Stage 02 is an analysis of the underlying structural and thematic components of a masterpiece jazz composition. The jazz vehicle chosen for observation and analysis is the master take of the bebop performance entitled Leap Frog, by Charlie Parker and Dizzy Gillespie recorded on June 6, 1950 in New York City. The recordings features a series of improvisational layers, one portion interacting and superseding the other. Representations of space, line, volume, and texture are implied in the music. The architect hears the three dimensional space of interpenetrating movements where primary and secondary precincts are juxtaposed and projected against complex geometries.

Personnel:
Charlie Parker, alto sax; Dizzy Gillespie, trumpet; Thelonious Monk, piano; Curly Russell, bass; Buddy Rich, drums.

<table>
<thead>
<tr>
<th>Leap Frog (master take)</th>
<th>no. of bars</th>
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<tbody>
<tr>
<td>Intro</td>
<td>Rich</td>
</tr>
<tr>
<td>Parker solo</td>
<td>32</td>
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<tr>
<td>Gillespie solo</td>
<td>32</td>
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<tr>
<td>Trade of fours</td>
<td>Parker-Gillespie</td>
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<tr>
<td>Trade of fours</td>
<td>Rich-Parker-Gillespie</td>
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<tr>
<td>Coda</td>
<td>Rich</td>
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*note: There is no theme statement after the intro; Parker's solo follows immediately.*

Each team begins with a written, verbal, audio, and graphical analysis of the entire master-take.
1. Download leap frog assets from the bebop studio blog and the shared folder on the studio server: (from macs: smb://archlab.arch.ttu.edu/brn_2402 from windows: \archlab\brn_2402)
2. The first step in the process is to repeatedly listen to the music. Each team must become familiar with the entire song, and then focus in on a 30-second slice to analyze in detail. Each 30-second slice must contain a B section.
3. Distill key musical structures and elements within each chorus. Discover underlying structures by looking for any event in the chorus that can be quantified or described in terms of relationships, numbers, ratios, positions, locations and zones.
5. By repeated listening and observing, students discover and recognize subtle relationships and references.  
6. A strict technical analysis of the music is unnecessary because we are looking at the exercise as architects, not musicologists. As a guide, use the attached reference material for the analysis when describing the structural events of the vehicle.

due dates:
Wed. 02/08/06. 09:00AM first report progress pinned up; be prepared to verbally present and answer questions.
Fri. 02/10/06. 09:00AM final final pinned up; be prepared to verbally present and answer questions; also turn in files to server; include text and graphic support files.

The Recording (the take):

Early jazz players...were reluctant to have their improvisations recorded (or their arrangements) during the first years of recording, as they recognized the opportunity for other players to re-hear and carefully copy anything they had on record and feared the ensuing competition for work and fame, once their secrets were known and assimilated. History shows that their concern was not without cause, as imitators have often crowded or displaced their stylistic idols by way of their race, business acumen, production talents, or simply their easy, local availability. Musically, though, imitators learn, rather than steal, from those to whom they listen (and they generally listen to many players on records, not one). The record makes it possible to re-hear any spontaneous creation endlessly, if desired, even to the point of transcription to musical notation, analysis, and total absorption. Individuality is inescapable, so that no two players sound exactly alike, regardless of any effort made to that end. Improvised music often needs re-hearing by the audience, to increase the level of their appreciation.

leap frog - a guide for listening

1. You should begin by counting measures and measure groups while listening to the opening solo by Charlie Parker. Try to decipher the form in terms of pattern (AABA).

2. Continue counting and identifying segments of the tune during the improvisation, especially the beginning of a new chorus.

3. Sometimes you'll hear the player improvise a phrase that begins before the end of one chorus and is completed in the early portion of the next chorus (a variation called overlapping). Other times you may be able to detect that the soloist is winding down or tapering to a close that can be closely pinpointed and anticipated if you've kept count of the measure groups. The next soloist will generally begin his solo at the crossroads between one chorus and another.

4. Hum the tune's melody along with the improvised sections, keeping pace with the tempo, measures, and phrases. Some improvisers admit to inwardly hearing the melody while they are improvising, to aid them in keeping their place in the tune.

5. It is suggested that one listening be devoted to the unique and seemingly asymmetrically placed accents in the background rhythms that accompany the very sparse melody. Notice that those rhythms are suggested throughout the performance, in a more subtle manner, even behind the solos.

6. Listen again and follow the form of the tune, which is an AABA structure. If you have never heard the recording before, listen to it regularly for a while, in a more generally relaxed manner. In other words, get to know the record so that it can be heard internally, in the memory.

7. After checking the thirty-two measure length, the eight-measure subdivisions, and the AABA form, try singing the melody against all ensuing choruses after the melody chorus.

8. In counting a fast tempo such as this, it might be advisable to count in half-time, or in two long beats per measure. Jazz musicians learn to count or sense two, four, and eight-measure segments, rather than beats or single measures. Feeling the music in longer segments encourages the graceful flow of the improvised melodic phrases.

