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Elements of Jazz

by
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Abstract

This thesis examines the unique musical and cultural elements particular to jazz improvisation. The topics of scales, melody, voicings, harmony and rhythm are examined in separate chapters with over two hundred notated musical examples used to demonstrate the materials in their context. This thesis also seeks to explain the relationships between these elements and presents the material in a form applicable to improvisation.

In its relatively short history jazz has developed many unique musical and cultural elements. The fact that most of these musical elements have been developed in an improvised environment means that the complexity of the harmonic, melodic and rhythmic material presents more than an academic challenge for the student of this music. To play jazz requires a deep understanding of the complex relationships that exist between melody, harmony and rhythm. This must go beyond an academic understanding because the practical application of this knowledge ultimately determines whether the elements can be used spontaneously in improvisation.

To explain the theoretical material that underlies jazz improvisation, various types of musical shorthand and complex techniques of cross-referencing have evolved. Until more recently most of these techniques have been kept within the profession and were shrouded in mystery, with most information being passed directly from master to student. The relative lack of literature on the theoretical components of jazz, and the fact that most of its finest examples only exist in recorded form, have exacerbated this situation. In the last decade or so several books have been written in an attempt to decipher jazz. The best of these works contain a large academic component with an emphasis on using the material in the context of improvisation. The theoretical complexity of jazz rivals any other western or non-western form of music, but the way in which it has been taught is based on the African tradition of aural learning through imitation. As jazz has grown in complexity, the tradition of learning improvisation solely by imitation has proven to be inadequate. The modern trend towards the blending of theoretical, practical and intuitive learning, has created a need to find new ways of organising the ever increasing material. This thesis seeks to examine the elements of jazz and categorise and organise the information in a more efficient way.

The thesis is divided into chapters exploring scales, melody, voicings, harmony and rhythm.

The subject of scales is explored with reference to traditional and extended structures and their particular relationship to harmony. To describe the relationships between scales and chords several charts and diagrams are employed, with parallel and derived approaches as a basis. Jazz contains many unique ways of generating and structuring voicings, with 4-way close, drop 2, slash chords, ambichords, pentatonic derivatives, upper structures and quintal structures forming the basis of this study. The similarities and differences between European classical harmony and extended jazz harmony are explored, with an emphasis on the techniques found in jazz. To explore this connection many written examples show the gradual introduction of harmonic density, from simple four-part writing through to the use of upper structure, alteration, substitution, superimposition and polyphonic elaboration. Basic reharmonisation and techniques of variation in chord progressions are explored, with a comprehensive study of chord substitution. Transcribed examples from the jazz repertoire are used to trace melodic and harmonic chromaticism, with reference to the parallel developments in rhythm. The use of polyrhythm, displacement, rhythmic grouping and metric modulation are examined, with an emphasis on the parallel developments in harmony and melody. This thesis also contains several essays that examine the relationship between jazz and 20th-Century music, the evolution of chromaticism in jazz, and the unique culture of jazz improvisation.

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Introduction

Elements Examined :

The unique melodic and harmonic elements found in jazz with analysis of their use and structure.

The evolution of melodic and harmonic chromaticism in jazz and the parallel relationship with rhythm.

The connections between traditional classical harmony and the modern innovations in jazz harmony.

The difference in culture between jazz and classical music and the relationship with 20th-Century music.

The culture of jazz improvisation and the elements fundamental to producing spontaneous music.

Sources and Methodology

Transcription of musical material

One essential problem with researching jazz is that most of its important examples are still only available as recordings and don't yet exist in written form. To analyse the structure of the music it must first be notated, so a large degree of transcription was required to complete this thesis. The methods used to transcribe the musical examples are outlined in Appendix 1. Unless indicated by a footnote, all transcriptions were done by this author. The methods used to analyse the resulting material are all based in traditional theory. Extended Roman numerals are used to define chord function within a key, chord symbols used to define a chord structure, the 'drop' system is used to define spacing within a voicing. The connection between chords and scales is constantly used as a way of explaining harmonic and melodic relationships.

Compositions

To demonstrate the application of some material it was necessary to compose a number of melody lines, chord progressions and some full pieces. In addition to this it was necessary to compose several harmonisations to demonstrate various concepts.

Informal discussion, Private consultation (lessons), Master classes, Conferences and Concerts

A proportion of the information here was gathered through private consultation with experts in the field over a number of years. A source of material and inspiration has been the I.A.J.E conferences (Chicago 1997 and New Orleans 2000) which provide exposure to the latest developments in thinking and include numerous performances by top practitioners. It also provides the opportunity to attend specialised lectures and talk informally with high level practitioners. Much of the information on the connections between jazz and classical harmony came from studies undertaken in the UK over a 3 month period in the year 2000. This and other information came primarily from my own studies with Peter Churchill, and lecture notes taken by Kirsten MacKenzie (recipient of ABRSM centennial scholarship) from classes with Nicky Iles, Peter Churchill, Danilo Perez and Simon Purcell. The work done in London helped to put the harmonic material in perspective by relating many disparate elements together. Some of the material comes from classes attended in the USA and New Zealand with John Scofield, Hal Galper, Mulgrew Miller, David Baker, Dave Liebman, Donny Nolan, Paul Wertico and Jim McNeely, also from private lessons with Mark Levine, Steve Erquiaga, Bill Cunliffe and Bruce Foreman.

