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CONCEPTUALIZING TUNES:  
AVANT-TEXTES, REFERENTS, AND THE ANALYSIS  
OF MUSICAL STRUCTURE IN JAZZ

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And approved by

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## ABSTRACT OF THE DISSERTATION

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The ontological status of jazz tunes is a fraught topic that has generated much philosophical and analytical debate. A given tune may be represented by many lead sheets, each one different from the last in its representation of the tune's melody and chord changes. Performances of tunes are even more diverse: musicians realize harmonies differently, substitute and interpolate chords, interpret the head melody differently, solo extensively over the chord changes, and so on. When analyzing a jazz tune, it is therefore difficult to determine exactly what is being analyzed.

The entire concept of the jazz tune is underlain by a paradox: on the one hand, there is a singularity—"the tune"—generally understood to be a musical structure or scheme comprised of constellations of harmonic, melodic, and formal features; on the other hand, there is a multiplicity of versions of the tune, manifest in performances and recordings by countless musicians and ensembles and as printed lead sheets, transcriptions, and arrangements. A sufficient understanding of the jazz tune requires us to engage tunes as both singularities and multiplicities, situating tunes as the products of various poietic and esthetic processes.

In this dissertation, I develop a cyclical, processual model of the jazz tune. My model begins with a multiplicitous network of existing versions of a tune. Borrowing terminology

from sketch studies and the literary field of genetic criticism, I call this network of documents an “*avant-texte*.” By analyzing the relations between various versions of a given tune, we can gain a sense of the overlapping contexts that inform an improviser’s conception of the tune. Improvisers become familiar with one or multiple versions from the *avant-texte* and form a referent for the piece, prototypes consisting of various kinds of musico-structural features and levels of defaults. When features are shared between referents, they often represent stock schemata that can be used to more quickly grasp the structure of many different tunes. Referents and their component schemata are subjective mappings of musical structure that capture some of the flexibility inherent in prototypes. Improvisers use these mappings in the moment of improvisation as part of an ongoing negotiation of musical structure. The resulting improvisation represents a new version of the tune, which in turn may become part of the tune’s *avant-texte* network. In order to engage with all aspects of this model, I advocate for a method of analysis that accounts for the varied subjective views that help construct a jazz tune’s perceived identity.

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## Chapter 1

### Jazz Tunes and Ontology

*Gathering for a jam session, a group of jazz musicians set up their instruments in a Brooklyn basement. The bassist turns to the others and asks, “what tune do you want to play?” The pianist shrugs, “how ‘bout ‘Stella’?” All agree. The saxophonist snaps her fingers, counting off: “un, two, un two three.” On the last snap, she slides up to a concert B-flat, tilting her horn downwards and then quietly sustaining the A one semitone below. Simultaneously, the bassist strums a low E, the pianist arpeggiates an E half-diminished chord, and the drummer presses his brushes across the head of the snare drum. Throughout their medium-up rendition of “Stella by Starlight,” the group mostly sticks to the chord changes familiar from fakebook lead sheets, only occasionally straying from them to interpolate tasteful reharmonizations. The saxophonist’s rendition of the melody also remains close to the notes found in composer Victor Young’s published score for the piece, featuring only occasional embellishments of the sparse melody with scalar runs, arpeggiations, and other more subtle ornamentations. However, in the tune’s B section the saxophonist briefly departs from Young’s melody, instead imitating Miles Davis’s interpretation of the melody on 1958 Miles with an ascending series of falling thirds. As she holds the sustained F that ends the head melody, the pianist begins soloing, opening the next chorus with a B-flat fully diminished chord. The bassist, having already played an E in anticipation of the more commonplace E half-diminished chord, quickly leaps down to B-flat, recognizing the fully diminished sound as the opening harmony of Young’s original rendition of “Stella by Starlight” as diegetic music for the film *The Uninvited*. Once the pianist’s solo has finished, the saxophonist re-enters with the anacrusic B-flat that begins the head melody. The band plays the head out, repeating the last few bars of the head as a tag before ending on an extended B-flat chord.*



Little verbal communication is needed to initiate this performance, which is bound by countless jam-session conventions familiar to most jazz musicians.<sup>1</sup> Central to this communication is the assumption that the musicians will perform a *tune*, a composition on which a jazz improvisation is based. Indeed, many of the actions illustrated above may be understood as a way of determining either what tune to play or how to begin playing it: the bassist's question is answered with an abbreviated version of the tune's full name ("Stella by Starlight" by Victor Young), indicating the familiarity the musicians are expected to have with it; the saxophonist's snaps indicate the tempo and help confirm the meter and the feel of the groove; her opening B-flat is to be recognized as the tune's anacrustic first note; the simultaneous sounding of A and the downward tilt of her horn confirm that the A is the tune's downbeat; the bassist's low E, combined with the pianist's E-half-diminished chord, contextualizes that melodic A with the first harmony of the tune as it is most often played in jazz renditions. The improvisers all seem to be so familiar with "Stella by Starlight" that, once the tune is selected, no other explanation is needed. Their knowledge of the tune is not limited to what might be found on a lead sheet (a score indicating only a simplified melody and chord symbols) but rather includes knowledge regarding famous versions of the tune, from the particularities of Miles Davis's performance of the melody to the original harmonic backdrop of the A section as found in the film score from which the tune originates.

Although this performance appears straightforward, it is only one of many possible ways a performance of "Stella by Starlight" could go. The saxophonist might have instead begun the performance with a chromatic run from a low to a high B-flat, or perhaps the bassist might have opted not to sound the root of the first chord but the third, leading to a

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<sup>1</sup> This fictional anecdote, while informed by my own experience as a jazz improviser, was also inspired by several similar anecdotes capturing the contextual richness of the jazz jam session; see especially Waters (2011, 3–4), Stover (2017, 2.15), and those found throughout Gazit (2015).

less-stable, first-inversion chord; the pianist might have chosen to add a major ninth above the root of the E half-diminished chord, or to more radically reharmonize the progression, risking a harmonic clash with the bass and saxophone; the drummer could have decided to play with sticks in a bossa nova groove, or to play double time with a medium swing, subverting the other musicians' expectations of how the count off should be interpreted. But even if these or many other alternative choices were made, members of the jazz community would likely have no trouble identifying the tune as "Stella by Starlight."<sup>2</sup> After all, the tune is the *only* thing that all performances of "Stella by Starlight" *must* have in common. It would seem, then, that a clear understanding of what exactly the tune "Stella by Starlight" *is* would be absolutely crucial for engaging with performances of the tune.

\*       \*       \*

What constitutes a *jazz tune*? Ethnomusicologist Paul Berliner, in his influential study *Thinking in Jazz*, writes that tunes are best thought of as "a melody and an accompanying harmonic progression" (1994, 63). This is a prevalent, if convenient, oversimplification. The musical structures of tunes are in fact frustratingly indeterminate: a single tune, such as Young's "Stella by Starlight," may be instantiated by written and recorded texts that substantially differ from one another in terms of musical content. For example, Dariusz Terefenko compares several different versions of Young's tune, illustrating harmonic differences across several versions (Example 1.1). These disagreements are complicated by the fact that, in practice, chords are frequently added, omitted, or substituted by improvisers.

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<sup>2</sup> Like many similar terms, "the jazz community" can refer to many things but most commonly includes jazz musicians, audiences, and critics. The issue of what constitutes the jazz community, especially as an imagined community, is explored at length in Prouty (2012).

Further, the melody does not offer any recourse from this indeterminacy: the melody represented in the lead sheet is simply a prototype, not wholly representative of any given version; performers treat the melody as malleable and flexible. While such flexibility may be cited as a means of facilitating expressive performances, the success of such performances reciprocally relies on audiences' familiarity with "the tune," suggesting that there is some real, fixed melody that exists in the collective consciousness of audiences and that undergirds all performances of the tune.<sup>3</sup>

**Example 1.1: Three sets of chord changes for the first sixteen bars of Young's "Stella by Starlight." Chord changes adapted from Terefenko (2010, 84).**

m.	1	2	3	4	5	6	7	8
<i>The Uninvited Soundtrack:</i>	B <sup>b</sup> o <sup>7</sup>		13 – <sup>b</sup> 13 – 5 Fomit <sup>7</sup>	F <sup>7</sup>	B <sup>b</sup> sus <sup>7</sup>	B <sup>b</sup> 7( <sup>b</sup> 9)	E <sup>b</sup> add2/B <sup>b</sup>	A <sup>b</sup> 9
Published Score:	B <sup>b</sup> o		F <sup>7</sup>		F <sup>-7</sup>	B <sup>b</sup> 7	E <sup>b</sup>	A <sup>b</sup> 7
Jazz Changes:	E <sup>-7</sup> ( <sup>b</sup> 5)	A <sup>7</sup>	C <sup>-7</sup>	F <sup>7</sup>	F <sup>-7</sup>	B <sup>b</sup> 7	E <sup>b</sup> maj <sup>7</sup>	A <sup>b</sup> 7
m.	9	10	11	12	13	14	15	16
<i>The Uninvited Soundtrack:</i>	B <sup>b</sup> /F	G <sup>-6</sup> /(E)	D <sup>-</sup>	D <sup>b</sup> 7( <sup>b</sup> 5)	F/C	B <sup>b</sup> o	A <sup>-9</sup> ( <sup>b</sup> 5)	
Published Score:	B <sup>b</sup>	G <sup>-</sup>	D <sup>-7</sup>	B <sup>b</sup> -	F	B <sup>b</sup> o	C <sup>-</sup>	D <sup>7</sup>
Jazz Changes:	B <sup>b</sup> maj <sup>7</sup>	E <sup>-7</sup> ( <sup>b</sup> 5) A <sup>7</sup>	D <sup>-7</sup>	B <sup>b</sup> -7 E <sup>b</sup> 7	Fmaj <sup>7</sup>	E <sup>-7</sup> ( <sup>b</sup> 5) A <sup>7</sup>	A <sup>-7</sup> ( <sup>b</sup> 5)	D <sup>7</sup>

If we wish to analyze Young's tune or a performance of it, to which melody or set of chord changes should we refer? An intuitive answer might be "the original published score,"

<sup>3</sup> Indeed, melodic expressivity is frequently explained as the difference between a given performance and some "original melody." See for instance Berliner's (1994) discussion of Lonnie Hillyer's recollection of Kenny Dorham's treatment of the melody of "Alone Together" (69). See also David Temperley (1999), which investigates melodic syncopations in popular music as displacements of inferred background prototypes.

but this proves problematic in practice. While many of the most popular jazz tunes originate in Broadway musicals or are otherwise available as published scores, those original texts are seldom definitive. Rather, jazz musicians most often come to know a tune by familiarizing themselves with many versions, whether live or recorded performances, lead sheets, or arrangements. This makes it exceedingly difficult to pin down the musical content of tunes, let alone the relationship between tunes and their performances. To more effectively engage this complexity, jazz theorists and analysts may benefit from adopting an explicit ontological model that clarifies how performances relate to the culturally ascribed category of “jazz tune.”<sup>4</sup>

Before such a model is developed, it will be useful to untangle a few key terms and delimit the scope of this study. Throughout this dissertation, I use the term “tune” as many jazz musicians do to refer broadly to pre-composed material that serves as a vehicle for improvisation in contemporary jazz practice. The term is sometimes used synonymously in both casual and academic discourse with other similar terms, including “head,” “composition,” “standard,” “referent,” and “work.” The first of these has many meanings and is perhaps the most common alternative to “tune” used by jazz musicians. The melody and harmonic progression, or “chord changes” (often shortened to simply “the changes”) together comprise the “head,” which is played at the beginning and ending of a typical jazz performance. In between these head statements, solos are taken by one or multiple members of the ensemble; during these solos, musicians improvise melodic lines over the changes. This head–solos–head format is frequently framed by an introduction and a brief ending or “tag.” A typical performance thus consists of many statements of the chord changes; each

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<sup>4</sup> Zbikowski (2002, 201–242) discusses the jazz tune as a category by adapting aspects of Eleanor Rosch’s theory of categories and prototypes to models of music ontology. The ways in which jazz tunes may be understood as prototypes is discussed in Chapters 4 and 5.

iteration of the changes is called a chorus. Although the “tune” is being performed throughout, the “head” is only played at the beginning and ending of the performance, effectively bookending the solos. Because of this, the term “head” more often refers specifically to a chorus statement that includes the melody. Reference to the “head” may also be used to help distinguish between tunes that share a chord progression, whether a blues, rhythm changes, or a more distinctive contrafact, lending further credence to the notion that the melody is the defining feature of a head.

In most contexts, the term “composition” refers to a relatively fixed musical structure, often as represented by a score, involving relatively little interpretation; in this sense, it is considered the opposite of “improvisation.”<sup>5</sup> When referring to pre-composed material in jazz, however, the use of the term “composition” is contentious. This is in part because many jazz performances involve adapting existing compositions for use in a head–solos–head format, where a number of alterations may be made to the composition in order to help make it easier or more interesting to improvise over. These changes often include removing sections (especially the opening verse in Tin Pan Alley songs and Broadway numbers), altering section lengths, and adding turnarounds at the end of each chorus. When combined with the repetition of choruses and the inclusion of improvised solos, the resulting performances of such compositions seldom resemble their original written incarnations. Further, the term “composition” itself proves problematic since it usually refers to the activity of fixing musical material and is often used in the Western art tradition to designate more-or-less fixed works.<sup>6</sup> While the pre-composed material may itself be fixed, it

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<sup>5</sup> Larson (2005) deconstructs the binary opposition of composition and improvisation, suggesting that the two concepts are best thought of as similar processes occurring at different times and on different scales.

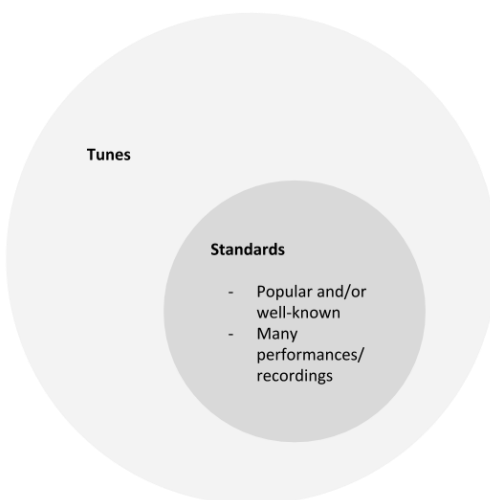
<sup>6</sup> This is not to say that there is no ontological complexity or indeterminacy in works of the Western art tradition, but rather to illustrate that the term “composition” is typically used to refer to relatively fixed works.

often undergoes so many changes in improvised performance that it no longer seems accurate to refer to a fixed composition. By contrast, the term “tune” often carries with it an expectation of flexibility, and suggests what Stephen Davies (2001, 16) calls a “thinner” musical structure that inherently permits elaborate ornamentation.

Many musicians use the term “standard” in much the same way they use “tune,” but each term has its own unique connotations. Jazz standards are tunes that are particularly popular amongst jazz musicians and have been performed (and/or recorded) many times. While the distinction between standards and tunes is fuzzy and there is much overlap between the two concepts, it will be worthwhile to differentiate between them since the ontological model developed in this dissertation is intended to apply to tunes generally. A standard may be understood as a subset of the larger category “tune,” as shown in Example 1.2; all standards are tunes, but not all tunes are standards. Whereas a standard implies some degree of popularity and a rich performance history, these are not necessary conditions for tunes generally. Henry Martin (1980) further considers “jazz standards” to be a subset of standards; he notes that, while a standard is “a tune that is well-known among people who listen to popular music,” a jazz standard is “well-known to jazz fans and jazz musicians, but not well-known among people who listen to popular music” (2). Throughout this dissertation, I use the term “tune” rather than “standard” because of its broader, more inclusive definition.

While the term “tune” is often employed in discourse as a stand-in for more ontologically loaded terms such as “composition,” “version,” “work”, it may be more useful to think of tunes in relation to their improvisational contexts: a composition *becomes* a tune when it is used as a vehicle for improvisation. If tunes are objects, they are not *performed* in the sense of a work or even a script (Cook 2001), but rather are *used* as the basis for an

**Example 1.2: Standards as a subset of tunes.**



improvised performance. In this way, they fulfill the role of what Jeff Pressing calls an improvisational referent, “an underlying formal scheme or guiding image specific to a given piece, used by the improviser to facilitate the generation and editing of improvised behaviour on an intermediate time scale” (1988, 153). When examining referents, we move from the study of universal invariants to the particulars of individual performance scenarios. While Pressing does not commit to a single, limited conception of referents, we may surmise that referents can describe both fixed, concrete musical structures that are universally invariant from one improviser to the next and more particular, personal conceptualizations that vary greatly between improvisers.<sup>7</sup> For this reason, the notion of referents will be helpful for clarifying how improvisers conceptualize and interact with tunes. It must be noted, however, that Pressing’s concept is much broader and more inclusive than the stricter, culturally and stylistically contingent concept of the jazz tune in a number of ways. First, referents are not limited to jazz, but rather may describe conceptualizations of structure in any musical

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<sup>7</sup> The flexibility of Pressing’s term is discussed in Chapter 4.

traditions or practices where some combination of improvisation and pre-composed material is present. Even within jazz, referents vary widely in the extent of their fixity. Although rare, some jazz referents are strictly fixed, allowing little to no improvisation. Others are almost completely open, placing practically no restrictions whatsoever on improvisers. Most fall somewhere in between these extremes, featuring some kind of fixed structure while allowing for improvisers to alter that structure in particular ways during the performance.

The fixity of certain elements, and the aspects of those elements that are able to be altered, depend in large part on stylistic as well as cultural norms. While such norms are nearly always in flux, a relatively stable practice of performing jazz tunes arguably emerged in the swing era and continued to evolve through the development of bebop and its antecedents, continuing through the present day and perpetuated in part through the practice's institutionalization in university and conservatory jazz programs. This practice is endemic to a handful of styles, especially swing, bebop, hard bop, and postbop,<sup>8</sup> and is much more common in small- than large-ensemble jazz.<sup>9</sup> The repertoire most often associated with this practice has been termed the “standard jazz repertoire” (Salley and Shanahan 2016) and includes the repertoire of compositions often known as the “Great American Songbook,” as well as many compositions written by influential jazz musicians.<sup>10</sup> It is worth noting that

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<sup>8</sup> This is not to say that tunes, or head–solos–head form generally, are never found in other styles. However, other prominent repertoires, from Dixieland to big band swing, jazz-rock fusion to free jazz, more frequently use other formats and therefore are less representative of the practice, making them less preferable prisms through which to view the ontology of mainstream jazz.

<sup>9</sup> The distinction between small- and large-ensemble (including “big band”) jazz is mirrored in some ways by Martin's (2018b) distinction between “large-scale works, smaller-scale works, and directly improvised works” (1.12), with the lattermost category including not only free jazz but melodies improvised over familiar sets of chord changes (e.g., Charlie Parker's “Bird of Paradise,” an improvisation on the changes of Jerome Kern's “All the Things You Are” that lacks Kern's original melody and replaces it with an improvised melody).

<sup>10</sup> The term “standard jazz repertoire” resembles Steve Larson's use of the term “modern jazz” throughout Larson (1998, 2009). In some publications, this repertoire, and the practices associated with it, are considered to be representative of jazz practice as a whole. I find this characterization to be reductive, however, as it



even the standard jazz repertoire is relatively diverse in style and origin: the tunes discussed in this dissertation range from American popular standards, to original jazz compositions and Brazilian bossa nova songs. Stylistic differences between these genres may prompt improvisers to conceptualize musical structure in slightly different ways. The repertoire covered in this study is hardly exhaustive, and taking other repertoires into consideration is likely to suggest new avenues for conceiving of and analyzing musical structure.<sup>11</sup>

### **Jazz and the Ontology of Musical Works**

Tunes are often compared with, regarded as, or simply synonymized with musical *works*. This term carries with it an enormous amount of cultural and scholarly baggage by calling to mind debates of musical ontology, especially with regard to what Lydia Goehr has termed the “work concept” (1994, 5). The precise location and nature of the work in jazz has been the subject of recent music-theoretical inquiry, igniting debates about the ontology of jazz.

Many aestheticians have set out to determine the relations between jazz tunes and their performances. Among the more prominent conclusions is that jazz, like the bulk of Western art music, is a tradition involving what Stephen Davies (2001) calls “works for performance” (3); jazz tunes are therefore works that are performed by jazz musicians.

Davies argues that jazz tunes are ontologically “thin” works, in that a limited amount of

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ignores large swaths of jazz practice that have historically been relegated to the margins of the genre. The ramifications of the standard jazz repertoire’s canonization are addressed at length in Prouty (2012, e.g., 8–10).

<sup>11</sup> For example, Benjamin Baker (2018) notes that jazz adaptations of more recent popular musics often eschew the head–solos–head format that dominates much standard jazz practice in favor of more complicated formal layouts reflective of the forms of late-twentieth- and early-twenty-first-century popular musics. Head–solos–head form is likewise abandoned in various other subgenres and related genres, including free improvisation and fusion; see, for example, Peter Elsdon’s discussion of form in various styles of jazz in Elsdon (2013, 66–68). Even the post-bop of the 1960s, a repertoire that increasingly relied on original compositions played or under the direction of the composer, is likely to differ in the extent to which structures are considered flexible.

performance information is specified by the work; in this sense, they are contrasted with the ontologically “thick” works of the Western art tradition, which often specify not only melodies and harmonies but exact pitches, rhythms and durations, articulations, dynamics, tempo, and so on. Performances of the same tune are therefore able to instantiate the same work despite the surface differences in their sound structures. One of these is formal: Davies’s account does not address the ways in which harmonic-melodic structures are instanced cyclically in performances. Unlike a Beethoven sonata, for instance, the performance of the work does not simply move through the written structure once (with certain sections repeated), but rather the chord changes (and sometimes the melody) are repeated in the head, each chorus of the solos, and in the head again. For some authors, this repetition necessitates a synthesis of tunes and the head–solos–head format. For example, philosophers James O. Young and Carl Mattheson, in their influential article “The Metaphysics of Jazz” (2000), do not distinguish between the two, intertwining them to describe what they call “jazz numbers” (129). According to Young and Mattheson, “two jazz numbers are instances of the same work just in case their heads contain the same melody and the improvisations are based on the chord changes of the head” (ibid.).

Both of these views typify what Julian Dodd (2007) identifies as the overwhelming tendency of music philosophers to adhere to a model of types and tokens, where works are types and their performances are tokens of that type. Such conceptions lay at the core of most ontologies of Western Art music: A performance of a Beethoven sonata is a token of that sonata as an abstract work (type), separated from its particular instantiations, and can therefore be said to “token” the work.<sup>12</sup> This type/token distinction is likewise foundational

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<sup>12</sup> This view is expounded by many aestheticians, including Goodman (1976) and Wollheim (1980). The music-theoretical relationships between conventional types and particular tokens has also been probed in the recent literature on musical form, especially in the work of Hepokoski and Darcy (2006). Their invocation of Mark

in the work of Philip Alperson (1984) and Carol S. Gould and Kenneth Keaton (2000).

Although type/token theories reflect the linguistic formulations that characterize discourse around jazz tunes (e.g., “have you heard Clifford Jordan’s recording of that tune?”), they do not address the variety of content amongst instances, nor the secondary nature of tunes in the critical reception of jazz. Brian Kane (2018) argues that these hierarchically-oriented ontologies rest on a set of assumptions that he calls the “realist framework” (3). Taking Stephen Davies to be the most representative of this view, Kane offers the following critique:

Davies’s realist commitments encourage a hierarchical conception of the relationship of works to performances: works *determine*, *precede*, and are *indifferent* to their rendition in performances. Thus musical works are wholly inoculated from performances, meaning that performances are *de jure* excluded from altering, changing, or affecting the works they instance. Davies’s view permits no mediation between works and performances since logical and causal relations always flow from works to performances, never in the other direction (Kane 2018, 510).

If conceptions of the relationship between work and performance are one-way and hierarchical, little room is left for alteration. To avoid this hierarchical conception, some writers have located the work in other aspects of the jazz performance paradigm.

Many aestheticians now argue that, because the locus of critical attention in jazz is not usually the tune being played but the performance itself, it is the performance that is the work. David Davies (2003), for instance, argues that the physical and/or sonic products of creative activities only mediate between audiences and the artistic act, a view which resonates

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Evan Bonds’s conformational/generative distinction, and especially their defense of a tenable conformational perspective, runs parallel to many of the issues at hand. Indeed, Hepokoski and Darcy seek to determine how a collection of particular compositions mutually establish and consequently play off of an emergent type. While both the repertoire and textual focus of the various authors of the so-called “New Formenlehre” differ from my own project, their methodological resonance with my work affords some unexpected insights: I apply their notion of defaults to referents in Chapter 4.

with Carolyn Abbate's (2004) argument for a drastic attitude, focusing on music's sounding materiality as contingent upon human bodies, rather than a gnostic, text-based interpretive mode. Under such frameworks, the act itself that may properly be considered the work, and in this way jazz performances, not tunes, are the works of jazz. Stefan Love (2016) convincingly takes this one step further by arguing that it is not jazz performances generally but rather solos that are at the center of critical attention. For Love, solos help further subvert the work paradigm by not being replicable; he argues that it is acts, not works, that are most valued in the jazz tradition. Andrew Kania (2011) even more provocatively suggests that, because performances are not "reidentifiable in multiple instances" (400), there simply are no artworks in jazz. He argues that such an argument need not devalue jazz, but rather ought to highlight the value placed on the ephemerality of improvisation. Yet this proposition throws the baby out with the bathwater: Jazz tunes may not be works, but they nonetheless play a crucial role in any ontological model of jazz, a role which finds no explication in eschewing the concept of work identity altogether. It seems that, for Kania, the cultural valuation of works is what stands in the way of locating a composed work in jazz practice.

Part of what is at issue in discussions of work ontology in jazz is the application of a cultural apparatus designed to describe Western concert music to a musical practice that does not share the same values. In his recent book, philosopher Eric Lewis has sought to find an alternative approach to jazz ontology that emphasizes an Afrological (as opposed to a Eurological) approach:<sup>13</sup>

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<sup>13</sup> These terms were introduced by improviser and musicologist George Lewis to distinguish between modes of improvisational practice. For more on the distinction and its implications, see Lewis (1996).

... an Afrological ontology of music invites us to reconsider the almost exclusive interest in the work/performance relation found in traditional ontology of music, instead suggesting that we look more at the performance/performance and performance/work relations. That is to say, Afrological ontologies of music tend to start with and prioritize performances, unlike Eurological ontologies, which start with the musical work concept (Lewis 104–105).

Lewis's book represents an important step forward in reevaluating the ontology of jazz from the bottom up, with a focus on the central role of improvisation in jazz practice, the varied reception of jazz, and the legal and economic stakes involved in ascriptions of work status. Particularly important for Lewis is the role of culture in determining what does and does not count as the same version of a given piece. For this reason, he is critical of determinations of identity driven by analyses of musical structure (Lewis 2019, 108). In his discussion of structural determinations of ontological status, Lewis speaks in terms of score compliance, a category that does not capture well the musico-structural landscape of a tune's ontological network. For Lewis, structural determinations are made on the basis of a comparison between a given performance and a score. He is correct that this is an unreasonable comparison for determinations of ontology, but I would argue that this misses the larger point surrounding musico-structural determinations of work identity, for even if we do not rely on a problematic, hierarchical relation between score and performance, determinations of work ontology that are entirely driven by musico-structural factors still fail to understand the ways in which those musico-structural relations are embedded in larger social and cultural processes. For our purposes, the question is not so much how musical structure determines work (or tune) concepts but rather what role musical structure plays in how listeners (including improvisers) conceptualize tunes.

