 - B7 - Em7 - A7 - Dm7 - G7 - Cmaj7) (3:13) (bit.ly/2p5m7tn)
- *Tihai* no. 3, with irealb, fast (3:57) (bit.ly/2p7qYHS)

- *Tihai* no. 4, maj II-V-I, various syllables (4:35) (bit.ly/2psIGF9)
- *Tihai* no. 4, swing (4:51) (bit.ly/2psXSCe)
- *Tihai* no. 4, swing, ascending melody, various syllables (5:08) (bit.ly/2oyff78)
- *Tihai* no. 4, min II-V-I, two melodically options (5:32) (bit.ly/2nDKNJv)

- *Tihai* no. 5, with irealb (progression: C#7 - F#m7 - B7 - Em7 - A7 - Dm7 - G7 - Cmaj7) (5:54) (bit.ly/2oWJnKy)
- *Tihai* no. 5, faster tempo (6:17) (bit.ly/2nDYCYG)
- *Tihai* no. 5, slowly, ascending melody (6:34) (bit.ly/2nDOz61)
- *Tihai* no. 5 with ascending melody, faster (6:58) (bit.ly/2nDZlZl)

- *Tihai* no. 3 as 8th note-pattern (progression: F#m7 - B7 - Em7 - A7 - Dm7 - G7 - Cmaj7) (7:18) (bit.ly/2p79H1m)
- *Tihai* no. 3 as 8th note, swing (7:43) (bit.ly/2ptc8ux)
- *Tihai* no. 3 as 8th note, irealb-app, faster tempo (8:06) (bit.ly/2nDZOev)

- *Tihai* no. 5 as 8th note-pattern on one note (progression: Em7 - A7 - Dm7 - G7 - Cmaj7) (8:27) (bit.ly/2oXa6XB)
- *Tihai* no. 5 as 8th note, faster tempo (8:46) (bit.ly/2ootae6)
- *Tihai* no. 5 as 8th note, with extra 2 notes up front (8:59) (bit.ly/2oogCn1)
- *Tihai* no. 5 as 8th note, ascending melody (9:12) (bit.ly/2p7yd2v)
- *Tihai* no. 5 as 8th note, ascending melody, faster (9:27) (bit.ly/2oyj2l6)
- *Tihai* no. 5 as 8th note with irealb (9:42) (bit.ly/2nE0j8n)
- *Tihai* no. 5 as 8th note with irealb, with extra 2 notes up front (10:00) (bit.ly/2osyFtQ)

- *Tihai* no. 3 as 8th note, slowly on ending of „It could happen to you“, altered melody (10:17) (bit.ly/2o61BoZ)
- *Tihai* no. 3 as 8th note on ending of „It could happen to you“, faster (10:52) (bit.ly/2oX9BMT)

- Own *Tihai*, slowly, one note (progression: A7 - Dm7 - G7 - Cmaj7) (11:20) (bit.ly/2oXamWz)
- Own *Tihai*, melodically (11:38) (bit.ly/2osGfEK)
- Own *Tihai*, melodically, other syllables (11:54) (bit.ly/2osvT7P)
- Own *Tihai*, swing, irealb-app (12:10) (bit.ly/2p5pocb)

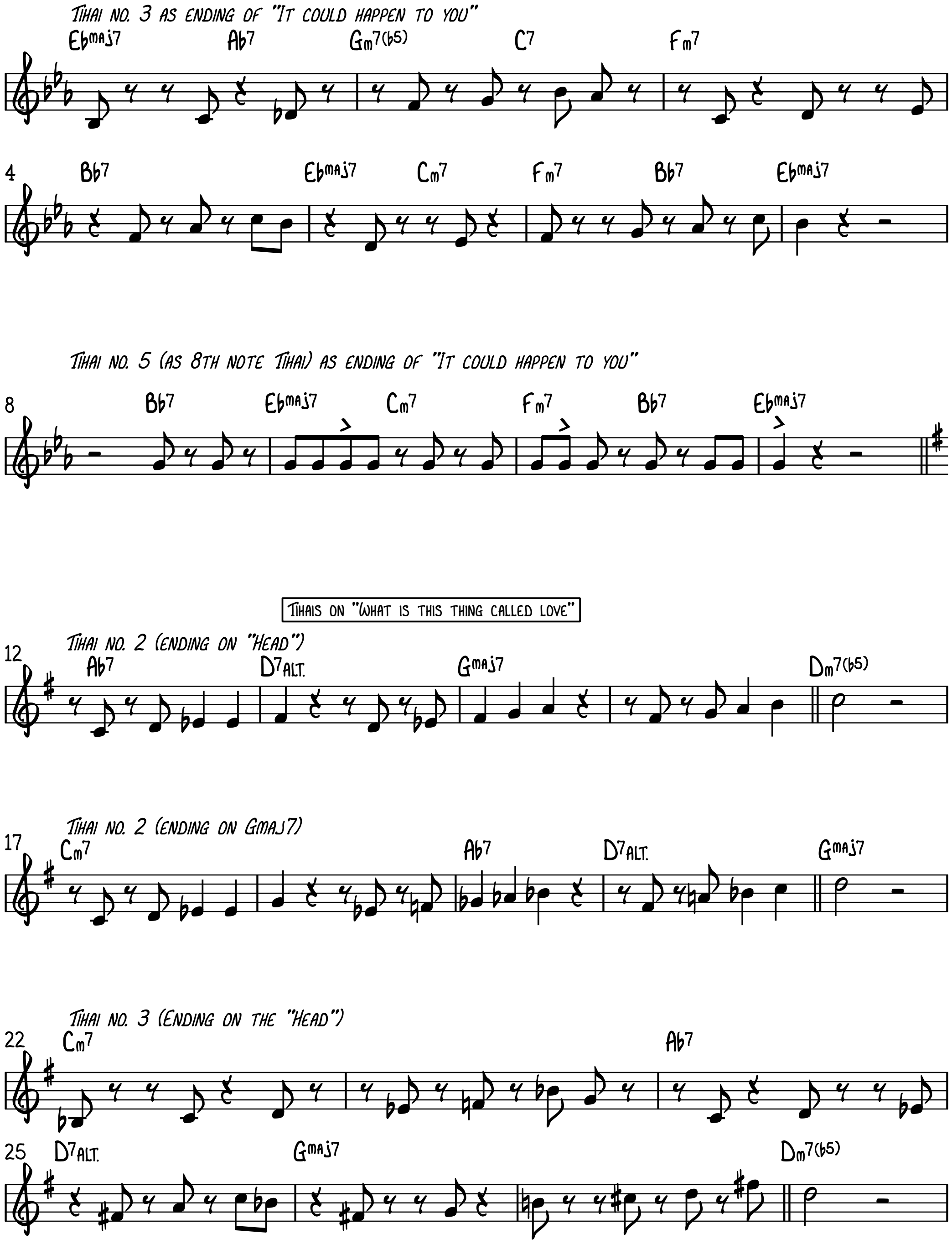
- Own *Tihai*, faster (12:26) (bit.ly/2o5MJql)
- Own *Tihai* on ending of „It could happen to you) (12:52) (bit.ly/2osuDS4)
- Own *Tihai* incorporated in improvisation on last B part of „It could happen to you“ (ending on the *hea*“), 2 versions (13:11) (bit.ly/2p4ZnKk)

- *Tihai* no. 1 incorporated in improvisation on last B-part of „It could happen to you“ (ending two measures before the *head* on the 1 of the *turnaround*) (14:22) (bit.ly/2o4aQ8a)
- *Tihai* no. 2 on ending of „It could happen to you“ (14:55) (bit.ly/2oXqur3)
- *Tihai* no. 2 incorporated in improvisation on last B-part of „It could happen to you“ (ending two measures before the *head* on the 1 of the *turnaround*) (15:09) (bit.ly/2osp6uX)

- *Tihai* no. 3 as 8th note incorporated in improvisation on last B-part of „It could happen to you“ (ending on the *head*) (15:40) (bit.ly/2os1QNK)
- *Tihai* no. 5 as 8th note incorporated in improvisation on last B-part of „It could happen to you“ (ending on the *head*) (16:11) (bit.ly/2psCZqJ)

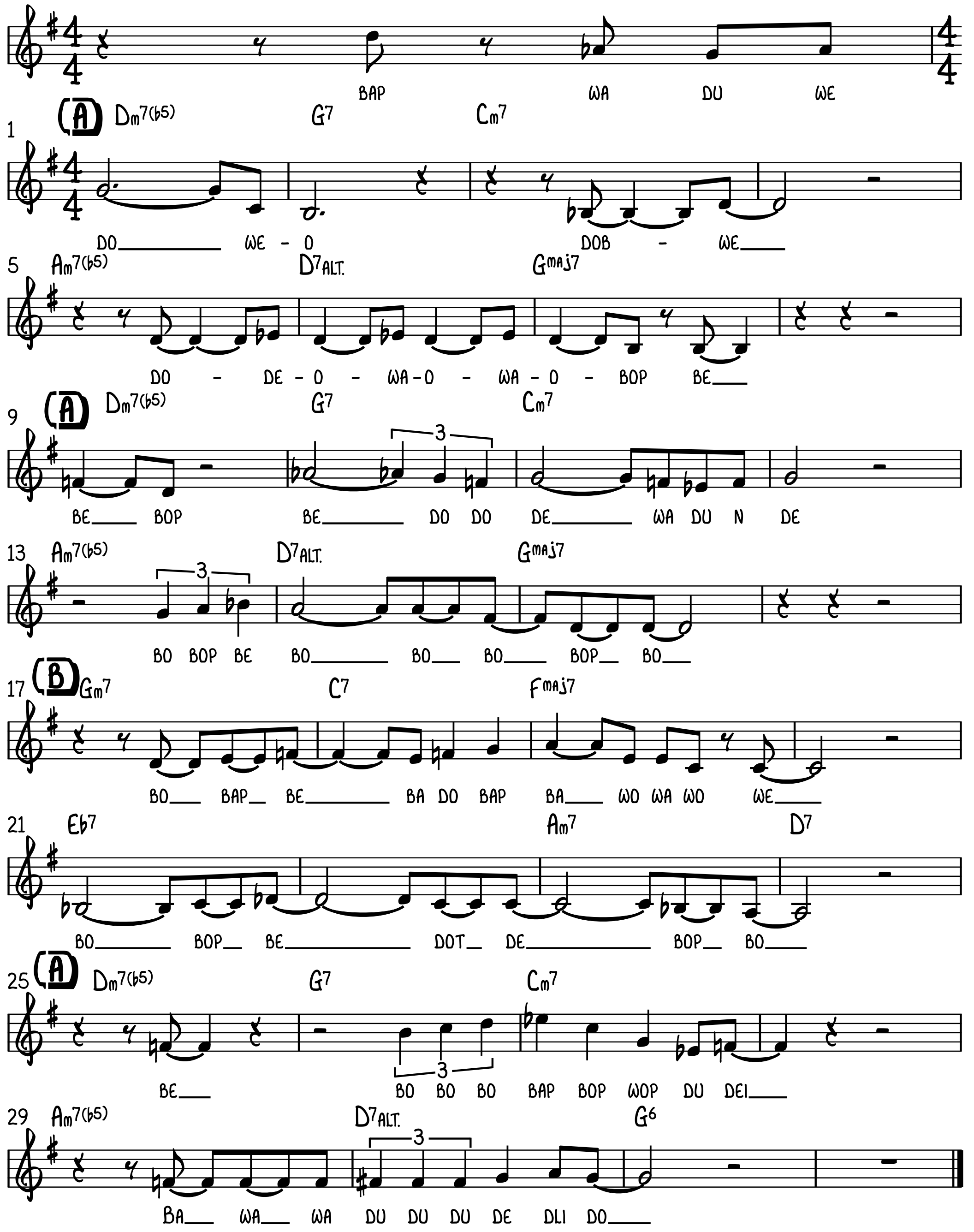
10.2 Melodic tihais

MELODIC TIHAIS


Tihai no. 3 as ending of "It could happen to you"
Ebmaj7 Ab7 Gm7(b5) C7 Fm7
4 Bb7 Ebmaj7 Cm7 Fm7 Bb7 Ebmaj7
Tihai no. 5 (as 8th note Tihai) as ending of "It could happen to you"
8 Bb7 Ebmaj7 Cm7 Fm7 Bb7 Ebmaj7
Tihais on "What is this thing called love"
Tihai no. 2 (ending on "Head")
12 Ab7 D7alt. Gmaj7 Dm7(b5)
Tihai no. 2 (ending on Gmaj7)
17 Cm7 Ab7 D7alt. Gmaj7
Tihai no. 3 (Ending on the "Head")
22 Cm7 Ab7
25 D7alt. Gmaj7 Dm7(b5)

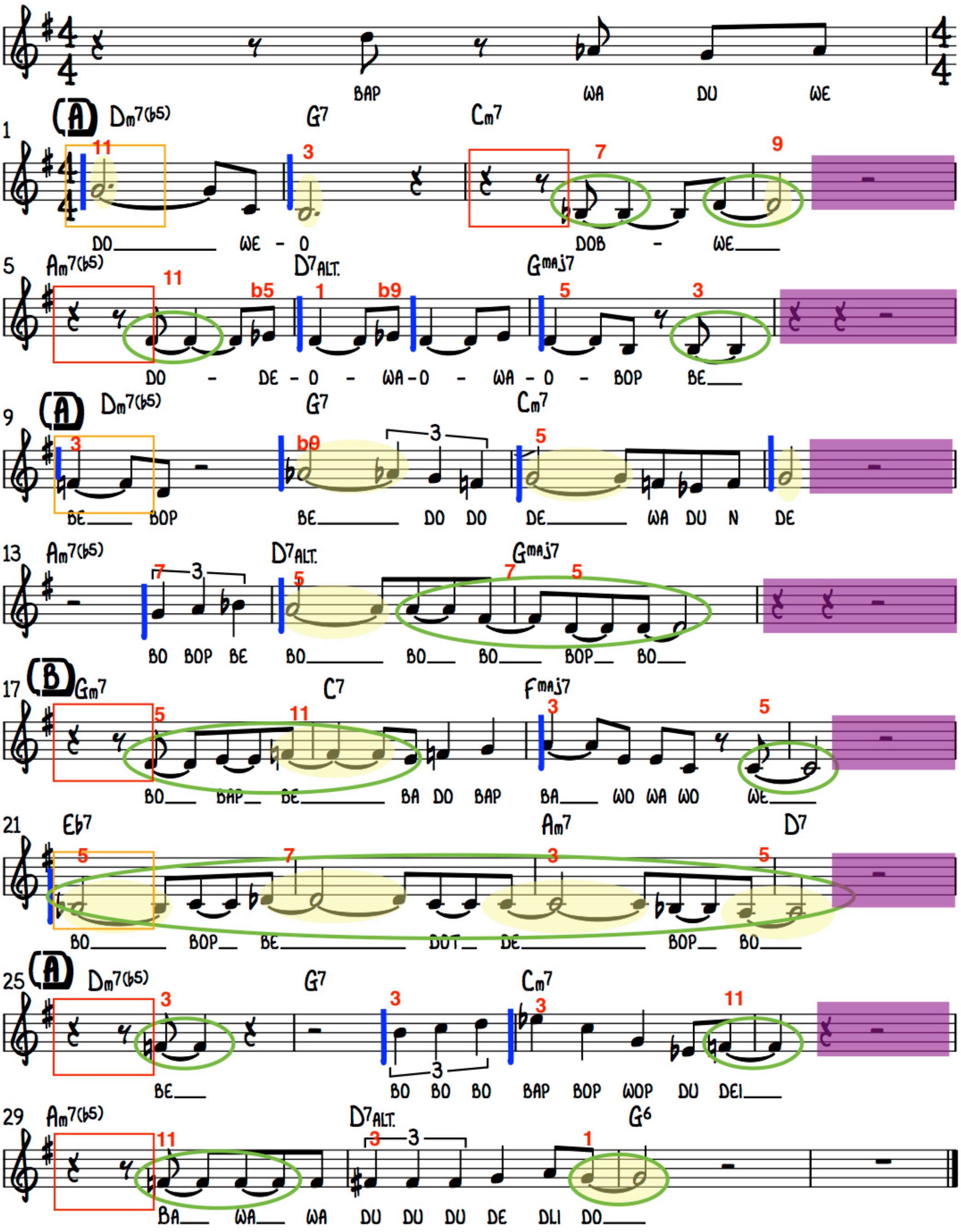
10.3 Transcription of solo before
a) Without notes

SOLO ON "WHAT IS THIS THING CALLED LOVE"


BAP WA DU WE
(A) Dm7(b5) G7 Cm7
1
DO WE - O DOB - WE
5 Am7(b5) D7ALT. Gmaj7
DO - DE - O - WA - O - WA - O - BOP BE
9 (A) Dm7(b5) G7 Cm7
3
BE BOP BE DO DO DE WA DU N DE
13 Am7(b5) D7ALT. Gmaj7
3
BO BOP BE BO BO BO BOP BO
17 (B) Gm7 C7 Fmaj7
BO BAP BE BA DO BAP BA WO WA WO WE
21 Eb7 Am7 D7
BO BOP BE DOT DE BOP BO
25 (A) Dm7(b5) G7 Cm7
3
BE BO BO BO BAP BOP WOP DU DEI
29 Am7(b5) D7ALT. G6
3
BA WA WA DU DU DU DE DLI DO

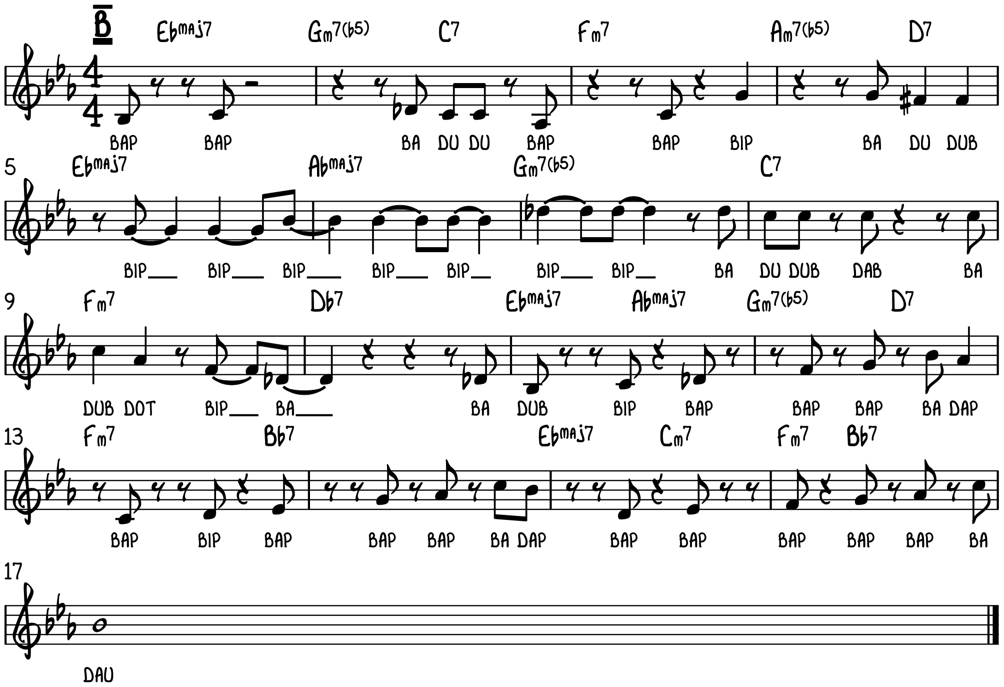
b) With notes

SOLO ON "WHAT IS THIS THING CALLED LOVE"


BAP WA DU WE
(A) Dm7(b5) G7 Cm7
11 3 7 9
DO WE - O DOB - WE
Am7(b5) D7ALT. Gmaj7
11 b5 1 b9 5 3
DO - DE - O - WA - O - WA - O - BOP BE
(A) Dm7(b5) G7 Cm7
3 b9 5
BE BOP BE DO DO DE WA DU N DE
Am7(b5) D7ALT. Gmaj7
7 5 7 5
BO BOP BE BO BO BO BOP BO
(B) Gm7 C7 Fmaj7
5 11 3 5
BO BAP BE BA DO BAP BA WO WA WO WE
Eb7 Am7 D7
5 7 3 5
BO BOP BE DOT DE BOP BO
(A) Dm7(b5) G7 Cm7
3 3 3 11
BE BO BO BO BAP BOP WOP DU DEI
Am7(b5) D7ALT. G6
11 3 1
BA WA WA DU DU DU DE DLI DO

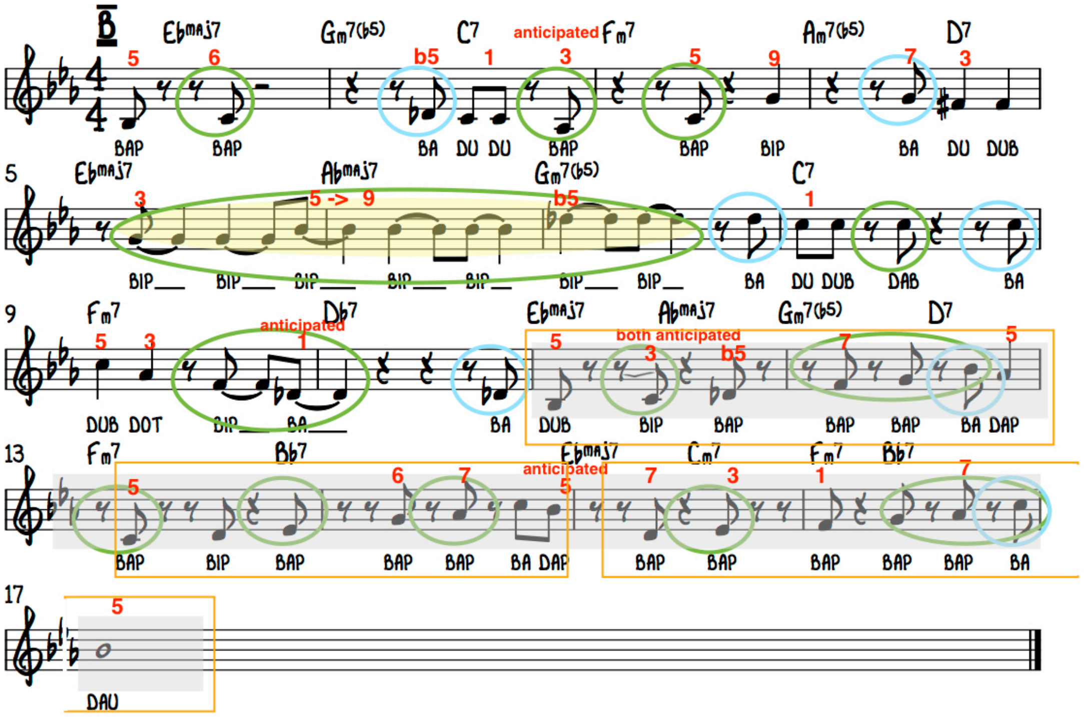
10.4 Transcription of solo after
a) Without notes

SOLO B-PART
"IT COULD HAPPEN TO YOU"


B
Ebmaj7
Gm7(b5)
C7
Fm7
Am7(b5)
D7
BAP BAP BA DU DU BAP BAP BIP BA DU DUB
5
Ebmaj7
Abmaj7
Gm7(b5)
C7
BIP BIP BIP BIP BIP BIP BIP BA DU DUB DAB BA
9
Fm7
Db7
Ebmaj7
Abmaj7
Gm7(b5)
D7
DUB DOT BIP BA BA DUB BIP BAP BAP BAP BA DAP
13
Fm7
Bb7
Ebmaj7
Cm7
Fm7
Bb7
BAP BIP BAP BAP BAP BA DAP BAP BAP BAP BAP BAP BA
17
DAU

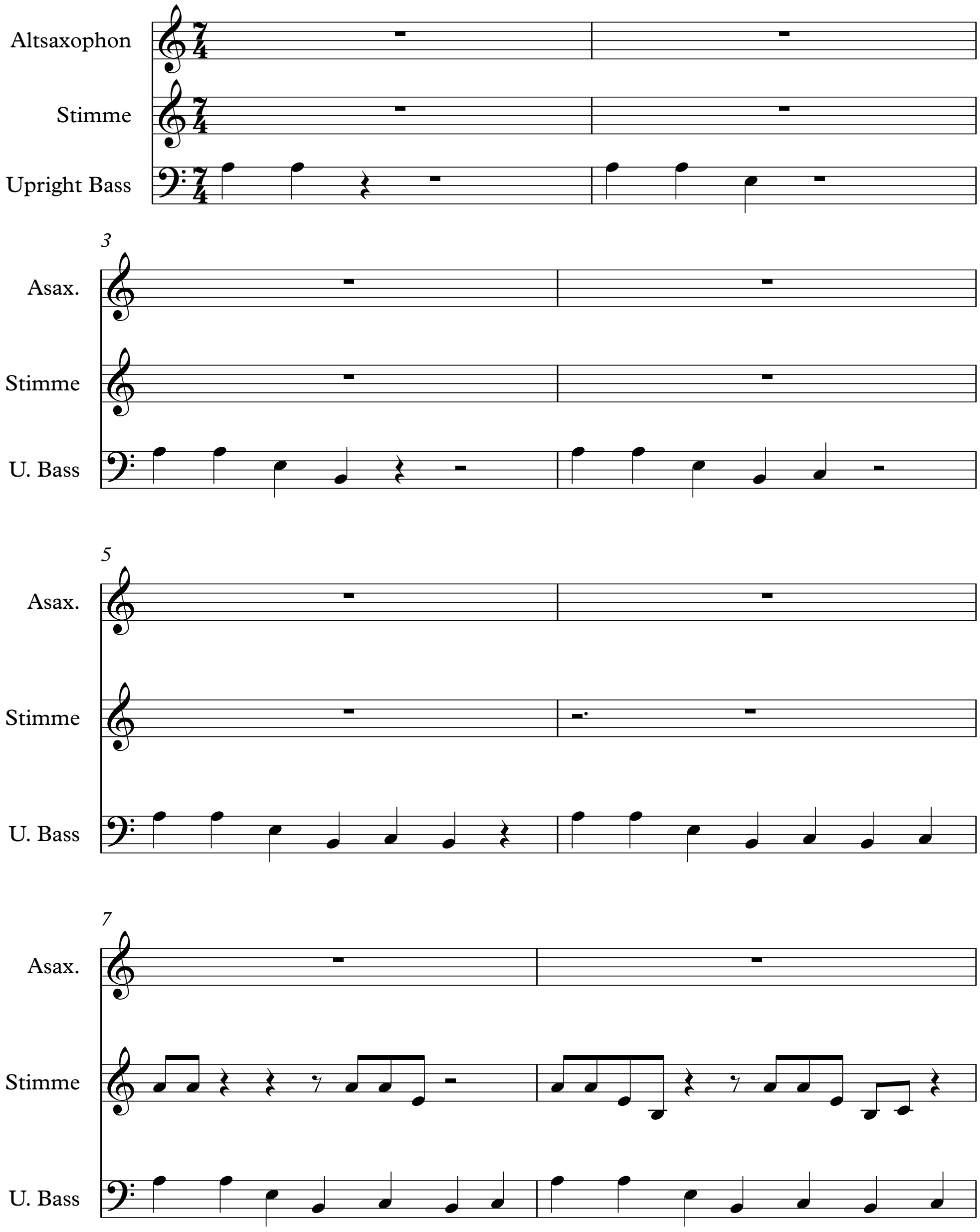
b) With notes

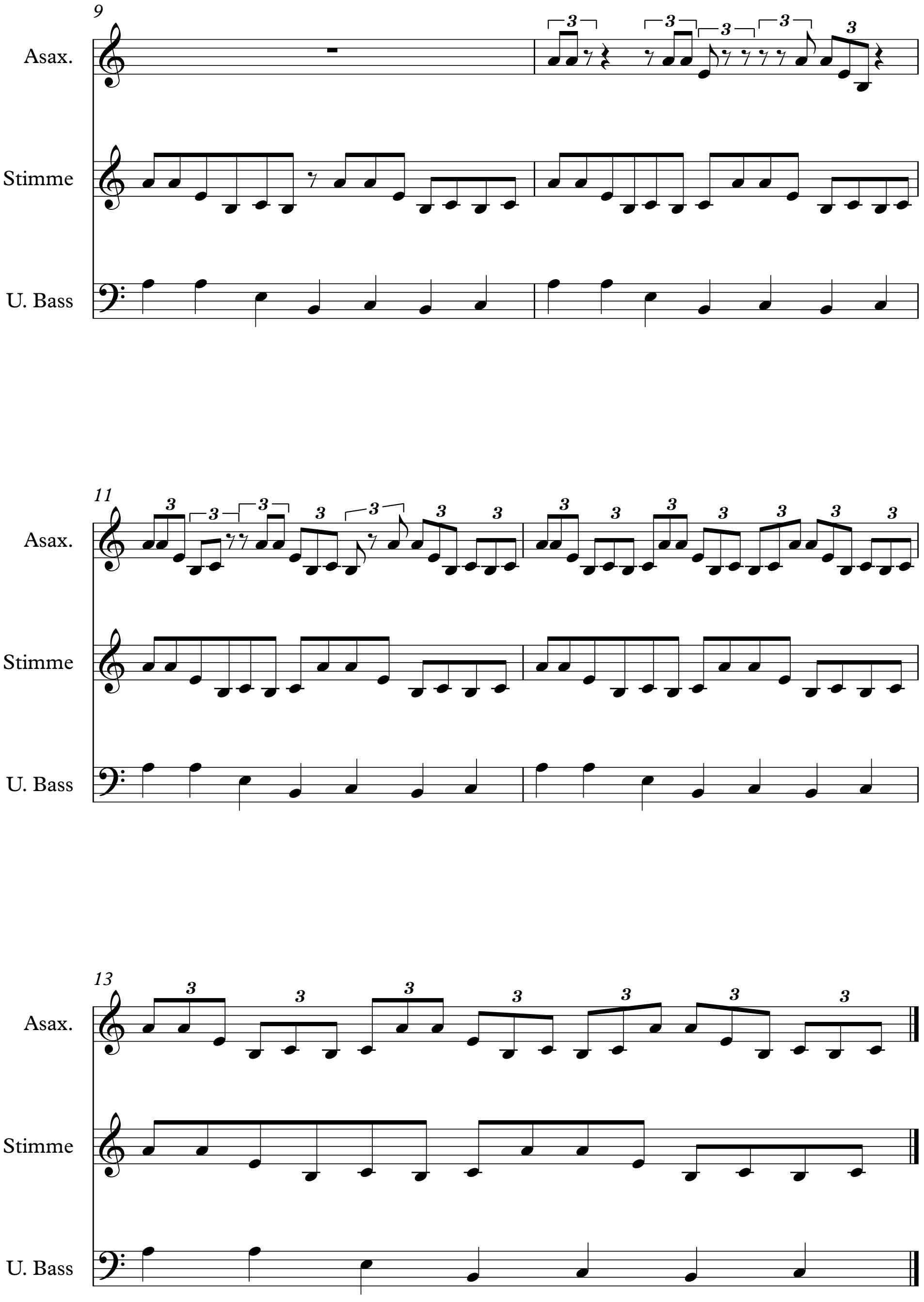
SOLO B-PART
"IT COULD HAPPEN TO YOU"


B
Ebmaj7
Gm7(b5)
C7
anticipated
Fm7
Am7(b5)
D7
5
6
b5
1
3
5
9
7
3
BAP
BAP
BA
DU
DU
BAP
BAP
BIP
BA
DU
DUB
5
Ebmaj7
Abmaj7
Gm7(b5)
C7
3
5 -> 9
b5
1
BIP
BIP
BIP
BIP
BIP
BIP
BIP
BA
DU DUB
DAB
BA
9
Fm7
Db7
anticipated
Ebmaj7
Abmaj7
Gm7(b5)
D7
5
3
1
5
both anticipated
3
b5
7
5
DUB
DOT
BIP
BA
BA
DUB
BIP
BAP
BAP
BAP
BA DAP
13
Fm7
Bb7
Ebmaj7
Cm7
Fm7
Bb7
anticipated
5
6
7
5
7
3
1
7
BAP
BIP
BAP
BAP
BAP
BA DAP
BAP
BAP
BAP
BAP
BAP
BA
17
5
DAU

