

## “LOUIS LICKS” AND NINETEENTH-CENTURY CORNET ETUDES: THE ROOTS OF MELODIC IMPROVISATION AS SEEN IN THE JAZZ STYLE OF LOUIS ARMSTRONG<sup>1</sup>

Peter Ecklund

Early in 1994 I began work on a book of transcriptions of Louis Armstrong's trumpet solos for the brass publisher Charles Colin. In April of that year the vicissitudes of musical employment found me touring France with the singer Leon Redbone. While riding in the back seat of the van and admiring the charming countryside, I played Louis' solos on my Walkman and puzzled over how best to notate the rhythmically complex phrases. The constant clicking on and off of the cassette player was more than a little annoying to my bandmates. To give them some relief, I decided not to inflict Carmine Caruso exercises on them in the afternoons. Instead, for some practice between sound checks and shows I had Bousquet's *36 Celebrated Studies for the Cornet*, copied from the back of the St. Jacome book.<sup>2</sup> Each day I attempted a new page from this collection of highly ornamented yet melodious etudes.

There was a curious similarity between the figures I was writing down in the back of the van and those that I was practicing before the shows. This was certainly not true of entire melodies or complete phrases. But the turns, scale fragments, and “licks” that make up Louis' great improvisations from the 1920s resembled the arpeggios, ornaments, and fragments of melody that went into Bousquet's etudes from nineteenth-century France. There was obviously nothing special about those particular etudes. I described what I had observed to three New York clarinetists, Ray Beckenstein, Lawrence Feldman, and Ken Peplowski, whom I happened to encounter together during a break in a performance. They told me that some of Benny Goodman's trademark licks can be found in nineteenth-century clarinet method books such as Klosé's.<sup>3</sup> The similarity can be noticed far more easily by looking at the transcriptions than by listening to the recordings. Because the European elements in Armstrong's and Goodman's improvisations are so thoroughly transformed by the rhythms and inflections of jazz, the music looks more similar than it sounds.

Did Louis Armstrong create great jazz from figures he learned practicing etudes at the back of the St. Jacome book? This idea seems quite ridiculous. Although Benny Goodman studied classical clarinet as a child, we have no evidence that Armstrong ever practiced from the St. Jacome, Arban, or any other nineteenth-century French instruction book, at least at the beginning of his career. The connection must be less direct. Perhaps Louis Armstrong and the authors of the nineteenth-century French tutors were inspired by similar music. The connection between the jazz of Louis Armstrong and nineteenth-century European popular music will be the focus of this article.

The route leading to the cornet etudes is not hard to identify. The St. Jacome and Arban<sup>4</sup> books were created in the mid-nineteenth century to teach cornetists to play primarily what would be described today as “light classical,” “parlor,” or “salon” music. This category lacks exact boundaries; in it we can identify well-known melodies from operas and symphonic works, themes and variations, sacred and sentimental songs, marches, waltzes, and polkas. It was music intended to be played by military bands and brass bands, or by amateur and professional musicians at private concerts. Inexpensive mass-produced pianos, easy-to-play cornets, and more leisure time available to a larger middle class all helped to make it possible. It was a part of the mass-marketed popular music of its time. Popular music meant sheet music; piano arrangements, orchestrations for theater ensembles and hotel orchestras, vocal arrangements, music for concert bands and brass bands. Player pianos and gramophones were not important until the 1890s, and radio not until the 1920s. For evidence of this repertoire’s popularity in Europe and North America, we need only look at some of the programs of one of the top musical acts in the world at about the turn of the last century, which was John Philip Sousa’s band.<sup>5</sup> The chasm that now exists between classical music and popular music scarcely existed in the late nineteenth century. Lawrence Levine discusses this point in his fascinating book, *Highbrow/Lowbrow*.<sup>6</sup> Much popular music was European in origin or influence, and was not enormously different from music heard in the opera houses and concert halls of Europe and North America, if it was different at all. Operatic melodies were popular songs. There was not much music marketed worldwide that was inspired by African American music or the music of any non-European culture; minstrel music and the songs of Stephen Foster are about the only such examples until ragtime came in vogue in the 1890s. The vast majority of printed sheet music and orchestrations that were sold in the late nineteenth century can be identified as entirely European in origin or inspiration.

