

Improvisation is an integral part of jazz – as well as of many other folk forms of the world music culture. Initially jazz was a kind of folk music (the jazz epoch goes back to the 1880s). Jazz and jazz improvisation have been developing for some time side by side in two forms: piano jazz and orchestra jazz. In the former (ragtime) all of the music was notated leaving no place for improvisation, whereas the orchestra jazz players (except for the pianists) were self-made musicians who could not read music, so that, naturally, improvisation already existed in the early period of orchestra jazz. A pianist who was the only one able to read music was the “professor” in the band. Naturally enough, the first jazz orchestrators were pianists. Subsequently jazz pianists appeared who could not read music but played in accordance with the new-style jazz traditions; this introduced improvisation as an integral part of music performance in piano jazz too, thereby putting piano jazz on the same footing vis-à-vis wind-instruments.

Jazz came into being at a time when the phenomenon of improvisation in “serious” professional music had almost vanished; it could only be found in church organ music (improvisation has always been and remains an integral part of the organist’s skill) as well as in violin cadences and piano concertos and in opera singing. Improvised cadences vanished and were replaced by notated ones – and this is the case today as well. Some outstanding musicians have always improvised when performing, including in public, but improvisation as a common phenomenon in professional music had disappeared by the end of the 18th century.

Jazz is undoubtedly responsible for reintroducing improvisation into the performance of professional music. For a number of historical reasons, jazz performance quickly reached a very high professional level; in some aspects (percussion instruments) even establishing a new professional standard. In general, great jazz instrumentalists significantly extended both the technical and expressive means of their instruments – percussion instruments, saxophones, trumpets, trombones, guitars, and so on, which, in turn, influenced both “serious” composers who composed for these instruments and “serious” performers who played these instruments.

Definition of Improvisation in Music

Improvisation in music can be defined as the spontaneous creation and performance of music – either within the framework of the set form and harmony of a certain theme that requires preliminary training, or on the basis of spontaneous form and harmony (free improvisation). Any musical composition begins with improvisation; there is, however, an essential difference: a composition is created within the framework of a certain form (from

* Nahum Perefervitch (pianist) is a member of the Jazz Department of the Jerusalem Academy of Music and Dance, teaching jazz piano, improvisation, and jazz harmony.

improvisation is constructed by spontaneously linking motifs, phrases, and sentences within the framework of their development.

Therefore, the main principle ("repetition and change" according to Dalia Cohen)* is observed but the ultimate result is obtained by accretion of the smallest elements. This resembles a freely told story that a narrator does not try to bring into conformity with any existing literary form, be it a short story, novella, or novel. The story may eventually look like a novella – but only in terms of its length, not its mood.

As to jazz improvisation as such, its function in jazz is similar to that of development in a piece of classical music. The essence of improvisation is the performer's utmost self-expression. A jazz player is an instrumentalist, improviser, composer, and interpreter in one. Each of these roles, taken in isolation, is of importance, though not of equal importance. To possess all of these qualities would benefit a "serious" classical musician as well. However, experience shows that the classical musician's main roles are those of instrumentalist and interpreter (with the former being more important). Not so in jazz. The role of instrumentalist is least important for a jazz musician; his greatest strength is improvisation linked to composition and interpretation. Thus, the history of jazz abounds in examples of technically weak instrumentalists (such as, for example, the trumpeter Miles Davis, especially during the initial period of his career) who were strong and even great improvisers and as such had a significant influence on jazz players who were strong in technique but weak in improvisation and composition. In fact, the effect of Davis's improvisations, however poor his technique, was so strong that other trumpeters, trying to imitate his manner, also copied the errors of technique and harmony that became an inherent part of his style.

On the other hand, the technical progress of jazz instrumentalists is connected to the constant search for instrumental means of self-expression that are different from those in classical music, where it is mainly composers, not performers, who can afford such a search. However, sometimes performers of "serious" classical music are more successful in making such progress than the composers of this music; such is the result of categorizing musicians into composers and performers.

In jazz such categorization is impossible, since improvisation – like a conversation – is absolutely individual; any imitation of other musicians' improvisations, perfect though it might be, lacks individuality, and this flatly contradicts the very essence of improvisation. The process of teaching improvisation, however, can include the use of notations of someone else's improvisations from recordings and the subsequent playing of them, sometimes together with the original recording. Here the main underlying ideas are that: (1) music is a language; and (2) a language can be learned using various methods, such as copying, studying rules of grammar, and practicing. A professional jazz player is usually able to imitate certain styles of playing and improvising, and also knows theory and can do arrangements.

