

University of Louisville

ThinkIR: The University of Louisville's Institutional Repository

Electronic Theses and Dissertations

5-2020

Backing tracks/play-along materials: origins of several currently popular platforms and strategies for their use.

Giovanni De Castro Sena
University of Louisville

Follow this and additional works at: <https://ir.library.louisville.edu/etd>



Part of the [Music Performance Commons](#)

Recommended Citation

De Castro Sena, Giovanni, "Backing tracks/play-along materials: origins of several currently popular platforms and strategies for their use." (2020). *Electronic Theses and Dissertations*. Paper 3461. Retrieved from <https://ir.library.louisville.edu/etd/3461>

This Master's Thesis is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.

BACKING TRACKS/PLAY-ALONG MATERIALS: ORIGINS OF SEVERAL
CURRENTLY POPULAR PLATFORMS AND STRATEGIES FOR THEIR USE

By

Giovanni de Castro Sena

A Thesis
Submitted to the Faculty of the
School of Music of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Master of Music in Music

School of Music
University of Louisville
Louisville, Kentucky

May 2020

BACKING TRACKS/PLAY-ALONG MATERIALS: ORIGINS OF SEVERAL
CURRENTLY POPULAR PLATFORMS AND STRATEGIES FOR THEIR USE

By

Giovanni de Castro Sena

A Thesis Approved on

April 13th, 2020

by the following Thesis Committee:

Professor Christopher Fitzgerald

Dr. Krista Wallace-Boaz

Professor Craig Wagner

DEDICATION

To my wife, daughter and parents who keep supporting me in my endeavors.

ACKNOWLEDGEMENTS

I would like to acknowledge all musicians that in a direct or indirect way have inspired me to become who I am.

Chris Fitzgerald, thank you for being a great mentor at University of Louisville.

All UofL faculty, classmates and staff, thank you for all inspiration and support.

ABSTRACT

BACKING TRACKS/PLAY-ALONG MATERIALS: ORIGINS OF SEVERAL CURRENTLY POPULAR PLATFORMS AND STRATEGIES FOR THEIR USE

Giovanni de Castro Sena

April 13th, 2020

The objective of this research is to discuss if the use of backing tracks/play-along materials can be an effective method for musical development. For this end, I interviewed six influential musicians who answered particular questions in order to have a better understanding about the real-world scenario of the use of backing track materials. Based on their answers, I found that the learning engagement and/or musical development happen when specific strategies while using such materials are made.

Tags: backing tracks, play-along materials, learning strategies

TABLE OF CONTENTS

DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
INTRODUCTION	1
CHAPTER 1 - BACKING TRACK MATERIALS	6
1.1 - Jamey Aebersold – Volume 70: Killer Joe.....	7
1.2 - Hal Leonard – Maiden Voyage: The Real Book Multi-Tracks Volume 01	10
1.3 - iReal Pro	13
1.4 - YouTube Channel: Elevated Jam Tracks	17
CHAPTER 2 - INTERVIEWS.....	22
2.1 - Massimo Biolcati - October 2 nd , 2019.....	23
2.2 - Stephen Allee – October 9 th , 2019.....	25
2.3 - Jamey Aebersold – October 14 th , 2019	26
2.4 - Jeff Berlin – October 29 th , 2019	29
2.5 - Terry O’Mahoney – November 6 th , 2019	29
2.6 - Sizão Machado – November 14 th , 2019	33
CHAPTER 3 - CONSENSUS ON THE SUGGESTED USE OF BACKING TRACKS	35
CHAPTER 4 - CONCLUSIONS	40
4.1 - Strategies for active learning.....	43
4.2 - Reflections on actual recordings versus backing tracks	50
4.3 - Final Considerations	52
REFERENCES	54
APPENDIX I	56
APPENDIX II	60
APPENDIX III.....	64
APPENDIX IV.....	66
BIO OF THE INTERVIEWEES	68
CURRICULUM VITA	74

INTRODUCTION

Musical instruments have traditionally been challenging to play. They require a significant investment of time, and in some cases, money to learn the basic operating skills of that instrument. In addition to frequent and arduous practice sessions, music lessons are often required, to help impart the mechanical and conceptual skills needed to achieve the proper musical expression associated with that instrument. During the past century and a half, the introduction of electronics-related technology has made a significant impact on musical instruments and how we learn and practice them. Consider Thomas Alva Edison's invention of the "talking tin foil", for which he borrowed from another inventor the term "phonograph" (voice-writer), it dates back to 1877 and at that time, Edison himself suggested to his potential buyers/customers some uses for his new invention since this would be a common feature in people's lives. Those suggestions were published in an article in the *North American Review* in 1878.¹

1. Phonographic books, which will speak to blind people without effort on their part.
2. The teaching of elocution.
3. Reproduction of music.
4. The "family record" - a registry of sayings, reminiscences, etc., by members of a family in their own voices, and of the last words of a dying persons.

¹ Michael Chanan, *Repeated Takes: A short history of recording and its effects on music* (London/New York: Verso, 1995), 3.

5. The preservation of languages by exact reproduction of the manner of pronouncing.
6. Educational purposes; such as preserving the explanations made by a teacher, so that the pupil can refer to them at any moment, and spelling or other lessons placed upon the phonograph for convenience in committing to memory.

As we know, these suggestions have been implemented for a long time. But what Edison did not know was how much his invention would contribute to the development of new tools in order to help musicians in their musical journey.

Currently, one of these tools which is really popular among professional and non-professional musicians is backing tracks. Backing tracks are recorded musical accompaniment, especially for a soloist to play along with. They appeared because of musicians' need to practice their part alone in their own practice room without the presence of any other musician. As a result, many play-along books appeared in the market.

Play-along books consist of books where there is notated music following with its respective audio media (MP3/CD or older versions of that such as Cassette Tapes or Records). In most cases, each recording is set in three different ways:

- 1) the whole song, which can be listened to the way the music was conceived;
- 2) the song without the melody track;
- 3) the song without a specific instrument, which will depend on what instrument the book was designed for.

In a quick *Google* search, it is possible to see a huge availability of different collections of play-along books designed for all different instruments and different genres. Some publishers release their books in series dividing them into different levels and also some of them include *tablature* for those who do not read standard music notation.²

Due to the improvements of technology, currently, there are several phone and computer apps with the same purpose of the play-along books. One of the most popular of these apps is “iReal Pro”. According to its press, the app simulates a real-sounding band that can accompany a musician as he or she practices, and also it lets musicians collect chord *charts* from their favorite songs for reference.³ The app serves as a book of chord charts which users can collect, transpose and access from anywhere; it also has a backup band, with more than 35 different accompaniment styles featuring a wide variety of instruments.

The popularity of the use of backing tracks among musicians calls into question the real efficiency of the use of such tool. Can backing tracks help musicians reach their musical goals? Do musicians use them at all? Is it possible to list the benefits and the disadvantages of using this tool in a context where musicians are in the process of developing new skills such as technique, repertoire, sense of interaction, autonomy, and interpretation in their specific instruments?

² A form of musical notation indicating fingering rather than the pitch of notes, written on lines corresponding to, for example, the strings of a guitar or the holes on a flute.

³ It is a form of musical notation that describes the basic harmonic and rhythmic information for a song or tune.

In order to attempt to answer those questions, this work will be organized in four different chapters. The first chapter, “Backing Track Materials”, describes materials that have backing tracks as a supportive tool for the users. The main goal of this chapter is to give the reader an overview of materials available with the feature of backing tracks. The choices were based on their relevance among users and how they are established in the market. The materials to be described are:

- Jamey Aebersold’s volume 70: Killer Joe, which is marked as a best seller at Jamey Aebersold’s online store.
- “Maiden Voyage Play-Along – Real Book Multi-Tracks Volume 01”, this one published by Hal Leonard.
- “iReal Pro”
- YouTube channel: Elevated Jam Tracks.⁴

The second chapter consists of interviews with important names in the music scene who are involved with performance, teaching music and/or who are directly responsible for putting some of the most relevant backing track-oriented material out in the market. The main intention here is to present their ideas, or even reasons that justify their use and creation of backing tracks, or reasons why they do not use backing tracks as a supportive tool for their music development. Their opinion about the use of the backing tracks will be taken based on specific questions addressed to them.

⁴ When you become a YouTube member, YouTube assigns a personal channel to you. Personal channels let you explore YouTube as a social network rather than as a simple video database. You can find users who like the same kinds of videos you do and find out what they are watching.

Parallel to the previous chapter, “What are backing tracks about”? which reports the interviewees’ responses of how each one deals with the main subject of this paper, the goal of chapter three is to note the real relevance of backing tracks in their daily practices and/or lessons. At this point, their answers will be discussed in order to bring out points that those musicians agree on and points on which they disagree.

Based on the gathered information, the last chapter is about the conclusion on the use of backing tracks as a tool that supports the development of musicians. For the sake of having a wider understanding about the subject, authors and scholars are visited to reinforce the idea that the use of backing tracks/play-along materials can promote the learning engagement users/musicians need.

It is not my intention to focus on the conflicts the subject may or not bring up, or to suggest a definitive answer of what is the best for each individual who is pursuing his or her own identity on their respective instrument. My main goal is to share what some of the most experienced musicians in the world have to say about those materials and use their experience to help other musicians, especially young musicians, make the most out of these materials.

Since everything discussed here is interspersed with my personal experiences of many years as a professional musician, without further pretensions, I have included some strategies based on the analysis of these experienced participants; for effective use of these materials in order to evolve musicianship. As mentioned above, these strategies are not to be considered a definitive answer but attempts for the music enhancement.

CHAPTER 1 - BACKING TRACK MATERIALS

Perhaps the idea of playing with backing tracks came from the necessity of groups to bring the recording studio to the stage and perform as much on stage as possible. It is known that the advance of technology has an important role with all that. Bands sought out ways of allowing technology to bring those studio recordings with complex *multi-track* arrangements to life on stage.⁵ Having this conception in mind, the possibility of bringing a whole band to practice rooms through recordings became a reality for musicians. They could prepare themselves for concerts, recording sessions, or develop their skills on their instruments at rehearsals with the full group.

Based on that, many publishing companies, and more currently, technology companies have envisioned that this could be applied in the people's process of learning or developing their musicality. The result of that was the releasing of hundreds of backing track materials with that specific goal: to help musicians, in all different levels, to develop their musicianship from the comfort of their homes.

In order to illustrate the different options of materials available in the market, four play-along methods have been chosen to be described in this chapter. They are Jamey Aebersold's volume 70: Killer Joe, "Maiden Voyage Play-Along"; Real Book Multi-Tracks Volume 01; "iReal Pro"; and Elevated Jam Tracks, a YouTube channel. It is curious

⁵ It is a method of sound recording developed in 1955 that allows for the separate recording of multiple sound sources or of sound sources recorded at different times to create a cohesive whole.

that even though each one was created in their own time with their own developer, it can be said that all of them have the same purpose although they have their own characteristics which make them different from each other. One similarity is that all four are well established in the market.

1.1 - Jamey Aebersold – Volume 70: Killer Joe

The first step taken before checking the book out from the University of Louisville's library was to visit Jamey Aebersold's website.⁶ It is possible to find the whole play-along collection that he has released through his publishing company. Some important Jazz names such as Ron Carter, Kenny Barron, John Patitucci, Grady Tate, Rufus Reid, James Williams, to name but a few, made up some of the *rhythm section* of the above-mentioned play-along series designed by Jamey Aebersold.⁷

Since the recordings employ some of the best jazz musicians in the world, the booklet and the recording sets allow musicians the opportunity to practice and improvise with well-known jazz personalities at home as well as in the classroom. It is a fact that this concept has been responsible for changing the practice habits of thousands of musicians around the world.

Typically, "Jamey Aebersold's jazz play-alongs" include a stereo CD (previously records and cassettes) and a coordinated booklet with transposed parts for all instruments

⁶ www.jazzbooks.com

⁷ It is a group of musicians within a music ensemble or band that provides the underlying **rhythm**, harmony and pulse of the accompaniment. Most of the times assumed by the piano, guitar, bass and drums on a Jazz ensemble.

including treble clef, bass clef and *transposing instruments*: B flat and E flat instruments.⁸

Volume 70 – Killer Joe - is not different. The book has fifty-two pages in total and it basically presents the *lead sheet* of thirteen *jazz standards* in multiple transpositions and musical clefs.⁹ The jazz standards included in this volume are:

- Killer Joe
- Sugar
- The Girl from Ipanema
- Elvinish
- Blue Moon
- Afternoon in Paris
- “Stop-Time” Blues
- Misty
- Sweet Georgia Brown
- Ladybird
- You Stepped Out of a Dream
- Birthplace Blues
- Mr. P.C

The contents are divided as follows: name of the *tunes*, introduction, discography, notes to the musician (user), nomenclature and scale syllabus and the tunes for the concert key instruments (treble clef), Bb instruments, Eb instruments and bass clef instruments with their respective page numbers.¹⁰ The songs included were presented in this respective order shown above.

⁸ Musical instruments whose music is recorded in staff notation at a pitch different from the pitch that actually sounds (concert pitch).

⁹ It is a form of musical notation that specifies the essential elements of a popular song: the melody, lyrics and harmony through chord symbols; *Jazz Standards*: Musical repertoire widely known, performed, and recorded by jazz musicians, and widely known by listeners.

¹⁰ Songs

There are a couple of sections worth to mention here: “discography”, displays a list of albums where the songs were recorded that may help the user as a reference.¹¹ “Notes to the musician” where Jamey himself wrote information about each song concerning their form, chord progression, and scales used. In every lead sheet, besides the melody and the chord symbols, it also includes the name of the composer(s).¹² An important note is that three out of the thirteen tunes were written by Jamey Aebersold. That means that the other ten, copyrights were paid to their respective owners.

In the inner part of the back cover of the book, there is a plastic sleeve where the audio CD is placed. The CD has fourteen backing tracks, where the first thirteen are the tunes listed in the booklet, and the last track is the tuning notes which users will use as a reference to tune their instruments to fit the recordings.

The recordings have a typical jazz rhythm section: Drums, Bass and Piano. The musicians who recorded in this volume were, Steve Davis on drums, Tyrone Wheeler on bass, and Jamey Aebersold on piano.

The backing tracks were recorded using a pan feature where the left channel includes bass and drums, while the right channel contains piano and drums. That means if the user turns the pan control on their stereo to the left channel the piano will be muted or if they turn to the right channel, the bass will be muted. According to their website, this feature provides the chance for different rhythm players to play along with the recording

¹¹ Jamey Aebersold, *Volume 70: Killer Joe*, (New Albany, IN: Jamey Aebersold Jazz Inc., 1996), iii and iv

¹² Jamey Aebersold, *Volume 70: Killer Joe*, (New Albany, IN: Jamey Aebersold Jazz Inc., 1996), v

although it is not possible for the drums to be muted. The average length of the tunes is around six minutes each, allowing the user to play along with multiple *choruses* of the song form.¹³ Because the song selections do not have slower tempo versions, it is easier to follow the chord changes if the user has the lead sheet in their hands.