Popular music at the turn of the last century came in a variety of forms that shared certain characteristics that all point to Europe. The modality is exclusively major or minor and the harmony mostly triadic. The melodies tend to fall in eight-bar phrases that relate to European dance forms. Rhythms are simple and direct. The rhythmic flavor of the music, which jazz musicians call the “groove,” is almost always stated in the melody itself.<sup>7</sup> A ground rhythm or “rhythm section” is not required for the music to function. In much European light music of the nineteenth century we can identify a tradition of melody and ornamentation that seems to come from opera. Whether this is the influence of opera itself or of the folk traditions that influenced opera is debatable, but irrelevant here. In European music we can hear opera rendering itself into virtuoso violin pieces and bravura cornet solos, with similar themes and twists and turns of melody. The influence of Italian and French opera is particularly strong in what we have identified as light or popular music of European origin or inspiration.

As James Lincoln Collier writes in his biography of Armstrong, “European symphonies, drinking songs, and pop tunes are all derived from one system of rhythm and harmony.”<sup>8</sup> Imbedded in Louis Armstrong’s improvisations are European conventions of harmony,

modality, and phrasing that are transformed into a new music by the rhythm, inflections, and creative spirit of jazz and blues.

When he was a young man in New Orleans, Louis Armstrong was exposed to opera and the European tradition of light music as well as the blues, ragtime, and African American spiritual music of his native city. He was singing even before he took up the cornet.<sup>9</sup> As a child and adolescent he heard recordings of Caruso, McCormack, Henry Burr, and Tetrazzini on his wind-up Victrola.<sup>10</sup> Unlike the early jazzman Sydney Bechet, who was a Creole, Armstrong did not have the opportunity to go to the French Opera in New Orleans.<sup>11</sup> However, opera was not the entirely highbrow entertainment it is today, and music of operatic origin could be part of a popular program. Louis almost certainly heard brass bands and concert bands play arrangements of operatic favorites.<sup>12</sup> Katherine Preston's important work indicates that opera was heard by virtually all classes in nineteenth-century New Orleans.<sup>13</sup> Odd jobs brought young Louis into contact with the city's large Italian-American population and he certainly heard their music.<sup>14</sup> New Orleans at the turn of the twentieth century was full of music and much of it was parade music. There were brass bands that played from printed parts, and other, more ad hoc funeral bands, ancestors of the street bands of today, that improvised a rough "heterophony" (neither an exact harmonized melody nor melody plus separate accompanying parts) to familiar themes.<sup>15</sup> The mass-marketed European-style music could be found in New Orleans as well as other cities of Europe and North America. Perhaps especially so, because by all accounts New Orleans at the close of the nineteenth century and the beginning of the twentieth was an exceptionally musical city.<sup>16</sup>

New Orleans in Armstrong's youth also had a rich and varied local musical culture that existed independent of any printed arrangements of European music. From the African American community came blues, gospel music, and a sophisticated vocabulary of rhythms traceable through various routes to West Africa. A West-African tradition of music and dance continued well into the nineteenth century at huge gatherings at Congo Square on Sundays, the traditional slaves' day off.<sup>17</sup> The Creole population in New Orleans had music with roots leading to Haiti and France, Cuba and Spain. As mentioned previously, there was also a substantial Italian-American community, with its own folksongs. In New Orleans it was the business of any musician of whatever camp to know the city's music and be able to play it. Some, especially the Creole musicians, participated in the entire experience, from the opera house to blues.<sup>18</sup> We know that Armstrong's earliest musical experiences, besides singing in a boys' vocal quartet, were playing blues with saloon pianists and working with the funeral bands.<sup>19</sup> March music, ragtime, popular operatic melodies, and blues, as well as the new jazz music, were all part of his listening and playing experience. In New Orleans all of them could be flavored with the magical rhythms that breathe inside the city's music and have done so as long as anyone can remember. New Orleans musicians (Armstrong excepted) are known in the trade as an arrogant bunch, but no one can deny that there is a special quality about their music that transcends whatever style they appear to be playing.

In tracing the influence of opera and European light music on Armstrong's style, so far we have found young Louis listening to Caruso on the Victrola while participating in

the varied musical life of New Orleans, with all its influences from Europe, the Caribbean Islands,<sup>20</sup> and West Africa. Since improvisation is the most striking characteristic of his music and it is not found in any of the European music we have described, it would be wise to take a closer look at jazz improvisation in the early twentieth century.