There is no such thing in jazz as exact performance of a solo theme (unlike the *tutti* of an orchestra, which is absolutely precise), but there is the possibility of varying the main melody (theme), primarily by embellishing it. The starting point for such varying is not harmony but melody (Ex. 1).

Ex. 1

September Song (Anderson/Weill)

The musical score for 'September Song' is presented in two parts: 'Original' and 'Instrumental Version'. Both are in 4/4 time and C major. The original melody (measures 1-4) consists of a simple line: C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter), G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter). The instrumental version (measures 1-4) embellishes this melody with triplets and grace notes. The piano accompaniment for both versions is shown in the lower staff, with chords: Cm6 (measures 2-3), AbMaj7 (measure 3), CMaj7 (measures 2-4). The second system (measures 5-9) continues the melody and accompaniment. The piano accompaniment for the second system includes chords: CMaj7 (measures 5-6), C7 (measure 6), D7 (measure 6), Fm6 (measures 7-8), G7 (measures 7-8), and CMaj7 (measures 8-9). The instrumental version features more complex rhythmic patterns, including triplets and grace notes, in the upper staff.

* Professor of musicology at the Hebrew University and the Jerusalem Academy of Music and Dance.

varying of a theme can be considered the first stage of improvisation, where the first beat varies in the first beat, variations of the second theme's beat occur in the second and so on. The original melody "shows through" the variation, with the original construction of phrases and sentences, including harmony and the total number of beats, being the same. In jazz, the general theme-form and the harmony are referred to as the theme. Thus, when further developing the theme-form – within two or more choruses – it is necessary to vary more intensively deform the melody than in the first chorus. However, the inner construction of the form and harmony is preserved, the possibility of the melodic line's development is restricted (Ex. 2).

Ex. 2

Ex. 2 shows a melodic line in G major with various chords and rhythmic patterns. The chords are Cm6, AbMaj7, CMaj7, C7, D7, Fm7, G7, and CMaj7. The melody consists of eighth and sixteenth notes, with some triplets and slurs. The piece ends with a double bar line.

the more varied the melody, the wider the use of the nonchord sounds, which creates the desired effect of dissonance – one of the most important elements of jazz, both in melody and harmony and rhythm (syncopation is rhythmic dissonance).

The standard form of jazz melodies has tended to change. Initially it was a multipart march (the first jazz bands were marching bands). Only one of the parts (usually the last one) of this form was used for improvisation.

Another traditional jazz form is blues. Twelve beats are divided into an A, A, B structure. An approved version of this form is still extant. Apart from blues, there is a common song form of 32 beats (sometimes extended to 34, 36, or 40) divided into A, A, B, A or A, B, A, C (A, B1).

Since improvisation of the harmony requires a certain theoretical knowledge (of modes, chord functions, etc.), early jazz players would improvise melody but not harmony. A similar technique also appeared later, in the late 1950s (Ornette Coleman), when the set form and harmony became much less important; sometimes they completely vanished (free jazz).

In the 1930s and 1940s, harmony became the most important basis for improvisation, even more important than melody. As a result, harmonies of the popular songs of the epoch were

used for creating the melodies anew – this time in the form of improvisational melodies, not original melodies (bebop). Still, the theme division into four and eight beats – typical of the early jazz – remained. But for further development of improvisation, simply varying the melody (however intensively) is not sufficient. Besides, playing around chords does not provide the required development, since pairing and symmetry characterize not only the construction of the song melodies but also their harmony (Ex. 3). Playing around the symmetrically and in-pair constructed harmonies is not sufficient; what is required is a nonpair and nonsymmetrical construction of improvised phrases and sentences (syncopations of the form) that returns every now and then in the process to the key points of the original form (the beginning of the chorus or part B, etc.). The construction of melodic line is linear – on the basis of new improvised motifs and phrases, which takes one further and further from the melodic and harmonic structure of the theme (massive use of substituting chords) (Ex. 4).

Ex. 3

Ex. 3 is titled "September Song - Harmonic Structure". It shows a harmonic structure with chords and melodic lines. The chords are Cm6, AbMaj7, CMaj7, C7, D7, Fm, G7, CMaj7, C, C7, Fm, C°7, Fm, C°7, and CMaj7. The melody consists of eighth and sixteenth notes, with some triplets and slurs. The piece ends with a double bar line and the text "Dal A al Fine".