In general, the information presented in the booklet works well with the backing tracks; however, the users do not have option to adjust the tempo of each song since the recordings are fixed. In order to focus on specific sections, users would need to stop the backing track to be able to give better attention to it. Apart from that, once the users are ready, they will have the chance to play the songs at the tempos which they are usually played.

1.2 - Hal Leonard – Maiden Voyage: The Real Book Multi-Tracks Volume 01

In the late 1930s in Winona, Minnesota, the late Harold "Hal" Edstrom, his brother Everett "Leonard" Edstrom and their friend Roger Busdicker had formed a very popular dance band. Concerned that their conservative father wouldn't approve of using the family name for a band, Harold and Everett took parts of their names and called the band Hal Leonard. As leader of the Hal Leonard Band, Everett eventually became known as "Hal Leonard."

The company Hal Leonard was founded in 1947, after the Hal Leonard Band broke up. At that time, Everett started a music store using the Hal Leonard name while Roger and

¹³ In jazz, a chorus is defined as one full cycle of a song's form played through, whether that form is a 12-bar blues progression, 32-bar popular standard, or so on.

Harold were both directing award-winning high school bands in Winona. In those days, most school bands played serious literature, but Harold and Roger had the unique ability (because of their professional experience) to arrange "popular" music for school bands. Soon band directors across the US wanted their arrangements. They started to mimeograph copies and sell them. They realized that to successfully (and legally!) launch a new publishing company, they needed to license songs, so they ventured to New York's *Tin Pan Alley* in search of copyrights.¹⁴ What they got on their trip was an education in publishing and the rights to "I Wonder Who's Kissing Her Now," one of the most popular songs of that day. Eventually, many music publishers in New York were licensing Hal Leonard to do school band arrangements of their songs. Thus, began their publishing business and an entirely new industry.

On their *website*, it is possible to find twenty-four different play-along series.¹⁵ Among them is the series: "The Real Book Multi-Tracks Jazz Play-Along". Currently, this series presents twelve different volumes. The first volume was entitled "*Maiden Voyage*" – volume one, consisting of 43 pages.¹⁶ The first page lists the contents. Compared to Jamey Aebersold's Play-Along described here, it is much simpler since the contents display

¹⁴ Tin Pan Alley is the name given to the collection of New York City music publishers and songwriters who dominated the popular music of the United States in the late 19th century and early 20th century.

¹⁵ www.halleonard.com

¹⁶ "Maiden Voyage" is a jazz composition by Herbie Hancock from his 1965 album *Maiden Voyage*. It features Hancock's quartet – trumpeter Freddie Hubbard, bassist Ron Carter and drummer Tony Williams – with additional saxophonist George Coleman. It is one of Hancock's best-known compositions and has become a jazz standard.

only the title of the tunes and their respective page numbers. The booklet contains ten different jazz standards:

- Autumn Leaves
- Blue Bossa
- Doxy
- Footprints
- Maiden Voyage
- Now's the Time
- On Green Dolphin Street
- Satin Doll
- Summertime
- Tune Up

The respective composers of each song are listed on the upper right side of every lead sheet and again all the charts were written in four different versions for: treble clef, bass clef and for transposing instruments: B flat and E flat instruments.

The booklet does not have any additional notes about the tunes whatsoever. This specific point differs from Aebersold's, which has different sections that help users to approach the music they are studying.

But this is not the only difference between them. The audio feature of the Hal Leonard's book is located on their website. Inside the book users can find a code which gives them access to an interactive, online audio interface where backing tracks of the tunes are. This interface presents interesting features like tempo control, looping, buttons to turn each instrument on or off, lead sheet with follow-along marker and melody performed by a saxophone or trumpet on the "*head in*" and "*head out*".¹⁷ It seems that the users have

¹⁷ Head in and Head out are commonly used to refer to the first and last melodies of a song played.

more control over the tunes since they can adjust the mix and speed of the songs to their needs. To have access to the audio contents a computer and an internet connection are needed. The recordings have also a typically jazz rhythm section: Drums, Bass and Piano followed by, as it was mentioned before, a horn playing the melodies of the songs.

Even though the audio looks like a real rhythm section playing, it is noteworthy to mention that the tunes were played by an intelligent automatic accompaniment program instead. Listening to them carefully reveals some repetitive patterns played by each instrument. The sounds are samples taken from real instruments though. This information is not shown anywhere in the book.

In contrast to the Aebersold method, the technology allows more interactivity between the users and the book itself. The online feature provides a more diverse palette of options that facilitates the learning process since it is possible to slow the music down, select a specific part to work on, turn on and off the instruments and also it has a click track that helps users to be more steady in tempo.

1.3 - iReal Pro

Some years ago, there were bound volumes of musical scores called “fake books”. They were full of lead sheets made up of a single melody line and chord progressions. The most well-known of these fake books is the Real Book, which is full of jazz standards. Actually, it is still possible to see old copies of those, especially in music schools or practice rooms. However, due the advance of technology those books have been transferred to the digital world.

Technology has revolutionized many different aspects of modern life. Music is one of them. The current apps; and *DAWs* have had a huge influence on how music is learned, taught and made.¹⁸ Currently, there are several tools that give musicians around the world different experiences on their process of developing their musicianship.

The mainstream ideas espoused as best practice in today's schools are rooted in a constructivist vision of learning and teaching, namely, that in order to learn, people construct their own understanding of experiences.¹⁹

The app iReal Pro is one of those tools, which some say is making musicians' lives easier, since they do not need to bring those heavy books to gigs anymore. It is not hard to see where its name comes from - Real Book. The app is not only a collection of musical scores, but also it simulates a real-sounding band that can accompany a musician as he or she practices, and also lets musicians collect chord charts from their favorite songs for reference.

The app serves as both a book of chord charts which users can collect, transpose and access from anywhere, and also as a backup band, with more than 35 different accompaniment styles featuring a wide variety of instruments. Because the app is available on the desktop, the tablet, and the mobile phone, musicians can take it with them everywhere.

Developed and created by Massimo Biolcati, iReal Pro had its major update in September of 2014. The app's update includes the Guitar, Piano and Chord Scale diagrams in the basic app; and the backup band, which already featured piano, guitar, bass, and

¹⁸ Digital Audio Workstation

¹⁹ J. Wiggins, (2007). "Authentic Practice and Process in Music Teacher Education". *Music Educators Journal* 93, n. 3 (2007): 36.

drums, now has a variety of new tracks, including acoustic guitar, electric bass, B3 organ, strings and vibraphone to name some. The main features that this update included was:

- 35 playback styles and chord diagrams
- An improved mixer with the ability to choose more instruments
- A drum track that can also be a click track or a metronome
- The ability to see your songs with all the piano or guitar chord diagrams in-line.
- 12 new jazz styles.
- A three-instrument backing track—drums, bass, and piano or guitar.

iReal Pro gives users the capability to choose from thirty-five song styles: among them it is possible to choose jazz, latin, and pop rhythms. The instruments and accompaniment patterns heard are based on the style users choose. For instance, the jazz charts include keyboard (acoustic, electric, or vibraphone), bass, and drums. Pop charts include guitar as one of the instrument choices.

Another valuable feature is that users can also change the tempo and the *key signature* of the tunes by simple choosing the available options.²⁰ Users may also choose to set loops that repeat specific measures of the song infinitely, which can be a valuable practice tool for working on specific sections of a song's harmony.

The interface is straightforward regardless of the device it is on. In the iPad, for instance, along the left side of the window there is a Library pane where users can access

²⁰ Key signature is the arrangement of sharp or flat signs on particular lines and spaces of a musical staff to indicate that the corresponding notes, in every octave, are to be consistently raised (by sharps) or lowered (by flats) from their natural pitches.

and contribute to the forum generated playlist of tunes. Just to the right of that there is a list of songs in the selected library or playlist. And on the far right are the chords and arrangement for the selected song. By default, the currently playing measure is highlighted in yellow (though the highlight color as well as the color of the background “paper” can be changed). When play is pressed, there is a count-off that indicates the song’s tempo; the highlight moves through the chart as the song plays, so users will know which chords are being played at any given moment.

When it is first installed, the user is asked to visit the iReal Pro forums. It is within those forums that users find links to the tunes that originally are in those fake books. For example, in the Jazz forum, there will be links to download jazz standards. By clicking on those links, the charts will be automatically added to iReal Pro and gathered in a playlist. No melody lines or lyrics are included though. Perhaps, this was the way the app's developer found to avoid copyright issues.

While the forums provide plenty of material, iReal Pro also includes an editor where users can edit existing files or create tunes of their own. Just pull up the editor and enter in the chart area the desired chords. Additionally, it is also possible to export tracks as audio or MIDI files or email charts as HTML files that other users can import into their own libraries.

Instrumentally, iReal Pro is limited. Even though Biolcati sampled real instruments to imitate their actual sounds, the sampled instruments do not sound authentic. Users do not have the option to choose better-quality sound out of the available instruments. The accompaniments have harmonic and rhythmic variations, but, since there is no presence of dynamics, everything sounds inorganic and unlike a real band.

At first, Biolcati had created this app for himself to use, but it quickly caught on among musicians, who saw the tool's versatility. After some developments like the ability to edit and share chord charts, it is possible that the addition of a forum, which has tens of thousands of users, is responsible for its popularity.

1.4 - YouTube Channel: Elevated Jam Tracks

YouTube was founded in 2005 and currently it is considered the world's most popular online video community where millions of people can discover, watch, and share originally created videos.²¹ It provides a forum where people can connect to each other and it also acts as a major distribution platform for original content from creators and advertisers, no matter if they are big or completely unknown in the market.

The platform is based in California and it uses a video technology that displays a wide variety of users' generated video content, including movie clips, TV clips, amateur content, and music videos.

Due to its popularity, different creators of digital content from all over the globe have launched their channels through it. Professionally generated channels often have superior financial resources compared with user-generated channels. The financial resources can allow professionally generated channels to increase their appeal of the channel and/or of specific videos through the creation of regular or large volumes of content. Considering the "Elevated Jam Tracks" channel, it seems that it is right in the

²¹ "Official YouTube Blog." Official YouTube Blog, February 14, 2020. <https://youtube.googleblog.com/>.

middle of the both worlds. Even though it is a user-generated channel, the way it was organized looks like a professional channel.

The channel was created in 2016 and it is run by a person named Tom. The lack of information about its creator did not make the channel less relevant. The channel has reached one hundred and forty thousand subscribers and it has generated more than 47 million views. Linked to the channel, the developer also launched a Facebook's fan page in order to communicate with the users and an online store where users can purchase products related to the channel like t-shirts and mugs.

“My name's Tom and I'm the guy behind Elevated Jam Tracks. From my small home studio, I write, arrange, record, mix, master, edit and upload a new backing track every day for your jamming pleasure”.²²

Up to the present moment, November 2019, eight hundred and fifty-four videos (backing tracks) were broadcasted in the channel. According to the description of the channel, this number tends to be higher very quickly since a new backing track is uploaded every day.

All the backing tracks available on Elevated Jam Tracks were recorded and prepared by its owner. The tracks are mainly chord progressions in a specific genre, and in a specific key signature with no suggested melody. That means that the whole material stands on “originals” which brings a great advantage for its creator: he does not have to deal with copyright issues.

²² “Elevated Jam Tracks.” YouTube. YouTube. Accessed February 19, 2020. <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>.

Many songwriters are not aware of this, but chord progressions, as such, are not protected by copyright, and can be used by other songwriters.²³

Several layers of instruments were recorded on the tracks such as drums, bass and electric guitars. The instrumentation for the tracks is like a regular rock band. The rhythm electric guitar is the only real instrument recorded. The other instruments were programmed using digital audio features as *VST plugins*.²⁴

It seems that the channel was created to a specific audience since the backing tracks are mostly based on the rock genre. It displays dozens of examples written in different keys. The key signatures are presented on the titles of each audio where users can be able to adjust their playing for the respective key of each track before hitting the play button. All backing tracks were organized into playlists. Those playlists were labeled as follows:

- Explosive Rock
- Atmospheric Ballads
- Mellow
- Pure Groove
- Alternative Rock
- Filthy Blues
- Mellow Grooves
- Wild Metal & Hard Rock
- Seductive Blues Ballads
- Pure Blues

²³ Gary Ewer, “What Songwriters Need to Know About Copyright Registration.” *The Essential Secrets of Songwriting*, 21, 2017. <https://www.secretsofsongwriting.com/>.

²⁴ Virtual Studio Technology (VST) is an audio plug-in software interface that integrates software synthesizer and effects in digital audio workstations.

Since the channel is hosted in a video platform, besides the audio, users also have the component of the video attached to the audio. The content produced is mainly backing tracks where images with particular information were added to fit the audio. The interaction between video and images happens due to the pre-thought video edition made by the channel's developer.

As soon as the play button is hit on the platform, the video (backing track) starts showing someone, maybe the developer, playing the chords for that track on his guitar. While the audio is being played, the chords pop up on the screen which can be followed by the viewers. In some cases, the chord representation on the screen is not so precise because some chord extensions are missing from the *chord symbol*.²⁵ Another aspect concerning the video, is the suggestion of *modes* to be played over the *chord progression*.²⁶ After a while, the image of the player disappears, and is replaced by a static illustration of a fingerboard of a guitar where the notes of that specific mode are emphasized. However, it is worth mentioning that in some videos the suggested modes do not correspond to the actual scale that is supposed to be played.

There are no special features concerning muting, highlighting specific instruments, panning or whatsoever in order to help users to learn distinct parts of the “song”, like the

²⁵ Chord extensions are essentially Notes that are added above the basic 7th chord structure. The most common extensions are the 9th, 11th, and 13th.

²⁶ In the theory of Western music, a mode is a type of musical scale coupled with a set of characteristic melodic behaviors.

bass line or *drum fill*, for instance.²⁷ The option of changing the speed is offered by the platform, but the quality of the audio is impaired when this feature is activated.

It seems that Elevated Jam Tracks was designed with the main purpose for users to practice their improvisation skills over the chords and the rhythms presented on the audios. According to its developer the channel is a tool for practice, improvisation and recreation.

“I’m less hung up on the learning and theory aspect and more about it being a fun and interesting experience for players of varying skill levels”.²⁸

²⁷ Drum fill is defined as a "short break in the groove. A lick that 'fills in the gaps' of the music and/or signals the end of a phrase.

²⁸ “Elevated Jam Tracks.” YouTube. YouTube. Accessed February 19, 2020. <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>.