9. Look for dominant and subordinate instruments as voices; melody and harmony.

10. Notice the rhythm section (drums, bass, piano) vs. soloists (alto saxophone, trumpet, trombone). The “star” instruments are alto saxophone vs. trumpet. Piano and bass always seem to play harmony. Trumpet is an equal responsive voice to the alto saxophone. Piano is very subtle in the background as is the pulse of the cymbals and bass.

11. Be aware of the following devices: partial quotes, descending or ascending sequences of notes, repetitious phrases or repeating sequences, and the B-section as bridge melody.
improvisation - variation on a theme

What is Jazz?

Jazz is the comprehensive name for a variety of specific musical styles generally characterized by attempts at creative improvisation on a given theme (melodic or harmonic) over a foundation of complex, steadily flowing rhythms (melodic or percussive) and European harmonies. Jazz is essentially the Black interpretation of elements borrowed from other music. Although the various styles of jazz may on occasion overlap, a style is distinguished from other styles by a preponderance of those specific qualities peculiar to each style. Jazz is difficult to define because it has many meanings and interpretations, however, one can identify elements, characteristics, and peculiarities, but not a concrete, singular or all encompassing definition. There is no agreement on what exactly jazz is.

Improvisation is the essential and distinctive characteristic of jazz. It is the basis for judging the creative excellence of a given performance. Therefore, it is impossible to conceal the quality of an improvisation because you are judged on the spot. The quality depends on the performer's depth of thought, which is a combination of emotion and intellect, and an immediacy of communication based on a delicate balance of imagination, inspiration, intuition, and experience.

Improvisation is to compose and perform simultaneously on the spur of the moment. Improvisation combines intellect with intuition. The intellect is for planning technical problems and the intuition is for developing the melodic form with originality. Emotion determines mood. The sense of pitch transforms heard or imagined pitches into letter names fingerings. Habit enables fingers to quickly find established pitch patterns. Free improvisation has to a degree certain controls and controlled improvisation has to a degree certain freedoms.

Improvisation in jazz is the act of creating new melodic patterns to fit a given harmonic foundation that has its own melody. The harmonic foundation remains fixed and the original melody is varied by the subtraction or addition of musical elements. The harmonic foundation keeps the musical character and outline of the original melody still recognizable or varied based solely on chord change with little reference to the original tune (traceable back to its originating idea).

What is the Best Improvisation?

- a delicate balance of all qualities
- organized pattern (unified structure, direction and purpose)
- must contain the unexpected (surprise and spontaneity)
- produces a feeling of excitement and exhilaration or relaxation and tension
- not looking for easy solutions or quick formulas
- creativity with technique and method of operation
- imagination; inspiration; intuition; experience.

The Tune (vehicle) = idea (schema) = part

Virtually all jazz selections are based on some sort of tune or song (Gillespie's vehicle). The design of the tune will be present during the improvised solos as well as during the playing of the melody (usually at the beginning and again at the end of the selection).

The word tune here refers chiefly to a melody with its accompanying chords. If there are words to the tune, they are likely to occur (if at all) during the playing of the melody. Furthermore, the words are seldom known or contemplated by the improvising soloists. A tune will also have rhythms, but like words, the rhythms will be more structured and apparent during the playing of the melody than during the improvisation on it. Although the melody is almost synonymous with the tune itself and therefore included with the accompanying chords as an important structural element of the tune, it is also true that even the melody will seldom be present during the improvisations.

Tunes have a melody, accompanying chords, rhythm, and word. The real identity of the tune, for most jazz players, is the sequence used in the accompanying chords, as the improvising soloist generally does not base his solo on the melody, rhythms, or words. The sequence of chords used to accompany the melody is generally referred to as the
chord progression or the chord changes, or simply progression or changes. The chord progression to the tune is usually retained with exactness throughout the selection, even during the improvised solos, simply by repeating the entire progression (which will be the same length each time through as it was in accompanying one entire playing of the melody) over and over. Improvisations also have melodies and rhythms, but except in rare instances the improvised melodies and rhythms won’t be symmetrically structured in terms of the sort of repetitions used during the playing of the tune’s melody.

The Chorus

One complete playing of the melody, or one complete playing of the chord progression, would be one chorus. The word chorus sometimes applied as a synonym for solo, which could be confusing because a solo may contain one or many choruses. The AABA form of chorus structure is extremely prevalent among jazz vehicles. The three segments labeled “A” for the purposes of analysis, use nearly the same melody and chord progression. The melody and chords are very different in the B-section, offering a contrast to the first two A-sections that makes it easier to repeat the A-section one more time after B. The contrasting section (B) is commonly called the bridge or the channel. Played through once, the AABA pattern would make up one chorus.

Definitions:

Accent: greater stress given to one musical tone than to its neighbors; the principle of regularly reoccurring stresses which serve to distribute a succession of pulses into measures.

