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Avant : pismo awangardy filozoficzno-naukowej 4/1, 417-454

2013

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

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The model of counterpoint improvisation and the methods of improvisation in popular music

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Received 15 April 2012; accepted 14 October 2012; published 30 June 2013.

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Abstract

The article consists of two parts. The first, more general, contains a description of the phenomena associated with improvisation, especially guitar, detailing the execution issues facing the improviser. Two points of view are presented: the first, more detailed, describes the elements of music and its importance in the process of improvisation, the second - more general - speaks of phenomena which cannot be described or analyzed in a simple way, or that are different for each track. These include the interaction between team members, expressing emotions through music and research problem of searching for one's own voice in art. Moreover, this section contains a description of three very different approaches to guitar improvisation. The first is the use of a tonal center (enriched with dominant tensions); the second method (used in fusion music) is to combine the harmony of the composition with relevant scales; the third (typical for bebop music) is based on the strict use of improvised chord sounds without the use of scales. The second section of the text provides a description of a specific type of polyphonic improvisation with the use of two-handed tapping on the guitar. This model stands in contrast to the three previously described ways of understanding guitar improvisation. The system is based on methods used in both the Renaissance and Baroque polyphony (among others in the leading Cantus Firmus melody or the counterpoint rules) as well as on assumptions of one voice bebop improvisation (the use of leading sound solutions specific to natural foursounds). This description refers back to the first part of the article, grouping issues around the individual elements of a musical work. This section contains notes and observations collected during the eight years the author spent searching for his own musical way.

There are two musical examples in the article:

http://fulara.com/temp/artykul/earth_song_-_1_take.mp3 (improvisation with theme)

http://fulara.com/temp/artykul/earth_song_-_2_take.mp3 (improvisation without theme)

Keywords: improvisation; polyphony; music; guitar; two-handed tapping.

Part I. Elements of music and the models of improvisation

Improvising means creating a musical composition, or a part thereof, without preparation. It has accompanied music for centuries. However, until the first recordings appeared, it fulfilled a different function. It is known that J. S. Bach improvised, as did other great musicians, among others, F. Chopin, F. Liszt, N. Paganini. Unfortunately, it is only the audience's accounts that are left after these improvisations. The situation changed exponentially with the arrival of the possibility of registering sound on analogue devices.

In the 20th century, improvisation became an inherent element of jazz. It has frequently been compared to language or speech (Wise 1983; Wooten 2008; Henderson 1992). Letters are like sounds, words like motifs, sentences are phrases, etc.

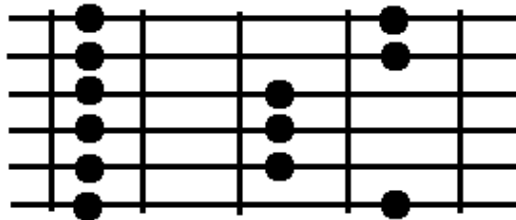
Improvisation is the art of conscious re-organisation. It does not consist in playing combinations of sounds, fragments of which have never been played before by anyone else, and especially the performer. Similarly, storytelling in some language does not consist in inventing new words. We put stories together from words known well enough that they do not need to be thought about. In a comparable manner, an improviser uses words (licks, phrases) which he or she knows perfectly. I will refer to this analogy numerous times. Improvisation does not consist in a constant change of melodic and rhythmic motifs, either, and a large degree of repetitiveness of certain features of the phrase and continuing the melodic thought are its important factors (Henderson 1992). This rule is similar to the method of building a musical form with the use of motivic work.

Models of improvisation according to the choice of sonic material

In order to better understand the process of improvising, we will trace various methods of improvising utilized by guitarists.

The basic method of improvisation is to determine the key of the piece, and, subsequently, to match a scale to this key. We talk about playing the piece on a scale. Initially, it is usually pentatonic minor scale (1, minor 3rd, 4th, 5th, minor 7th), frequently used in one position.

Pentatonic minor scale – position I



On the basis of this sound system, the basic rules of improvisation can be learnt relatively fast. In the music deriving from blues (different varieties of blues, blues-rock), the pentatonic minor scale can be used to play pieces in the major key (e.g. AC/DC's "You shook me all night long").

Another step in learning improvisation is learning the pentatonic major scale, which is the second mode of the pentatonic minor scale. Subsequently, one learns the particular scale, usually beginning with the seven modes of the natural minor scale, and then, in sequence, the harmonic minor scale, and sometimes the melodic minor scale, as well as the other scales, which are known as "exotic" ones. This is how the first years of learning how to improvise usually pass.

This method of approaching music has one fundamental downside. The course/progress of the piece plays a secondary function here, and so do the apportionment of the tensions, progressions and harmonic changes. That is, the improviser utilizing this method pretends that the piece is "standing still" on a tonal chord. When it comes to choosing sounds, the musicians usually rely on their own hearing, which may be unreliable, especially within the first few years of studying. There are, obviously, exceptions. What is interesting is that one can achieve quite considerable technical proficiency utilizing only this method. We talk then about the phenomenon of shredding; in this context the word has negative connotations.

In other words, the first, basic approach to improvising according to the choice of sounds is finding the key, and, subsequently, using the selected scale (or scales). This method has one fundamental drawback: one can only play pieces with one tonal centre in this way.

It is much more advanced to improvise to pieces which contain modulations (e.g. Kenny Dorham's "Blue Bossa"), which today are used even in pop music. The utilisation of a single scale while improvising in such pieces sounds very bad, and it forces the improviser to watch the places of modulation, which causes numerous difficulties to beginner musicians (especially when there is more than one key).

There is one disadvantage to this type of improvising: in the long run it soon becomes boring to the audience. Another step which can offset this phenomenon to a large degree is adding the so-called dominant substitutes to the basic scale. Every tonal centre, or even every chord of the piece, possesses its own dominant, that is, a dominant seventh chord, built a perfect fifth higher. This fact is utilized when creating a series of tensions and releases both in composition, and in improvisation. In other words, two modulations are added – a switch to the mode of a dominant, and releasing the created tensions by a switch to the tonic scale. However, this phenomenon is different from a typical modulation. In the tension mode one cannot end phrases (only in certain particular circumstances can such an ending sound well). Obviously, this requires a good pitch, sense, and knowledge regarding the methods of releasing tensions, as well as dominant substitutes. The same technique is utilised in practically every tonal piece of music: from simple folklore songs to Bach's complex polyphonic fugues. The improvised tensions can, but do not have to, overlap with harmonic tensions. Such a system is already sufficient for playing an improvisation interesting with regard to the choice of sonic material. It is not, however, the only method for improvising.

It can be said that all those methods, from using pentatonics to modal scales to tracing modulation and using substitutes of dominants, are the successive steps of the same cohesive model of improvisation, which here for our needs we call the model of the tonal centre.

In the following part of the text in the examples given I use the American notation of sound names: ABCDEFG; instead of the German H, there is B, and instead of B, there is Bb.

In the textbooks of fusion music (Misiak 1996; Henderson 1988) one can frequently come across a slightly different model of improvisation. It consists in following the harmony of the piece, and, subsequently, ascribing every model with the appropriate scale. And thus, the subsequent chords of the II V I progression in C-Major:

Dm7 | G7 | Cmaj7

are played with scales:

- Dm7: Dorian, Aeolian, Phrygian, etc.
- G7 - Mixolydian, major Phrygian, dominant pentatonics, etc.
- Cmaj7 - Ionic, Lydian, major pentatonics, etc.

The condition of a scale's belonging to the given chord is that the chord should be completely contained within the given scale; however, there are exceptions to this rule. For instance, the major pentatonics C (C, D, E, G, A) does not contain all components of Cmaj7 (C, E, G, B) - it lacks the B note (a sensitive artist can correct this attribute by changing A into B in major pentatonics). Since there are several such scales, an improviser decides which of them to choose, based on their hearing. Sometimes more scales can be combined, which happens frequently if a chord lasts a longer time (e.g. for several measures).

Using the Lydian scale instead of the Ionian one is a frequently described substitute. One talks then about colours which reflect two different scales describing the same chord. For example, the Lydian scale is "colour #4" (of an sharp fourth), and the Ionian one has a regular fourth in this place. Another frequently utilised example is the usage of the Mixolydian #4 scale (e.g. for G7 this scale is G, A, B, C#, D, E, F, G) instead of the Mixolydian one (for G the scale is G, A, B, C, D, E, F, G).

It is a difficult method of improvising, which requires a large and good knowledge of the scales (in contrast to the first method described herein). Large problems are then caused by motivic work, and by the places of changing scales occurring with the subsequent chords. If a phrase does not end in such a place, short junctions sound well, for example, through sounds common for both modes, or short junction routes (whole tone or semitone).

The third method of improvising is mainly based on the harmony of the piece. We use the sounds of the chords, as well as passing notes (which are located between the chord sounds) to play the progression of these chords. In order to improvise in this manner we do not have to know any scale. The popularity of this direction of improvisation was initiated by Charlie Parker together with other pioneers of bebop. At present, this kind of improvising is the foundation of improvised jazz. Chord notes fill the strong parts of a tact (when one is improvising e.g. with eights, it is "one, two, three, four"), and the remaining notes are transitional notes, which are frequently accented. Obviously, this kind of improvising can also be played by the means of scales. There have even been developed special 8-grade bebop scales, whose property is that when subsequent sounds of this scale are played with eights, chord notes are hit on the strong parts of the chord. Chromatics plays a substantial role in this kind of improvising. Some musicians use special "systems" of im-

provising deriving from this tradition, for example, the system of chromatics. However, all these methods come down to the same model of improvisation characterized by components of the chords in the strong part of the tact. The improvisers using this system usually utilize equal rhythmical lengths (swinging eights or sixteens), and melodic motifs are not the most important. One also practises frequently phrases that play the entire progressions (II V I, III VI II V I), especially if the chords change at a rapid pace. In this method of improvisation, the role of tensions created by the dominant chords and their components is also substantial. Jazz is the music of individuality - almost every prominent musician has worked out their own system of improvising that serves the same purpose - playing the sounds of subsequent chords.