Louis Armstrong and clarinetist/soprano saxophonist Sidney Bechet, both of New Orleans, are known as the first great jazz soloists or jazz improvisers. This is not to say that the musicians that preceded them in New Orleans, such as cornetists King Oliver and Freddy Keppard, did not have most of the elements of jazz in their playing. Syncopations across the strong beats, blues inflections, and swinging (tripletted) eighth notes, can all be found. But the improvisation of players like Keppard and Oliver that we know from recordings from the early '20s is achieved primarily through ornamentation of the melody and the rhythmic displacement of some of its elements.

The recorded legacy shows that before Armstrong and Bechet, jazz improvisation in New Orleans involved mostly the rhythm of the melody, not its sequence of notes. This by itself was an extraordinary innovation. It can be seen as an improvised version of ragtime—"ragging" the melody. Ragtime was developed in the last decades of the nineteenth century by a number of pianist-composers, most of them African-Americans from the Midwest. It became enormously popular in the 1890s. Scott Joplin's *Maple Leaf Rag* (1897) was the first composition of any genre to sell a million copies of sheet music.<sup>21</sup> Ragtime was created by adding West-African syncopations and the inflections of the blues to music that in other respects resembles European-style marches in 2/4 time played at a slow tempo. The syncopated melodies against the oom-pah bass recapitulated to a degree the rhythmic intensity of a more complex African style of syncopated drums against a steady ground rhythm. And as we have seen, the African tradition of the drum ensemble persisted in New Orleans almost until the dawn of jazz. You can hear ragtime and the rhythms of the city in all the early New Orleans jazz music.

Louis Armstrong's first recordings were made while he was working with King Oliver's band and was under the King's protection and tutelage. The essence of the rhythmic side of Louis' style of improvisation can be heard in the music of this great cornetist. This is especially true for Louis' great hot-jazz recordings from the 1920s. European music, in which the melody tends to define the rhythm, does not readily allow such wanton displacement of melody notes from the beats that define the meter (1 and 3 in 2/2 march time, for example) to off-beats and syncopations. The variations and ornaments found in the melodies of European music customarily occur within approximately the same rhythm as the original theme.

The rhythmic side of Louis Armstrong's improvisation has antecedents in New Orleans in the music of King Oliver and others. There is little about its origins that is European. The reverse is true of the melodic side of Louis' music. The pieces Armstrong was playing in the '20s, except for the blues, are organized into eight-bar phrases, making sixteen- or thirty-two-bar choruses, as in ragtime and march music. They have distinctive harmonies, often unique to the tune, or at least not exactly the same as in very many other tunes. The harmonies give rise to improvisations based on the chord structure of the song. These

harmonies radiate some of the distinctive quality of that song alone even when the players deviate entirely from the melody. The tendency of harmonies to preserve the mood of a piece through each improvisation is even stronger with American popular songs of the '20s and after that form the repertoire of jazz standards than it is with the repertoire of King Oliver's Creole Jazz Band and Armstrong's "Hot Five" and "Hot Seven." Other styles of music are for the most part less suitable for the melodic improvisation of jazz. For example, rock and Irish fiddle tunes are not particularly suitable for improvisations departing from the melody because they usually lack harmonic foundations that are distinctive or unique for each tune. *Satisfaction*, a rock tune by the Rolling Stones, has two chords, tonic and subdominant. Jazz musicians have created many fine improvisations on these two chords, but without the song's distinctive melody, beat, and arrangement, there is nothing about any of these improvisations that relates to the Rolling Stones song. There are rock bands like the Grateful Dead that are famous for improvisation, but the solos take the form of extended "jams" redolent with atmosphere but not melody or structure. *Lanigan's Ball*, a richly modal Irish jig, is commonly accompanied mostly by two chords, E minor and D major. There is a great tradition of improvisation in Irish music based primarily on ornamentation, but when the musician departs from the melody there is little to channel the improvisation in a direction that relates specifically to the tune. In composing *Quasimoto* the great jazz saxophonist Charlie Parker avoided any references to the melody of Gershwin's *Embraceable You*. But by using the harmonies of that tune, Parker guaranteed that all improvisations on *Quasimoto* will have a distinctive character that relates specifically to the Gershwin composition. Although most of the great popular songs that became jazz standards had not yet been written by the early 1920s when Armstrong was finding a new approach to improvisation, his example, filled with melodic, harmonic, and melodic richness, waited only for *How Deep Is the Ocean* to be composed. And in the late '20s and early '30s, Louis recorded many of these songs himself. In jazz the use of European harmony and structure made rhythmic improvisation in the Afro-Caribbean tradition extendable into the melodic domain.