Balance: relative audibility of individual performers within a group, achieved primarily by adjusting the volume levels of individuals until each part can be heard in proper proportion with all other players.

Beat: the regular pulses underlying most music; it is the lowest unit of meter.

Break: a point in an arrangement in which all instruments (including the rhythm section) suddenly cease to play for two, or four measures while the soloist continues to play alone, then the accompaniment resumes after the break.

Bridge: a contrasting section of a tune, usually a “B” section in structural terms, and generally occurring only once within one complete chorus. It is also called the channel or release.

Cadence: the beat, time or measure of rhythmical motion or activity.

Chord: a combination of tones that blend harmoniously when sounded together.

Chorus: the refrain of a popular song; usually repeated over and over by different members of the ensemble; one complete playing of the tune with all of its sections.

Contrapuntal: of or relating to counterpoint; polyphonic.

Double-time: the interpretation of a tempo at twice its given speed, usually by doubling the note density.

Dynamics: relative and graduating volume or intensity levels.

Ensemble: concerted music of two or more parts.

Flat: a musical note or tone one-half step lower than a specific note or tone.

Harmony: tuneful sound; the structure of music with respect to the composition and progression of chords.

Implied beat: a consistent beat that is felt and understood, but not played in the consistent manner of time-keeping rhythmic figures.

Improvisation: to compose and perform simultaneously without any past preparation of a text that accompanies the song.

Intervals: measured distance between different notes.

Intonation: an important aspect of tone; to play in tune, playing sharp or flat; the relative precision of pitch.

Jam session: performance of jazz musicians usually informal and often private.

Leaps: wide intervals

Line: a succession of musical notes especially considered in melodic phrases; any of the horizontal parallel strokes on a music staff on or between which notes are placed.

Measure: rhythmic structure or movement; a grouping of musical beats made by the regular recurrence of primary accents and located on the staff immediately following a vertical bar; the space between vertical bar-lines in notated music. The bar-lines group beats together in specific, consistent numbers. For example, in the very common 4/4 time signature, four beats will equal one measure.

Melodic development: the retention, usually in terms of successive variations, of a particular motive or fragment of a melody.

Melody: a sweet or agreeable succession or arrangement of sound.

Melody chorus: the chorus, generally heard at the beginning and end of a jazz selection, in which the given melody is played.

Note: a written symbol used to indicate duration and pitch of a tone by its shape and position on the staff.

Overlapping: the practice of beginning a phrase shortly before an important down-beat of a new section or chorus, continuing the phrase across the dividing line and into the next segment, obscuring somewhat the fact that a new section has been entered.

Phrase: a short musical thought typically two to four measures long closing with a cadence.

Pitch: the property of sound and especially a musical tone that is determined by the frequency of the waves producing it; highness or lowness of sound; a particular vibrational frequency or, in the vernacular, a “note.”

Polyphony: a style of musical composition in which two or more independent but organizationally related voice parts sound against one another.

Progression: the entire sequence of the chords contained in one chorus of the tune. Sometimes called changes.

Quotes: melodic phrases in an improvisation that have been borrowed from a different tune altogether.

Register: a term used to approximate various levels of range in a comparative fashion, such as low, middle, or high registers.

Rhythm: an ordered recurrent alternation of strong and weak elements in the flow of sound and silence in speech.

Rhythm section: a group of instruments within a jazz ensemble, usually piano (and/or guitar), bass, and drums, which form the more stable, consistently present part of the band, supplying chords, bass line, time-keeping figures, and suggestions and responses to the soloist.

Sound: the tone quality, which can range from small to large, mellow to brilliant, or dull to lively. Nearly all jazz players can be identified by their sounds alone.

Staff: the horizontal lines with their spaces on which music is written (stave).

Standard tune: a tune, particularly those of the thirties and forties, which was once a very popular song and then becomes a perennially played tune.

Stop time: rhythm sections drop out on every other beat; a long series of breaks.

Syncopation: a temporary displacement of the regular metrical accent in music caused typically by stressing the weak beat.

Technique: the speed, evenness, and clarity of execution (finger dexterity, etc.)

Tempo: the pronounced rhythm that is the characteristic driving force of jazz; the speed or rate at which the beat passes.

Theme: melodic subject; harmonic progression; combinations.

Time: the ability to keep a steady tempo; the consistent accuracy and feeling of the pulse. All great players are perfect or near perfect in this respect.

Tonality: the relationship of the notes of the major scale gives a song a particular kind of sound and structure.

Tonality: the selected (there are often choices) chords, scales, and emphasized melody notes (in improvisation). The listener probably won’t know exactly what is being used, but he can notice a difference in the sound of the selected materials, especially in the case of pretty or effectively used melody notes.

Tones: vocal or musical sound; sound of a definite pitch and vibration.

Variations: melodies or melodic fragments (motives) that closely resemble a previously played phrase but are slightly different in some way.

Vehicle: a tune selected for improvisation.