These three systems of improvising and choosing sound material are the most popular ones at the moment. Hundreds of manuals have been written on the subject, devoted to the so-called pictorial notion of improvisation - the study of scales and chords, as Wooten (2007) calls it. Much more can be written about the sonic material, but, after all, it is not only the choice of sounds that is important during improvisation.

Elements of music

There are several elements of music; frequently, it is the following that are named (Śledziński 1982):

- melody - sets the sequence of sounds of different pitch and different period of duration
- rhythm - organizes the sonic material in time
- dynamics - regulates the intensity of the sound
- agogics (tempo) - determines the speed of performing the piece
- harmony - organizes the consonance of sounds within a piece
- timbre - determines the colour of the sound
- form - organizes the structure of a piece.

In improvising these notions are too general and the authors of works devoted to improvisation usually provide many more of them (among others, Wooten 2008); for instance, time is closely connected with rhythm. However, it is possible to improvise using only the basic, strict, metronomic kind of time. This is why isolating particular elements is so important. Another example is the notion of articulation, which can be described on at least two different levels: talking about articulation for a group of sounds (e.g. staccato, legato, portato), or a single sound which is, most often, the end of the phrase, or an accented sound (the so-called articulative accent). In the latter case, we talk about vari-

ous manipulations which can be done on a single sound, e.g. vibration, pulling a string/ chord, glissando, modulation of the amplitude, etc.

When learning improvisation, it is worth practising all the possible musical aspects thereof, since this results in much more musical, valuable effects. In my educational practice I have distinguished 15 musical elements of improvisations:

- rhythm (the lengths of subsequent notes and pauses)
- time (the situation of sounds against the metronomic points)
- meter
- tempo
- melics, melodics (the location of the heights of the sounds, sonic material, scales)
- dynamics (changes in the intensity of sound)
- articulation (the way of extracting the sound for groups of sounds and for a single sound)
- harmony (chord consonance)
- colour (timbre)
- phrasing
- form
- accentuating (connected with rhythm, dynamics and phrasing)
- agogics (as the proportion of the amount of notes to the tempo of the piece)
- texture
- interpretation (the way of operating and connecting elements of music by the performer)

Within each of these elements, one may develop their own style of playing (Henderson 1992, Wooten 2008). We can talk here about fifteen axes of development, along which we mark our subsequent milestones. For instance, with accentuating at the beginning, we do not learn how to accentuate at all, then we learn various kinds of accents (e.g. dynamic, articulative, agogic, tonal), and various intensities of accents - the so-called strong and weak accents (Bliziński 1983).

In the process of learning improvisation one can very frequently encounter abandonment of development of several of these fields; we often talk then colloquially about the performer's lack of musicality. For instance, guitarists

utilising very distorted timbre have problems with achieving dynamics. One can then help oneself with additional effects to supplement these deficiencies (e.g. a volume pedal), but this is usually not paid attention to. As a result, the guitar loses its dynamic possibilities. This phenomenon is far from new. There are several instruments known in the history of music that lack dynamics, for example, the harpsichord, which owes to the lack of these capabilities its decline as a concert instrument in favour of the more dynamic piano. The importance of dynamics may be underscored for instance by the fact that in the times before the piano existed J. S. Bach preferred the diminutive clavichord to the resonant harpsichord, precisely due to the former's dynamic and articulative capabilities. Unfortunately, this instrument was too quiet and, thus, concerts with its use could only be performed in small rooms (Schweitzer 1963).

Achieving the effect of immediacy is another issue. At first, both a harpsichord and a strongly distorted guitar sound good, but a steady intensity of the sound quickly tires the listener (Rieger 2007). This is also the reason why the recordings of classical and jazz music are not appropriate for such strong compression as the recordings of pop and rock music.

Learning how to accentuate, similarly to the study of each of these 15 elements, takes place more or less consciously. The lack of interest in this element of music leads to very schematic playing and is limited to several easy so-called "patents" (repeated schemata), which, in turn, result in a shallowness of the audience's impressions. Interestingly, it is frequently the musicians without musical education who pay more attention to this issue than the students of musical schools, due to the inner need for developing one's abilities in many directions at once, the need to "listen in" to one's sounds and to ponder over them. Musical schools frequently put too much emphasis on the study of harmony, rhythm, and melics, demoting other elements of a musical piece to the margins, while the students often do not feel that inner need to reach them on their own, relying on the schemata they have learned (Wooten 2008). Already in 1960 Skołyszewski wrote about this issue: he recommended practising various elements of a musical piece at once. Moreover, the musical school students feel partially "exempted" from the responsibility of seeking the right solutions (using their hearing, or literature). Unfortunately, for some reason ready recipes (scales, chords, rules), given clearly in the form of school knowledge **do not result in a deep understanding of the subject**, but only in a very shallow usage of schemata (Holdsworth 1992). This is why it is recommended to search independently for solutions to the given problems, while using book knowledge only for support. Nevertheless, theoretical rules are a treasury of knowledge and they should be used as often as possible.

It seems that the rule of a golden mean works here: balancing the elements of music, seeking a right proportion between them and learning as many of

them as possible in a systematic manner (Wooten 2008). It is, thus, a good idea to listen carefully to recordings at all possible levels and to observe various musical phenomena, e.g. changes in dynamics. While doing so, one should not be limited to certain favourite music genres, but, rather, one should look out for sensitive, valuable musicians regardless of the types of music they perform.

Elements of music – overview

1. **Rhythm** – determines the lengths of notes and pauses, as well as the moment of their starts. It is the most important element of music; one can improvise based only on rhythm (e.g. with the use of a snare drum). In improvisation, we use various rhythms, which are sometimes connected with the kind of music that is performed. For instance, bebop is frequently played with even sixteens (or eights); other rhythmical lengths appear more rarely, with the exception of phrase endings. In slower tempos, we use the effect of swinging, which has made its way into almost all musical genres. It is a rhythm that consists in performing even notes in such a way that the first of them is prolonged, while the second is shortened - and, frequently, the latter is also accented. The length of the first note is not determined unequivocally - it ranges between 50 and 75% the length of the group of two notes. Thus, the second (shorter) one is between 25 and 50% of the period the group lasts. This effect also occurs in nature - as beating of the heart. A similar rhythm can be also encountered in classical pieces, for instance, Contrapunctus 2 from J. S. Bach's *Kunst der Fuge*, or L. Van Beethoven's *Menuet G-major*, contain this rhythm written down as a series of two notes: an eight with a period and a sixteen. Schweitzer claims that it is "ceremonial rhythm" for Bach, which appears in this form in cantatas. It suggests a certain particular mood of the music. Many interesting things can be said about rhythm as the most important element of improvisation. As Pat Metheny writes on his website, "To me, rhythm and what you do with it is everything." In his manual *Melodic Phrasing*, Scott Henderson refers to the issue of rhythm in improvisation in a similar manner. There are also many books focusing on and organizing solely the notion of rhythm in improvisation. Sylwester Laskowski published an entire manual on the subject of rhythm in improvisation in 2007.
2. **Tempo** is the number of metric measures (usually eights or quarter-notes) performed within one minute (e.g. a quarter-note equal to 60 bpm in notation means 60 beats per minute). In the pieces of old masters one can also encounter Italian denotations of tempo constituting certain absolute borders (e.g. *Allegro* is a tempo ranging from 120 to 168 bpm). Musicians frequently have quite serious problems in keeping rhythm within a certain tempo; in educational work we use the metronome, or a percussion

automaton set according to measures in bpm units. There are many stories about rhythmical practice with a metronome; Miles Davis writes about the issue in his autobiography (1990). There are at least two stages of playing with a metronome. The first one regards keeping the tempo with certain tolerance: we hit more or less within the rhythm, but the beats minimally miss the metronome so that two beats can be clearly heard - one of the musician, the other - of the metronome. The second stage is achieving the so-called “synchro” (from the word “synchronization”), which consists in precise practising with the metronome so that the sound of the metronome blends into one attack with the sound of the musician (the player has the impression that the metronome is “disappearing”). The energy of the soundwave overlaps with the attack of the player, creating a much more precise effect which sounds good for the listener. In Poland, this procedure can be heard, among others, in the shows of Wojciech Pilichowski, who attaches very large importance to achieving the “synchro” effect. Three commonly committed metronomical mistakes are: playing unevenly with regards to the metronome, playing unevenly with regards to oneself (e.g. the left hand sometimes hits slower, and sometimes faster than the right one - this problem pertains especially to pianists, drummers and other musicians who use both hands to elicit sounds), and playing unevenly with regards to other members of the band. One frequently talks about “EMBEDDING” the instrument’s part. This is especially important in the case of the rhythmical session (drums, bass, rhythm guitar). Tempo is often described by the word “agogics,” which has a different primary meaning. The lack of metronomical control evidences the performer’s weak musical sensitivity.