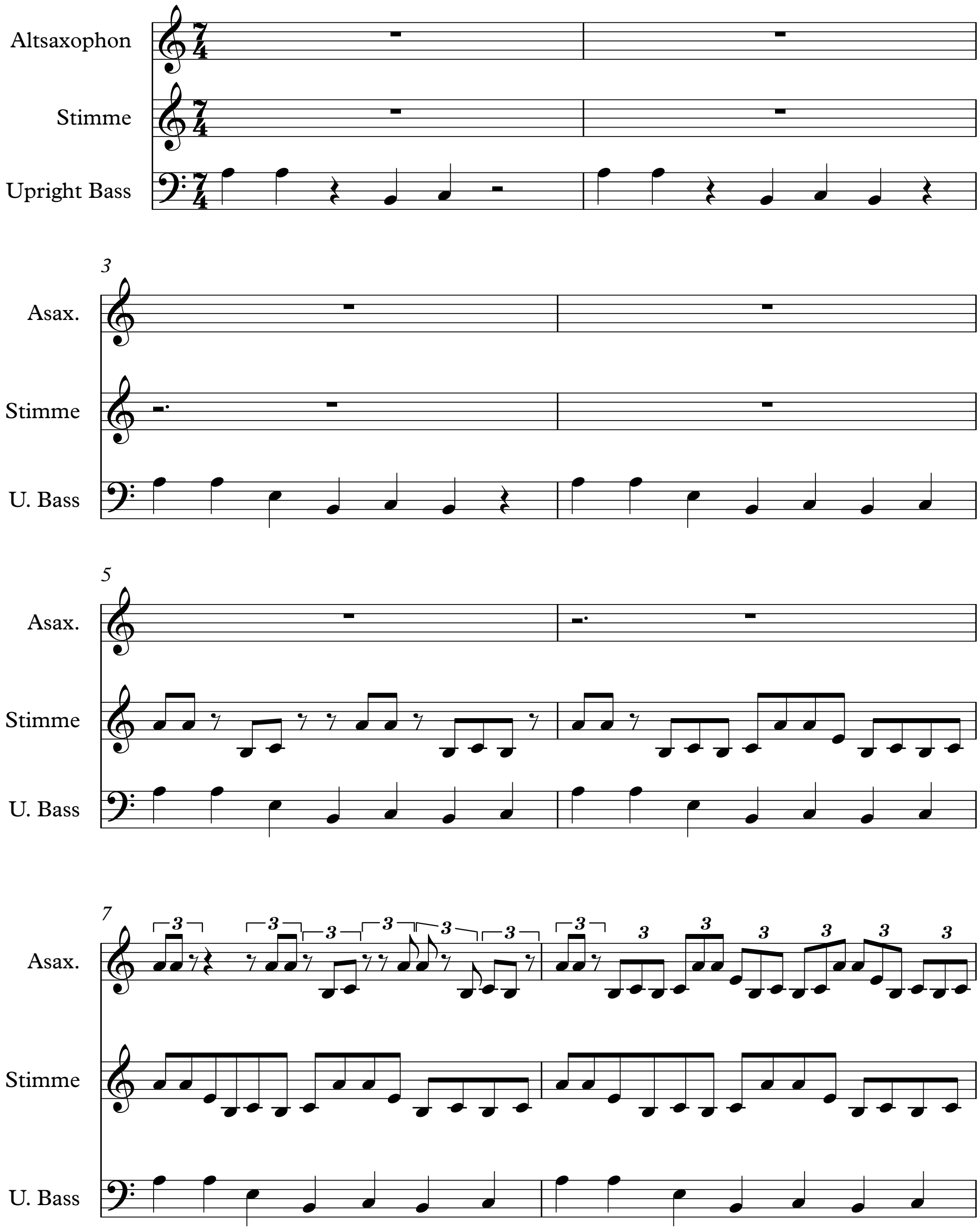
11. Appendix B – Second intervention cycle – "Apoligitis"

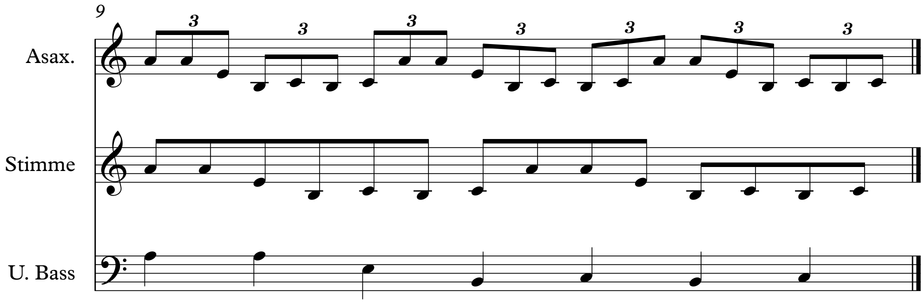
11.1 *Rupak* build-up No. 1


Altsaxophon
Stimme
Upright Bass
3
Asax.
Stimme
U. Bass
5
Asax.
Stimme
U. Bass
7
Asax.
Stimme
U. Bass

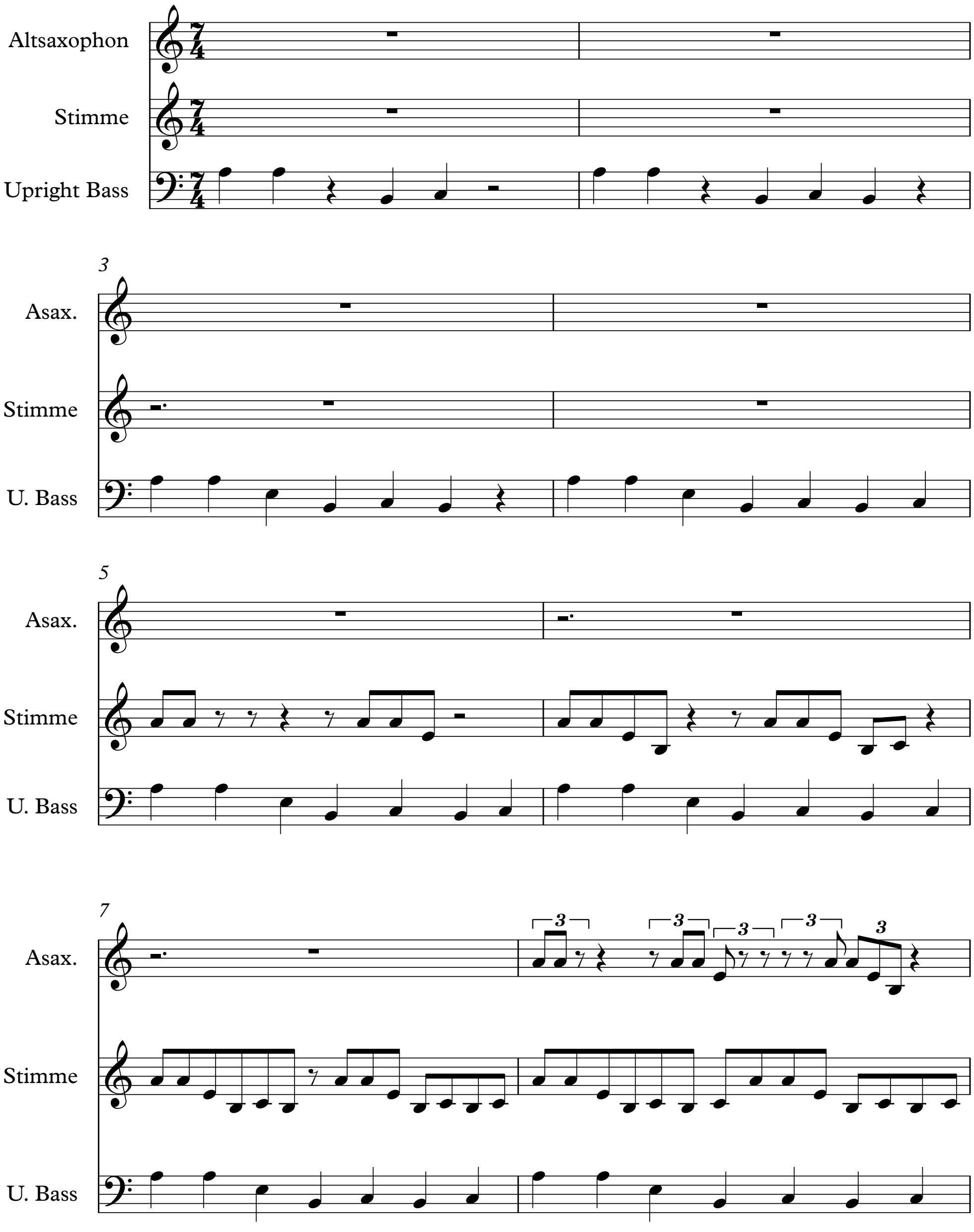

9
Asax.
Stimme
U. Bass
3
11
13

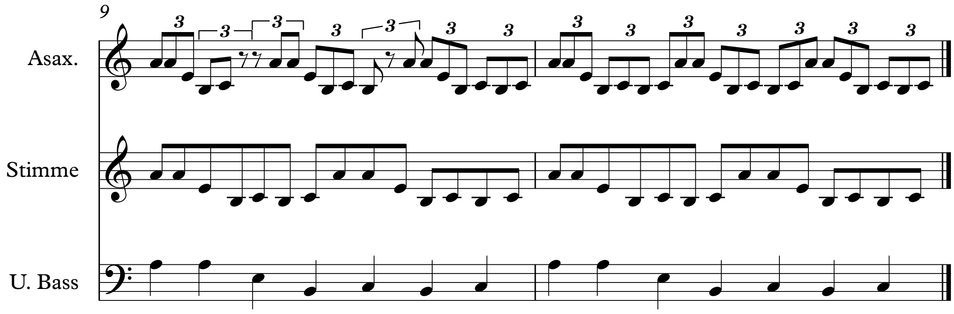
11.2 *Rupak* build-up No. 2


Altsaxophon
Stimme
Upright Bass
3
Asax.
Stimme
U. Bass
5
Asax.
Stimme
U. Bass
7
Asax.
Stimme
U. Bass

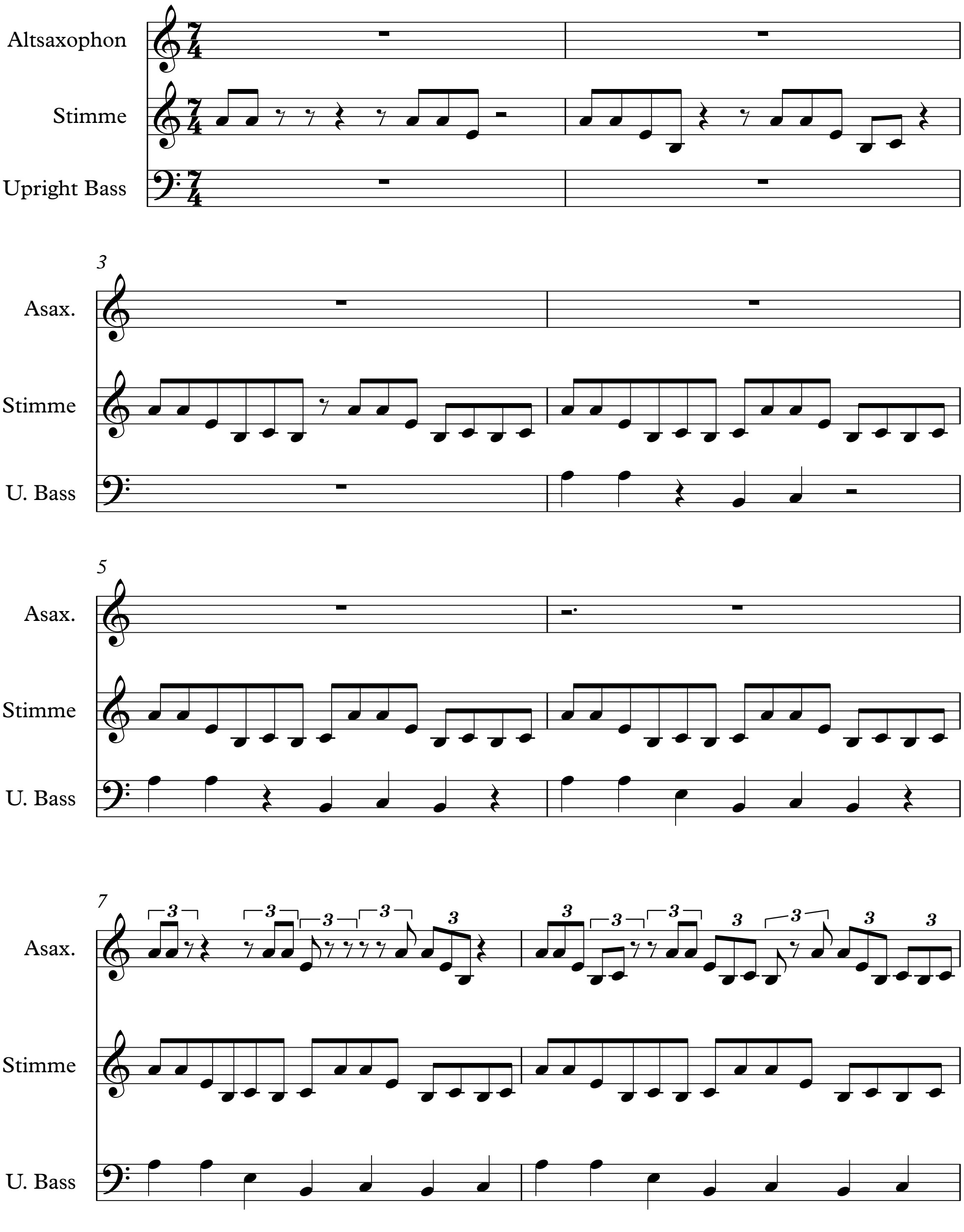

Asax.
Stimme
U. Bass

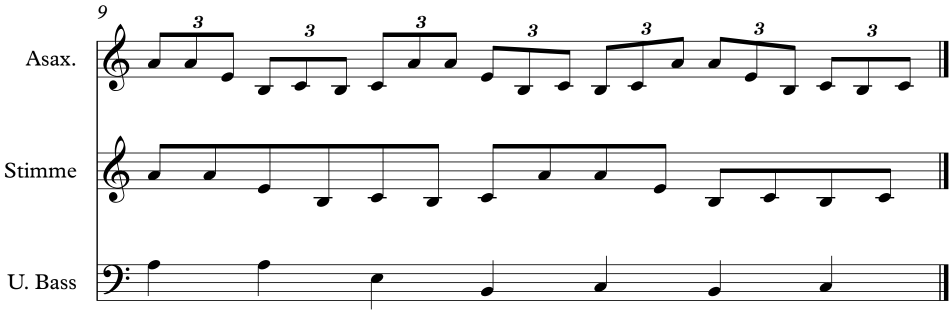
11.3 *Rupak* build-up no. 3


Altsaxophon
Stimme
Upright Bass
3
Asax.
Stimme
U. Bass
5
7
3

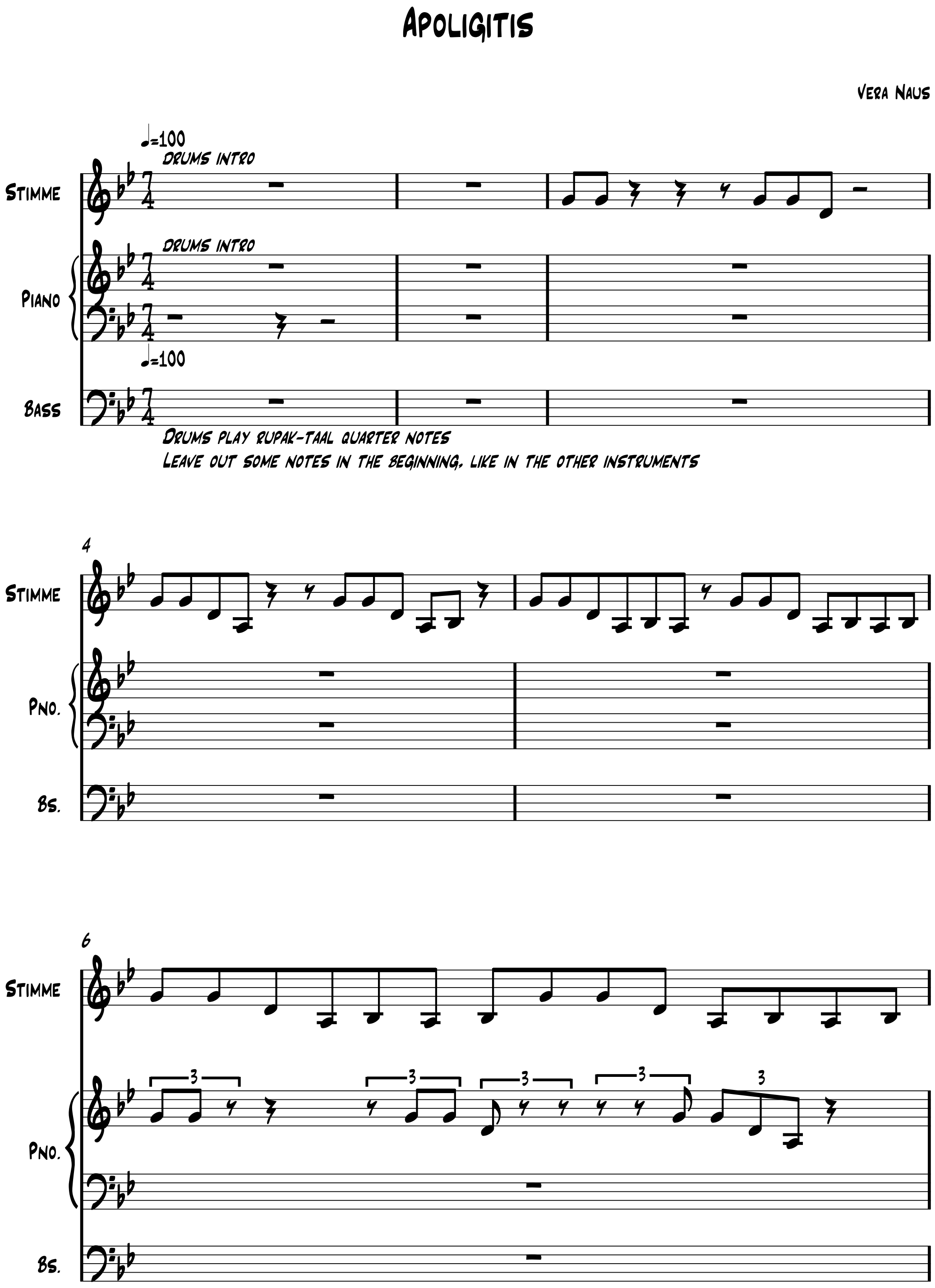

9
Asax.
Stimme
U. Bass
3

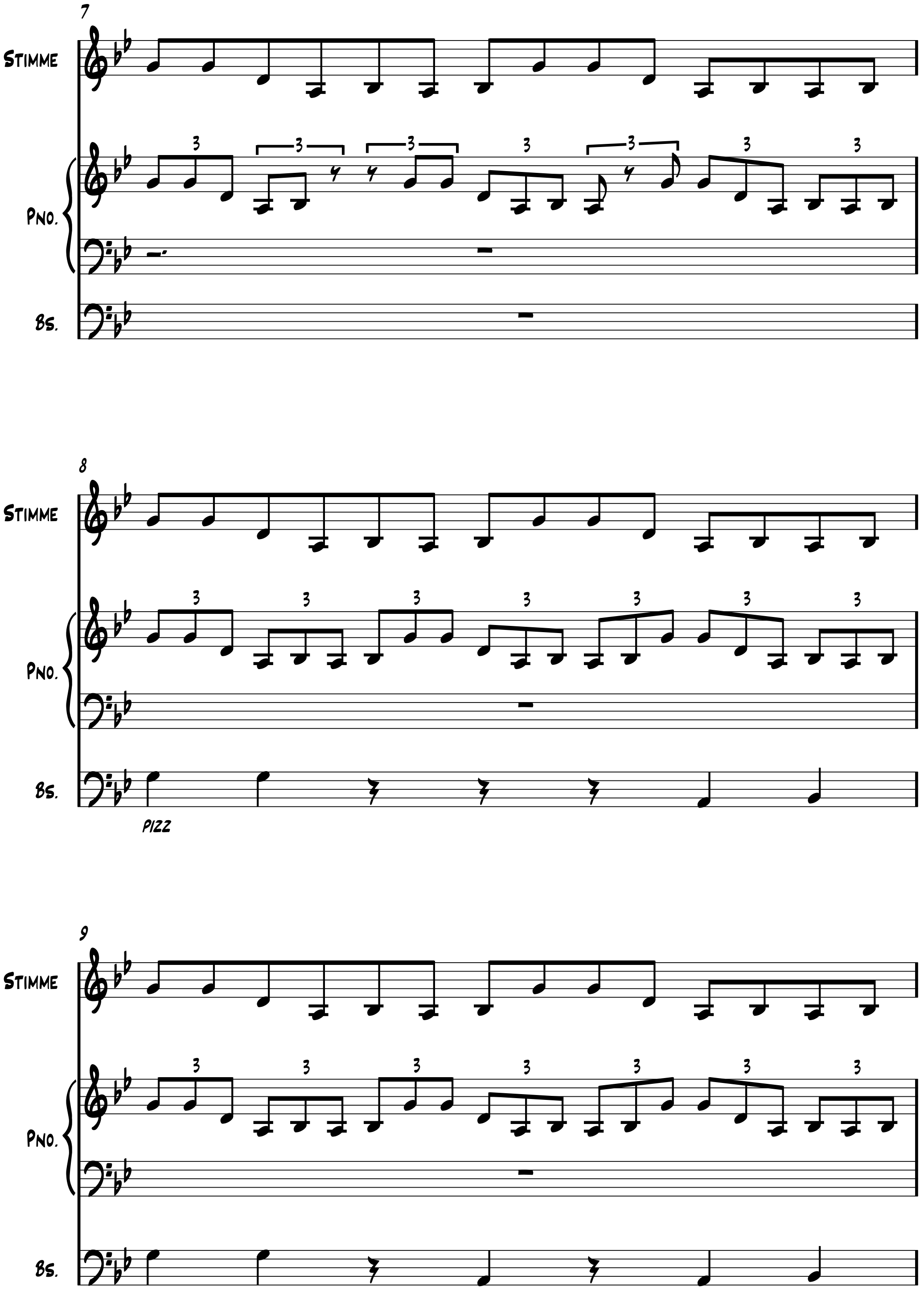
11.4 *Rupak* build-up no. 4

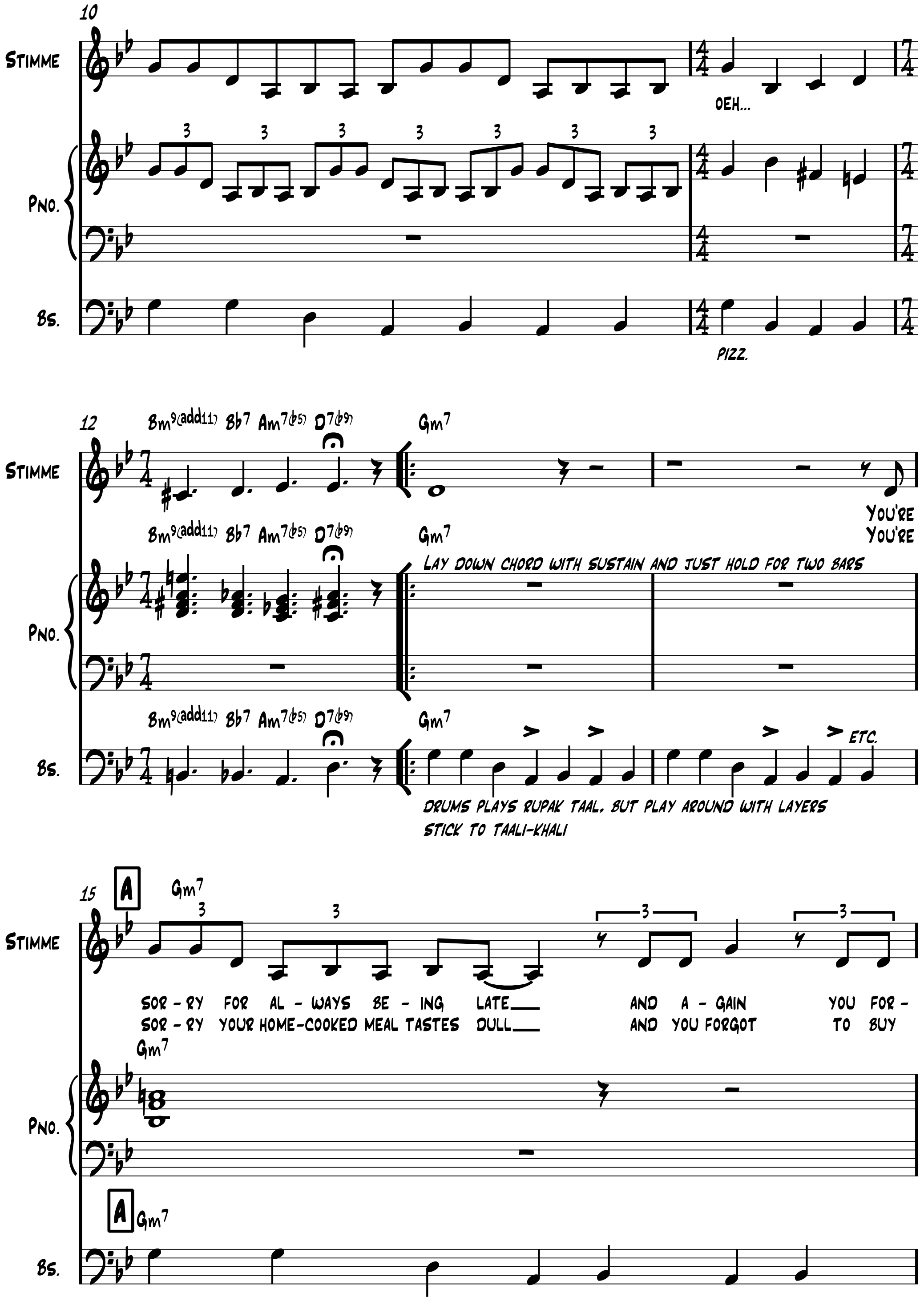

Altsaxophon
Stimme
Upright Bass
3
Asax.
Stimme
U. Bass
5
Asax.
Stimme
U. Bass
7
Asax.
Stimme
U. Bass


Asax.
Stimme
U. Bass

11.5 Score of "Apoligitis"

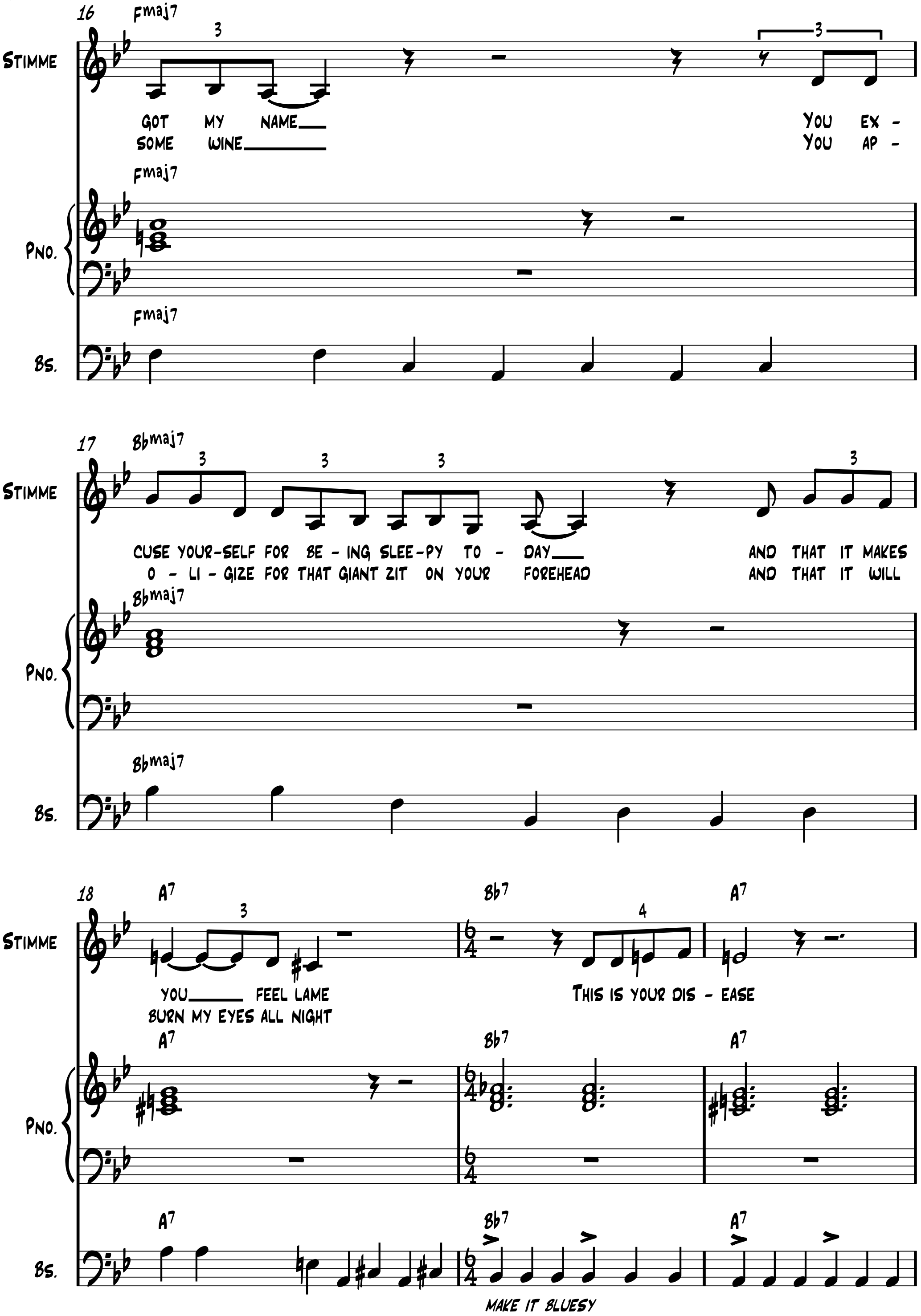

Apoligitis
Vera Naus
♩=100
Drums intro
Stimme
Drums intro
Piano
♩=100
Bass
Drums play rupak-taal quarter notes
Leave out some notes in the beginning, like in the other instruments
4
Stimme
Pno.
Bs.
6
Stimme
3
Pno.
Bs.