An odd parallel to jazz improvisation is the theme-and-variations form of nineteenth-century parlor music, which must have been familiar to New Orleans musicians. Even though it is not jazz and is not improvised, this form uses the underlying structural harmonies of a theme, usually a well-known melody, to present highly ornamented variations that may retain only a passing acknowledgment of the original theme. A variation is structurally analogous to a jazz chorus. Interestingly, Louis Armstrong used this very term when he described how his employer and mentor King Oliver upbraided him for playing "too many variations" and not sticking to the melody.<sup>22</sup>

European popular music provided a structure for the new jazz music that was especially suitable for improvisation. It also provided a stock of melodic ideas and ornaments, similar to those I encountered practicing Bousquet's *36 Celebrated Studies*, that could be turned into the "licks" required for facile improvising. A European form, the theme and variations, furnished a model and a precedent for improvised "variations." The blues provided a uniquely expressive vocabulary of pitch and inflection that could turn European sequences of notes into a new music. A tradition of rhythmic improvisation with its roots in West

Africa and the Caribbean provided a rich source of inspiration for transforming lines of European melody into jazz phrases. Probably in response to a demand for new dance music, the march-like 2/4 of ragtime gave way to a freer and more relaxed 4/4, more suitable for improvising. Jelly Roll Morton claimed that he distinguished “jazz” rhythm from ragtime as early as 1902.<sup>23</sup> In this meter, the dancers perceived twice as many beats per bar even if only two bass notes per bar were played, leaving the opportunity to step on beat 2 or beat 4 as well as the familiar left-right (from the leader’s perspective) of beats 1 and 3. W.C. Handy’s *Memphis Blues* was an early popular hit in 4/4 time. Dancing to this and other 4/4 tunes, Vernon and Irene Castle turned the foxtrot into a national dance craze in the years before World War I. Interestingly, Vernon Castle observed in 1914 that the dance that became known as the foxtrot had already been known in the African American community for at least fifteen years.<sup>24</sup>

None of these developments explains why a freer and more melodically inventive style of improvising actually developed. To the rhythmic improvisation practiced by virtually all the early New Orleans jazz musicians, jazzmen like Armstrong and Bechet added an equally extraordinary melodic dimension. And why was it Louis Armstrong who became the king of jazz trumpeters? There are a few obvious answers. Louis was a consummate genius who was in the right place at the right time. He was an African American who was in touch with a long tradition of improvisation, mostly in the rhythmic dimension, in his native city, and was blessed with the creative imagination to take this improvisation in a new direction. He was a gifted musician who had the technical mastery to transform the role of his instrument away from that of a simple provider of memorized melody.

A fine doctoral dissertation by Brian Harker shows how the New Orleans clarinetists were an inspiration to Armstrong.<sup>25</sup> In New Orleans jazz and the music that predated jazz, they played passages that required greater range and technical facility than the cornet and had more freedom to ornament and improvise. The ornaments and arpeggios that are typical of clarinet parts are of course derived from the operatic tradition. As a teenager Louis was a “fast finger” player who acquired local fame as the cornetist who could play the famous Alphonse Picou clarinet solo on a popular march, *High Society*, in its original register.<sup>26</sup> Like Bechet, Louis had a prodigious memory and incorporated anything he heard and liked into his vocabulary of improvisation. He had a wonderful gift for melodic line and his jazz solos have a beautiful coherence and inner logic as well as a willingness to allow surprises. Although Sidney Bechet’s reputation as a jazz soloist predates Louis’, Armstrong quickly eclipsed him and became the most influential jazzman of his time.

The most important connection between Louis Armstrong and the operatic tradition is even more direct than the quantifiable musical relationships we have discussed. There is no question that Louis was attracted to the emotional intensity of operatic music as well as its power to express dramatic stories of heroism, danger, and pathos.<sup>27</sup> Louis grew up in poverty in segregated New Orleans and never went to the opera as a young man. Nevertheless, he incorporated the best of the operatic sensibility in his new style of interpreting popular songs, both as a singer and as a trumpet player. As we have seen, he heard recordings of opera, and in fact the music was everywhere, embedded in the popular music that

was his everyday experience.