Ex. 4

Chords: Cm6, A♭Maj7, CMaj7, CMaj7, C7, D7, Fm, G7, CMaj7, Cm6, A♭Maj7, CMaj7, CMaj7, C7, D7, Fm, G7, CMaj7, C, C7, etc.

connection with the chords still remains, but becomes less direct. This is achieved not only by abundant use of singing nonchord sounds but also by playing chord keys. The resulting sound is very peculiar: the theme harmony is tonal while the interpretation of every chord in improvisation is modal. In the 1940s, Charlie Parker developed new ideas in jazz: he extended the structure beyond 1, 3, 5, and 7 to 9, 11, 13, and even 15 and began more widely using the upper steps of chords, which resulted in the perception of these chords as new, different from those of the theme (Ex. 5).

Ex. 5

Chords: CMaj7, CMaj7, CMaj7

Labels: a) Distalend, b) Biting, c) De-Dep

The further development of jazz improvisation (since the late 1950s) involved the use of modality, both in the melody and in the harmony (Miles Davis, Gil Evans, John Coltrane), as well as the extension of tonality, extreme chromaticization, and the application of elements of atonality (Ornette Coleman, Archie Shepp). Therefore, jazz has reiterated all of the stages of development of “serious” music, although in a much later time period.

Modal jazz is the kind of jazz that we in Israel find most interesting. We believe that it serves as a link between jazz and the music of our region (the first characteristic example is *Sketches of Spain* by Gil Evans and Miles Davis). It is notable that the use of modality in jazz harmony and melody historically precedes the creation of a new, general rhythmic concept that corresponds to the change of harmonic pulse in modal vs. tonal music (Ex. 6, 7). The main harmonic/melodic idea here is that the minor pentatonic scale is a part of the Dorian scale, which means that the melody concept (including in improvisation) is between these two scales. When listening to the original recording of Miles Davis’s “So What” (*Kind of Blue*, Columbia, 1959), one cannot help noticing numerous inconsistencies; and it is little wonder, because this is the very first example of a modal theme based on modal harmony and modal chords in the history of jazz.

Ex. 6

“So What”

Chords: Dm7(Dorian), EbM7(Dorian), D.S. al Coda

Ex. 7

Improvisation on "So What"

Ex. 8

The blues scale

Ex. 9

The harmonic progression of a "blues"

Ex. 10

Improvisation on a typical blues

These inconsistencies are as follows:

In spite of the fact that the duration of the harmonic pulse is much longer than in traditional jazz themes of the 1950s, the theme's form and construction are quite traditional: 32 beats (A, A, B, A).

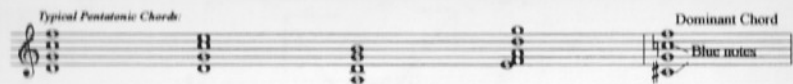
A bass player and a drummer play the traditional rhythm of hard bop, which does not correspond to the harmonic pulse.

The theme melody is based on the Dorian scale while the chords of the theme are pentatonic. The trumpeter's solo, which is the most integral as far as music and performance are concerned, includes the Dorian, harmonic minor, and traditional blues scales.

The tenor-saxophone player bases himself on the pentatonic and Dorian scales, using a massive rubato that digresses from the accompanying 4/4 rhythm. The alto saxophonist's concept is not clear, so he moves between the style of the trumpeter and the tenor-saxophone player, meanwhile trying to use the typical Charlie Parker style, which does not, of course, quite fit the piece. Bill Evans, the pianist, is an outstanding melodist but does not seem to have found the melodic concept in the improvisation and just plays chords – modal clusters that fit this piece perfectly.

After he left Miles Davis, the saxophonist John Coltrane established his own group where he continued to develop Davis's "modal" ideas, and by the mid-1960s he had created his own style based on modal pentatonics. Taking into consideration that the basis of blues is the pentatonic scale, Coltrane's contribution to the development of jazz may be defined as follows: he created a new blues concept whose influence can be felt even today, and not only in jazz. The essence of this concept is that: the performance form becomes open, achieving complete freedom, and is only stylistically linked to the theme, while the form of the theme is reduced to a motif or an even smaller unit (Ex. 8-11).

Ex. 11



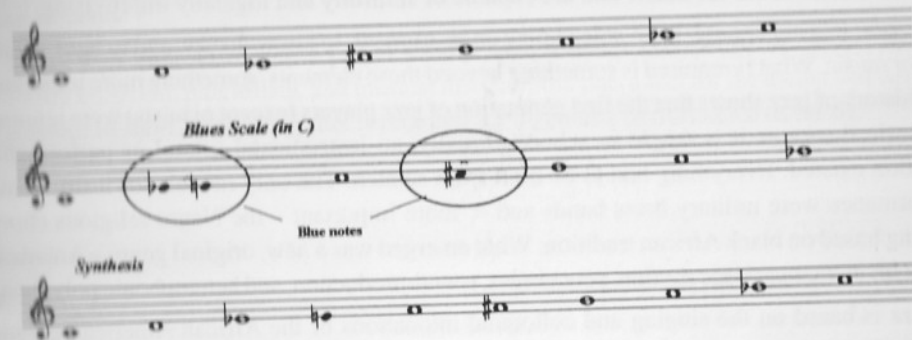
Jazz of the second half of the 1960s is characterized by the mixing of various styles: (1) jazz and rock into jazz-rock, their common basis being blues; (2) jazz and Latin American music, both of these being of African origin.