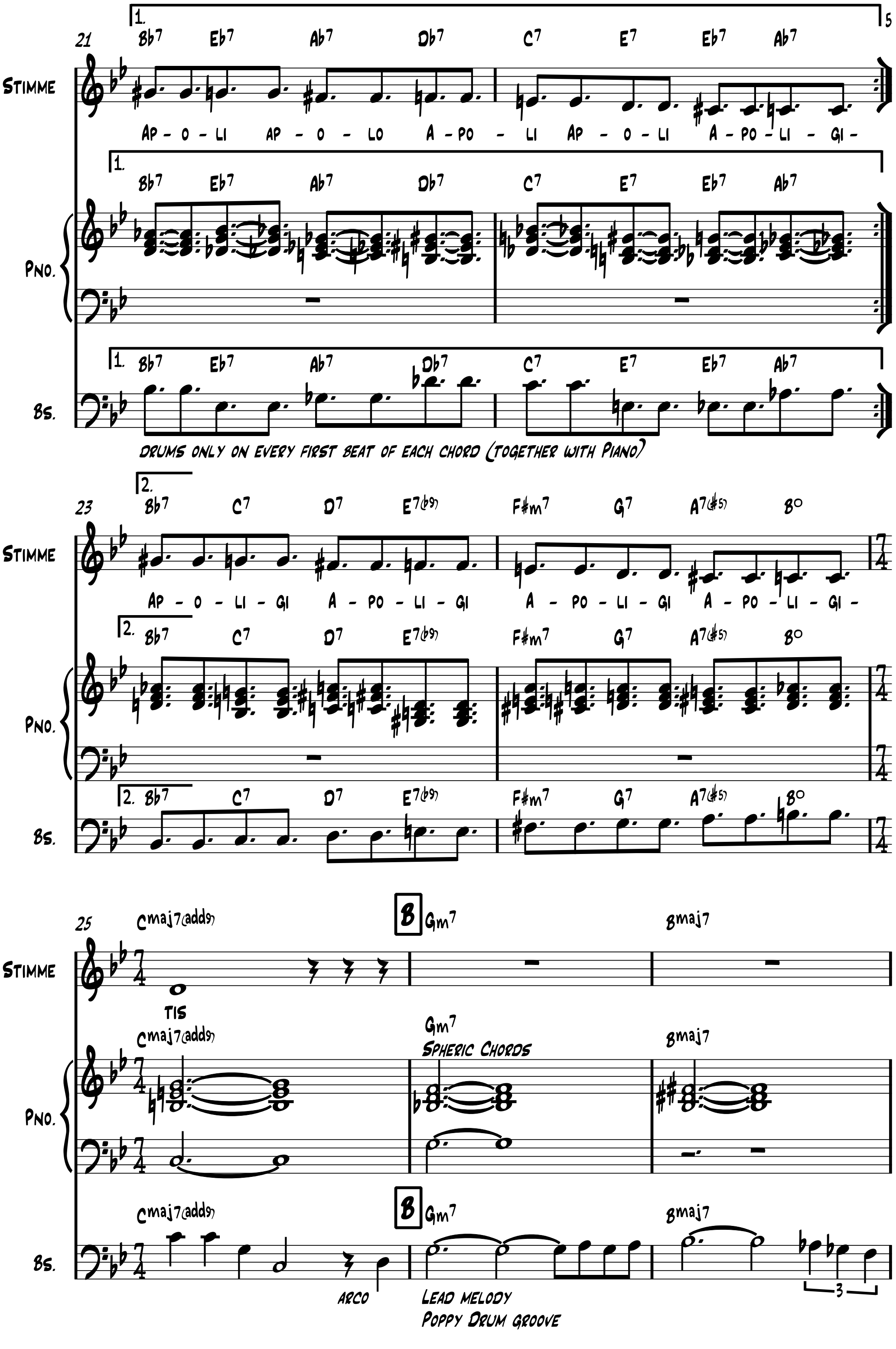

7
Stimme
Pno.
Bs.
8
Stimme
Pno.
Bs.
pizz
9
Stimme
Pno.
Bs.

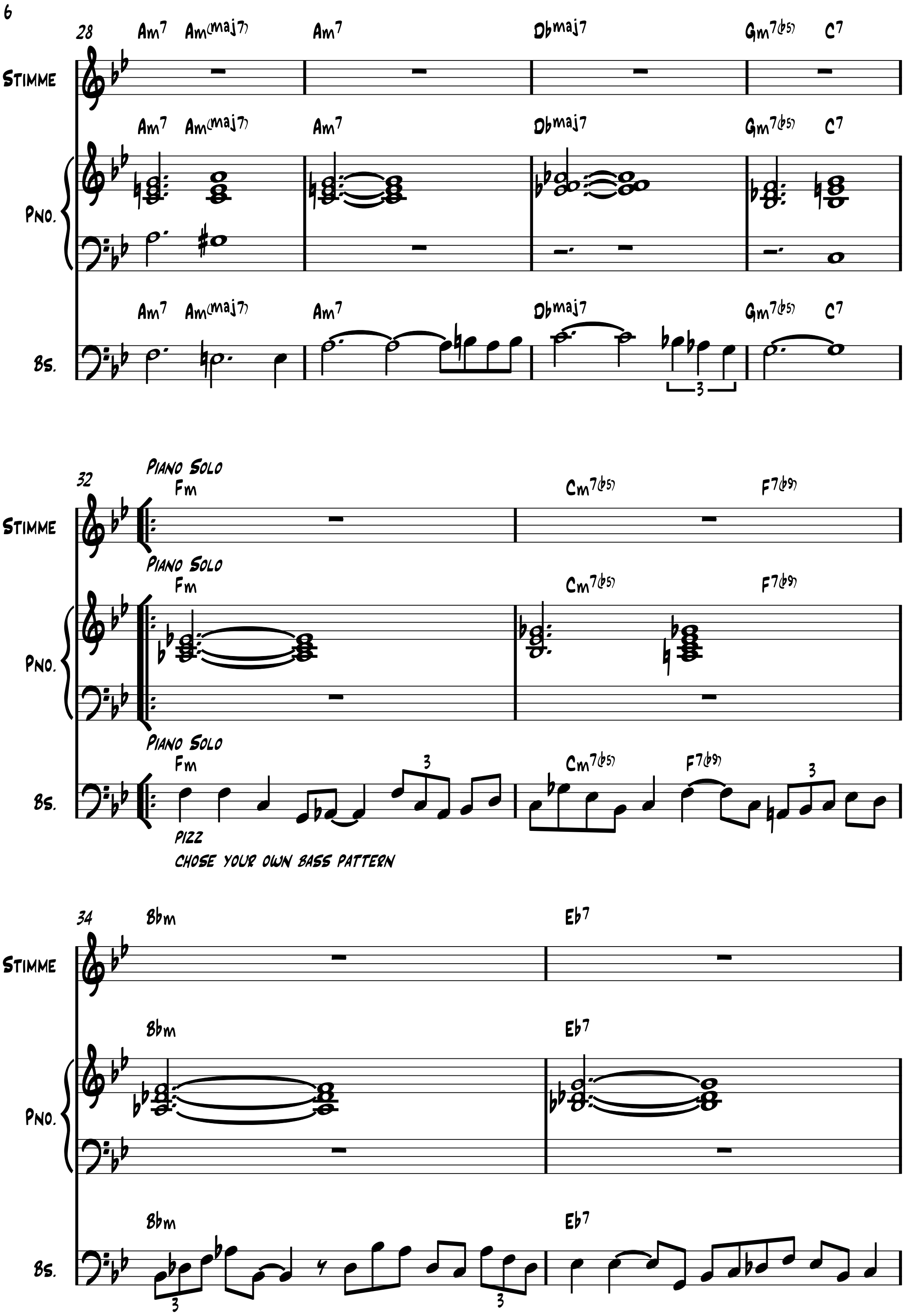

10
Stimme
Pno.
Bs.
oeh...
pizz.
12
Bm9(add11) Bb7 Am7(b5) D7(b9)
Gm7
You're
You're
etc.
15
A
Gm7
sor - ry for al - ways be - ing late___ and a - gain you for -
sor - ry your home-cooked meal tastes dull___ and you forgot to buy

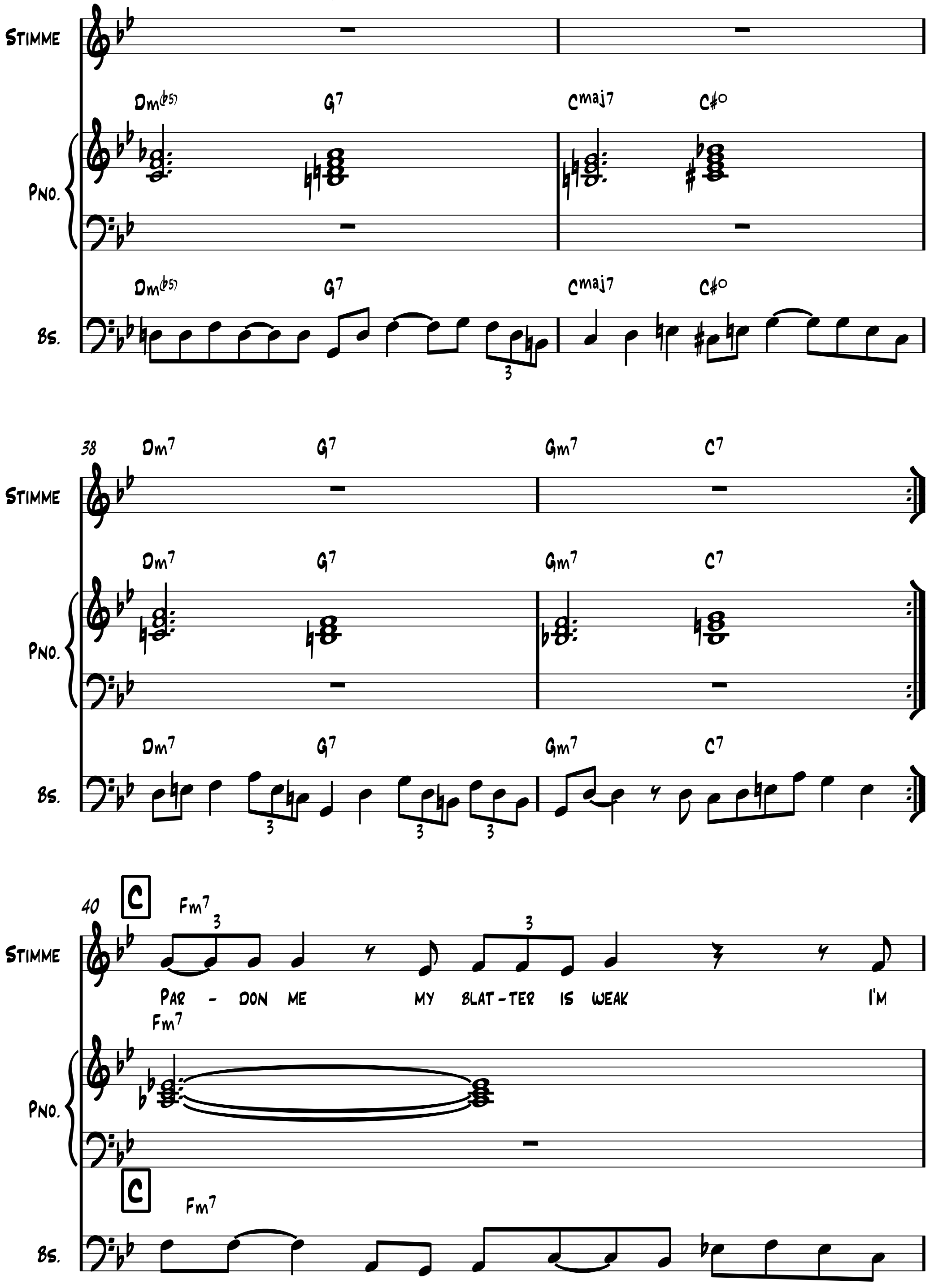
Lay down chord with sustain and just hold for two bars

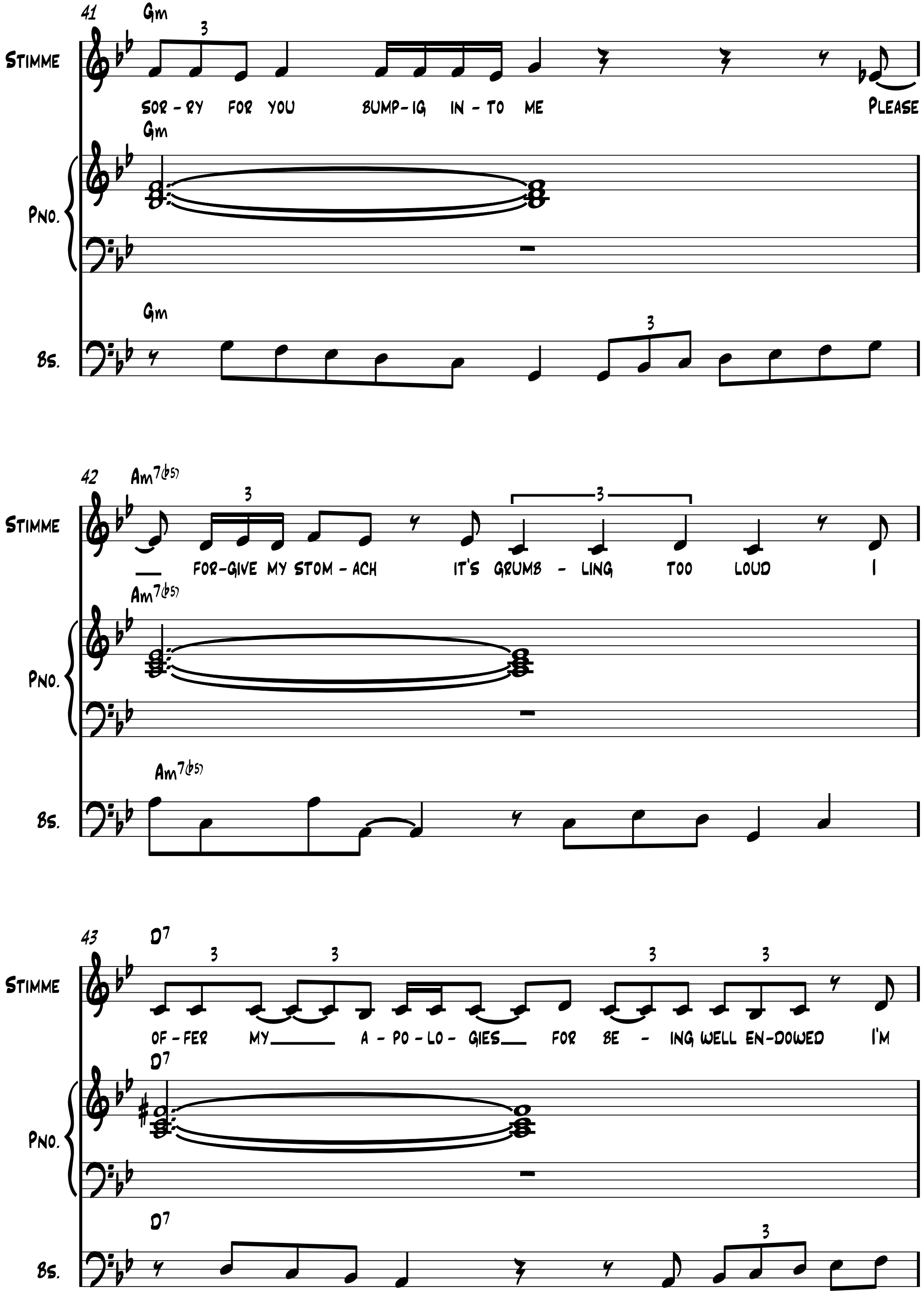
Drums plays rupak taal, but play around with layers
stick to taali-khali

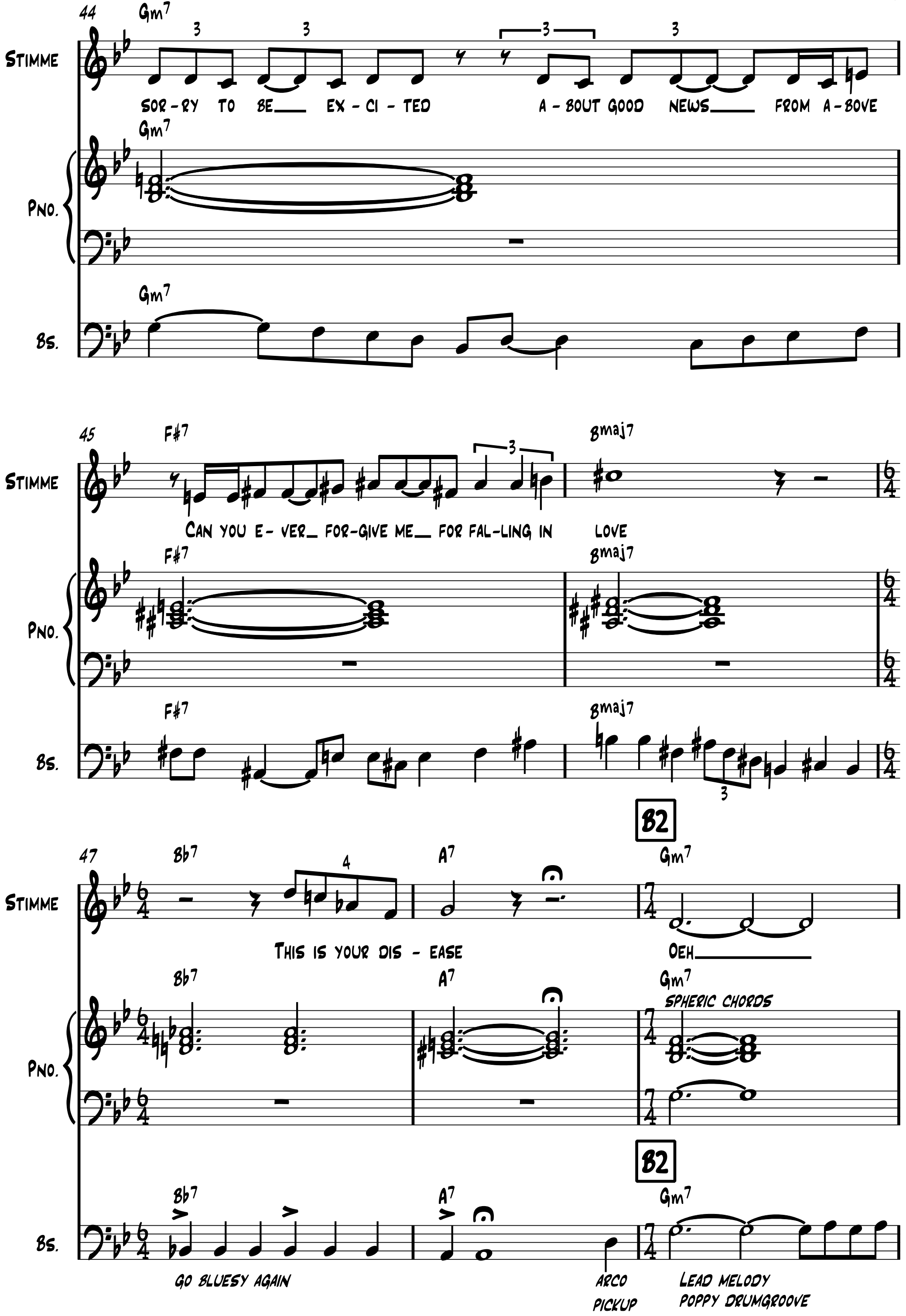

16
Fmaj7
Stimme
Got my name
Some wine
You ex -
You ap -
Pno.
Bs.
17
Bbmaj7
cuse your-self for be - ing slee-py to - day
and that it makes
o - li - gize for that giant zit on your forehead
and that it will
18
A7
Bb7
You feel lame
burn my eyes all night
This is your dis - ease
make it bluesy

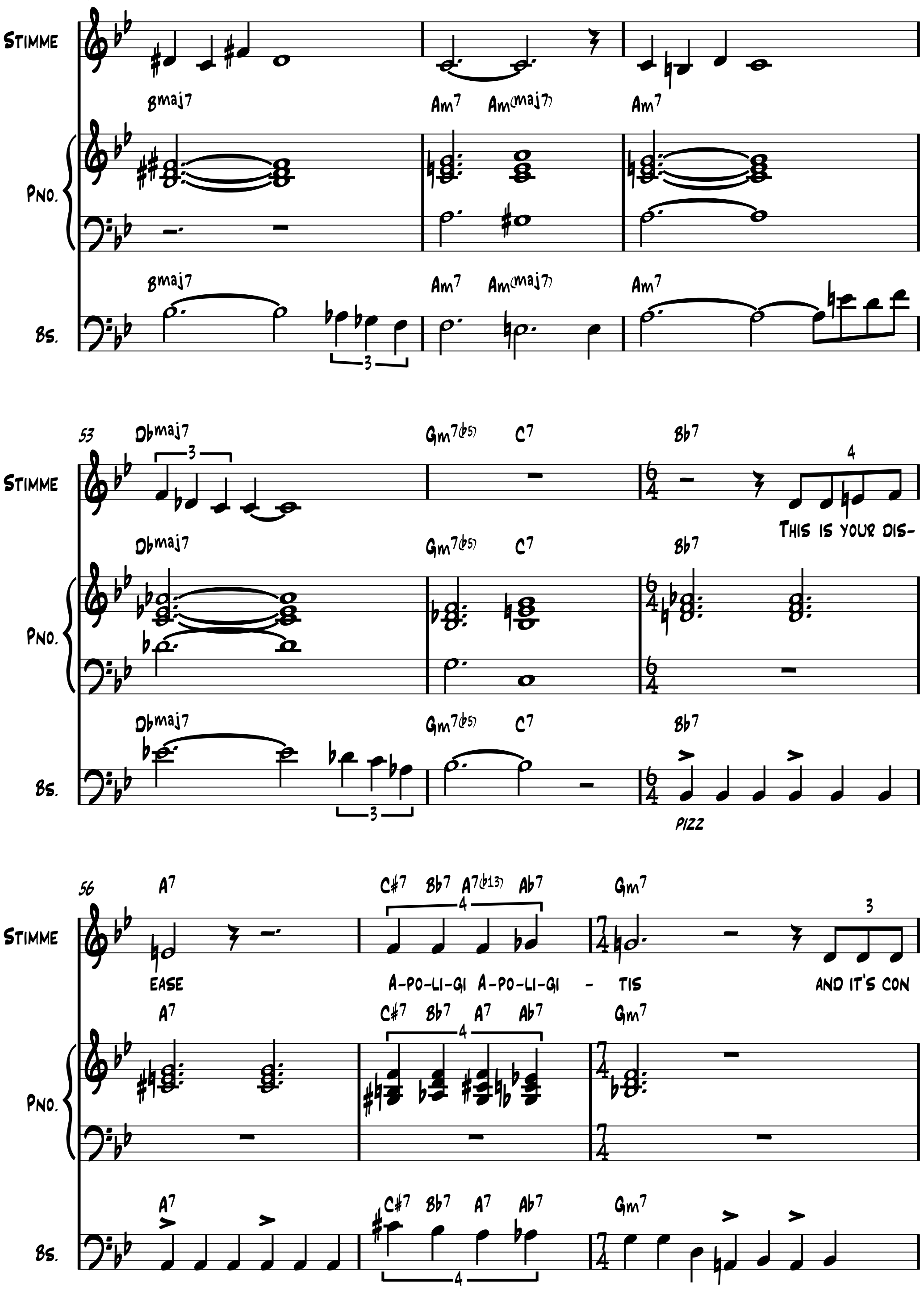

Stimme
Pno.
Bs.
1.
5
21
Bb7 Eb7 Ab7 Db7 C7 E7 Eb7 Ab7
Ap - o - li ap - o - lo A - po - li Ap - o - li A - po - li - gi -
Drums only on every first beat of each chord (together with Piano)
2.
23
Bb7 C7 D7 E7(b9) F#m7 G7 A7(#5) B°
Ap - o - li - gi A - po - li - gi A - po - li - gi A - po - li - gi -
7/4
25
Cmaj7(add9)
B
Gm7
Bmaj7
Tis
Spheric Chords
arco
Lead melody
Poppy Drum groove
3

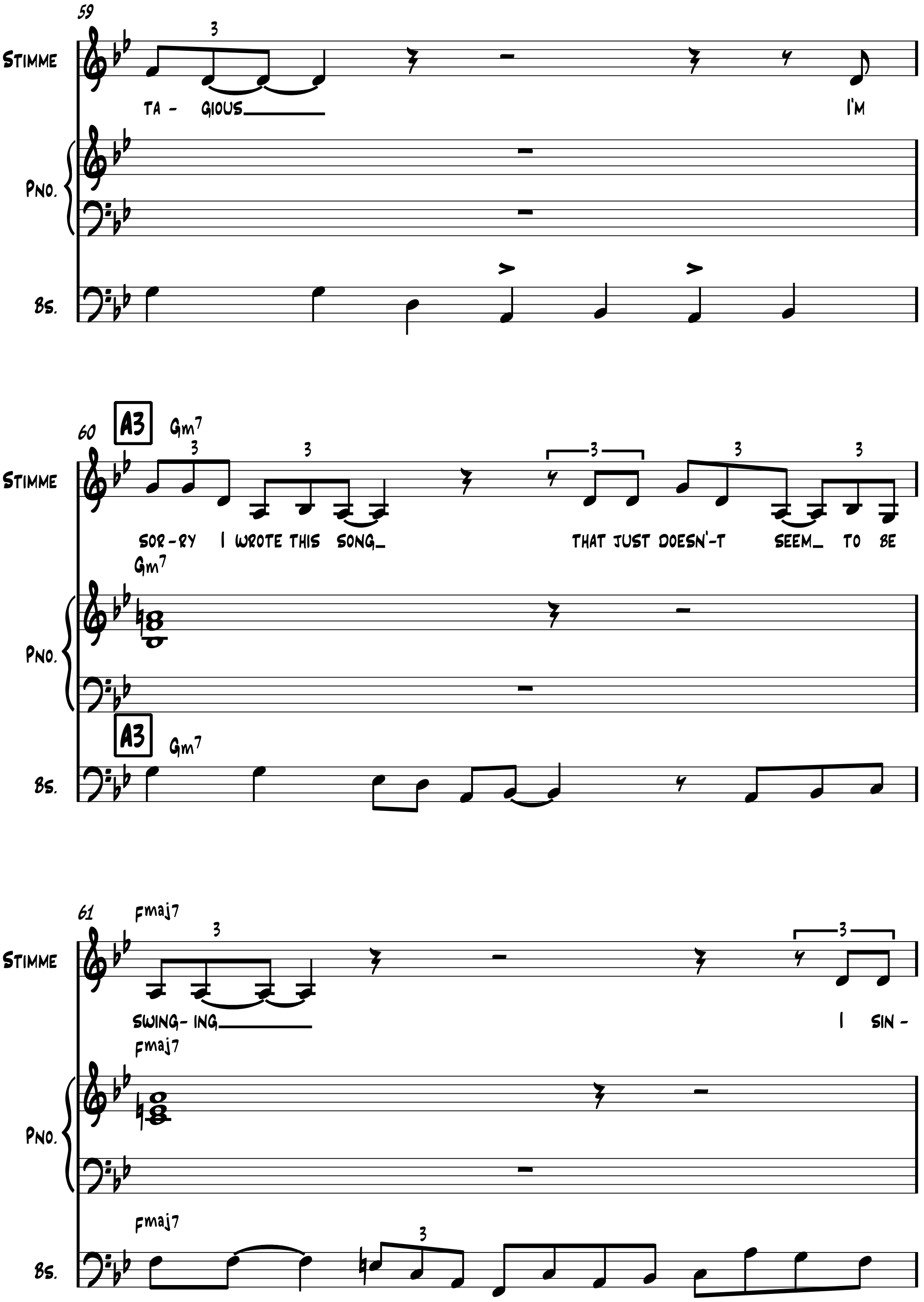

28
Stimme
Pno.
Bs.
Am7 Am(maj7) Am7 Db maj7 Gm7(b5) C7
3
32
Piano Solo
Fm Cm7(b5) F7(b9)
3
pizz
chose your own bass pattern
34
Bbm Eb7
3
3

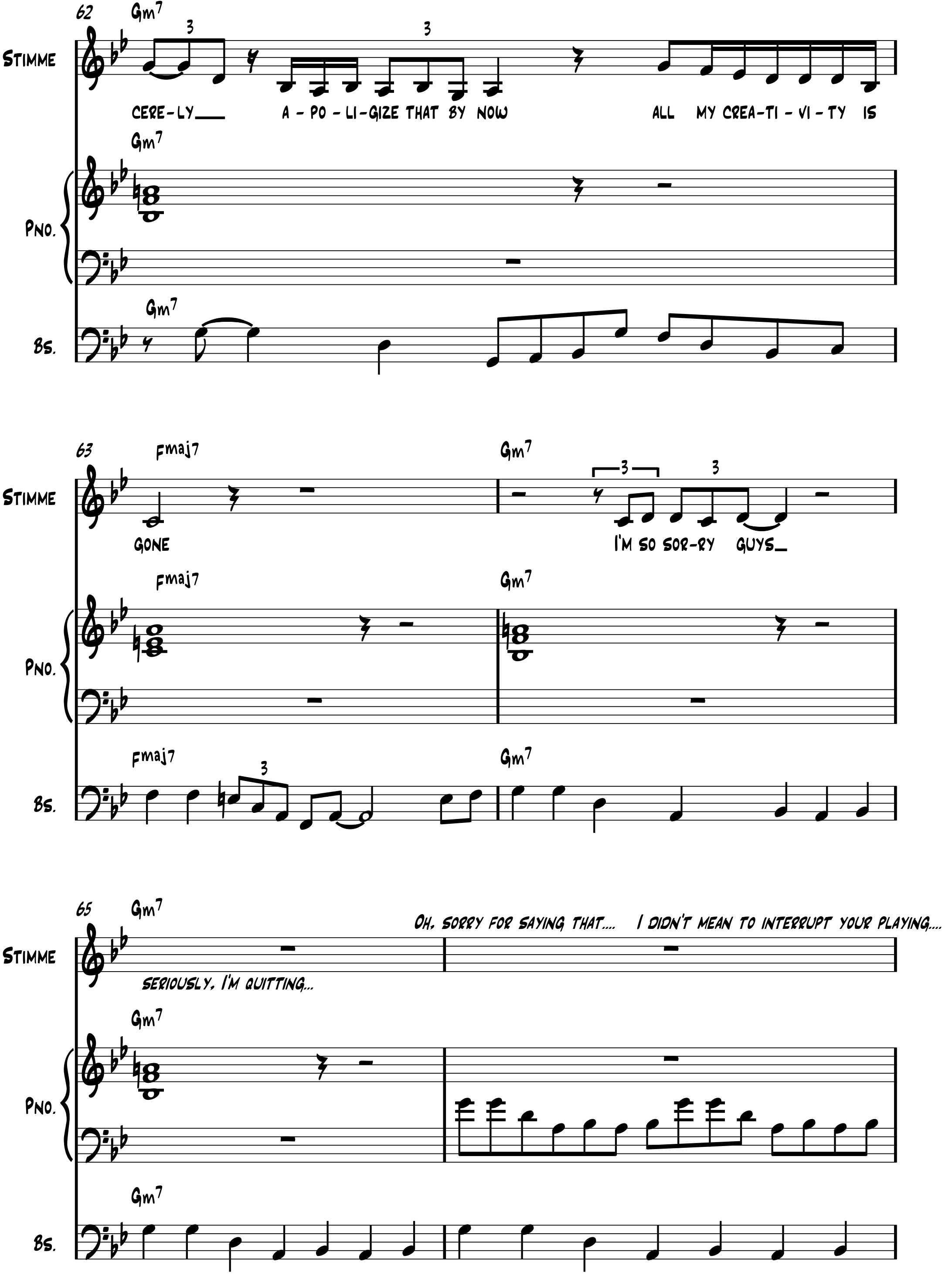

36
Dm(♭5)
G7
Cmaj7
C♯o
Stimme
Pno.
Bs.
3
38
Dm7
G7
Gm7
C7
3
3
3
40
C
Fm7
3
3
Par - don me my blat-ter is weak I'm

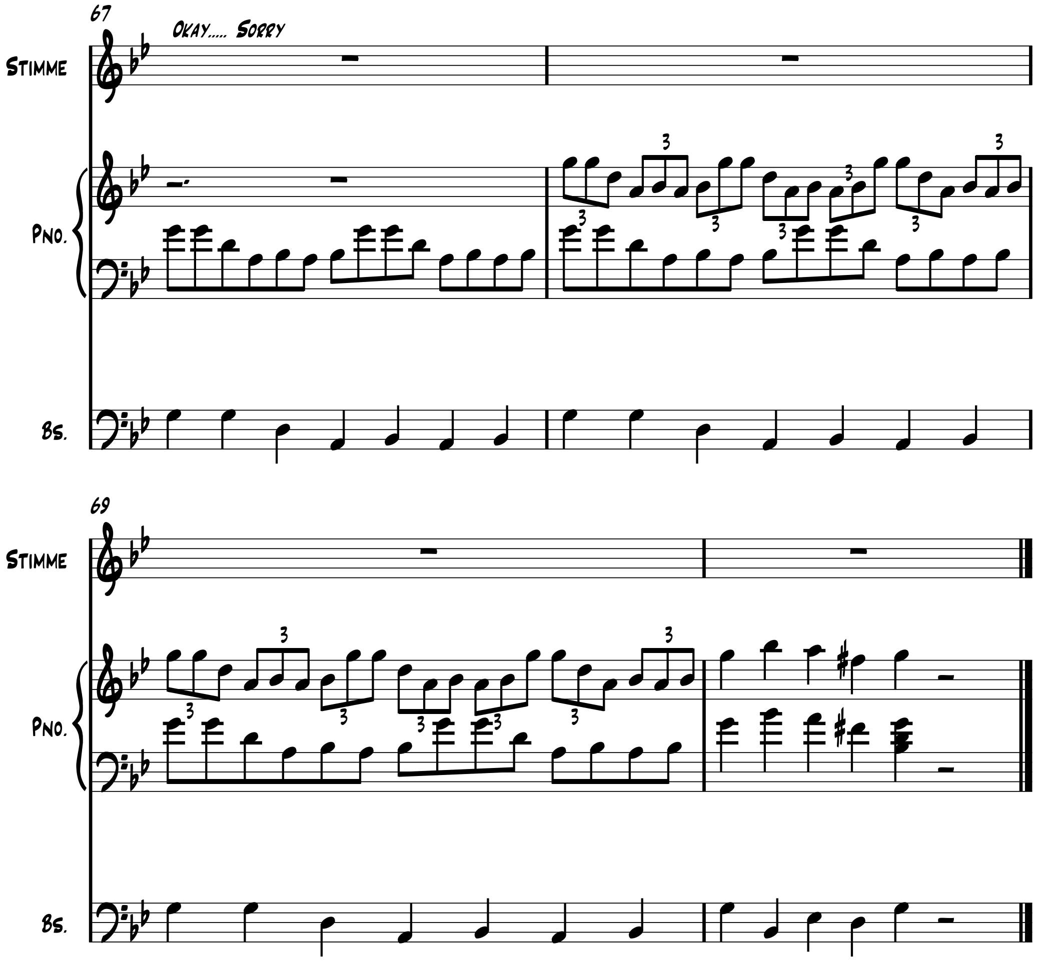

41
Gm
Stimme
sor-ry for you bump-ig in-to me Please
Gm
Pno.
Gm
Bs.
42
Am7(♭5)
Stimme
for-give my stom-ach it's grumb-ling too loud I
Am7(♭5)
Pno.
Am7(♭5)
Bs.
43
D7
Stimme
of-fer my a-po-lo-gies for be-ing well en-dowed I'm
D7
Pno.
D7
Bs.