3. **Agogics** is not only the tempo, but also the agility, that is the proportion of the number of notes to the piece’s tempo. The notion was introduced by H. Riemann (Śledziński 1981). In improvisation we frequently talk about “fast” solos. Yet, a fast solo can appear in a slow piece or in a very fast one. It happens that musicians use only one favourite kind of agility, e.g. they play very fast regardless of the piece’s tempo. In the case of rock music we talk about shredding. This statement frequently, though not always, evokes negative connotations. In fact, the majority of shredders have very poor technique in the scope of using the remaining elements of music, e.g. deficiencies with regards to dynamics, accenting, harmony, phrasing, form, articulation, etc., although this does not always happen. Allan Holdsworth and Frank Gambale, two true masters in utilizing the list of musical means recorded an album together, entitled “Truth in shredding,” where “truth” implicitly denotes technical mastery, not only based on a large amount of notes, but also on using other elements of music. Using simplifications is a frequent mistake of shredding. If we add other means of musical expression (dynamics, accenting, phrasing, time,

harmonic junctions, etc.) to a “carefree” fast series of notes, the level of difficulty increases manifold. This phenomenon has been known for a long time (Schweitzer 1963).

4. **Time.** We frequently talk about shifting the part of one musician (or even shifting the part of one hand, e.g. in the case of a pianist or a drummer) relative to the metronome on which the section of a band is based. The rhythm that is steadily beaten by the metronome (usually the function of the metronome is fulfilled by a drummer) is herein denoted as “beat.” We commonly mention playing “behind the beat” and playing “before the beat,” which means consciously shifting the entirety, or part of the rhythm forwards or backwards in time. At the same time, this shift is much shorter than the length of the notes performed.

Musicians playing “behind the beat” are encountered more frequently than those playing before it. This means of expressing emotions is still new and still provides large possibilities of experimenting with music. Already in baroque harpsichord players utilized this procedure with the aim of achieving the effect of expression to compensate for the dynamic deficiencies of the harpsichord. This is how Keith Jarrett (among others) performs the Aria from J.S. Bach’s *Goldberg Variations*. In the theme of the Aria we can clearly hear that he shifts the part of the right hand backwards, doing so in a very irregular manner (some sound groups are played evenly, some “behind the beat”). At present, this procedure is used widely in vocal music, in R’n’B and hip hop. In Poland, this was used by, among others, by the group Sistars (e.g. in the song “Synu”). One also talks often about good “flow,” which is strictly connected with skilful operating of both this element of music, and rhythm. Time causes **even the most banal melody to start to appear attractive to the listener**; it gains new glow. This element of music is also utilized by many great improvisers (Metheny, Wooten, Scofield, Brecker). Advanced operations with the use of time can be also heard in Chris Dave’s productions – he is a young, very talented drummer who plays “behind the beat” with himself (imitating the delay effect). This phenomenon occurs also in pulling the snare drum beats “behind” in time in typical pop and rock rhythms, or the occurrence of double beat of a snare drum (the first strike is metronomic, and the second one is behind the beat), which increases the so-called groove feeling. In such a case, the entire rhythm section must be aware of a procedure of this kind, and cooperate in its creation (Królik 2011).

5. **Meter** of a piece - is a way of counting. In improvisation the first problem is actually hearing the backtrack, feeling the strong part of the tact and the accented places. This is rather simple in the case of the 4/4 meter, but problems appear when improvising in odd meter (e.g. “Take Five” in 5/4). Additionally, there are problems with breaking up complex meter into

simple groups (two or three units of length), as well as with improvising in a different distribution than the backtrack; we talk then about polymeters. Some procedures of this kind are utilized in the form of licks, e.g. a $\frac{7}{8}$ phrase played on a loop in 4/4 meter. The melody of a lick is then shifted; such a procedure may also be used as way of motivic work. This procedure is frequently also called a polyrhythm, as it resembles a polyrhythm extended in time for several tacts. We can hear such music e.g. in King Crimson's performances. Music courses conducted by the famous Guitar Craft taught how to play in polymeter.

6. **Melody** consists basically of rhythm and the pitches of the following sounds in a sequence. The pitches on their own (without the rhythm) comprise the so-called melics. The majority of manuals on improvisation focus on the choice of sonic material utilized in the creation of melics. These manuals are frequently illustrated with certain schemata and graphs, usually sets of scales or melodically distributed chords. A common mistake lies in melodic simplifications - using one scale for the entire piece without paying attention to its harmonic course, an issue that has been discussed in the first part of this article. Some musical genres, e.g. blues, allow for simplifications, as the performers seek different modes of expression there; yet, there is a large group of musicians playing within this genre who put emphasis on choosing sonic material, playing sounds connected with harmony (Henderson 1992).
7. **Harmony** – the course of chord consonance in a piece. It is used on many levels in improvisation. Firstly, harmonic changes set the right sounds for improvisation. These sounds change with the chord of the piece. A strict relationship between harmony and improvisation was defined by the creators of bebop, Charlie Parker and Dizzy Gillespie. They could improvise in stunning tempos, frequently using only chord sounds on the downbeat. For example, when playing eights they would hit the chord sounds for “one” and then every second sound would come from the chord played by the rhythm section. The remaining sounds they called “transition sounds.” This system of improvising was the foundation of sound choice in jazz improvisation (Wise 1982). In fusion music appropriate “scales” are ascribed to chords (Misiak 1996, Henderson 1988). For instance, the major chord Cmaj7 = C, E, G, B can be played with the C-Ionian scale, or the C-Lydian scale. The systems are similar in their assumptions, but the created improvisations sound different.

Harmonic improvisations (played with chords) that are frequently used by pianists and jazz guitarists can also be distinguished. Joe Pass created the foundations for the entire “guitar style” based on improvising with chords. This is strictly connected with the texture of the instrument, and

it requires a good knowledge of both scales and harmonies, and the rules of conducting voices (Pass 1987).

A common harmonic mistake is the lack of understanding for the voices guided in the chords and playing with “fingering” (learned via pictorial schemata) without understanding them. Such a musician has no idea what has happened to the second, and what - to the third voice between the fourth and fifth chord. Not only does he not know what components of chords there are, but also he connects them in a way that is nonmusical and sounds bad - with leaps enforced by “pictorial” learning.

Releasing tensions with the aid of substitutes of dominant chords is an entirely separate notion when it comes to harmony and melody. Such an attitude, as Olszewski (2009) writes, is slightly different from the classic functional harmony. A mistake that is frequently committed by beginning improvisers is utilising a certain scale without considering the series of tensions and releases that already exist for this scale. An improvisation played this way sounds monotonous, strange and unnatural. Even the simply constructed Dorian AC/DC pieces have clear dominant tensions. Every prominent jazz musician has their own way of using dominant tensions (Martino 1996). Moreover, the procedure of achieving tension by the means of a dominant chord in various modal scales was already known in the Renaissance, and it was one of the procedures that influenced the creation of the major - minor system (Feicht 1957).

8. **Texture** – is a way of conducting the melodic line with the means that the instrument gives us. A melody can be played with the sounds from a scale. We have just mentioned the style of Joe Pass, who could play the same melody with chords. Wes Montgomery often played a melody with parallel octaves. A completely different kind of texture constitutes counterpoint playing which consists in leading two partially independent melodic lines at the same time. It is also said that some musicians, for example F. Chopin, create on the basis of the texture of a certain instrument (here, a piano). This means that they utilize the entire wealth of the sound, including the pedal in such a way that a faithful musical performance of these pieces on different instruments becomes very difficult, or, frequently, impossible. J. S. Bach is a very different composer when it comes to using texture: his pieces sound great practically on every instrument, and they are especially often performed on piano. Bach himself almost did not compose for the piano, which was still being constructed at the time, and he did not appreciate the first pianoforte constructions (Schweitzer 1963).

In improvisation one also frequently mentions texture, especially in the context of building the form of an improvisation. Artur Lesicki, a well-known Polish jazz guitarists, talk about the subject a lot during the guitar

workshops he conducts. Thus, we talk about texture not only as a “method of improvisation,” as it is in the case of Joe Pass, but also as a change in conducting texture, as a means of building tension both in the piece, and in its improvised part.

9. **Timbre** is one of the most overrated musical means. This effect is also known in psychology, where it is referred to as G.A.S. (Gear Acquisition Syndrome). In short, this pertains to constant modifications of equipment, constant looking for a new timbre and spending large sums of money in order to satisfy one’s equipment needs. Obviously, a good instrument is necessary, and every musician looks for one - sometimes, throughout their entire life (Hafner 2010), but such a search should not become a musical end in and of itself. Symptoms of G.A.S. are frequently displayed by musicians who have difficulties keeping up with metronomic tempo, or cannot hear if an instrument is tuned. One only needs to consider what instruments J.S. Bach, F. Chopin, or - in more recent times - Jimi Hendrix improvised on. Despite limitations of which they could not be well aware themselves, they created sounds that entered the history of music for good.

However, timbre is not just an instrument. We change the tone with the way of eliciting sound (e.g. on a guitar: with a pick, fingers, tapping, legato), or even the place of hitting the string with a pick or fingers (Wooten 2008). Such a procedure was the basis for, among others, John Scofield’s style of improvisation: he hits the strings very close to the bridge, which, in connection with the timbre of a bridge-type converter, results in nasal sound typical only for him. **An individual, characteristic, recognizable tone is one of the most important properties of one’s own style**, and it has a much greater value than the fact that an instrument just sounds good. Miles Davis, among others, wrote about it in his autobiography. He initially also sounded almost like Dizzie Gillespie, but it changed soon (Davis 1990).