Opera taught him some great melodies and gave him a sensitivity to the development of melodic line that was far superior to King Oliver's, as well as a model for ornamenting and developing a tune. The revolutionary approach to stating melody that is first apparent in his playing and singing in the late '20s and the '30s can be seen as a reinvention of the operatic device of rubato in a rhythmic context. Instead of speeding up and slowing down the melody in real time, as in rubato, Armstrong displaces the notes of the melody into rhythmic figures that cross the barlines, often in complex three-against-two patterns that can also be found in Cuban music.<sup>28</sup> This creates the illusion of rubato while maintaining all the rhythmic drive of a dancing medium tempo 4/4. A fine example of this technique is his solo on *Stardust* from 1929 (Example 1).

There is a "heroic" quality to Armstrong's playing. In a lecture in New York on the occasion of Louis' 100th birthday, Stanley Crouch and Wynton Marsalis emphasized the bravura nature of much of his work. Like a great operatic tenor, Armstrong reached for the ultimate in passion and intensity and seemed to toy fearlessly with man's mortal limits in the pyrotechnics of his playing. In Armstrong's case, this bravura came from the heart but was almost certainly inspired and directed more by sensibility of opera than anything else. In a fine article entitled "Louis Armstrong and Opera,"<sup>29</sup> Joshua Berrett explores this question both as it relates to the heroic attitude that permeates Louis' playing and the melodic resources of his improvisations. In an analysis of some of Armstrong's solos, Berrett makes a very strong case for the importance of opera in Louis' music. He points out the operatic origin of some of the melodic motives that Louis uses frequently in his improvisations, and larger pieces of melodies that Louis quotes in some of his solos.<sup>30</sup> Armstrong also acknowledged being inspired in the early '20s by such titans of the trumpet as B.A. Rolfe and Vic Ippolito, who were not jazzmen but belong more to the tradition of the nineteenth-century cornet virtuosos.<sup>31</sup> Again we see a connection to a tradition beginning in Europe transformed by Armstrong and others into a new form of music with European and African American elements.<sup>32</sup>

Some of the connection between Louis' music and light music in the European tradition is through the great American popular songs that were the most important part of his repertoire after the mid-1920s. Much has been written about what was new in these songs by Berlin, the Gershwins, Porter, Rodgers and Hart, and others; the slangy Americanisms of the lyrics, the rhythms from ragtime and jazz, the harmonies borrowed from Russian and Jewish music, the occasional bluesy tonalities. But in establishing a mood and telling a story in as few as thirty-two bars, they are part of the operatic tradition of the aria. Many if not most of them come from musical comedies where they are imbedded into the narrative in the same way that arias are an essential part of operas. A few of the composers, such as Jerome Kern, Victor Herbert, and Sigmund Romberg, also wrote operettas.

A certain caveat applies. Louis' music is not opera, any more than it is march music or any other light music in the European tradition. Like jazz itself, it is a complex amalgam of musical traditions, the principal ones African and European, in which the whole is greater than the sum of its parts. Each aspect of each tradition within it is thoroughly

The image displays a musical score for a solo on the trumpet, titled "Example 1". The score is written in G-flat major (one flat) and 4/4 time. It consists of eight staves of music, each with a key signature of one flat and a common time signature. The chords and fingerings are as follows:

- Staff 1: Fm7, Abm6
- Staff 2: Eb, C7, Fm7, Bb7
- Staff 3: Bb7, Eb, F7
- Staff 4: Bb7, Fm7
- Staff 5: Abm6, Eb, C7, Fm7
- Staff 6: Abm6, Eb
- Staff 7: C7, Fm7, Bb7, Eb, Abm6, Eb
- Staff 8: Eb, Abm6, Eb

The score includes various musical notations such as slurs, accents, and fingerings (e.g., 1, 2, 3, 4) to guide the performer.

### Example 1

Louis Armstrong's solo on *Stardust* (1931; Okeh W405061-4) (copyright 1995 by Peter Ecklund and the estate of Louis Armstrong; published by Charles Colin, New York).



transformed by aspects of the other traditions within it, to the point where they are not always easy to recognize. Nevertheless, it is safe to say that it was the European tradition of mass-marketed popular music that provided most of the melodic material for early jazz, as well as its phrase structure and harmony.