44
Gm7
Stimme
sor-ry to be ex-ci-ted a-bout good news from a-bove
Pno.
Bs.
45
F#7
Bmaj7
Can you e-ver for-give me for fal-ling in love
B2
47
Bb7
A7
Gm7
This is your dis-ease
Oeh
spheric chords
Go bluesy again
arco pickup
Lead melody poppy drumgroove


50
Bmaj7
Am7 Am(maj7)
Am7
Stimme
Pno.
Bs.
53
Dbmaj7
Gm7(b5) C7
Bb7
This is your dis-
pizz
56
A7
C#7 Bb7 A7(b13) Ab7
Gm7
ease
A-po-li-gi A-po-li-gi - tis
and it's con
C#7 Bb7 A7 Ab7

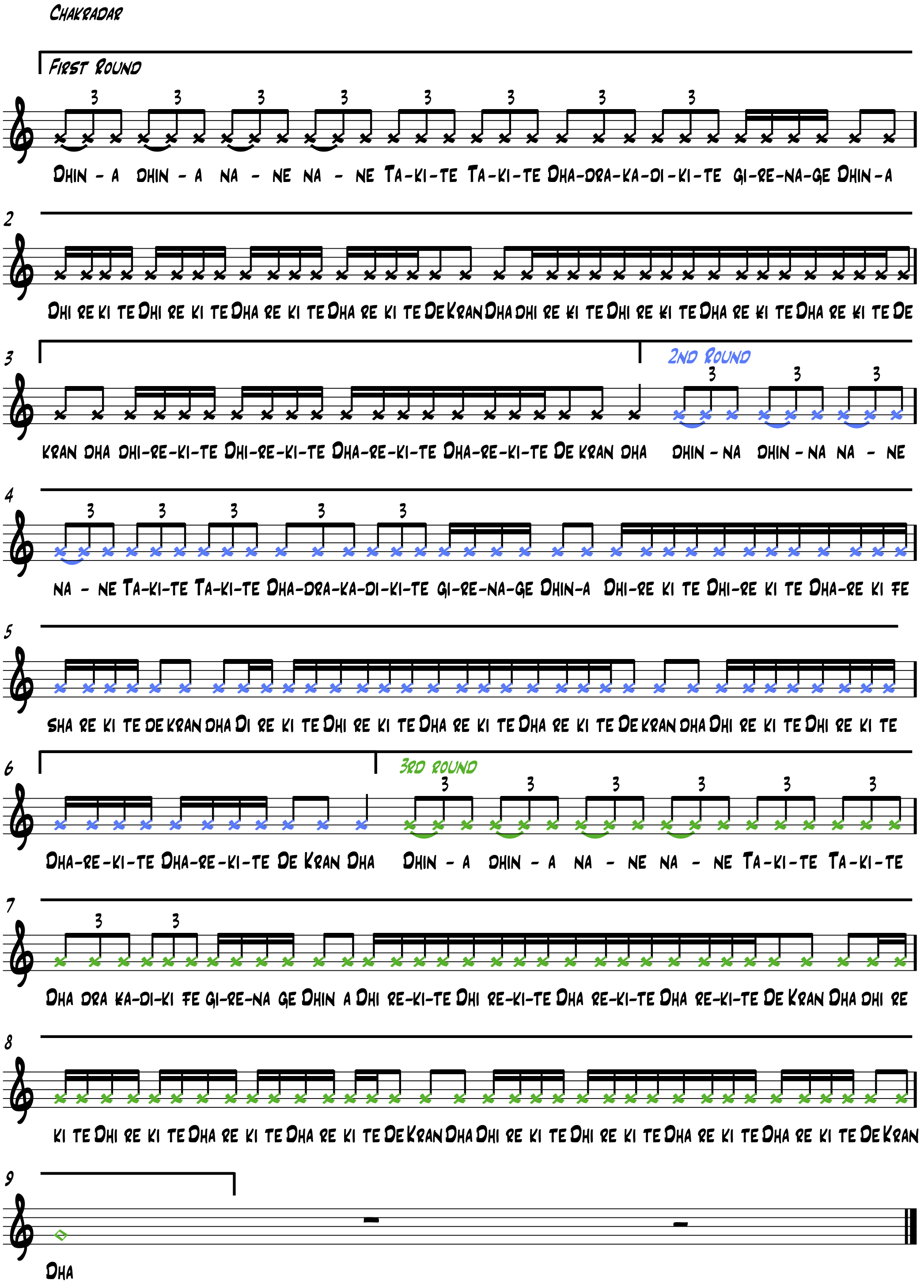

59
Stimme
3
ta - gious
I'm
Pno.
Bs.
60
A3
Gm7
3
3
3
3
3
sor-ry I wrote this song
that just doesn'-t seem to be
Gm7
A3
Gm7
61
Fmaj7
3
3
swing- ing
I sin -
Fmaj7
Fmaj7
3


62
Gm7
Stimme
cere-ly___ a - po - li-gize that by now all my crea-ti - vi - ty is
Pno.
Bs.
3
63
Fmaj7
gone
Gm7
I'm so sor-ry guys_
65
Oh, sorry for saying that.... I didn't mean to interrupt your playing....
seriously, I'm quitting...

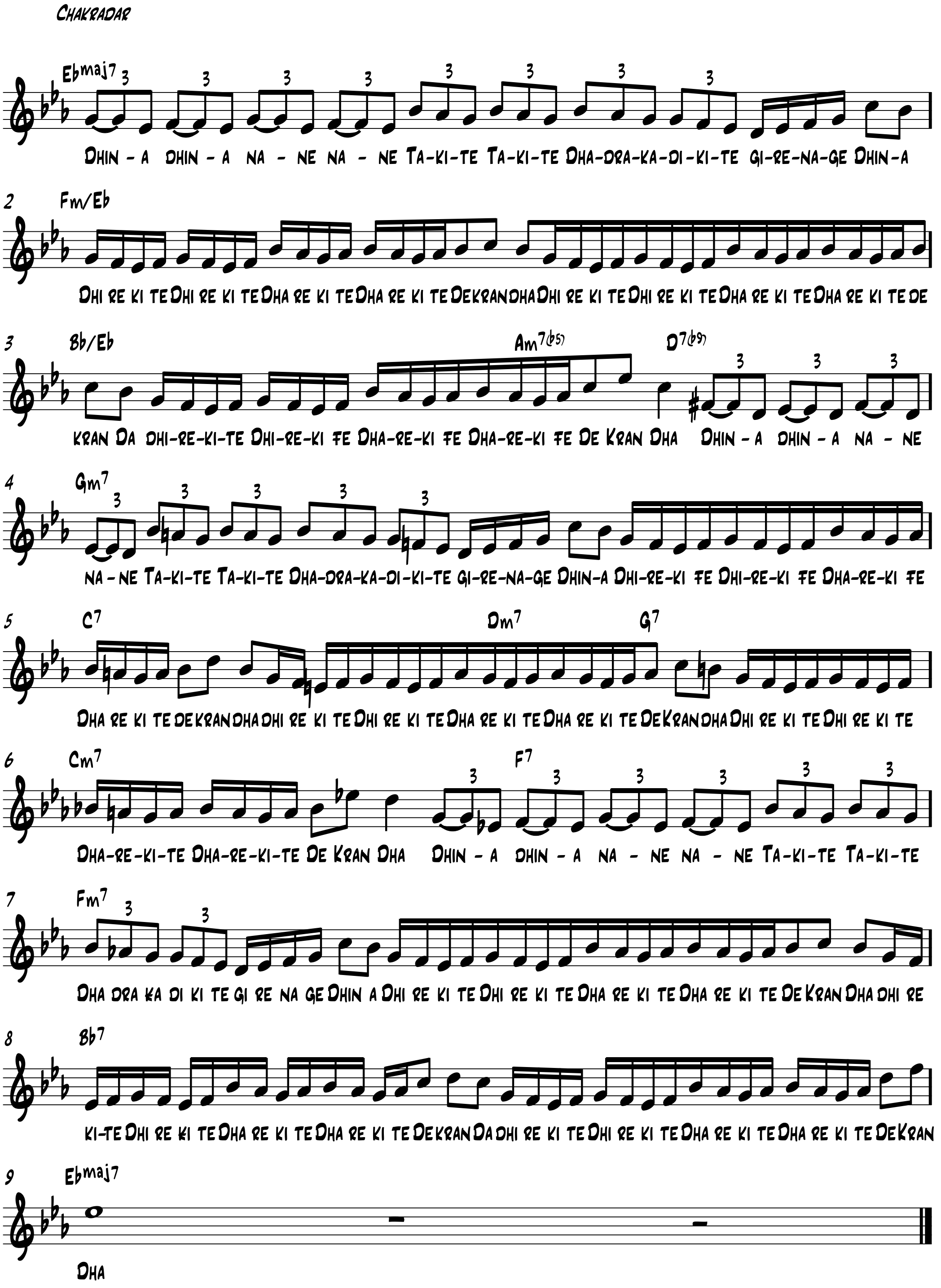

67
Okay..... Sorry
Stimme
Pno.
Bs.
69
Stimme
Pno.
Bs.

12. Appendix C – Second intervention cycle – “Dha Dhin”

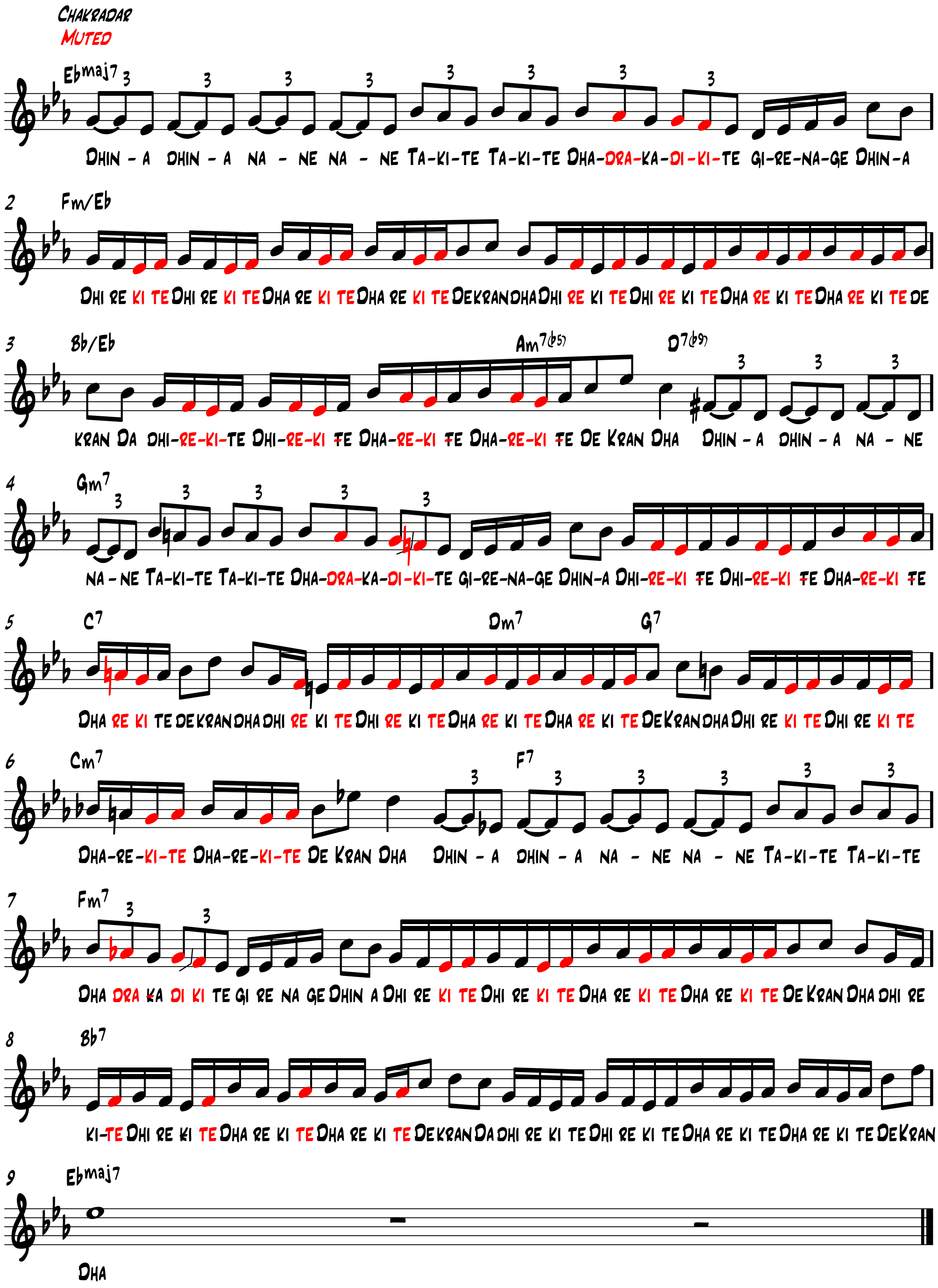
12.1 *Chakradaar* rhythmically


Chakradar
First Round
3 3 3 3 3 3 3 3
Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a
2
Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran Dha dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De
3
2nd Round
kran dha dhi-re-ki-te Dhi-re-ki-te Dha-re-ki-te Dha-re-ki-te De kran dha dhin - na dhin - na na - ne
4
na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a Dhi-re ki te Dhi-re ki te Dha-re ki fe
5
sha re ki te de kran dha Di re ki te Dhi re ki te Dha re ki te Dha re ki te De kran dha Dhi re ki te Dhi re ki te
6
3rd round
Dha-re-ki-te Dha-re-ki-te De Kran Dha Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te
7
Dha dra ka-di-ki fe gi-re-na ge Dhin a Dhi re-ki-te Dhi re-ki-te Dha re-ki-te Dha re-ki-te De Kran Dha dhi re
8
ki te Dhi re ki te Dha re ki te Dha re ki te De Kran Dha Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran
9
Dha

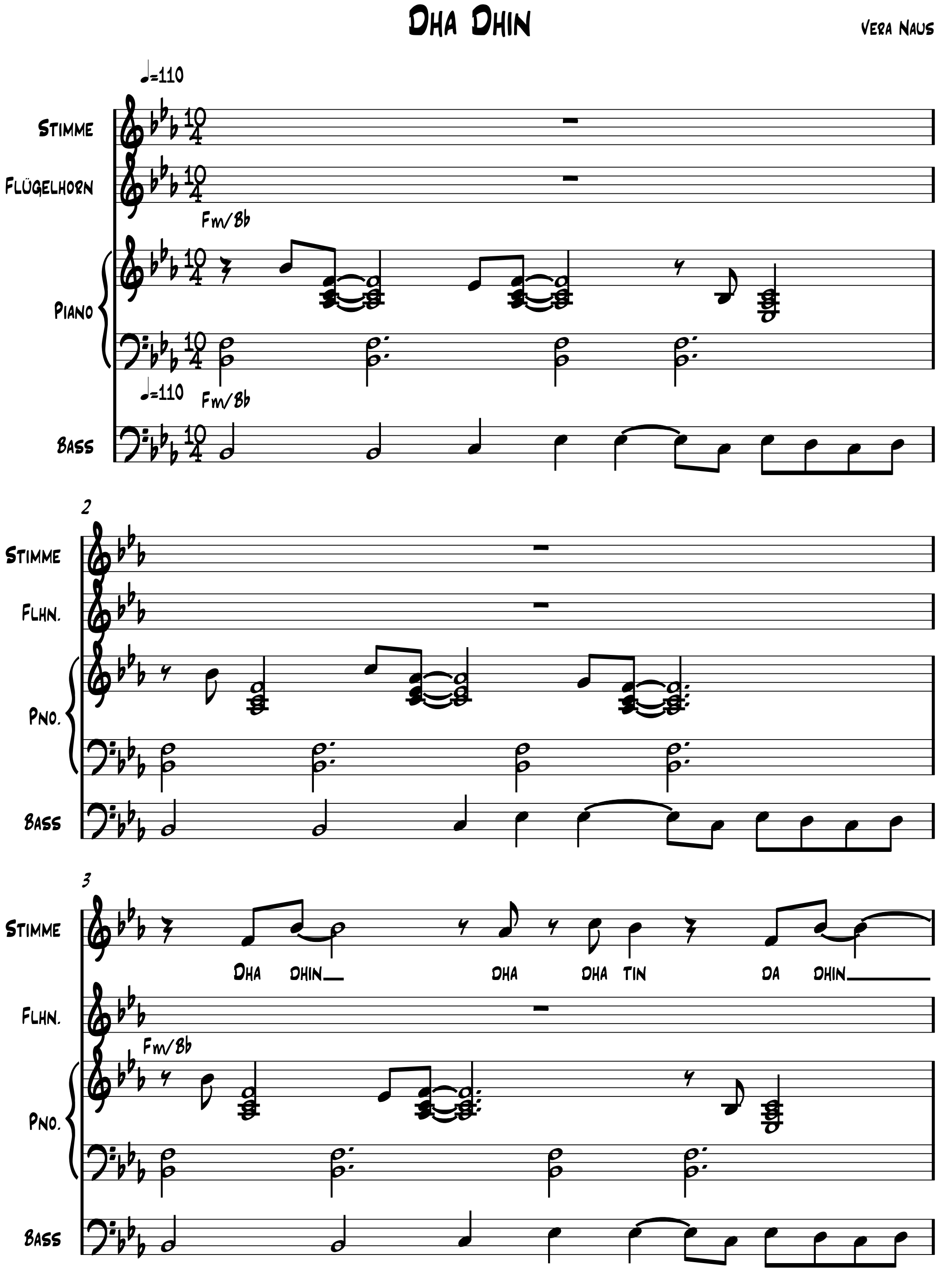
12.2 *Chakradaar* melody

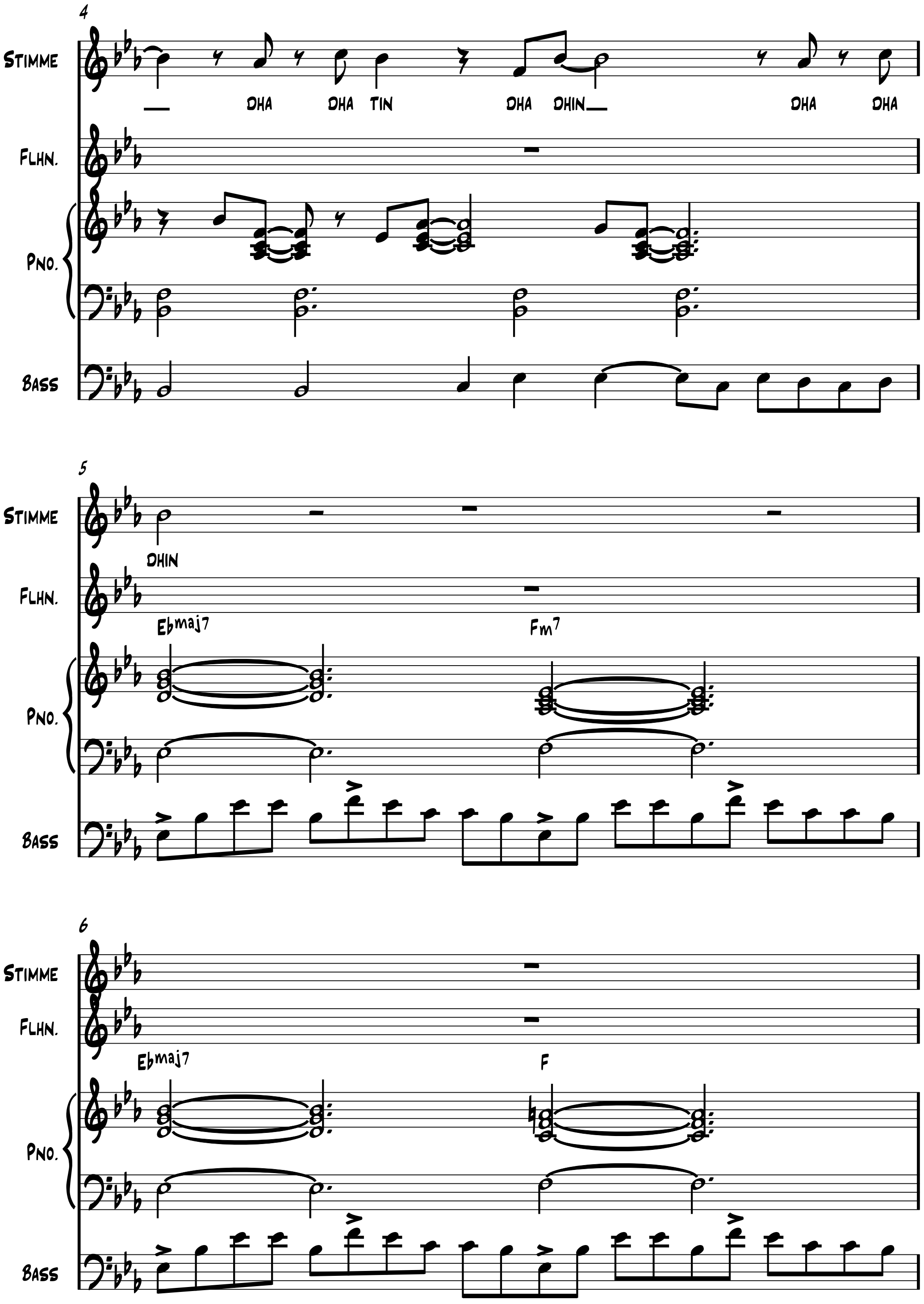

Chakradar
Ebmaj7
Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a
2 Fm/Eb
Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De kran dha Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te de
3 Bb/Eb Am7(b5) D7(b9)
kran Da dhi-re-ki-te Dhi-re-ki te Dha-re-ki te Dha-re-ki te De Kran Dha Dhin - a dhin - a na - ne
4 Gm7
na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a Dhi-re-ki te Dhi-re-ki te Dha-re-ki te
5 C7 Dm7 G7
Dha re ki te de kran dha dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran dha Dhi re ki te Dhi re ki te
6 Cm7 F7
Dha-re-ki-te Dha-re-ki-te De Kran Dha Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te
7 Fm7
Dha dra ka di ki te gi re na ge Dhin a Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran Dha dhi re
8 Bb7
ki-te Dhi re ki te Dha re ki te Dha re ki te De kran Da dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran
9 Ebmaj7
Dha

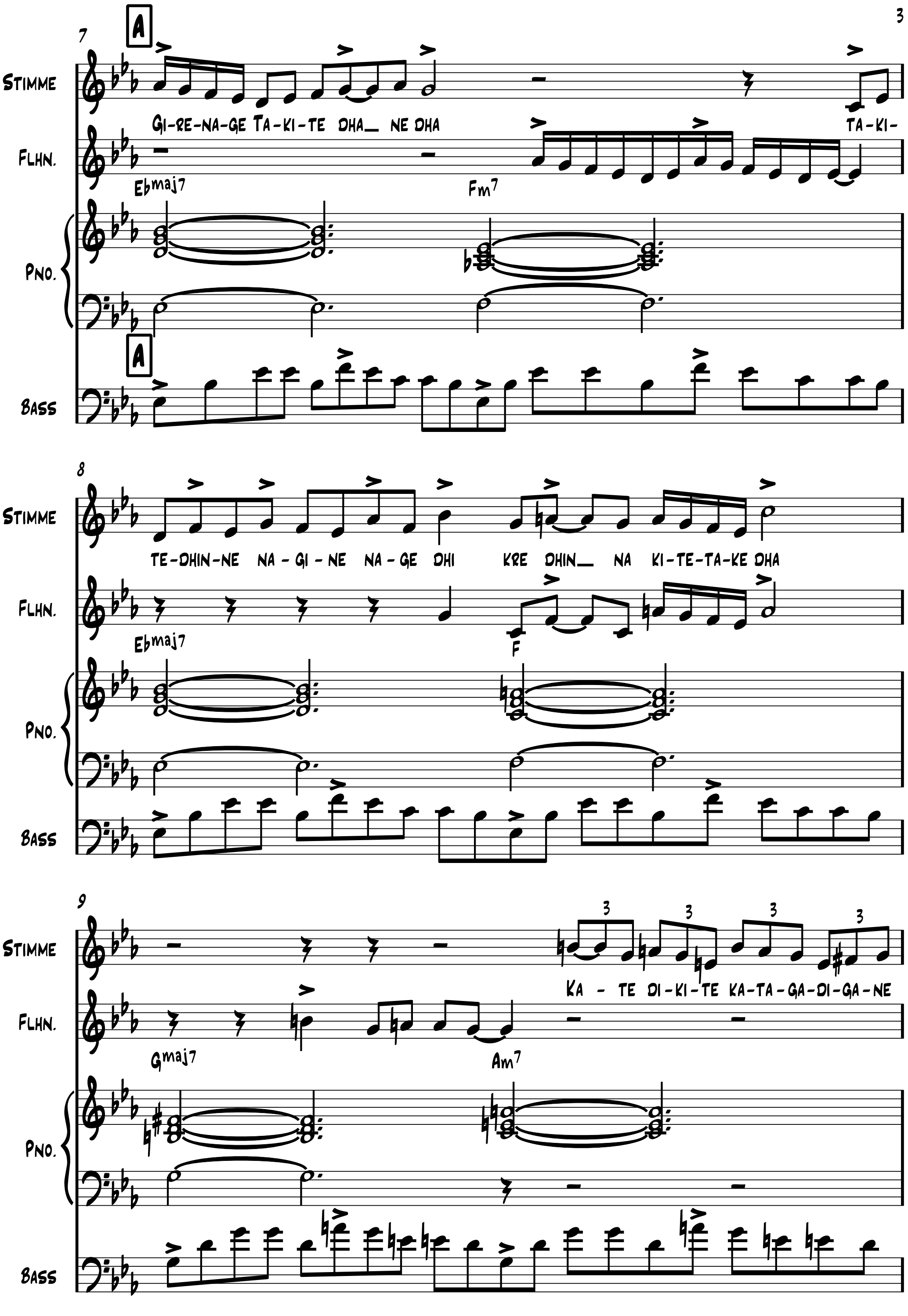
12.3 *Chakradaar* with mutes

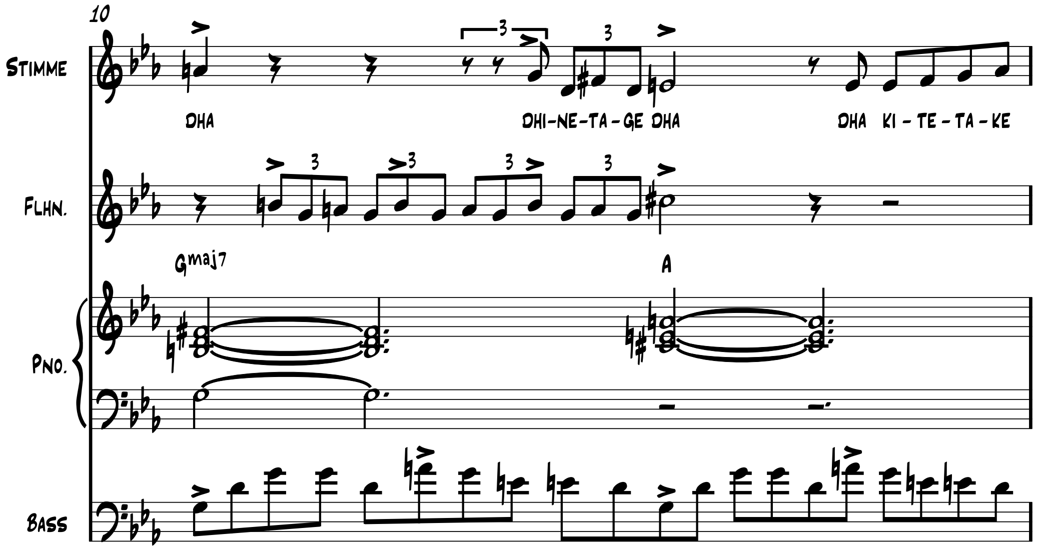

Chakradar
Muted
Ebmaj7
Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a
2
Fm/Eb
Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te Dekrandha Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te de
3
Bb/Eb
Am7(b5)
D7(b9)
kran Da dhi-re-ki-te Dhi-re-ki te Dha-re-ki te Dha-re-ki te De Kran Dha Dhin - a dhin - a na - ne
4
Gm7
na - ne Ta-ki-te Ta-ki-te Dha-dra-ka-di-ki-te gi-re-na-ge Dhin-a Dhi-re-ki te Dhi-re-ki te Dha-re-ki te
5
C7
Dm7
G7
Dha re ki te dekrandha dhi re ki te Dhi re ki te Dha re ki te Dha re ki te DeKrandha Dhi re ki te Dhi re ki te
6
Cm7
F7
Dha-re-ki-te Dha-re-ki-te De Kran Dha Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te
7
Fm7
Dha dra ka di ki te gi re na ge Dhin a Dhi re ki te Dhi re ki te Dha re ki te Dha re ki te De Kran Dha dhi re
8
Bb7
ki-te Dhi re ki te Dha re ki te Dha re ki te Dekran Da dhi re ki te Dhi re ki te Dha re ki te Dha re ki te DeKran
9
Ebmaj7
Dha

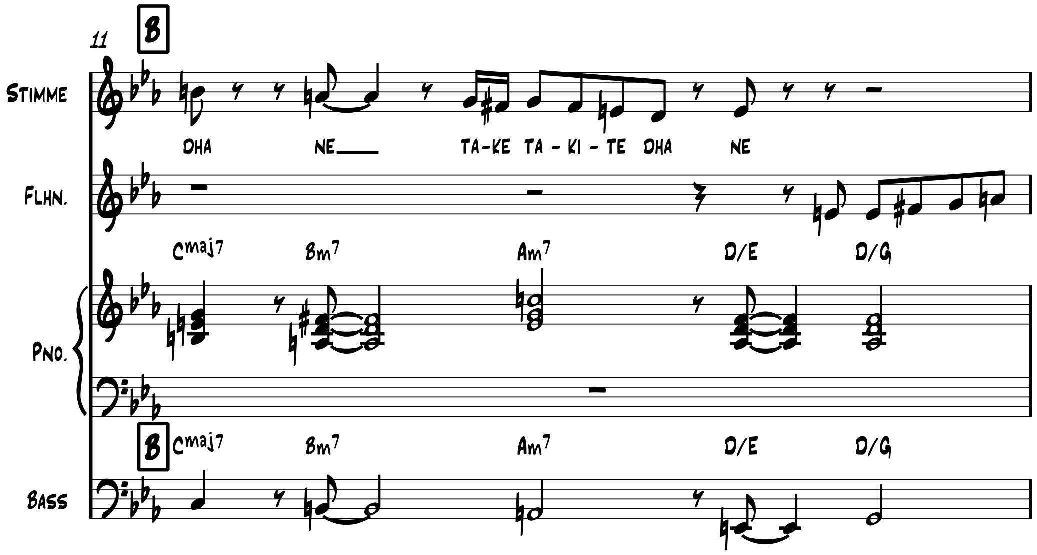
12.4 Score of composition “Dha Dhin”