One way around this problem is to eschew the notion of “work” and the evaluative baggage it invites and to instead reconfigure tunes as musical texts. This change in

perspective has several advantages. First, it encourages closer examination of the details of the text; second, it opens the jazz tune to investigation through various models and methodologies developed by literary theorists (see Chapter 2); and finally, it considers tunes not as intangible ideals but as networks of material objects out there in the world. Nicholas Cook, for instance, argues for a materialist approach to ontological questions, writing that

[u]nderlying any [cultural] categorisation is some kind of material trace [...] which may, or may not, afford a given interpretation. And the role of music theory is to model this pattern of affordance in a manner which (unlike the cultural categorisation) is open to empirical verification or refutation (Cook 1999, 203).

In order to better engage the particularities of jazz, it will be beneficial to shift our focus from abstract questions of higher-order ontology to those surrounding particular utterances traced by material texts such as individual scores and recordings. A materialist perspective allows us to better survey the nuanced relationships between specific texts. José A. Bowen, for instance, notes that each performance of a tune shares features with other performances, but no one performance exhibits all essential traits. Lead sheets become a practical, yet imperfect, compromise in this crisscrossing ontology. Bowen writes:

In jazz, the lead sheet [...] is an attempt to bring together the essential qualities of the work; that is, a theoretical intersection set of all of the performances. But in jazz, all of the performances do not share a common set; one can play the tune without playing everything on the lead sheet (Bowen 1993, 147).

Thus, while lead sheets are overly summarial and necessarily vague, individual performances are not, and cannot be, completely representative of the structures that underlie them. Yet, says Bowen, “while the lead sheet is an attempt to specify all of the characteristics of a jazz tune, it is really just another type of version, performance or

utterance” (1993, 148). Lead sheets (and presumably other similar written documents like scored arrangements) therefore come to occupy a space shared by performances and recordings as *versions*. Indeed, the term “version” features prominently in the discourse surrounding jazz tunes and represents a convenient category for conceptualizing the relations between tunes. In the context of a jazz tune, we can think of a version as any instantiation of the tune, including live or recorded performances, lead sheets, scored arrangements, or scored transcriptions.<sup>14</sup> The term “version” carries with it implicit connotations of multiplicity, where multiple different versions exist under the banner of a single name.<sup>15</sup>

To model relationships between versions, Bowen invokes Ludwig Wittgenstein’s theory of family resemblances and blurred concepts, resulting in a stratified ontology: On one level, family resemblances relate all performances, lead sheets, and other material instantiations of a tune to one another, while the tune is, reciprocally, a blurred concept on a higher level. This concept is visualized in Example 1.3.

Cook (1999) arrives at a similarly stratified model in his study of various ornamented versions of Arcangelo Corelli’s Sonatas for Violin, Op. 5. By surveying the structural relationships between particular ornamented variants, Cook is able to more concretely problematize the notion of a definitive, singular work. He claims that, much like the relation of variations to a theme, the various ornamented versions of Corelli’s Op. 5 are only identical at a deep middleground level, failing to sufficiently account for what may otherwise be characteristic surface inflections. Surveying the resemblances of four versions of Corelli’s

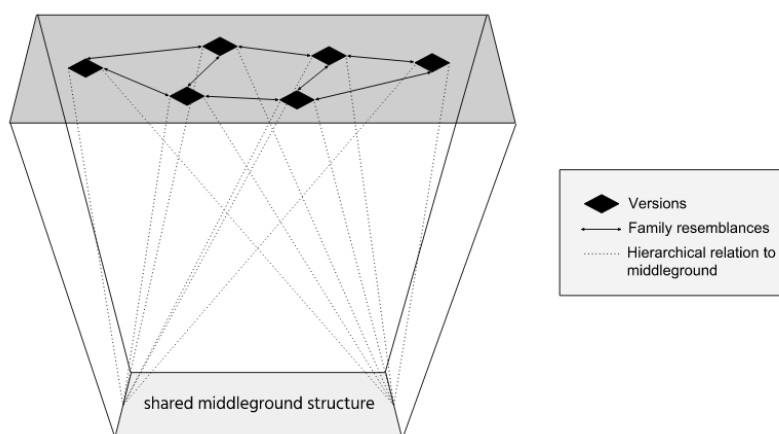
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<sup>14</sup> Live recordings are perhaps the most complex of these version types in part because they render tangible an otherwise ephemeral event. For more on the ontology of live recordings in jazz, see Solis (2004) and Elsdon (2010; 2013, 8–11).

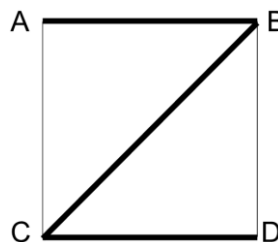
<sup>15</sup> Despite this, some philosophers model versions as part of a type-token hierarchy; see García-Carril Puy (2019).

Op. 5 no. 8 (labeled A through D), Cook presents the summarizing visualization shown here in Example 1.4, where versions A and B, B and C, and C and D are all closely related by similarities across various parameters, but A and D share no such features. He terms the result a “musical ‘multitext’: the network of relationships at the level of the material trace which affords cultural ascriptions of work identity” (Cook 1999, 214).

**Example 1.3: My visualization of the stratified ontology suggested by Bowen (1993).**



**Example 1.4: Cook’s model of relations between versions of Corelli’s Op. 5, where A, B, C, and D represent different versions of the same piece and bolded lines represent shared features.<sup>16</sup>**



<sup>16</sup> Adapted from Figure 1 in Cook (1999, 214).



Cook's multitext may be fruitfully applied to jazz tunes by arranging related texts into a network. Although he does not adopt Cook's term, Kane (2018) offers a similar network-based ontology of jazz standards, where the nodes of the network are concrete versions and the edges are differences between them (represented by two kinds of "operations," replication and nomination). In this way, jazz tunes are not to be thought of as single objects but rather multiplicities, networks of related texts. Networks represent a bottom-up alternative to top-down, hierarchical, type/token systems: rather than membership being ascribed to a given text by instantiating a fixed type, the category is determined by the very relations that make up the network. Membership in such a category may be somewhat ambiguous, with some versions being more or less typical.<sup>17</sup>

Network-based conceptions are appealing because of how they account for the ontologically thick detail of performances and recordings. But this approach only works if we observe the network from a distance, tracing relations between existing texts like archeologists constructing history from loosely related artifacts. We would do better to situate the jazz tune in its many natural environments: local jam sessions, jazz clubs and theatres, classrooms and practice rooms of jazz conservatories and university departments, home stereos, car radios, the earbuds of streaming service subscribers, and more. In these contexts, listeners engage closely with a selection of versions, limiting the network to just a few texts.

The notion of a network of versions also conflicts with the way that jazz musicians talk about tunes. A jazz musician would not say "let's create a new *version* of 'Stella by Starlight,'" but rather simply "let's play 'Stella by Starlight.'" It likewise seems improbable

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<sup>17</sup> This graded conception of category membership resembles theories of prototypes (see Chapters 4 and 5) and fuzzy sets. For more on the relationship between fuzzy set theory and musical ontology, see Wallentinsen (2017, 67–130).

that jazz musicians conceptualize tunes *as* multiplicities, since recollecting so many versions at once throughout an improvised performance would require the use of an enormous amount of attention, leaving less attention to spend on improvised utterances and interaction. Instead, Berliner suggests that musicians often understand tunes as singular, inherently flexible prototypes of harmonic structures (1994, 76–88).<sup>18</sup>

### **A Conceptual Model of Jazz Tunes**

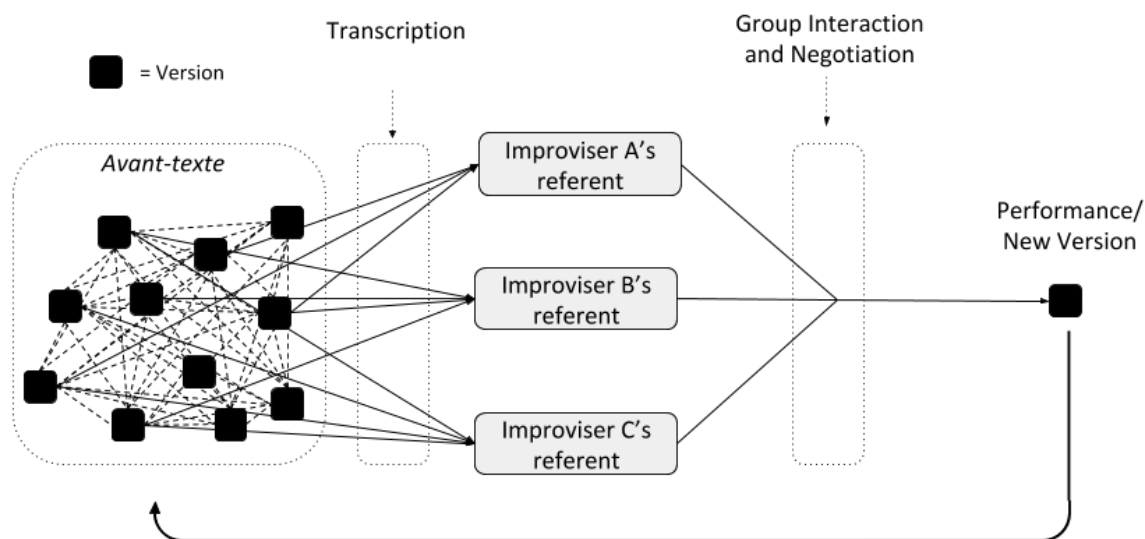
From all of this ontological complexity, then, a paradox seems to emerge: the jazz tune appears to be on the one hand a singularity (the tune “Stella by Starlight”) and on the other a multiplicity (the many versions of “Stella by Starlight”). It is my contention that embracing this paradox will allow us to come to a better, more complete understanding of what jazz tunes are, how they are understood by improvisers and audiences, and how they may be engaged by music theorists and analysts. I argue that a sufficient understanding of the ontological and conceptual status of the jazz tune requires us to step back and situate tunes as the products of various poietic and esthetic processes. A jazz tune is not a singular entity that is “out there in the world,” a stable, fixed object able to be observed in the same state at all times. Neither is it only a “thin” work (c.f. Davies 2001), nor exclusively a thick network of versions related by replication and nomination (c.f. Kane 2018). Tunes are ontologically complex and conceptually variegated; we can only faithfully model their ontological status and conceptualization if we properly contextualize them within the large-scale cultural processes that reify them in their varying forms. A cyclical, processual model of the jazz tune

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<sup>18</sup> The accounts of musicians presented throughout Berliner (1994, especially Chapter 3) help confirm this conceptualization.

concept is shown in Example 1.5. This model is the central pillar of this dissertation and serves as an organizational scheme for the chapters that follow.

**Example 1.5: My cyclical, processual model of the jazz tune concept. This figure serves as the central unifying model of this dissertation.**



The model begins with a thick network of existing versions of a tune; each of the squares in Example 1.5 may represent a recording, lead sheet, arrangement, and so on. Chapter 2 begins by examining how such networks may be conceptualized. Borrowing terminology from sketch studies and the literary field of genetic criticism, I call this network of versions an “*avant-texte*.” Roughly translating to “pre-text,” an *avant-texte* is a network of existing versions from which improvisers draw. By analyzing the relations between various versions of a given tune, we can gain a sense of the overlapping contexts that inform an improviser’s conception of the tune.

Chapter 3 examines the process by which improvisers become familiar with one or multiple versions from the *avant-texte* and form a referent for the piece. Adopting a concept

familiar to most jazz musicians, I call this process of referent formation *transcription*.

Improvisers transcribe a tune's structure consciously and unconsciously, using both verbatim and gist memory, while engaging with different versions of the tune. In order to better understand how this process works, I became familiar with several tunes with which I was previously unfamiliar, selecting recordings to listen to and lead sheets to play and taking notes throughout the process as my referent formed. This study yielded interesting and at times surprising results that reveal how difficult it can be to predict how musical structure is encoded into memory.

Chapter 4 focuses on the nature of referents. I argue that a tune-referent is best understood as an improviser's own personal understanding of a tune's structure, held in memory, and acts as their guide to playing the tune during the moment of improvisation.<sup>19</sup> Referents are further shown to be prototypes, consisting of various kinds of *referent features* and levels of *defaults*. The particularities of tune-referents are therefore specific to each individual improviser and may or may not be shared with other improvisers. When features are shared between different referents, they often represent stock patterns and formulas that can be used to more quickly grasp the structure of many different tunes. In Chapter 5, I theorize these shared features as musical *schemata*, contending that, when taken as a whole, tune-referents and their component schemata may be thought of as *flexible conceptual maps*, subjective mappings of musical structure that capture some of the flexibility inherent in prototypes. These conceptual maps are grounded in the tune's *avant-texte* and emerge in part from the features shared by different versions with which the improvisers become familiar; because of this, improvisers who are playing together will develop different referents,

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<sup>19</sup> Throughout this dissertation, I occasionally use the term "tune-referent" to differentiate this specific kind of referent (that of a jazz tune) from the broader category of possible referent types. In unambiguous contexts, however, I will use the term "referent" to mean tune-referents.

meaning that the structure of the tune must be negotiated in the act of interactive improvisation.

A complete improvisation, generated from the process described throughout Chapters 2–5, represents a new version, which in turn may become part of the tune’s *avant-texte* network. Complete versions are arguably the most common objects of jazz analysis. In Chapter 6, I reflect on what it means to analyze a jazz tune and suggest that approaching this issue from the perspective of an improviser helps foster productive attitudes towards analysis. In particular, I advocate for Chris Stover’s notion of *analysis as multiplicity* as a means of accounting for the varied subjective views that together construct a jazz tune’s identity.

The model developed throughout this dissertation is primarily concerned with the ways in which jazz improvisers engage with tunes. However, the familiar notion of “the listener” will continually crop up from time to time. In general, I most frequently use the term “listener” to refer to potential general listeners, including audience members at a live jazz performance and people listening to recordings in various circumstances. Their experiences can vary widely, ranging from those with little to no familiarity with the conventions of jazz performance and style to those who are themselves accomplished jazz musicians. Improvisers are also listeners; the fact that listening experiences are brought to bear on improvisational actions creates a feedback loop central to many studies of interactive improvisation (Hodson 2007; Michaelsen 2013a, 2019).<sup>20</sup>

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<sup>20</sup> Because the category of “listener” is so broad, it becomes difficult to generalize about the kinds of experiences listeners may or may not have. For example, a listener who lacks knowledge about the head–solos–head format that guides most performances of tunes may fail to grasp that the repeating harmonic, formal, and metric content across a given performance, making the construction of a referent rather difficult and limited. Similarly, some parts of the model do not apply equally well to all kinds of listeners: while most knowledgeable, enculturated listeners will become familiar with a variety of versions and form a referent for a tune, those who are not improvisers are unlikely to transcribe the tune in as much detail as improvisers. For purposes of scope, my treatment of the broader category “listeners” is mostly focused on relatively knowledgeable, enculturated listeners.

## Chapter 2

### Avant-textes

Jerome Kern's "All the Things You Are" has enjoyed a lengthy and varied history extending far beyond its initial appearance in the 1939 Broadway musical *Very Warm for May*.

Distinctive features like the descending fifths sequence that begins each of its A sections, recurring tonicizations of local mediant, and a neatly voice-led compound melody, all help make the tune instantly recognizable. Yet very few listeners who are familiar with Kern's composition are likely to know the words of the song, written by Oscar Hammerstein II, nor the distinctive and sharply contrasting opening verse.

This is in part because Kern's original composition is less known than the many jazz renditions recorded over the years. When performed by jazz musicians, the features of "All the Things You Are" differ widely from those of the initial Broadway production. Kern's introductory verse (Example 2.1) is nearly always eliminated; instead, jazz renditions frequently begin with a short introduction composed by Dizzy Gillespie (Example 2.2).<sup>1</sup> While Kern's original chorus melody (Example 2.3) will typically be present, it is usually played loosely, often with improvised gestures filling in the spaces between melodic phrases. The harmony too will frequently undergo revision, with chord substitutions and interpolations altering, whether subtly or radically, the unfolding musical fabric. Despite these changes, most listeners will register such interpretations as clear instantiations of the tune "All the Things You Are": none of these alterations to Kern's original composition are

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<sup>1</sup> This introduction also appears before Billy Eckstine's 1944 recording "Good Jelly Blues" (on which Gillespie played) and may have been intended as a parody of Sergei Rachmaninoff's famous Prelude Op. 3 No. 2; see Deveau (1999, 342). As Henry Martin notes, the two chords in the intro of "Good Jelly Blues" differ not by a half step but a whole step; see Martin (forthcoming).

considered especially unusual, and many listeners may not even be aware that they constitute alterations at all. Indeed, these “remembered innovations” may over time become part of the tune’s very identity.<sup>2</sup> Countless jazz musicians have contributed their own innovations to the tune. Some of these are recorded, while others are lost to the ephemerality of improvised live music. Some innovations are carefully studied, practiced, and internalized; others are forgotten entirely. When jazz improvisers select a tune to play, they necessarily engage with the innovations that *they* remember, cutting selectively across the tune’s history in order to craft a unique improvised performance.<sup>3</sup>

Productively engaging with the complexity of a tune’s history is no easy task. The sum total of a tune’s versions can hardly be collated together neatly in a single score for study, and the dense technological and commercial mediation of a tune’s dissemination through recordings, lead sheets, and arrangements often produces sprawling, crisscrossing paths of influence throughout history. This complexity makes a chronological study of a tune difficult, if not impossible, to undertake with any clarity.<sup>4</sup> Instead, the analyst becomes engulfed in a sea of recordings, lead sheets, and other documents, searching if not for a definitive version then for some consensus, a clear narrative of the existing interpretations of the tune.

But music analysts are not alone in this struggle. Literary scholars have faced a similar problem when dealing with an author’s drafts, where similar issues of creativity,

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<sup>2</sup> The term “remembered innovations” is borrowed from Bowen (1993, 164).

<sup>3</sup> This process may also be framed through Henry Louis Gates Jr.’s influential concept of “Signfiyin(g),” as first noted in Gates (1988, 63–64). Several subsequent studies have further applied Gates’s theory to the ways in which jazz improvisers interpret jazz tunes and interact with their varied histories; see especially Walser (1993), Monson (1996), and Zbikowski (2002, 223–242).

<sup>4</sup> The mediation of jazz performances is discussed in Born (2005) and Kane (2018). Both of these accounts are examined in more detail below. Mediation is discussed by Kane in even greater detail in Kane (forthcoming).

Example 2.1: Excerpt of the introductory verse of “All the Things You Are” (Kern and Hammerstein II).<sup>5</sup>

Time and a - gain I've longed for ad - ven - ture, Some-thing to make my

heart beat the fast - er, What did I long for? I nev - er real - ly

Example 2.2: A frequently played introduction to “All the Things You Are,” likely composed by Dizzy Gillespie.<sup>6</sup>

(1st x)

<sup>5</sup> Adapted from Kern et al. (1955).

<sup>6</sup> Adapted from *The Real Book*, Vol. 1, Sixth Edition (Milwaukee, WI: Hal Leonard, 2004), 22.



Example 2.3: Excerpt of the chorus of “All the Things You Are” (Kern and Hammerstein II).<sup>7</sup>

The musical score is for the chorus of "All the Things You Are" by Jerome Kern and lyricist Oscar Hammerstein II. It is written in F major (three flats) and 4/4 time. The score consists of two systems of music. The first system covers measures 1 through 4, and the second system covers measures 5 through 8. The vocal line is in the upper staff, and the piano accompaniment is in the lower staves. The piano part is marked *p cantabile*. Chord symbols are written above the vocal line: Fm, Fm<sup>7</sup>, Bbm, Fm, Eb<sup>7</sup>, Eb<sup>9</sup>, Cm, Eb<sup>7</sup>, Abmaj<sup>7</sup> in the first system, and Db, Dbmaj<sup>9</sup>, Db<sup>6</sup>, Dbmaj<sup>7</sup>, G<sup>7</sup>, Cmaj<sup>7</sup>, and C<sup>6</sup> in the second system. The lyrics are: "You are the prom-ised kiss of sprng-time That makes the lone - ly win - ter seem long." The piano accompaniment features a steady eighth-note bass line and chords in the right hand.

intention, perception, and ontology swirl amongst the materials of a work’s genesis, enveloping it in a haze seemingly impenetrable by straightforward analysis. Genetic criticism, a subfield of literary studies oriented around the study of how texts come to be, has developed the notion of an *avant-texte* (French for “pre-text”) to denote a network of sketches, edits, and drafts that represent the genesis of a text.<sup>8</sup> This concept has already seen significant interest in musical sketch studies.<sup>9</sup> In the present chapter, however, I argue that

<sup>7</sup> Adapted from Kern et al., *The Jerome Kern Songbook*.

<sup>8</sup> Although some scholars use the English translations “pretext” or “pre-text,” most translations retain the original French term to avoid confusion with other familiar definitions of the English term “pretext.”

<sup>9</sup> See for example Kinderman and Jones (2009), Kinderman (2012), and Sallis (2015).

the concept of *avant-texte* can also be used to clarify issues surrounding the relationship between improvisation and musical texts. By conceiving of the histories of jazz tunes as *avant-textes*, we can begin to more clearly trace the ways in which tunes change shape over time and glean a sense of how improvisers conceptualize such texts and their manifold mediations. I begin by expanding on the notion of *avant-texte* as it has developed in genetic criticism and exploring how it may elucidate the ontological and conceptual status of jazz compositions, especially inasmuch as they constitute referents for improvisation.<sup>10</sup>

Examining the resonances between *avant-textes* and network-based ontologies of musical works, I develop a model of jazz ontology as the tracing of the nodes and edges of an *avant-texte* network to create referents for improvisation. As a case study, I examine several well-known performances of Kern's "All the Things You Are," detailing the ways in which they each engage with and relate to the tune's history.

### ***Avant-Textes* and Networks**

Genetic criticism is a branch of literary studies developed around the writings of Louis Hay that concerns itself with the genesis of texts, as gleaned through the examination of manuscripts, drafts, and other similar sources.<sup>11</sup> Jean Bellemin-Noël (1972) introduced the notion of *avant-texte* as a way of differentiating between a finished work and the versions that led to it. Bellemin-Noël's term has been widely embraced by genetic critics, emerging as a foundational pillar of the field. Although authors disagree on the nuances of the term's

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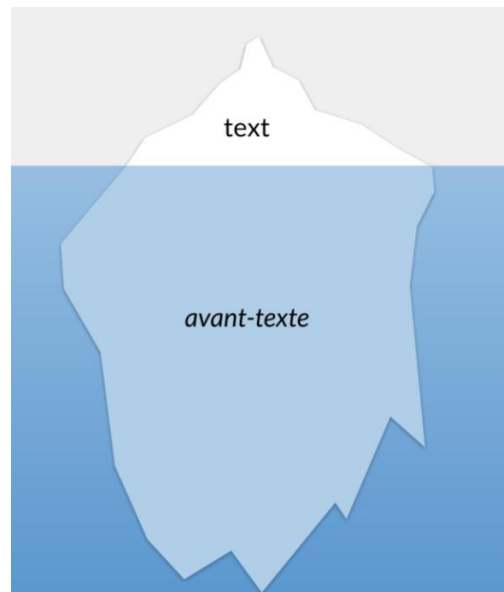
<sup>10</sup> Referents are discussed in more detail in Chapters 3, 4, and 5.

<sup>11</sup> For an overview of the field, see Deppman et al. (2004).

meaning, the concept is most frequently used to connect the creative process to existing material traces in the form of incomplete or unfinished texts.

Musicologist William Kinderman compares the relationships of a text and its *avant-texte* to the visible and submerged parts of an iceberg (Example 2.4): the finished work floats visibly above the surface of the water, while the work’s massive *avant-texte* sits underneath it, hidden beneath the waves (Kinderman 2012, 15–42). Although the “final” text is more easily seen, it would not exist without the submerged *avant-texte*, which constitutes the final text’s conditions of possibility.

**Example 2.4: *Avant-texte* as the submerged portion of an iceberg.**



The dichotomy that emerges here between text and *avant-texte* may be misleading, however. Rather than impose a strict distinction between the two categories, Maureen Ramsden uses the term as a way to problematize the very notion of completeness. According to Ramsden, completed texts may be seen as “a chance occurrence, as simply the

end, one possible end, of a series of *avant-textes*” (2002, 40).<sup>12</sup> Understood in this way, *avant-textes* highlight the open-ended, never-finished nature of texts. In literature and in composed Western art music, where the “complete” text is sometimes construed as a material trace such as a manuscript or score, the *avant-texte* serves in part to explain the poietic process that leads to that particular trace, but also to disrupt the assumed stability of the work by casting the written trace as a “chance occurrence,” suggesting other endpoints would not only have been possible, but also equally valid.

Although developed to model the genesis of relatively fixed texts, I argue that the notion of an always-incomplete text resonates even more strongly with the concept of the jazz tune. Standards like “All the Things You Are” are renegotiated by improvisers each time they are performed, and essential features change and evolve over time; tunes are, to some extent, always in the process of becoming. Individual performances may occasionally become fixed as recordings or transcriptions, but the “realization” or “completion” of a tune is always ephemeral. A complete performance of a jazz standard does not thereafter define the tune; the *performance* is complete, but the *tune* has simply acquired more innovations and variations, which may or may not be recorded or remembered, while reinforcing other aspects of the tune’s structure. As soon as one performance is complete, though, another instantiation waits on the horizon.<sup>13</sup>

It would be misleading to construe these renegotiations as unfolding teleologically over time. Rather, *avant-textes* are better conceived as atemporal accumulations of compositional and improvisational choices that delimit the boundaries of an improvisational

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<sup>12</sup> A similar view is espoused by Peter Eldson in his study on jazz recordings when he writes that “the history of [John Coltrane’s] “Chasin’ the Trane” *begins rather than ends* with the [initial] 1962 Vanguard recording” (2010, 157, emphasis added).

<sup>13</sup> This cyclical process is discussed by Georgina Born as the result of the commodification of recorded improvisations; see Born (2005, 27).

possibility space: as Bellemin-Noël writes about the genetic method, genetic critics “do not reconstitute the sequential history of a creation, [they] explore an environment of words” (2004, 31). Conceiving of tunes as *avant-textes* allows us to navigate this environment of materials not as a temporally bound sequence of texts but as an open-ended network, where the tune’s identity is always expanding outward.

Networks have long been employed by philosophers as a non-essentialist means of modeling ontology.<sup>14</sup> Recently, Brian Kane has persuasively argued for an ontology of jazz standards oriented around networks, even going so far as to claim that, in jazz, “*the musical work is a network*” (2018, 524, emphasis in original). In Kane’s model, versions represent nodes in a network, while edges represent acts of replication.<sup>15</sup> In this ontology, no “thin” work emerges:<sup>16</sup> there is only a “thick” network of material traces in the form of written and recorded versions.<sup>17</sup> This network-based ontology resembles models developed by José Bowen and Nicholas Cook, where related musical texts share no set of essential features and instead relate to one another only by Wittgensteinian family resemblances.<sup>18</sup> By thinking in

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<sup>14</sup> Particularly influential examples of network-based ontological models in music scholarship include the concepts of “family resemblance” (Wittgenstein 1953, Cook 1999, and Bowen 1993), “rhizome” (Deleuze and Guattari [1980] 1987), and actor-network theory (for an introduction, see Latour 2005; for a musicological discussion, see Piekut 2014). Although these models all have much to offer, a fuller engagement of their potential in modeling networks of versions of jazz tunes is outside the scope of the present work.

<sup>15</sup> Kane’s account of replication is drawn from the work of Whitney Davis. According to Davis, replication describes “the sequential production of similar material morphologies ... that are substitutable for one another in specific social contexts of use” (Davis 1996, 1). As Kane acknowledges, it also bears resemblance to Georgina Born’s (2005) account of the social and technological mediation of works in jazz.