Academic Literature

In an attempt to convey a fresh perspective it was essential to become familiar with current theories and culture, therefore, a large amount of reading was undertaken. Although jazz theory is relatively new many authors have tackled various areas. I have undoubtedly been influenced by the current literature that is available, but have tried to find better relationships and more efficient ways of explaining the material. There are references to external sources in the form of books, journals, interviews, videos, internet archives, musical scores, published transcriptions and lecture notes.

Performance and Teaching

To identify issues relevant to improvisation it is necessary to have a practical involvement in the subject. Associating and playing with numerous high level practitioners over 18 years has helped me to formulate practical theories of jazz and be immersed in its culture. The practical nature of improvisation dictated that many ideas in this thesis should be oriented toward a practical application. Some of the findings are due to a constant involvement in the teaching of jazz. To teach jazz effectively requires the formulation of clear concepts and explanations that can be applied directly to a performance situation.

Equipment

The graphical layout was produced solely by the author on a Macintosh 7100/80 using a combination of Encore 4.1 and ClarisWorks 4.

Glossary

A

Alteration - chords can have extension notes that are outside of the functional key

Atonal - Without a discernible key

Ambichords - 3 or 4 note chords based on combinations of 2nds and 4ths that have an ambiguous function because of the abundance of root note possibilities

Augmentation - extending the duration of notes in the repetition of a melody

Avoid Note - a particularly dissonant note of a scale often the 4th of a major scale

B

Backdoor Changes - typically a bVII chord functioning as a plagal minor or V7b9 substitute in a cadence

Bebop - a style of music from the 1940s associated with Charlie Parker and Dizzy Gillespie, the name bebop was despised by Charlie Parker, despite that it became the current name associated with this era

BIAB - Band-in-a-Box, software program for producing rhythm section backings

Bi-Tonal - in two keys at the same time

C

Cadence - resolving harmonic movement

CESH - contrapuntal elaboration of static harmony

Cadenza - an improvised ending to a composition often rubato

Changes - chord progression or harmonic basis

Chart - sheet music, manuscript or lead sheet

Chops - technique

Chorus - the complete song form once through

Chromaticism - the use of chromatic or out of key notes to enhance a melodic or harmonic passage

Close Position - a voicing that has several notes within a small interval sometimes called a cluster

Consonant - a term subjective describing the a lack of tension contained within a harmonic structure

Comping - the chordal accompaniment behind a soloist

Cross Rhythm - uneven rhythmic groupings often used in Metric Modulation

D

Deceptive Cadence - the V chord moves to a relative of the I chord

Delayed Resolution - a cadence that involves the tonic or resolving chord occurring later than expected. Often associated with chord I diminished substitution

Degree - a specific step within a scale

Diatonic - within a scale or key

Diatonic Cycle - a cycle that occurs within the constraints of a scale

Displacement - a rhythmic shift of a musical idea making it occur earlier or later than the original

Dissonant - a subjective term used to describe the amount of tension present in a harmonic structure

Dixieland - a style of jazz that originated in New Orleans around 1910

Double Diminished - A chord containing most of the notes from two adjacent diminished triads

Double Time - the changing of a tempo to twice the speed of the original, the harmonic rhythm often remains

Drop 2 - voicing with the 2nd note from the top dropped down in pitch by one octave

Drone notes - another term for Pedal point

E

Enclosure - a group of notes, usually upper and lower neighbour tones, that precede a melody note

Exotic scale - a scale with one or more minor 3rds, or an unusual construction of intervals

Extension - a note or group of notes that are non chord tones

Extemporisation - another term for improvisation, usually applied to classical music

F

Fake Book - a book of jazz standards usually just the melody and chords

Fragrant Chords - chords that have been specifically broken down and reassembled using a tonic register layout

Feel - a common term used by jazz musicians to describe the intricacies of the overall rhythm

Figure - a rhythmic motif found in the head often used as a unifying element in solos

4-Way Close - a term used to describe a four-note voicing that occurs within an interval smaller than an octave

Free Jazz - a term used to describe a type of jazz playing that developed from around 1960. Although not regarded as a style it has become more idiomatic in recent times. Linked to the avant-garde

G

Gig - a performance

Groove - An abstract term describing the main pulse or synchronisation of elements

Guide Tones - notes of a melody or chord that guide the harmony. Often 3rds and 7ths

H

Harmonic Rhythm - the duration that chords receive in a metric cycle

Harmonisation - the chordal accompaniment used to support a melody

Head - The melody

Horn - a generic term used by jazz musicians to describe a musical instrument. Even a piano can be referred to as a horn

Hybrid Upper Structure - a term describing a chord that has a 3 or 4 -note voicing combined with a bass note

I

Idiomatic - pertaining to a particular style

Improvisation - The art of using musical elements to spontaneously create music of the moment