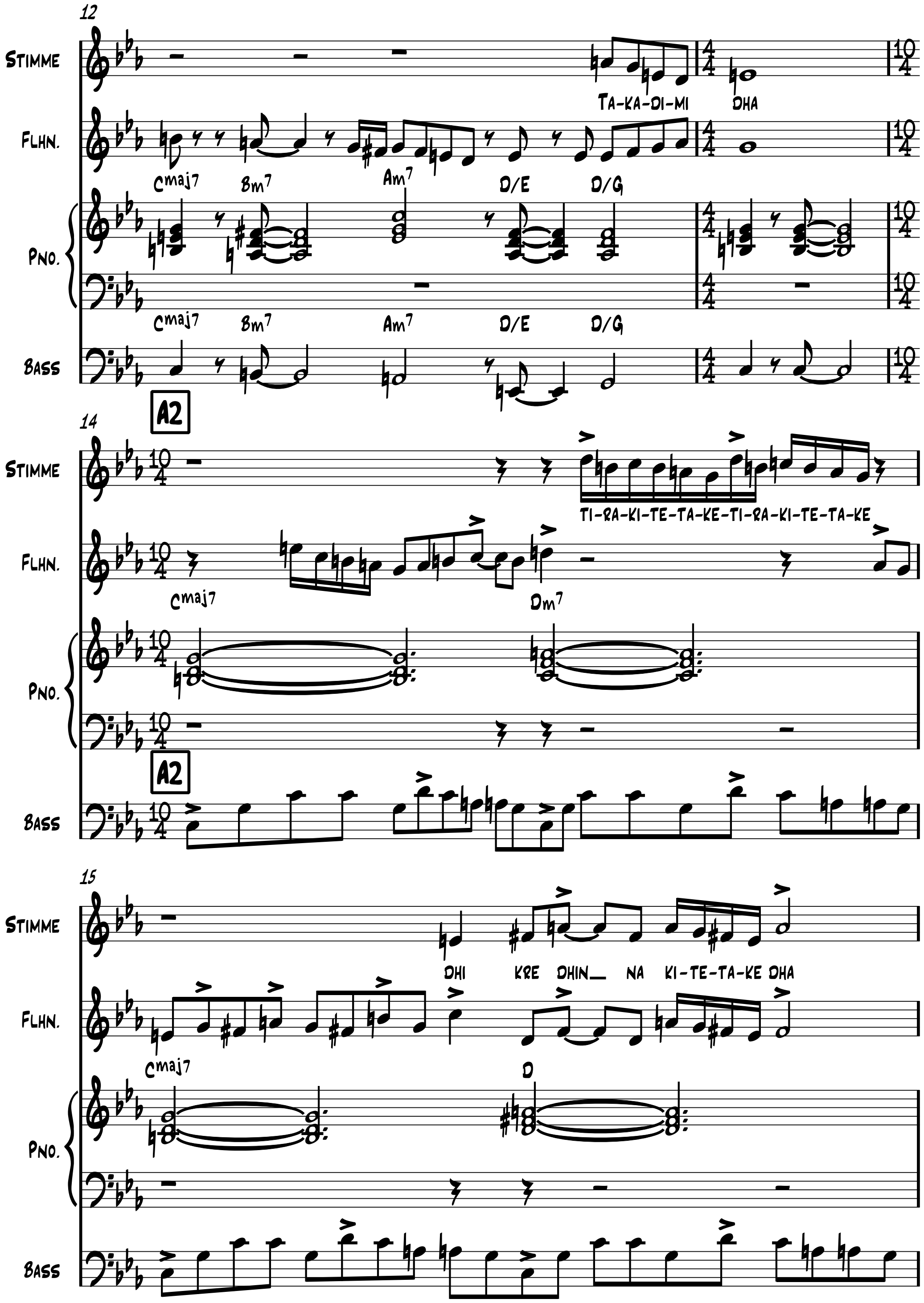

Dha Dhin
Vera Naus
♩=110
Stimme
Flügelhorn
Fm/Bb
Piano
♩=110
Fm/Bb
Bass
2
Stimme
Flhn.
Pno.
Bass
3
Stimme
Dha dhin dha dha tin da dhin
Flhn.
Fm/Bb
Pno.
Bass

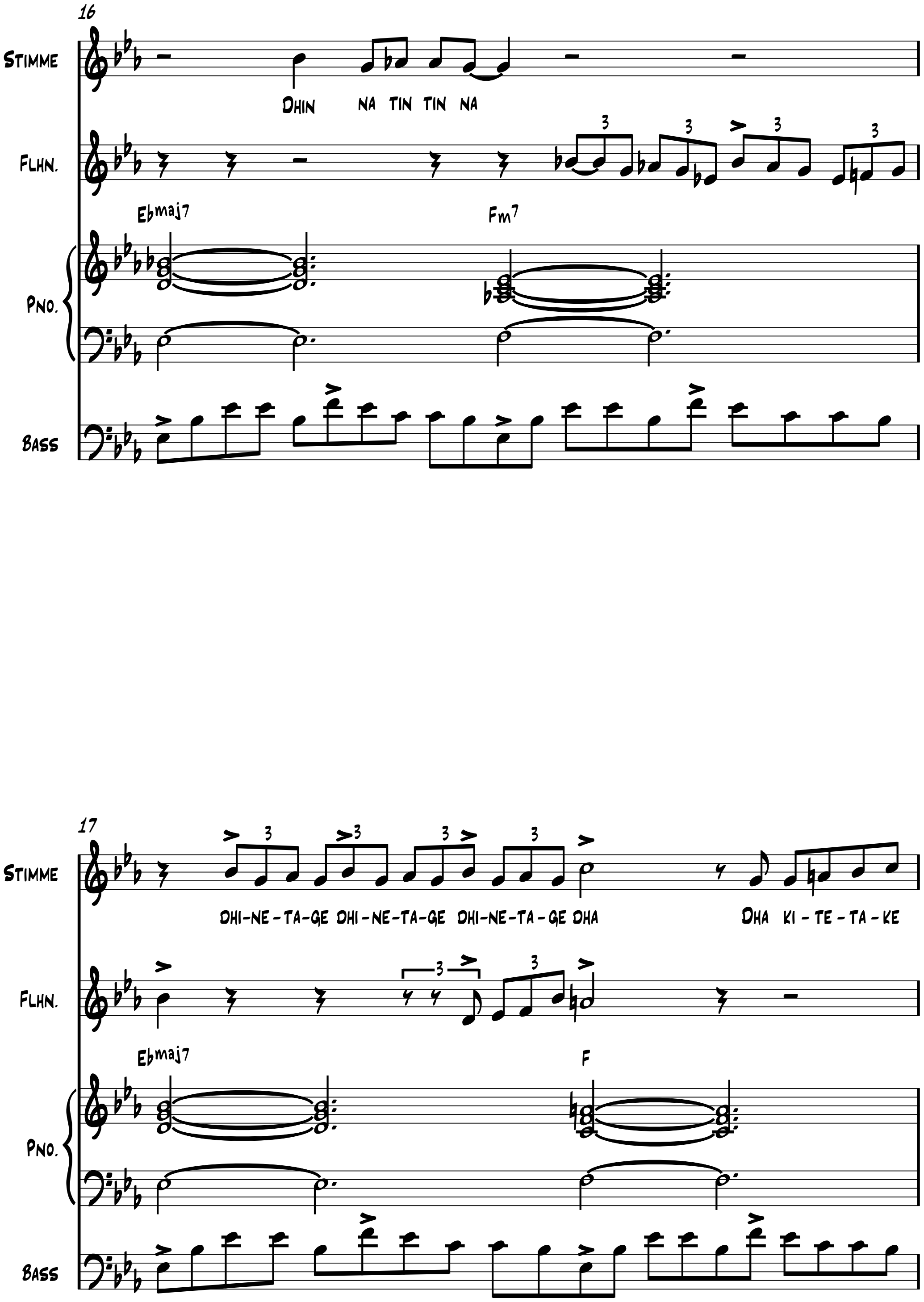

4
Stimme
DHA
DHA
TIN
DHA
DHIN
DHA
DHA
Flhn.
Pno.
Bass
5
Stimme
DHIN
Flhn.
Ebmaj7
Fm7
Pno.
Bass
6
Stimme
Flhn.
Ebmaj7
F
Pno.
Bass

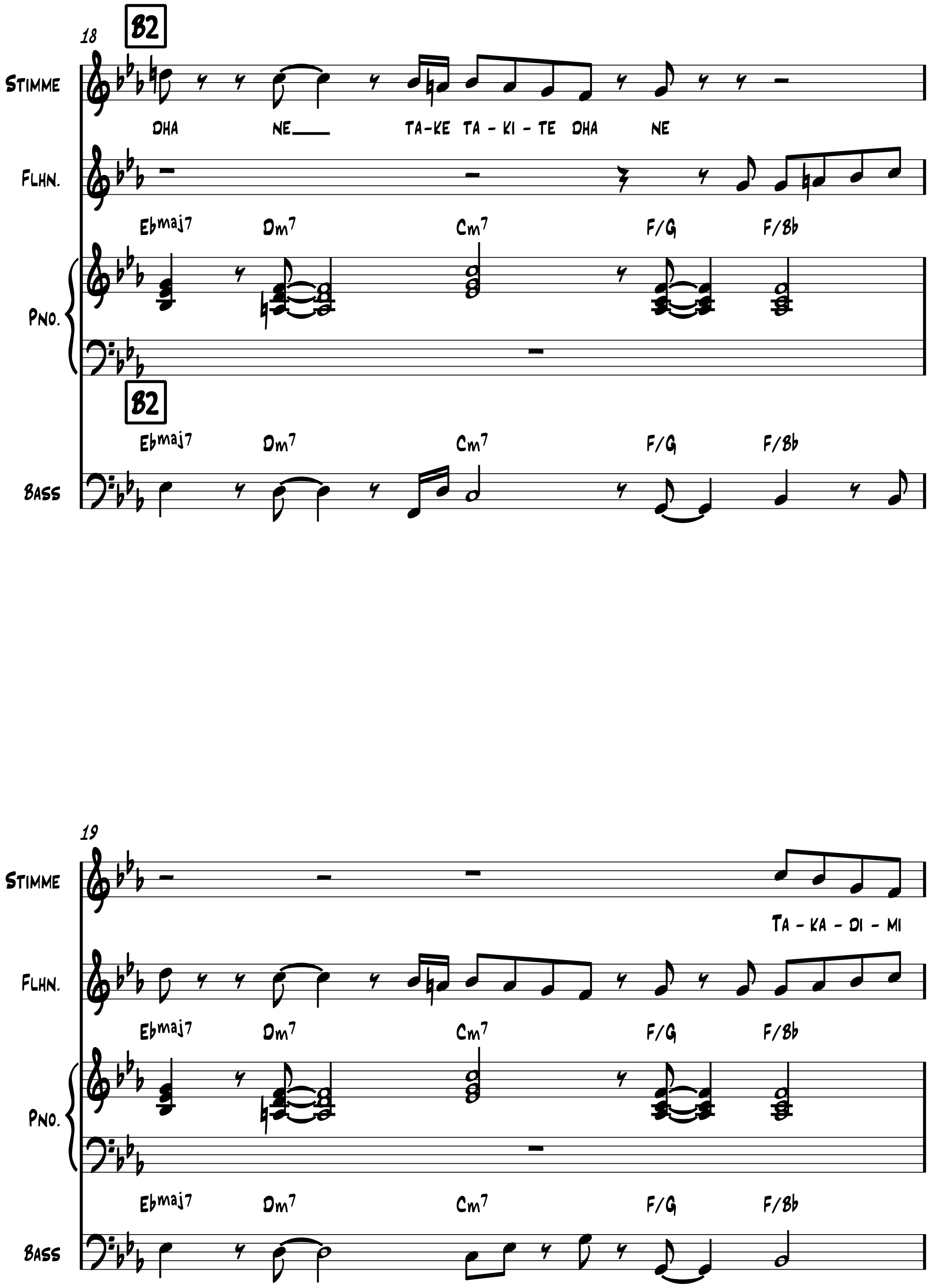

A
7
Stimme
Gi-re-na-ge Ta-ki-te dha_ ne dha
ta-ki-
Flhn.
Ebmaj7
Fm7
Pno.
A
Bass
8
Stimme
te-dhin-ne na-gi-ne na-ge dhi kre dhin_ na ki-te-ta-ke dha
Flhn.
Ebmaj7
F
Pno.
Bass
9
Stimme
3
3
3
3
Ka - te di-ki-te ka-ta-ga-di-ga-ne
Flhn.
Gmaj7
Am7
Pno.
Bass

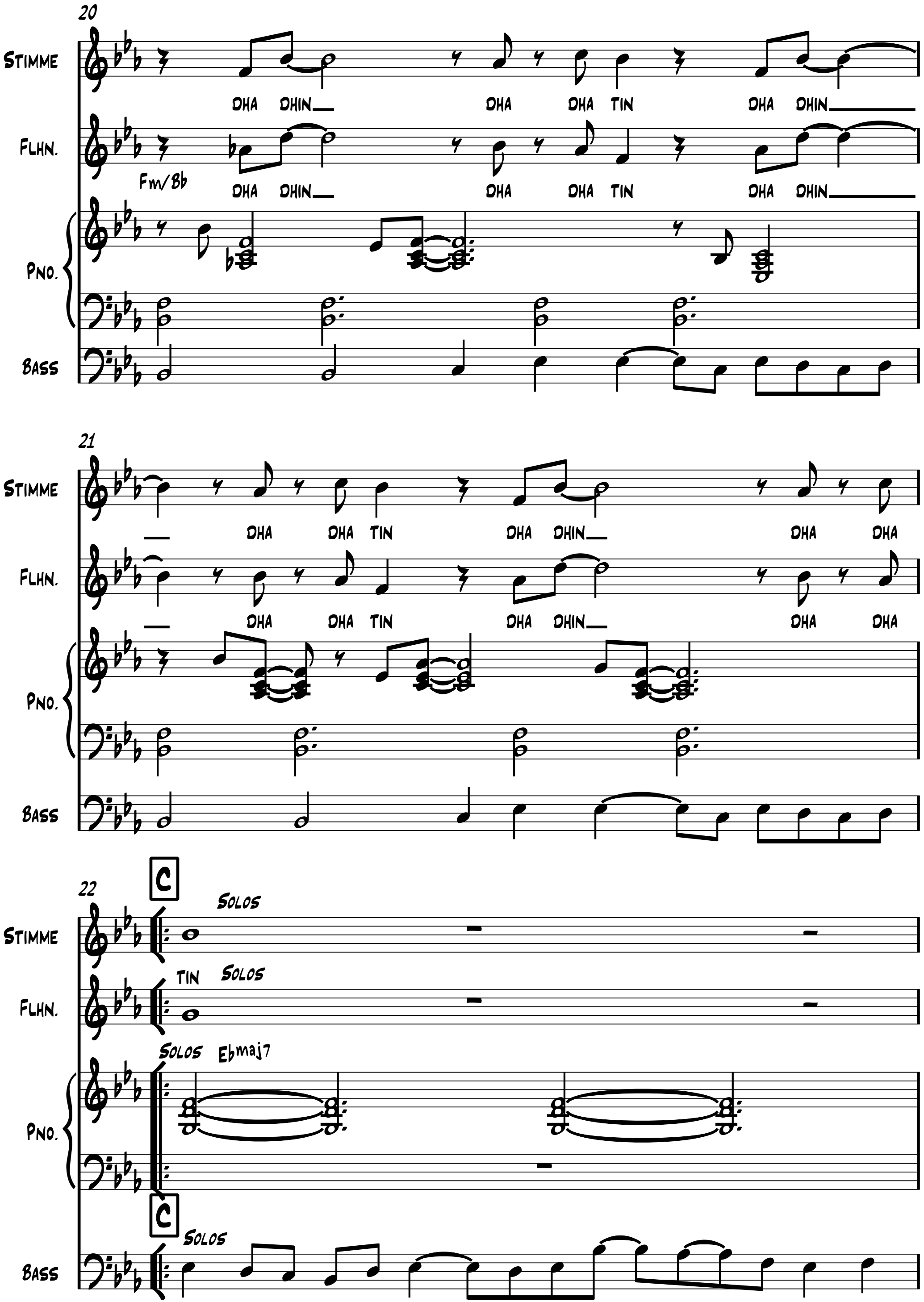

10
Stimme
DHA
DHI-NE-TA-GE DHA
DHA KI-TE-TA-KE
Flhn.
Gmaj7
A
Pno.
Bass
3


11
B
Stimme
DHA
NE
TA-KE TA-KI-TE DHA
NE
Flhn.
Cmaj7
Bm7
Am7
D/E
D/G
Pno.
B
Bass

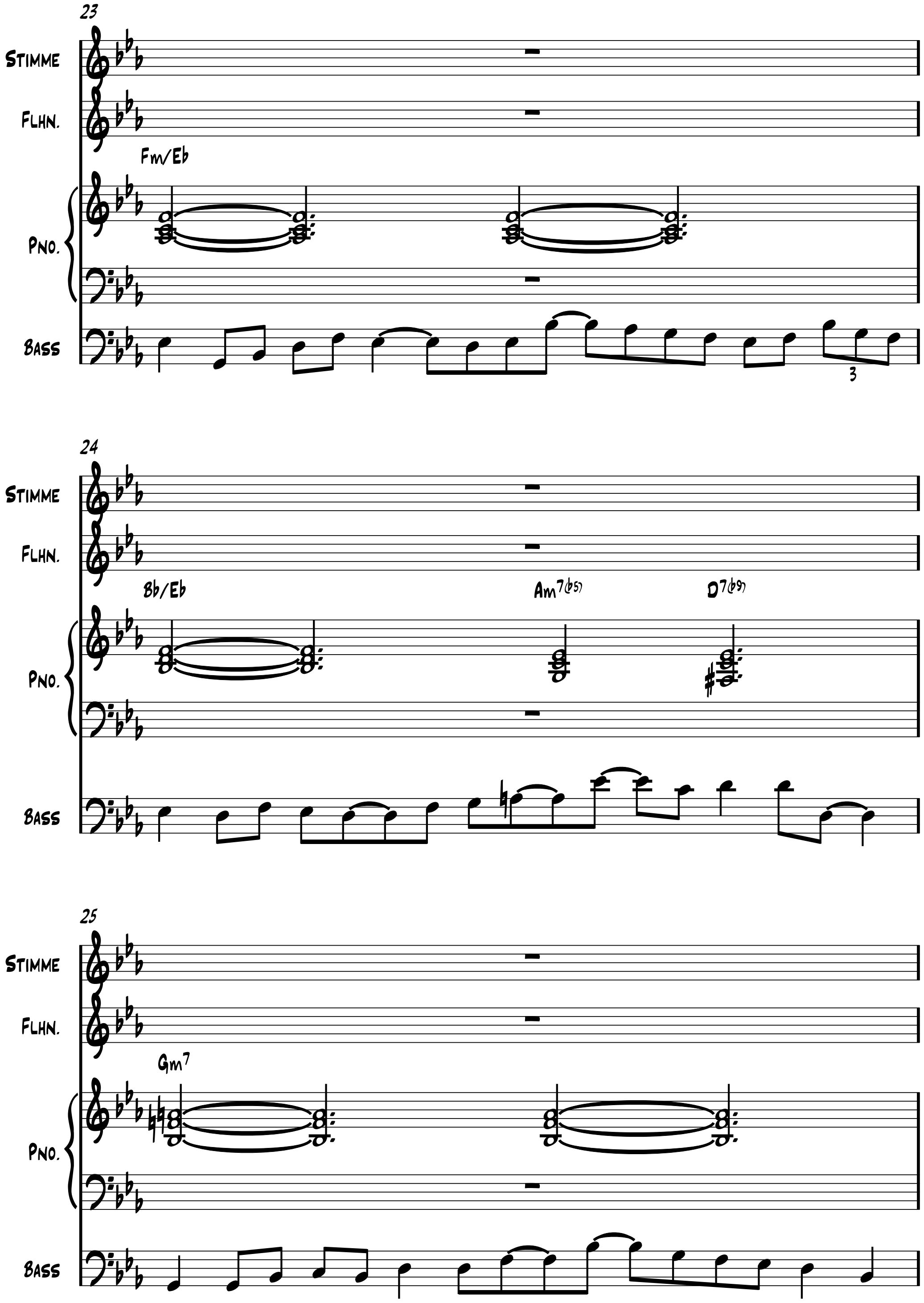

12
Stimme
Ta-ka-di-mi dha
Flhn.
Cmaj7 Bm7 Am7 D/E D/G
Pno.
Cmaj7 Bm7 Am7 D/E D/G
Bass
A2
14
Stimme
Ti-ra-ki-te-ta-ke-ti-ra-ki-te-ta-ke
Flhn.
Cmaj7 Dm7
Pno.
A2
Bass
15
Stimme
Dhi kre dhin_ na ki-te-ta-ke dha
Flhn.
Cmaj7 D
Pno.
Bass

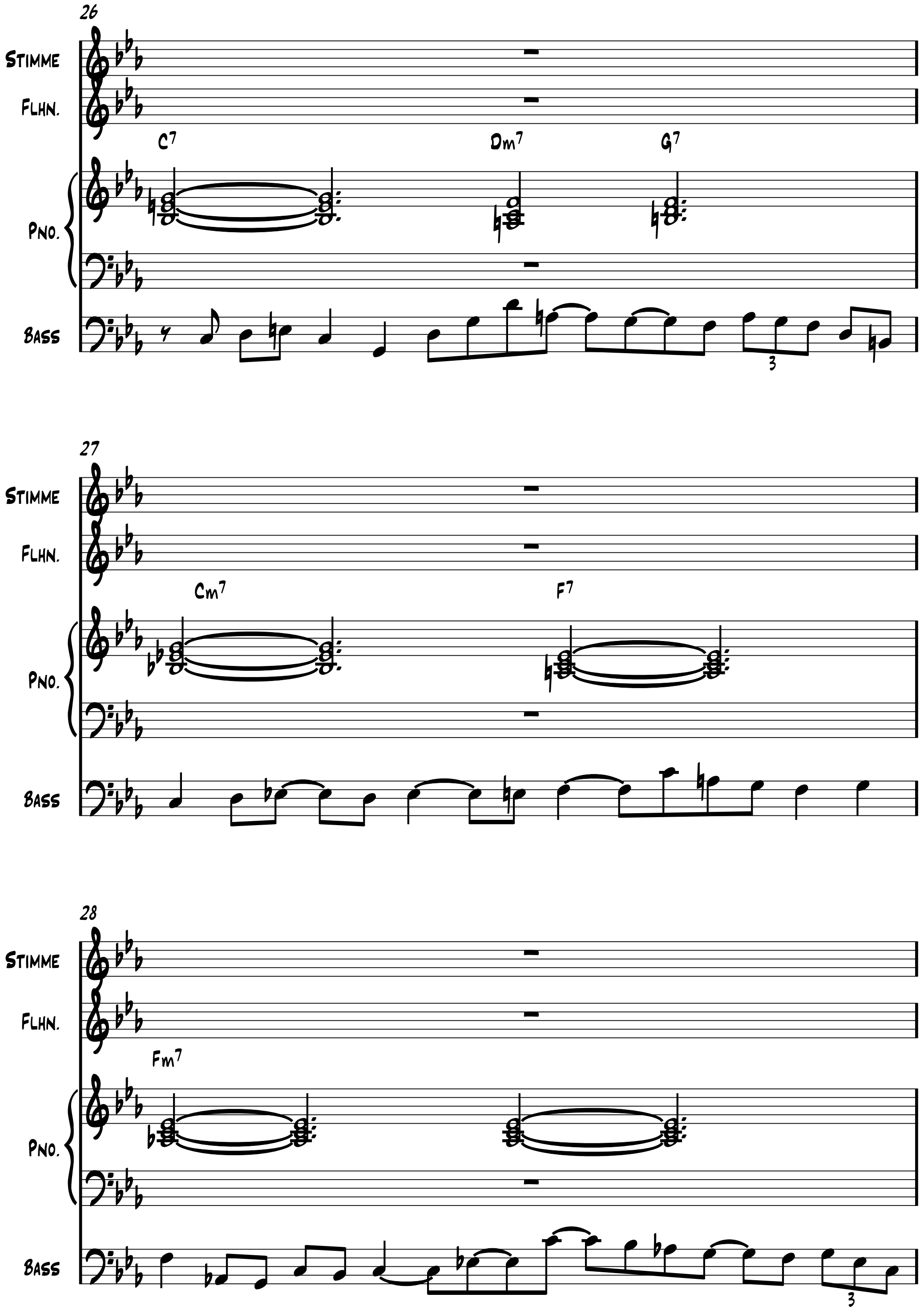

16
Stimme
Dhin na tin tin na
Flhn.
Ebmaj7
Fm7
Pno.
Bass
17
Stimme
Dhi-ne-ta-ge dhi-ne-ta-ge dhi-ne-ta-ge dha
Dha ki-te-ta-ke
Flhn.
Ebmaj7
F
Pno.
Bass

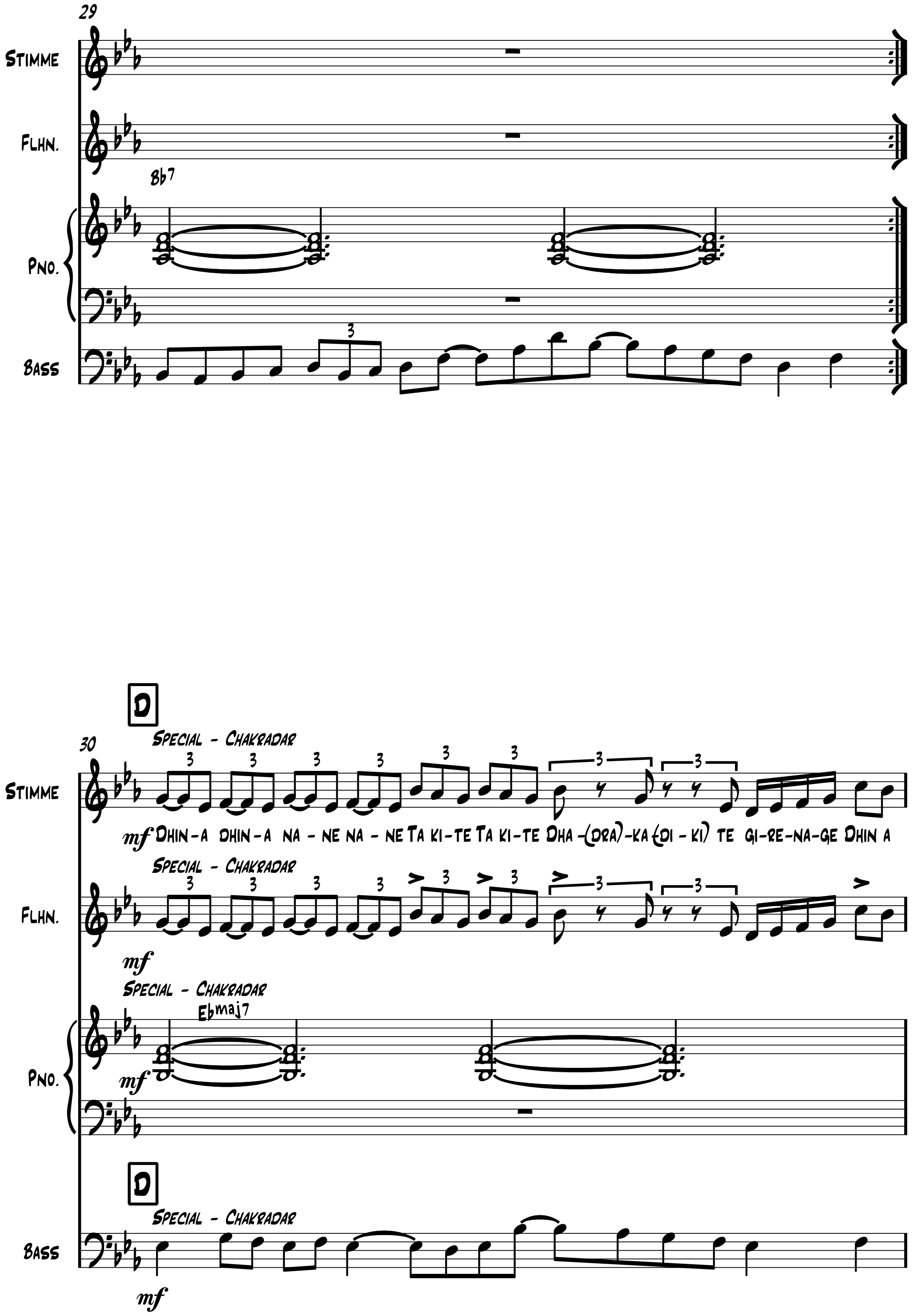

18
B2
Stimme
DHA NE TA-KE TA-KI-TE DHA NE
Flhn.
Ebmaj7 Dm7 Cm7 F/G F/Bb
Pno.
B2
Ebmaj7 Dm7 Cm7 F/G F/Bb
Bass
19
Stimme
TA-KA-DI-MI
Flhn.
Ebmaj7 Dm7 Cm7 F/G F/Bb
Pno.
Ebmaj7 Dm7 Cm7 F/G F/Bb
Bass

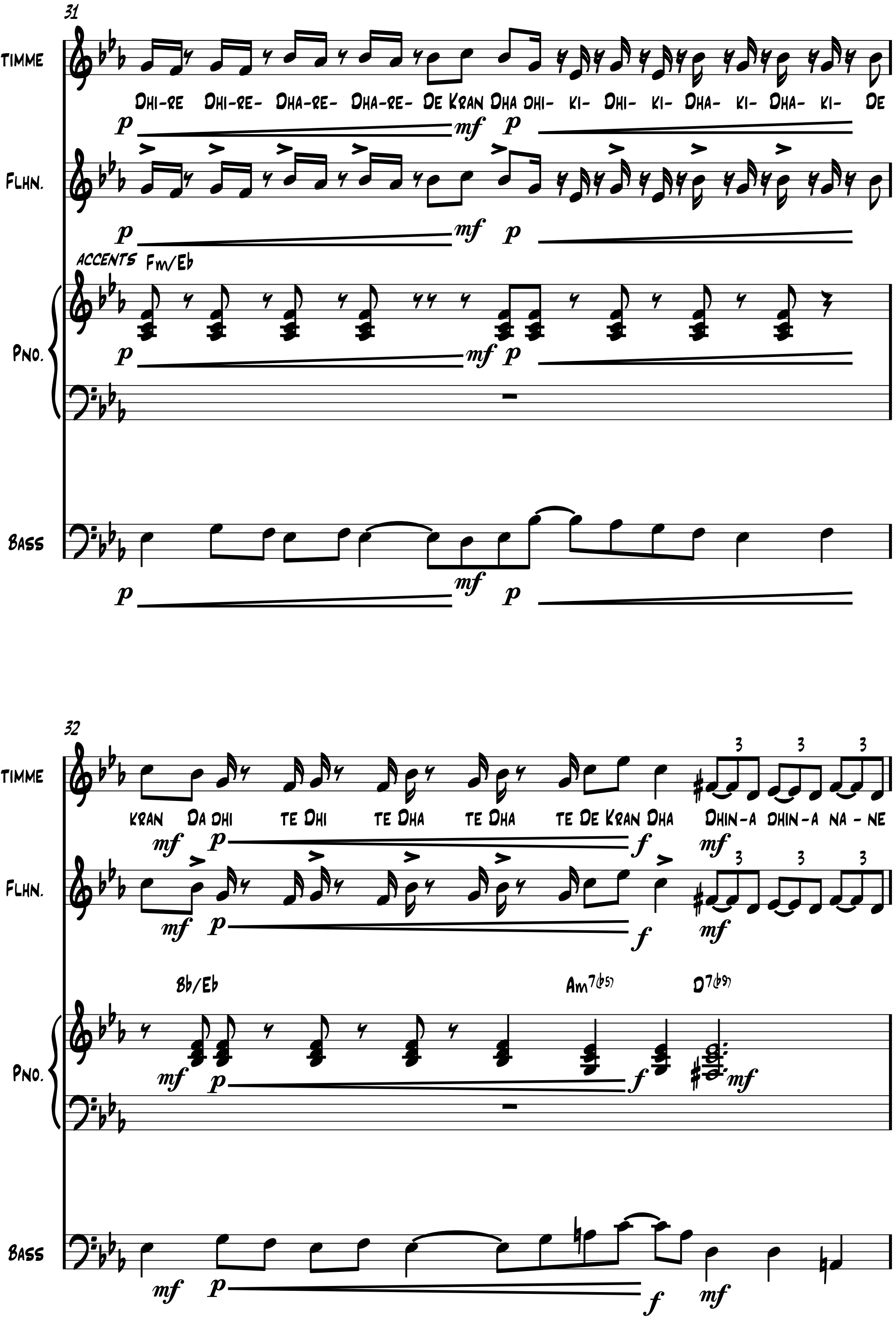

20
Stimme
Dha Dhin
Dha Dha Tin
Dha Dhin
Flhn.
Dha Dhin
Dha Dha Tin
Dha Dhin
Fm/Bb
Pno.
Bass
21
Stimme
Dha Dha Tin
Dha Dhin
Dha Dha
Flhn.
Dha Dha Tin
Dha Dhin
Dha Dha
Pno.
Bass
22
C
Stimme
Solos
Flhn.
Tin
Solos
Solos
Ebmaj7
Pno.
C
Bass
Solos