<sup>16</sup> Kane hints at a more nuanced account when he writes that “*a standard is not (or not simply) a thin work but rather a thick musical network*” (2018, 524, emphasis in original).

<sup>17</sup> The terms “thick” and “thin” are developed in reference to ontological status in Davies (2001). Davies uses these terms to describe the extent to which works are more or less determinate, respectively. Kane positions his ontological model against “realist” ontologies, as characterized by Davies’s account.

<sup>18</sup> See Bowen (1993) and Cook (1999). Bowen’s model, which Kane acknowledges as a precedent, is implicitly two-tiered, with a thick network of family resemblances giving rise to a thin “blurred concept” (Bowen 1993, 147). Bowen (2015) follows up on his earlier work with a near-exhaustive tracing of the recorded history of “Body and Soul.” Cook’s model, which he reluctantly but provocatively calls a *multitext*, is developed to

terms of networks—networks of versions, networks of compositional materials, networks of composers, improvisers, and listeners—we avoid potentially problematic characterizations of change as evolution and progress.

If we take seriously Kane’s claim that jazz tunes are constituted, at least in part, by networks of versions, it follows that a genetic study of a tune involves tracing this network.<sup>19</sup> Drawing on categories devised by Jean Bellemin-Noël, Pierre-Marc de Biasi (2004, 43) suggests a methodology for genetic critics that focuses on the relationship between *avant-texte* networks and the completed works that emerge from them; I visualize this tripartite model in Example 2.5. The so-called “definitive” Manuscript stands at one end of the spectrum, complete and as fixed as it will ever be.<sup>20</sup> The Manuscript stands in opposition to a dossier of “rough drafts and other draft documents that were used to conceive and produce the work” (ibid.). This dossier is organized and interpreted by the genetic critic. Such acts of organization and interpretation, for de Biasi, constitute the *avant-texte*, in the sense that the analytical observations made comprise a study of the genesis of the work. In my visualization of de Biasi’s model, I represent this conception of the *avant-texte* as a network where the nodes pre-exist the *avant-texte*, but the edges emerge only as a result of agential intervention.

By casting the network of versions of a given tune as an *avant-texte*, we are able to mobilize the methodological strategies of genetic criticism in the service of tracing a jazz tune’s pluralistic identity. Indeed, the term *avant-texte* carries implicit connotations that the

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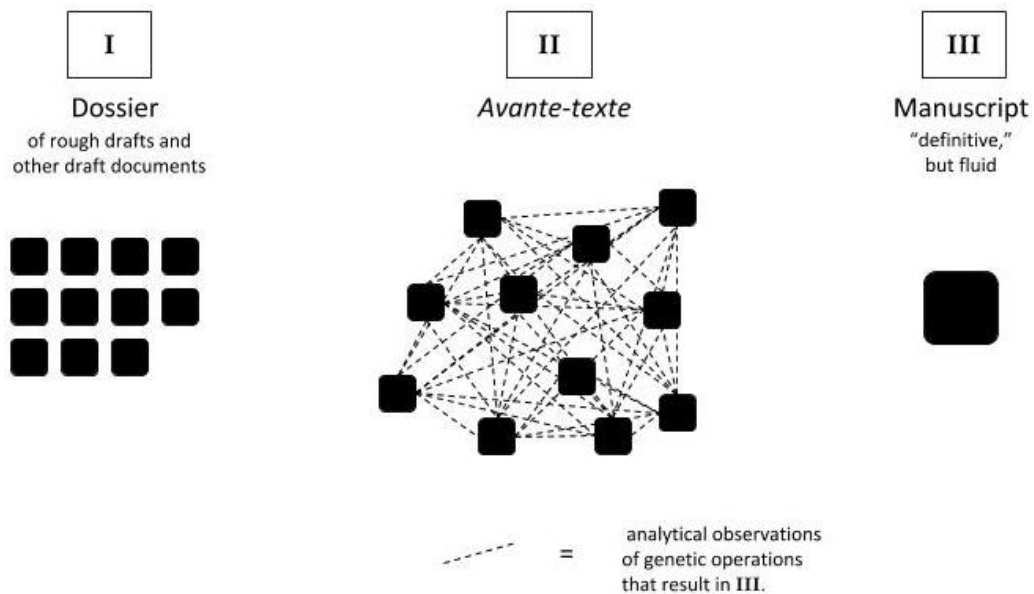
describe the relationship between various graces on Corelli’s Violin Sonatas, Op. 5, yet has many resonances with jazz practice.

<sup>19</sup> Kane argues as much when he writes that “to follow a standard is to trace its network of replications” (2018, 519).

<sup>20</sup> Although de Biasi stipulates that the Manuscript must be “fixed, reproduced, and published” (de Biasi 2004, 43), the absolute fixity of a text seems unnecessary and contradicts the calls many scholars have made in favor of problematizing fixity. It may, instead, be better to think of the Manuscript as not necessarily reproduced but replicable (cf. Kane 2018, Davis 1996), not fixed but fluid (see Bryant 2002).

more significant, “complete” texts of jazz are not scores or already-extant recordings, but rather future performances influenced by those scores and recordings. By considering the existing network of scores and performances as methodologically *prior to* some postulated performance, we ensure that the ultimate focus of our analysis is on the improvisatory practices of jazz rather than on a canon of fixed works. This also helps to clarify the role scores and recordings play in the always-already ongoing, cyclic process of version creation and commodification emphasized by Born (2005): existing scores and recordings influence the creation of new performances, which in turn may become fixed and disseminated as recordings, entering the *avant-texte* and potentially going on to influence later performances. In other words, the improvised performance, which most frequently serves as the locus of critical attention in jazz, exists in the liminal space between the *avant-texte* and the text.<sup>21</sup>

**Example 2.5: My visualization of de Biasi’s (2004) tripartite model.**



<sup>21</sup> This point is significant to the ongoing inquiry of work ontology since, as Andrew Kania argues, the locus of critical attention ought to be the center of any ontological account of artworks; see Kania (2011, 397).

In much genetic criticism, as in musical sketch studies, the Manuscript of Example 2.5 is a relatively fixed object.<sup>22</sup> But in jazz, the Manuscript itself is slippery and fluid. There is no single definitive version of a tune, and any attempt at fixing one (as many fakebook lead sheets arguably endeavor to do) will inevitably result in an incomplete compromise.<sup>23</sup> Instead, it is the dossier that is more concrete, featuring fixed recordings and scores.<sup>24</sup> Connecting the dots between these documents by determining the precise nature of each edge in the network allows us to sketch a clearer image of the unknown Manuscript, to better understand how contradictory drafts may be reconciled against one another. Construed in this way, however, the genetic project risks becoming too comprehensive to be practical. After all, constructing an *avant-texte* that is truly complete would involve documenting and transcribing every material trace, which in the case of a jazz tune would include every recorded performance of a tune, along with every lead sheet in every existing fakebook, every known arrangement, every published transcription, and so on. All of these traces additionally involve what Gérard Genette ([1979] 1992) calls “transtextual” data, such as intertextual relations, pre-learned improvisational formulae, written notations, and other contextual information that may or may not contribute to the identity of the text.

Where should we locate the borders of our study, and how wide and porous should they be? One practical way to begin is by limiting our dossier to only those documents (represented primarily by versions of the tune, whether recordings, lead sheets, arrangements, or remembered performances) featuring the title of the tune in question. Yet

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<sup>22</sup> Whether or not the stability of the final work can be disputed, there often stands a relatively fixed text in the position of the Manuscript.

<sup>23</sup> Bowen writes that “while the lead sheet is an attempt to specify all of the characteristics of a jazz tune, it is really just another type of version, performance or utterance” (1993, 148).

<sup>24</sup> Although these recordings and lead sheets may go on to influence an improviser’s referent, they are fixed as part of the *avant-texte* and only become flexible during the process of transcription (see Chapter 3).



even titles can pose problems thanks to the common occurrence of contrafacts, tunes that replicate another tune's chord progression but replace the melody. If the harmonic contents of two tunes are identical but their titles and head melodies are different, do they belong in one another's *avant-texte*? Because the only substantial difference between a contrafact and the tune on which it is based is usually the head melody, the two documents may be said to be related by more than mere intertextuality. In the case of "All the Things You Are," contrafacts range from new melodies pasted onto the existing chord progression and named differently (e.g., Charlie Parker's "Birds of Paradise," Dexter Gordon's "Boston Bernie," Tadd Dameron's "Jabero," and Mal Waldron's "Anatomy") and arrangements that are titled with puns on the original name (e.g., Hal Galper's "All the Things You Aren't," Bill Evans's "Are You All the Things," and Charles Mingus's "All the Things You Could Be by Now If Sigmund Freud's Wife Was Your Mother"). For Kane, such documents are related by replication, but not *nomination*, resulting in a contrafactual relationship that may or may not be considered part of the larger identity of the tune (2018, 522). Titles are just one among many aspects of what Genette (1987) terms "paratexts," constituted by parameters which, while not typically considered part of the text itself, facilitate access to its content and influence its reading. The paratext of a recording of a jazz tune might include, for instance, cover artwork, liner notes, dedications, information such as the record label, pressing (e.g., test pressing, original pressing, reissue, etc.), track numbers, and position in a setlist or tracklist. In the case of a lead sheet, paratextual information could extend to notation style (neatly typewritten or hastily handwritten), position within a collection (such as the Real Book or other themed fake books), genre descriptions, and so on.<sup>25</sup>

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<sup>25</sup> For more on fakebooks and their histories, especially the notorious underground publication known as the *Real Book*, see Kernfeld (2006).

As such considerations come into focus, the line between what “counts” and what does not becomes increasingly difficult to negotiate. Indeed, Philip Gossett argues that a comprehensive genetic study of a work would not only be impractical, it would be impossible and even *uninteresting*, for it would have little to say outside of its comprehensiveness. Gossett quips that

while we can learn an enormous amount from individual studies, the task of assembling the entire genetic history of any given “work” ... may be beyond us. I know how much I have learned about *La forza del destino* by investigating elements of its genesis, but could I ever produce a complete genetic critique of the opera? And if I did, would anyone read it? (Gossett 2009, 218).

For Gossett, the value of such a project comes from smaller observations made along the way, not from the comprehensive, holistic nature of the project. It may therefore be beneficial to understand *avant-textes* not as exhaustive lists of related sources, but rather as critical arrangements of (some of) those documents. In this sense, *avant-textes* are subjective; every listener develops their own *avant-texte* for a given tune, which may change as the listener becomes familiar with new versions and/or reinterprets relations between versions. Deppman et al. write that the term *avant-texte* “always carries with it the assumption that the material of textual genetics is not a given but rather a critical construction elaborated in relation to a postulated terminal—so called definitive—state of the work” (2004, 8). Understanding *avant-textes* as critical postulations—things that are produced by scholars in order to examine a particular aspect of a work—ensures that the enterprise is not only more practical but that analyses have something to contribute. In this way, we shift our focus from the daunting and perhaps futile quest to comprehensively account for a work and its entire genesis to tracing aspects of that genesis that gradually color in the wider picture—to, as

Thomas Clifton puts it, uncover “*some* essences rather than *the* essence” of a text (1983, 99, emphasis added).

In order to narrow our study, it may be useful to limit our dossier to a number of well known and/or demonstrably influential documents. For “All the Things You Are,” this dossier might include especially popular recordings like those by Dizzy Gillespie and Charlie Parker, Sonny Rollins and Coleman Hawkins, and the Bill Evans Trio alongside the lead sheets from both the illegal (fifth) and legal (sixth) editions of *The Real Book*, Vol. 1.<sup>26</sup> Such an approach may, however, fail to account for more atypical utterances; for this reason it will be useful to contrast these against versions that are especially idiosyncratic and therefore appear to tug at the boundaries of identity. Kris Davis’s 2011 solo recording, which begins pointilistically and bears little resemblance to Kern’s tune until the end of the recording, is a radical case (and will be discussed in more detail below), but we might also include in this category those versions that feature notable reharmonizations and metric alterations, such as recordings by Brad Mehldau and Gerald Clayton. Example 2.6 shows a dossier of documents, arranged chronologically. Determining the network of relations formed by the documents in this dossier would, following de Biasi’s model (Example 2.5), allow us to create an *avant-texte*, helping us to reveal some common traits of the Manuscript while tracing innovations and reinscriptions of those innovations.

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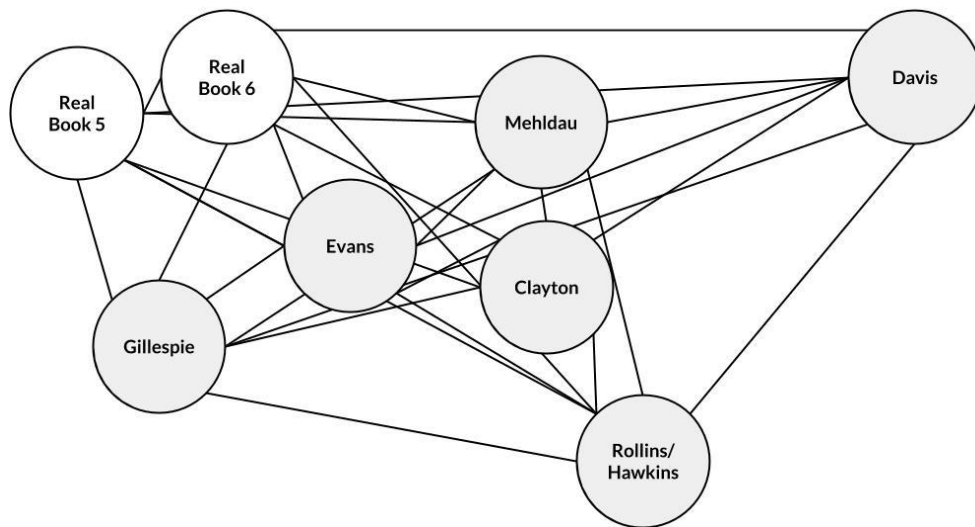
<sup>26</sup> The use of consistent metrics for determining popularity and influence poses a tough, though not insurmountable, problem. While we might use hard data like record sales, radio and streaming service plays or views, and fakebook or lead sheet sales, these versions have all become known through different means of access. In addition, many members of the jazz community would likely have trouble identifying the circumstances through which they became exposed to each version. If all of this makes proving popularity difficult, proving influence is even more challenging. I argue, however, that influence, rather than popularity, is not only the more important of these questions, but also the more tangible for the purposes of the present project, in that influence may be suggested by tracing similarities between the idiosyncrasies of particular versions.

Example 2.6: Dossier of documents under consideration.

Artist/ Author	Album/ Collection	Personnel	Released/ Published	Format
Dizzy Gillespie	<i>All the Things You Are/Dizzy Atmosphere</i>	Dizzy Gillespie (t) Charlie Parker (as) Clyde Hart (p) Remo Palmieri (g) Slam Stewart (b) Cozy Cole (d)	1945	Studio recording
Bill Evans	<i>At Shelly's Manne-Hole</i>	Bill Evans (p) Chuck Israels (b) Larry Bunker (d)	1963	Live recording
Sonny Rollins and Coleman Hawkins	<i>Sonny Meets Hawk!</i>	Sonny Rollins (ts) Coleman Hawks (ts) Paul Bley (p) Bob Cranshaw (b) Roy McCurdy (d)	1963	Studio recording
Unknown	<i>The Real Book, Vol. 1 (5th Edition)</i>	N/A	c. 1975	Lead sheet
Brad Mehldau	<i>Art of the Trio 4: Back at the Vanguard</i>	Brad Mehldau (p) Larry Grenadier (b) Jorge Rossy (d)	1999	Live recording
Unknown	<i>The Real Book, Vol. 1 (6th Edition)</i>	N/A	2007	Lead sheet
Gerald Clayton	<i>Bond: The Paris Sessions</i>	Gerald Clayton (p) Joe Sanders (b) Justin Brown (d)	2010	Studio recording
Kris Davis	<i>Aerial Piano</i>	Kris Davis (p)	2011	Studio recording

Example 2.7 represents the documents in our dossier as nodes of a network, with written documents in white and recorded documents shaded grey. Notably, each node in the network is connected by an edge. The presence of these edges does not indicate a claim of any clear historical connection between the nodes, nor does it suggest that the author(s)/artist(s) involved in the making of one node would have been aware of, or influenced by, the connected document. Rather, these edges are necessary aspects of the network: by virtue of being versions of “All the Things You Are,” a connection of some kind must be able to be established between each pair of documents.

**Example 2.7: *Avant-texte* network of documents in the dossier shown in Example 2.6. Lead sheets are shown in white, recordings in grey.**



What kinds of relationships might these edges represent? For Kane, edges of the network constitute replicated features, aspects shared by both nodes. But edges may also be understood in terms of the differences between nodes. This kind of transformational approach characterizes relations between nodes as the set of operations needed to map one

node onto another.<sup>27</sup> Whereas Kane's replications emphasize the elements that are carried over from one version to another, a transformational approach emphasizes points of contention and, potentially, innovation. Ideally, these two perspectives ought to complement one another: as we trace through the nodes and edges of the network, we can clarify the contributions and idiosyncrasies of each version by focusing alternately on the replications and transformations that cohabit the network edges. By focusing on replications, we highlight possible lines of influence; by focusing on transformations, we highlight moments of difference from which we can draw conflicting conceptualizations of the tune. As we trace both replications and transformations, it is important that we do not automatically ascribe authorial intention or historical influence to such relations. By doing so, we would be confusing difference for innovation and similarity for influence. While the more neutral categories of difference and similarity may be used to tease out concrete historical and creative relationships, the mere presence of a similarity or difference should not alone be used to substantiate such a claim.<sup>28</sup> More detailed analysis will always be necessary, and when such claims are made they are necessarily critical postulations, hypotheses that in most cases cannot be definitively proven.<sup>29</sup>

If an *avant-texte* network is to comprehensively account for all relationships between the documents, each edge would represent an enormous number of features. Even the two *Real Book* lead sheets, which carry a relatively small amount of abstract data compared to the

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<sup>27</sup> This line of thought is indebted to the writings of David Lewin on transformational networks (see especially Lewin 1987).

<sup>28</sup> In this sense, the term "replication" may be rather problematic, since it would seem to imply that any similarities between texts constitute lines of conscious influence.

<sup>29</sup> Although this may at first seem to devalue the work of the analyst, we should be careful not to undervalue such critical postulations. In the case of jazz referents, critical postulations are especially helpful since they can account for and describe a well-informed prototype of a mental construct comprised primarily of procedural knowledge that is otherwise difficult for improvisers to clearly access or articulate.

sonically thick recordings, are connected by an edge dense with information.<sup>30</sup> These lead sheets are compared in Example 2.8, with differences between them summarized in the table below. A list of transformations is provided in the rightmost column of the table. We should note that the emergence of a given document later in history than another does not necessarily imply a causal relationship from the earlier-dated document to the later one. In the table of Example 2.8, the transformations listed take the fifth edition lead sheet as a starting point for ease of reading only.<sup>31</sup>

Given the number of similarities between these two lead sheets and the eminent comparability of them (e.g., their similar formatting, means of representing melody and harmony, one-to-one measure count, and so on), the number of differences and transformations cataloged in Example 2.8 is striking.<sup>32</sup> Should we wish to compare recorded performances, rather than lead sheets, the conditions for comparison become far more complex and the differences cataloged much more numerous.

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<sup>30</sup> Kane (2018) acknowledges this density as among the disadvantages of network representation, but chooses nonetheless to represent standards using such static figures, writing that a network must be “read for what it intends to show: a depiction of the fact that inclusion in a network does not require that some essential property be present in all of its nodes or edges (525–526, endnote 19). I argue that networks, static or not, are useful for more than demonstrating a basic ontological point, and that conceptualizing edges as dense with information helps to convey the complexity of such relationships, even if closer analyses require us to bracket out a large portion of the information represented by each edge.

<sup>31</sup> In this particular case, the sixth edition of *The Real Book* was conceived in part as a corrective to what many feel are errors in the fifth edition. In fact, this is one of the few relationships between documents that can be said to straightforwardly corrective. However, the choices made by the sixth edition are still mediated by many other documents, some appearing earlier than the fifth edition, so we should still be careful not to characterize such transformations as strictly corrective.

<sup>32</sup> Some of the differences cataloged in Example 2.8 (e.g., the enharmonic respelling in mm. 23–24, the melodic anticipation in mm. 17 and 21) are so small as to seem negligible. Yet such differences still arguably blur the identity of the tune, especially the ways in which it may be conceptualized, and therefore contribute to the difficulty of pinning down a definitive version.

**Example 2.8: Differences between the lead sheets for “All the Things You Are” from the Fifth (underground) and Sixth (legal) editions of *The Real Book*, Vol. 1.**

	<i>Fifth Ed. lead sheet</i>	<i>Sixth Ed. lead sheet</i>	<i>Transformation</i>
<b>Intro?</b>	No intro	Gillespie intro	Intro added
<b>m. 14, first half</b>	<b>Melody:</b> Quarter-note triplet  <b>Harmony:</b> D7	<b>Melody:</b> Quarter-eighth-eighth  <b>Harmony:</b> A-7 <sup>b5</sup>	<b>Melody:</b> Rhythmic transformation  <b>Harmony:</b> Local V embellished as ii–V
<b>m. 16, second half</b>	<b>Harmony:</b> Gmaj7	<b>Harmony:</b> E7 <sup>#9</sup>	<b>Harmony:</b> Anticipatory V7/ii added
<b>m. 17, first half</b>	<b>Melody:</b> Half-note D	<b>Melody:</b> Dotted-quarter D, eighth C	<b>Melody:</b> C anticipated, rhythmic transformation
<b>m. 21</b>	<b>Melody:</b> Half-note B, half-note A  <b>Harmony:</b> F <sup>#</sup> -7	<b>Melody:</b> Dotted-quarter B, eighth A, half A  <b>Harmony:</b> F <sup>#</sup> -7 <sup>b5</sup>	<b>Melody:</b> A anticipated, rhythmic transformation  <b>Harmony:</b> Major ii–V changed to minor ii–V
<b>m. 23</b>	<b>Melody:</b> Ab	<b>Melody:</b> G <sup>#</sup>	<b>Melody:</b> Enharmonic respelling
<b>m. 24</b>	<b>Melody:</b> Ab; C+7	<b>Melody:</b> G <sup>#</sup> ; C7 <sup>#5</sup>	<b>Melody:</b> Enharmonic respelling; chord symbol style changed <sup>33</sup>
<b>m. 30</b>	<b>Harmony:</b> Db-7	<b>Harmony:</b> Gb7(13)	<b>Harmony:</b> Harmonic substitution <sup>34</sup>
<b>mm. 34–35</b>	<b>Melody:</b> G5-Ab5	<b>Melody:</b> G4-Ab4	<b>Melody:</b> Transposition down an octave.
<b>m. 36</b>	<b>Melody:</b> Ab  <b>Harmony:</b> (G7-C7)	<b>Melody:</b> Rest  <b>Harmony:</b> (G-7 <sup>b5</sup> -C7 <sup>b9</sup> )	<b>Melody:</b> Note shortened  <b>Harmony:</b> Chain of applied dominants replaced with minor ii–V.

<sup>33</sup> Notably, a dominant seventh chord with a #5 tension indicated could be interpreted differently than an “augmented” dominant seventh chord, although it seems likely that the authors of the sixth edition of *The Real Book* simply wanted to replace the somewhat ambiguous augmented dominant chord symbol with a more widely accepted, standardized one.

<sup>34</sup> This transformation is notable in part because it continues the circle-of-fifths sequence of the first two A sections instead of sliding to the minor subdominant, similar to what Steven Laitz terms a “Hollywood cadence” (Laitz 2012, 429–430). The harmony of this measure is the subject of further inquiry below.



Example 2.9 shows a transcription of the first sixteen bars of the head of the Bill Evans Trio's 1963 recording of "All the Things You Are" at Shelly's Manne-Hole. Compared against the abstract chord symbols of the lead sheets in Fig. 8, the transcription shows a great deal more information, both in the particulars of pitch and rhythm of the melody and in the realization of the chords. There are a number of notable differences that emerge between the lead sheets and this live performance—the Dbmaj7 in m. 5 is replaced by a D-7<sup>b5</sup>, the Ebmaj7 in m. 12 is replaced by a ii–V to the Abmaj7 in m. 13, a #11 is brazenly emphasized in the Gmaj7 chord found in mm. 15–16—but a comprehensive account of these differences is both impractical and, for many of the more minute differences, rather uninteresting. More thorough analysis is necessary to differentiate noteworthy replications and transformations. This methodological step mirrors the analytical intervention of the genetic critic in constructing the *avant-texte* (bridging stages I and II in Example 2.5), sifting through the transcribed "drafts" and searching for developments that reveal creative decisions and lines of influence. However, casting this step as a simple act of analysis glosses over one of the most intimidating challenges surrounding the use of recordings in our dossier: unlike lead sheets, recordings offer a thick sonic structure that listeners sift through to hear "the tune." This activity of "listening-through" is necessary if we wish to compare two recordings.<sup>35</sup>

Disentangling improvised utterances from the referent that helps give rise to them is in most cases a challenging task; arriving at a definitive structure is impossible. A referent serves as a conceptual map that improvisers track alongside an ongoing improvisation;

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<sup>35</sup> The notion of "listening through" a thick structure to an ontologically thinner one is discussed in Kania (2005, 197–198).

**Example 2.9: Transcription of mm. 1–16 of the head statement of the Bill Evans Trio’s 1963 recording of “All the Things You Are” at Shelly’s Manne-Hole.**

Bill Evans (Piano)

Chuck Israels (Bass)

Chords: F-7, Bb-7, Eb7, Abmaj7, D-7b5, G7b9, Cmaj7, C-7, F-7, Bb7, Bb-7, Eb7, Abmaj7, A-7, D7b9, Gmaj7(#11)

referents may therefore be standardized or idiosyncratic, fixed or flexible. Postulating a referent for a given performance does not simply involve transcribing the sounding melodies and harmonies of the recording and writing them in lead-sheet format. Melodic gestures and chord changes often differ between choruses of an individual performance, making it difficult to arrive at a single representative lead sheet. Furthermore, each improviser has their own referent in mind, and distinguishing one improviser’s referent from another involves in many cases an enormous amount of investigative labor.

Consider the Bill Evans Trio’s use of D-7<sup>b5</sup> instead of Dbmaj7 in m. 5 of Example 2.9: Is this an arrangement that was agreed upon prior to the performance or an improvised

substitution? If the latter, who initialized it? Does Israel's confident placement of D natural on the downbeat of m. 5 indicate a prior arrangement, or was Israel simply familiar with Evans playing a D-7<sup>b5</sup> in this measure in other performances? If the latter, is it a part of Israel's referent, or just Evans's? Does the G in Evans's left-hand chordal voicing indicate that Evans feels an 11th is a crucial part of the sound of the chord in this substitution? Is it a conscious doubling of the G in the melody, played by Evans's right hand? Is it a chordal tension thoughtfully added in the moment to emphasize the dissonance of the half-diminished chord? Or is it simply part of a learned voicing Evans often used for comping over half-diminished chords? These questions, which seek to determine the nature of Evans and his trio's creative processes, have implications for the referent, and therefore for our construction of an *avant-texte*, because they necessarily differentiate various improvisational strategies from each improviser's conception of the tune. While most of these questions are impossible to answer definitively, they can still help guide an analysis seeking to posit a consistent reference point.<sup>36</sup> For this reason, it is paramount that an *avant-texte* analysis finds a way to differentiate between layers of the sounding music. Such an activity resembles gazing at a palimpsest, a manuscript that has had its content partially scraped away in order to make room for new text.<sup>37</sup> By examining this sonic palimpsest, we take into account the

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<sup>36</sup> We should note that for a referent to be consistent it need not be totally fixed. I account for this textual fluidity below through the notions of defaults and schemata.