The essence of the genius of Armstrong and the other New Orleans musicians is that they created an entirely new form of music out of materials that were at hand. In 1920 nobody knew that there would be a Charlie Parker or even that there would be jazz as a recognized art form. All it took was for players like Armstrong and Bechet to take advantage of the inherent possibilities for improvisation in the music they were playing. The question of whose music it was or where it came from mattered little to them or anyone else at the time. It was simply the music they knew, and with their nourishment it grew into an extraordinary new musical art.

Louis created a vocabulary for improvisation, “Louis licks,” that set the standard for jazz trumpet until the bebop era.<sup>33</sup> These “licks” are the fragments of scales and arpeggios, melodic turns and ornaments, and blues figures that Louis strung together to create his wonderfully coherent improvisations. Except for the blues, most of them can be traced to the European tradition of melody, although it is difficult to identify their specific origins. They are so short that a search would probably find squarish versions of “Louis licks” in thousands of places in the literature of light music, such as marches, quadrilles and other dance music, operatic melodies, and other music in the European tradition. Melodic figures like these were also to be found in ragtime music and in the playing of the New Orleans clarinetists, as well as in light music in New Orleans and most of the Western world 100 years ago. Louis was a genius with a prodigious memory, and anything that he heard stood a chance of being incorporated into his vocabulary for improvisation.

The exact origin of these licks is less important than what Louis did to them to turn them into jazz. By adding complex and creative syncopations, blues inflections, and rhythmic drive to these simple melodic ideas, Louis contributed mightily to the creation of a new kind of music. By way of illustration we can turn to the opening bars of Louis’ famous improvisation on *Potato Head Blues*. As is, it is great jazz (Example 2). In 3/4 time with the jazz rhythms eliminated, it becomes an elegant Viennese waltz, showing the European roots of its melodic content (2b). Without any pitches at all, it becomes an interesting and creative jazz drum solo (2c). What was new about Louis’ improvising was that it was brilliant and profound in the rhythmic and melodic domains at the same time. Even though it incorporates ideas in the European tradition, it does not sound anything like European music. It sounds so complete and of itself that it is hard to believe there was a time when it did not yet exist.

Through the ‘30s, ‘40s, and ‘50s, jazz harmony continued to follow the European tradition and moved in the direction of greater chromaticism, as European music did late in the nineteenth century. Certain harmonic devices, such as the use of all of the pentatonic notes rather than major and minor triads,<sup>34</sup> and the use of flatted sevenths, flatted thirds (“sharp nines”) and flatted fifths can be traced directly to the blues. However, late nineteenth- and early twentieth-century European composers also influenced jazz harmony

### Example 2

Louis Armstrong, *Potato Head Blues*.

a. stop chorus

b. waltz

c. drum solo

through the inspiration they gave to Berlin, Gershwin, Porter, and others in writing the great popular songs used by jazzmen as vehicles for improvisation.<sup>35</sup> Nevertheless, the melodic vocabulary outlined by Louis Armstrong began to be left behind by a new one created by

Lester Young, Charlie Parker, Dizzy Gillespie, Miles Davis, and others. Bebop bears very little relation to the European tradition of melody we have discussed.

*Peter Ecklund is a trumpet player, arranger, composer, and teacher who lives in New York City. He can be heard on several hundred recordings, including two solo CDs for Arbors Jazz and albums featuring David Bromberg, Bonnie Raitt, Gregg Allman, Leon Redbone, Jay Ungar and Molly Mason, and the Grateful Dead. He teaches every summer at "Fiddle and Dance" at Ashokan, New York, and at the Augusta Festival at Davis and Elkins College, Elkins, West Virginia. His recent work includes music for Lindy-hop dancing and original compositions that blend together different styles of traditional American music. Ecklund is the author of Louis Armstrong: Great Trumpet Solos, and Bix Beiderbecke: Great Cornet Solos, both published by Charles Colin, New York.*

#### NOTES

<sup>1</sup> This article is based on a lecture/demonstration given by Peter Ecklund at "Toronto 2000: Musical

Intersections," a conference of fourteen music societies, Toronto, November 2000. Ecklund's presentation was part of one of the Historic Brass Society's sessions at this conference.

<sup>2</sup> Louis A. St.-Jacome, *Grand Method for Trumpet or Cornet* (New York: Carl Fischer, 1894; originally published Paris, 1870).