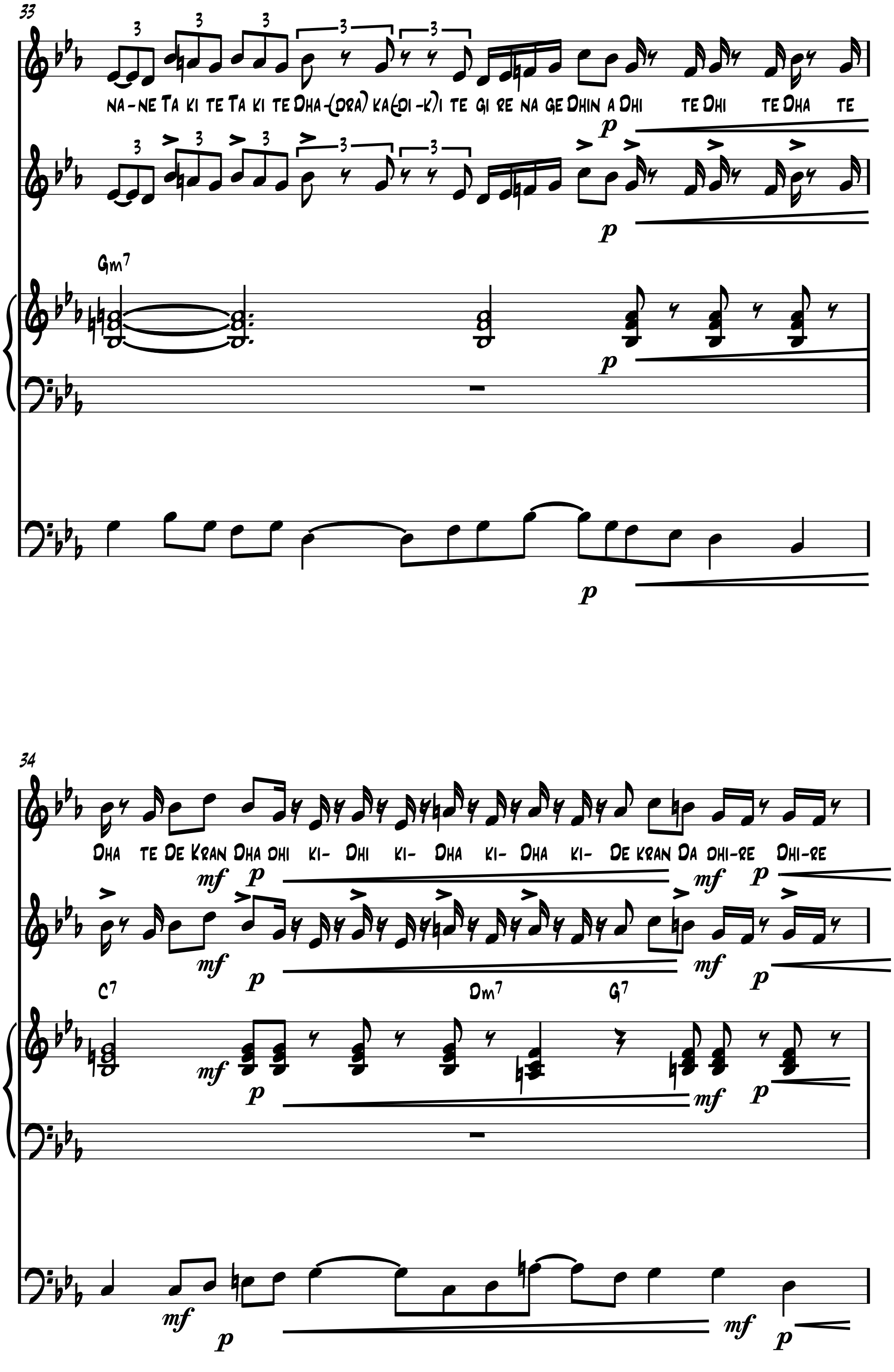
Chose your own bass pattern, but stick to the taali-Khali

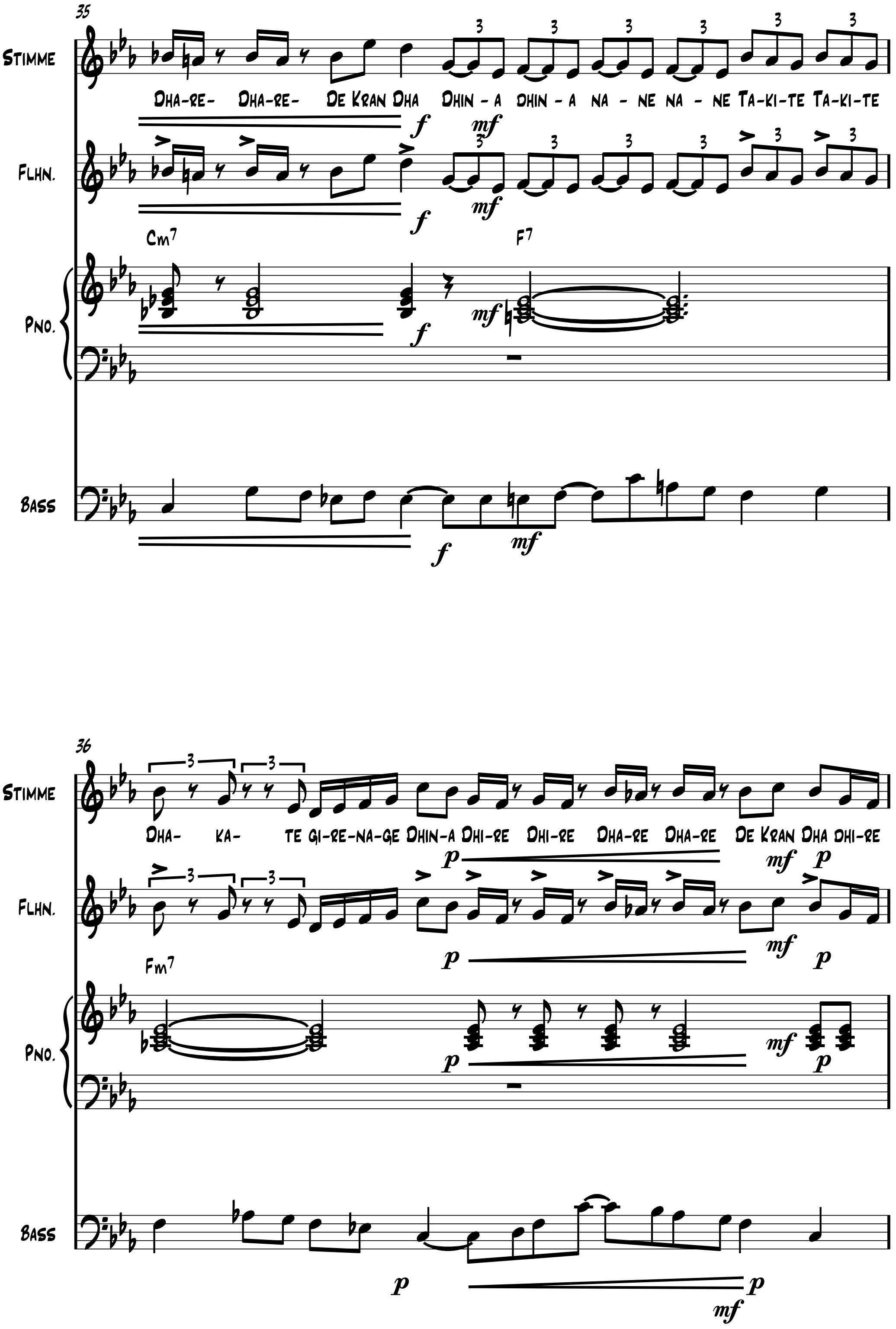

23
Stimme
Flhn.
Fm/Eb
Pno.
Bass
3
24
Stimme
Flhn.
Bb/Eb
Am7(b5)
D7(b9)
Pno.
Bass
25
Stimme
Flhn.
Gm7
Pno.
Bass

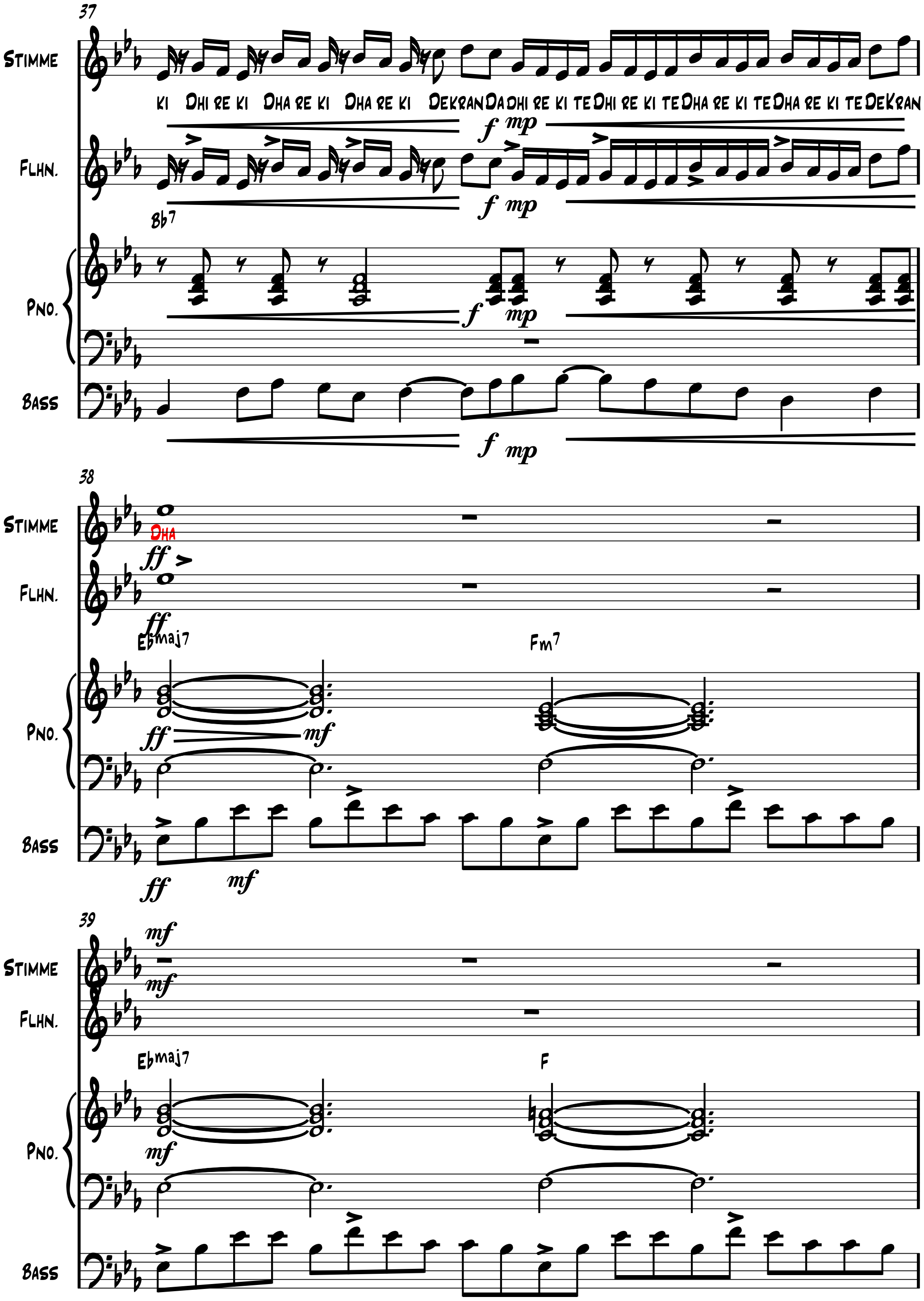

26
Stimme
Flhn.
C7
Dm7
G7
Pno.
Bass
3
27
Stimme
Flhn.
Cm7
F7
Pno.
Bass
28
Stimme
Flhn.
Fm7
Pno.
Bass
3

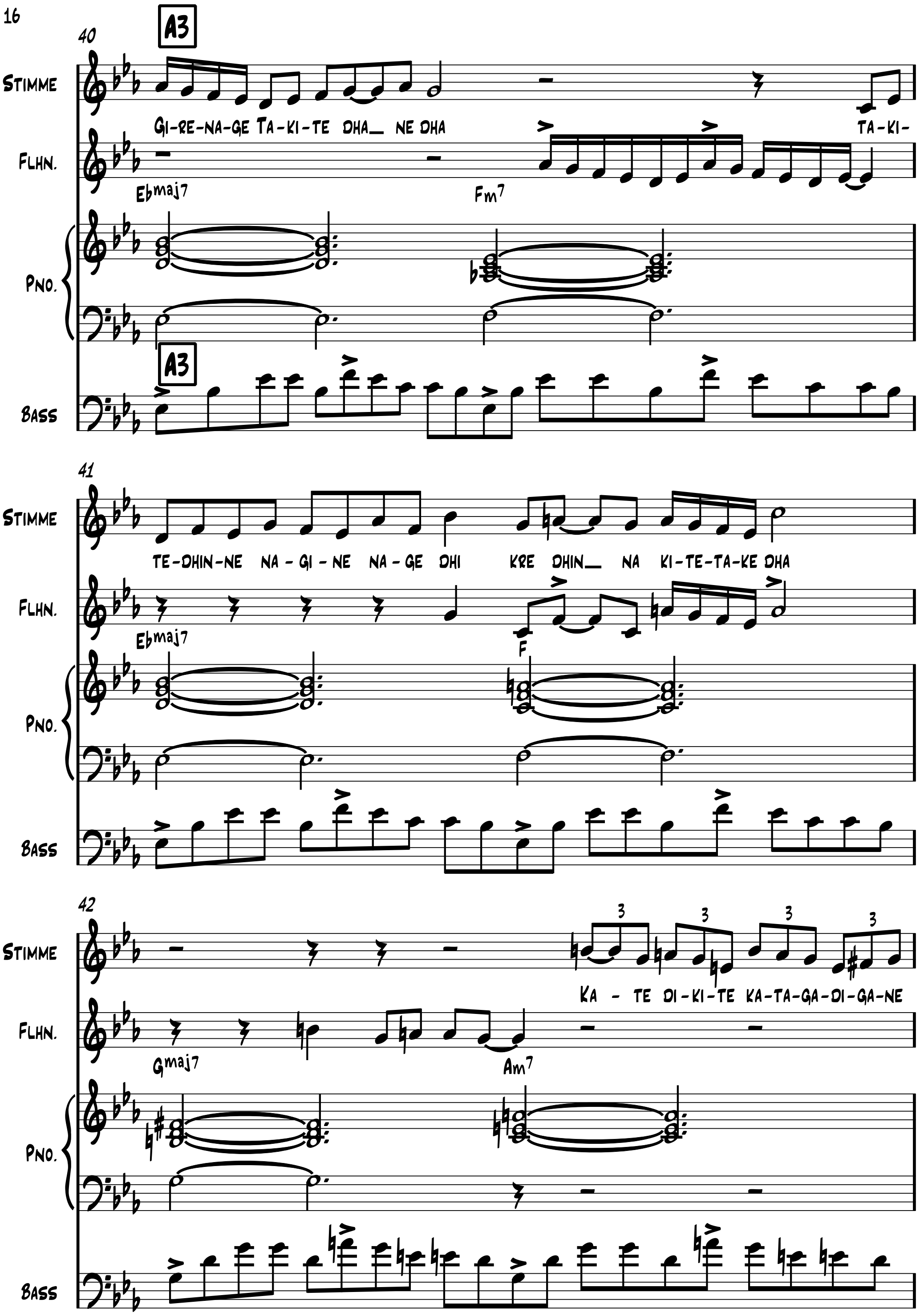

29
Stimme
Flhn.
Bb7
Pno.
Bass
3
D
Special - Chakradar
30
mf
Dhin-a dhin-a na-ne na-ne Ta ki-te Ta ki-te Dha-(dra)-ka(di-ki) te gi-re-na-ge Dhin a
Ebmaj7

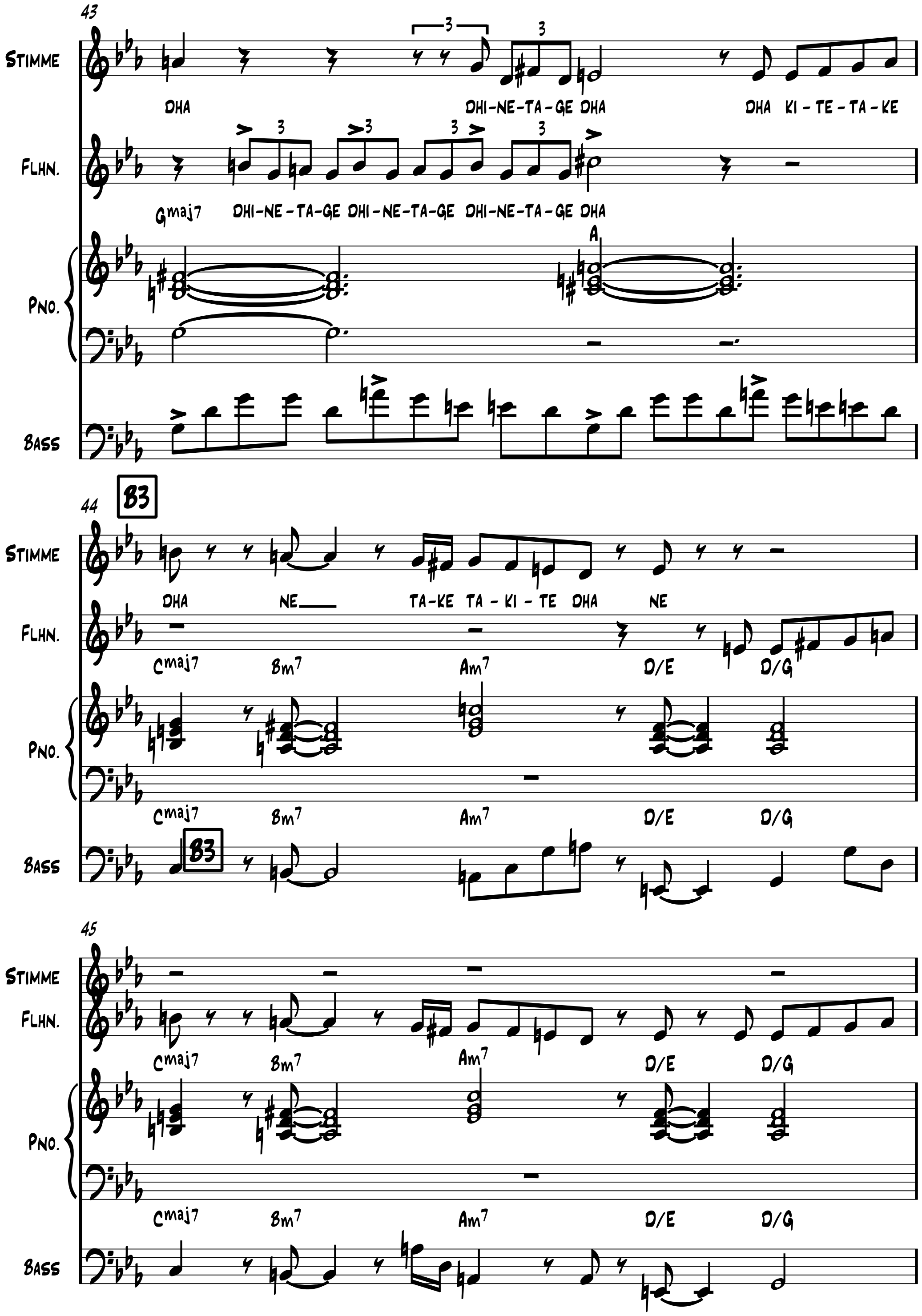

31
Stimme
Dhi-re Dhi-re- Dha-re- Dha-re- De Kran Dha dhi- ki- Dhi- ki- Dha- ki- Dha- ki- De
Flhn.
ACCENTS
Fm/Eb
Pno.
Bass
32
Stimme
kran Da dhi te Dhi te Dha te Dha te De Kran Dha Dhin-a dhin-a na - ne
Flhn.
Bb/Eb
Am7(b5)
D7(b9)
Pno.
Bass

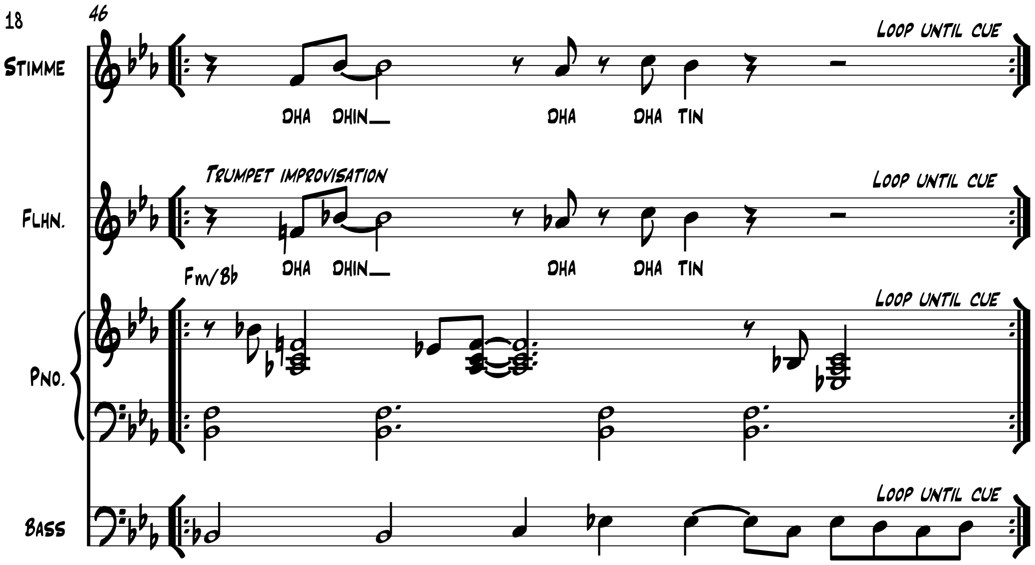

33
Stimme
na-ne Ta ki te Ta ki te Dha-(dra) ka(di-k)i te gi re na ge Dhin a Dhi te Dhi te Dha te
Flhn.
Gm7
Pno.
Bass
p
34
Dha te De Kran Dha dhi ki- Dhi ki- Dha ki- Dha ki- De kran Da dhi-re Dhi-re
mf
C7
Dm7
G7

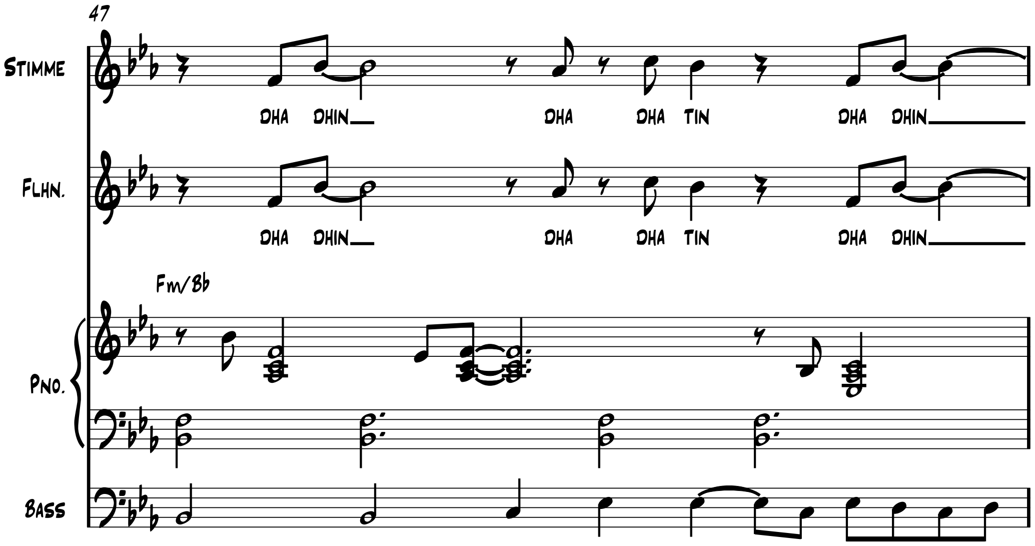

35
Stimme
Dha-re- Dha-re- De Kran Dha Dhin - a dhin - a na - ne na - ne Ta-ki-te Ta-ki-te
Flhn.
Cm7
F7
Pno.
Bass
36
Stimme
Dha- ka- te gi-re-na-ge Dhin-a Dhi-re Dhi-re Dha-re Dha-re De Kran Dha dhi-re
Flhn.
Fm7
Pno.
Bass

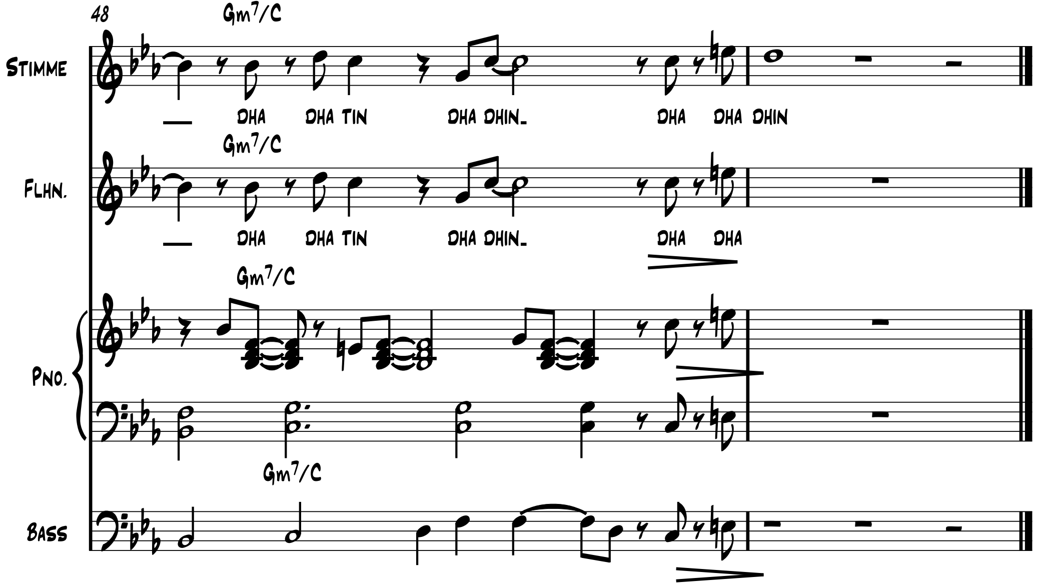

37
Stimme
ki Dhi re ki Dha re ki Dha re ki Dekran Da dhi re ki te Dhi re ki te Dha re ki te Dha re ki te Dekran
f mp
Flhn.
f mp
Bb7
Pno.
f mp
Bass
f mp
38
Stimme
Dha
ff
Flhn.
ff
Ebmaj7
Fm7
Pno.
ff mf
Bass
ff mf
39
Stimme
mf
Flhn.
mf
Ebmaj7
F
Pno.
mf
Bass


40
A3
Stimme
Gi-re-na-ge Ta-ki-te dha_ ne dha
Ta-ki-
Flhn.
Ebmaj7
Fm7
Pno.
A3
Bass
41
Stimme
te-dhin-ne na - gi - ne na - ge dhi kre dhin_ na ki-te-ta-ke dha
Flhn.
Ebmaj7
F
Pno.
Bass
42
Stimme
3
3
3
3
Ka - te di-ki-te ka-ta-ga-di-ga-ne
Flhn.
Gmaj7
Am7
Pno.
Bass


43
Stimme
DHA
DHI-NE-TA-GE DHA
DHA KI-TE-TA-KE
Flhn.
Gmaj7
DHI-NE-TA-GE DHI-NE-TA-GE DHI-NE-TA-GE DHA
A
Pno.
Bass
44
B3
Stimme
DHA
NE
TA-KE TA-KI-TE DHA
NE
Flhn.
Cmaj7
Bm7
Am7
D/E
D/G
Pno.
Cmaj7
Bm7
Am7
D/E
D/G
Bass
B3
45
Stimme
Flhn.
Cmaj7
Bm7
Am7
D/E
D/G
Pno.
Cmaj7
Bm7
Am7
D/E
D/G
Bass