<sup>37</sup> Benjamin Givan (2002) refers to jazz improvisation as a palimpsest through which we can draw information about an improviser's referent (41); I consider the notion of the palimpsest in more detail in Chapter 3. Givan uses the metaphor in order to make sense of jazz performances, where the tune is written over by the improviser's utterances. I offer thanks as well to Philip Duker for the suggestion of a palimpsest as an alternative way of thinking about the conceptualization of jazz tunes.

ways in which the improvisers seem to construe the tune in order to arrive at a critically postulated referent.<sup>38</sup>

Differentiation between improvisational choices and referent content often requires careful analysis that treats each event as unique and contingent on its context. Generalized strategies for such differentiation are therefore difficult to establish, and thus the finer details of our analyses must be worked out on an ad hoc basis. Nevertheless, once we have arrived at a postulation for a harmony, melodic utterance, or other event, there are a few clues that might help us determine the likelihood that the given event represents an aspect of an improviser's referent (or is otherwise part of an arrangement; we will return to this distinction below). The rubric shown in Example 2.10 may be used to search for the consistent presence of a given event throughout a performance. Following this rubric may help us to (1) distinguish the referent from improvised alterations within a given performance; (2) determine essential features across multiple versions; and (3) trace trends of conceptualization within and across artists' oeuvres, historical eras, and styles.<sup>39</sup>

Rather than cataloging exhaustively the similarities and/or differences between two documents, this rubric allows us to focus on a single feature as a means of determining how that feature proliferates through the documents of an *avant-texte*. To demonstrate this process, let us hone in on the harmony of m. 30 in the Bill Evans Trio's 1963 performance. Note that in Example 2.8, the fifth edition of *The Real Book* is listed as having Db-7 in this

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<sup>38</sup> While it might at first seem that we are committing the intentional fallacy, we should note that we are not confusing intention with analytical relevance; rather, we are attempting to approximate the conceptual model used by the improviser, which requires engaging with, and perhaps proposing or at least imagining, the ways in which certain creative decisions might have been made.

<sup>39</sup> Referents, arrangements, and defaults are discussed in more detail in Chapter 4.

**Example 2.10: Rubric for identifying default referent and arrangement features in a standard head–solos–head format.**

<i>Does the feature occur in (or is it otherwise suggested by) ...</i>	<i>Yes</i>	<i>No</i>
... one or both head statements?	More likely to be a feature of an arrangement and/or all improvisers' referents	Less likely to be a feature of an arrangement and/or all improvisers' referents
... most or all choruses of a given improviser's solo?	More likely to be a feature of that improviser's referent	Less likely to be a feature of that improviser's referent
... both solo and comping parts of the texture?	More likely to be a feature of both soloist and comping improviser's referent	Less likely to be a feature of both soloist and comping improviser's referent
... multiple improviser's solos?	More likely to be a feature of an arrangement and/or all improvisers' referents	Less likely to be a feature of an arrangement and/or all improvisers' referents
... multiple improviser's comping?	More likely to be a feature of an arrangement and/or all improvisers' referents	Less likely to be a feature of an arrangement and/or all improvisers' referents

measure, while the sixth edition has Gb7.<sup>40</sup> If we wish to compare the Evans trio's performance to other documents in the dossier, which chord should we select as representative of the Evans trio's performance?

A number of important tonal relationships exist between Db-7 and Gb7. First, they are the ii7 and V7, respectively, of Cb major.<sup>41</sup> When extended diatonically, they therefore

<sup>40</sup> The arrangement found in Kern (1955, 136) features Db-6; it is worth noting that Db-6 presents an interesting compromise between Db-7 and Gb7 by including the sound of the minor subdominant and the third of Gb7.

<sup>41</sup> It is possible to play both chords together in m. 30, resulting in a ii–V of Cb. In practice, this does not appear to be a common choice, perhaps because doing so would break the otherwise consistent harmonic rhythm of one chord per measure.

share the same tones.<sup>42</sup> For this reason, it can be difficult to distinguish between them, especially if there is a conflict between, for instance, the bass and piano. If, for example, Evans plays a voicing for a Db-7 but Israel plays a Gb, the strength of the bass may recontextualize Evans's voicing not as Db-7 but as Gb7, making it nearly impossible to tell which chord Evans intended to play. There are a few ways we might distinguish between the two chords, however. First, the presence of a structural (i.e., non-embellishing) Cb, the chordal seventh of Db-7, may suggest the improviser in question is playing Db-7, especially if that Cb participates in a larger voice-leading line as a guide tone. By contrast, a Cb would likely sound awkward when played harmonically against a Gb7 chord; in some jazz pedagogies, the tone would be considered a “harmonic avoid tone” because of the potential minor ninth that could sound between it and Bb.<sup>43</sup> Conversely, the presence of a structural Bb is more likely to indicate a Gb7, where Bb acts as the chordal third. A Bb sounding harmonically over a Db-7, while not entirely uncommon, is frequently avoided, especially in the case of ii–V, so as to preserve the arrival of Bb as a crucial guide tone of Gb7. Similarly, an emphasis on Gb is somewhat more likely to indicate a Gb7 than a Db-7 because it is less likely to appear as the eleventh of Db-7 than the root of Gb.

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<sup>42</sup> If an improviser is thinking in terms of chord-scales, a common pedagogical device for determining what notes to play over a given chord, the two default chord-scales (Db dorian, Gb mixolydian) are rotations of the same parent scale. It is worth noting that Evans had likely become familiar with the notion of chord-scale equivalence through exposure to George Russell's *The Lydian Chromatic Concept of Tonal Organization* (1959), but that he likely saw it as a compositional device (where tunes are composed using scales/modes) rather than an improvisational strategy. Furthermore, Evans's improvisational style was very developed by the time he encountered Russell's theories. Nonetheless, for an improviser who understands harmony through the prism of chord-scale theory, the sharing of a parent scale could diminish the differences between the two chords, or otherwise suggest further differentiation strategies based on whether a so-called “avoid tone” sounds. For more on chord-scale theory, see Stover (2014) and McClimon (2016, Chapter 4).

<sup>43</sup> Harmonic avoid tones are one of the core tenets of the chord-scale theory system taught at Berklee College of Music. For an overview of this system, see Mulholland and Hojnacki (2013).

The ensemble role of each instrument may also help us determine possible features of a referent.<sup>44</sup> For example, whereas the piano in a piano trio is often responsible for supplying crucial voice-leading lines, the bass is typically expected to sound the root of the chord in a metrically strong or otherwise significant position. For this reason, a Gb or Db emphasized in the bass may suggest that the bassist was thinking of Gb7 or Db-7, respectively. Likewise, the presence of a guide-tone line in the piano may suggest Gb7 (C—Bb—Bb over Dbmaj7—Gb7—C-7) or Db-7 (C—Cb—Bb over Dbmaj7—Db-7—C-7).<sup>45</sup>

Using these guidelines (among other analytical clues), Example 2.11 shows a critical postulation of which chord Evans and Israels seem to be instantiating through each chorus of their 1963 recording. (Drummer Larry Bunker also would have had a referent in mind, but it may or may not have specified the chord in m. 30, and he has no means by which to articulate the tonal aspect of his referent.) Referring to the rubric in Example 2.10, a few telling observations may be made. First, while Israels consistently sounds a Gb in both head statements, Evans does not—he seems to play a Gb in the first head but reverts to Db-7 in the second. This seems to suggest that there was no particular arrangement made prior to the recording, at least for this measure. The solos are more consistent: Evans implies a Db-7 in all three choruses he takes, whereas Israels mostly implies Gb7 throughout his solo. This may suggest that Evans's default chord in m. 30 is Db-7, while Israels's is Gb7. Interestingly, in the first solo Israels takes, Evans seems to first play a Db-7 before adding a Gb7 halfway through the measure. This could simply be interpreted as a ii–V (albeit one that Evans does

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<sup>44</sup> For more on ensemble roles, see Monson (1996), Hodson (2007), and Michaelsen (2019).

<sup>45</sup> That said, we might also consider the possibility that an improviser may gloss over the harmony in this measure, treating it as a more-or-less undetermined harmony. This is in many ways akin to attending only to the harmonic plan of a deeper structural level. Such an approach resonates with Schenkerian thinking and would not have been unusual for Evans; Steve Larson (2009, 10–32) discusses the similarities between Evans's remarks on compositional structure and those of Schenkerian theory, noting that Evans was a student at Mannes College of Music, a conservatory with a long history of Schenkerian influence.

not add elsewhere),<sup>46</sup> but it seems as likely that Evans noticed Israel's use of Gb7 and switched to playing this chord mid-measure to better accompany him. Evans notably continues to use Gb7 in his comping in the following chorus, perhaps suggesting that he consciously changed his chord choice to better suit Israel's soloing.

Given this evidence, it would seem likely that Evans and Israel have conflicting referents, at least as far as the harmony of m. 30 is concerned. Israel seems to clearly favor Gb7, whereas Evans appears to prefer Db-7, with Gb7 as a possible alternative. In this way, m. 30 of Evans's referent is not fixed but *fluid*.<sup>47</sup> We might represent such fluid features as *defaults* of varying levels in each improviser's referent. For Evans, m. 30 of his referent contains multiple possible harmonies: Db-7 constitutes a first-level default, with Gb7 as a second-level default.<sup>48</sup> Notice that we have not relegated the Gb7 to the realm of in-the-moment improvisational decisions but instead have included it as part of the referent. After all, Evans seems to include the chord in the very first head statement. Had Evans only played the chord in response to Israel's consistent use of it, its inclusion as part of our postulation of Evans's referent may not have been warranted. Importantly, the existence of only two defaults for the harmony of this measure in our postulated referent does *not* foreclose other possibilities in the moment of improvisation. Instead, events that diverge from these are better understood not as referent features but as the products of other

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<sup>46</sup> This is notable because Evans consistently adds ii-Vs in mm. 12 and 28, implying that those are part of an arrangement, or his referent generally, but the content of m. 30 is not.

<sup>47</sup> Literary scholar John Bryant (2007) defines a fluid text as "any written work that exists in multiple material versions due to revisions (authorial, editorial, cultural) upon which we may construct an interpretation" (17). Fluidity, as the simple existence of multiple conflicting versions, is shared by musical and literary texts. The qualities of that fluidity are in each case different, however, especially in how musical and literary texts negotiate the divide between textuality and ephemeral discourse.

<sup>48</sup> My use of this terminology is borrowed from and inspired by Hepokoski and Darcy (2006); their theory of sonata form as dialogic and conformational resonates strongly with many aspects of the present work. I discuss defaults in more detail in Chapter 4.



**Example 2.11: Table indicating what chord seems to be played in m. 30 by each musician in each chorus of the Bill Evans Trio's performance.**

	Head, melody played by Evans	Evans Solo 1, Chorus 1	Evans Solo 1, Chorus 2	Israels Solo, Chorus 1
Bill Evans (p)	Gb7	Db-7 (Guide tones C-Cb)	Db-7 (Guide tones C-Cb)	Gb (possibly converted to a ii-V: Db-7 Gb7)
Chuck Israels (b)	Gb7	Gb? (Difficult to hear downbeat, possibly Gb. However, Gb is emphasized on beat 3)	Gb	Db-Ab-Gb-Db (Likely Gb7, with Ab acting as an appoggiatura)

	Israels Solo, Chorus 2	Israels Solo, Chorus 3	Israels Solo, Chorus 4	Israels Solo, Chorus 5
Bill Evans (p)	Gb7	N/A	N/A	N/A
Chuck Israels (b)	Gb7 (Db down to Gb)	? (Eb-Db, quoted from head melody)	(indiscernible, mostly rest)	(C-Eb) More likely Gb7, since C would clash with Cb. Anticipation of C-7 in m. 30 (same gesture is played in both measures).

	Israels Solo, Chorus 6	Israels Solo, Chorus 7	Evans Solo 2, Chorus 1	Head, melody played by Evans
Bill Evans (p)	N/A	N/A	Db-7 (C-Cb-Bb gt line)	Db-7
Chuck Israels (b)	Bb-Ab-Fb-Db (transformation for previous measure, with Fb replacing F. Could fit either chord.)	Db-Fb-Gb (likely Gb7)	Db-Gb (likely Gb7 or ii-V)	Gb7

improvisational decisions and strategies. For example, common harmonic substitutions like tritone subs (which *substitute* for a default chord) constitute strategies independent of any given tune and would therefore not qualify as referent features unless the use of the substitution is so prevalent in a given performance as to constitute a default in its own right.

How do the defaults of the Evans trio's performance compare to those of other documents in the dossier? Example 2.12 shows postulations for the harmony of m. 30 in the Dizzy Gillespie sextet's 1945 performance of "All the Things You Are." Featuring only two choruses (one head and one chorus of solos, with the melody passed around between the musicians in both choruses), consistency of the chords is easier to locate, but because so few of the musicians are heard, consensus on the chord changes is more difficult to pin down. From what little information there is, we can glean that Gb7 appears to be the default chord in at least a few of the musicians' referents.

**Example 2.12: Table indicating what chord seems to be played in m. 30 by each musician in each chorus of the Dizzy Gillespie sextet's performance.**

	Head, melody passed from Gillespie (AA) to Parker (B) to Stewart (A)	Solos, passed from Hart (AA) to Palmieri (B), to Gillespie (A)
<b>Dizzy Gillespie (t)</b>	N/A	Gb, Fb. Would work over Db-7 but emphasis on Gb seems to suggest Gb7. Notably a transposition of original melody up a m3
<b>Charlie Parker (as)</b>	N/A	N/A
<b>Clyde Hart (p)</b>	Gb7	Gb7
<b>Remo Palmieri (g)</b>	(inaudible)	(inaudible)
<b>Slam Stewart (b)</b>	Orig. melody, Eb-Db. Fits either chord.	Gb7 (root emphasized)

As we trace the edges of our *avant-texte* network, then, Gb7 and Db-7 both emerge as first- and second-level defaults. The notion of defaults helps here to capture the multiplicity of jazz improvisation while acknowledging that norms not only emerge from across *avant-textes* but arguably help certain features proliferate through the network.

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If the dossier of Example 2.6 represents stage I of Example 2.5 and the *avant-texte* network of Example 2.7 represents stage II, how should we construe stage III, the Manuscript? Is it a platonic form, a proper musical work that governs the instantiation of the tune in each of its manifold written and performed contexts? Rather than retread this well-worn and fraught ground,<sup>49</sup> I suggest that, in jazz, the manuscript (and therefore “the tune”) can more productively be understood as a set of defaults grounded in the network of textual and discursive utterances that emerge through an analyst’s engagement with each document.<sup>50</sup> In other words, analysts’ referents are shaped by the analytical actions that constitute the construction of an *avant-texte*. This concept becomes more fruitful still if we expand our notion of “the analyst” to include listeners and improvisers who engage with (however actively or passively) those same textual/discursive utterances, forming their own *avant-texte* through their interpretation of the network edges. In this way the genetic-critical enterprise becomes a reflection of the cyclical process through which referents are formed by

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<sup>49</sup> For an overview of some of the philosophical issues surrounding the ontological status of jazz tunes, see Lewis (2019), Kane (2018), Love (2016), and Kania (2011). Some of these ontological issues are addressed from a music-theoretical standpoint in Martin (2018a, 2018b, forthcoming), Stover (2017), Strunk (2003), and Zbikowski (2002).

<sup>50</sup> My use of the term “default” is influenced by the work of Hepokoski and Darcy (2006). For more on defaults, see Chapter 4 of this dissertation.

improvisers and reconciled on the bandstand, forming new documents that subsequently go on to shape (and revise) the referents of other listeners and improvisers (see Example 1.5).

## Analytic Vignettes

Tracing through the nodes and edges of our *avant-texte* network for “All the Things You Are” may yield more revealing insights about the tune’s history, and possibly its future as well. The remainder of this chapter consists of analytic vignettes examining several recordings of “All the Things You Are” and explores the ways in which our construction of an *avant-texte* might reveal how certain features may or may not impact our referent and, therefore, our conceptions of the tune.<sup>51</sup>

### *Odd Meters, Odd Features: Distinguishing between Arrangement and Referent*

In his recent book detailing the developments jazz underwent in the late twentieth and early twenty-first centuries (cleverly entitled *Playing Changes*), music critic Nate Chinen describes Brad Mehldau as “an inward-seeking rhapsodist with a wary ambivalence about jazz’s canon and conventions” (2018, 32). Chinen casts Mehldau, along with fellow pianists Robert Glasper and Vijay Iyer (among many others), as instigators of a paradigm shift in how jazz engages with its history and traditions. Mehldau represents a convenient locus for such a

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<sup>51</sup> A number of published studies that examine the relationships between versions of a tune may also serve implicitly as *avant-texte* tracings. These include Bowen (1993), which traces the history of Thelonious Monk’s “Round Midnight”; Alper (2011), which uses “What Is This Thing Called Love?” as a lens through which to view styles of pianism; Michaelsen (2019), which traces Miles Davis’s history with “My Funny Valentine”; Meyers (2015), which considers stylistic changes in Davis’s performances of “I Fall in Love Too Easily”; and Bowen (2015) and Kane (2018), both of which examine “Body and Soul.” Bowen’s study provides an especially detailed account and is probably the closest any extant study has come to a complete genetic-critical account of a jazz tune.

turning point in part because his early performances seemed to point in so many directions at once: backward to the virtuosity and hip aesthetic of the bebop era, outward to popular and classical musics, and forward to a vision of jazz as both grounded in tradition and radically postmodern.

For Chinen, much of this attitude is epitomized in Mehldau's now-famous rendition of the standard "It Might as Well Be Spring," played in a spritely 7/8 rather than the original 4/4. Instead of sounding "herky-jerky or cerebral," Chinen says, Mehldau's version "feels natural, even inevitable" (2018, 32). Throughout much of the history of jazz, the use of unusual time signatures was often relegated to original compositions, with the most famous being the 5/4 vamp of Paul Desmond's "Take Five" as recorded by Dave Brubeck Quartet. Alterations of standards were more typically harmonic and melodic (or even formal in the case of added sections, breaks, and so on) so as to retain much of the familiarity that those standards brought along with them.<sup>52</sup> Mehldau's conversion of the meter of a standard in this way served a clear purpose: by casting a well-worn standard in a distinct and slightly disorienting metric mold, Mehldau and his trio communicated a sense of novelty alongside their usual virtuosity. Whereas many earlier performances of the tune maintain a steady, medium tempo, Mehldau's take is brisk, making the 7/8 meter even more difficult for most Western listeners to entrain to.<sup>53</sup> The virtuosic nature of the performance simultaneously made clear that the tune was fully ingrained as part of each of the musicians' vocabularies (thereby establishing a clear link to the jazz lineage) and that a reverential attitude toward that lineage was not a necessary condition for a successful performance of the tune.

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<sup>52</sup> See Kane (2018, 523).

<sup>53</sup> For more on the concept of metric entrainment, see London (2004).

The Mehldau trio's live performance of "All the Things You Are" at the Village Vanguard, captured on the 1999 album *Art of the Trio 4: Back at the Vanguard*, similarly replaces that tune's original simple quadruple meter with a quick-paced 7/8. This is perhaps the most immediately salient innovation, but a number of more subtle features also help emphasize both the novelty and virtuosity of the performance. Mehldau begins the performance solo, eschewing the popular Dizzy Gillespie introduction (see Example 2.2) and instead clearly outlining the descending-fifths sequence that characterizes the A section. The relative clarity of the harmony is especially notable due to the unfamiliarity of the meter, the complexity of which is compounded by Mehldau's use of cross-rhythms between the left and right hands. A number of subtle reharmonizations are introduced throughout, but the most notable harmonic innovation arrives during the last eight measures of each chorus. Example 2.13 compares Mehldau's changes against a more common set of defaults. (The head appears in A major twice throughout the performance, and never in the more common key of Ab major.) Through a number of smooth voice-leading maneuvers, Mehldau tonicizes Bb, bII in the key of A major (mm. 32–33), reversing the centripetal tonal motion momentarily, thereby helping to loosen the grip of the primary key just as the trio moves into the next chorus. This mid-phrase tonicization helps facilitate a series of modulations between choruses, shown in Example 2.14. Note how the transpositions mostly descend through the circle of fifths, mimicking the opening descending-fifths sequence of the tune's A section.


Although the Gillespie introduction does not appear at the beginning of the performance, the trio repurposes the vamp as an extended outro over which drummer Jorge Rossy solos. The intro's descending motive is reharmonized, recycling many of the same chord changes used in mm. 29–36 of each chorus (see Example 2.15). Again, Mehldau uses

the tonicization of Bb major in order to disrupt the tonal stability of the progression, ensuring that there is a persistent element of surprise. That the trio chooses to reharmonize the Gillespie intro, itself at one time an innovation, speaks to the multiply directed aesthetic of Mehldau and his cohort: the new and old innovations are not only rubbing shoulders in the same performance, but they become thoroughly blended together.

**Example 2.13: Comparison of Mehldau's changes for mm. 29–36 against more common defaults.**

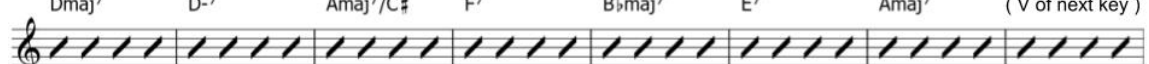
Common defaults (transposed to A major for comparison)

29	30	31	32	33	34	35	36
Dmaj <sup>7</sup>	D- <sup>7</sup>	C <sup>♯</sup> - <sup>7</sup>	C <sup>o</sup> <sup>7</sup>	B- <sup>7</sup>	E <sup>7</sup>	A <sup>♯</sup> maj <sup>7</sup>	( G <sup>♯</sup> - <sup>7</sup> / <sub>5</sub> C <sup>♯</sup> <sup>7</sup> / <sub>9</sub> )

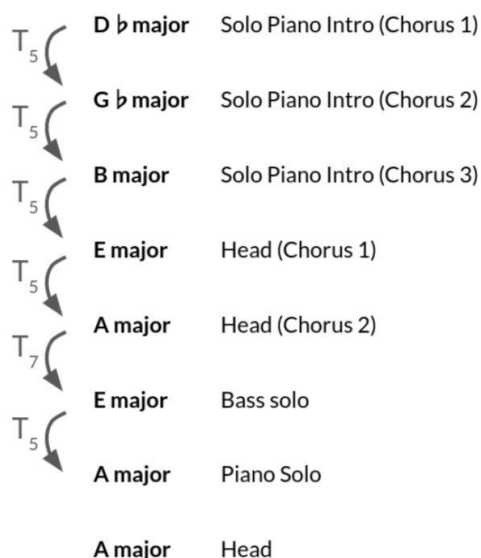


Mehldau reharmonization:

29	30	31	32	33	34	35	36
Dmaj <sup>7</sup>	D- <sup>7</sup>	A <sup>♯</sup> maj <sup>7</sup> /C <sup>♯</sup>	F <sup>7</sup>	B <sup>♭</sup> maj <sup>7</sup>	E <sup>7</sup>	A <sup>♯</sup> maj <sup>7</sup>	( V of next key )

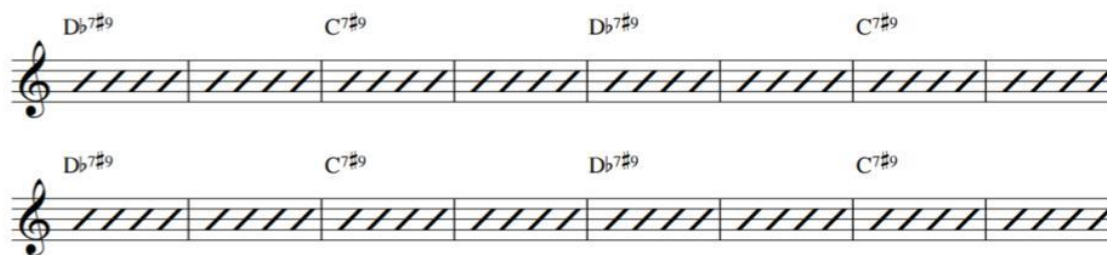


**Example 2.14: Modulation scheme between choruses of the Brad Mehldau Trio's 1999 performance.**

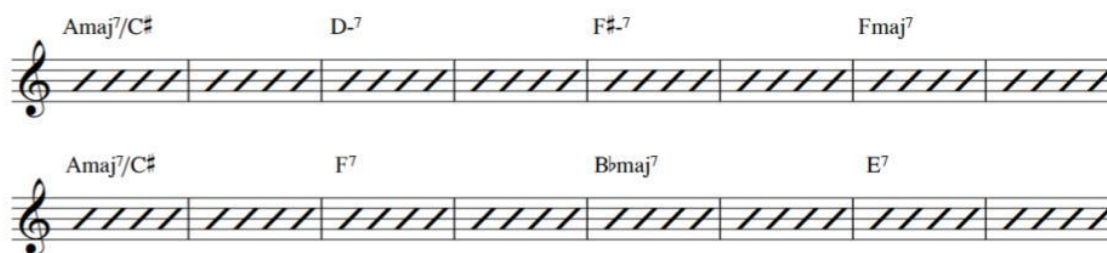


**Example 2.15: The Brad Mehldau Trio's reharmonization of the Gillespie intro.**

Gillespie intro:



Mehldau reharmonization:



If an improviser becomes familiar with Mehldau's performance, there is a possibility that aspects of these innovations may find their way into a future performance by that improviser. Yet the precise nature of the relationship between innovation and replication is seldom clear or simple: whereas some innovations are picked up by improvisers and consciously implemented into their performances, others become ingrained through repeated exposure, unknowingly integrated into a performance. It will be useful to distinguish between these two types of replicated features:

1. Features of a performance that are both consciously implemented *and planned before the performance* may be said to be *arrangement features*.
2. Features that are integrated into an improviser's referent and represent, for that improviser, *the default version of the tune*, may be said to be *referent features*.<sup>54</sup>

<sup>54</sup> This way of thinking about features resonates with Kane's theory that, in jazz, work-determinative properties may be considered "sufficient but not necessary" for establishing work identity; see Kane (2018, 507).



Despite this seemingly clear distinction, arrangement and referent features can sometimes blur together. Perhaps the most salient example of this, in the case of “All the Things You Are,” is the Gillespie introduction. This introduction, shown in Example 2.2, is comprised of a distinctive falling melodic motive (played in a lower register but often doubled in an upper register) answered by a sustained dominant-sharp-nine chord, and bears no clear relation to the rest of the tune. It is not found in *Very Warm for May*, the musical from which “All the Things You Are” is culled, nor in any performance predating the Dizzy Gillespie sextet’s 1945 recording, but it has become a popular addition since then, appearing in seven of the eight documents in the dossier of Example 2.7. Despite its popularity, it remains an optional addition because it does not interfere with the tune’s chorus structure. Including this intro (or outro, where it also frequently appears) in a performance will often be the result of an arrangement decided on by the improvisers ahead of time. But because the intro begins with a pickup, those who are familiar with it will not always need to be aware of its inclusion prior to the performance to successfully pick up on it; a competent improviser may simply need to hear the first few notes to realize that it will be included. Well-known intros and endings like this one, although typically devised originally as arrangement features, often become referent features through convention as improvisers become familiar with them over time and implement them on the fly.

Some arrangement features are less predisposed to become referent features. While Mehldau’s performance is certainly striking, many of its innovations are difficult to integrate into an improvisational referent. Features like the use of 7/8 meter, the tonicization at the end of each chorus, and the overarching transpositional scheme that organizes modulations between choruses are difficult to integrate into a performance (especially by an ensemble) without agreeing to do so beforehand. Indeed, attempting to include such features on the fly

would risk the emergence of a clash, and could threaten to pull the performance apart should any of the improvisers involved in the performance not be aware of these particular innovations (perhaps even constituting a social *faux pas*; see for instance Ofer Gazit's discussion of "vibing" in Gazit 2015, 44–45). The extent to which an arrangement feature is predisposed to be adapted as a referent feature may arguably be taken as a sign of how central that kind of feature is to the average jazz improviser's sense of tune ontology.