It is also important that certain instruments have much greater sound possibilities than others. In guitar, the characteristic sound can be achieved even by turning the knob, and it is similar in a synthesiser. In the case of a piano this is much more difficult, but still possible. Glenn Gould, among others, could elicit an individual and very characteristic tone from the piano, and we recognize him immediately by an attack typical only for him.

10. **Dynamics** – this element informs us about the changes in the intensity of the sound. In this case what is important is not just whether we are playing a loud or a quiet sound, but also how loudness changes in time. We talk about the levels of sound intensity (forte - loud, piano - quiet, etc.), but also about the increase and decrease in the force of the sound (cre-

scendo and diminuendo). Dynamic possibilities are strictly connected with the “emotionality” of the performed pieces, and through them, with the temper of the instrument. After all, they are what the piano owes its full name (pianoforte) to. Dynamics can be conducted in several manners. One of them consists in dynamic contrasts and dynamic changes connected with the conducted melody (romanticism). Another method is the so-called terraced dynamics, that is the inclusion of “dynamic thresholds” between the phrases in such a way as to make the dynamics within a given phrase stable (Schweitzer 1963). This is how the polyphonic music of the Baroque period is frequently performed. One can also work with dynamics with the use of special equipment added to instruments (crescendo roller, potentiometer, volume pedal). We can talk about the way of conducting dynamics by the improviser, as well as by the entire music group working together over certain dynamic manipulations.

Dynamics and the way it is operated are evidence of the improviser’s sensitivity to sound. Dynamics has a key meaning for classical music and jazz. Consciously conducted dynamics will be negatively influenced by all kinds of compressors that most radio stations use. Common mistakes of performers are the lack of dynamics (playing all sounds with even loudness, although the instrument could play quiet and loud sounds), or chaotic dynamics (not considering the loudness of subsequent sounds and playing them at random levels of loudness). The latter mistake is a kind of a problem with musicality and hearing that frequently touches drummers and bass players (we colloquially talk about a “compressor in the paw” of the bass player).

- 11. Articulation** is a way of eliciting sounds. We can talk about it at least on two levels. The first one pertains to eliciting sound in a series of several sounds of the same length. We can then talk about staccato (separating individual sounds, thus shortening them by half), portato (detaching subsequent sounds) and legato (close connecting of sounds). The second level pertains to certain manipulations on a sound which the instrument enables us to do, e.g. glissando, vibrato, tremolo. Both these levels are important from the perspective of improvisation. An articulatory strategy, e.g. legato, denotes a way an improviser practises typical phrases, and manipulations on a single sound are ways of finishing (or, sometimes, beginning) phrases. Next to dynamics, articulation is an element that evidences the improviser’s level of sensitivity.

A very important issue connected with articulation is attack, that is the starting phase of each sound, which lasts a few milliseconds. A good musician has a characteristic attack, which is also a crucial element of the playing style. The notions connected with attack pertain to different instruments. Characteristic individual attacks can be observed in, among others, Glenn Gould (piano), Miles Davis (trumpet) or Steve Morse (gui-

tar). Beginning musicians usually cannot hear their attack, which is why it is random and chaotic.

12. Accenting is connected with rhythm, as well as with dynamics and articulation. In general, this is related to playing “important sounds,” and to whether important, emphasised sounds create some kind of logic in the course of an improvisation. And they may create e.g. rhythmical logic by establishing a constant pulse, a repeating rhythm. For instance, Victor Wooten frequently accents the final sixteen of the beat, creating a characteristic, flowing sound of a phrase. There are also other kinds of accents:agogical, intonational, or sound ones (Bliziński 1983). Moreover, one can accent on several levels; we talk about strong and weak accents. In improviser’s practice, accents should be especially trained, that is create large contrasts between accented and unaccented sounds in order to achieve right levels of accents after several months’ efforts. This pertains especially to the musicians who have never practised accenting before. A proper usage of this element of music results also in excellent effects in connection with shifting time, which increases the effect of the flow of the rhythm.

13. Phrasing is the way of connecting subsequent sounds into logical units. We can thus create characteristic, recognizable sections of melody, which are frequently compared to the language of speech. Sounds are connected into motifs, motifs into phrases, and phrases into various kinds of sentences (questions, answers). The sentences create the form. Appropriately phrased music sounds naturally and does not tire the listeners. Common mistakes are the lack of phrasing both in improvisations (unending streams of sounds), and in the rhythm section music (Henderson 1992). It ought to be remembered that even the bass plays a melody which is built in a certain logical way. Thus, the bass player should also use phrasing, emphasise logical beginnings of phrases, play repeating motifs in similar way, e.g. putting accents and clipped sounds in the same places, etc. The issue of the lack of appropriate phrasing concerns especially guitarists and piano players. They do not have to “take breaths,” so they play “too many notes (Davis 1990).

Motivic work is an enormous tool of improvisers; it has been described abundantly in literature on the subject of the structure of musical piece (Frączkiewicz & Skołyśzewski 1988). This tool has been utilised successfully on many levels for hundreds of years. Phrasing is closely connected with what an experienced improviser “hears in their head.” Sound which will occur in a moment have been known earlier to the performer due to a certain consistent conducting of the phrase. Motifs and phrases are characterized, among all, by characteristic rhythm and shape: a phrase can increase and decrease, or stay on a specific sound (Henderson 1992).

What is important for phrases is the distinction points (the highest and the lowest sounds in a phrase). They are frequently connected with the harmony of a piece. Next to excess of sounds, a common mistake lies in the lack of, or in the intrusive circular repetition of a few motifs, which leads to the schematicity of improvisation.

14. **Form** regulates the course and development of improvisation with the aid of musical means. An improvisation frequently increases to a climax with the aid of certain contrasts. For example, at the beginning one plays in the lower registers of the instrument, using longer, individual sounds, less complex scales (e.g. pentatonics), then slowly increasing the tension. This can be done in various ways, e.g. by gradually turning the volume up, and then increasing the register of the instrument (or the other way round). The whole logic of the improvisation's "increasing" is precisely its form. A common mistake is practising an improvisation to a looped backtrack, without it increasing, instead of enclosing it in logical frames (the correct way to do it is to practise an improvisation from beginning until the end, and then from the beginning again).
15. **Interpretation** of the piece (or of improvisation) - consists in such a choice of musical means that an improvisation forms as coherent a whole as possible. Musicians can utilise e.g. such specific phrasing, such motivic tools, they can build the form (increase) in such a way, utilise such - and not different - scales, use such modifications of harmony, etc. Interpretation is an idea for improvisation for a specific piece, the presence of a concept transcending the chaos. It is said that music likes order on every level.

In practice, it is very difficult to achieve mastery in using all those elements at the same time. In principle, it is impossible above a certain level. One can devote one's entire life to self-development in the field of rhythm, and a similar thing can be said about a majority of these elements. However, masters of improvisation are characterized by having learned all the elements to some degree. It is, in a way, looking for a golden mean. Allan Holdsworth is a true master of improvisation. Yet, he utilises a rather narrow dynamic spectrum, which is, however, a very specific spectrum. There is no possibility of random dynamics, there is no chaos within this music. The musician knows precisely what he is doing and he does it well (although it is difficult to say that he is a master of dynamic shading).

Each of these elements is in a practical way connected to a certain kind of hearing and a level of musical sensitivity. Thus, we can talk about rhythmic hearing (not only following the rhythms, but also hearing the "synchro"), harmonic hearing (following the changes in harmony and dominant tensions, recognizing progressions, suspensions and other harmonic structures), melod-

ic hearing (recognizing scales and modes), polyphonic hearing (following several melody paths at once and the ability to reproduce them in the sense of e.g. rhythm and melody of each path, but also recognizing intervals), musicians often talk also about important details, which I identify with hearing that follows the nuances of dynamics (that is, the ability to tell whether a series of sounds is performed at the same loudness, e.g. indicating louder notes in a series of eights) and nuances of articulation, structure of the form and the quality of interpretation. Hearing deficiencies are typical for the performers of popular music, and they are frequently equalized in the recording studio with the help of appropriate equipment or computer programs. A singer's intonation (singing off key) can be equalized with the use of VST plug-in, sounds that miss the time can be shifted to the right places (a musician frequently does not hear that he/she lacks "synchro"), and sounds played in irregular dynamics (lack of sensitivity to dynamics and to the instrument's attack) are brought to a single level of loudness with the use of compressors. Usually, it is songs known from commercial radio stations that undergo such a cycle of editions (compress dynamics, quantizing rhythm, tuning the intonation of the vocal). The songs are "smooth," but, in a way, artificial. We arrive at the conclusion that **it is difficult to play well even the simplest instrumental part** (Metheny 2011).

General notions of improvisation

The elements of music constitute a kind of a **detailed** outlook at the issues of improvisation; we are now going to talk a little about **more general** notions that cannot be subject to such detailed analyses.

Interactions between band members constitute a separate problem. The notion of the scope of improvisation might be debatable. Sometimes the whole band improvises, but even then something is decided upon, e.g., a common beginning. Sometimes it is the form of a piece, and an improviser has at their disposal e.g. a specific number of measures, sometimes the number of its repetitions is decided upon (depending on the course of improvisation). If there is one improvising soloist, the band usually follows them, which is connected with various elements of music: dynamics, rhythm, and form of the soloist, and sometimes with the re-harmonisation of the improviser (Davis 1990).