CHAPTER 2 - INTERVIEWS

It is common to say that learning music is like acquiring a new language. That means that there are some common steps in both processes. Rather than discussing which steps learners face, the focus here is to emphasize that these common aspects may vary from person to person, regardless of the stage they are at in their particular process.

Learners have an important role in their own learning process since, after a while, as they evolve into mature learners, they find ways to select information that fits better for their needs instead of receiving it passively.

“The trouble with the search for universal rules concerning thought is that our memories and thinking processes interact as we grow. We do not just learn about things; we learn ways to think about things”.²⁹

“Humans are considered innately active; we interact with the environment; the environment does not merely act upon us”.³⁰

Nevertheless, there is always a starting point where apprentices feel motivated by someone whom they consider their role models for inspiration. With that in mind, this chapter presents interviews of six influential musicians who answered particular questions in order to have a better understanding about the real-world scenario of the use of backing track materials. The questions addressed were based on each interviewee’s background and

²⁹ Manfred Clynes. *Music, Mind, and Brain: The Neuropsychology of Music* (New York, N.Y.: Plenum, 1982), 02.

³⁰ Cynthia Taggart and Peter Gouzouasis. “Music Learning and Language Learning.” *Update: Applications of Research in Music Education* 13, no. 2 (1995): 9–13. <https://doi.org/10.1177/875512339501300204>.

respective work they have done in the music field. In the appendix of this paper it is possible to find each interviewees' bio where more details of their work are presented.

The chosen names were based on their own contribution to the music scene around the world and/or their contribution to the music pedagogy worldwide. The names are:

- Massimo Biolcati
- Stephen Allee
- Jamey Aebersold
- Jeff Berlin
- Terry O'Mahoney
- Sizão Machado

The interviews were transcribed in full and subsequently their ideas will be discussed in the next chapter of this paper.³¹

2.1 - Massimo Biolcati - October 2nd, 2019

Why did you start iReal Pro? (Please tell me all the process up to getting the idea of developing the app.)

During a certain period, I found myself playing a lot of original music with various bands so that when a standards gig would come around, I had forgotten some of the more obscure tunes. I didn't want to carry around a physical *Real Book* and at that same time the original iPhone was released.³² I attempted to upload *pdf* scans of the real book into the iPhoto app, but the screen was just too small and besides all I needed was a quick glance at the chord progression to refresh my memory.³³ Apple released a software development kit and since I had been dabbling with programming on and off for many years, I thought I'd give it chance to explore the idea of making an app containing a collection of chord progression easily readable on the small screen. The app took off and after a couple of years I started exploring the idea of adding a playback engine to the app that would read the chord progression and create backing tracks in various styles and tempos.

³¹ My methodological decision was to transcribe interviewees' answers verbatim from e-mail correspondence.

³² The Real Book may refer to a number of compilations of lead sheets for jazz standards. It usually refers to the first volume of a series of books transcribed and collated by Berklee College of Music students during the 1970s.

³³ a file format that provides an electronic image of text or text and graphics that looks like a printed document and can be viewed, printed, and electronically transmitted.

When did you start it?

I started coding in 2008 and released the app in January 2009. The play along feature was added only in 2012.

How did it change over time and what made you decide to make the changes that you did? (If the product changed over time) – describe some of the ways that the product grew into something or different from the original idea.

Initially it was only a collection of chord progressions. Next I added the option to transpose the chord progressions and make playlists. Year two was big because I added an editor that allowed users to edit the chord progression to their liking and to create their own songs. I also added the ability to share the chord progressions with other users of the app. The play along feature of course was the biggest change and in the following years there have been many improvements with new styles and features to help with practice. I grew up in a small suburban city in Italy where I didn't have access to a lot of other musicians, so playing along with Jamey Aebersold's CDs was fundamental to my initial foray into Jazz. During the 90s I also spent some time with an application called Band-In-A-Box that is still around to this day. The app boom gave me the idea of trying to create something similar but more flexible and useful than a book with a CD and for the newly popular mobile computing platform.

Did you create this material at least part for your own use? Or was it more a question of recognizing of a general need for education materials of that nature?

It started as a tool for me.

If you use your own materials and methods to practice, how often and in what ways do you do so?

I still use my app regularly when I want to learn new songs or when learning other people's music with unusual chord progressions or unusual *meters* since the app can handle most of it.³⁴

How do you imagine your product may continue to evolve to meet future consumer needs?

I will try to improve the quality of the generated playback tracks to make them even more realistic sounding.

³⁴ Meter refers to the regularly recurring patterns and accents such as bars and beats.

In your opinion what are the limitations of using this type of material as opposed to the original method of playing with other people? (Listening to and playing with other people).

The major obvious limitation is that a backing track doesn't listen to you which is one of the fundamental and most rewarding aspects of making music in an ensemble.

Feel free to share any other thoughts you may have about the usefulness of play-along materials.

Play along tracks can be incredibly helpful specially for beginners in learning to play with other instruments. Learning to play in tempo, to keep the form, to play/sing in tune, to improvise. It can save a lot of time at rehearsal or ensemble class if the players have already spent time at home with a play a long version of the song.

2.2 - Stephen Allee – October 9th, 2019

How did the invitation to record the backing tracks for Jamey Aebersold's play-along series come about?

I had known Jamey for many years and had been playing in his quartet for many events, concerts etc. He then asked me to play the string parts for the Bud Shank Standards with Strings Play-Along. He then asked me to record the Cole Porter double CD play along when my trio with Bill Moring and Tim Horner were playing at the Jazz Factory in Louisville. I also had built my own recording studio outside of Nashville IN. He started asking me to record and produce Play-alongs there with a variety of musicians, Jonathan Higgins, Tyrone Wheeler, Bill Moring, Tim Horner, Rufus Reid and many more.

Have you ever recorded a play-along material before?

I had recorded tracks for my own study purposes. I had extensive experience recording *underscore* and background music for TV and documentaries.³⁵

How did you approach your part in the music given that the melody or solo that you normally would have been interacting with was absent?

There is a discipline involved in playing "less" and imagining the soloist. You have to play considering the length of the phrases that the soloist might use. Some of the play alongs are very busy, almost too busy to solo with. Of course, none the ones I recorded.

³⁵ In a musical theater or film production, underscoring is the playing of music quietly under spoken dialogue or a visual scene. It is usually done to establish a mood or theme, frequently used to recall and/or foreshadow a musical theme important to the character(s) and/or plot point, onstage or onscreen.

Did you or do you personally use play-along materials in your practice?

Yes! I'm an advocate of backing tracks and I use them quite regularly. I always recommend them to my students. The Aebersold's play-alongs are recordings of "real" musicians playing in the moment for multiple choruses. The iReal Pro program is a machine-oriented loops that do not *swing* (in my opinion).³⁶ It's ok for initially learning chord changes but not helpful for learning "feel" and pacing.

Can you list some of the ways play-along materials can contribute to young musicians' development?

As an aid to learning songs, learning the styles of the songs, learning chord scale relationships. Learning to read the melodies accurately, modeling the players (piano, bass, drums, guitar) time feel and pacing. Learning the correct chord changes of a song. Learning significant numbers of songs from many jazz artists. Practicing set chord progressions: 2-5-1's in major, minor keys.³⁷ Learning songs in all 12 keys, for vocalists, learning how to work with an accompanist.

List some the limitations of the medium.

The fidelity on many of the CD's are recording Mono & Mono without stereo imaging. There are a few that do though.

Feel free to share any other thoughts you may have about the usefulness of play-along materials.

I believe I have played and/or recorded approximately 16 play-alongs for Jamey. Miles Davis (2nd edition). Joe Henderson, Lee Morgan, JJ Johnson, Eddie Harris, Cole Porter, Good Time, Standards with Strings, Dixieland, Christmas etc. Learning songs with a masterful rhythm section is a huge benefit of play-alongs. I personally learned additional comping techniques from modeling the pianists on the recordings. I transcribed some of their comping rhythms to assimilate pacing and phrasing. I like the fact that you can Play-Along with them as if you were on a gig, playing one song after another for an hour or so. The fast tempo volumes are also helpful to play with a rhythm section (that sounds great) maintaining an incredible tempo that you are challenged to match.

2.3 - Jamey Aebersold – October 14th, 2019

Why did you start making play-along books? (Please tell me all the process up to getting the idea of developing the famous Aebersold's books).

³⁶ Colloquially, to swing is used to describe the quality or impression or effect ("feel") of a changing pattern in a propulsive rhythm created by the musical interaction between the performers.

³⁷ The 2-5-1 chord progression is a famous chord progression used primarily in jazz music.

While in Elementary school my parents bought a Hammond Organ. I learned to walk bass lines in the left hand and play chords in the right hand. I recorded several songs and used it as a practice tape before college and during college. I just wanted to play with SOMETHING! It was years later, in 1967 that I put out volume 1 LP and booklet. That was successful and many more were to follow. In the beginning, I didn't have an idea to put out more play-a-longs. Just one was all I had in mind because I wasn't a businessman. I was a teacher of private lessons and a working musician. Eventually, it evolved to LPs and cassettes. Then CDs came along and LPs disappeared, but cassettes stuck around for a while then they disappeared.

How did it change over time and what made you decide what to make the changes that you did? Describe some of the ways that the product grew into something or different from the original idea.

Well, I had other people offering suggestions along the way. Dan Haerle was encouraging me to put out volume 3, The II V7 I Progression and that was very helpful to thousands of people around the world. In 1976 I put out Charlie Parker, Miles Davis and Sonny Rollins and that really got things going in a hurry. Volumes 21 and 24 probably should have been published earlier but the idea of playing scales and chords was important but hadn't caught my imagination yet. Once they were released the pedagogy offerings had begun. Volumes with beginning songs for young jazzers were very important like volume 54 and 70. Also, along this time people were asking for Duke Ellington, Herbie Hancock, Horace Silver. I was able to get the rights to those famous songs and off I went.

Did you create this material at least in part for your own use? Or was it more a question of recognizing of a general need for educational materials of that nature?

Originally, it was for my own use and a few others that I felt might like this new idea. Once they became readily available, everyone wanted to play with them. From beginning students to pros like Mike Brecker, Bill Evans, Woody Shaw, Doc Severinsen, Phil Woods, and many others.

Have you ever recorded a play-along material before the ones you published?

Just the ones on the organ and tape. Oh, I did make some with piano, bass and drums here at the house on cassette. We did a bunch of tunes and made some cassette copies for friends. They were excellent but I never put them out for sale.

If you use your own materials and methods to practice, how often and in what ways do you do so?

I assume you mean Do I Practice with My CDs? Yes, I use them when I practice. Depending on my mood, I'll choose tunes or tracks that I feel like playing at the time OR, tunes I need to work on like maybe the several sets I have that take tunes through ALL TWELVE KEYS. That's always a challenge!

Since you were part of the rhythm section while recording the backing tracks, how did you approach your part in the music given that the melody or solo that you normally would have been interacting with was absent?

I've comped on piano for many students over the years and have learned how to outline the harmony but not get in the way of the imaginary soloist. I played alto on several volumes which were made in New York, but I never released the sax soloing. Comping is an art and I really enjoy it. Sometimes in New York I would have to sing the melodies and then scat sing in order to give the piano player, bass and drums something to play with or against. But we never put the singing on the tape.

Can you list some of the ways play-along materials can contribute to young musicians' development?

They allow the student to HEAR good harmony and a good rhythm section. No one has a good rhythm section at their house to practice with, so my Play-A-Longs fill that void. Of course, it's not like playing with a professional rhythm section but it's very close and much cheaper. My volume 1, 21, 24, 47, 84 and 116 are fantastic in helping learn the basics and have fun at the same time. You have to learn and play the basics, or you'll never feel satisfied with your solos. Also, the CDs and books help train your EAR.

In your opinion what are the limitations of using this type of material as opposed to the original method of playing with other people? (Listening to and playing with other people).

Interaction is missing with CDs, but your imagination can overcome that in a hurry. Only the player's limitations can keep these volumes from being helpful. Millions around the world have used them and enjoyed the music they can make while practicing and performing with some of the finest bass, piano and drummers on the planet! Lee Konitz even used them in concerts! Pros practice their craft with them every day. Make Music, Music, and more Music.

How do you imagine your material may continue to evolve to meet future consumer needs?

We have all the background tracks available at Jazzbooks.com and are currently making available many books in PDF form. This will allow people to use them on the road, so to speak.

Feel free to share any other thoughts you may have about the usefulness of play-along materials.

Playing with others is crucial to our jazz development. The CDs are the next best thing to having a pro rhythm section available. And the books have CORRECT melodies and CHORD CHANGES. Also, we have eight volumes that have SLOWER TEMPO CDs. Volume 54 tracks are available in elongated CD versions. Each track on volume 54 is about

15 minutes long. These CDs are great for using with a class or several students at the same time.

2.4 - Jeff Berlin – October 29th, 2019

Did you use backing tracks when you were a student? If so, describe some ways in which its use helped you to develop as a musician?

No, I never used them. During my formative years, I learned the music off of records and practiced the bass parts. Doing this, plus playing all the time, practicing a lot, and having a deep immersion into studying academic music was all that I needed to improve my playing.

If applicable, can you list any limitations of studying in this way?

My thought is that playing with backing tracks isn't study. It is performing which is different than learning because the goals of learning and performing aren't the same.

Do you use this type of material in your lessons? If so, how effective you think they are in general?

I teach academic musical content to readers of music, and I teach reading of music to non-readers. I never incorporate performance principles in a learning experience that best functions with an out-of-time approach. Hence, no *metronomes* and no backing tracks!³⁸

Do you personally use play-along materials in your practice nowadays?

Rarely!

Why did you choose not to use them?

I didn't make a conscious choice not to use them. The idea of using them just never occurred to me. Maybe to see them more as fun instead of educational.

Have you ever recorded a play-along material or do you have the intention to do so?

No, but I intend on doing this, shortly!

2.5 - Terry O'Mahoney – November 6th, 2019

Why did you start making play-along books?

³⁸ a device used by musicians that marks time at a selected rate by giving a regular tick.

I started writing books with play-along components because, over the last 10-15 years, that has become the industry standard in percussion/drum set pedagogy. Due to the innate nature of how drummers function in an ensemble, their primary role is to accompany other instrumentalist and/or singers, and this role requires a great deal of ensemble experience across many genres of music. Chart reading for drummers is often very difficult to practice without any musical point of reference (i.e. the melody, backgrounds, solos, etc.). Students often would attempt to play through a chart unaccompanied by anything other than a metronome and miscount, which would mean that if they played some rhythmic figures correctly, those figures may be several beats early or late, depending upon the counting error. Without any point of reference, a drummer might be playing the correct rhythmic figures but *at the wrong time* and they would have difficulty knowing that they were playing incorrectly. The play-alongs were meant to replicate what transpires in a rehearsal – the drummer learns to count measures properly and interpret the rhythmic figures properly at the correct time in the chart.