Other arrangement features, such as Mehldau's reharmonization of the Gillespie intro, are more capable of becoming referent features over time. There a number of reasons for this: First, the reharmonization does not necessarily risk clashing too harshly with what other players might play if they do not or cannot pick up on the reharmonization. Second, the intro does not carry a great deal of tonal-structural significance (especially considered as a vamp) besides its second chord, C7<sup>#9</sup>, acting as the dominant of F-7, the first chord of the A section; this dominant function is arguably still somewhat present in Mehldau's arrangement because the melodic motive outlines that chord via its fifth and root. Finally, other, more subtle reharmonizations of this intro exist (see the Evans trio's 1963 recording, for example), opening the door for improvisers to provide alternate reharmonizations of this material, including those played by Mehldau.

This is not to say that arrangement features are incapable of replication. While playing "All the Things You Are" in 7/8 in an ensemble setting without any prior discussion of doing so carries many aesthetic (and social) risks, improvisers take these arrangement choices and implement them as part of their own arrangements frequently.<sup>55</sup> A particularly striking example of this practice may be heard in the Gerald Clayton Trio's 2010 studio

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<sup>55</sup> An internet search for performances of "All the Things You Are" in 7/8 or 7/4 yields dozens of amateur recordings, some explicitly acknowledging the influence of Mehldau.

recording, which features a clever spin on Mehldau's odd-meter conversion. Rather than playing the entire performance in 7/8, only the first two A sections are played in 7/8, with each B section played in 6/8 and the final A section of each chorus played in 5/8. This effectively adds a sense of ongoing contraction to the already-lopsided feel provided by the odd-meter framework.

**Example 2.16: Foreshadowing of metric contraction in the introduction of the Gerald Clayton**

**Trio's recording of "All the Things You Are."**

<u>Introduction:</u>										
<i>m.</i>	1	2	3	4	5	6	7	8	9	10
<b>Chord:</b>	Dbmaj7	C-11	Dbmaj7	C-11	Dbmaj7	C-11	Dbmaj7	C-11	Dbmaj7	C-11
<b>Meter:</b>	7/8	6/8	5/8	7/8	6/8	5/8	7/8	6/8	5/8	7/8

<u>Chorus:</u>				
<i>Section (mm.)</i>	<i>A (mm. 1–8)</i>	<i>A (mm. 9–16)</i>	<i>B (mm. 17–24)</i>	<i>A (mm. 25–36)</i>
<b>Meter:</b>	7/8	7/8	6/8	5/8

The Clayton trio's arrangement even foreshadows this contraction in its reworking of the Gillespie intro: instead of adopting Mehldau's reharmonization (which is tied to some extent to his reharmonization of mm. 29–36), Clayton opts for a subtler reharmonization, retaining the roots of both chords (Db7 and C7 become Dbmaj7<sup>#11</sup> and C-11, respectively) and focusing attention on sudden metric shifts (see Example 2.16). These metric shifts mirror those that happen in the chorus, but rather than changing meter at the start of a new section, the meter changes at the start of each measure. Clayton, who has acknowledged

Mehldau as an influence,<sup>56</sup> seems to be simultaneously adapting one of Mehldau's signature innovations while contributing something new to that same aspect of the tune.<sup>57</sup>

*Contesting Tradition Within and Beyond the Borders of Identity*

Although referents and arrangements serve important roles in jazz improvisation, they only constitute part of the larger poietic process behind a given performance. Other aspects of a performance's poiesis may include sets of melodic and/or harmonic formulas with which each musician is familiar, music-theoretical fundamentals such as how certain chords and scales may be related, the unfolding context of the improvisation against which future utterances may be determined, and various other improvisational strategies. In some cases, the latent trace of a tune's recorded history is overshadowed by these other aspects of poiesis.

A particularly fascinating example of this is a 1963 recording of "All the Things You Are" from the album *Sonny Meets Hawk!*, featuring several generations of pathbreaking improvisers, including tenor saxophonists Coleman Hawkins and Sonny Rollins, and pianist Paul Bley. The unusual meeting of the two tenor sax players produced a strange rendition of the tune; both saxophonists' solos are more progressive than is typical of their styles, though Rollins's is particularly avant-garde.

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<sup>56</sup> In a blindfold test for *DownBeat* conducted by Dan Ouellette, Clayton remarked, "I don't know a single modern pianist who hasn't taken something from Brad. I told him that I should be arrested for all the stuff I've stolen from him" (Ouellette 2013, 106).

<sup>57</sup> Despite this seemingly clear line of influence, however, it is worth noting that such procedures are common in Clayton's music, and especially in his interpretations of standard tunes. For example, his recording of the standard "If I Were A Bell" (from the same album) groups sixteen beats into 3+3+10 and reharmonizes the tune's typical Broadway harmonies using gestures drawn from blues and gospel music.

In their 2016 article “Capturing the Ineffable: Three Transcriptions of a Jazz Solo by Sonny Rollins,” René Rusch, Keith Salley, and Chris Stover use Rollins’s solo as a prism through which to view a variety of issues pertaining to jazz-solo transcription, producing a thorough analysis along the way.<sup>58</sup> Each author comments on the seeming ambivalence with which Rollins appears to regard the context that the tune provides in his solo: Rusch notes that Rollins’s “melodic lines ... seemed to lie outside of the harmonic progression” (Rusch et al. 2016, 2.1), while Salley notes how “tonally and rhythmically divergent” the solo is (ibid., 3.1). Indeed, the relationship between Rollins’s solo to the harmonic content of the tune is sometimes so thin that, as Rusch comments, “[t]he times when Rollins swerved back into alignment with the changes or the fast 4/4 meter lent an overall flair to his startling detours, making his choice of pitches and rhythms seem cryptic and extraordinary” (ibid., 2.1). Stover notes this “recalibration” as well; his transcription lays bare the contrast between what he refers to as a stretched “down-home blues lick” and conventional bop phrasing (ibid., 4.6).<sup>59</sup> This contrast leads Stover to read aspects of Rollins’s solo as sarcastic imitations of Hawkins’s style. We should note that this contrast also highlights how clear articulation of or alignment with the referent can in some cases mark (or set into relief) especially expressive and meaningful improvisational gestures.

Pianist Paul Bley’s solo is similarly adventurous. While his rhythm and phrasing are more traditional than those in Rollins’s playing, Bley nonetheless frequently departs from the changes established throughout the rest of the performance. Norman Meehan, whose transcription of Bley’s solo is adapted in Example 2.17, argues that Bley’s strategy consists of

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<sup>58</sup> Indeed, the authors argue that their transcriptions and the comparisons that emerge between them constitute a “rich plural analysis” (Rusch et al. 2016, 5.8).

<sup>59</sup> See Stover’s Figure 9, which is a transcription of mm. 4A2.3–6 of Rollins’s solo, where Rollins suddenly “recalibrates” and clearly outlines the changes with a phrasing more typical of his usual style.

“play[ing] a phrase in a tonality completely unrelated to the underlying chords” (2002, 92). He cites mm. 77–84 (3A1.5–3A2.4) of Bley’s solo, where a phrase in D major is superimposed over chord changes that suggest keys of A-flat major, C major, and E-flat major. Rather than simply playing “out,” Bley’s conspicuous superimposition of a coherent diatonic collection over conflicting harmonies seems to simultaneously communicate knowledge of the referent and a desire to produce tension against it. Indeed, Bley’s utterances only appear avant-garde *because of* the context provided by the referent. Stripped of its contextualization, Bley’s utterances would likely sound not only consonant but possibly dull and meandering. Perhaps even more so than Rollins, Bley relies on the context of the tune and, crucially, the *listener’s knowledge of the tune* (especially its status as a familiar and much-performed jazz standard) to serve as a stable backdrop against which expressive gestures can be formed.

**Example 2.17: Excerpt from Meehan’s (2002, 109–110) transcription of mm. 73–84 of Bley’s solo on “All the Things You Are.”<sup>60</sup>**

73 Fmin<sup>7</sup> Bbm<sup>7</sup> Eb<sup>7</sup> Ab Db

78 Dmin<sup>7</sup> G<sup>7</sup> C

81 Cmin<sup>7</sup> Fmin<sup>7</sup> Bb<sup>7</sup> Eb

D major

D major

D major

<sup>60</sup> Meehan’s transcription makes use of a one-flat key signature, though it is unclear why since the performance does not at any point tonicize F major or D minor.

Many of the utterances of this performance are not optimally replicable, especially because melodic and harmonic utterances are strung together: Whereas a single salient harmonic substitution could be recalled by an improviser in a later performance, the frequency with which Bley moves outside of the chord changes, as well as the extent to which his utterances seem to be indicative of his established style (and that of his influences, especially Ornette Coleman), renders the possibility of future replications unlikely, at least inasmuch as the influence would be sonically recognizable and attributable. This is not to say that this performance lacks innovation or influence; on the contrary, it is a much-discussed recording, and Bley's solo in particular has been identified by many musicians as a critical juncture in their budding conceptualization of how a jazz solo may be constructed.<sup>61</sup> But it seems unlikely that specific utterances in his solo have the capacity to be transmitted across versions and therefore to become enjoined with the identity of the tune. Put differently, the innovations in this performance do not entangle themselves with the referent but are instead stated in *relief* to it.

A similar approach is taken by pianist Kris Davis, whose 2011 solo recording of “All the Things You Are” pushes against the borders of identity, using the familiarity of its tonal structure as a thread to guide listeners through an otherwise atonal and ametric environment. Her performance begins freely and pointilistically, as if consciously avoiding any reference to Kern's composition. After a few minutes, aspects of the tune's structure emerge: the characteristic descending-fifths sequence and mediant modulation appear like ethereal glimmers beneath an otherwise atonal surface (see Davis's recording, 3:40–3:55). Gradually, a familiar set of chord changes appears, and by the end of the recording the tune is made plainly audible (in her recording, see especially 5:00–5:19).

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<sup>61</sup> See Kevin Sun's blog (Sun 2015) for testaments from a variety of established jazz musicians acknowledging the influence of Bley's solo on the *Sunny Meets Hawk!* recording.

This emergence of clarity strategically coincides with the end of the tune's chorus: just as the performance coalesces into a recognizable rendition of the tune, the performance ends. But in a sly reference to the tune's history, Davis replaces the final tonic with a cascading trichord borrowed from the Gillespie intro. Eschewing the rhythmic and harmonic content of the intro, she repurposes the descending, three-note melodic gesture and swiftly brings it crashing down in octaves to the bottom of the keyboard (in Davis's recording, 5:29–5:34). This gesture serves not only to abruptly and surprisingly bring an end to this iteration of the tune, but to remind us that even this elusive, fractured performance is in dialogue with an *avant-texte*. Despite Davis's proclivity toward free improvisation, her experimental performance of "All the Things You Are" is necessarily buttressed by the network of texts from which her and her listeners' referents are formed, and the success of the performance may rely, at least in part, on the listener's familiarity with the tune's history, the tracings of an *avant-texte* network.

## Conclusions

The relationship between history and identity is always a complicated one. Even seemingly "fixed" compositions, where every note to be played is specified in a score, change throughout history and are continually reinterpreted. While *avant-textes* have most often been employed to engage the creative process of a single author or composer, the concept may easily be expanded to cover the entirety of the poietic process. Jazz tunes, by the time they reach an audience, have most often accrued a complicated poietic status as multiply authored improvisational frameworks. Kern's "All the Things You Are" is not only *reimagined* by Dizzy Gillespie, Sonny Rollins, and Kris Davis, but *rewritten*, and every ensemble performance we



hear will be the result of multiple authors co-inscribing the tune, however ephemerally. While these poietic interventions destabilize the identity of the tune, they might also encourage us to turn our attention to the esthetic process, to the role that listeners play in mutually constructing that identity.<sup>62</sup>

*Avant-textes* and referents occupy opposite sides of the same tune-identity coin. If *avant-textes* represent a useful way of engaging the written or fixed aspects of the *poietic* process, referents may help us to piece together the complementary aspects of the *esthetic* process, the way such written or fixed aspects are perceived. In this chapter, I have provided a small sampling of ways in which we can uncover the relationships between these two processes. While many of the concepts and techniques I have addressed are generalizable, it is important to emphasize that every analysis must be sensitive to the particularity of its context. If we apply the same methods to the comparison of the Dizzy Gillespie and Brad Mehldau recordings of “All the Things You Are” to the Kris Davis and Gerald Clayton ones, our analysis will likely be incoherent. If on the other hand we acknowledge the extent to which each performance of a tune relates uniquely to other performances, as well as the extent to which the sufficient qualities of one tune differ from those of others, we can chisel away more effectively at the fundamental questions of identity that cloud the analysis of standards. In the following chapter, we will use *avant-textes* as a starting point for examining how improvisers learn tunes and form referents for improvisation.

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<sup>62</sup> The terms poiesis and esthesis are borrowed from Jean-Jacques Nattiez, who in turn adopted them from semiologist Jean Molino; see Nattiez (1990). As Robert Hodson argues, the fact that improvisers are also *listeners* has important ramifications for our understanding of the creative process in jazz, because the poietic and esthetic become enjoined in a feedback loop. See Hodson (2007, 15–16).

## Chapter 3

### Entextualization and Transcription

Despite the turn in jazz studies, mirroring that of musicology generally, away from texts and toward elements of performance and sociocultural context, texts *do* matter in the jazz tradition.<sup>1</sup> In their article on the role of notation and annotation in the performance of music, Emily Payne and Floris Schuiling (2017) seek to rein in the methodological ramifications of the performative turn in so much as it has influenced scholars to disregard the concreteness offered by notation. Proposing Tim Ingold's (2010) notion of *textility* as a way forward, Payne and Schuiling highlight Ingold's metaphor of the weaver, writing:

the weaver does not shape threads into a pre-established form, but lets this form emerge by binding together separate threads. That is to say, even with a pre-established design, the process of making is not so much a matter of “moulding” the material into shape, but of negotiating the motion and the tension of the threads, the various elements of the loom, and the particular characteristics of the fabric. What Ingold calls the “textility” of creative practice is meant to shift attention to the materials used in creative work, and the “tactile and sensuous knowledge of line and surface” that comes with handling them (Payne and Schuiling 2017, 441).

Jazz musicians playing tunes are likewise weavers: they do not shape musical utterances to fit a particular musico-structural surface but allow the sounding music to emerge from an ongoing negotiation with the textual fabrics of the *avant-texte*.<sup>2</sup> In an effort

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<sup>1</sup> For example, Stover (2012), in his review of Waters (2011), argues that writers such as Brownell (1994), Monson (1996), and Walser (1997) take “antagonistic stances” against close readings of the music as text (Stover 2012, 8). In an especially pointed defense, Stover writes that “critiques of jazz analysis often betray a tacet assumption that improvising musicians are either not interested in, or unable to discuss, matters of formal logic, compositional design, or teleological development” (Stover 2012, note 1). See also Waters (2011, 53–55).

<sup>2</sup> The *avant-texte* of course is only part of what is involved in negotiating musical structure; other factors, some of which are discussed below, include stylistic concerns, ensemble roles, and what Garrett Michaelsen terms “interpersonal interaction” (Michaelsen 2019, 17).

to avoid relying on texts for fear of overemphasizing them in a tradition where texts are not the locus of critical attention, studies of improvisation have sometimes painted composition and improvisation as being at odds with one another.<sup>3</sup> Understanding the creative process not as a polarized either/or but rather as a fluid dialogue between text and novelty (that is, as involving an element of *textility*) may help to enrich not only studies concerned with texts themselves but also studies of improvisational processes.

Indeed, our adaptation of the *avant-texte* concept to jazz practice might be productively complicated by recognizing that much of the very materials that comprise an *avant-texte* are in fact *themselves texts*. As fixed materials, recordings and lead sheets of a given tune constitute much of the textuality of the jazz tradition. As texts, recordings and lead sheets contribute to the creation of new performances which themselves have the capacity to become texts (see Example 1.5), animating the dialogical model of relayed creativity that, for Born (2005), is central to jazz ontology.

This chapter seeks to better understand the processes that facilitate this relayed creativity, mediating between the texts that comprise an *avant-texte* and the production of a new text. Central to this line of inquiry is the process of referent formation, where listener engagement with written and recorded texts gradually establishes a referent for improvisation. Before we dive into this process, however, it will be useful to first consider what exactly constitutes the beginning and endpoints of the process: the “texts” of jazz.

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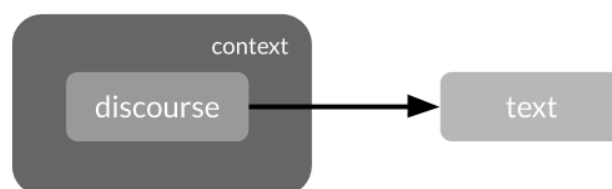
<sup>3</sup> On the other hand, Steve Larson (2005) highlights the similarities between composition and improvisation, and Nicholas Cook (1990) sees both classical and jazz performance to be fundamentally similar processes operating under different conditions (113).

## Tune and/as Text in Jazz Practice

What are texts and what purposes do they serve? Anthropologist Karin Barber (2007), following Michael Silverstein and Greg Urban (1996), contrasts texts with discourse, writing that while discourse “is the unremarked and unrepeated flow of utterances in which most human activities are bathed,” text “is created when instances of discourse, by being rendered detachable from their immediate context of emission, are made available for repetition or recreation in other contexts” (Barber 2007, 22). This detachability gives texts “authority and value,” she adds, because they are able to “be assessed for relevance, commented on or narratively expanded” (ibid., 23). For Urban, the relation between discourse and text gives rise to a broader theory of “how culture moves through the world” by providing concrete traces of “the movement of something abstract and ungraspably immaterial” (2001, 43).

Barber makes a careful and important distinction between text and writing, noting that “writing is not what confers textuality. Rather, what does is the quality of being joined together and given a recognisable existence as a form” (Barber 2007, 1). Texts may therefore be oral or written, and all texts are considered to involve some kind of dialogue between these two poles, a result of the interplay between discourse and textuality. To investigate this interplay, Silverstein and Urban theorize a process they term *entextualization*, which occurs when extemporized discourse is detached from its original context and stabilized into a fixed, reproducible text (1996, 21). Perhaps the defining maneuver in any process of entextualization is the act of detachment, dislodging the utterances from the spatiotemporal contexts from which they originate, thereby decontextualizing them (Example 3.1). It is through this detachment that discursive utterances become reproducible, taking on ontological significance.

**Example 3.1: Schematic representing *entextualization*. Discourse is detached from its context and entextualized into a reproducible text.**



Barber remarks that detachment may be “achieved by a variety of devices. It can of course be achieved by writing a stretch of utterance down [...] but it can also be achieved wholly within an oral context” (2007, 22). And so it is with jazz: entextualization permeates the fabric of jazz practice, playing a crucial role in the process of relayed creativity. Performances are marked off from discourse by their circumstances (e.g., being played in a club as part of a set, in a studio as part of a recording session, etc.);<sup>4</sup> recording technology fixes the sounds of a performance, enabling them to be reproduced in both digital and physical formats, allowing for dissemination; and perhaps most importantly for the present study, improvisers (and other listeners) detach tunes from these various listening contexts in order to form an understanding of the tune as an oral text. As Barber notes, detachment leads to particular kinds of replications. “Structural properties of the text,” she writes, “can encourage repetition and thus, by definition, detachment from a single original context—for example, the text can be structured from a series of parallel formulations which, by establishing internal patterns of repetition, encourage the repetition of the whole text” (2007, 71–72). This is arguably a large part of the process of referent formation, of engaging with existing materials and drawing from them an understanding of the tune’s structure and

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<sup>4</sup> This marking-off of text from discourse is comparable to the reification of a particular instance of musicking *as music* (see Small 1998).

ontology. Borrowing a term familiar to most jazz musicians, I refer to this as a process of “transcription.”<sup>5</sup> I believe that examining processes of transcription will not only tell us more about how improvisers learn tunes but also that it might help us to better understand how aspects of a given performance proliferate through a network of versions, establishing what Born, following Alfred Gell (1998), refers to as a “distributed object” (Born 2005, 8).

### **Transcription as Entextualization**

In most musical contexts, transcription refers to writing down non-written music using notation of some kind.<sup>6</sup> It is an extremely popular method for learning to improvise jazz: Students in conservatory programs are often assigned to produce transcriptions of solos in order to hone their technique and develop vocabulary, and popular magazines such as *Downbeat* and *Jazztimes* have published notated transcriptions for much of their history.<sup>7</sup> Yet to many jazz musicians, the term “transcription” is not limited to the act of translating aural data into music notation; rather, it extends to any activity whereby once-ephemeral sound becomes fixed, either written or committed to memory, often but not always through the mediation of an instrument. For many jazz musicians, “transcribing” simply refers to the process of aurally learning music, whether it is a solo or a tune. Throughout this dissertation, I use the term “transcription” in three ways: first, to refer to the process of transcribing

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<sup>5</sup> Throughout this dissertation, I use the term “transcription” to refer to the process of transcribing generally, the written product that the process often leads to, and to the role that the process plays in referent formation.

<sup>6</sup> Much of the extant scholarship on transcription can be found in the ethnomusicology literature. For writings on transcription generally, see Seeger (1958), England et al. (1964), Ellingston (1992), Winkler (1997), Stover (2009), and Stanyek et al. (2014). For works dealing with transcription from a jazz viewpoint, see Berliner (1994), Tucker and Kernfeld ([2002] 2016), and Rusch et al. (2016).

<sup>7</sup> Detailed transcriptions have also become widely disseminated in the form of “omnibooks,” collections of transcribed recordings meant to aid improvisers in the study of a given artist’s idiom.

generally; second, to the written product that the process often leads to; and finally to the role that the process plays in referent formation.

It is worth reminding ourselves that any act of transcription is far from an objective process. Rather, transcription involves subjective engagement with an aural source, analysis of the content of the source, and an interpretation of how that content may be effectively conveyed. Any act of transcription is therefore not *only* a means of *fixing* an ephemeral source, but also *interpreting* and *analyzing* that source.

Perhaps the most detailed look at jazz transcription in the music-theoretical literature is Rusch et al. (2016). In their article, Rusch, Salley, and Stover consider the purposes and stakes of jazz transcription through a thoughtful comparison of their written transcriptions of Sonny Rollins's solo on "All the Things You Are" (from 1963's *Sonny Meets Hawk!*) and situating their processes of transcription within two binaries, Seeger's (1958) influential prescriptive/descriptive dichotomy and Boretz's ([1992] 2003) descriptive/ascriptive framework. Seeger's framework is especially helpful for distinguishing between the purposes that notated transcriptions serve: for Seeger, notation may be intended primarily for musicians to read and reproduce the sound of the transcribed utterance, or it may be used to describe the musical content of the sound as accurately as possible. The latter is more aligned with most definitions of jazz transcription, but it is worth noting that improvisers often transcribe with the intent to *perform* the tune or solo in question, meaning that the prescriptive is often taken into consideration as well.

Perhaps most valuable in Rusch et al.'s account is the notion that transcription entails, or in certain cases is simply equivalent to, a kind of analysis. "A transcription," the authors write, "is an analytic act that says as much about the transcriber's experience of the transcribed object as it does about the music being transcribed" (Rusch et al. 2016, 1.5). In

this way, analysis is placed at the center of the transcription enterprise, and along with it all of the subjectivity and cultural contingency that attend any analytical act. This understanding aligns Rusch et al. with Henry Martin, who writes that “transcription is an analytical statement—an interpretation of what was played, an analytical first stage, or a ‘reading’” (Martin 1996a, 5).

Most authors dealing with transcription discuss the process as though it *necessarily* entails written symbols and is therefore constrained by whatever notation is used by the transcriber.<sup>8</sup> Where my approach differs is in considering transcription as not necessarily involving writing or notation.<sup>9</sup> I argue that, although the act of inscribing symbols on the page certainly serves to further reify abstract musico-structural prototypes, such acts of inscription may happen entirely in the improviser’s embodied, situated mind. As an act of entextualization, transcription simply serves to preserve utterances and carry them through to future iterations.

Improvisers entextualize a tune’s structure, whether consciously or not, by transcribing different renditions of the tune. Individual utterances from the recordings take on ontological significance and help form a referent for improvisation. In the process of referent formation, various structural elements are decontextualized and detached from the specificities of a given performance and therefore become reproducible in other contexts. Entextualizations are the result of subjective engagement with an *avant-texte* through the analysis of the various connections, contentions, and points of overlap that, to them, emerge

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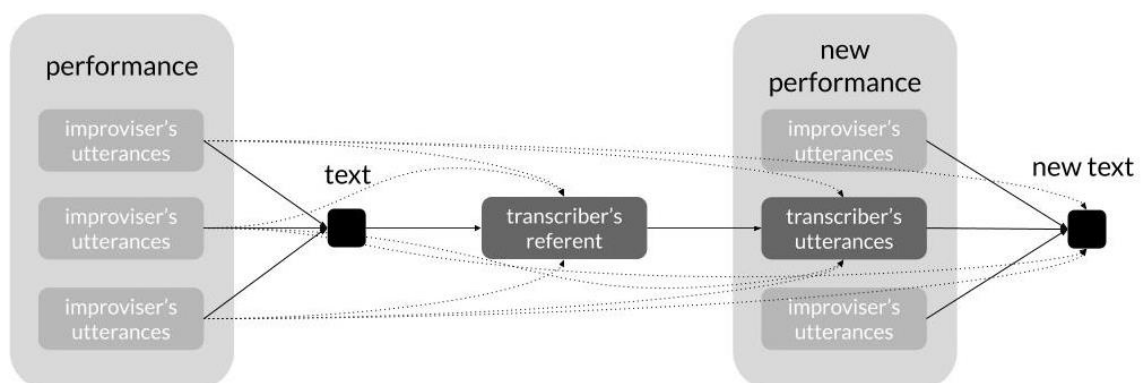
<sup>8</sup> In addition to Rusch et al. (2016) and Martin (1996a), see also England et al. (1964) and Stanyek et al. (2014).

<sup>9</sup> In this sense, I follow Silverstein and Urban (1996) and Barber (2007) in asserting that entextualization, and the circulation and dissemination of the texts that it results in, does not rely on written, material texts. According to Barber, “stretches of discourse are disembedded from the context of utterance through grammatical and structural means as much as through the modalities of performance. Essentially, what is involved is the removal of deixis—references to the immediate context of utterance, where the meaning depends on the listener sharing the same time and space as the speaker” (Barber 2007, 71).



between versions. While the short-term result of this process is the formation of a referent, transcription may ultimately impact the way a new version crystallizes and therefore participates in the replication of the tune. Entextualization is therefore a process entailing multiple overlapping trajectories (Example 3.2).

**Example 3.2:** The trajectories of entextualization as they influence the ongoing becoming of a tune. Various types of entextualization are shown by solid-line arrows, while dotted-line arrows illustrate the ways in which improvised utterances proliferate across the *avant-texte* network through such entextualizations.



### Learning Tunes: How Musical Structure Becomes Encoded as Referent

To examine the process of referent formation in more detail, I transcribed a number of tunes with which I was previously either unfamiliar or only somewhat familiar. In some cases, these were tunes that I had heard dozens of times but had not learned to play myself; in other cases they were tunes that I vaguely recognized but could not put a name to, or tunes whose title I recognized despite having no knowledge of the musical framework. In some cases, I attempted to notate my transcriptions as lead sheets; in others I simply allowed

a referent to form in my head. In order to capture a variety of possible learning scenarios, I started learning each tune differently: for some, I began by learning the tune from a single lead sheet; for others, I treated a single recording as authoritative. In each case, I later compared many recordings and lead sheets to flesh out my knowledge of the tune. It should be noted that, while these scenarios are fairly representative of how jazz musicians often learn tunes, questions of ontology and entextualization lingered in my mind throughout the process. Upon reflection of these processes, my observations yielded some possible insights into how exactly these processes might work. While I do not make any claim that my own experiences are completely representative of how other jazz musicians learn tunes, I do suspect that many of these experiences are widely shared, and my conversations with jazz conservatory students and other fellow musicians have often resonated with the observations I have made here.