Another problem is conveying emotions by the means of music. This is a rather subjective issue; there are no masters who have a good grip on the elements of music, whose music would not move the audience. This is how J.S. Bach used to be talked about: his music disappeared from parlours for a hundred years to come back in glory (Schweitzer 1963); today Allan Holdsworth's music is described in such a way. It is not music for everyone, but it will get to a sensitive, experienced listener. Such a kind of "advanced" music will proba-

bly not be enjoyable with the first listen, it reaches one with time. As Schweitzer (1963) claims, the case is similar with some of Bach's pieces.

A more frequent phenomenon connected with conveying emotions are workshop deficiencies when it comes to the elements of music (e.g. uneven playing, lack of tensions, inappropriate phrasing, lack of motivic work, etc.), or using very poor means (e.g. articulative ones), capable of spoiling even the most beautiful sounds, which become, in a way, stripped of their beauty due to the performer's sloppiness.

However, emotions are not everything. If someone works on generally understood elements of music, if they are inquisitive, patient and do so for a long time, they will most likely without many obstacles achieve the stage where conveying emotions is not a problem. The music of such a performer will move the audience in a particular way. There is, however, something much more difficult, which is an unclimbable wall for many musicians.

Miles Davis writes about it emphatically in his biography "Music is about style" (Davis 1990): one's own, characteristic, unique, personal style. A set of factors that allow the audience to identify records of a musician whose style they are familiar with, even if they hear a new piece by this musician, after just a few sounds. A style which is "measured" with the number and the achievements of its imitators. This is a rather large problem, especially in the times of the mass exchange of information. One of the many common but untrue opinions is that "in contemporary world everything has already been played." There are many musicians, but, at the same time, there are few who have something interesting to say in music while having appropriate abilities (Metheny 2011).

Famous musicians refer to this problem when answering the question "what advice would you give to young artists?". One can devote their entire lives to the analysis of achievements of favourite performers and to practising technical etudes from notes, but this is not what it is all about. In his article entitled "How To Not Sound Like Anybody Else (More or Less)... in 3 to 5 Miserably Painful Years," Wayne Krantz (2010) writes "I went through this with Pat Metheny in 1980. No, he didn't sound like me; I sounded like him. When I realized I wasn't satisfied with that, I stopped listening to him altogether." An even harsher tone can be found in Miles Davis' autobiography (1990).

There are two examples of musical improvisation:

http://fulara.com/temp/artykul/earth_song_-_1_take.mp3 (improvisation with theme)

http://fulara.com/temp/artykul/earth_song_-_2_take.mp3 (improvisation without theme)

Part II. Counterpoint improvisation as a tool for shaping one's own style of music

Artist's style

For me, music and life are all about style
[Miles Davis]

I have written two articles about artist's style in the Polish press. They include my ideas on how to think and work with music, how to be more creative, how to look for one's own voice in music. These ideas do not come from speculations, but from an inner, spiritual need to be different from the rest of the music world. Most musicians lack this inner need. They "synthesize" styles, progressions, licks, and sound in part like one artist, in part like another. This does not yield results if we consider music to be an art form. It can result in what I call "small 's'-style" but not "capital 'S'-Style". These musicians are more imitators than artists even if they „compose" syntheses of different kinds of music. "Style" can be imitated by other musicians, because it has trademarks. Imitators have to have something to copy, so there are certain trademarks, characteristics, which are the best descriptions of that Style. Having more imitators means having a better defined style.

As a listener, I look for musicians with distinct individual characteristics. I prefer Allan Holdsworth's music, which is not easy to listen to, to safe-blues typical playing then. There are emotions in the playing of blues musicians, but usually only very few of them have the Style.

A distinct style does not preclude beauty, or make music difficult to listen to. Among the best examples there are J.S. Bach, Chopin, Beethoven, Mozart, but also Davis, Parker, Coltrane, Pass and Metheny. The music of these artists is not a "fusion" of other artists' music; it was developed as an expression of their individual voices. Obviously, previous music always influenced the artists, but this influence is not the only creative force in their playing. Their ideas are much more advanced than only "copying" other artists. Commercial musicians often do not have their own Style. However, not all music has to constitute art in this sense.

We cannot treat „Style" as some kind of a mathematical calculation or equation. There is no simple description of what the Style is. There are too many factors to describe when talking about style: timbre, note choice, the conception of music, harmony, even words in songs, and the clothes worn by the artists etc. Everything is important. Music serves many different purposes, and the performers have different needs and sensitivities. But this article is not about Style. In the next part I write about my own struggles in looking for my own voice in improvisation.

For me having Style is the key issue in music. I divide musicians into the ones who have their Style - the original performers, and those who do not - the derivative ones. The second group consists of the “imitators,” who mix styles of different artists that they are influenced or inspired by. There is nothing wrong with being inspired by someone else. However, it becomes a big problem if it is the only way of improving one’s playing. An opposite point of view enforces a certain natural way of seeking one’s own personality. It is not a calculation as much as the issue of comprehending music at a level of conscious shaping one’s own needs, which arrives with age and experience. As Glenn Gould said: „If somebody has nothing new to say when playing the tune, he shouldn’t play it live, and he certainly shouldn’t record it” (Hafner 2009).

Copying different styles does not have value for art unless such a “copy” has a deeper conception. Young musicians often make the mistake of believing in these compositions based on the music of their idols. However, copying may do more harm than good (Krantz 2010). It is not easy to have high skill in music in that sense (Metheny 2011). Copying is safe, and sometimes it is enough in some kinds of popular music. Thus, we have many artists with no style, who play for big audiences and record CDs.

Moreover, labels often require the musicians to play in a certain style. If you want to write a pop hit, you should not think about expressing your individual voice because the label will not agree to produce such a record for fear of losing money (Marsalis 2011).

I started playing the guitar in the 1990s by copying my idols, such as AC/DC, Iron Maiden etc. After a few years I realized that composing music that would resemble AC/DC has no artistic value. There were thousands of such derivative bands. It was not my music, although these were my compositions. Furthermore, my idols did not copy their own idols (although they were a source of inspiration). They created something new, fresh, valuable. It was not about “playing like Iron Maiden”, but about creating fresh music as they used to do. It is about a kind of a prism which is not for light – but for sound. It creates our own version of musical pieces even if they are not our compositions. This is the most valuable thing in music for me. It is extremely difficult to achieve musical personality. If you are working on the inner music voice, you are alone. Listeners prefer easy music based on common popular patterns. J. S. Bach found this out the hard way: even his sons – musicians themselves - were not able to appreciate his genius (Schweitzer 1963). However, composers of that kind did not overtly chase popularity. They knew that the quality and beauty of music does not depend on the popularity it enjoys.

Counterpoint texture and its possibilities. “The magic of intervals”

I have enjoyed counterpoint since I was a child. The intricate melodic lines create something that I used to call the “magic of intervals”. When I studied at 1st level of music school, J. S. Bach used to be my favourite composer. Even the most beautiful songs did not have the same magic as that can be found in a simple Bach composition interweaving two melodic lines. The counterpoint was the main reason I started to play the guitar using the two-handed tapping technique, and worked out a portato articulation method for tapping. The portato method makes two tapping lines clearer (Fulara 2002).

One might debate over what the counterpoint texture is, and what it is not. Nobody who ever had anything to do with Bach’s fugues will have any doubt in that matter. It concerns equal treatment of two melodic lines. This is a better word than “independent,” because there are dependencies between the lines. For example, they are strictly connected rhythmically. We have two different rhythms, but both are based on the same rhythmic motifs. Moreover, both lines rely on the same harmony. Finally, the lines are dependent on horizontal and vertical counterpoint rules and genres (Sikorski 1955). However, the lines are also independent, as each of them can be the master line.

For my considerations, the fundamental notion in counterpoint is the “magic of intervals,” resulting from two melodies played together. Already in the Baroque, J. S. Bach was famous for his counterpoint improvisation skills. He based his virtuosity on the fugue form. He was able to improvise for an hour on a simple melodic theme (Schweitzer 1963). Witnesses of his performances claimed that scores were only a small part of his wonderful music.

Improvisers rarely use counterpoint textures. The main reason is that most of creators utilising advanced improvisation concepts, for example, Charlie Parker, Dizzie Gillespie, Miles Davis, play homophonic instruments like trumpet or a saxophone. Counterpoint possibilities are available for those playing piano or keyboard and guitar - but with this instrument it is very complicated. You can use fingerstyle, or classical technique to play guitar counterpoint. Only a few guitar players reached a high level of musicianship playing it. Ted Greene (1996), Steve Herbermann (2002) and Jimi Wyble (2001), author of a counterpoint guitar textbook, were the best. All of them based their improvisations on jazz harmony. Motivic work is not that important then. Ted Greene developed the most interesting ideas by joining jazz harmony with classical I-IV-V progressions. There is a video on the Internet in which Greene demonstrates the possibilities of this kind of texture (1996).

Some piano players use counterpoint for improvisations as well, among others, Brad Mehldau, Lennie Tristano or Keith Jarrett. Some bands use it in group improvisations. It is a kind of a trademark of Mulligan's Quartet. You can also find it in Jim Hall's, Kurt Rosenwinkel's or Dave Holland's recordings,

as well as those of many others. Another, less independent kind of counterpoint could be heard in pieces from the Dixieland period.

There is no one correct way to play counterpoint in improvisation. When the whole band plays, one musician has to guess what another wants to play in order to play the right note together. Harmony and the same length of notes (for example, sixteens) are the usual common denominators.