Some of my play-along projects were example tracks and designed to provide an “aural picture” of how different drum patterns/grooves felt. Other versions or projects contained two versions of the same track – one with drums and one without drums (which the students could use when practicing). Students often play the “notes” of a *groove* but aren’t able to delve any deeper into the music because they haven’t been exposed to a particular style of music (e.g. Brazilian, Afro-Cuban, etc.) and miss one of the most important aspects of the music – feel. The example track was meant to provide the musical information that a play-along track alone cannot provide.³⁹

How did your books change over time and what made you decide what to make the changes that you did?

The play-alongs I produced commercially were meant to be used with the methods books I wrote. Specific play-along tracks were tied to specific exercises or concepts in the book. The purpose and use of the play-along did not fundamentally change or differ from the original concept.

Did you create this material at least part for your own use? Or was it more a question of recognizing of a general need for educational materials of that nature?

I created some of my first play-alongs as practice tools both for myself and my private drum students. The first ones were produced using various software, such as Finale, and were very simple. My second book, *Jazz Drumming Transitions*, was a direct result of interactions with my students. They would often come to their lessons with a chart from the composition class or for a recital and ask how to approach various concepts. Examples of this might include switching feels from swing to bossa nova, Afro-Cuban bembé, or mambo; metric modulations; switching from brushes to sticks seamlessly during a chart;

³⁹ Musicologists and other scholars argued that a "groove" is an "understanding of rhythmic patterning" or "feel" and "an intuitive sense" of "a cycle in motion" that emerges from "carefully aligned concurrent rhythmic patterns" that stimulates dancing or foot-tapping on the part of listeners.

or playing in less well known jazz subgenres (e.g. straight eighth-note *ECM*, modern ECM swing, modern odd-time funk, etc.).⁴⁰

Prior to writing my second book, I was also a contributing critic of education material for a scholarly journal. I was sent large volumes of new method books and other pedagogical material to review. Having access to this broad range of new pedagogical material allowed me to identify an area of the literature that was not being addressed, in essence, “finding a niche.” I produced my book to fill a specific gap in the pedagogical literature.

As students brought more and more complicated arrangements that they were asked to play on recitals or concerts, I started to develop more and more complex play-alongs, but again, only through the use of software, not recording of live players. While the computer-generated play-along were useful, I felt that they were missing “the human touch” that can’t be replicated. I then moved on to making play-alongs using live musicians recording to a *click track*.⁴¹

Have you ever recorded a play-along material before the ones you published?

I did record some play-along projects for several friends. They were rather straight-forward and meant primarily for players to develop their solo vocabulary. They normally followed a standard format – a chorus for the melody, several choruses for improvisational practice and a recap of the melody and an ending.

If you use your own materials and methods to practice, how often and in what ways do you do so?

I use my own material on a rotational basis, whenever I feel that I need to “brush up” on something or when I know I have to prepare for a specific concert. I don’t necessarily use them every day, but they are part of my overall practice regimen.

Since you were part of the rhythm section while recording the backing tracks, how did you approach your part in the music given that the melody or solo that you normally would have been interacting with was absent?

When playing on swing play-alongs as backing tracks, I normally attempt to keep my snare drum and bass drum comping rather “generic” and subdued. I try to maintain the groove as much as possible, don’t vary the ride pattern very much, and don’t include too many fills.⁴² This allows the student practicing with the play-along to concentrate on their own work. Some play-alongs, however, require stylistically different approaches from the

⁴⁰ ECM (Edition of Contemporary Music) is an independent record label founded by Karl Egger, Manfred Eicher and Manfred Scheffner in Munich in 1969. While ECM is best known for jazz music, the label has released a variety of recordings, and ECM's artists often refuse to acknowledge boundaries between genres.

⁴¹ A click track is a series of audio cues used to synchronize sound recordings.

⁴² In drumming, a fill is defined as a "short break in the groove, a lick that 'fills in the gaps' of the music and/or signals the end of a phrase.

outset. For example, if the track was intended to replicate an Elvin Jones inspired style from his work with John Coltrane (e.g. *A Love Supreme*), I would comp and generate time differently than if the track was a straight-ahead bebop tune, shuffle, ballad, bossa nova, or other style that could be codified by a static, specific style of playing.

Interacting with the soloist is difficult to “build in” to a play-along track, and that was never my intention to build it into the track, but I might increase the frequency of my snare and bass drum comping as the track progresses, depending upon the style of the music being practiced.

Can you list some of the ways play-along materials can contribute to young musicians’ development?

I think play-alongs are one of the most valuable tools students, particularly rhythm section players, now have to develop their musicianship. It is assumed that the play-along maintains a steady tempo, so students experience how it feels like to control their tempo fluctuations. The play-alongs also allow students to hear how a groove or pattern should feel in real time, what fills are stylistically appropriate, to practice trading 4’s or 8’s with the track, and generally build stamina. They are the best way, short of playing with other people, that students can develop their ensemble playing.

In your opinion what are the limitations of using this type of material as opposed to the original method of playing with other people? (Listening to and playing with other people).

The biggest limitation to play-alongs is their fixed tempo. The *iReal Pro* app seems to have overcome this limitation with its variable tempo settings and stylistic choices that can be applied to any of the tunes from *The Real Book*. The ability to begin working with play-alongs at a tempo best suited for the student’s technical level is invaluable. Young rhythm section players are often paired with more experienced instrumentalists who often expect the rhythm section players to be able to come into a rehearsal and immediately play *any* groove at *any* tempo the instrumentals request. This often overwhelms young players, as they have not had enough time to deeply develop a strong technical grasp of all of the styles needed by today’s rhythm section player. Approaching new styles or grooves at a manageable tempo will allow the student to take the necessary time to fully develop the groove, style, or concept more easily.

The possibility for rhythm section/soloist interaction is another great limitation but is not as great a limitation as the fixed tempo limitation. If students who work with play-along develop a strong groove, a good feel, and the ability to trade 4’s or 8’s without tempo fluctuations, they will have derived a great deal from the play-along tracks. The “next level” of rhythm section/soloist interaction will be much easier to develop once the students have mastered these other musical fundamentals.

How do you imagine your material may continue to evolve to meet future consumer needs?

I would like to have the ability to vary the tempo of the play-along to allow students to begin the examples or exercises at their own desired tempo and slowly work the tempo up to a useable speed.

Feel free to share any other thoughts you may have about the usefulness of play-along materials.

I wish I had access to the variety of play-along materials available today when I was younger. It was often difficult to find a play-along that would work. For example, when I was a young student, there was a play-along series entitled “Music Minus One” and there was an edition for drummers. However, the series was only issued on vinyl records and when I played too loudly, the record would skip, which made practicing rather difficult and frustrating. The only style represented was big band music, not bebop, Brazilian, Afro-Cuban, or post-bop. Having only one style available to practice with limited the learning experience.

2.6 - Sizão Machado – November 14th, 2019

Have you ever used a play-along material when you were still learning your instrument? If yes, describe the benefits that backing tracks brought to your development?

I used to and I still use backing tracks in my routine. The best way of learning a new language is, arguably, through listening to. Play along is an indispensable tool to develop as a musician. In my old days when I was learning about music, the first tools that we had were imported LPs that eventually we had in our hands. At that time, it was really hard to transcribe because there was not any way to slow down the pace of the music. So, we had to stop the turntable, manually put the stylus in the right spot in order to listen to the phrase or chord progression again that I was transcribing. Anyway, it was really important for me as a musician.

Could you list the limitations of the use of backing tracks?

The limitations are basically operational. All you have to do is to adjust the pace and play. In some cases, depending on the app you’re using, it is necessary to write the chord progression.

Do you use this kind of material in your lessons? In your opinion, how effective is it for your students?

I usually use them a lot. Using backing tracks, my students are able to listen to the excerpt and try to reproduce it at the same time. The result is always positive.

Do you personally use play-along in your study routine?

Yes, I do. I think they are essential. For my musical activity and for the development of my technique they are absolutely indispensable. We are very fortunate of having this kind of tool.

What changes would you like to see in play-along materials in the future?

It would be awesome to record yourself using the same app that it is used for the backing tracks. Maybe this option is already available, and I don't know yet.

Have you ever recorded any material like that?

I have never recorded any material like that, but I hope to do it soon.

Feel free to share any other thoughts you may have about the usefulness of play-along materials.

In my experience I usually use the "loop station" pedal. It is a very effective tool to study chord progression, melody and finally basslines at the same time. We can listen to all these elements at once.

CHAPTER 3 - CONSENSUS ON THE SUGGESTED USE OF BACKING TRACKS

When the initial idea of this paper was conceived, the intention was simply to put together well-known musicians' ideas about play-along materials and, based on that, the work would be restricted to describing what those ideas say about the use of backing tracks. After analyzing their responses, it was noted that in order to use backing tracks properly, it was not just a matter of playing along with them. It seems that it is necessary to use strategies to make the use of such materials effective. Although these strategies were not totally explicit in their answers, this chapter presents an overview about the interviewees' thoughts.

Among the interviewees, Jeff Berlin was the only one who did not consider or has used backing tracks as a supportive tool for the development of his musicianship. In his formative years he learned music by listening to records, "playing a lot" and used academic contents as supportive material for his musical growth.

According to Berlin, the learning process cannot be confused with the act of performance. He considers that these two aspects have different goals. It is implicit that backing tracks are meant for learners to play along with, and because of this, they are not able to acquire new information because playing is directly linked to performing. He characterizes such materials as performance principles. This may explain the reason he did not take backing tracks in consideration when he was developing himself as a musician or

even when he is teaching, although he asserts that this decision was taken unconsciously. Due to the lack of details of his answers, or perhaps to the lack of specific questions about this subject, his statement comes down to seeing backing tracks as fun rather than an educational tool. Since he never considered using play-along materials, he did not ponder any strategy or specified any goal in the use of them in his interview.

The other interviewees are directly associated with the use of play-alongs. Massimo Biolcati, Jamey Aebersold and Terry O'Mahoney developed their own material. They started their respective projects involving backing tracks to meet their particular needs. Their ideas ended up turning into products, and these products were released on the musical market.

These three affirmed that they still use their material to practice with. The procedures they take in order to use it are similar. Even though specific goals were not mentioned by them, through their responses it was possible to understand their way of using it. Biolcati mentioned that he uses his iReal Pro regularly when he needs to learn new songs, practice unusual chord progressions, or songs with unusual meters. Aebersold, on the other hand, uses his own materials depending on his mood. He chooses tunes or tracks he feels like playing or tunes that he needs to work on. O'Mahoney states that he does not use it every day, but he considers his material as part of his overall practice regimen.

Regarding their opinion about the limitations of backing tracks, Massimo Biolcati was emphatic in stating that the limitation is the lack of interaction since backing tracks do not respond musically to what users play. He sees interaction as one of the fundamental and the most rewarding aspects of making music in an ensemble. Although Jamey

Aebersold also pointed out interaction as an aspect that limits learners to evolve, he claims that only players' own limitations could keep backing tracks from being helpful. Perhaps, based on his answer, is it possible to infer that beginners or inexperienced musicians may encounter difficulties in such materials without a proper orientation on how to use them? Terry O'Mahoney mentioned interaction as well, however he does not recognize it as the greatest problem. The fixed tempo of the backing tracks is the biggest limitation for him. As reported by him, young players should approach to new styles or grooves at a manageable tempo. This would allow them to take the necessary time to fully develop the groove, style, or concept more easily. Here, we presume that he is referring to play-along materials that have no special features such as tempo control as we can find in three of the materials described in this paper.

Like the previous three interviewees, Sizão, Machado, and Allee advocate the use of play-along materials as well. Besides using them regularly, Allee also recommends them to his students to practice with. Sizão considers them indispensable for the development of his technique, and for his musical activity, for instance.

Differently from the others, neither Machado nor Allee said that the interaction would be a limiting factor. According to Machado, the limitation would be operational, meaning that sometimes users would have to add the chord progression they need to work on, depending on the app they are using. Allee only mentioned a specific technical issue concerning the way some backing tracks are recorded. It is assumed that this may pose barriers to the users, even though these barriers were not specified by him.

With the exception of Jeff Berlin, all the interviewees identified benefits of using play-alongs. The list below highlights these main benefits mentioned by them:

- Help beginners in learning to play with other instruments.
- Help to learn new songs and styles of the songs.
- Help to learn chord scale relationships.
- Help to read melodies accurately.
- Help students to hear good harmony and a good rhythm section.
- Help to control tempo fluctuations.
- Help to build stamina.
- Help to develop ensemble playing.
- Help to play in tempo.
- Help to keep the form of tunes.
- Help to play/sing in tune.
- Help to improvise.
- It saves time at rehearsals or ensemble classes if players have already spent time at home practicing.

Learning is considered a process of knowledge acquisition where experiences are exchanged between individuals and also between the learner and a specific source. The background of the learner should be considered and also his/her maturity with regard to knowing how to manage this resource in order to take advantage of it. Each individual has his/her own way of retaining information, which varies the learning process. However, there is a common ground for each individual where experiences define concepts and values which end up guiding us for our future choices for new experiences.

Considering what was said by all the interviewees, the last chapter examines suggestions on the use of the matter of this paper, along with a brief discussion about how our experiences define the concepts of the learning process.

“The experimental learning model is a simple description of the learning cycle-how experience is translated into concepts, which in turn are used as guides in the choice of new experiences”.⁴³

⁴³ David A. Kolb “Management and the Learning Process.” *California Management Review* 18, no. 3 (April 1976): 21–31. doi:10.2307/41164649.

CHAPTER 4 - CONCLUSIONS

Over the years, the results achieved by thousands of popular musicians have been reached in many different ways. Some of these musicians meet their goals by means of theoretical support found in written materials or lectures done by teachers in lessons. However, it is evident that a large number of musicians reach their achievements by “trial and error”. Normally, they make autonomous decisions to check what best works for their needs, and by doing that, they adjust each aspect to their reality through living these experiences.

In many occasions, popular musicians start playing professionally soon after gaining minimal proficiency on their instruments. Apparently, after learning songs, mostly by ear, some of these musicians feel ready to perform for an audience in a live performance setting. This result encourages them to keep making these autonomous actions while they develop their musicianship throughout the years.

This empirical facet of music can turn into a commitment to pursue autodidactic improvement in their skill sets, and consequently, improvement in their performance. This autonomy can work as a motivation that can potentially enhance the musicians’ musical progress in general. Keith Swanwick states that music can be taught without necessarily being in a formal classroom of schools and colleges.

“There are many other people who teach music and facilitate access to music without necessarily thinking of themselves as teachers in any formal sense. These include music promoters, composers, performers, program writers, critics, people in TV, film and radio,

organizers of festivals, adjudicators, examiners and those many informal music-makers who, while they may be unattached to institutions, are very active in our communities”.⁴⁴

The latter ones in the list are more related to the act of practice and performance. The boundary between practicing and performing is frequently blurred among popular musicians because the idea of “learning on stage” becomes something evidently common and pleasant for them. If it is pleasant, it motivates the development.