There is one notable aspect of the process that I was not able to account for here, namely the transfer of specific knowledge between insiders. For example, many young improvisers will be told outright that Joseph Kosma's "Autumn Leaves" is not typically played in E minor, as it is written in *The Real Book*, but rather in G minor, instead of having to figure it out for themselves through transcription. Likewise, certain chord substitutions and other similar nuances of repertoire performance are taught directly to students not as originating in this-or-that particular version but simply as a matter of how a tune is most commonly played. This kind of insider knowledge is difficult to account for because it is seldom written down and is most often tune-specific. Common defaults become widespread in jam sessions, with improvisers learning particular changes or melodic alterations by hearing others play them repeatedly. In a jam session, any discrepancies must be worked out quickly, and a participant can be made to feel shameful if she or he fails to learn the

“correct” arrangement.<sup>10</sup> In what follows, I make no attempt to account for these and other similar scenarios and instead sought to learn these tunes in isolation, simply by reading lead sheets and listening to recordings. For the purposes of the study, this relative isolation may help us to identify noteworthy aspects of the transcription process as it pertains to engagement with extant texts alone.

### *Tracing and Encoding Melodic Particularities in “Satin Doll”*

I began with Duke Ellington and Billy Strayhorn’s “Satin Doll,” a tune that I had previously only listened to passively. I selected nine recordings of “Satin Doll” (listed in Example 3.3) that represent a fairly wide array of performance formats, from duo to big band. This relatively diverse *avant-texte* ensured that I listened to the melody and harmony being played by different instruments in many combinations. After setting up a playlist of the recordings in random order, I listened to the recordings and took notes on some observations about the tune and the performances, especially as I felt my referent for the piece develop. After this initial note-taking session, I listened several more times to the playlist; sometimes I would pay close attention, other times I would let it slip into the background. This blend of active and passive listening arguably captures the listening habits of many improvisers, and therefore more closely approximates how the details of a referent gradually come into shape over the course of many listens.

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<sup>10</sup> In such cases, subtle power dynamics may dictate which features are or are not considered authoritative. For more on the social and cultural dynamics of jam sessions, see Gazit (2015).

**Example 3.3: My *avant-texte* for “Satin Doll” (Ellington and Strayhorn).**

Artist	Release	Date	Label
Duke Ellington and His Famous Orchestra	<i>Satin Doll/Without A Song</i>	1953	Capitol (2458)
Ella Fitzgerald	<i>Ella Fitzgerald Sings the Duke Ellington Songbook, Vol. 1</i>	1958	Verve (MGV 4008-2)
The Wes Montgomery Trio	<i>The Wes Montgomery Trio</i>	1959	Riverside (RLP 12-310)
J. J. Johnson Quartet	<i>A Touch of Satin</i>	1961	Columbia (CS 8537)
McCoy Tyner	<i>Nights of Ballads &amp; Blues</i>	1963	Impulse (A-39)
The Incredible Jimmy Smith Featuring Kenny Burrell And Grady Tate	<i>Organ Grinder Swing</i>	1965	Verve (V-8628)
Erroll Garner	<i>Ready Take One</i>	2016 [1967]	Legacy (LGCY 536332)
Oscar Peterson and Clark Terry	<i>Oscar Peterson and Clark Terry</i>	1975	Pablo (2310 742)
Count Basie and His Orchestra	<i>Warm Breeze</i>	1981	Pablo (D2312131)

After a few days, I sat down at the keyboard and tried to work out what for me had become the default melody and chord changes of the tune based on the referent emerging in my head (Example 3.4). Compared against Ellington’s premiere 1953 recording, transcribed in Example 3.5, my referent differs primarily in the rhythms of the melody. Suspecting that this aspect of my referent was not influenced by only one recording, I decided to attempt to trace the development of melodic rhythm in my referent. In order to facilitate this, I transcribed the first A section from each of the nine recordings in the *avant-texte*; these transcriptions are shown in Example 3.6.

Example 3.4: Lead sheet transcription of my initial referent for “Satin Doll.”<sup>11</sup>

**A**

5

**B**

9

13

Example 3.5: Lead sheet transcription and reduction of the head in Ellington’s premiere recording of “Satin Doll.”

**A**

5

**B**

9

13

<sup>11</sup> All three A sections in the AABA tune are typically identical, so I have written the A section only once in both Example 3.4 and Example 3.5.

**Example 3.6: Transcriptions of the first A section in each of the recordings of the “Satin Doll” *avant-texte*, compared against my referent.**

The image displays a musical score for the first A section of 'Satin Doll'. It compares a 'Referent' transcription with nine other recordings. The score is written in 4/4 time and includes various chords (D-7, G7, D-7, G7, E-7, A7, E-7, A7, D-7, D9, C6) and melodic lines. The recordings are: Duke Ellington, Ella Fitzgerald trans. F, J. J. Johnson trans. F, Wes Montgomery, Jimmy Smith, Erroll Garner trans. A, Count Basie trans. B, Clark Terry / Oscar Peterson, and McCoy Tyner. The referent transcription is at the top, and the other recordings are listed below it. Each recording shows a different melodic interpretation of the A section, with some variations in chord voicings and phrasing.

The A section features four distinct but related melodic ideas, labeled in Example 3.7 as motives *a* (green), *a'* (orange), *b* (blue), and *c* (yellow). Most of the recordings feature motive *a* in mm. 1 and 3, motive *b* in mm. 2, 4, and 5, and motive *c* in m. 6. But my referent follows only three of the recordings in replacing motive *a* with the variant motive *a'*, suggesting that, for at least these two measures, my referent draws especially on the recordings by J. J. Johnson, the Count Basie Orchestra, and McCoy Tyner. There are a number of reasons this might be the case: perhaps J. J. Johnson's direct, straight-ahead performance caught my ear amongst some of the more embellished takes; perhaps as a keyboardist I was drawn through an embodied, memetic response to McCoy Tyner's pianistic rendition;<sup>12</sup> perhaps the tight, confident Basie arrangement lent a sense of authority

<sup>12</sup> See Arnie Cox's work on the "memetic hypothesis" in Cox (2011) and Cox (2016).

to that recording; or perhaps I was drawn to the parallelism that emerges between the first and second bars of the tune on the third beat. Whatever the reason, it is notable that this aspect of my referent for the piece was neither the pattern that was most prevalent in the *avant-texte*, nor was it that of Ellington's original recording.

### Example 3.7: Melodic motives in the A section of "Satin Doll."

The image displays a musical score for the A section of "Satin Doll" in 4/4 time. It compares a "Referent" lead sheet with ten other recordings, each with its own set of melodic motives highlighted in different colors. The recordings are: Duke Ellington, Ella Fitzgerald (trans. F), J. J. Johnson (trans. F), Wes Montgomery, Jimmy Smith, Erroll Garner (trans. A), Count Basie (trans. B), Clark Terry / Oscar Peterson, and McCoy Tyner. The motives are color-coded as follows: orange for D-7, G7, and E-7; green for G7 and A7; blue for D-7, A7, and D9; and yellow for D67, A67, and C6. Below the main score, four specific melodic motives are labeled: 'a' (green), 'a'' (orange), 'b' (blue), and 'c' (yellow).

Example 3.8 compares the B sections from each of the opening heads of the nine recordings of "Satin Doll" with my referent lead sheet. Tracing the rhythmic particularities of my referent proved to be much more difficult here than in the A section, in part because there was much more rhythmic variation. The B section can be easily divided into two

parallel four-bar phrases, where the melody (and harmony) in the first phrase is transposed up a whole step in the second. Each phrase breaks down into four three-note motives which descend and ascend in alternation. The rhythm that I recorded in my lead sheet for these three-note gestures is intentionally “neutral,” in the sense that syncopations (primarily in the form of anticipations that fall on the upbeats) are removed, leaving a straight quarter-and-eighth-note rhythm. Throughout most of the performances in the *avant-texte*, all instances of the three-note motive are syncopated the same way, and this syncopation remains consistent across both phrases (Example 3.9). Perhaps surprisingly, Ellington’s premiere recording is the most unusual in this regard, because the syncopations applied to each three-note segment differ between the first and second phrases of the section.

**Example 3.8: Transcriptions of the first B section in each of the recordings of the “Satin Doll” *avant-texte*, compared against my referent.**

The image displays a musical score for the first B section of "Satin Doll" by Duke Ellington, comparing various recordings against a referent. The score is written in 4/4 time and includes the following recordings and transpositions:

- Referent:** Original notation with chords: G7/C, C7, G7/C, C7, F, A7/D, D7, A7/D, D7, G7.
- Duke Ellington:** G7, C7, G7, C7, F, A7, D7, A7, D7, G7.
- Ella Fitzgerald trans. F:** G7, C7, G7, C7, F, A7, D7, A7, D7, D7, G7.
- J. J. Johnson trans. F:** G7, C7, G7, C7, F, A7, D7, A7, D7, D7, G7.
- Wes Montgomery:** G7, C7, G7, C7, F, A7/D, D7/A, A7/D, D7/A, D7, G7/D9.
- Jimmy Smith:** G7, C7, G7, C7, F, A7, D7, A7, D7, A7, D7, G7.
- Erroll Garner trans. A:** G7/C, C7, G7/C, C7, F, A7/D, D7/A, A7/D, D7/A, G7.
- Count Basie trans. B:** G7, C7, G7, C7, F, A7, D7, A7, D7, G7.
- Clark Terry / Oscar Peterson:** G7, C7, G7, C7, F, A7, D7, A7, D7, D7.
- McCoy Tyner:** G7, C7, G7, C7, F, A7, D7, A7, D7, D7, G7.

The score shows the melodic lines for each recording, with the referent line at the top. The recordings are arranged vertically below the referent, with their respective transpositions noted above the staff. The notation includes various musical symbols such as notes, rests, and accidentals, as well as chord symbols above the staff.



**Example 3.9: Three-note melodic motives comprise the parallel four-bar phrases of the B section in “Satin Doll.” A variety of syncopations derived from anticipations of beats 1 and 3 produce subtle motivic transformations, providing a foundation on which the diversity of rhythms in Example 3.8 rests.**

The musical notation illustrates three variations of a four-bar phrase in 4/4 time. The first staff, labeled 'no syncopation:', shows a standard melody with a 3-note motive (Bb, A, G) in the first two bars. The second staff, labeled 'beat 1 anticipated:', shows the first bar starting with a half rest followed by the 3-note motive. The third staff, labeled 'beats 1 and 3 anticipated:', shows the first bar starting with a half rest, followed by the 3-note motive in the second half, and the third bar starting with a half rest followed by the 3-note motive. Brackets below the staves group the first two bars as 'phrase 1' and the last two bars as 'phrase 2'.

Should we consider anticipations and other minute syncopations essential to a tune’s identity, and are such syncopations and other particularities typically removed when structural information is encoded into a referent? This question is difficult to answer and opens a number of interesting lines of inquiry. First, we should note that lead sheets often (but not always) remove syncopations in favor of simple, on-the-beat rhythms. José Bowen argues that these and other notations in lead sheets are intended to capture the “essential qualities” of a tune (1993, 147), but notes that “ironically, a performance which adhered to all of the characteristics on a lead sheet (an overly literal performance) would barely be considered a performance of the tune at all. It would be a caricature of the tune in every sense of the word” (ibid., 148). But some lead sheets *do* include specificities of rhythm, suggesting that particular kinds of gestures lose something when their rhythmic particularities are stripped away.<sup>13</sup> What determines whether such particularities are essential

<sup>13</sup> This is especially the case with busier melodies. See my discussion below regarding Charlie Parker’s “Scrapple from the Apple.”

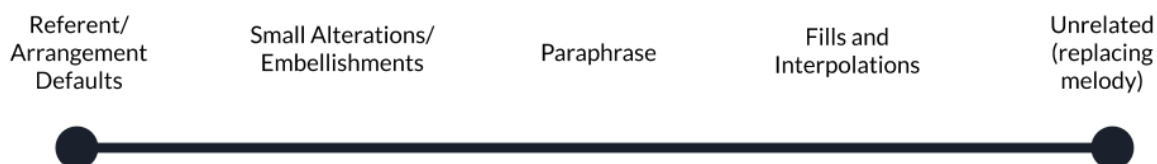
or not? Furthermore, if a performance deviates from such particularities, what determines whether those deviations are or are not understood as problematic or inauthentic?

While some of these questions lay outside the scope of the present study, we can begin to address them by considering the extent to which performed utterances seem intended to faithfully represent a written melody. As I notated the melodies in Examples 3.6 and 3.8, I felt at first compelled to mark off segments of the melody that seemed to simply fill in the rests between the melodic phrases of the tune, like those found in mm. 7 and 8. I soon realized, however, that this was only one of many decisions I needed to make about which features were or were not representative of the tune's melody in a given recording. This ambiguity of "what counts" as part of the tune is one of the principal challenges of transcribing a tune, as well as of jazz analysis more generally. As Benjamin Givan writes, "a jazz improvisation is like a palimpsest in sound. Beneath the music that reaches our ears lies a theme that simultaneously inspires and constrains the performer. From time to time traces may appear on the music's surface that, like ghostly penitents, provide us with clues to the improviser's underlying conception of the theme [... their] 'model,' or 'referent'" (Givan 2002, 41). Like palimpsests, jazz improvisations necessarily involve scraping away or at least obscuring elements of the underlying tune in order to make room for the improviser(s)'s utterances. Improvisers learning a tune must sift through each palimpsestic recording, inferring what the structure of the tune is in an ad hoc manner.

Some segments of these recorded melodies seem to represent clear attempts to play the melody "straight," others embellish the melody, and others still simply departed from the melody entirely with flights of inspired improvisation. In other words, such segments are of variable textility: they are influenced by the textual materials of the performing improviser's referent in different ways and to different degrees. Although the lines between these textilic

categories are fuzzy, it will be beneficial to conceptualize these distinctions as ranging across a spectrum of textility from “referent defaults” to “unrelated” (see Example 3.10). These determinations describe the ways in which aspects of a given performance appear (or do not appear) to convey the performing improviser’s referent, and therefore determine the extent to which such features become encoded as part of the listening improviser’s referent. Making such determinations can at times be difficult and is always subjective, but they are determinations that must be made in the process of transcription in order to understand what is and is not part of the tune and, therefore, what does or does not become part of one’s referent.

**Example 3.10: Spectrum of textilic relations between performed melody and referent defaults. Categories further to the left of the spectrum are considered to represent the tune more faithfully, whereas categories to the right deviate from the tune more markedly.**



Example 3.11 categorizes segments of the A section melodies along this spectrum. The majority of the first A sections of these recordings seem to me to be representing the tune more or less straightforwardly. A few passages feature small, mostly rhythmic, alterations to the melody; Erroll Garner’s ornate take is replete with such alterations. Other possibilities include more thickly embellished melodies, such as those played by Clark Terry in his performance with Oscar Peterson, and interpolations that simply fill in the space left in the last two measures of the phrase. It is worth noting that, in some cases, there is clearly

an arrangement that the entire ensemble is following, potentially resulting in confusion between referent features and arrangement features.<sup>14</sup> Nonetheless, these passages often serve a similar purpose: in many cases, they present the melody “as is,” though some arrangements, like the triplets in Wes Montgomery’s rendition or the turnaround fill in Jimmy Smith’s recording, are quite clearly marked from the tune and, importantly, unique to those performances.<sup>15</sup>

Although none of these A sections featured unrelated improvisational flights replacing the melody, this technique was more common in the B sections, shown in Example 3.12. The extent to which these B-section melodies represented referent defaults was also more polarized than that of the A-section melodies: for the most part, the B section was either played straight or was rather heavily altered using a variety of techniques from across the spectrum.

Improvisers subconsciously sort segments of melodies into these (or similar) categories as they listen, then use these determinations to help build and refine their referent. Determinations toward the left side of the spectrum have greater impact on referent formation, while those toward the right side of the spectrum are less likely to be encoded as “part of the tune.” Segments that are categorized as somewhere in the middle are more ambiguous, and may perhaps be retained only as second- or third-level defaults. These determinations are likely sharpened by the broadness of one’s familiarity with many versions of the tune: the fewer versions an improviser has heard, the less confidently such determinations can be made.

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<sup>14</sup> This distinction is fleshed out in more detail in Chapter 2 of this dissertation.

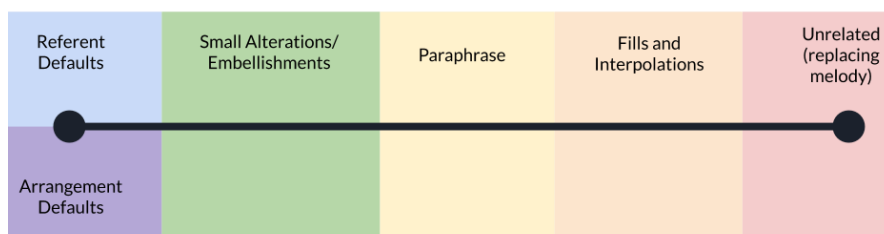
<sup>15</sup> For more on distinguishing between referent and arrangement, see Chapter 2.

**Example 3.11: Relations of A section melodies of “Satin Doll” to referent defaults and arrangement features.**

The image displays a musical score for the A section of "Satin Doll" in 4/4 time, key of D major. The score is organized into ten staves, each representing a different arrangement or performer. The top staff is the "Referent" melody. The subsequent staves are labeled with the performer's name and the transposition (trans. F or trans. A):

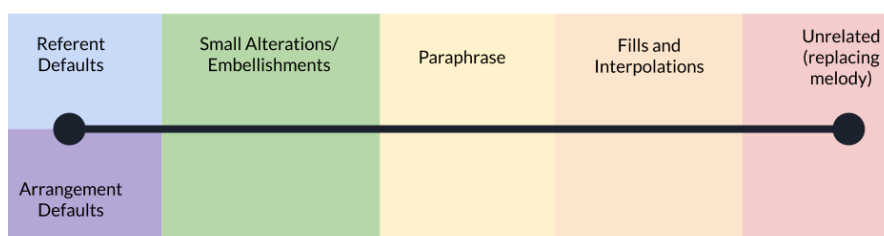
- Duke Ellington
- Ella Fitzgerald trans. F
- J. J. Johnson trans. F
- Wes Montgomery
- Jimmy Smith
- Erroll Garner trans. A
- Count Basie trans. Bb
- Clark Terry / Oscar Peterson
- McCoy Tyner

Chord symbols are written above the staves: D-7, G7, D-7, G7, E-7, A7, E-7, A7, D-7, D67, C6. The melody is color-coded to show different types of alterations from the referent: blue for Referent Defaults, green for Small Alterations/Embellishments, yellow for Paraphrase, orange for Fills and Interpolations, and pink for Unrelated (replacing melody). The McCoy Tyner staff shows a significant portion of the melody in pink, indicating it is unrelated to the referent.



**Example 3.12: Relations of B-section melodies of “Satin Doll” to referent defaults and arrangement features.**

The image displays a musical score for the B-section of "Satin Doll" in 4/4 time. The top staff is the "Referent" melody. Below it are ten other arrangements, each with a different color-coded background: Duke Ellington (blue), Ella Fitzgerald trans. F (light blue), J. J. Johnson trans. F (medium blue), Wes Montgomery (dark blue), Jimmy Smith (red), Erroll Garner trans. A (green), Count Basie trans. Bb (purple), Clark Terry / Oscar Peterson (yellow), and McCoy Tyner (orange). Each arrangement shows the melody with various alterations, such as changes in rhythm, pitch, and phrasing, which are categorized in the diagram below as "Small Alterations/Embellishments", "Paraphrase", "Fills and Interpolations", and "Unrelated (replacing melody)".



*Limited Knowledge: Bill Evans’s recording of “What Is This Thing Called Love?”*

What might happen if an improviser is only familiar with a single version of a tune? Many jazz musicians become familiar with tunes primarily by listening to a recording of it by an artist of whom they are particularly fond. In such cases, these recordings may inadvertently take on an authoritative quality on the formation of the musician’s referent.

The version of Cole Porter’s “What Is This Thing Called Love” with which I am undoubtedly most familiar is by the Bill Evans Trio on their influential 1960 release, *Portrait in Jazz*, an album I have listened to dozens, if not hundreds, of times. It is a tune that I never paid much attention to, however, and for whatever reason I had not been particularly familiar with other versions prior to this project, despite undoubtedly having heard the tune in other contexts. Since my knowledge of the tune was so heavily centered around this version, I decided to create a lead sheet that captured my conception of the tune as mediated by Evans’s recording; I could then compare this lead sheet to other versions to see how much my own referent was influenced by specificities of Bill Evans’s interpretation. It is worth emphasizing that my task here was not to transcribe the tune *exactly as played by Bill Evans* (although I later did that as well); rather, I attempted to transcribe what I thought a fakebook lead sheet might look like based on what I suspected was the basic structure of the tune as mediated by Evans’s recording.

As I created my lead sheet (Example 3.13), I noticed that, in part because I am so familiar with Evans’s idiom, I was able, to some extent, to make clear judgements about which notes were part of the tune or not. One particular procedure that has always stood out to me is how Evans seems to reduce many standard melodies down to only the most structurally essential notes, but then embellishes these skeletal lines in different ways. On the one hand, my knowledge of this helped me to infer what the more “important” tones were from Evans’s playing (compare my lead sheet against a detailed transcription of his performance of the melody, shown in Example 3.14); on the other hand, his re-embellishments of the skeletal melody became red herrings, and in several cases managed to mislead me as to what was and was not more typically part of the tune. Compare my lead sheet from Example 3.13 with the lead sheet adaptation of the published score from the

Cole Porter songbook (Example 3.15). Notice that I took the delayed arrival of the first G and the escape tone C that Evans adds in m. 2 as features of the tune, which is why they appear in my lead sheet despite not being present in Porter's score.

**Example 3.13: Lead sheet for my initial referent of “What Is This Thing Called Love?” based solely on the Bill Evans Trio’s performance from *Portrait in Jazz* (1960).**

This lead sheet is written in 4/4 time with a key signature of two flats (Bb and Eb). It consists of four staves of music, each with a measure number (1, 9, 17, 25) at the beginning. Above each staff are chord symbols: G-7b5, C7#9, F-, D-7b5, G7#9, and Cmaj7. The melody is written in a single voice, featuring a delayed arrival of the first G and an escape tone C in the second measure. The notation includes various note values, rests, and a repeat sign at the end of the fourth staff.

**Example 3.14: A detailed transcription of Evans’s rendition of the melody in the opening head of “What Is This Thing Called Love?” from *Portrait in Jazz* (1960).**

This detailed transcription of Evans's rendition of the melody is written in 4/4 time with a key signature of two flats. It consists of four staves of music, each with a measure number (1, 9, 17, 25) at the beginning. Above each staff are chord symbols: G-7b5, C7#9, F-, D-7b5, G7#9, and Cmaj7. The melody is written in a single voice, featuring a delayed arrival of the first G and an escape tone C in the second measure. The notation includes various note values, rests, and a repeat sign at the end of the fourth staff. A "comping" label is present below the first staff, indicating the accompaniment.



Example 3.15: Lead sheet for “What Is This Thing Called Love?,” adapted from Porter 1991.

Lead sheet for “What Is This Thing Called Love?,” adapted from Porter 1991. The sheet includes musical notation in treble clef with a key signature of two flats (Bb and Eb). The lyrics are written below the notes, and chord symbols are placed above the staff. The music is divided into measures, with measure numbers 5, 9, 13, 17, 21, 25, and 29 indicated. The lyrics are: “What is this thing called love? This fun - ny thing called love? Just who can solve its mys - ter - y? Why should it make a fool of me? I saw you there one won - der - ful day. You took my heart and threw it a - way. That’s why I ask the Lawd in Heav - en a - bove, What is this thing called love? What love?”

Chord symbols: C<sup>7</sup>, Fm, G<sup>7</sup>, G<sup>+</sup>, C, C<sup>ma</sup>, C<sup>7</sup>, C<sup>#dim</sup>, Fmin, Bb, Ab, Ab<sup>+</sup>, Fmin, G, Am<sup>7b5</sup>, G<sup>7</sup>, C, C<sup>#dim</sup>, C<sup>7</sup>, Fmin, G<sup>7</sup>, G<sup>+</sup>, C, Fmin, C, C<sup>7</sup>, C, Fmin, C.

As I transcribed, I also began to feel as though the melody that I was writing seemed to be too sparse, perhaps because, even if I was able to remove most of Evans’s embellishments, I was not able to add back the ornamental aspects of the melody that he

had reduced out in his interpretation. This is especially so in the lack of rhythmic fidelity to Porter's published version, specifically the rhythms dictated by the lyrics. Whereas other instrumental performances clearly retain the rhythms of the opening lines ("What is this thing called love?/This funny thing called love?"), Evans, and by extension my lead sheet, uses most of the same pitches as Porter's published score—especially where they participate in structural voice-leading lines—but not the same rhythms or repeated notes. Since becoming familiar with many other versions of the tune, my referent now *does* include that rhythmic specificity, but in the moment of improvisation, I can still recall the particular gestures that I transcribed from Evans's recording, glowing dimly like lighted paths through the improvisational dark.

*Authoritative Recordings, Bebop Melodies, and "Scrapple from the Apple"*

In some cases, one recording from the *avant-texte* may be privileged by virtue of its popularity or some other culturally-endowed status. Such recordings are not necessarily "original" or "definitive" but nonetheless become influential through their popularity. A notable example is Cannonball Adderley's influential recording of "Autumn Leaves" on *Somethin' Else* (1958). The introduction, and especially its bass ostinato (Example 3.16), have become well-known amongst jazz musicians and audiences, and although the introduction is never expected when the tune is played, it is not unusual to open or end the piece with the Adderley intro. Despite its popularity, it would be exceedingly rare to find a jazz musician who would characterize Adderley's recording as "definitive"; instead, it is just one of a handful of especially well-known recordings that are influential and may be frequently referenced in the act of improvisation.

**Example 3.16: Bass ostinato from the introduction to Cannonball Adderley’s recording of  
“Autumn Leaves” (*Somethin’ Else*, 1958).**



While the label of “definitive” is especially suspect in any discussion of jazz tunes, something like a definitive version may emerge as an example of what Henry Martin (2018b) terms an “authoritative recording” (5.16). According to Martin, authoritative recordings hold more weight than other versions and are often conceptualized by improvisers as a kind of *Urtext*, thanks to the fact that the tune’s composer is closely involved in the production of the recording. Authoritative recordings become increasingly commonplace during the era of hard-bop and post-bop in the late 1950s and early 1960s. Examples of tunes with well-known and widely agreed-upon authoritative recordings include John Coltrane’s “Giant Steps” on *Giant Steps* (1960), Horace Silver’s “Song for My Father” on *Song for My Father* (1965), and Wayne Shorter’s “Juju” on *Juju* (1965). For Martin, a recording may be considered authoritative if the recording is the premiere recording of the tune, the composer is present, performing, or is the leader, director, or producer of the recording, or if the recording becomes popular (2018b, 5.16). An authoritative recording may or may not be the rendition with which a given improviser is most familiar, but deviation from the norm represented by the authoritative recording may be considered less acceptable than when there is no authoritative recording.