When one musician is playing counterpoint, they have control over every melodic line. Thus, they have the ability to play e.g. a form similar to fugue (one example is Brad Mehldau).

When we first start to play counterpoint, we discover that simple melodic tools do not work. If you play sounds in any particular scale, even using deep phrasing and articulation, you will not achieve musical results. Counterpoint lines are more bare and harmony-sensitive than any kind of a monophonic improvisation. When you play usual single line improvisation, it is much easier to play the wrong (dissonant) note and treat it as suspension of melody. Each wrong note is a mistake for the listener (Schweitzer 1963).

In theory, harmony and counterpoint oppose each other, but in practice, **counterpoint is a way of carrying out harmony, and harmony is the building material for counterpoint.** However, counterpoint and harmony oppose each other when a musician is practicing.

Guide Tones

In the field of jazz improvisations there exists the notion of guide tones (**GT**). Thirds and sevenths are the most important chord tones. For each root you can build a natural major 7th chord, a minor 7th chord, a dominant 7th chord and a half diminished chord (which is a minor 7th chord with diminished 5th and it is treated like a minor 7th chord, because it has the same guide tones).

Guide tones for chords based on the C note

<i>Chord</i>	<i>Third (GT)</i>	<i>Seventh (GT)</i>	<i>Root</i>	<i>Fifth</i>
Cmaj7	E (Major 3th)	B (Major 7th)	C	G
Cm7	E_b (Minor 3th)	B_b (Minor 7th)	C	G
C7	E (Major 3th)	B_b (Minor 7th)	C	G

If we play neither the 3rd nor the 7th of the chord, we are unable to tell what kind of a chord that is. Playing guide tones on the harmonic instrument is usually the main way of playing harmony, while the bass plays the root.

The next step may be looking for the best guide tones connections using inversions. For a typical II V I progression the components are as follows:

Guide tones for II V I progression in C major mode

<i>Chord</i>	Dm7	G7	Cmaj7
<i>Third</i>	F	B	E
<i>Seventh</i>	C	F	B

Joining the guide tones in the shortest ways we have the following paths:

Path 1 (from the third): F | F | E (bolded font)

Path 2 (from the seventh): C | B | B (italicised bolded font)

This rule is well known and used in teaching jazz improvisation. It is also a popular tool for composers. The main melody of “Autumn Leaves” is based on the GT path.

Guide lines

But what does it mean to “base melody on the path”? Each phrase has an important note called the melodic accent. Depending on the context, this could be:

- a note in a strong beat position
- the beginning and the end of the phrase
- the highest and the lowest note
- the loudest note, the most accented note
- the longest note
- a repeated note

Frequently, a number of these factors happen at the same time and on the same note. For example, the longest note is the first in measure on strong beat position. It is not important according to what criterion you distinguish the “most important” note. When you listen to recordings of improvisations, you can hear without problems the most important notes one after another. A typical mistake of young improvisers is repeating the important notes throughout the improvisation. Usually it is the root of the tune, sometimes it is another note, for example from pentatonic minor scale. This immediately suggests that the improviser follows simplifications, and evidences their defi-

ciencies in hearing and technique. In other words, if you listen to improvisations, you can easily say for whom these sounds are important, and for whom they are not.

You can also write down these important melodic notes and analyze what happens with the line. When you do it with “Autumn Leaves,” you write down the longest notes of the melody in the strong beat position, and then you reach GT line.

You can reverse the process, too. This is used to learn jazz improvisations based on GT lines. Then, you avoid playing obvious roots when chords change. In most cases, the GT path goes down together with the sounds or stays on the same level. It rarely increases rapidly, and when it does, it is most frequently between particular parts or progressions.

Using this method you can write down a melody, usually consisting of whole notes. It can be treated as the so-called Cantus Firmus (C.F. line). It is a base melody which is first line of counterpoint. Then, using the counterpoint rules, you can write another line related to the C.F. line. This is called the **first species** of counterpoint. (Sikorski 1955; Kennan 1969; Gawlas 1979). A similar method was used already in the Renaissance period (Feicht 1957).

Many of the rules connected to the first species of counterpoint can be used directly to create improvisations. Other rules can be omitted or modified by taking into account bebop harmony rules. For example, the rule “if one part jumps, another goes down a 2nd interval in contrary motion” works almost everywhere. Another rule, that is treating fourths as dissonant, does not work, because guide tones for a major 7th chord create a fourth between them (see the table for Cmaj7, and Cm7 chords).

I also allow for a possible consonance of seconds and sevenths, because they are natural for all 7th chords. For example, for Am7 chord the 7th A-G as well as the second G-A are allowed. In my opinion in any kind of improvisation everything that sounds good is allowed and desirable. The point is to have rules, but not too many.

I conducted experiments in order to determine what sounds good, and what does not. I used J. S Bach’s pieces as well as jazz standards in the process. I analysed important notes in famous melodies in the context of harmony. In particular, I studied intervals between melody lines and G.T. lines. I have studied almost 100 songs and jazz standards this way. My conclusions were quite surprising. Whole note lines from important melody notes always sound good together with GT lines. The only problem occurred when melody lines were created using G. T. lines (as in “Autumn Leaves”), but I used the second G.T. line then. Obviously, if you do not want to use the original whole note from important melody notes line, you can write down your own line, using counterpoint rules. The point is that you will have two whole notes lines

for any tune with harmony. The first one comes from the important notes taken from the melody, and the second is just a G.T. line. Let us call them guide lines. They constitute a kind of a new harmonic context which will be the base for the improvisation. Instead of chord tones, you can now use these lines, and you can improvise that way, using the tonal centre. It is still possible to discern the guide lines, because you still use them as important notes. You go from point to point, from important note to another important note in each part. The first step of practicing is playing guide lines together in any position. Then you practice the tonal centre (even if it changes). Chromatic means can be used as well.

The next step is to do motivic work, or even play licks that describe guide lines. You do not have to think about harmony changes while practising. Guide lines are enough. It can be boring to play the same guide lines all the time; thus, you can do an inversion: the G.T. line can be played in another part. If it is still not enough, you can use the second G.T. line instead, or even another harmony-based line, and for a new line you can create a new counterpoint line in the second part. Then, if you have two versions of guide lines, you can jump from one to another.

These ideas are enough to play a few minutes of improvisation without an obvious impression of repetitions. Then you improvise using all the accessible elements of music. A strong rhythm of the counterpoint improvisation is the most important. If a single line improvisation is like telling a story (Wise 1983), then counterpoint improvisation is like a conversation in which interlocutors change. When one speaks, another one accompanies them, but suddenly the situation changes, and then the heretofore main voice becomes less important and the second voice speaks.

You can play any jazz standard, and any melody this way. In my manifest published in "Guitar Player" (Polish ed.) I used two simple tunes to show that. The first was "Zombie" by The Cranberries, and the second was "Careless Whispers" by WHAM. I wrote down guide lines for those tunes. You can also find other recordings with that kind of improvisation - a jazz standard versions of "All of me", Eminem's "Lose yourself", and Michael Jackson's "Earth Song". I used to write down guide lines for any song I played.

This system is a good departure point for my personal thinking about improvisation. I started to build my own improvisation language based on that form. Using music elements is a big challenge for me. For example, the rhythm of the second part depends on the rhythm of the first part. You can use time as an element of rhythm variation. You can play one line after the beat as it can sometimes be done when playing Bach's pieces on a harpsichord. You can improvise all phrases playing them laid-back, one part after another. Laid-back playing is much more advanced than playing single line improvisation. You can make a shift of the phrase by a single sixteenth note, and thus you can

play one part a single sixteenth note before another. Then you can play both parts together after the beat. Thus, one part comes before the beat, and the second comes after it. The beat is in the middle between the notes. It sounds a bit like a delay effect.

This kind of improvisation could be played with a band. I play it with my trio. This creates another opportunity to improvise together. Bass could also be treated as a third part of the counterpoint, and together it could result in a three part counterpoint, but this requires much more discipline.

This kind of improvisation could be done as solo act. And it still sounds good. You do not need a backing track to provide the context. Well done counterpoint is self-sufficient (Pitston 1947). The same rule is typical for bebop single line soloing (Wise 1983), although its implementation is quite different. It is a very good method of harmonic improvisation to combine two parts into one. That method was frequently used by J. S. Bach. All of his homophonic work (for violin solo, for cello solo) was done that way. The famous F-major Invention joins three parts into two (and it is now a two part invention for keyboard) etc. It sounds very good. A simple method to do that is to play the “pedal tone”. It sounds complicated, but it is not that much complicated indeed.

Let us trace all steps that should be done when I am learning a song, and improvisation form. I will use “Zombie” by The Cranberries to do that. First of all, we have simple guitar fifths and one sixth.

E5 | C5 | G5 | F#6 :||

The key center is E minor. Thus, the seventh chords are: Em7 | Cmaj7 | Gmaj7 | F#mb57 :||

The last chord could be Dmaj/F# but let us stay with F#mb57.

The second step is to designate the two Guide Tones lines. The third step is to find important melody notes (vocal line). Then we have these notes:

Important notes for counterpoint improvisation - “Zombie”

<i>Song</i>	E5	C5	G5	F#6
<i>Chords</i>	Em7	Cmaj7	Gmaj7	F#mb57, or D7/F#
<i>GT line from 3th</i>	G	B	B	A
<i>GT line from 7th</i>	D	E	F#	E
<i>Bass</i>	E	C	G	F#

<i>Melody notes</i>	E	D	C	F#
<i>GT line from 3th – melody line interval</i>	3 (6)	3(6)	2 (7)	3(6)

As we can see, the GT lines are not always “the shortest way”. You can play E after G over Em7 | Cmaj7 change. You should use your ears to detect the best possibilities. The basic motion method is the contrary motion, which is essential in the counterpoint.