“The practice was something that popular musicians did so long as they enjoyed it – if they were not enjoying it, they did not do it”.⁴⁵

The motto, which says, *musicians learn and evolve when they actually play*, seems to be a common attitude among more experienced musicians. Certain musical traits or even attributes of their personality, which can interfere in their playing, are addressed and can be improved by the interaction that happens while they play. Although the term interaction brings a connotation of group, aspects of individual performance are considered when the music collectively occurs. Swanwick advocates that the social interaction with ourselves and with others means that we are not merely responders but interpreters.

“We do not simply react to our environment, whether physical or cultural, but we also reflect upon our experience”.⁴⁶

Musicians with more experience affirm that the stage is not the right place to fix flaws. On the other hand, others say that the stage is the only place some of them appear.

⁴⁴ Keith Swanwick, *Teaching Music Musically* (New York: Routledge, 2012), xv.

⁴⁵ Lucy Green *How Popular Musicians Learn: a Way Ahead for Music Education* (London: Routledge, 2017), 23.

⁴⁶ Keith Swanwick, *Teaching Music Musically* (New York: Routledge, 2012), 23

Despite the highs and lows in finding solutions to flaws, in general, musicians are usually motivated to increase their engagement to the learning process based on their weaknesses.

There are intrinsic and extrinsic motivations that lead musicians toward their goals. As Ryan & Deci state, “intrinsic motivation commonly refers to motivation which originates within an individual: that is the motivation to do something because it is inherently interesting or enjoyable”.⁴⁷ On the other hand, extrinsic motivation tends to refer to externally regulated behaviors which are performed “in order to attain some separable outcome”.⁴⁸ No matter the type, motivation is one of the central keys that promotes the engagement learners need in order to improve.

Through the interviews of this paper, it was noted that the increase of the engagement of learners can evolve with the use of supporting material - in this case, the backing tracks. Considering that the act of playing professionally, being prepared for the most diverse circumstances that a live situation can present, is it possible to assume that backing tracks can minimize the flaws of musicians before getting to an actual live stage situation? Do they allow musicians make autonomous decisions to engage in their learning process? According to the musician and professor Stephen Allee, this is totally possible; however, in his estimation some strategies concerning its use must be considered in the process.

“I personally learned additional comping techniques from modeling the pianists on the recordings. I transcribed some of their comping rhythms to assimilate pacing and phrasing. I like the fact that you

⁴⁷ Ioulia Papageorgi and Graham Welch. *Advanced Musical Performance: Investigations in Higher Education Learning* (London: Routledge, 2016).

⁴⁸ Richard M. Ryan and Edward L. Deci. “Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being.” *American Psychologist* 55, no. 1 (2000): 68–78. <https://doi.org/10.1037/0003-066x.55.1.68>.

can play along with them as if you were on a gig, playing one song after another for an hour or so”.⁴⁹

It seems that approaches are needed in order to take the best advantages from the play-along materials. Considering Allee’s choices, he tends to model the pianists on the backing tracks to add a new vocabulary to his own comping techniques. It is worth remembering that in the backing tracks some instruments are highlighted since the soloist is missing. Transcribing is another procedure he adopted to better understand some specific elements of the piano in that context.

These actions vary from person to person depending on the level of their experiences. Formal instruction may not be necessary: however, perhaps to go deeper into those strategies, formal systems may be crucial points of access. Doubtless, efforts are needed to help the learning process take place. These efforts are directly linked to strategies that learners should take in their own way of finding mature solutions to their flaws. No matter the aim, backing tracks should be seen as a supportive tool rather than a replacement or the only source to access the musical properties.

4.1 - Strategies for active learning

It is noted that the use of backing tracks without specific strategies can lead to a negative result. The interactions that occur in a group situation will be missed if goals are not well defined while using this supportive tool. Since the play-along features allow students to repeat specific parts as many times as they want, slowing the tempos, loop difficult excerpts, in general the responsibility that a group interaction demands is set aside

⁴⁹ Stephen Allee interviewed by Giovanni Sena, October 9th, 2019.

because backing tracks do not present the engagement with the human condition, especially in its social, cultural, and civic dimensions.

On the other hand, it is indisputable that play-alongs do have benefits. They facilitate learners to chase smaller portions of a whole music-based concept throughout the special features this kind of materials can provide. Depending on the backing track material, some specific instruments are absent, which can call the attention to a different perspective while the users are trying to pursue their goals in particular qualities of the music.

These are some features found in the materials analyzed in this paper:

- The soloists are missing or can be easily muted. As a result, the rhythm section can be more easily focused on.
- The chord changes are more defined and easier to hear.
- The track stays consistent in terms of harmony.
- The tempo of the tunes is more stable.

These attributes make backing tracks great for practicing with. However, they indicate that to use them effectively, the attitude that they exist simply for the desire to “just play” should be abandoned. Approaches to promote active learning should be focused in order to develop learners’ high order thinking skills instead. To illustrate that, Terry O’Mahoney, who writes play-along materials for drummers, described a very specific feature students can work while they use backing tracks in his interview: “I think play-alongs are one of the most valuable tools students, particularly rhythm section players, now have to develop their musicianship. It is assumed that the play-along maintains a steady tempo, so students experience how it feels like to control their tempo fluctuations”.⁵⁰

⁵⁰ Terry O’Mahoney interviewed by Giovanni Sena, November 6th, 2019.

In spite of the many factors that should be considered, learners should be aware of their autonomy to achieve a better understanding of strategies that come from their own choices. Although the psychologist Jerome Bruner argues that *there are natural energies that sustain spontaneous learning such as curiosity, desire to be competent, wanting to emulate others, a need for social interaction*, these energies can be seen as conscious ways that learners can use to accomplish their objectives in music.⁵¹ These conscious ways mirror what Jones describes, that “successful engaged learners are responsible for their own learning. These students are self-regulated and able to define their own learning goals and evaluate their own achievement. They are also energized by their learning; their joy of learning leads to a lifelong passion for solving problems, understanding, and taking the next step in their thinking”.⁵² This statement incorporates not only motivation to learn in the present, but a motivation toward life-long learning.

“The mainstream ideas espoused as best practice in today’s schools are rooted in a constructivist vision of learning and teaching, namely, that in order to learn, people construct their own understanding of experiences”.⁵³

If people learn by constructing their understanding of their experiences, we can presume that backing track materials contribute giving learners opportunities to have their own experiences as they actively and interactively engage in those experiences by using them. Constructivist learning theory emphasizes that individuals learn through building

⁵¹ Jerome Bruner, *Toward a Theory of Instruction*. Cambridge (Mass.): Belknap Press of Harvard University Press, 1966.

⁵² Beau Fly Jones, *Designing Learning and Technology for Educational Reform* (Oak Brook, IL: North Central Regional Educational Laboratory, 1994), 11

⁵³ Jackie Wiggins, “Authentic Practice and Process in Music Teacher Education.” *Music Educators Journal* 93, no. 3 (2007): 36–42. <https://doi.org/10.1177/002743210709300318>.

their own knowledge, “connecting new ideas and experiences to existing knowledge and experiences to form new or enhanced understanding”.⁵⁴

The efforts to actively build knowledge through the use of backing tracks may come from a range of activities that stimulate active learning. Bonwell and Eison defined strategies that promote active learning as “instructional activities involving students in doing things and thinking about what they are doing”.⁵⁵

Reflecting on what Bonwell and Eison stated, this paper offers some suggestions for a more focused use of backing tracks.

- Integrate new bits of language into users’ vocabulary
- Isolate a concept
- Work on problem chords
- Figure out chords by ear
- Compose your own music

Integrate new bits of language into users’ vocabulary.

New phrases or melodic ideas should be integrated once in a while to the vocabulary learners already have. Even someone else’s idea or excerpts of the melody of a tune can be modified and adapted becoming something new. Through the features provided by play-along materials, particular sections of songs can be looped in slower tempos and in different keys facilitating the internalization of the new “language”. The goal is to gain mastery over using that language by directly inserting it.

Isolate a concept

⁵⁴ John D. Bransford, *How People Learn: Brain, Mind, Experience, and School*. Washington, DC: National Acad. Press, 2004.

⁵⁵ Charles C. Bonwell and James A. Eison. *Active Learning: Creating Excitement in the Classroom*. Washington, DC: George Washington University, ERIC Clearinghouse on Higher Education, 1991.

Just as a new piece of language can be integrated into the vocabulary, any concept can be isolated and worked on extensively using a play along. This method can be used for any concept learners want to improve upon.

Work on problem chords

There are always some spots in tunes where particular chord progressions make musicians freeze while they are playing. That's a problem chord. Most of the times, rather than work on these chords, learners pass over them. The suggestion here applies two different methods: first, the original recording, actual albums, can help give learners the knowledge of how their models dealt with that specific chord problem. Second, after building this knowledge, users can loop the section in the play along material, applying the new content until they get a firm understanding of how to go about playing over that particular harmonic issue.

Figure out chords by ear

The main idea is to figure out the chord progression by listening to the tunes. Of course, the tunes that should be used is defined by the level of the learners. This exercise may seem daunting at first, but the play-alongs can slow down the chord progressions, loop particular sections and also isolate specific instruments to be heard easily. What key is it in? Where does it start? Where does the bridge go? In every tune there are these flag-posts of main places the tune goes which can be highlighted in the play-along materials. Especially for beginners, there are some play-along materials focusing on ear training, where this kind of exercises are gradually presented.

Compose your own music

Composition is a beneficial activity which can serve as a constructive learning tool. According to Bloom the learning process has six different stages, each of which can be incorporated while composing.⁵⁶

1. Remembering

Considered to be the most basic level of learning where musicians are asked to simply memorize musical concepts as chord progressions, for instance.

2. Understanding

Causes students to explain the meaning of what they have memorized. Here, the relation of the chords is asked to be understood.

3. Applying

The previous stage is directly linked to this one. Here, musicians are required to use what they “understood” in similar situations. It is very common to come across the same functional chord progression in different parts of a tune, or even in different tunes, for instance.

4. Analyzing

Learners, by analyzing, can highlight what differs from different tunes and contrast them. This can reinforce the previous stages.

5. Evaluating

Can make learners explore information in order to find value in it, specifically to understand its importance.

6. Creating

⁵⁶ Benjamin Samuel Bloom, *Taxonomy of Educational Objectives: The Classification of Educational Goals* (New York: Longman, 1984), 201–207.

Musicians can create something new based on the information they have learned applying the previous stages. Writing a *contrafact* to the chord progressions delivered by the backing tracks can create a deeper understanding of different musical elements.⁵⁷ These are some examples that learners can get by writing their own melodies to the chord progressions:

- Understand the relation between the chords and the notes of the created melody.
- Improve technique playing the “new” melody in different tempos.
- Incorporate new language into the vocabulary based on the original melody.

Contrafacts activate all the learning stages mentioned above since “students will begin to transfer learning from one place to others”.⁵⁸ This new or refined knowledge is then used in all future experiences and will be further refined and improved upon. Composing gives more decision-making to the learners and it allows more scope for each individuals’ cultural choices. It gives students an opportunity to bring their own ideas based on their own backgrounds.

In conclusion, these approaches promote active learning often explicitly asking musicians to make connections between new information and their current mental models, extending their understanding. In other words, these designed learning activities allow learners to confront misconceptions, helping them reconstruct their mental models based on a more accurate understanding.

Nevertheless, these suggested activities should not be seen as definitive solutions to what musicians/learners are trying to pursue in their musicianship, but rather as a

⁵⁷ A contrafact is a musical composition consisting of a new melody overlaid on a familiar harmonic structure.

⁵⁸ Catherine M. Wehlburg, *Meaningful Course Revision: Enhancing Academic Engagement Using Student Learning Data* (Place of publication not identified: John Wiley & Sons, 2015), 45.

supportive material to be used wisely. It would be a waste of time to “just play” over them without creating strategies that can bring improvement to the learning process.

4.2 - Reflections on actual recordings versus backing tracks

During the formative years of many musicians, especially when technology was different from what we have today, they used to learn music off the records. Their models were “fixed moments” registered in the grooves of *vinyls* where the listening was the central key to seize the information they were looking for.⁵⁹ Even though the music in records is not an actual live performance, through the years, the recordings were and still are considered an authentic conception of music. After all, they crafted genres, styles, vocabulary and many different musical particularities and even cultural manners observed and learned by the interaction of musicians/learners with their records.

No matter if it is in practice where a learner is still acquiring new information, or in a professional live situation, Wiggins states, “in a constructivist music condition, students would have the opportunity to construct their own understanding of the dimensions, and metadimensions of music through interaction with real world music by performing, creating and listening. Best practice in music education should draw upon the most central and authentic conceptions of music and learning”.⁶⁰

Taking this fact into account, the concept of making backing track materials currently imitates the way multi-track records were made. Due the advance of technology,

⁵⁹ phonograph records.

⁶⁰ Jackie Wiggins, “Authentic Practice and Process in Music Teacher Education.” *Music Educators Journal* 93, no. 3 (2007): 36–42. <https://doi.org/10.1177/002743210709300318>.

users have the opportunity to isolate instruments of the recordings through apps as if they own a professional studio mixing board. These materials can easily reproduce or at least get close enough to the high-fidelity sound of a real band, even if they are based on virtual instrument technology.

“The technological development has always had a wide influence on music, whether in its mechanisms of production, distribution or even in its styles and trends. Any individual related to music is invariably required to be involved with technology”.⁶¹

Some backing tracks are made out of actual recordings. A common practice today among artists is to produce backing tracks out of their albums. They use the *stems* from the actual recordings to build backing tracks for all the instruments involved.⁶² This way, the musicians can practice their parts in the comfort of their homes before touring, for instance. Another common practice is the use of them in live performances. Some artists integrate backing tracks with the real band in their concerts. This demands a lot of practice, especially for the rhythm section, since the whole band has to play synced with a click track. Textures, synths, and rhythm patterns can work as a new layer to the sound of the group in a live situation.

Perhaps, the effectiveness of the engagement in the learning process by using backing tracks would be plausible when learners experience an authentic musical situation.

⁶¹ Daniel Marcondes Gohn, *Auto-Aprendizagem Musical: Alternativas tecnológicas* (São Paulo: Annablume, 2009), 49.

⁶² A stem file is an audio file that contains a track split into four musical elements: A drums stem, a bassline stem, a harmony stem, and a lead stem for example. The stem file also includes the original stereo master of the track for standard playback.

As mentioned above, the previously mentioned practices demonstrate that backing tracks are as authentic as records or even live music.