46
Stimme
Flhn.
Pno.
Bass
Loop until cue
Trumpet improvisation
Fm/Bb
DHA DHIN DHA DHA TIN
DHA DHIN DHA DHA TIN

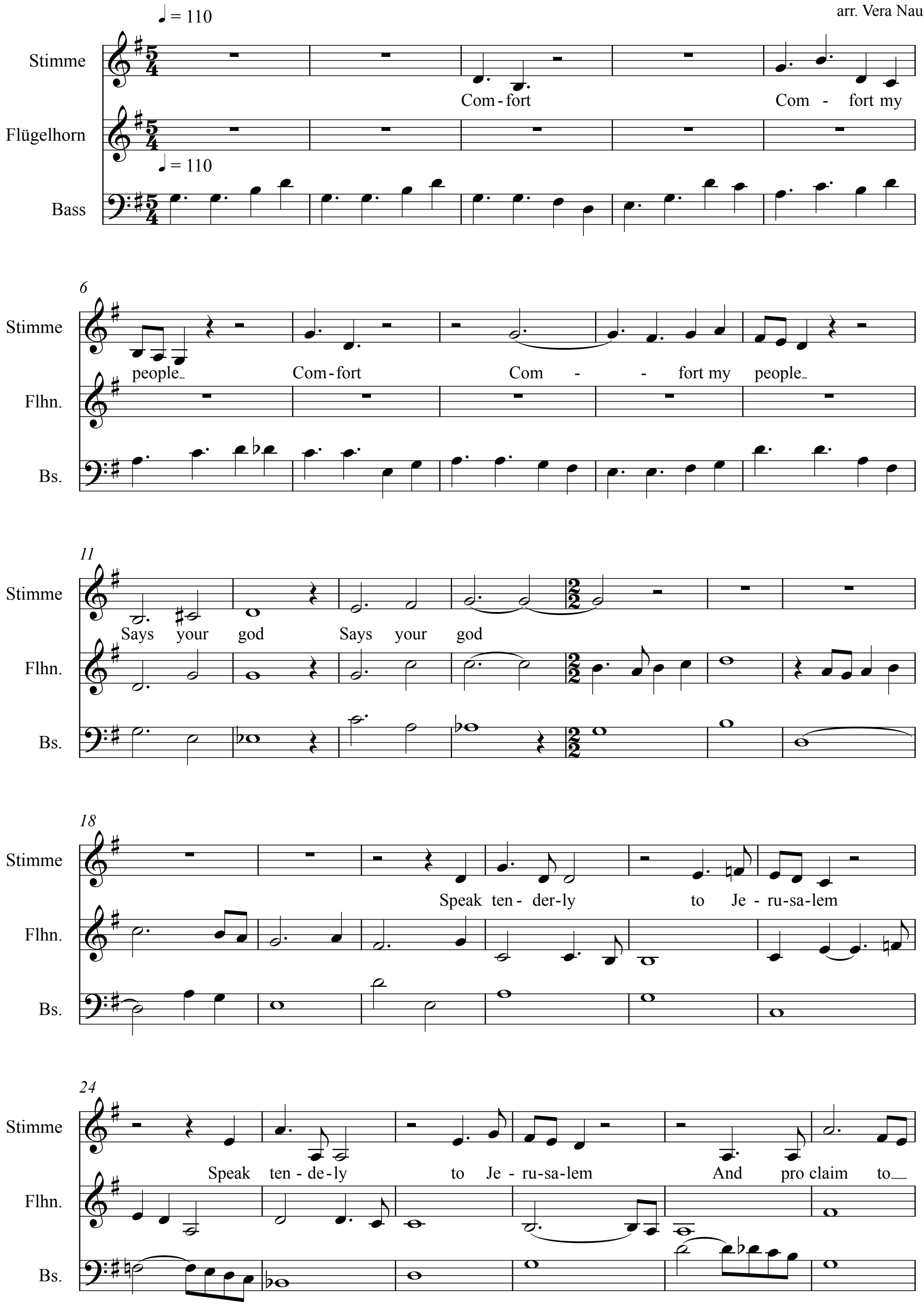

47
Stimme
Flhn.
Pno.
Bass
Fm/Bb
DHA DHIN DHA DHA TIN DHA DHIN
DHA DHIN DHA DHA TIN DHA DHIN


48
Gm⁷/C
Stimme
DHA DHA TIN DHA DHIN_ DHA DHA DHIN
Flhn.
DHA DHA TIN DHA DHIN_ DHA DHA
Pno.
Bass

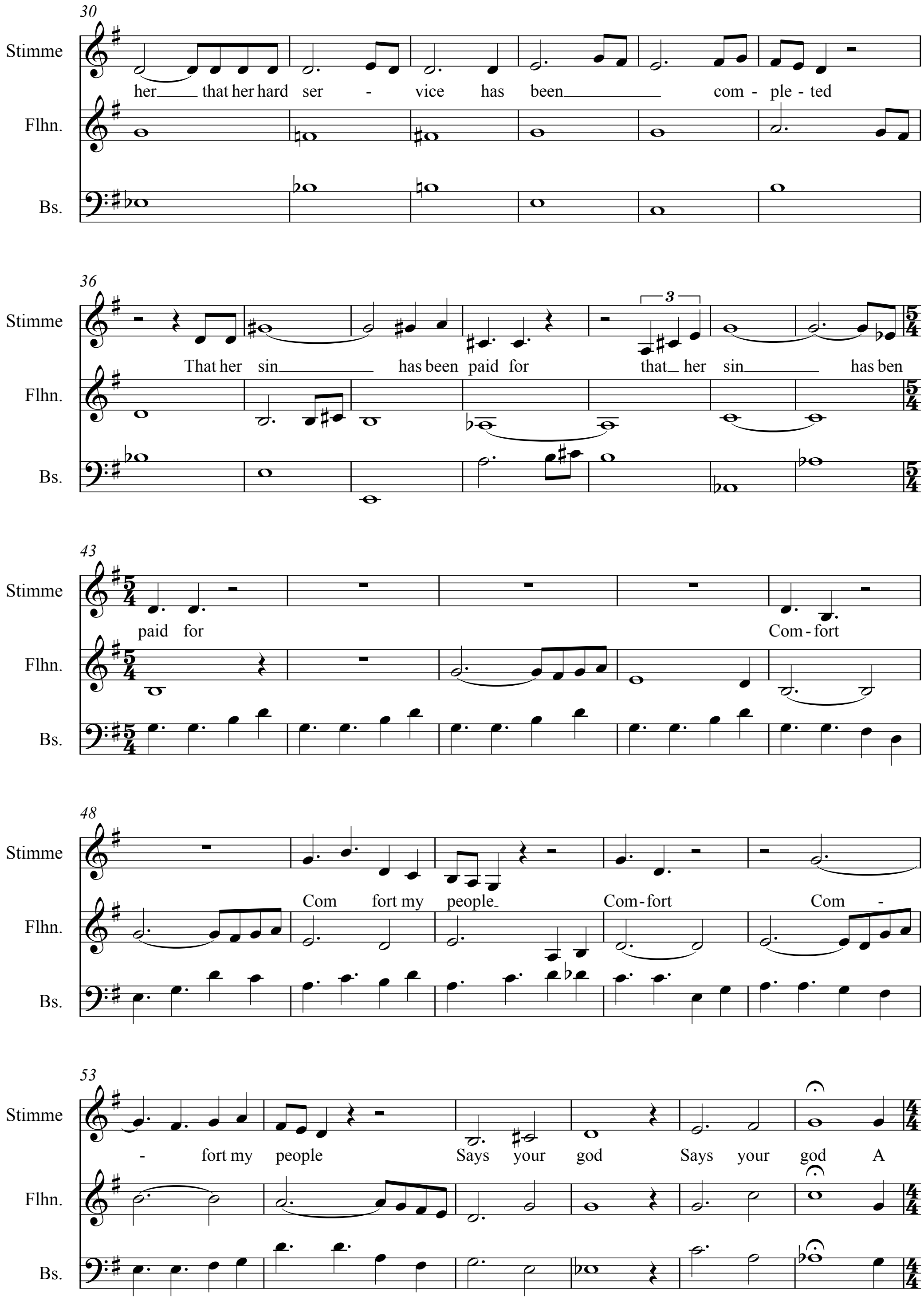
12.5 Score of arrangement “Comfort Ye”

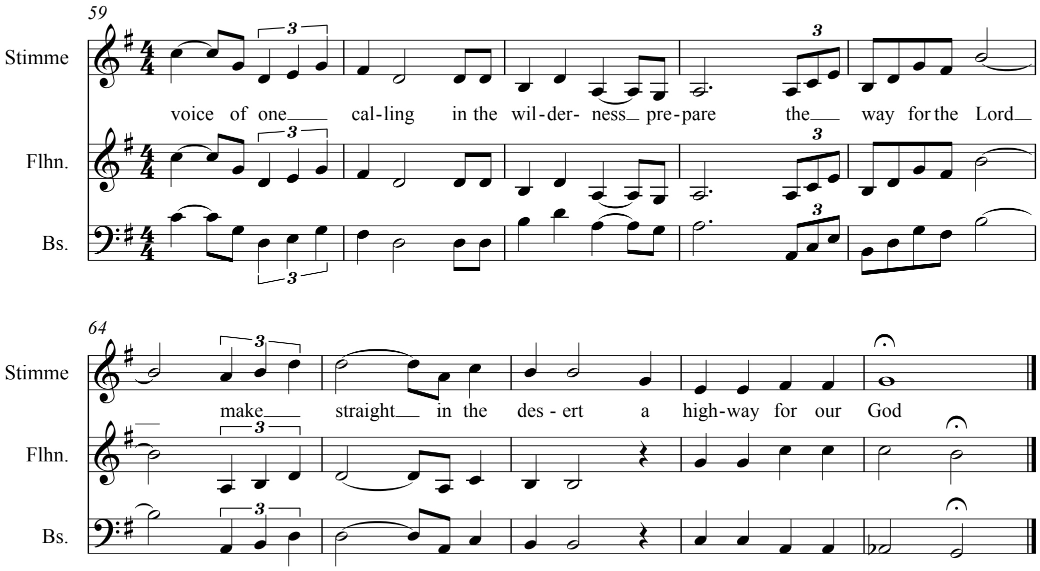
Comfort Ye

G.F. Händel
arr. Vera Naus


♩ = 110
Stimme
Flügelhorn
Bass
Com - fort
Com - fort my
6
people
Com - fort
Com - - fort my
people
Flhn.
Bs.
11
Says your god
Says your god
18
Speak ten - der - ly
to Je - ru - sa - lem
24
Speak ten - de - ly
to Je - ru - sa - lem
And pro claim to

Copyright © Vera Naus


30
Stimme
Flhn.
Bs.
her that her hard ser - vice has been com - ple - ted
36
3
That her sin has been paid for that her sin has ben
43
paid for Com - fort
48
Com fort my people Com - fort Com -
53
- fort my people Says your god Says your god A

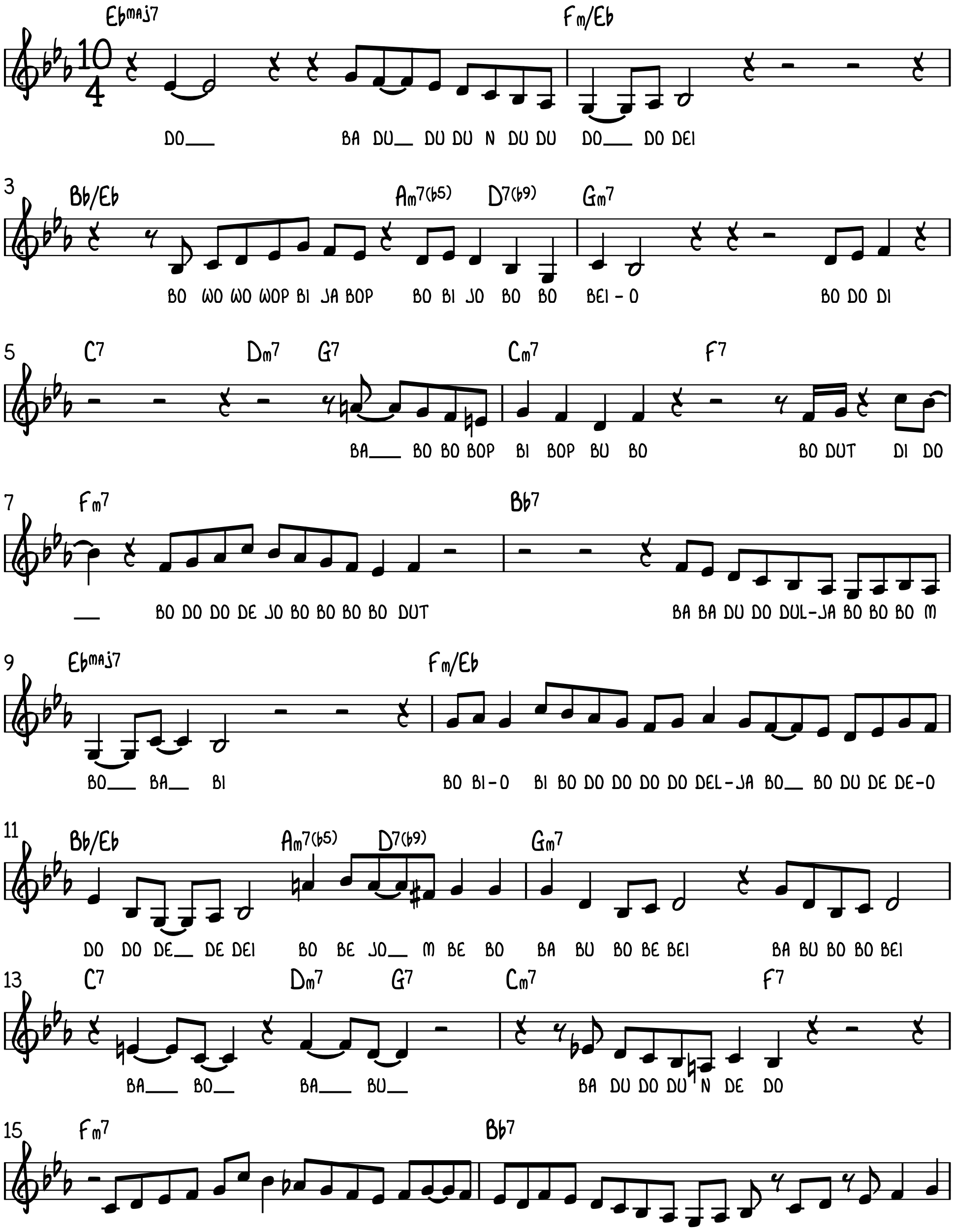

59
Stimme
Flhn.
Bs.
voice of one calling in the wil-der-ness prepare the way for the Lord
64
make straight in the des-ert a high-way for our God

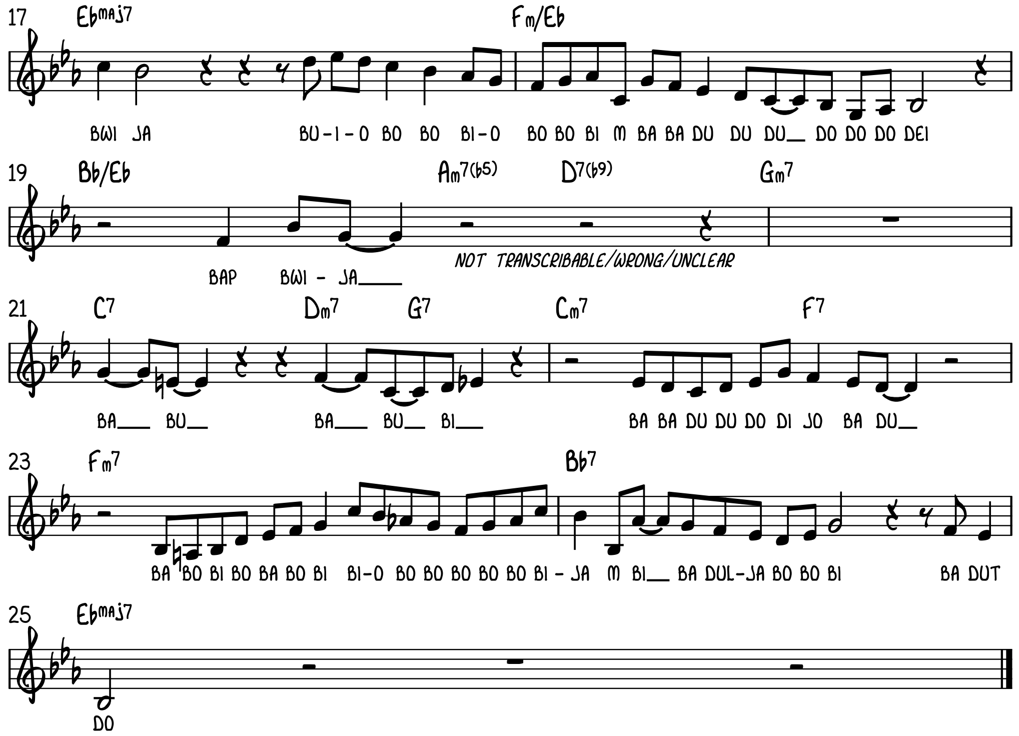
13. Appendix D – Third intervention cycle

13.1 Transcription solo before

a) Without notes

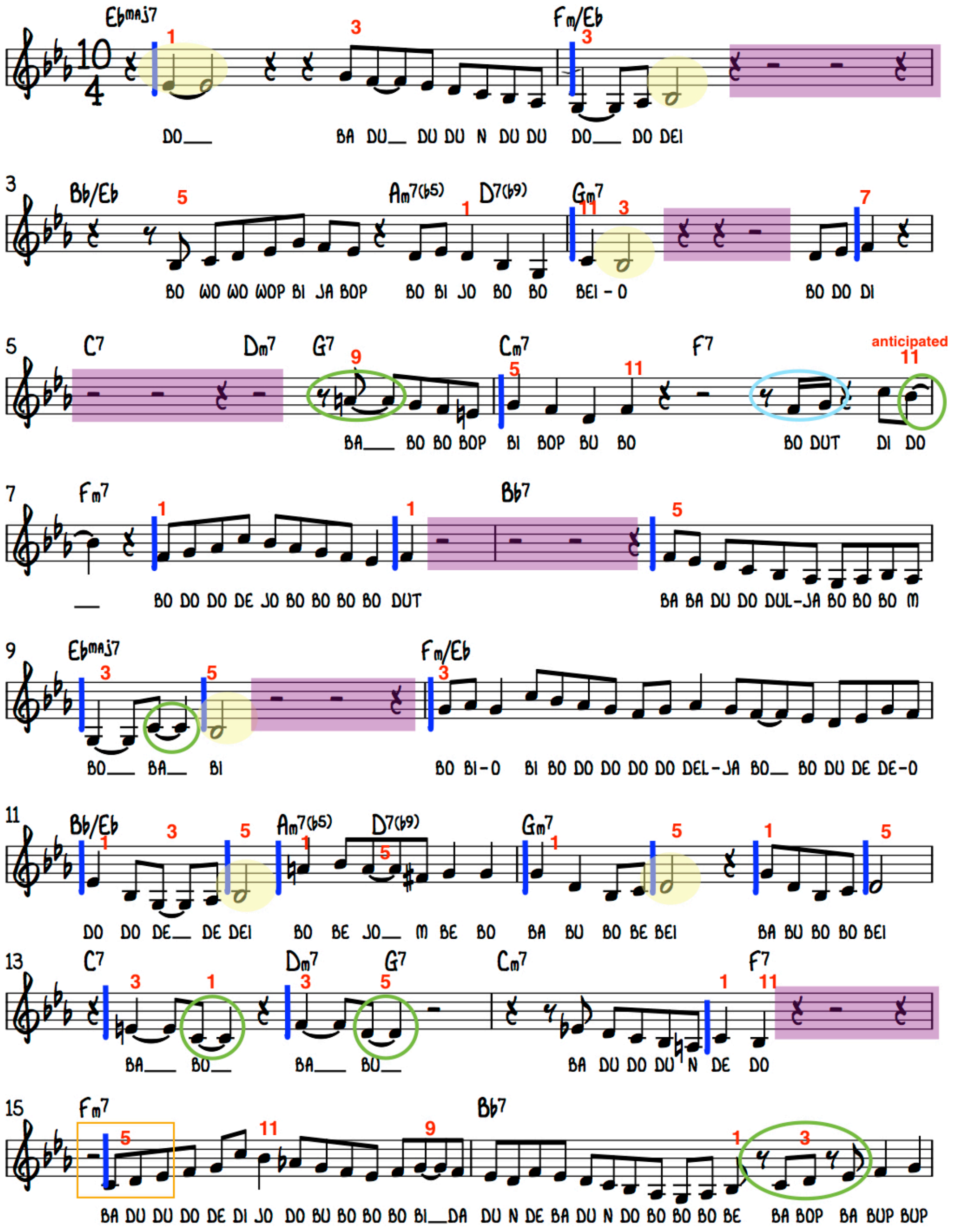
SOLO ON "DHA DHIN" BEFORE

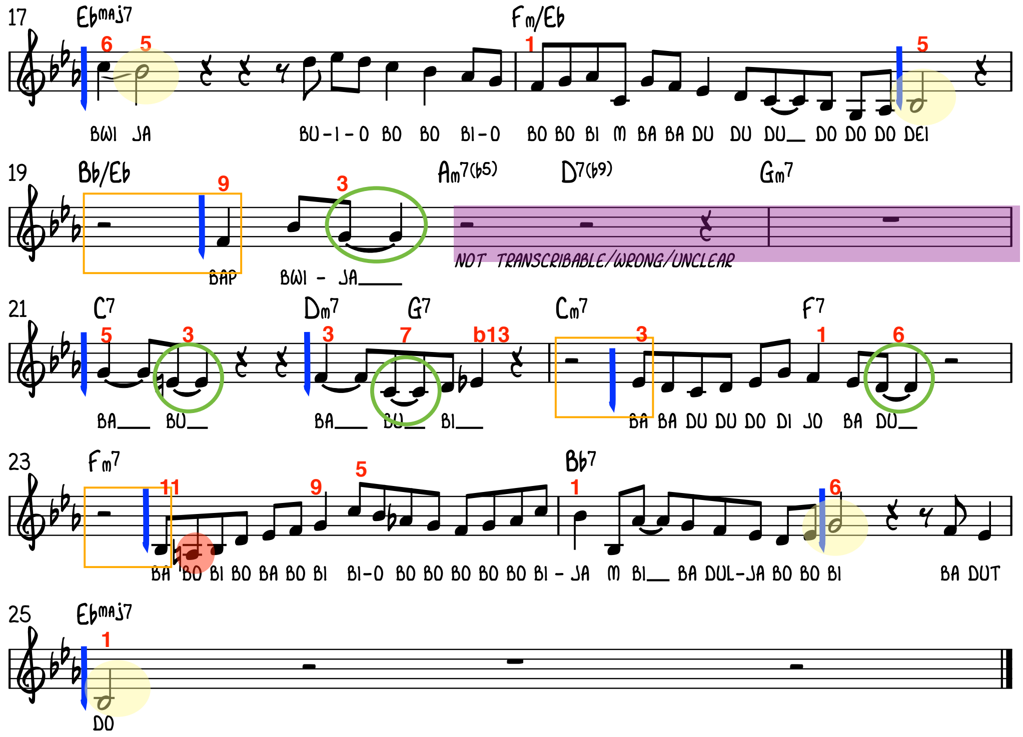

Ebmaj7
Fm/Eb
10/4
DO__ BA DU__ DU DU N DU DU DO__ DO DEI
3
Bb/Eb
Am7(b5)
D7(b9)
Gm7
BO WO WO WOP BI JA BOP BO BI JO BO BO BEI - O BO DO DI
5
C7
Dm7
G7
Cm7
F7
BA__ BO BO BOP BI BOP BU BO BO DUT DI DO
7
Fm7
Bb7
__ BO DO DO DE JO BO BO BO BO DUT BA BA DU DO DUL-JA BO BO BO M
9
Ebmaj7
Fm/Eb
BO__ BA__ BI BO BI-O BI BO DO DO DO DO DEL-JA BO__ BO DU DE DE-O
11
Bb/Eb
Am7(b5)
D7(b9)
Gm7
DO DO DE__ DE DEI BO BE JO__ M BE BO BA BU BO BE BEI BA BU BO BO BEI
13
C7
Dm7
G7
Cm7
F7
BA__ BO__ BA__ BU__ BA DU DO DU N DE DO
15
Fm7
Bb7
BA DU DU DO DE DI JO DO BU BO BO BO BI__DA DU N DE BA DU N DO BO BO BO BE BA BOP BA BUP BUP


17
Ebmaj7
Fm/Eb
BWI JA BU-I-O BO BO BI-O BO BO BI M BA BA DU DU DU__ DO DO DO DEI
19
Bb/Eb
Am7(b5)
D7(b9)
Gm7
BAP BWI - JA____
NOT TRANSCRIBABLE/WRONG/UNCLEAR
21
C7
Dm7
G7
Cm7
F7
BA___ BU__ BA___ BU__ BI___ BA BA DU DU DO DI JO BA DU__
23
Fm7
Bb7
BA BO BI BO BA BO BI BI-O BO BO BO BO BO BI - JA M BI__ BA DUL-JA BO BO BI BA DUT
25
Ebmaj7
DO

b) With notes

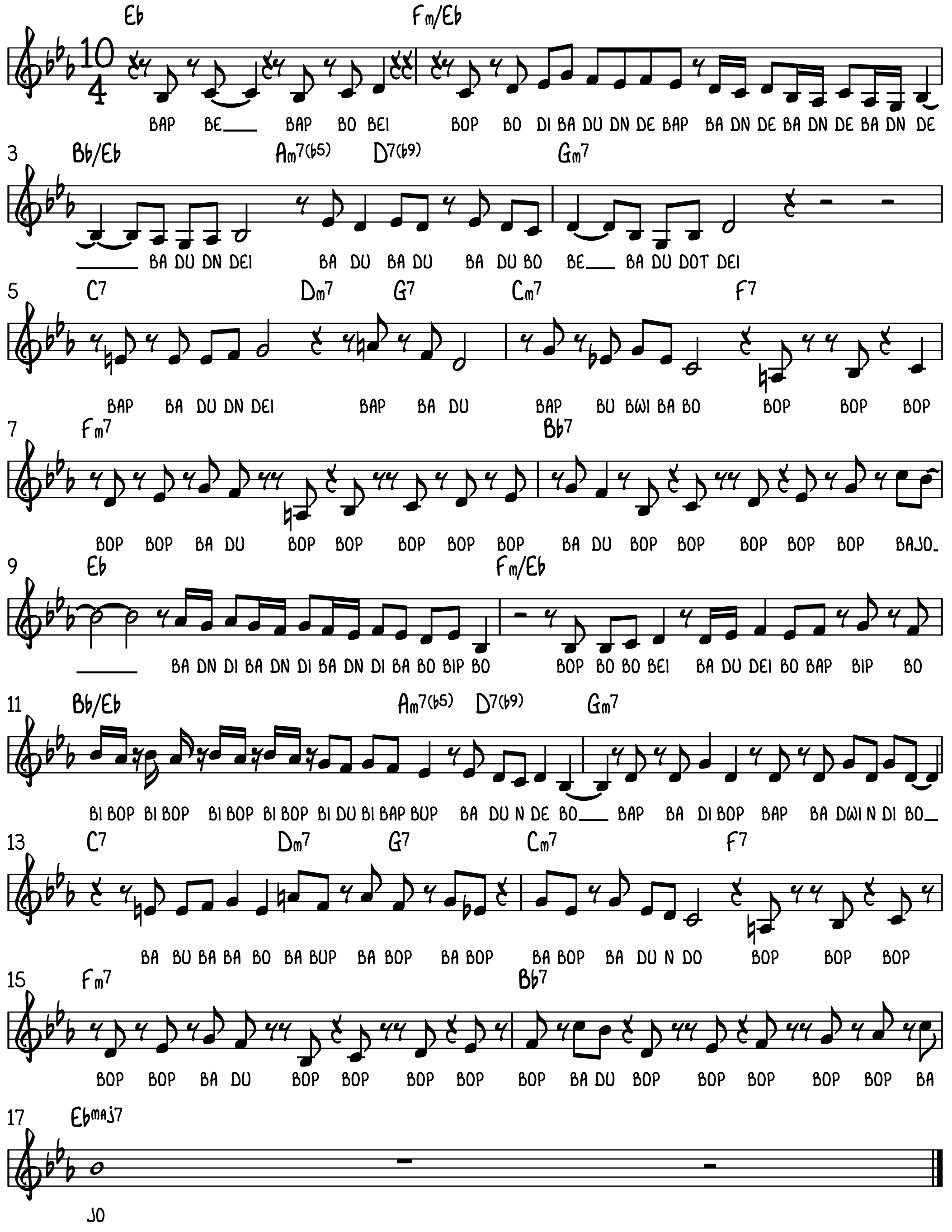
SOLO ON "DHA DHIN"
BEFORE


Ebmaj7
10
4
1
3
Fm/Eb
3
DO__ BA DU__ DU DU N DU DU DO__ DO DEI
3
Bb/Eb
5
Am7(b5)
1
D7(b9)
Gm7
11
3
7
BO WO WO WOP BI JA BOP BO BI JO BO BO BEI - O BO DO DI
5
C7
Dm7
G7
9
Cm7
5
11
F7
anticipated
11
BA__ BO BO BOP BI BOP BU BO BO DUT DI DO
7
Fm7
1
1
Bb7
5
__ BO DO DO DE JO BO BO BO BO DUT BA BA DU DO DUL-JA BO BO BO M
9
Ebmaj7
3
5
Fm/Eb
3
BO__ BA__ BI BO BI-O BI BO DO DO DO DO DEL-JA BO__ BO DU DE DE-O
11
Bb/Eb
1
3
5
Am7(b5)
1
5
D7(b9)
Gm7
1
5
1
5
DO DO DE__ DE DEI BO BE JO__ M BE BO BA BU BO BE BEI BA BU BO BO BEI
13
C7
3
1
Dm7
3
G7
5
Cm7
1
F7
11
BA__ BU__ BA__ BU__ BA DU DO DU N DE DO
15
Fm7
5
11
9
Bb7
1
3
BA DU DU DO DE DI JO DO BU BO BO BO BI__DA DU N DE BA DU N DO BO BO BO BE BA BOP BA BUP BUP


17
Ebmaj7
6 5
BWI JA
BU-I-O BO BO BI-O
Fm/Eb
1
BO BO BI M BA BA DU DU DU__ DO DO DO DEI
5
19
Bb/Eb
9
BAP
3
BWI - JA____
Am7(b5)
D7(b9)
Gm7
NOT TRANSCRIBABLE/WRONG/UNCLEAR
21
C7
5 3
BA___ BU__
Dm7
3
BA___ DU__ BI__
G7
7 b13
Cm7
3
BA BA DU DU DO DI JO BA DU__
F7
1 6
23
Fm7
11
9
5
BA BO BI BO BA BO BI BI-O BO BO BO BO BO BI - JA
Bb7
1
M BI__ BA DUL-JA BO BO BI
6
BA DUT
25
Ebmaj7
1
DO

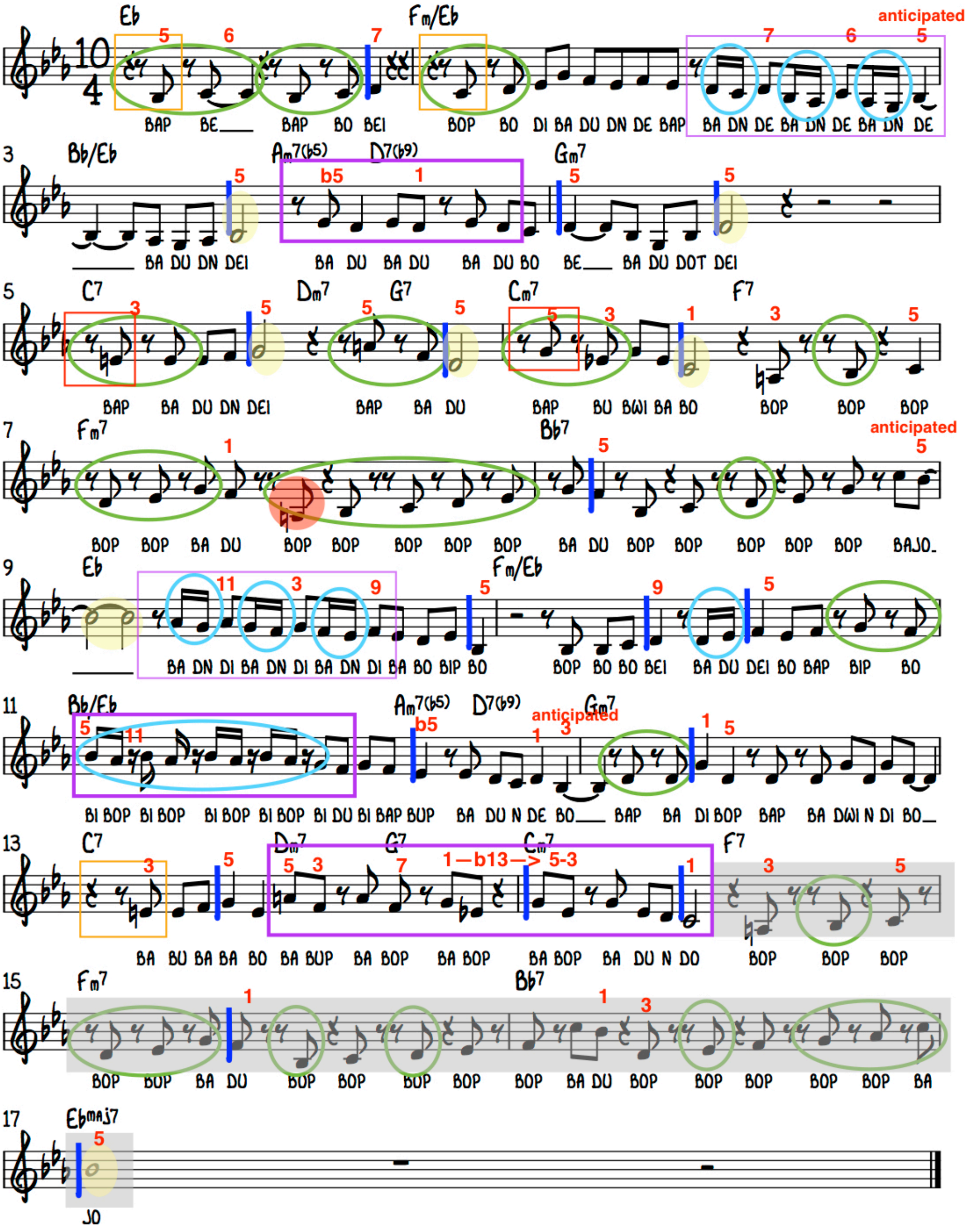
13.2 Transcription solo after – version 1
a) Without notes