Charlie Parker’s “Scrapple from the Apple” is an example of a tune with an authoritative recording: the 1948 Dial Records release lists Charlie Parker as the leader, Parker himself is not only present but plays the melody, it was the premiere recording of the

tune, and it would go on to become the best-known performance of the tune.<sup>16</sup> Prior to this project, my knowledge of “Scrapple from the Apple” was half-baked: although I knew the tune passively by ear, I had not learned to play the head at the keyboard, nor had I analyzed it in much detail. While I might have been able to vaguely hum the melody of a variant, I would not have known such a variant note-for-note, nor would I have been able to transcribe the harmonies of a variant chord-for-chord. I began filling out my knowledge of the tune as many beginning jazz musicians might by reading the *Real Book* (fifth edition) lead sheet (Example 3.17). I first looked at the harmony, quickly remembering that the B section of the AABA tune featured the bridge of a rhythm changes, but that the A sections were instead filled primarily with repeating ii–V progressions. I soon realized that the A-section progression was drawn from Fats Waller’s “Honeysuckle Rose.” (The “scrapple” in the title presumably refers to the blending of these and other elements in a similar manner to the blending of cuts of meat in the now-out-of-fashion breakfast dish.)

After getting the knotty bebop melody into my fingers, I decided to double check the melody against Parker’s premiere recording. Because of the “authoritative” status of Parker’s recording, I identified the places where the *Real Book* lead sheet differed from Parker’s performance as “errors,” rather than mere “differences.” This seemingly minute distinction is an important one, for by referring to differences between texts as errors, we are implicitly both conferring upon one text an authoritative status and making an evaluative judgement of a transcriptive act not as a creative and intentional decision but rather as a mistake, a problem that ought to be solved or corrected.<sup>17</sup> Such errors are generally written or

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<sup>16</sup> Ted Gioia writes that “this song has mostly kept true to its original inspiring vision, and is almost always played at the same moderately fast tempo without fancy arrangements or other adornments” (Gioia 2012, 361).

<sup>17</sup> For more on the aesthetics of errors in jazz, see Stefan Love’s illuminating discussion in Love (2016).

Example 3.17: Lead sheet for “Scrapple from the Apple” (Parker) in *The Real Book, Vol. 1, Fifth Edition*.

performed traces of a mishearing or an otherwise sloppy, rushed transcription on the part of the lead sheet’s authors.<sup>18</sup> Example 3.18 shows what I identified as errors in the lead sheet, along with my corrections. Note that I have written these revisions on the original lead sheet, crossing out incorrect notes and chords and replacing them with my own transcriptions. This annotative method preserves the original artifact that I used to learn the tune, but presents the revisions explicitly as corrections, as opposed to possible alternatives.<sup>19</sup>

<sup>18</sup> Such errors are also sometimes attributable to authors relying on a single (non-authoritative) recording of the tune, such as would have been the case in the above discussion of “What Is This Thing Called Love?”

<sup>19</sup> See Payne and Schuling (2017) for more on the textual implications of annotation.

Example 3.18: My annotations on the A section of the *Real Book* lead sheet for Parker’s “Scrapple from the Apple” indicating perceived errors based on comparison with Parker’s 1948 premiere recording.

The image shows a musical score for the A section of "Scrapple from the Apple" in 4/4 time. The key signature has one flat (Bb). The score consists of two staves. The first staff has four measures with chords G-7, C7, G-7, and C7b9. The second staff starts with a measure 5, followed by Fmaj7, then two measures with red annotations: a red 'Bb' over a G-7 chord and a red 'Bb°7' over a C7 chord, both crossed out with red slashes. This is followed by a triplet of eighth notes, then Fmaj7, G-7, and a first ending bracket containing A-7 and D7. Red dots and a red '3' are also present in the first staff, indicating a triplet figure.

A few things especially stood out to me in these corrections. First, the pitches of the triplet figure in m. 3 seemed incorrect. In fact, even before checking it against a recording, this immediately jumped out at me as stylistically suspect: surely, I thought, in keeping with bop style and especially Parker’s style, this would be a descending arpeggio outlining the chord. And indeed, Parker’s version outlines a G minor triad, while Dexter Gordon’s later recording, from 1963’s *Our Man in Paris*, outlines a Bb major triad by replacing the G with an F (perhaps an informed mishearing rather than an outright error, given that the relatively poor sound quality of Parker’s 1948 recording makes it difficult to hear pitches that are of short duration and not rhythmically emphasized). The only recording I found that replaced Parker’s arpeggio with the D-C-Bb scalar gesture from the lead sheet was a 1998 live recording by Keith Jarrett’s “Standards Trio” with Gary Peacock and Jack DeJohnette, released on 2018’s *After the Fall*. Even in this context, the scalar figure sounded jarring to me: unlike an improviser taking liberties with a melody, this sounded like a naive error, even if I doubt that Jarrett would be liable to make a naive error in this relatively late stage of his accomplished career.

The other distinctive error in the lead sheet occurs in the chord changes of m. 6: where the *Real Book* lists a ii–V progression in the tonic key of F major, the changes in Parker’s recording are more akin to those found in m. 6 of a prototypical rhythm changes, with a motion to the subdominant followed by a passing fully-diminished chord. This error probably stems from the fact that Waller’s “Honeysuckle Rose” typically features a ii–V in m. 6, whereas “Scrapple from the Apple” adapts this measure from its other main influence, rhythm changes; in this sense, Parker’s composition is even more of a scrapple than many accounts let on.<sup>20</sup>

A number of important observations emerge from the preceding account. First, even though I started with a lead sheet, I ultimately deferred to a more authoritative version of the tune, as many players do; this suggests not only that authoritativeness matters in the transcription process but also that recordings (especially authoritative ones) arguably hold more weight than other kinds of texts. Second, the intertextual resonances the tune establishes with “Honeysuckle Rose” and rhythm changes, while helpful for learning the tune’s chord changes, produced some confusion surrounding the harmonic content of m. 6; such intertextual resonances open up both improvisational possibilities and opportunities for mistaken transcriptions. Finally, in addition to the authoritativeness of Parker’s recording, I found that the quick, dexterous bebop melody of Parker’s tune made slight deviations seem less tolerable, as though the melody itself was simply less flexible or open to interpretation due to being more involved and busy. While in other contexts we might feel that a changed note here or an added gesture there are expected and simply ways for an improviser to leave their personal imprint on the melody, Dexter Gordon’s single wrong note and Keith Jarrett’s

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<sup>20</sup> The possibility of mishearings or, at the very least, a less intentional blending, is certainly possible. Through his extensive ethnographic work, Paul Berliner has provided accounts from Art Farmer, Barry Harris, and others regarding incorrectly played rhythm changes bridges (1994, 76–78).

stylistically unidiomatic scalar gesture seemed to represent mishearings rather than conscious creative decisions. The fact that we are able to hear these moments as errors is arguably made possible by the existence of an authoritative recording as well as the relatively thickly determined head melody.

This last observation has especially strong implications for how jazz melodies are understood and raises a number of important and difficult questions: Are busy melodies more thickly determined than sparser ones? What determines whether alterations to a busy melody are understood as mistakes or creative choices? Are particular kinds of melodic gestures more open to revision and alteration than others? For the most part, these questions lay outside the scope of the present project, but a more thorough investigation into these issues may shed light not only on the way that listeners hear melodic embellishment and alteration but also on the ways in which authority and power resonate and flow through a network of people and texts.

### *Musical Style and “There Is No Greater Love”*

If our understanding of bebop style is in part responsible for our evaluations of errors in the melody of “Scrapple from the Apple,” musical style may more generally be a useful tool for carving away at the essence of tunes. Indeed, understanding the style in which a tune is written or played is key to making sense of a recording and especially a lead sheet. Without stylistic information, interpreting a lead sheet will be difficult and, at best, will result in a necessarily impoverished performance of the tune.

Such turned out to be the case as I attempted to learn “There Is No Greater Love,” a ballad written in 1936 by Isham Jones that prior to this project I had been unfamiliar with. I



again turned first to the *Real Book* (fifth edition) lead sheet, shown in Example 3.19. As is the case with many lead sheet representations of popular standards, the melody is notated as rhythmically simply as possible, primarily using quarter notes, half notes, and whole notes. While this method of representing melodies is simple to read and helps to communicate the relative flexibility of the melody, it also has downsides: I soon realized that, with no knowledge of how others played the tune, and no words indicated on the lead sheet, I had no clear sense of how the melody might phrased, or how such phrasing related to the rhythmic structure on the page. I relied on my own intuitive sense of how standards like this are typically interpreted, an intuition borne out of playing and listening to renditions of standards in many styles and comparing them against lead-sheet representations. Even then, I noted that any phrasing I tried felt slightly awkward, as though my brain was trying to compare my performance against a model that did not exist.

Without having heard any renditions, I had to rely only on the information I was able to obtain from the lead sheet. As I played through the harmonies, I noticed that the chords seemed to me to be stylistically mismatched: while the opening four bars featured a prominent applied tritone sub, Ab7, more typical of bop progressions, elsewhere the tune made heavy use of secondary dominant chords in a way more common in styles pre-dating bebop. Likewise, the ii–V–i progression in the relative minor key of the B section seemed to clash slightly with the arpeggiations in the melody, which fit better over a simple V–i progression; this suggested to me that the ii–Vs here were most likely added later, as is often the case in bop renditions of earlier standards.

I listened to a variety of recordings of the tune to see if I could work out how the tune's harmonies evolved over time, and especially how they were influenced by style.

Example 3.19: Lead sheet for “There Is No Greater Love” (Jones) from *The Real Book*,

*Vol. 1, Fifth Edition.*

The lead sheet for "There Is No Greater Love" (Jones) from *The Real Book*, Vol. 1, Fifth Edition, is written in B-flat major (two flats) and 4/4 time. The melody is presented in a single staff with a key signature of two flats. The sheet includes a variety of chords and a bridge section.

**Measures 1-4:** Bbmaj7, Eb7, Ab7, G7

**Measures 5-8:** C7, F7

**Measures 9-12:** Bbmaj7, Eb7, Ab7, G7

**Measures 13-16:** C7, C-7, F7, Bb

**Measures 17-20:** A-7b5, D7, G-, A-7b5, D7, G-

**Measures 21-24:** A-7b5, D7, G-, C7, F7

**Measures 25-28:** Bbmaj7, Eb7, Ab7, G7

**Measures 29-32:** C7, C-7, F7, Bb, (F7)

Boppish features like the applied tritone sub in the A section and the ii–Vs in the bridge did indeed turn out to be more common in later recordings of the tune from the 1950s and onwards, such as those by Miles Davis and Sonny Rollins, but were not present in the premiere 1936 recording by Isham Jones with Woody Herman,<sup>21</sup> nor in Duke Ellington’s recording from the same year. This suggested to me that the style of the tune as transcribed

<sup>21</sup> The debut recording by Jones is rather difficult to find, but may be found on the compilation *Jazz in the Charts 25/100 - Is It True What They Say About Dixie?*, released in 2006, which contains numerous recordings from 1936.

on the *Real Book* lead sheet was a composite of the earlier swing style of Jones's original with features typical of bop style that had been added in later recordings.

Because I initially had no performances to compare the lead sheet to, my first efforts to “figure out” the tune were mostly a matter of teasing apart “the tune” from a variety of stylistic features. This might seem at first to be a fraught project: tunes are not inoculated from musical style, and indeed tunes and styles mutually constitute one another, at least in part. The musical content of a tune is determined in part by the style within which it is written or played, while styles themselves are constituted in part by the devices found in the contents of tunes. Conceiving of a tune *without* style is difficult, if not impossible, to do. Could we imagine, for instance, a rendition of Dizzy Gillespie's “Groovin’ High” that eschews the characteristic chord changes and melodic tendencies of bebop, or a performance of Bobby Timmons's “Moanin’” that does away with the blues and gospel topics of hard bop? If these stylistic elements were somehow removed, would most jazz listeners recognize the resulting transformation as a valid instantiation of the tune? Likewise, styles are established in part through the compositional and improvisational practices of musicians. Without a repertoire of representative tunes and improvisational norms, conceiving of a style is not only difficult but also purposeless.

Tune and style then are fundamentally entangled with one another.<sup>22</sup> This entanglement manifests itself in many different ways: there is the style in which a

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<sup>22</sup> A theory of musical style as it relates to jazz has yet to be undertaken in any rigorous way. Perhaps the most thorough examination of jazz styles is Mark Gridley's jazz history and appreciation textbook *Jazz Styles* (Gridley [1978] 2012). Gridley's book contains a wide range of details on particular styles but does not attempt a broader theorization of the concept of style in a way akin to, for example, Leonard Meyer's (1989) seminal study, *Style and Music*. Garrett Michaelsen (2019) notes that style is also a fundamental aspect of group interaction. His Example 4 situates the improvised utterance amongst interactions with various elements of jazz performance, including musical style, the referent, established ensemble roles, and “interpersonal” interaction, a term coined by Michaelsen to refer to the ways in which improvisers interact with one another's utterances in the ongoing flow of interactive improvisation. I would argue that the arrows in Michaelsen's Example 4, which point outwards from the utterance to these other categories with which the utterance interacts, ought to be conceived

composition is written, the style in which an ensemble performs the composition, the stylistic tendencies of individual performers, and stylistic signifiers attached not to the entire piece or performance but to individual gestures.<sup>23</sup> These distinctions might be clarified by adopting, as Benjamin Givan (2014, 211) has suggested, Leonard Meyer's (1989) tripartite framework of dialect, idiom, and intraopus style.<sup>24</sup> For Meyer, a dialect consists of a shared stylistic qualities across a group of people, often but not always linked by geographic region or historical moment and typified by a number of stylistic rules and strategies.<sup>25</sup> Artists who share a dialect employ different strategies within that dialect, resulting in an idiom through which their work can be easily identified. While idioms characterize many different works, intraopus style refers only to "what is replicated within a single work" (Meyer 1989, 24). For our purposes, intraopus style refers to the stylistic features that are exclusive to the tune and which are not traceable to the performer or composer's idiom, nor to the broader dialect. Meyer makes one final but important distinction along these lines, between intraopus style and intraopus *structure* (1989, 25).<sup>26</sup>

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as a double-headed arrow, for utterances, referents, styles, ensemble roles, and so on, inevitably co-constitute and reinforce one another.

<sup>23</sup> Such stylistic signifiers may be productively examined through the lens of a different but related set of music-theoretical tools that are often grouped under the banner of "topic theory." Indeed, Leonard Ratner's initial definition of a musical topic links the concept closely to style, writing that topics are "subjects for musical discourse" that may appear "as figures and progressions within a piece, i.e., styles" (Ratner 1980, 9). While a detailed introduction to topic theory is outside the scope of the present paper, an overview of the field and its early development may be found in Mirka (2014). There is unfortunately very little published research on topic theory as it pertains to jazz, with one notable exception being Garrett Michaelsen's (2013b) work on groove topics. While I do not attempt to undertake a more thorough study of music-stylistic topics in jazz in the present work, this field is ripe for future research. The dimensions of musical meaning that open up through the analysis of topics are integral parts of the ways in which improvisers and listeners alike make sense of the musical surface and its relation to a tune's identity.

<sup>24</sup> For Meyer's complete discussion of this framework, see Meyer (1989, 23–30).

<sup>25</sup> For more on Meyer's distinction between rules, strategies, and laws, see Meyer (1989, 13–21).

<sup>26</sup> Meyer notes that what he terms intraopus structure is roughly equivalent to Eugene Narmour's notion of idiolect (1977, 25).

To put these distinctions to work, let us return to “There Is No Greater Love.” The Miles Davis quintet’s recording of “There Is No Greater Love” on *The New Miles Davis Quintet* (1956) is performed broadly in the dialect of hard bop, while the utterances of each individual improviser (Davis on trumpet, Red Garland on piano, Paul Chambers on bass, and “Philly” Joe Jones on drums)<sup>27</sup> are characterized by their own personal idiom, contributing to the ensemble’s overarching style. The intraopus style refers here to aspects of “There Is No Greater Love” as a composition, apart from the stylistic content of the performance, while the intraopus structure refers to the unchanging structural aspects of the tune. These distinctions can be difficult to engage with, but we might productively think of intraopus style and structure as being the qualities that distinguish the Davis quintet’s performance of “There Is No Greater Love” from their performance in the same recording session of Benny Golson’s “Stablemates.” Teasing apart dialect, idiom, intraopus style, and intraopus structure can be difficult, especially if we are referring only to a single rendition of the tune. But by making note of features that are indicative of a particular style, like the ii–Vs in the bridge or the secondary dominants in the A sections, we can begin to prod at how exactly the tune is mediated by dialect and idiom, putting Meyer’s intraopus category, and therefore the tune’s identity, into somewhat clearer relief.<sup>28</sup> Because of this, the particular harmonies an improviser transcribes for “There Is No Greater Love” will depend upon the dialect and idiom of the renditions they come into contact with. While Isham Jones’s original composition is written in the dialect of a 1930s ballad, Miles Davis’s recording treats the song as a hard bop tune, resulting in a blend of stylistic traits. Harmonic aspects of the Davis

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<sup>27</sup> Although John Coltrane was a member of the Miles Davis Quintet at this time, he does not play on this recording of “There Is No Greater Love.”

<sup>28</sup> Garth Alper (2011) takes a similar line of inquiry from a different angle: comparing nine different pianists’s renditions of “What Is This Thing Called Love?,” Alper uses the shared tune of each recording to set into relief the dialect and idiom (although he does not explicitly use Meyer’s terms) of each pianist.

band's arrangement, as well as Davis's distinctive melodic phrasing, are likely to influence a player's referent regardless of what Jones may have had in mind, but Jones's own stylistic proclivities may still shine through, making the tune legible as a unique category linking its many performances.

For Meyer, style holds a certain ontological weight that helps to set pieces into relief against the possibility spaces that engendered their creation. According to Meyer, "to appreciate fully what something is—to comprehend its significance—is to have some notion (however informal or unformulated) about what it might have been ... The road actually taken is invariably understood partly in terms of those not taken" (Meyer 1989, 31–32). Indeed, it is this sense of relief that in many ways makes tunes such popular frameworks for improvisation: as possibility spaces, the improvised choices being made at any given time are understood against a background of other possible choices, some actualized in the form of past performances and recordings, some only imaginable.<sup>29</sup>

## Conclusions

Entextualization, in all its manifold instantiations, is an important part of a tune's becoming. Although most jazz performances always already involve some interplay between the written and the improvised, performances may largely be understood as extemporized discourse that has the capacity to be entextualized: an entextualization of a single performance of "What Is This Thing Called Love?" would not, as we have seen, directly reproduce "the tune," but

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<sup>29</sup> Benjamin Geyer refers to this sense of possibilities being imagined alongside and in contrast to an ongoing improvisation as an "audiation stream" (2016, 8).

rather a densely mediated performance of the tune. Entextualizations of different performances of the same tune therefore differ radically from one another.

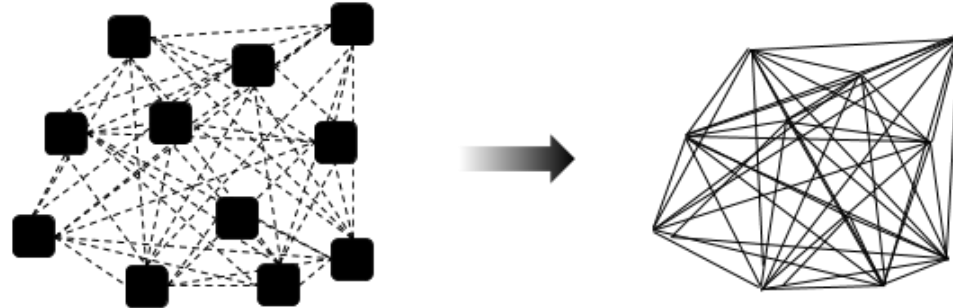
While both recording and transcription are entextualizing processes, transcription fixes the musical text in a different way than a sound recording.<sup>30</sup> Choices made as to what constitutes the structure of the tune, and in the case of written transcriptions the particular notational choices made, serve to abstract the text, allowing certain aspects (e.g., important melodic tones, harmonies) to be reproduced while other features (such as rhythmic feel and groove, subtle dynamics, and timbral effects) may be omitted. The nature of this abstraction is culturally contingent and may change over time, with notions of “what is structurally important” in a given musical culture informing transcriptional choices.

A maximally thick, fixed text—a recorded performance—may therefore be wrung out into a thin, malleable text in the form of the transcribed referent. This process effectively serves to transform a network of versions (an *avant-texte*) into a single referent. In my visual representation of this process, shown in Example 3.20, the nodes that represent individual recordings are drawn together into an interpreted network. As the improviser analyzes and makes sense of these connections, the edges of the network emerge more clearly and the nodes begin to dissolve. In some ways, this process resembles a Deleuzian rhizome: as Deleuze and Guattari write in *A Thousand Plateaus*, “[t]here are no points or positions in a rhizome ... there are only lines” ([1980] 2005, 8). The improviser’s referent likewise obfuscates the distinction between the one and the many: a simplified melody and a basic, prototypical chord progression become only a starting place, connected to countless other paths both already traversed and yet to be charted.

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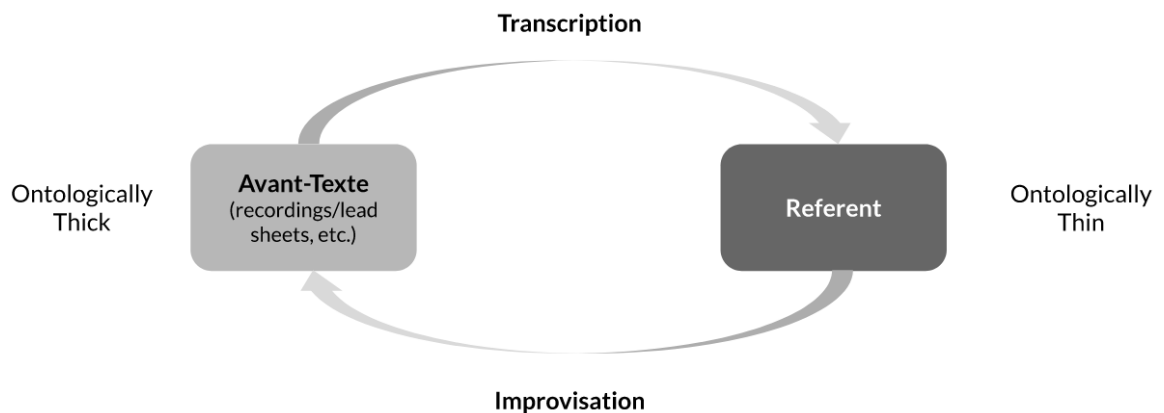
<sup>30</sup> Evoking Walter Benjamin, Peter Elsdon notes that the recording process preserves a performance “in such a way that it can be mechanically reproduced in contexts divorced from the usual rituals associated with performance” (2010, 146).

**Example 3.20: Visualization of transcription as *avant-texte* nodes dissolving into a rhizomatic referent.**



Transcription and improvisation are, in some ways, opposing processes; transcription serves to fix material into a text, to entextualize, while improvisation opens up that text once again to be revised and commented upon. In this sense, transcription and improvisation alternate with one another to mediate between the ontologically thin and thick, between the palimpsest of the recorded improvisation and the radical intertextuality of the *avant-texte*. This process is schematized in Example 3.21.

**Example 3.21: Transcription and improvisation as opposing processes mediating between *avant-texte* and referent.**





In many ways, it is the back-and-forth of this process that makes improvising on a well-known tune so exciting. The familiar and the unfamiliar constantly cut against one another, producing an ongoing and palpable friction. By focusing on that friction and the processes that give rise to it, we can come to better understand the relationship between jazz tunes and their performances, and what makes that unique relationship so riveting to listen to time and again. In the next chapter, we will examine in more detail the relatively stable yet dynamic midpoint in this ongoing process, the referent.

## Chapter 4

### Referent Features and Defaults

Whereas Chapter 3 examined the ways in which referents form as texts through the processes of transcription and entextualization, this chapter is devoted to a more comprehensive explication of what exactly referents are or might be, how they operate in the cognitive processes underlying jazz improvisation, and how they may be used as a lens through which to view jazz ontology and analysis. Specifically, I argue that referents consist primarily of a set of *defaults* that are held in memory and are used to furnish musical structures against which performances are heard. These defaults are grounded in the experiences of improvisers and are conditioned by culturally contingent understandings of musical structure. In addition to coordinating the moment-to-moment events of a performance, referents and their defaults provide a foundation in and around which creative decisions are made.

The chapter begins by contextualizing referents in their cognitive contexts, starting with an overview of Jeff Pressing's computational model of improvisation before moving on to more recent ecological approaches. Referents are then distinguished from arrangements and knowledge bases, putting the notion of *referent features* into sharper relief. This leads to a fuller theorization of referent defaults, followed by a discussion of the ways in which referent features involve different kinds of musical parameters.

## Referents in the Cognitive Processes of Improvisation

In his influential theorization of the cognitive processes underlying improvisation, Jeff Pressing (1988) formulates the computational model shown in Example 4.1.<sup>1</sup> The top line shows event clusters ( $E_i$ ) that form the musical surface, while dotted lines serve to break down these event clusters into four categories (acoustic, musical, movement, and other), each of which “decomposes” into an array of objects, features, and processes.<sup>2</sup> The presently sounding event cluster, in tandem with other feedback, feeds into an “array generator” that then generates the behavior that forms the next event cluster. Among the other influences on the array generator are sounds from other players, more nebulous concepts such as goals and memory, and what he terms a “referent.”

Pressing’s model is so richly detailed that it can be easy to forget that the categories on the bottom line of Example 4.1 are far from self explanatory. Yet Pressing provides surprisingly little detail about these other factors, including the referent. In an earlier article, he explains that a referent is “an underlying formal scheme or guiding image specific to a given piece, used by the improviser to facilitate the generation and editing of improvised behaviour on an intermediate time scale” (1984, 53).<sup>3</sup> Aaron Berkowitz, characterizing Pressing’s concept, defines a referent as “a structure or template of *events* out of which an improvisation can be crafted (the underlying schema)” (2010, 29, emphasis mine). These

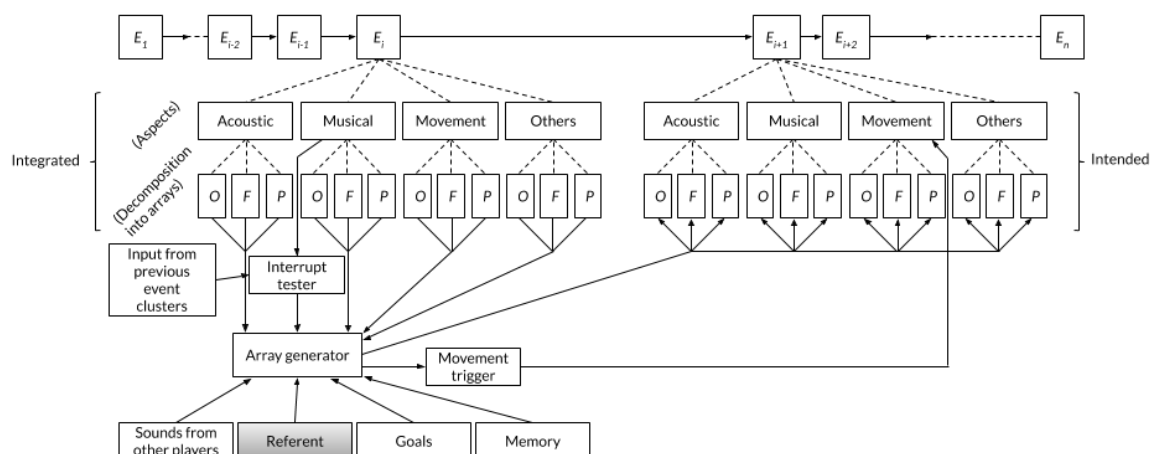
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<sup>1</sup> Notable work on the cognitive processes underlying improvisation can be found in Johnson-Laird (2002) and Berkowitz (2010); Norgaard (2011, 109–111) contains a useful summary of these and other approaches.