4.3 - Final Considerations

Music is one of the fundamental expressions of human culture. Musical activity is multifaceted in terms of style and also regarding the ways in which we experience it. All individuals see the world through a personal lens based on their own backgrounds, experiences and perceptions. A student's experiential background is used as a point of departure and an anchor in the exploration of new ideas, then these new ideas and tasks are contextualized. It is at this point that new knowledge is created: "once students are engaged in a particular subject, they develop a new perspective or lens through which to view".⁶³

Being a musician implies an extensive long-term individual study, including the multifaceted experiences music provides such as listening to music, practicing alone, playing in groups, etc. It is known that individual study is one the most important aspects that can promote musical "expertise". But individual study does not act by itself; It interacts with other factors such as cognitive characteristics, personality and motivation. Another important fact discussed here was the auto regulation by the learners. It concerns the mechanisms that students use to control their own learning process by making autonomous decisions.

Based on interviewees' responses, it was observed that backing tracks are effective if strategies are designed to support their use. The goals may not change when musicians

⁶³ M. Suzanne Donovan, John Bransford, and James W. Pellegrino. *How People Learn: Bridging Research and Practice*. Washington, D.C.: National Academy Press, 2009.

use play-along materials or if they use their favorite records to play along with. Great lines and great solos are created using knowledge gained from hours and hours of listening and practicing. Great jazz improvisers are building upon information that they have acquired through a combination of studying others and discovering things themselves by taking autonomous actions.

David Goslin asserts that increasing engagement in learning is the key for increasing achievement and therefore productivity for musicians.⁶⁴ A better understanding of how to use backing tracks can supplement individual users' strategies and can contribute to their improvement. As motivation is one of the central keys that promotes this engagement, it is evident that backing tracks can be considered an important feature that stimulate learners/musicians to achieve their goals.

⁶⁴ David A. Goslin, *Engaging Minds: Motivation and Learning in Americas Schools* (Lanham, MD: Scarecrow Press, 2003).

REFERENCES

- Bloom, Benjamin Samuel. *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: Longman, 1984.
- Bonwell, Charles C., and James A. Eison. *Active Learning: Creating Excitement in the Classroom*. Washington, DC: George Washington University, ERIC Clearinghouse on Higher Education, 1991.
- Bransford, John D. *How People Learn: Brain, Mind, Experience, and School*. Washington, DC: National Acad. Press, 2004.
- Bruner, Jerome. *Toward a Theory of Instruction*. Cambridge (Mass.): Belknap Press of Harvard University Press, 1966.
- Chanan, Michael. *Repeated Takes: a Short History of Recording and Its Effects on Music*. London: Verso, 1995.
- Clynes, Manfred. *Music, Mind, and Brain: The Neuropsychology of Music*. NEW YORK, N.Y. (U.A.): PLENUM PUBL., 1982.
- Donovan, M. Suzanne., John Bransford, and James W. Pellegrino. *How People Learn: Bridging Research and Practice*. Washington, D.C.: National Academy Press, 2009.
- Ewer, Gary. "The Essential Secrets of Songwriting." *The Essential Secrets of Songwriting*, 21, 2017. <https://www.secretsofsongwriting.com/>.
- Gohn, Daniel Marcondes. *Auto-Aprendizagem Musical: Alternativas tecnológicas*. São Paulo: Annablume, 2009.
- Goslin, David A. *Engaging Minds: Motivation and Learning in Americas Schools*. Lanham, MD: Scarecrow Press, 2003.
- Green, Lucy. *How Popular Musicians Learn: a Way Ahead for Music Education*. London: Routledge, 2017.
- Jones, Beau Fly. *Designing Learning and Technology for Educational Reform*. Oak Brook, IL: North Central Regional Educational Laboratory, 1994.

- Kolb, David A. "Management and the Learning Process." *California Management Review* 18, no. 3 (1976): 21–31. <https://doi.org/10.2307/41164649>.
- Papageorgi, Ioulia, and Graham Welch. *Advanced Musical Performance: Investigations in Higher Education Learning*. London: Routledge, 2016.
- Ryan, Richard M., and Edward L. Deci. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55, no. 1 (2000): 68–78. <https://doi.org/10.1037/0003-066x.55.1.68>.
- Swanwick, Keith. *Teaching Music Musically*. London: Routledge, 2012.
- Taggart, Cynthia, and Peter Gouzouasis. "Music Learning and Language Learning." *Update: Applications of Research in Music Education* 13, no. 2 (1995): 9–13. <https://doi.org/10.1177/875512339501300204>.
- Wehlburg, Catherine M. *Meaningful Course Revision: Enhancing Academic Engagement Using Student Learning Data* (Place of publication not identified: John Wiley & Sons, 2015), 45.
- Wiggins, Jackie. "Authentic Practice and Process in Music Teacher Education." *Music Educators Journal* 93, no. 3 (2007): 36–42. <https://doi.org/10.1177/002743210709300318>.

APPENDIX I

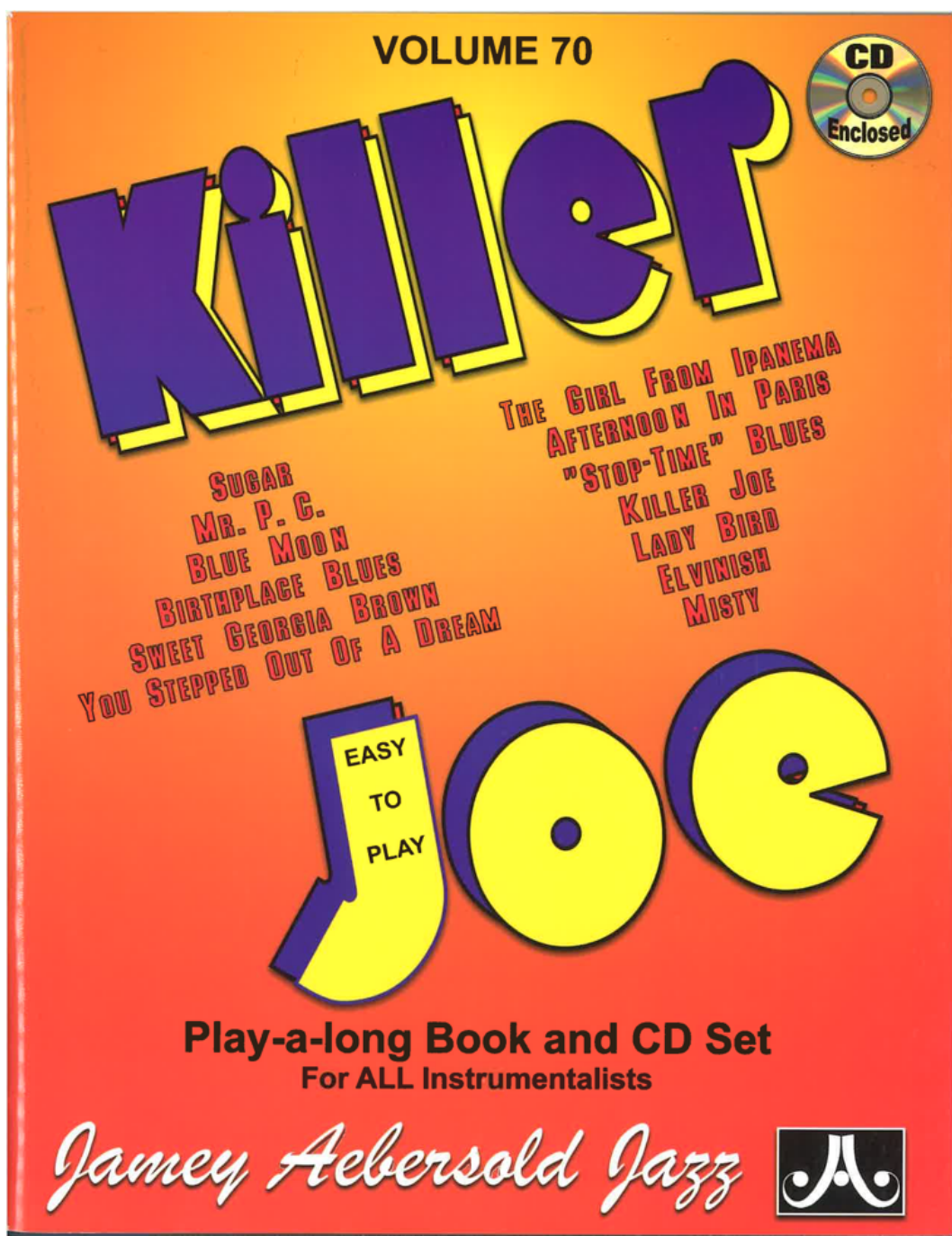


Image 1.: Jamey Aebersold, *Volume 70: Killer Joe*, (New Albany, IN: Jamey Aebersold Jazz Inc., 1996).



1. Killer Joe



PLAY 5 TIMES (♩ = 104)

By Benny Golson

Chord progression for the main melody:

C7 Bb7 C7 Bb7

C7 Bb7 C7 1. Bb7 2. Bb7

E0 A7b9 Eb- Ab7 A7

Ab7 E- A7 C7 Bb7

C7 Bb7 C7 Bb7 C7 Bb7

SOLOS

Chord progression for the solo section:

C7 Bb7 C7 Bb7 C7 Bb7 C7 Bb7

BRIDGE

Chord progression for the bridge:

E0 A7b9 Eb- Ab7 A7

Ab7 E- A7 C7 Bb7

C7 Bb7 C7 Bb7 C7 Bb7

Chord progression for the end of the piece:

C7 Bb7

Repeat Over & Over & Fade

Copyright © 1979 StepTime Music (ASCAP)
 This Arrangement Copyright © 1979 StepTime Music
 International Copyright Secured. All Rights Reserved. Used by Permission.

Image 2.: Jamey Aebersold, *Volume 70: Killer Joe*, (New Albany, IN: Jamey Aebersold Jazz Inc., 1996).





CONTENTS

Scale document down

Tunes included in this volume are:

- | | |
|---------------------------------|---------------------------------------|
| 1. <i>Killer Joe</i> | 8. <i>Misty</i> |
| 2. <i>Sugar</i> | 9. <i>Sweet Georgia Brown</i> |
| 3. <i>The Girl From Ipanema</i> | 10. <i>Ladybird</i> |
| 4. <i>Elvinish</i> | 11. <i>You Stepped Out Of A Dream</i> |
| 5. <i>Blue Moon</i> | 12. <i>Birthplace Blues</i> |
| 6. <i>Afternoon In Paris</i> | 13. <i>Mr. P.C.</i> |
| 7. <i>"Stop-Time" Blues</i> | |

INTRODUCTION and DISCOGRAPHY.....	ii
NOTES TO THE MUSICIAN.....	v
NOMENCLATURE.....	vii
SCALE SYLLABUS.....	viii

 CONCERT KEY SONGS & CHORD/SCALE PROGRESSIONS.....	1
 Bb INSTRUMENT SONGS & CHORD/SCALE PROGRESSIONS.....	14
 Eb INSTRUMENT SONGS & CHORD/SCALE PROGRESSIONS.....	27
 BASS CLEF INSTRUMENT SONGS & CHORD/SCALE PROGRESSIONS.....	40

NOTE: Any codas (Ⓢ) that appear will be played only once on the recording at the end of the last recorded chorus.

Graphics by PETE GEARHART
and DAVID SILBERMAN
Cover Design by JAMEY D. AEBERSOLD

Published by
JAMEY AEBERSOLD JAZZ, INC.
P.O. BOX 1244
NEW ALBANY, IN 47151-1244
<http://www.jazzbooks.com>



Copyright © 1996 by Jamey Aebersold Jazz, Inc.
All Rights Reserved Printed in U.S.A. International Copyright secured
All copyrights used by permission
No portion of this book may be reproduced in any way without express permission from the publisher.
Book only \$4.95

Image 4.: Jamey Aebersold, *Volume 70: Killer Joe*, (New Albany, IN: Jamey Aebersold Jazz Inc., 1996).

APPENDIX II

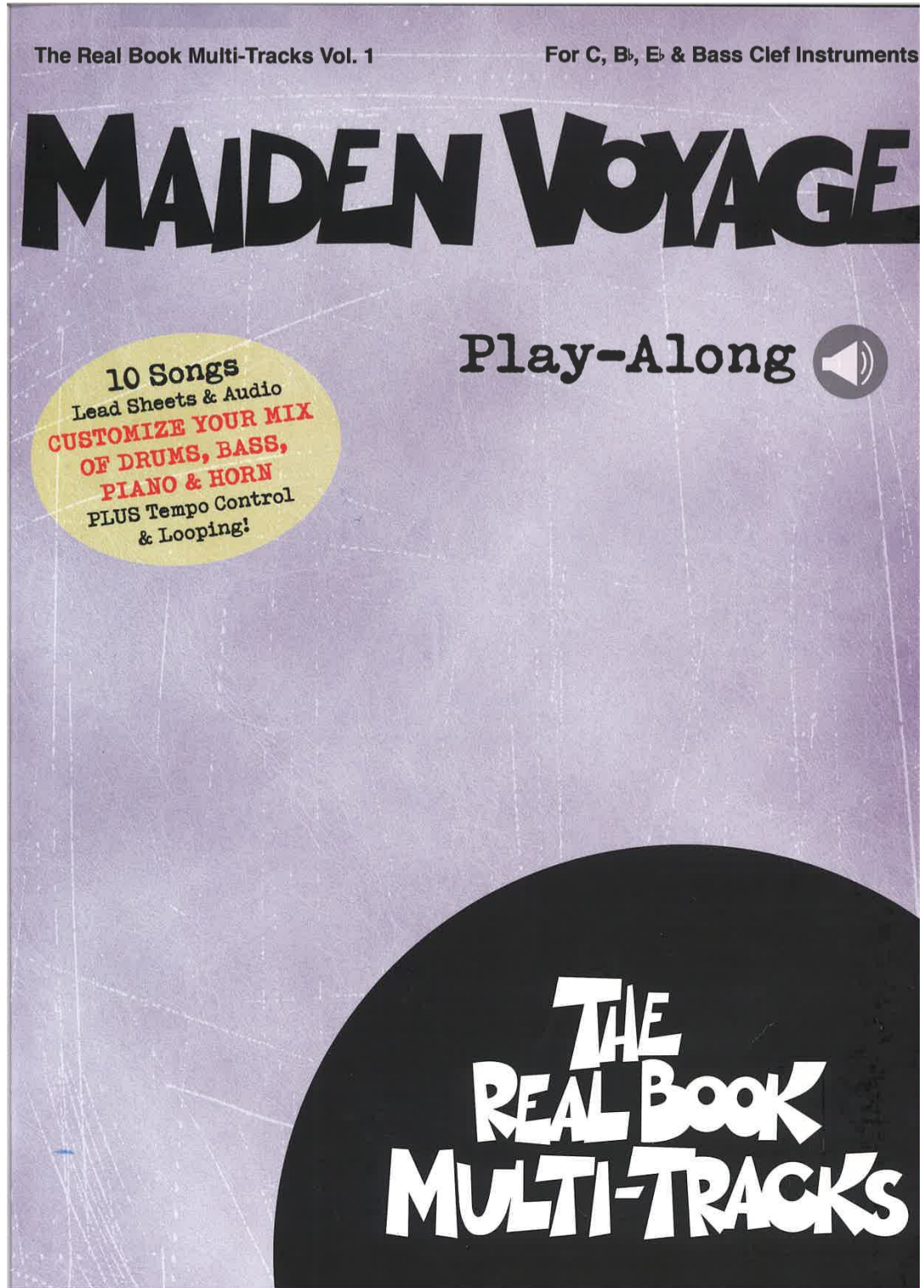


Image 5.: *The Real Book Multi-Tracks Volume 01 - Maiden Voyage*, (Milwaukee, WI: Hal Leonard, 2017).