SOLO ON "DHA DHIN"
AFTER - 1


Eb Fm/Eb
BAP BE___ BAP BO BEI BOP BO DI BA DU DN DE BAP BA DN DE BA DN DE BA DN DE
3 Bb/Eb Am7(b5) D7(b9) Gm7
___ BA DU DN DEI BA DU BA DU BA DU BO BE___ BA DU DOT DEI
5 C7 Dm7 G7 Cm7 F7
BAP BA DU DN DEI BAP BA DU BAP BU BWI BA BO BOP BOP BOP
7 Fm7 Bb7
BOP BOP BA DU BOP BOP BOP BOP BOP BA DU BOP BOP BOP BOP BOP BAJO_
9 Eb Fm/Eb
___ BA DN DI BA DN DI BA DN DI BA BO BIP BO BOP BO BO BEI BA DU DEI BO BAP BIP BO
11 Bb/Eb Am7(b5) D7(b9) Gm7
BI BOP BI BOP BI BOP BI BOP BI DU BI BAP BUP BA DU N DE BO___ BAP BA DI BOP BAP BA DWI N DI BO_
13 C7 Dm7 G7 Cm7 F7
BA BU BA BA BO BA BUP BA BOP BA BOP BA BOP BA DU N DO BOP BOP BOP
15 Fm7 Bb7
BOP BOP BA DU BOP BOP BOP BOP BOP BA DU BOP BOP BOP BOP BOP BA
17 Ebmaj7
JO

b) With notes

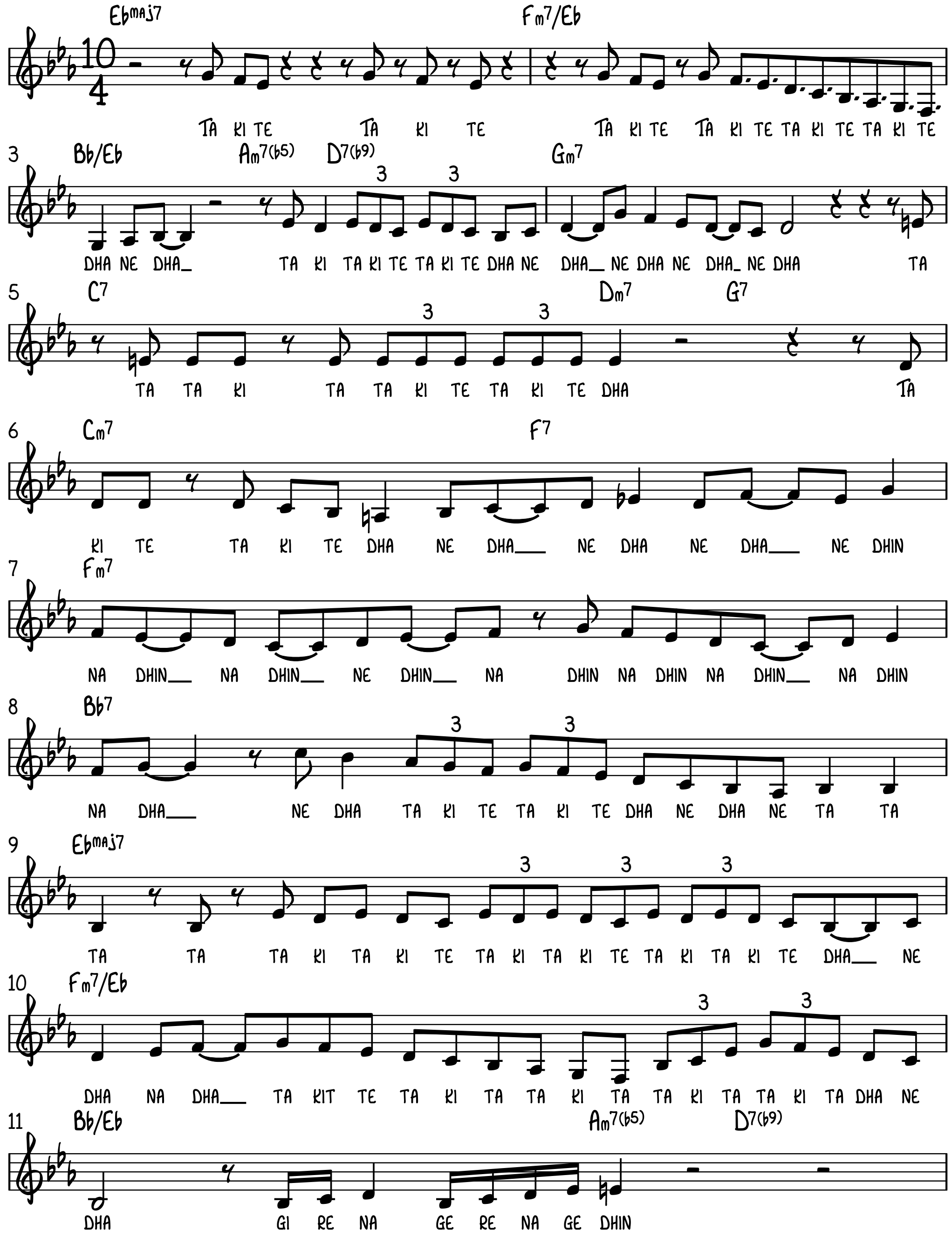
SOLO ON "DHA DHIN"
AFTER - 1

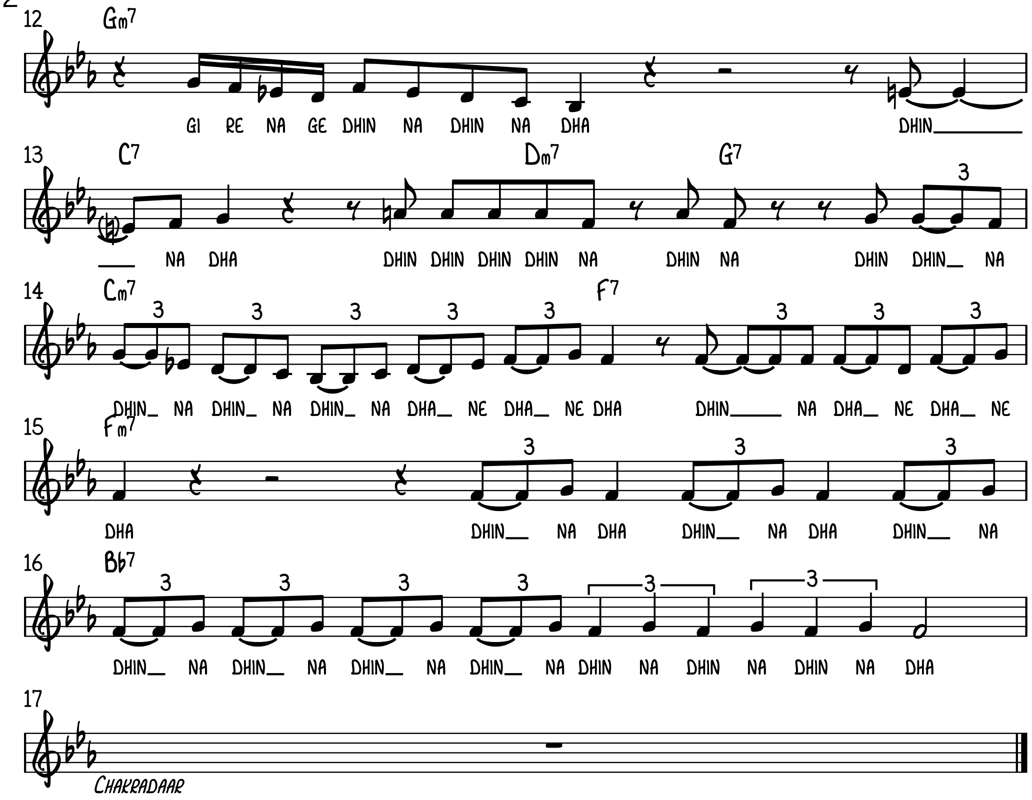

Eb
Fm/Eb
anticipated
5 6 7 5 7 6 5
BAP BE___ BAP BO BEI BOP BO DI BA DU DN DE BAP BA DN DE BA DN DE BA DN DE
3
Bb/Eb
Am7(b5) D7(b9)
Gm7
5 b5 1 5 5
BA DU DN DEI BA DU BA DU BA DU BO BE___ BA DU DOT DEI
5
C7
Dm7 G7
Cm7
F7
3 5 5 5 5 3 1 3 5
BAP BA DU DN DEI BAP BA DU BAP BU BWI BA BO BOP BOP BOP
7
Fm7
Bb7
1 5 anticipated 5
BOP BOP BA DU BOP BOP BOP BOP BOP BA DU BOP BOP BOP BOP BOP BAJO_
9
Eb
Fm/Eb
11 3 9 5 9 5
BA DN DI BA DN DI BA DN DI BA BO BIP BO BOP BO BO BEI BA DU DEI BO BAP BIP BO
11
Bb/Eb
Am7(b5) D7(b9) Gm7
anticipated
5 11 b5 1 3 1 5
BI BOP BI BOP BI BOP BI BOP BI DU BI BAP BUP BA DU N DE BO___ BAP BA DI BOP BAP BA DWI N DI BO_
13
C7
Dm7 G7 Cm7 F7
3 5 5 3 7 1—b13—> 5-3 1 3 5
BA BU BA BA BO BA BUP BA BOP BA BOP BA BOP BA DU N DO BOP BOP BOP
15
Fm7
Bb7
1 1 3
BOP BOP BA DU BOP BOP BOP BOP BOP BA DU BOP BOP BOP BOP BOP BA
17
Ebmaj7
5
JO

13.3 Transcription solo after – version 2

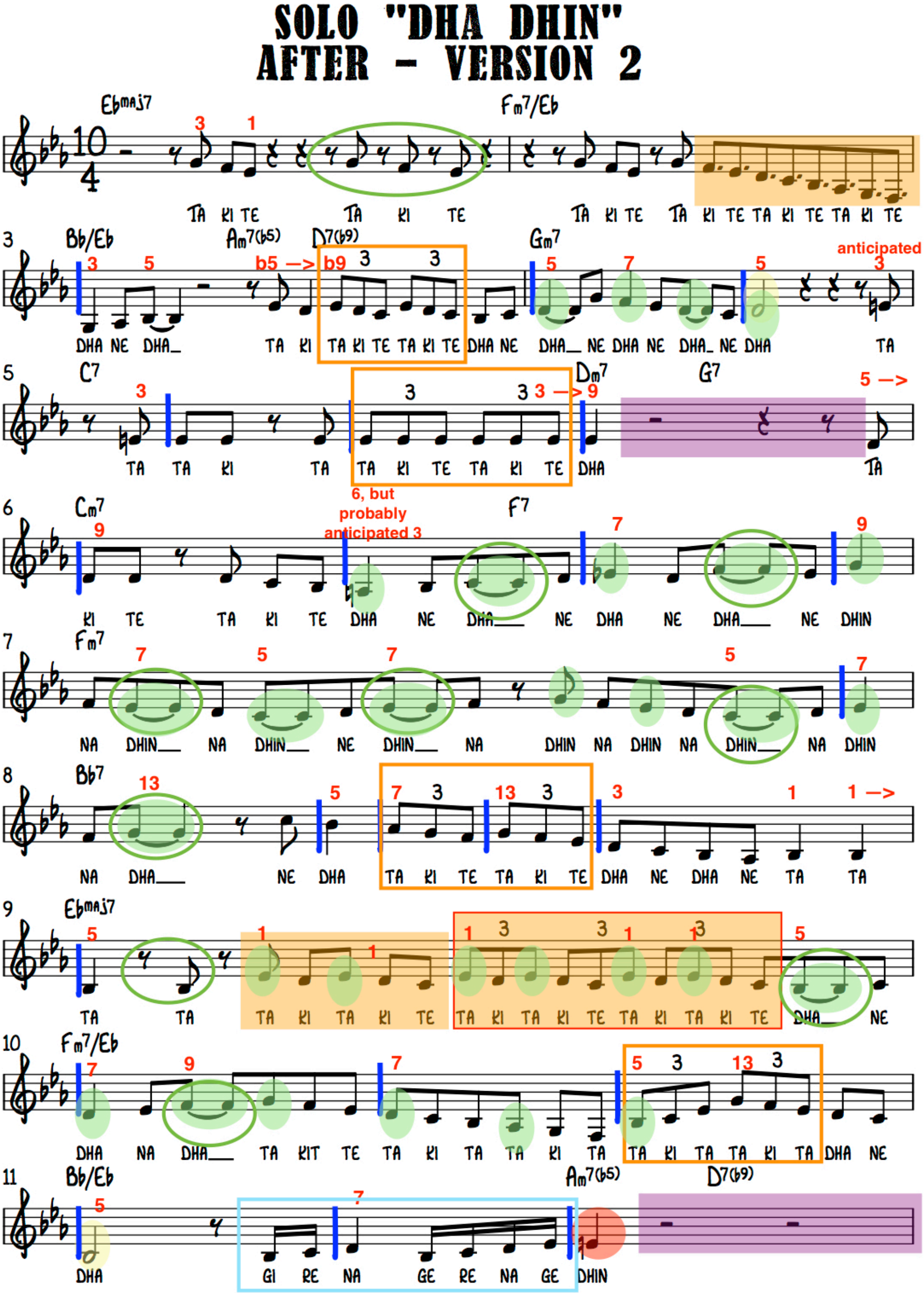
a) Without notes

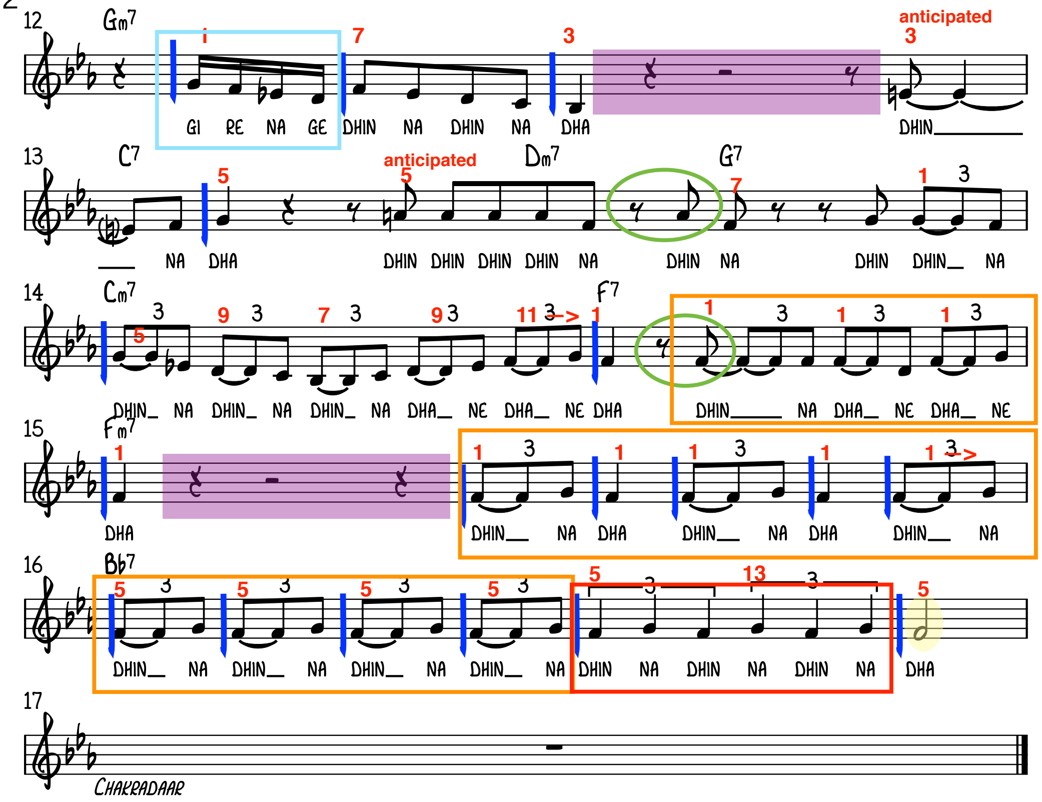
SOLO "DHA DHIN"
AFTER - VERSION 2


Ebmaj7
Fm7/Eb
10/4
TA KI TE TA KI TE TA KI TE TA KI TE TA KI TE TA KI TE
3 Bb/Eb Am7(b5) D7(b9) Gm7
DHA NE DHA_ TA KI TA KI TE TA KI TE DHA NE DHA__ NE DHA NE DHA_ NE DHA TA
5 C7 Dm7 G7
TA TA KI TA TA KI TE TA KI TE DHA TA
6 Cm7 F7
KI TE TA KI TE DHA NE DHA___ NE DHA NE DHA___ NE DHIN
7 Fm7
NA DHIN___ NA DHIN___ NE DHIN___ NA DHIN NA DHIN NA DHIN___ NA DHIN
8 Bb7
NA DHA___ NE DHA TA KI TE TA KI TE DHA NE DHA NE TA TA
9 Ebmaj7
TA TA TA KI TA KI TE TA KI TA KI TE TA KI TA KI TE DHA___ NE
10 Fm7/Eb
DHA NA DHA___ TA KIT TE TA KI TA TA KI TA TA KI TA TA KI TA DHA NE
11 Bb/Eb Am7(b5) D7(b9)
DHA GI RE NA GE RE NA GE DHIN


12
Gm7
GI RE NA GE DHIN NA DHIN NA DHA DHIN
13
C7
Dm7
G7
NA DHA DHIN DHIN DHIN DHIN NA DHIN NA DHIN DHIN NA
14
Cm7
F7
DHIN NA DHIN NA DHIN NA DHA NE DHA NE DHA DHIN NA DHA NE DHA NE
15
Fm7
DHA DHIN NA DHA DHIN NA DHA DHIN NA
16
Bb7
DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHA
17
Chakradaar

b) With notes


SOLO "DHA DHIN"
AFTER - VERSION 2
Ebmaj7
3 1
TA KI TE TA KI TE
Fm7/Eb
TA KI TE TA KI TE TA KI TE TA KI TE
3 Bb/Eb
3 5
DHA NE DHA_
Am7(b5) D7(b9)
b5 —> b9 3 3
TA KI TA KI TE TA KI TE DHA NE
Gm7
5 7 5
anticipated 3
DHA_ NE DHA NE DHA_ NE DHA TA
5 C7
3
TA TA KI TA
3 3 3 —> 9
TA KI TE TA KI TE
Dm7 G7
DHA
5 —>
TA
6 Cm7
9
KI TE TA KI TE
6, but probably anticipated 3
F7
7 9
DHA NE DHA_ NE DHA NE DHA_ NE DHIN
7 Fm7
7 5 7 5 7
NA DHIN_ NA DHIN_ NE DHIN_ NA DHIN NA DHIN NA DHIN_ NA DHIN
8 Bb7
13 5 7 3 13 3 3 1 1 —>
NA DHA_ NE DHA TA KI TE TA KI TE DHA NE DHA NE TA TA
9 Ebmaj7
5 1 1 1 3 3 1 1 3 5
TA TA TA KI TA KI TE TA KI TA KI TE TA KI TA KI TE DHA_ NE
10 Fm7/Eb
7 9 7 5 3 13 3
DHA NA DHA_ TA KIT TE TA KI TA TA KI TA TA KI TA TA KI TA DHA NE
11 Bb/Eb
5 ?
DHA GI RE NA GE RE NA GE
Am7(b5) D7(b9)
DHIN


Gm7
i
anticipated
GI RE NA GE DHIN NA DHIN NA DHA
DHIN
C7
anticipated
Dm7
G7
NA DHA
DHIN DHIN DHIN DHIN NA
DHIN NA
DHIN DHIN NA
Cm7
->
F7
DHIN NA DHIN NA DHIN NA DHA NE DHA NE DHA
DHIN NA DHA NE DHA NE
Fm7
->
DHA
DHIN NA DHA DHIN NA DHA DHIN NA
Bb7
DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHIN NA DHA
CHAKRADAAR

13.4 Index of Youtube videos about the third intervention cycle

- Day 1: Going through the chord scheme in 4/4: bit.ly/2p7t1eP (Track 06)

- Day 1: Singing bassnotes in 4/4: bit.ly/2nITrqh (Track 06, 2:16)

- Day 1: Singing bassnotes in 10/4: bit.ly/2oDhyGd (Track 06, 3:01)

- Day 1: Improvising on “Dha Dhin” with playback-track: bit.ly/2nDC2iN (Track 07)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note C, ascending melody: bit.ly/2nDKlLw (Track 08)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note C, descending melody: bit.ly/2pb5xbA (Track 08, 0:13)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note Eb, descending melody: bit.ly/2pdfti7 (Track 08, 0:27)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note Eb, ascending melody: bit.ly/2paYu2J (Track 08, 0:40)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note G, ascending melody: bit.ly/2oDt4kI (Track 08, 0:53)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note G, again ascending melody: bit.ly/2ovQatl (Track 08, 1:04)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note A, descending melody: bit.ly/2p0WJoX (Track 08, 1:19)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note A, ascending melody: bit.ly/2p0K6dH (Track 08, 1:32)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note Bb descending melody: bit.ly/2paQsH3 (Track 08, 1:47)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note Bb, ascending/descending melody: bit.ly/2nJqwSX (Track 08, 2:03)

- Day 2: Lick on “Am7b5 – D7”, in 4/4, starting note Bb, ascending/descending melody: bit.ly/2p15a3Z (Track 08, 2:19)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note C, descending melody: bit.ly/2oWYjIv (Track 08, 3:02)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note C, ascending melody: bit.ly/2obFg8q (Track 08, 3:15)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note D, descending melody: bit.ly/2oriGuf (Track 08, 3:26)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note F, descending melody: bit.ly/2ovS78R (Track 08, 3:33)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note F, again descending melody: bit.ly/2oDrSOn (Track 08, 3:45)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note F, descending/ascending melody: bit.ly/2oDqsDF (Track 08, 3:58)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note F, ascending/descending melody: bit.ly/2ovOvE0 (Track 08, 4:09)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note A, descending melody: bit.ly/2ovOd00 (Track 08, 4:21)

- Day 2: Lick on “Dm7 – G7”, in 4/4, starting note A, ascending/descending melody: bit.ly/2nJsrqD (Track 08, 4:32)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note D, ascending/descending melody: bit.ly/2oy9ir2 (Track 09)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note D, ascending melody: bit.ly/2nLZ5rD (Track 09, 0:12)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note C, ascending melody: bit.ly/2obJCNZ (Track 09, 0:26)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note Eb, descending melody: bit.ly/2pgqCi0 (Track 09, 0:38)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note Eb, again descending melody: bit.ly/2oeEw2k (Track 09, 0:50)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note Eb, ascending/descending melody: bit.ly/2pgtb3G (Track 09, 1:02)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note G, ascending/descending melody: bit.ly/2oeLd4z (Track 09, 1:14)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note G, ascending melody: bit.ly/2oxSRu9 (Track 09, 1:25)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note A, ascending melody: bit.ly/2pgqZsU (Track 09, 1:39)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note A, ascending melody: bit.ly/2p2HZG7 (Track 09, 1:53)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note A, again ascending melody: bit.ly/2nLTAcp (Track 09, 2:07)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note A, again ascending melody: bit.ly/2nLWVsg (Track 09, 2:22)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note A, descending melody: bit.ly/2pdUIpo (Track 09, 2:38)

- Day 2: Lick on “Am7b5 – D7”, in 10/4, starting note Bb, descending melody: bit.ly/2oxT40p (Track 09, 2:53)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note C, descending melody: bit.ly/2psO4bj (Track 09, 3:19)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note C, ascending melody: bit.ly/2oeurTm (Track 09, 3:34)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note D, descending/ascending melody: bit.ly/2obvNid (Track 09, 3:48)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note D, ascending/descending melody: bit.ly/2obCwsE (Track 09, 4:02)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note F, descending melody: bit.ly/2oxTbJn (Track 09, 4:19)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note F, ascending melody: bit.ly/2oxNH1i (Track 09, 4:31)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note A, descending melody: bit.ly/2p2CF5K (Track 09, 4:44)

- Day 2: Lick on “Dm7 – G7”, in 10/4, starting note A, ascending melody: bit.ly/2oGc0dY (Track 09, 4:59)

- Day 2: Improvising on “Dha Dhin” with playback-track: bit.ly/2p7j6Gb (Track 10)

- Day 3: Improvising on “Dha Dhin” with playback-track, first take: bit.ly/2oWYXWx (Track 11)

- Day 3: Improvising on “Dha Dhin” with playback-track, second take: bit.ly/2pApe9k (Track 11, 2:32)

- Day 3: Improvising on “Dha Dhin” with playback-track, third take: bit.ly/2ottqZp (Track 11, 5:07)

- Day 3: Improvising on “Dha Dhin” with playback-track, fourth take: bit.ly/2pdZrYe (Track 11, 7:44)

- Day 4: Improvising on “Dha Dhin” with playback-track, first take: bit.ly/2p7nsx2 (Track 12)

- Day 4: Improvising on “Dha Dhin” with playback-track, second take: bit.ly/2nM2RS3 (Track 12, 2:32)

- Day 4: Improvising on “Dha Dhin” with playback-track, third take: bit.ly/2pgzKmT (Track 12, 4:48)

- Day 5: *Tihai* no. 1 on end of solo scheme „Dha Dhin“: bit.ly/2nDF8n7 (Track 13)

- Day 5: *Tihai* no. 2 on end of solo scheme „Dha Dhin“: bit.ly/2o4ECd0 (Track 13, 0:28)

- Day 5: *Tihai* no. 3 on end of solo scheme „Dha Dhin“: bit.ly/2o4IFpB (Track 13, 1:00)

- Day 5: *Tihai* no. 4 on end of solo scheme „Dha Dhin“: bit.ly/2oye6g8 (Track 13, 1:28)

- Day 5: *Tihai* no. 5 on end of solo scheme „Dha Dhin“: bit.ly/2oXc7CL (Track 13, 1:58)

- Day 6: Base solo on *tihai* and sing it, *tihai* no.1: bit.ly/2oyoLY6 (Track 14)

- Day 6: Base solo on *tihai* and sing it, *tihai* no.2: bit.ly/2osjctW (Track 14, 2:29)

- Day 6: Base solo on *tihai* and sing it, *tihai* no.3 (missed the tihai): bit.ly/2nDGduY (Track 14, 5:09)

- Day 6: Base solo on *tihai* and sing it, *tihai* no. 3 (too early): bit.ly/2oX9uRK (Track 14, 7:45)

- Day 6: Base solo on *tihai* and sing it, *tihai* no.3: bit.ly/2oyacnq (Track 14, 10:20)

- Day 7: Base solo on *tihai* and sing it, *tihai* no.4: bit.ly/2oX9AIT (Track 14, 12:59)

- Day 7: Base solo on *tihai* and sing it, *tihai* no.5: bit.ly/2ookLHo (Track 14, 15:32)

- Day 8: Base solo on *tihai* and sing it, *tihai* no. 3, first take: bit.ly/2oomZXe (Track 15)

- Day 8: Base solo on *tihai* and sing it, *tihai* no. 3, second take: bit.ly/2oy8P7D (Track 15, 2:32)

- Day 8: Base solo on *Chakradaar* and sing it: bit.ly/2p51a1K (Track 15, 4:14)

- Day 9: Performance at Research Festival, improvisation based on *tihai* no. 3: bit.ly/2pd5xoK (Track 16, 13:07)

- Day 9: Performance at Research Festival, improvisation based on *Chakradaar*: bit.ly/2pxDVtJ (Track 16, 16:49)

14. Appendix E – Summary of interviews

Before the first intervention cycle:

Bart de Win (main subject teacher):
Bart knows Indian music from collaborations of pop musicians with Indian music in the 60's and 70's and from film music. Additionally, he is impressed by rhythmical skills of Trilok Gurtu, who fuses conventional drumming with percussion and *tabla* music. To research about this fusion is interesting and helpful because " it's hard to imagine any contemporary jazz style without the influence of world music/blues/funk/classical western music etc.".
In his opinion, the best way to incorporate North Indian rhythm in my natural musical language is to be an expert in both styles and "own" as much of them as possible. During this quest the *tala* language is a guide and necessary for exploring and "owning" the music, but in the end he hopes for a use of language in-between the *tala* language and the traditional jazz scat-syllables, which he would call "Naus Mouth".
About the arrangement of "What is This Thing Called Love" which contains a special written with the use of a fixed rhythmical composition he says: "Cool concept. Well written and performed but still hard to connect to the standard song and the conventional reading of the tune. But it sounds good and I hear joy. I like the harmony. It proves this whole thing might work."

External expert Shai Maestro:
Shai is a pianoplayer, who studied *tabla* for about two years, to get to know the Indian rhythmical thinking. He was born and raised in Israel and is familiar with many different music styles. He does not consciously use the Indian *tala* in his music, although he does every now and then play a *tihai*, but it comes to him naturally. In his opinion, it is good to study different musical styles and see how in every style there is a different approach to for example rhythm, but in the end you should let it go and trust for it to be in you. Don't keep thinking about it too much.

This is also what he hears in my arrangement of "What is this thing called love". He likes it, but nevertheless, hears the special as a concept, a "copy-paste"-thing. But in his opinion this is part of the process. He gave me the e-mail address of saxophone player Oded Tzur, who studied Indian music more deeply and in Shai's opinion could answer many more of my questions.

15. Appendix F – Track list of audio/video recordings

01 Reference recording, Nov. 2015, Jazz-standard “What is this thing called love”; bit.ly/2oo7nDp

02 First intervention cycle process, Nov. 2015 – May 2016; bit.ly/2o4oxDZ

03 Reference recording, Dec. 2012, arrangement of Händel’s “Comfort Ye”; bit.ly/2p4Armc

04 Result of second intervention cycle, Jan. 2017, composition “Apoligitis”; bit.ly/2p4H6MS

05 Result of second intervention cycle, Jan. 2017, composition “Dha Dhin”; bit.ly/2o4qmRp

06 Third intervention cycle, process, 22.02.2017, Day 1 A-C; bit.ly/2p7t1eP

07 Third intervention cycle, process, 22.02.2017, Day 1 D; bit.ly/2nDC2iN

08 Third intervention cycle, process, 24.02.2017, Day 2 A; bit.ly/2nDKlLw

09 Third intervention cycle, process, 24.02.2017, Day 2 B; bit.ly/2oy9ir2

10 Third intervention cycle, process, 24.02.2017, Day 2 C; bit.ly/2p7j6Gb

11 Third intervention cycle, process, 26.02.2017, Day 3; bit.ly/2oWYXWx

12 Third intervention cycle, process, 28.02.2017, Day 4; bit.ly/2p7nsx2

13 Third intervention cycle, process, 01.03.2017, Day 5; bit.ly/2nDF8n7

14 Third intervention cycle, process, 03.+04.03.2017, Day 6+7; bit.ly/2oyoLY6

15 Third intervention cycle, process, 08.03.2017, Day 8; bit.ly/2oomZXe

16 Result of the third intervention cycle, 09.03.2017, Presentation at “Codarts Research Festival”; bit.ly/2oqT0hw

16. Appendix G - List of sources and network

Recordings:

Recordings of Shiv Kumar Sharma and Zakir Hussain:

The Pioneer Of Santoor (Chhandra Dhara,1991) (bit.ly/1IVVpow)

The Glory Of Dawn (The Gramophone Company Of India Ltd.,1985)

Classical Santoor (Live at Safari Gandharva) (it.ly/2osh84R)

The Flow Of Time (Navras Records, 2002) (bit.ly/2p4KvLN)

An Audience with: Pandit Shivkumar Sharma (Navras Records, 2009) (bit.ly/2ooht75))

Dan Weiss: “Jhaptaal Drumset Solo” (Chhandayan, 2011)

Youtube videos:

Cannonball Adderley’s “74 Miles Away”: bit.ly/2oo9nLD

Dave Brubeck’s “Take Five”: bit.ly/1oGlsbw

Dave Brubeck’s “Unsquare Dance”: bit.ly/1z5vyTm

Don Ellis’ “Whiplash”: bit.ly/1MplsZa

Don Ellis’ “332221222”: bit.ly/2oyiR9o

Don Ellis’ “New Nine”: bit.ly/2oy5K8f

Books:

“Hariprasad Chaurasia and the art of improvisation” – Henri Tournier – Accord Croisés, 2010

“The Jazz Book” – Joachim-Ernst Berendt & Günther Huesmann – Lawrence Hill, 2009

Internet sites:

http://chandrakantha.com/tablasite/glossary.htm

https://www.ragaculture.com/tihai.html

http://lisayoungmusic.com/wp-content/uploads/masters/masters.pdf

http://www.apassion4jazz.net/glossary5.html

Network:

INTERNAL:

Niti Ranjsan Biswas (tabla player and teacher)

Henri Tournier (bansuri player and teacher)

Jarmo Hoogendijk (jazz trumpet player and improvisation teacher)

EXTERNAL:

Sebastiaan van Bavel (jazz piano player)

Shai Maestro (jazz piano player)

Oded Tzur (saxophone player)

Oene van Geel (improvising violist)