<sup>3</sup> Hyacinthe Eleonor Klosé, *Twenty Studies for Clarinet* (New York: Carl Fischer, 1946).

<sup>4</sup> J.B. Arban, *Complete Conservatory Method for Trumpet (Cornet)* (New York: Carl Fischer, 1936; originally published Paris: Leon Escudier, 1857, <sup>3</sup>1864).

<sup>5</sup> Rudi Blesh and Harriet Janis, *They All Played Ragtime* (New York: Oak Publications, 1966), pp. 73-74.

<sup>6</sup> Lawrence W. Levine, *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* (Cambridge, MA: Harvard University Press, 1988).

<sup>7</sup> James Lincoln Collier, *Louis Armstrong, an American Genius* (New York: Oxford University Press, 1983) p. 51.

<sup>8</sup> *Ibid.*, p. 48.

<sup>9</sup> Joshua Berrett, "Louis Armstrong and Opera," *Music Quarterly* 76 (1992): 216.

<sup>10</sup> Louis Armstrong, interview with Richard Maryman, quoted in *ibid.*, p. 218.

<sup>11</sup> John Chilton, *Sydney Bechet, the Wizard of Jazz* (New York: Da Capo Press, 1996), p. 5.

<sup>12</sup> J.L. Collier, telephone interview with the present author, March 2001.

<sup>13</sup> Katherine Preston, *Opera on the Road: Traveling Opera Troupes in the United States, 1825-1860* (Urbana: University of Illinois Press, 1993).

<sup>14</sup> Berrett, "Louis Armstrong and Opera," p. 219.

<sup>15</sup> Collier *Louis Armstrong, an American Genius*, p. 57.

<sup>16</sup> Ted Gioia, *The History of Jazz* (New York: Oxford University Press, 1997), p. 33.

<sup>17</sup> *Ibid.*, pp. 3-5.

<sup>18</sup> Collier, *Louis Armstrong, an American Genius*, p. 54.

<sup>19</sup> Ibid., p. 62.

<sup>20</sup> After the Haitian revolution in the early nineteenth century, many Haitians, white, black, and mixed, came to New Orleans, as did many Spanish-speaking people from Hispaniola. There was also much trade and cultural interaction between New Orleans and Cuba.

<sup>21</sup> Gioia, *History of Jazz*, p. 24.

<sup>22</sup> Richard Hadlock, interview with Louis Armstrong, 1950, quoted in Hadlock, ed., *Jazz Masters of the Twenties* (New York: Macmillan, 1965), pp. 14-15.

<sup>23</sup> Gunther Schuller, *Early Jazz* (New York: Oxford University Press, 1968), p. 139.

<sup>24</sup> Reid Badger, *A Life in Ragtime: The Biography of James Reese Europe* (New York: Oxford University Press, 1995), p. 116.

<sup>25</sup> Brian Cameron Harker, *The Early Musical Development of Louis Armstrong, 1901-1928* (Ph.D. diss., Columbia University, 1997), p. 125.

<sup>26</sup> Ibid., p. 131.

<sup>27</sup> Berrett, "Louis Armstrong and Opera," p. 221.

<sup>28</sup> This must have been noted by scholars but in my case it is based on personal experience. While playing in Larry Harlow's Salsa band in the early '80s I recall being admonished to play a figure consisting of a quarter rest and two eighth notes at the end of a bar as a quarter rest and two quarter notes contained in a quarter-note triplet.

<sup>29</sup> Berrett, "Louis Armstrong and Opera," p. 221.

<sup>30</sup> Ibid., pp. 219-26.

<sup>31</sup> Ibid., p. 221.

<sup>32</sup> As this article was in production related information was presented by Larry Hamberlin in a paper presented at the 13 Oct. 2001 meeting of the Greater New York Chapter of the AMS, "Red Hot Verdi: European Allusions in the Music of Jelly Roll Morton and Louis Armstrong."

<sup>33</sup> In the mid 1920s some of these characteristic phrases were actually published by Melrose Music as *50 Hot Breaks for Trumpet*, transcribed from a cylinder recording by Louis, which has unfortunately been lost.

<sup>34</sup> In the key of C (or A minor), these notes are C, D, E, G, and A.

<sup>35</sup> This subject merits further investigation, examples of which I have not yet found. Porter's studies with Vincent D'Indy and Gershwin's association with Rachmaninoff are cases in point.