(FAST BLUES)
NOW'S THE TIME

- CHARLIE PARKER

B^b VERSION

♩ G⁷ C⁷ G⁷

C⁷ C^{#o7}

G⁷ * (E⁷) A⁻⁷

* OPTIONAL ON SOLOS

D⁷ TO G⁷ D⁷

REPEAT HEAD W/OUT
 AFTER SOLOS, D.S. AL
 (PLAY PICKUP)

G⁷

Copyright © 1945 (Renewed 1973) Atlantic Music Corp.
 All Rights for the World excluding the U.S. Controlled by Screen Gems-EMI Music Inc.
 and administered by Sony/ATV Music Publishing LLC, 424 Church Street, Suite 1200, Nashville, TN 37219
 International Copyright Secured All Rights Reserved

Image 6.: *The Real Book Multi-Tracks Volume 01 - Maiden Voyage*, (Milwaukee, WI: Hal Leonard, 2017).

Contents

TITLE	PAGE NUMBERS			
	C Treble Instruments	B \flat Instruments	B \natural Instruments	C Bass Instruments
Autumn Leaves	4	14	24	34
Blue Bossa	5	15	25	35
Doxy	6	16	26	36
Footprints	7	17	27	37
Maiden Voyage	8	18	28	38
Now's the Time	9	19	29	39
On Green Dolphin Street	10	20	30	40
Satin Doll	11	21	31	41
Summertime	12	22	32	42
Tune Up	13	23	33	43

Image 7.: *The Real Book Multi-Tracks Volume 01 - Maiden Voyage*, (Milwaukee, WI: Hal Leonard, 2017).

UNIVERSITY OF LOUISVILLE LIBRARIES
 0005 25236 898 5

Accurate, easy-to-read lead sheets and professional, customizable audio tracks are included for the following songs:


Autumn Leaves	Now's the Time
Blue Bossa	On Green Dolphin Street
Doxy	Satin Doll
Footprints	Summertime
Maiden Voyage	Tune Up

Interactive, online audio interface includes:

- Tempo control
- Looping
- Buttons to turn each instrument on or off
- Lead sheet with follow-along marker
- Melody performed by a horn on the "head in" and "head out"

The full stereo tracks can also be downloaded and played off-line.

Separate lead sheets are included in the book for C, B-flat, E-flat and Bass Clef instruments.



Price: \$7.99, Audio \$10.00 = U.S. \$17.99
 Parts not sold separately

ISBN 978-1-4950-7472-1

Image 8.: *The Real Book Multi-Tracks Volume 01 - Maiden Voyage*, (Milwaukee, WI: Hal Leonard, 2017).

APPENDIX III

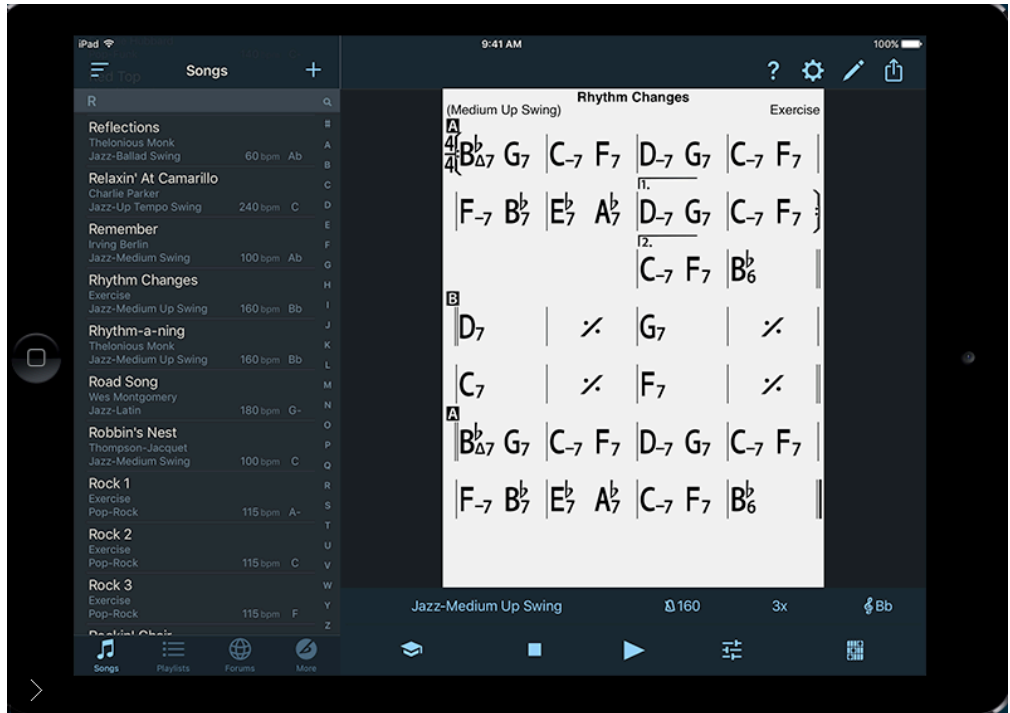


Image 9.: picture from www.irealpro.com, accessed on March 2nd, 2020.

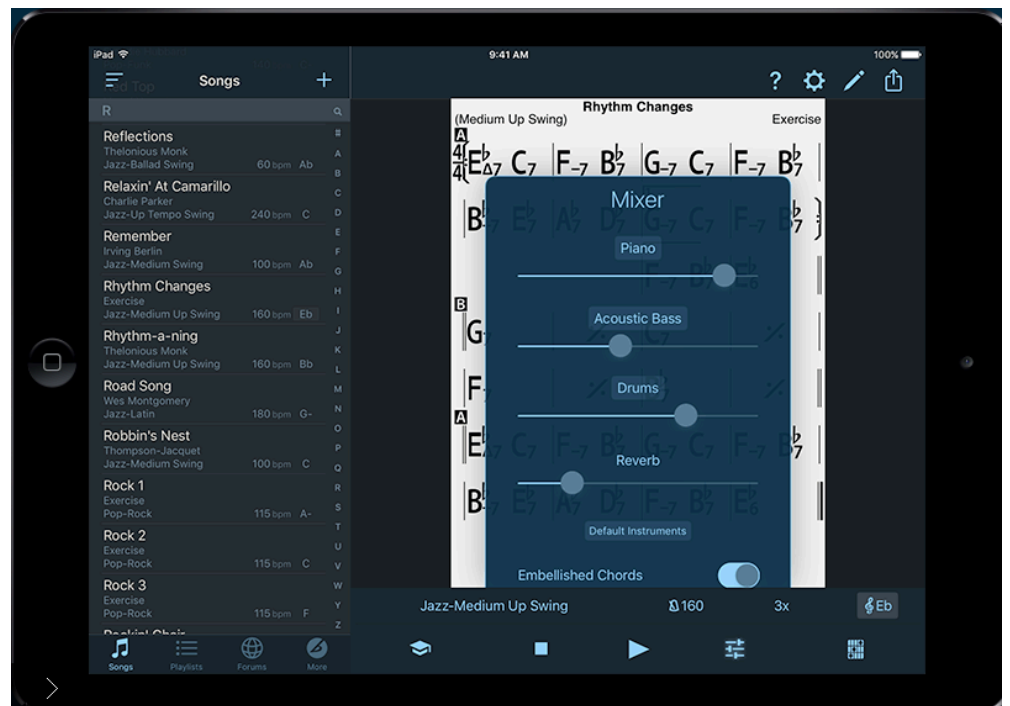


Image 10.: picture from www.irealpro.com, accessed on March 2nd, 2020.

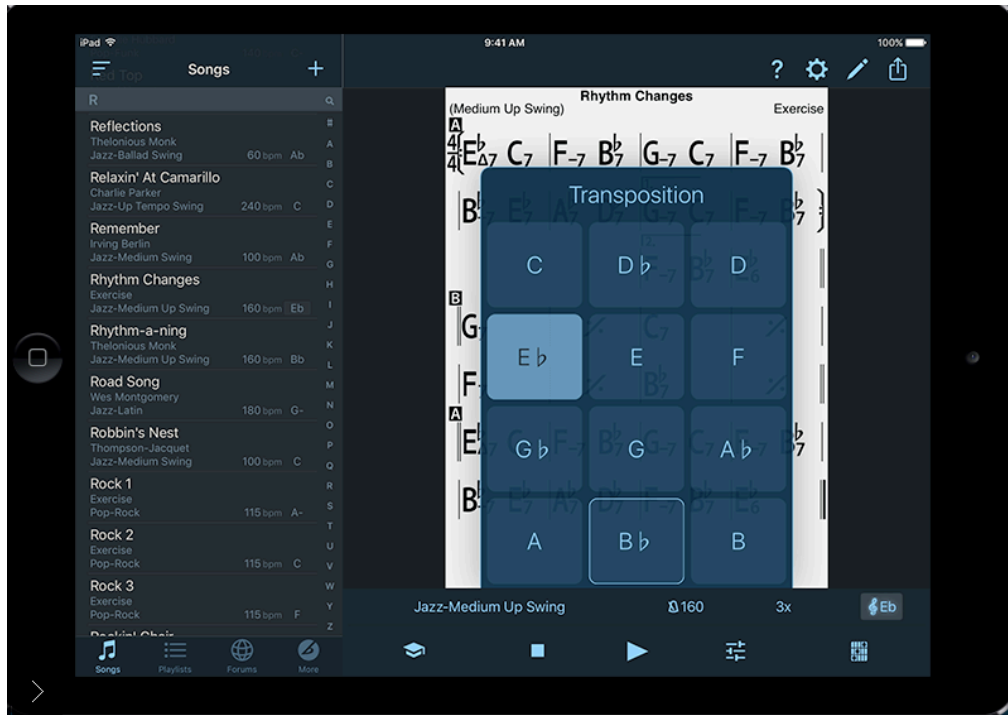


Image 11.: picture from www.irealpro.com, accessed on March 2nd, 2020.

APPENDIX IV

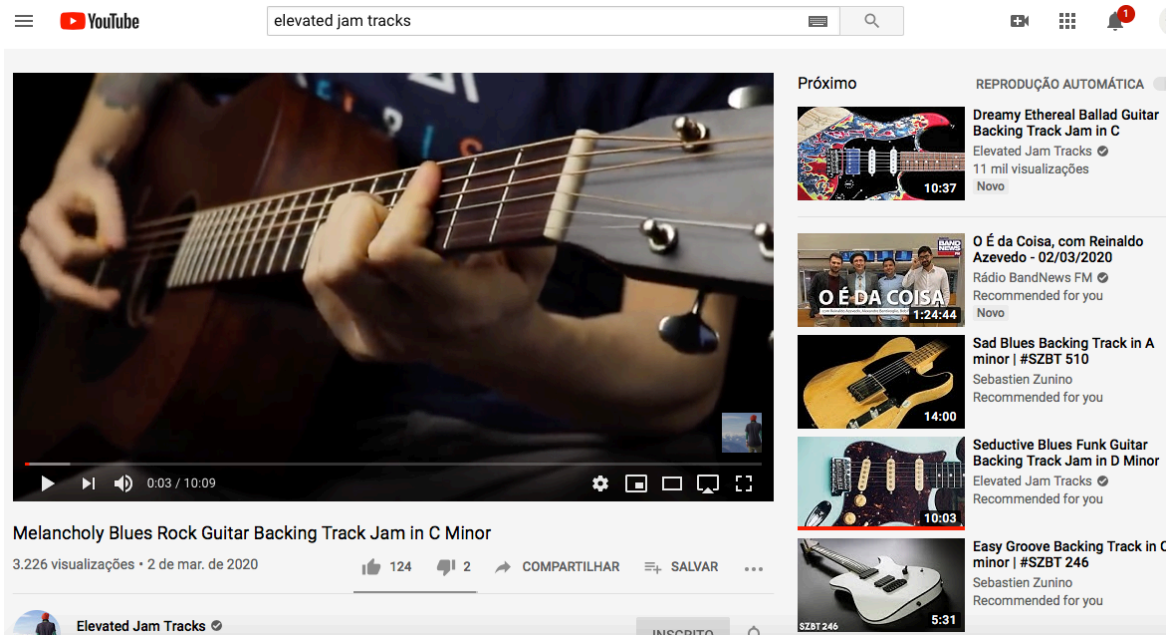


Image 12.: picture from <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>, accessed on March 2nd, 2020.

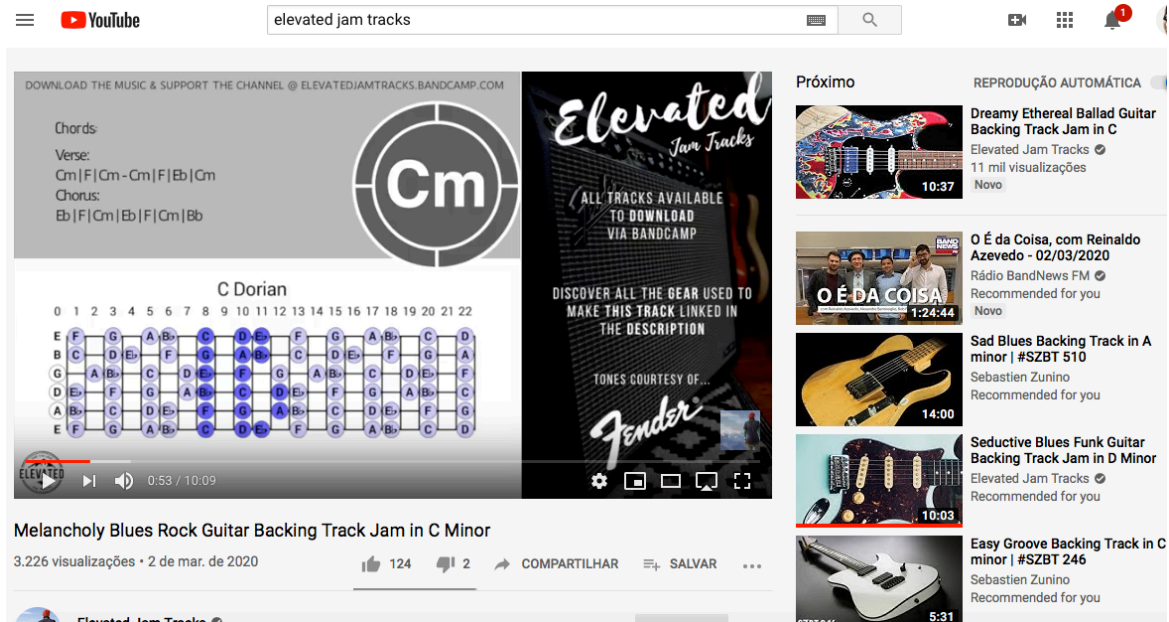


Image 13.: picture from <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>, accessed on March 2nd, 2020.