In that piece the most important lines for me are the GT from the 3rd line, and the melody line (bold font). I play it for a while and learn to hear the undergoing interval changes: a third, a third, a second and a third. The most important interval here is the second. It creates a tension, because the thirds are consonances, and the second is a dissonance. In classical first species counterpoint this is forbidden. However, here we aim for harmony tones and short connections, and I find that these sound well.

The inversions are equal. It does not matter if one plays E-G or G-E. The intervals will change, but we will use that to make the form more attractive and to explore more interval possibilities in improvisation. The second is much more noticeable for the listener as a dissonance than the seventh, but both of them have the same harmonic context.

If you think that way, you have only few interval possibilities between the parts of improvisation. They create the “magic of intervals”:

- a minor second
- a major second
- a minor third
- a major third
- a fourth
- a tritone

If we add the tonal center, we only have three of them:

- a second
- a third
- a fourth (or a tritone)

The rest of them are inversions. The seconds are dissonances, the thirds – consonances, the fourths (with the exception of tritone) are also consonances. In

the last row of the table we can see intervals of the piece. If we play this way, we hear the interval changes.

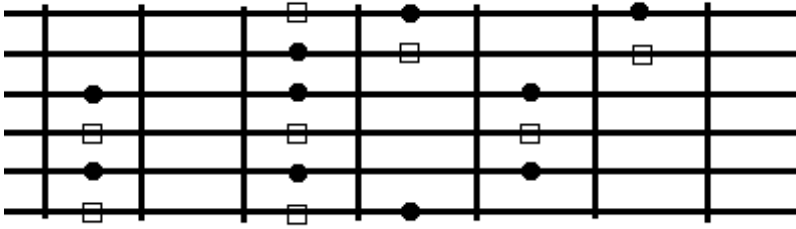
We have thus established the guide lines. Now we can use melodic patterns, licks, fingerings and well-familiar homophonic melody solutions with tonal center E-minor for each line. What is important is that it does not matter which kind of an interval will be created by these varied lines. The parts will meet each other in important points that create “the magic of intervals”. These important points depend on the player’s invention. In counterpoint textbooks there have been described many species of counterpoint (Sikorski 1955, Kennan 1959, Gawlas 1979), but this could only make counterpoint very hard to implement in improvisation. Thus, I only use some of the “first species counterpoint” rules, while treating the remaining ones as inspiration to find good notes.

Thus, in my version there is no such thing as forbidden intervals. Everything is allowed, the question is how you use these options. During improvisation the parts sometimes become weird. It depends on the improviser’s technique and experience. But always, even if something goes wrong, the parts meet each other frequently in guide line tones; they have to do so. Another possibility, that is playing random licks in tonal center, would only result in a chaos. **“Music likes order.”**

Tonal center patterns

The “pictorial” aspect of counterpoint improvisation is important for guitar players. There usually is a kind of a diagram with the scale on the fingerboard. I have provided such a diagram, but it is made according to different rules. The most important notes are found in the guide lines. I use diagrams to find them fast on the fingerboard. Then I build the tonal center around these important notes. Learning this way allows you to make a connection between guide lines and the tonal center. And thus, if you know the tonal center by ear, you will be able to hear how colourful these guide lines notes are. During every moment of the improvisation you should hear the guide lines in your head. In our example (“Zombie”), and for the guide lines chosen, the notes are as follows: G, B, B, A. You can find them all on the D string. Then you can see the scale diagram, and fit the notes into the diagram. Then you can do a similar thing for every other string (find the points where the G, B, B, A notes are on the string, then play tonal center around them). This is how I build the scales and diagrams. You can follow the same steps with the second guide line. This is especially important if you would like to use a dominant to create tension. It is a good exercise to play long notes of the guide lines. This is what my counterpoint world looks like. I practise different combinations of these lines.

E Minor scale for “Zombie” with guide lines, from 5th fret, 3 notes on each string



The D string is the most important in this diagram. All three guide line notes are marked on it as squares. There are two notable things on this diagram. First of all, you need to remember the sequence of the squares. The three squares are in fact the same one - moving from one point to another (G to B then B again and then A, frets: V, IX, IX, VII on the D string). The second important issue is how to change the string from D to another, for example E. The same diagram can be used then, but the position would be changed to the III fret. We will have the same diagram, the only change is looking at the E string in the same way that we have been looking at the D string before. Adjacent strings have the same patterns.

The same thing can be seen on the B string in the VII position. Then we should look at the B note on the B string on the XII fret; we would have all three notes of the guide line on the one string again. The sequence of the squares is the same all the time.

This is the way I shift the hand up and down on the fretboard. It looks complicated, but it is not complicated at all. Learning it is much easier than finding guide lines on each position of the scale. You go from one note to another note, from one square to another, improvising all the time. We do not even have to play guide line notes, the fact that we hear them inside our heads is the most important.

Notes outside the tonal centre

When we play guide lines, we do not have to keep strictly to the tonal centre. We can use secondary dominant substitutes. A resolution of this dominant could be achieved on the guide line note. You can play chromatic figures too, popularly known as bebop licks. For example, if the guide line note is D, you can play a D, C#, D, D#, D, or a D, B, C, C#, D sequence.

A chromatic will not always fit. You have to be careful and sensitive to intervals that it creates with the other part in counterpoint. You must have some experience in tonal counterpoint playing, as well as in guide lines playing, to do that. What is important is that you would find that kind of chromatic mel-

odies creation in both jazz improvisation and bebop books. For example, *apoggiatura* and *echappé* are typical for both these kinds of music.

Phrasing, accenting, time

Long lines without any rests are typical for the Baroque period counterpoint. The main reason is that composers were afraid that one part would dominate the piece when another part rests. The piece would become homophonic. This is not important to me. I like very clear phrasing that can be encountered e.g. in Pat Metheny's music. Each phrase is easy to understand for the listener. Counterpoint is, in itself, complicated. We do not need another level of complication, resulting in never ending phrasing (in fact, when a phrase ends, the next phrase immediately starts in old counterpoint). My point is to make this complicated structure as "melodic" as possible. I hear simple counterpoint lines in my head, so I would like to play them when improvising. However, this simplicity is connected to the "magic of intervals.". I am not looking for complicated lines and virtuosity without counterpoint contents.

The first important tool I use is motivic work together with imitation. The most important methods are those that give recognizable results: repetitions, shifting of tonal center steps, inversion of motif intervals, changing of motif intervals, repetitions of motif rhythm, diminution and augmentation. Playing a motif backwards happens very rarely, and I use it only for very short motifs (Frączkiewicz & Skołyszewski 1988).

The second tool is playing the same length of notes all the time (*ostinato*) in one part, while developing another part by motivic work. This is quite similar to playing walking lines on bass, but the parts become very close to each other in my playing. We change these *ostinato* notes too (quarter notes, eighths, sixteenths, half notes depending on the context). You can also change the time of each part, for example, as has already been mentioned, shift the *ostinato* part before the beat (even by a single sixteenth note) and play both parts after the beat. You can also change parts – so at one moment you play *ostinato* rhythm in one part, and then, for a while, in another part. You could thus avoid one part dominating, and treating another part simply as a realization of harmonic counterpoint. This method was also used by J. S. Bach, but in a much stricter way. The *ostinato* part could be also a figuration melody. Rest is one of the most important things in improvisation, and it creates good phrasing (Davis 1990). In my opinion, this point of view does not come into conflict with the counterpoint. The "magic of intervals" is still there. In my opinion, the possibilities for domination of each part are the key issue. Thus, the perspectives coming from the counterpoint Baroque and the one emerging from jazz remain in conflict.

Phrasing is connected with accenting. J. S. Bach had his favourite way of accenting. He would join a strong beat position (on “one”) with the previous phrase, making it the end of the phrase. Thus, new phrases could begin on the “1 and” or on the “2” beat position. This shifted the beginning of a phrase that was accented (Schweitzer 1963). My favourite way of accenting is putting accent on the last sixteenth note of the beat. The accent shifts from “one” to the last sixteenth note before “one”. The same happens with two, three and four. This accent is used by many improvisers in single note soloing; for example, V. Wooten uses it frequently. This gives counterpoint the kind of a flow different from the one encountered in Baroque pieces.

Every part has an independent accent, as well as independent distinction points (the lowest and the highest notes of each phrase). An accumulation of accenting points denotes a culmination of the improvisation form, like in the Baroque counterpoint, which usually means the end of the improvisation.

Rhythm and meter

I use only well-defined rhythmic values to play counterpoint. Sometimes guitar shredders try to play an undefined number of notes as fast as possible, keeping only last note of a phrase in the beat. When you play counterpoint, this just does not work. Parts seem much more “bare” for the listener and an improviser cannot cheat in such a situation, neither musically nor rhythmically.

I also use swing, syncopation, polyrhythms. I was initially inspired by trance music, where polyrhythms, such as 2:3 polyrhythm, where you can group triples into 2-notes groups (as in Armin van Buuren’s recordings), are a usual occurrence. I also use different polyrhythms: 4:3, 5:3, 5:2, etc. You can also use a polymetrical rhythm, shifting one note of the phrase for each bar, for example playing 7/8 over 4/4. This gives new possibilities for the motif rhythm.