In the 1970s jazz used elements of exotic music of the Far East and the Middle East (Mahavishnu Orchestra, Keith Jarrett), as well as of Spanish music (Chick Corea, Al Dimeola, Leo de Lucia).

Israel witnessed the first experiments of this kind in the early 1970s. Initially, this process of blending the two very different genres was based on the "jazzing" of traditional Oriental melodies and subsequent improvisation – either in the Oriental style or in the jazz style, which required some special training in form and harmony. Little by little, the mixture of the two musical genres became more organic on the levels of rhythm, key harmony, and melody; it was no longer a mere collage of two different styles. The pentatonic scale exists in all music cultures and well fits the Oriental keys; the same is true of rhythm.

In studying the history of jazz, one sees that jazz players do not restrict themselves when seeking to develop the language of the music, and freely make use of the music of any country or epoch (Ex. 12, 13).

Ex. 12



Ex. 13

Possibilities of improvisation in the "fusion" style – based on the synthesis mode



On Teaching Improvisation

How to teach jazz (as well as any other) improvisation is a question of great interest. There are many well-educated professional musicians who are absolutely incapable of improvising – as there are many musicians who never attended a music school and cannot read music but have an excellent ear for music and are capable of skillfully and logically improvising.

Hence, it is not enough to be able to play an instrument, to know theory, and to have a good ear for music. What is required is something beyond those elements, something more important. The history of jazz shows that the first generation of jazz players (except pianists) were ignorant of music theory as it is taught in school. Initially, no instrumental school or performance tradition existed. Everything had to be built from scratch. The only models for instrumental performance were military brass bands and – more important – the Negro religious choral singing based on black African tradition. What emerged was a new, original genre – American jazz with its characteristic rhythm, pentatonics, sound-production, and heterophonic polyphony.

Jazz is based on the singing and colloquial intonations of the African American people. This is a very important point, since any music, including jazz, is a language and its basic elements are those of colloquial speech: intonation, articulation, form, rhythm, syntax, and so on. The main basis of both music and speech is rhythm. As one example, in American music the accent typically occurs on beats 2 and 4 of the four-beat rhythm. Let us compare: when counting in English – one, two, three, four – the accent naturally falls on the second and fourth words, whereas in Hebrew counting – *ahat, shiti'im, shalosh, arba* – it is the first and the third words that are accented, which is characteristic of the rhythms of Israeli folk music, which is strongly influenced by Oriental music.

It is no coincidence that professional musicians who have been studying music for ten to fifteen years (school, college, conservatory, academy) are often unable to improvise competently and logically. This is the result of the traditional methods of teaching “serious” music.

Music is not taught as a language but as an art; works created by professional composers serve as models to admire and follow. It is like studying French using works written by great French authors. It is the French language, no doubt, but not all of the language. A French speaker can generally understand, appreciate, and even recite a literary work much better than a reader who has only studied grammar, syntax, and vocabulary; the reverse is very unlikely. And what about music? To be sure, to perform Beethoven's music you need to know his musical language; but it may also require knowing the language he spoke and read. And even that may be insufficient: you may need to know the composer's aesthetic and philosophical views; to have some knowledge of what works of art and literature may have influenced him, and so on. This in-depth investigation of the composer's personality is an endless process, and its purpose is to make every note of his works convey the truth. One of the stages of mastering a composer's language – a stage not to be ignored – is to create music that imitates his style and to improvise on it.

The ability to improvise, that is, to act and respond spontaneously, is inborn. In fact, we do it constantly – in moving, in acting, in speaking. There is no reason that a musician cannot do it “musically.” However, the existing traditional methods of teaching music based mainly on

using printed material are an obstacle to developing the ability to improvise. Similarly, when learning a foreign language only using printed texts, a student is unable to practice the language except by being prompted by a written text. More than once have I seen music teachers demanding from their student a precise performance of a notation. No improvisation was allowed and, more often than not, even the idea of improvising could not have occurred to these students.

In order to improvise, a jazz player should have a better knowledge of theory than an orchestra musician; plus artistic and musical imagination; plus a feel for the ascent and descent of tension; in short, everything that is required for a genuine performance of music.