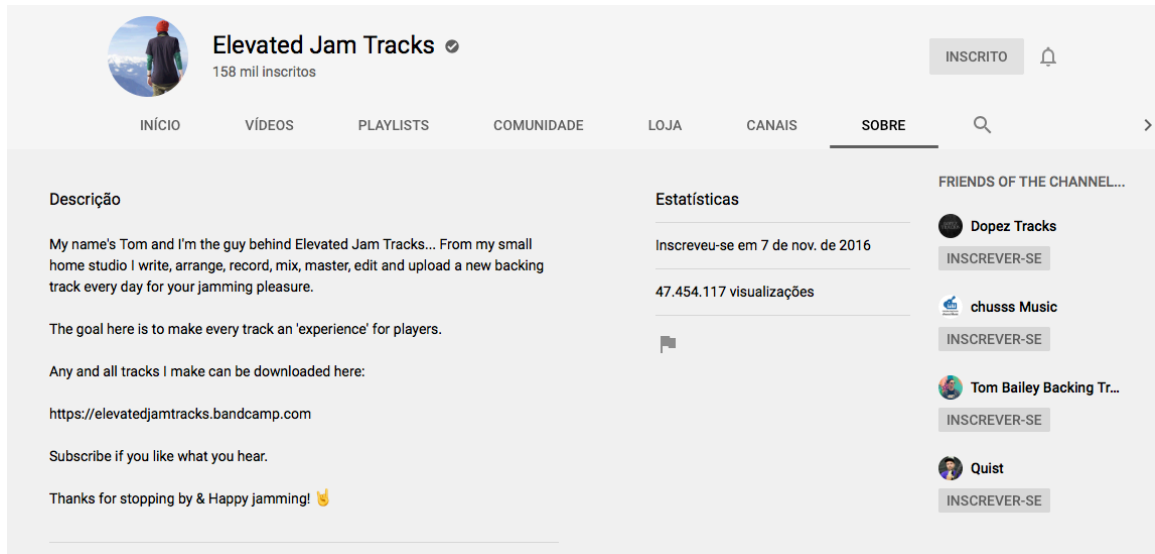


Image 14.: picture from <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>, accessed on March 2nd, 2020.

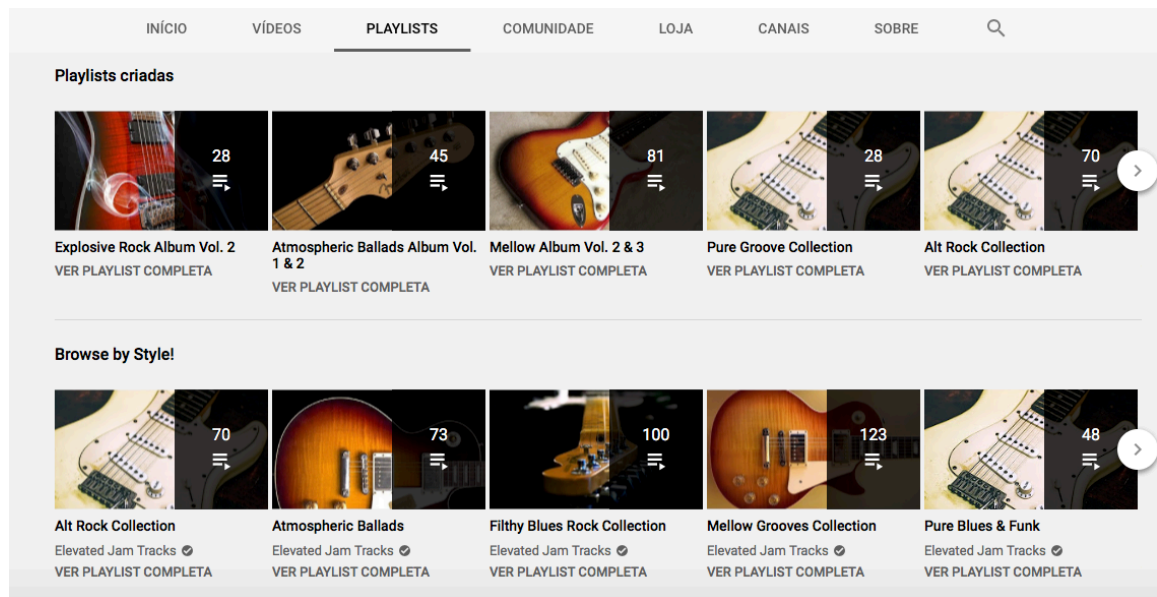


Image 15.: picture from <https://www.youtube.com/channel/UCqAZJmEC2-C9roOB4vgzROA/about>, accessed on March 2nd, 2020.

BIO OF THE INTERVIEWEES

Jamey Aebersold

Jamey Aebersold was born July 21st, 1939, in New Albany, Indiana. In 1989, the International Association of Jazz Educators inducted Jamey into their Hall of Fame at the San Diego convention. With this award, Jamey joins other jazz luminaries such as Count Basie, Duke Ellington, Charlie Parker, Louis Armstrong and others. He is an internationally known saxophonist and authority on jazz education and improvisation and has developed a series of Jazz play-along books (now numbering 133 volumes) as well as various other supplemental aids for the development of improvisational skills. Probably Aebersold's play-along books are the most popular ones around the world which his first edition goes back to 1967.

Information taken from Jamey Aebersold's official website: <http://www.jazzbooks.com/jazz/jbio>

Massimo Biolcati

New York bassist Massimo Biolcati is best known as a founding member of Gilfema, the acclaimed collective trio with Hungarian drummer Ferenc Nemeth and Beninese guitarist and vocalist Lionel Loueke that recorded two albums for Obliqsound. The group also recorded three albums for Blue Note as the Lionel Loueke Trio, including Karibu with Wayne Shorter and Herbie Hancock.

Hailing from a Swedish/Italian family, Biolcati has worked with some of jazz's most celebrated artists, including tours with Paquito D'Rivera, Terence Blanchard, Ravi Coltrane, Lizz Wright, and Luciana Souza. As a leader he released 2008's Persona on Obliqsound, an ambitious debut album of original compositions played by Loueke,

pianist/accordionist Peter Rende, and drummer Jeff Ballard, with vocal contributions by Lizz Wright and Gretchen Parlato.

He also continues to run iReal Pro, the app he created in 2009 that has become an essential tool for musicians and music students, providing access to chord charts and custom generated backing tracks for thousands of compositions.

Information taken from Massimo Biolcati's official website: <https://www.massimobiolcati.com/biography>

Stephen Allee

Pianist, composer and arranger Steve Allee is a veteran of more than 35 years on the music scene, working principally in jazz, writing and performing for syndicated radio programs, network television and motion pictures, and as a music educator.

Steve began his professional career at age 19 with the Buddy Rich Orchestra before he was drafted into military service during the Vietnam War. Through the years, he has worked with a veritable “Who’s Who” of major jazz artists across the United States and abroad. Recent performances include the Rufus Reid Trio, The Randy Brecker Quartet, David “Fathead” Newman, John Clayton and The Rich Perry Quartet. He also leads a big band that performs regularly in Indianapolis.

Steve’s big band CD, Downtown Blues, with bassist John Clayton and drummer John VonOhlen, was nominated for a Grammy® award. Allee's first national solo CD, The Magic Hour, released on Noteworthy Records, landed at No. 14 on the Gavin national radio poll. His other musical accomplishments included being commissioned to write and conduct a four-movement work for the Indianapolis Symphony Orchestra to celebrate the 100th anniversary of The Indianapolis Museum of Art. His score for the film, "New York

in the Fifties," was performed live at Switzerland's acclaimed Montreux Jazz Festival. Steve was co-director and arranger for a J.J. Johnson Tribute Concert featuring trombonist Slide Hampton at the Indy Jazz Fest in 2001.

His writing credits include soundtracks for "New York In The Fifties," the film inspired by the Dan Wakefield book of the same title, as well as "Something To Cheer About," a documentary starring Halle Berry and Oscar Robertson that focused on the 1954-55 Crispus Attucks Tigers basketball team on which NBA legend Robertson played in high school in Indianapolis. It was the first all-black high school team ever to win a state championship – and the team that changed the face of basketball forever.

Steve's performance and network television writing credits with Los Angeles Post Music© include music for "Chicago Hope," "Mad About You," "Martha Stewart," "Friends," "Nash Bridges," "NYPD Blue," "Dharma and Greg," and "Touched by an Angel."

As an educator, Steve has taught or lectured at several college and university music programs over the years, including the University of Cincinnati, University of Louisville, University of Illinois, Morehead College, Purdue University, Butler University, University of Indianapolis, Indiana State University, Drury College, and Florida International University. He now teaches at the Jamey Aebersold Summer Jazz Workshops and other master classes and workshops during the year.

Information taken from Stephen Allee's official website: <http://www.steveallee.com/Steve-allee-bio.html>

Jeff Berlin

A flexible and powerful electric bassist, Jeff Berlin was one of the major fusion bassists to emerge during the mid-'70s. His father sang opera and his mother played piano. Berlin had nine years of violin lessons starting from when he was five and was considered a child prodigy, appearing with orchestras in New York City. However, when he was 14, he switched directions and began playing electric bass. Berlin attended the Berklee College of Music for a time and then moved back to New York. For a short period, he was in a trio with Allan Holdsworth and Tony Williams. In 1975 he recorded in Europe with Yes keyboardist Patrick Moraz and then in New York he became quite busy with studio work, club dates, and record sessions. Berlin played with many top musicians including Pat Martino, Gil Evans, Toots Thielemans, Al DiMeola, George Benson, Earl Klugh, Larry Coryell, Bob James, Dave Liebman, Herbie Mann, Ray Barretto, the Brecker Brothers and others. Berlin was also a regular member of Bill Bruford's band (which included guitarist Holdsworth and keyboardist Dave Stewart) for a couple years starting in 1977; four recordings resulted.

Berlin subsequently moved to Los Angeles, worked in clubs with Scott Henderson and Frank Gambale, became an educator (helping to found the Bass Institute of Technology), played rock (including with Frank Zappa), and turned down an opportunity to join Van Halen. During 1985-1986 Berlin recorded two fusion/rock dates for the soon-defunct Passport label. He moved to Florida in 1990 and toured with Yes, John McLaughlin, Billy Cobham, Kazumi Watanabe, and other musicians from a wide variety of creative genres. In addition, he began teaching at the Players School. His third set as a leader, 1997's *Taking Notes* for Denon, was Berlin's most jazz-oriented set to date. He

continued releasing a number of albums into the 21st century, including *Lumpy Jazz* (2004) with his core trio featuring pianist Richard Drexler and drummer Danny Gottlieb; the highly regarded *In Harmony's Way* (2004) with guest appearances by saxophonist David Liebman, vibraphonist Gary Burton, and guitarist Mike Stern; *Ace of Bass/Aneurhythms* (2006); and the piano trio-oriented *High Standards* (2010), again featuring Drexler and Gottlieb in addition to the session leader.

Information taken from an unofficial source: <https://www.allmusic.com/artist/jeff-berlin-mn0000237300/biography>

Terry O'Mahoney

Terry is currently Adjunct Professor of Music at Bellarmine University (Louisville, KY) and retired as a Professor of Music at St. Francis Xavier University in Antigonish (Nova Scotia, Canada). He is an active performer in the Louisville area with various jazz and classical ensembles, including the Louisville Orchestra. He holds a B.M.Ed. from the University of Louisville and a master's in jazz performance from the University of Miami (FL). A former student of jazz drumming legend Jeff Hamilton (Los Angeles, CA), he has performed on drumset with numerous jazz artists (Mike Stern, Randy Brecker, Larry Grenadier, Phil Woods, Curtis Fuller, Jimmy Heath, and others) in addition to his frequent symphonic performances with Symphony Nova Scotia (Halifax, NS) on percussion and drum set. He has three books in print - *Motivic Drumset Soloing*, *Jazz Drumming Transitions*, and *100 Essential Drumset Lessons* - for the Hal Leonard Corporation. His articles have appeared in *Modern Drummer* and *Percussive Notes* magazines and his compositions have been published by Per-Mus Publications. He plays Vic Firth drumsticks and Crescent Cymbals exclusively.

Information taken from Terry O'Mahoney's official website:
https://people.stfx.ca/tomahon/website_2012/Prof._Terry_OMahoneys_Website.html

Sizão Machado

Sizão Machado is Brazilian bassist well known nationally and internationally for works with Chet Baker, Herbie Mann, Elis Regina, Cesar Camargo Mariano, Jim Hall, Chico Buarque, Dori Caymmi, Djavan, Milton Nascimento, Dionne Warwick, Ivan Lins, Joyce, Guilherme Vergueiro, Flora Purim & Airtó Moreira, Roberto Menescal, Noite Ilustrada, Jean & Paulo Garfunkel, Família Jobim, Paulo César Pinheiro, Heraldo do Monte, Paul Winter, Hendrick Merkins and many others, putting his fingerprints wherever he plays.

Moreover, his performance around the world, Sizão also recorded in hundreds of albums including the album “Worlds Together” with the sax players Jerry Bergonzi and Billy Pierce, drummer Bob Kaufman and the guitarist Lupa Santiago.

In 2010, Sizão releases his first book, published by Souza Lima Press. The book content brings transcriptions of recordings that he made through the years with comments written by himself.

Information taken from Stephen Allee's official website: <https://www.sizaomachado.com.br/biografia.html>

CURRICULUM VITA

NAME: Giovanni de Castro Sena

ADDRESS: Rua 18 Norte, Lote 05, Apt. 802
Águas Claras Norte
Brasília – DF
71910-720

DOB: Itapipoca, Ce (Brazil) October 29, 1974

EDUCATION
& TRAINING: B.S., Music Education
Universidade de Brasília
2006 – 2009

INVITED
PRESENTATIONS: CIVEBRA – EMB – Escola de Música de Brasília – Brasília,
DF – Fev 2017.