Playing a different meter than 4/4, which is typical for commercial, so-called progressive music, provides many possibilities. I did a few pieces in the 5/4, 7/4, 11/8 meter with counterpoint improvisation. Another tool can lie in the change of meter in the piece and polymetrical composition. You can improvise while keeping harmonic rhythm in odd meter, but playing 4/4 rhythm over it. The rhythm shifts all the time.

Articulation

For clarity purposes I use the portato articulation method, which consists in tapping when you avoid the effect of hammer-ons and pull-offs. I play each note as if nothing has been played before on the particular string. In my opin-

ion, hammer-ons and pull-offs are only colorful articulation effects, but they can be used from time to time.

Other articulation effects, such as vibrato, bending, glissando can be used as various kinds of articulation accents, which I utilise to make the guide line note stronger. I do not use ornaments characteristic for the Baroque period; I prefer guitar articulation. J. S. Bach himself used the *bebung* effect (vibrato, bending) when playing clavichord - his favourite instrument. However, we do not know where and how he used it (Schweitzer 1963). It certainly was not a substitute for ornaments, as in the Baroque period all of them were played from the note down. Conversely, *bebung* always changes the pitch up (Brauchli 1998). We only have witness testimony to rely on from the Baroque period, and even those are few and far between. While Bach used such devices, he made no note of it. His son Carl Philipp Emanuel Bach, who provided a notation key and some general rules of using vibrato, wrote slightly more on the subject, for example “*bebung* should encompass the note’s latter half until the end of its sound” (Brauchli 1998).

The main problem of playing vibrato and bends is the pitch change. If we play one note, then play another one on the second string, and then bend one of the notes, the interval changes. It is impossible to achieve such a change when playing the piano. Thus, it is a new effect for the listeners. Sometimes they like it, sometimes they do not. It may sound disturbing for someone familiar with the Baroque period counterpoint. Still, I like the effect. It is a source of new possibilities in counterpoint playing: you can play vibrato in each part separately, or use them together. You can alternate the speed of the vibrato effect in every part. You can play even the classical guitar vibrato (without pitch changes) in order not to change the pitch. There are numerous possibilities.

Another articulation effect is the glissando. You can make a short gliss (2 frets), or a long gliss (about 5 frets), and I like to play the octave effect on the same string (lower A, then gliss to reach higher A note). I like the way Pat Metheny uses the glissando effect, which is also an important part of phrasing – occurring at the beginning or at the end of phrase. Since I feel that I have achieved a strong, characteristic musical spine of style, I keep asking myself: “What works with counterpoint improvisation?”. I try different popular methods from various books, recordings, workshops etc. in a new context. We know this process from Miles Davis autobiography: “Another thing I found strange after living and playing in New York for a little while was that a lot of black musicians didn’t know anything about music theory. Bud Powell was one of the few musicians I knew who could play, write, and read all kinds of music. A lot of the old guys thought that if you went to school it would make you play like you were white. Or, if you learned something from theory, then you would lose the feeling in your playing. (...) I would go to the library and borrow scores by all those great composers, like Stravinsky, Alban Berg, Pro-

kofiev. I wanted to see what was going on in all of music. Knowledge is freedom and ignorance is slavery, and I just couldn't believe someone could be that close to freedom and not take advantage of it. I have never understood why black people didn't take advantage of all the shit that they can. It's like a ghetto mentality telling people that they aren't supposed to do certain things, that those things are only reserved for white people. When I would tell other musicians about all this, they would just kind of shine me on. You know what I mean? So I just went my own way and stopped telling them about it.” (Miles Davis)

If somebody has achieved the basis of the style, then copying other notions into that inner conception can be a good idea.

Form

Obviously, if we talk about improvisation it should have some kind of a form. The simplest method here is to increase form in any dimension during improvisation until the culmination point. I like to start improvisation with guide lines, playing in the simplest way in the middle or in the low register of my guitar. This allows the audience to define my “harmony” of counterpoint and to understand better what happens next. Their ears are now familiar with my new “harmony,” as provided by the guide lines.

Following that, I use contrasts to achieve an increasing effect. For example, I change dynamics from quieter to louder notes. I like to play “*piano*” dynamics, as in *piano* after the attack every note can be heard very well (as a kind of a gentle “pop”). I like the way this sounds much better than the *forte* attack. You can use terrace dynamics too, switching volume levels only between phrases (this is well known from the Baroque period music interpretations). It also sounds good when you play the upper part *piano*, and the lower part *forte*.

I start playing with long notes (whole notes, half notes), and next I use quarters, eighths and so on. What is important is that there is cohesion to rhythms I use. Triplets work well with swing rhythm. I start from quarters, then quarters become swing eighths, then I play eighths triplets to achieve this effect. It is important that the rhythms of both parts should fit together. In the following step, you could change the time, which is one of my favourite counterpoint rhythm ideas.

The melody of the improvisation gradually moves from the lower to the higher register. I have two tools to achieve that effect. First of all, I transpose the guide lines an octave higher. However, I do not do that all at once. First, I shift one line (the lower one), and then I conduct inversions of the intervals, but the harmonic context stays the same. In the second step, I transpose the second guide line; now both guide lines are transposed by one octave. You can also

keep one guide line unchanged, and transpose the second line one octave higher, then two octaves higher, etc.

You can also alternate guide tones while changing one of the guide lines. Thus, you can use guide tones from the third, and from the seventh in the next step, then from the third one octave upper, etc. Both guide tone lines are in fourths, so this kind of a skip works well with the flow of the improvisation.

Another option is to use scale licks which join octaves to make the transposition smoother. You can develop a number of ways to do a smooth octave skip. The octave gliss is one of my favourites. In such a case, crossing voices causes no harm if the rhythm is well defined. You can use the bass part as a third voice in improvisation, but it requires developing a common form of the improvisation.

You can use the counterpoint texture as a tool to build the form of improvisation, alternating homophonic texture with the counterpoint building the form. Still, I prefer using only counterpoint texture when playing with my band.

Using articulation can be yet another tool. At the beginning of an improvisation you can play without bending and vibrato. Then you can use a flat vibrato, but still no bendings, then deep vibrato and bending. You can also increase the speed of vibrato.

It is very important to achieve cooperation in the band while building the improvisation form. This mostly concerns increasing the whole band's dynamics. Band members should listen to each other, and play similar motifs, rhythms, sometimes phrasing etc. Interaction is very important. You can also experiment with another form, for example with the pulse increasing form.

Visualisation can work wonders for improvisation. Use your imagination to conjure up a picture of a conversation between two persons (two parts). This is a strange kind of dialogue, in which two persons are speaking simultaneously. Thus, when one of them is the main speaker, the second person says only short, less important sentences (motifs), but then the less important person becomes the most important participant, while the first person speaks the less important motivic sentences. A similar treatment of improvisation as a language can be encountered in jazz improvisation as described in Wooten's and Wise's books. The same point of view can be found in classic textbooks. As an example we can mention Chopin's method as described by Neuhaus (Niemöller & Koch 2000). Imagination is a fundamental thing in building the story.

It is a good exercise to play the whole form of an improvisation, and then begin again. Neverending forms should not be played.

Intuition is the second important notion. It should work very fast when improvising. This is one of the terms that are difficult to define. It is much easier

to say that somebody has good intuition in searching for valuable sounds than to explain how this intuition was formed.

However, the most crucial aim of every good improvisation is certainly expressing emotions.

Conclusion

The difference between playing this kind of improvisation and e.g. a standard bebop improvisation is staggering. It can be said that a breakthrough has occurred in my playing. I enjoy it much more now than I used. However, the results are achieved not through mathematics and calculations, but through listening.

The herein described tools may seem complex, but to me, they are clear and simple and “achieved through hearing.” You cannot just read this article, then use them to play. You need to take your time to listen, experience, practice and experiment. I have been doing this for eight years now and I am still improving. Only now have I decided to record my first CD based on that method. It is called „*An introduction to counterpoint*”.

In my opinion, the key thing for somebody who wants to do something new in music is to pay attention to the time of the piece, the fact that music is a living thing. Music is not stable, it goes from one point to another. Everything changes then: harmony, rhythms, tonal centers, phrasing, the form, etc. People treat music in a more static way, trying out new scales, or new chords. You can find a “new chord” much more easily if you define how the chords change in some particular way.

Building your own style requires you to be a smart listener of all kinds of music. You should listen to recordings on many different levels, focusing on every element of music. Observe tricks used by composers, not to copy them, but to understand their point of view. The counterpoint hearing is very important to me. It allows you to follow all parts of a counterpoint tune at once. This can be achieved by careful listening to J. S. Bach’s music. Without this kind of hearing, Bach’s pieces become a complicated set of sounds, a vague cloud of sound, and the tunes seem very similar to each other.

Sensitivity to all elements of music - rhythm, time, phrasing, dynamics, accenting, etc. - is also important. When you can hear all of them, and you are able to play them at once it is the first step on the way to using them in any kind of music (Wesołowski 1959). My advice to all musicians is: **look for your own notes and ways to organize them in order to make the music more personal, valuable and artistic.**

It's not like that (...) with hardly any of the other younger musicians today. They all want to be stars right away. They all want to have what they call their own styles. But all these young guys are doing is playing somebody else's shit, copying all the runs and licks that other guys already laid down. There are a few young guys out there who are developing their own style. [Miles Davis]

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