Intervallic - the constant use of intervals larger than a 3rd in melodic lines

Inversion - a term describing the position of the notes of a chord

J

Jam Session - an informal gathering of jazz musicians, sometimes competitive in nature

L

Lead Sheet - sheet music for a standard often just melody and chords

Lick - a small musical phrase, often a cliché used in a solo

Line - melody or improvised series of notes

M

Melodic Minor Substitution - a technique of substitution based on the melodic minor scale

Metric Modulation - the changing of one tempo to another by using related cross rhythms

Metronome - a tool used by musicians to mark out perfect time

Modal - music with melodies and harmonies based on a mode

Mode - a scale that is based on a degree of a parent scale

Middle Eight - the bridge section of a song structure

N

Neighbouring Tone - a note that lies a semitone above or below a main melody note

O

Open Position - a chord that has intervals larger than a 3rd giving it a larger degree of spacing between notes

Ostinato - a repeated rhythmic bass line that is used as a foundation for melodies and harmonies

P

Parallel Movement - the use of an identical chord structure at a different pitch

Parent Scale - a scale that has many other scales (modes) that can be built from each note

Passing-Tone - a note used to link two important pitches

Pedal Point - a series of chords or harmonies underpinned by a single bass note

Pentatonic Chords - chords constructed exclusively from the notes of a pentatonic scale

Plagal Minor Substitution - a type of substitution based on the use of chord IV as a minor chord

Play-Along - a music minus one recording usually a rhythm section used as an aid to practicing improvisation

Polychord - two or more chords combined in the same structure

Polyrhythm - a rhythm that cannot be divided evenly against the main pulse

Q

Quartal - Movement in fourths

Quintal Voicing - a chord constructed primarily from intervals of a 5th

Quintuplet - the rhythmic subdivision of a phrase into five equal parts, often used in polyrhythmic approaches

R

Rhythm Changes - A chord sequence associated with the Gershwin composition "I Got Rhythm", used frequently as a background for fast improvisation

Rhythm Section - The group of musicians associated with keeping the pulse and the form. Usually piano, bass, guitar and drums (tuba and banjo in Dixieland). Sometimes horn players mistakenly think they are part of the rhythm section when playing backgrounds

Ride Cymbal - the cymbal used by a drummer principally to keep the time

Riff - a repeated melodic phrase or bass-line

Root Note - the naming note of a scale or chord, the tonic

Rubato - an expressive term referring to the lack of a steady pulse used in intro's and endings

S

Secondary Dominant Chord - a chord that functions as a temporary chord V in diatonic harmony

Serial Composition - a way of composing based on the use of a tone row or mathematical formula

Side Slipping - the temporary modulation of a melodic or harmonic passage up or down a semitone often used to create temporary dissonance

Slash Chord - a chord that occurs over a bass note giving it a different function

Songsheet - a concise notation of lyrics, chords and melody used to convey a jazz standard

So What Chord - a voicing originally used on *Kind of Blue* album, based on the pentatonic minor scale. Series of voicings derived from the pentatonic minor scale

Subdivision - the division of a metric pulse into smaller units

Substitution - A replacement chord that functions in a similar way to the original

Superimposition - A chord or melody placed in a foreign harmonic environment effectively creating bi-tonality

Swing (1) - An abstract term used to describe the subtlety and mystery of jazz rhythm

Swing (2) - A term describing the 12/8 nature of a bar in 4. Referred to as a swing feel as opposed to a straight eighth feel

Swing (3) - The era of jazz that occurred in the 1930s associated with Benny Goodman

Symmetrical Scales - a scale that has a reoccurring pattern of intervals

Syncopation - a stressing of offbeats rather than main beats

Synthetic Scale - a scale comprised of notes from two keys

T

Target Tone - a pivotal note in the construction of a line, a note where several elements resolve

Time Feel - the subtle aspects of rhythmic placement. Sometimes used as a term to describe the rhythmic idiom of a composition

Trading - the consecutive sharing of ideas between two musicians, often between the drummer and melody instrument

Tritone substitution - a term used to describe the replacement of chord V⁷ with a bII⁷ chord in a cadence

Turnaround - a harmonic pattern that is often used at the end of a song form to link back to the start of the form

U

Upper Neighbour Tone - a note that lies a semitone above a main melody note

Upper Structure - a recognisable structure (often major or minor) that occurs in the upper part of a chord that contains extensions

T

Tonic Gravity - the pull exerted on a functional chord by the tonic key

Tone Row - a series of notes used to generate a musical composition

Transcribing - The act of writing down music that is available only in recorded form. The main method by which a jazz musician learns to improvise.

V

Vagrant Chords - A term used by Schoenberg to describe symmetrical chords that are ambiguous in function, or have no function.

Voicing - the spacing and layout of a harmonic structure producing a characteristic sonority

Voice Leading - the connection of voices from one harmonic structure to another

W

Walking Bass - a steady quarter-note line employed by a bass player to underpin a swing feel

Wood-Shedding - intensive practice over a period of time