<sup>2</sup> Mavromatis (2019) notes that Pressing’s emphasis on event clusters is meant in part to acknowledge the psychological constraints on generative behavior and is a form of what psychologists often refer to as “chunking.”

<sup>3</sup> Love (2011) and Geyer (2016) use the term “scheme” to mean roughly what Pressing calls a “referent.” Love (2017) would later go on to adopt Pressing’s term.

**Example 4.1: The referent embedded within the context of Pressing's computation model of improvisation (adapted from Pressing 1988, 161). Note that the referent, highlighted in the image below, feeds directly into the array generator.**



definitions are likely intentionally vague so as to ensure that the model would hold up cross-culturally.<sup>4</sup> Indeed, Pressing's goal was to capture improvisation as a fact of human cognition, where specific improvisational practices are culturally grounded but ultimately rely on many of the same cognitive processes. His suitably broad conception of referents across improvisational art forms is wide-ranging. He writes, for example, that musical referents can include musical structures, motives, or "mood," while dance referents might include "music, kinetic or structural images, movement qualities, stories, [and] emotions" (Pressing 1984, 347). Despite this vagueness, Pressing evidently sees referents as positively *central* to much improvisation, going so far as to write that

Much of the variety of improvisation comes from the many different types of referent which may be used, and the many kinds of relationships the improviser may

<sup>4</sup> Pressing's work was notably interdisciplinary, drawing upon an idiosyncratic mélange of research from cognitive psychology, music theory, ethnomusicology, anthropology, and philosophy.

choose to set up between the referent and the sounds, movement, words, etc., that constitute the improvised behaviour (Pressing 1984, 346).

In addition to providing variety and a sense of limitless possibility, Pressing also sees the referent, along with a knowledge base, as one of the most important tools used by improvisers in order to free up attentional resources.<sup>5</sup> Berkowitz adds that these tools also establish a musico-stylistic context, providing further constraints that aid in the allotment of attention.

Despite the centrality of pre-existing musical materials, Pressing simply does not devote much space to a discussion of what referents are or might be, instead using them as a way of qualifying different kinds of improvisational processes. The closest he comes to a more comprehensive description is in his classification of various referent types. He lists “tonal jazz” under the category of “Theme and Variations Form” and notes that this kind of referent is prevalent across Western history, is “in-time,” and “may consist of the chord progression, song melody, and distinctive rhythmic features” (1984, 348–349).

We can surmise that Pressing himself would likely have been quick to acknowledge that, even in relatively coherent artistic traditions, improvisers not only devise a diversity of ways to relate their improvisations to a referent but also make use of drastically different kinds of referents. Within the relatively circumscribed breadth of practices usually termed “jazz,” there are indeed a wide variety of different referent types, from thickly specified big band charts and other similar written arrangements to skeletal ostinati,<sup>6</sup> and free jazz is often

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<sup>5</sup> Berkowitz (2010, see especially Chapter 5) addresses the notion of a knowledge base from the standpoint of music from the Classic era at length.

<sup>6</sup> For more on the former, see Geyer (2019); Antares Boyle (2019) looks at ostinati in contemporary jazz in the improvisations of Kris Davis and Craig Taborn.

said to eschew the use of a referent entirely.<sup>7</sup> Yet I argue that one kind of referent has tended and continues to dominate much of mainstream jazz history and practice, namely that of the tune concept. By focusing on tunes, I do not wish to exclude discussion of other kinds of referents, nor do I seek to paint tune-playing as a uniform practice devoid of variation between individuals and communities. The diversity of jazz practice sometimes fails to be properly acknowledged in both the scholarly community and in the jazz community at large, and more peripheral practices are certainly deserving of just as much attention. Nonetheless, I would argue that tunes do occupy a relatively central place in mainstream jazz practice and education, and therefore represent a useful starting point for thinking about referents and the kinds of things that constitute them. Reciprocally, referents offer much explanation of the role tunes play in tonal jazz from a cognitive perspective.

But to what degree is cognition the domain to which referents belong? Pressing (as well as some later writers) have tended to discuss referents not as something of the mind, stored in memory, but rather as something out there in the world, static musical structures that can be (or even necessarily are) notated and with which improvisers interact.<sup>8</sup> In this sense, a referent in tune-based jazz performance might be best represented by a singular, definitive lead sheet or arrangement. This view is problematic for a variety of reasons. First, it ignores how individual improvisers might conceive of and engage with the musical structures represented on the page differently. As Andrew Goldman (2016) argues, musical structures can be understood in many ways, and improvisation represents a possible “way of

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<sup>7</sup> See Pressing (1984, 346). This does not preclude the use of composed material entirely, however; Hannaford (2019, 36) shows how composed materials and improvisation interact in the music of Muhal Richard Abrams.

<sup>8</sup> This conceptualization sees tunes as idealizations, operating very much like a work in Goehr’s (1994) imaginary museum. The ontological status of tunes is discussed in Chapter 1; in many ways, I see the concept of referents as a means of productively disrupting this problematic, work-concept-like conceptualization.

knowing” that has not yet been sufficiently explored.<sup>9</sup> Second, and perhaps more importantly, it fails to address the fact that many performances simply do not rely on a single shared lead sheet or arrangement, and are instead based on a flexible, prototypical understanding of the tune. Love (2017) offers a further critique of this perspective, claiming that such a conceptualization asserts that novices and experts essentially “perceive the same objectively defined referent” and “differ only in their knowledge of the rules for processing it” (36). “Errors” under this framework are the result of an improviser failing to know or apply the rules of realization. By shifting the “cognitive burden” to the referent, improvisational “errors” may stem not from a lack of knowledge of rules but rather from a lack of knowledge of the referent itself. Love determines that this is still problematic, because the referent becomes too inclusive, and a structure that seems simple becomes exceedingly difficult to fully grasp. Claiming that “objective comprehension of a referent is not a meaningful possibility” (*ibid.*), Love instead lands on an ecological view, discussed in more detail below, which takes the referent to be a set of affordances.

A similar but slightly different take is offered by Garrett Michaelsen (2019) in his theorization of improvisational interaction, in which he posits that the referent acts as a non-human agent with which human improvising agents interact. While Michaelsen, citing Bowen’s (1993) account of the always-changing nature of tunes, acknowledges that referents are flexible, this flexibility is not necessarily always accessible in his theorization of

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<sup>9</sup> Goldman identifies an important tension between music-theoretical accounts of musical structure and assumptions about the cognitive processes that surround the generation and perception of those structures. Highlighting the rift between music theory and music cognition research, Goldman writes that “descriptions of cognitive correlates of musical structures are reliant upon the music-theoretical conceptions of the structures themselves” and that “changing one’s music-theoretical perspective on how to analyze structures in music can also change the inferences about the cognition underlying the perception and production of such structures” (2013, 1.5).

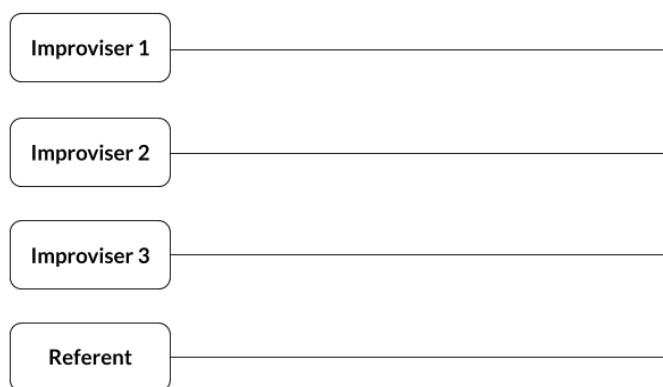
interaction.<sup>10</sup> By understanding the referent as something with which improvisers interact (that is, by affording it agency), Michaelsen implicitly treats it as separate from other ongoing generative processes that necessarily rely on the referent; my interpretation of this implicit conceptualization is visualized in Example 4.2. A number of considerations complicate this view. First, although referents are often aligned with lead sheets, there is typically no written score with which the referent can be identified for a given performance. Rather, as discussed in Chapter 3, many improvisers learn tunes without recourse to (or reliance on) a lead sheet and therefore come to a unique conception of the tune. This again suggests that referents are not “out there in the world” but are instead prototypes stored in memory. Moreover, these referents must be able to be negotiated in the moment of improvisation with other improvisers. If each musician has a unique referent and the process of improvisation necessarily requires that those referents are constantly negotiated against one another, our visualization of interaction would change, resembling something like that shown in Example 4.3. In this view, referents are coupled with improvisers, indicating that the auditory stream that results from their utterances is at some fundamental level inextricable from the influence of the referent. Put in Pressing’s terms, the event clusters that comprise the unfolding auditory stream engendered by Improviser 1’s actions originate in Improviser 1’s array generator, which is always being influenced by the referent on an ongoing basis. Interaction with referents, then, happens primarily through negotiation of the referent’s structure as manifested in each improviser’s auditory stream. In this way, referents may be

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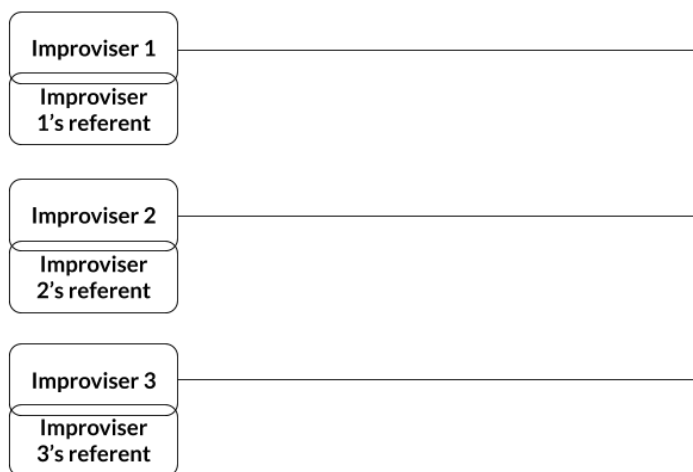
<sup>10</sup> This is not a flaw of Michaelsen’s theorization but rather a product of his prioritization of interaction. For Michaelsen, interaction with the referent is more comparable to Gates’s (1988) notion of “Signifiyin(g),” a means of expression opened up by juxtaposing particular improvised utterances against a well-known referent.



**Example 4.2:** My visualization of Michaelson's interaction framework, which regards the referent as an agent, a separate stream with which improvisers may converge or diverge.



**Example 4.3:** My view of referents as inextricable from the projection streams of improvisers, embedded in the matrix of improvisational interaction.<sup>11</sup>



<sup>11</sup> Note that this visualization does not account for the various ways in which each improviser's referent (or utterances based on that referent) may converge with or diverge from, to varying degrees, those of other improvisers. Likewise, power dynamics between improvisers are not taken into account here. If, for example, one of these improvisers is the leader of the ensemble, the other improvisers may be inclined to alter the contents of their referent for the performance to more closely match what they understand to be the leader's referent. Different instrumentalists may also engage with tunes differently, potentially leading to further conflicts. For example, a pianist may focus more on the particularities of harmonic motion in various versions than a drummer, who may be more focused on the formal particularities and the opportunities that particular melodic utterances afford for interaction.

understood not as fixed, idealized objects but rather as internalized conceptualizations of relatively fixed yet flexible musical structures.<sup>12</sup>

### *Referents and Memory*

If referents are internalized, they are stored in memory.<sup>13</sup> Memory is itself an enormous topic, and its bearing on referents, and jazz tunes more specifically, is deserving of more attention than I can devote to it here. Nonetheless, a brief discussion of the relationships between referents and memory is warranted.

Pressing (1984, 353) categorizes components of the improvisational process according to long- and short-term memory.<sup>14</sup> For Pressing, short-term memory is where the immediately preceding context is stored, and along with it some of the ideas that are influenced by that context. Long-term memory is responsible not only for earlier training (and all the minutiae it carries with it), but also earlier material (such as learned licks and formulas) and the referent.<sup>15</sup> Pressing makes a related distinction between *object* and *process* memory:

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<sup>12</sup> It seems plausible to imagine that referents are densely entangled with paratextual information; closer consideration of such paratexts is outside the scope of the present study.

<sup>13</sup> Zbikowski (2002) claims that this is true of any aural tradition, writing that “performers who work within aural traditions base their performance of a given tune on a cognitive construct that is stored in memory and that represents essential features of that tune” (217).

<sup>14</sup> Short-term memory is now most often referred to as “working memory” (Mavromatis 2019).

<sup>15</sup> Although Pressing categorizes the referent as being stored in memory, it seems that he still sees it as being a musical structure capable of being perceived objectively. The difference between Pressing’s theorization of referents and mine here is that I see referents not as simply being stored in memory for practical purposes (much like, for example, a memorized, composed score might be in order to facilitate competent performance) but rather as existing *exclusively in the domain of memory*. In this sense, referents have no counterpart “out there in the world”; they exist only in the (embodied, situated) mind and are grounded in lived experiences, especially in the way that prior performances (as parts of an *avant-texte*) become encoded in them.

One method is to practise the execution of specific forms, motives, scales, arpeggios or less traditional musical gestures, so that such musical objects and generalized representations of them are entered into long-term “object memory” in conceptual, muscular and musical coding. A second method is to practise the “process” of compositional problem-solving: transitions, development and variation techniques, and methods of combining and juxtaposition are practised in many musical contexts and with many different referents. This experience (along with actual performance) forms the basis for long-term “process memory” (Pressing 1984, 355).

Pressing would later recognize that object and process memory roughly correspond to the notions of *declarative* and *procedural* memory, respectively. Whereas declarative memory stores facts (knowledge of *what*), procedural memory operates at a more subconscious level (knowledge of *how*). Put differently, declarative memory is used to explicitly recall, while procedural memory describes skill (Berkowitz 2010, 8). While improvisational processes more generally are sometimes characterized as largely procedural (Johnson-Laird 2002, 439), referents would seem to represent both kinds of knowledge: for example, when asked “what is the third chord of ‘All the Things You Are?’,” an expert improviser could respond with declarative knowledge about the tune by saying “Eb7,” or perhaps “V in the opening key.” But their knowledge of the same tune is also procedural, guided by a sense of what it is and has been like to play that chord in the context of the tune countless times. Indeed, understanding tunes as residing, at least in part, in procedural memory disrupts the very idea that tunes can consist of fixed chord progressions and melodic statements, because the possible paths through the tune and the variations that the improviser knows or has played shape a more nuanced, subconscious understanding of the tune’s structure.<sup>16</sup> As Berkowitz notes, procedural memory includes (but is not limited to) what is often referred to casually as

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<sup>16</sup> This is similar to the familiar sentiment among jazz musicians that, when it comes time to improvise, the subconscious ought to take over, allowing the improviser to naturally generate ideas by relying on technique they have acquired through practice.

“muscle memory” (2010, 9), and is therefore closely related to theories of embodied cognition. Indeed, research in embodied cognition suggests that the ways in which musical structure is understood (and utilized) by improvisers is grounded in sensorimotor perception and kinesthetics. Vijay Iyer for example notes that “for musical performers, the difference between musical and human motion collapses to some degree; the rhythmic motions of the performer and of the musical object overlap” (Iyer 2002, 395).<sup>17</sup>

The distinction between declarative and procedural knowledge also resembles that between *verbatim* and *gist* memory.<sup>18</sup> We use gist memory frequently, for example to recall the “gist” of a story, but verbatim memory is used less frequently. Without the help of written texts, recalling a passage of literature verbatim is exceedingly difficult, while recalling only the broad strokes of its meaning is comparatively easy. According to psychologist Ian Hunter (1984), under usual circumstances, we are not only incapable of recalling verbatim passages of spoken text, but also are unable to *recognize* whether two extended passages are in fact exactly identical.<sup>19</sup> However, as Elizabeth Margulis (following Tillmann and Dowling 2007 and Dowling, Tillmann, and Ayers 2001) has noted, verbatim memory seems more common in remembering music, where gist memory becomes comparatively of little use due to music’s lack of clear semantic meaning; whereas a story can be essentialized, a piece of music cannot be. This is in part due to the fundamentally and irreducibly temporal nature of music. As Margulis (2013) writes, “[y]ou can’t duck in and out of music, midphrase—you have to mentally ‘sing through’ until you get to the spot you want” (2013, 44). Margulis argues that

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<sup>17</sup> The suggestion that improvisers engage with musical structure differently than other kinds of performers is a question explored and thoughtfully refined in Goldman (2016). Rather than seeing improvisation as one way of engaging with the same musical materials, Goldman posits that improvisation may represent a different “way of knowing,” resulting in fundamentally different structures of knowledge (2016, 3.1).

<sup>18</sup> A helpful summary of psychological literature on gist and verbatim memory and their relation to music can be found in Margulis (2013, 85–89).

<sup>19</sup> A notable exception to this, however, may be actors memorizing a script.

*repetition*, unusually common in music compared with other arts, relates deeply to the prevalence of verbatim memory in music, writing:

High verbatim memory, rather than (or in addition to) benefiting from temporal structure, seems to reflect an implicit commitment to the idea that something valuable resides in the surface content. It can be taken as an index of the value assigned to the actual details of the stimulus over and above some abstract content for which those details serve as a vessel. Just as the significance of a poem often resides in specific word choices and their nuanced associations and connotations, as well as in their interrelationship, the significance of an insult often resides in the specific word choice and the timbral nuances used to utter it. *These elements are the most resistant to conceptual capture, and thus benefit most from repetition* (Margulis 2013, 88–89, emphasis mine).

Indeed, as we saw in Chapter 3, the musical surface often appears to be encoded as part of the referent, and repeated hearings serve in part to help encode those verbatim utterances. This is only reinforced by audio recording technology, which allows for exact replays of the musical surface, providing more opportunities for verbatim particularities to be encoded.<sup>20</sup>

If music seems to be more frequently encoded verbatim, at the surface level, why do we not only remember the surface—how do we *also* arrive at a kind of prototypical background understanding of a tune? In part, this seems to be due to *what* is repeated when we listen to one or multiple versions of a tune. Some features are repeated far more than others, even in a single performance, including for example certain (often “structural”) melodic tones, particular harmonies (whether “reharmonizations” or not), and other miscellaneous features understood for a variety of reasons to be important to the tune’s

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<sup>20</sup> Margulis (2013), for example writes that “[w]hen most everyday listening happens through recordings [...] these practices do not serve as a kind of neutral background on which more individualized live performances can stand; rather, they come to define the set of expectations listeners bring to new musical experiences” (91).

identity.<sup>21</sup> When we listen to many versions of the same tune, gist memory seems to come into play by extracting the features shared between multiple versions. Referents therefore seem to rely both on verbatim *and* gist memory in varying degrees depending on listening habits, how a tune is learned, educational experience, and so on.<sup>22</sup>

### *Ecological Affordances*

Regardless of how exactly referents are stored in memory, we must remember that they are always, as Love argues, a form of mediated knowledge, and are therefore always embedded in many other kinds of thought (2017, 36).<sup>23</sup> This view of referents as an aspect of embodied, situated cognition runs contrary to the computational models first explored by Pressing and Johnson-Laird, and inspires Love to turn instead to ecological psychology as a means of modeling referents and the roles they serve in jazz improvisation. Love notes that Pressing's computational perspective sees referents as making improvisation easier by limiting the options available and lessening the amount and extent of creative work necessary to improvise, while an ecological perspective would see the constraints that referents pose as doing just the opposite, making improvisation harder by means of "shrinking the set of actions that count as 'success'" (Love 2017, 34). Using Sudnow's (2001) metaphor of

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<sup>21</sup> In this sense it is noteworthy just how much harmony is reinforced more than melody, for it is reinforced every chorus, not just in the head.

<sup>22</sup> Educational experience may become especially important if a tune is explicitly taught to a student, or if an improviser otherwise makes a conscious effort to learn the tune. This is often the case when musicians strive to "learn the changes" in a way that is explicit, especially when this learning process relies more on lead sheets or active transcription more than on a blend of active and passive listening.

<sup>23</sup> Love's use of the term "mediated knowledge" is adapted from Gibson ([1979] 1986, 42).

navigation, Love sees referent-based improvisation as navigation through an environment that is shaped by the *affordances* (Gibson [1979], 1986) of the referent.<sup>24</sup>

Affordances are “opportunities for action that emerge from the interaction between organisms and their environment” (Hannafor 2019, 6). Love sees a referent as an environment with which improvisers interact, which results in a set of affordances. He construes these affordances rather broadly, writing that “the affordances of any given referent are practically infinite, not only in the form of trivial variants on stylistic clichés, but also in the form of genuine innovations: actions substantially unlike anything done before that nonetheless ‘work,’ that is, sound artful to an informed listener” (Love 2017, 34). Indeed, Love’s reconsideration of referents as sets of affordances leads him to the striking conclusion that “the psychological processes underlying expert improvisation do not depend on rules at any level” (ibid.). By rejecting the notion of rules, Love strives to capture a more complicated picture of improvised behavior, one grounded in lived experience, that cannot be easily modeled by an algorithm.<sup>25</sup>

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<sup>24</sup> Love’s account of an ecological description of jazz improvisation has many resonances with Hannafor’s work on free jazz (Hannafor 2019) and is anticipated in some ways by Vijay Iyer’s writings (1998, 2002) on embodied, situated cognition as a means of understanding the cognitive processes underlying improvisation.

<sup>25</sup> Affordances offer a compelling way out of what Love characterizes as a “theoretical cul-de-sac” (2017, 36): rather than trying to determine with certainty the exact characteristics of a referent, we instead acknowledge that a referent “affords” certain actions, and that these affordances are inherently subjective, embodied, and situational, and are therefore flexible and change with each passing performance (and even each passing chorus). Like many theoretical revelations, this change in perspective is helpful, but not necessarily revolutionary: should we shift our perspective to affordances, we are still stuck trying to understand the conditions that govern affordances for a typical improviser given a particular referent. The subjective-objective divide still remains an issue as well, thanks to the negotiability of referents in group interaction. Improvisers are unlikely to conceptualize referents in ways so radically different that they cannot at least agree on a baseline understanding to the extent that they are able to successfully coordinate improvised behavior. If a referent has certain affordances, those affordances still emerge from socioculturally mediated, music-theoretically definable conditions of flexible musical structures. This argument is not an attack on Love’s work or the theory of affordances more generally. On the contrary, I think that Love’s theorization is insightful in its characterization of improvisational processes and that referents can profitably be understood from this perspective. The skepticism expressed here is only meant to qualify Love’s assertions for the purposes of defining and better understanding what referents are and how we might best investigate them. An affordances-based model suggests an important perspective shift, especially with regard to how improvisers and referents interact in the course of improvisation, but it does not necessarily offer new ways of conceiving of referent *features*.

It may at first seem as though affordances simply flip the computational perspective on its head: instead of constraints against which improvisational behavior strains, referents constitute affordances that establish possible actions. Yet an ecological perspective does more than this, emphasizing the *interaction* between an agent and its environment and the ways in which that relationship densely intertwines the two. Writing about how this interaction complicates the precise location of affordances, Hannaford states that “animals perceive objects in the environment in terms of their potential interactions with or uses of them—that is, directly—rather than their constituent qualities, such as size, color, or weight ... Affordances thus neither inhere completely in objects or animals” (2019, 43) and in that sense disrupt the subjective-objective dichotomy. The resulting system, wherein animal and environment become inseparably intertwined, resembles Karen Barad’s (2003) notion of *intra-action*, whereby the interaction of two entities is rendered ontologically unique due to the fact that those entities are either nonexistent or fundamentally different when the interaction does not take place. An animal cannot exist apart from its environment, and so the coupling of animal and environment becomes an important intra-action that constitutes in part the identities of both. The entities *rely* on each other for their identity; those identities change if the intra-action changes, and they cease if the intra-action ceases.

Following Anthony Chemero (2009), Hannaford identifies a feedback loop that emerges in this animal-environment system. Because animals’ actions can alter their environment, they can alter the affordances of the environment, with which they continually interact. This feedback loop resembles many of the feedback loops observed by various writers on improvisational processes.<sup>26</sup> Applied to jazz tunes, referents may be understood as

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<sup>26</sup> Hannaford cites as examples of such writers Berkowitz (2010), Braasch (2011), Johnson (2011), Pressing (1984, 1988), and Wilson and MacDonald (2016). A similar phenomenon is noted by Hodson (2007) and Michaelsen (2013a, 2019) in their studies on group interaction.



changeable environments that depend on the individual improviser for their identity; improvised behavior both relies on the referent and can simultaneously alter that referent.

### **Entangled Features: Referents, Arrangements, and Knowledge Bases**

Jazz tunes represent particular kinds of referents. The remainder of this chapter is devoted to a description and theorization of what kinds of features comprise such *tune-referents*. I begin with a discussion of how referent features are entangled with other musical materials, especially arrangements and improvisational knowledge bases. Following this, I adapt the notions of defaults and modules, familiar from *Formenlehre* research (Hepokoski and Darcy 2006), to the study of referents. These concepts prove helpful for capturing both how the tracing of relations between individual documents in an *avant-texte* manifests in developed referents and how those referents inflect, whether consciously or not, performances of tunes. The chapter closes with an overview of the musical parameters most frequently associated with tunes, establishing a foundation on which the analytical approach developed in Chapter 5 rests.

It will be useful at this juncture to return to and flesh out a number of distinctions and considerations that have been introduced throughout the course of the dissertation thus far. In Chapters 2 and 3, I drew a distinction between *referent features* and *arrangement features*, noting that distinguishing between the two is often difficult but important nonetheless if we are interested in understanding how tune-concepts operate. By construing referents as internalized cognitive prototypes, this distinction becomes more sharply etched.

Referent features may be best defined in opposition to other kinds of content. Arrangements represent such an opposition. For the purposes of the present project, I

define an arrangement as anything about a given performance that is fixed before that performance begins, as agreed upon by members of the same ensemble.<sup>27</sup> Under such conditions, an utterance that does not follow the arrangement is *unambiguously* considered by both the player and the ensemble to be an error.<sup>28</sup> This is subtly, but importantly, different from an error emerging from other kinds of circumstances, including for example contrasts between intent and realization, the sounding music and an audiation stream, or style and referent. An arrangement error arises from a set of agreed-upon expectations and is therefore less amenable to “corrections” that positively contextualize the mistake as the improvisation continues to unfold, potentially reversing the initial evaluation of the utterance as an error.<sup>29</sup> Arrangement features may or may not be legible to an informed audience, although brazen arrangement errors may render tangible the fixedness of an arrangement when it would otherwise have gone unnoticed.<sup>30</sup>

Arrangements can vary widely in complexity. In extreme cases, every utterance of a performance, down to the finest grains of detail, may be arranged. Arrangements, especially

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<sup>27</sup> This of course does not resolve all ambiguous cases, especially since it is not always clear to the audience what is or is not arranged. Arrangement features can also, if they become commonly adopted, transcend their original arrangement contexts to become referent defaults. An especially ambiguous case in this regard is the notion of sub- and countermelodies that are replicated in multiple performances by different artists (see for example the distinctive, descending contrapuntal line added to the A section of Miles Davis’s “Nardis” by Bill Evans in his arrangement of the tune on *Explorations* (1961), which is an arrangement feature that has since been replicated in many lead sheets and subsequent recordings).

<sup>28</sup> This does not necessarily mean that the error is conceived of in a negative light. The general tendency in many jazz styles to consider mistakes as possibilities for further improvised elaboration allows for arrangement errors to be taken lightly, possibly even embraced. The important consideration, for the present purposes, is that the utterance in question unambiguously fails to match the arrangement. For more on errors and what they communicate about jazz ontology and referent knowledge, see Love (2016) and Love (2017).

<sup>29</sup> This framework for arrangement errors, which is grounded in a shared agreement of what constitutes the arrangement, is complicated when solo performances are taken into account. Solo performances may still make use of arrangements, but it becomes more likely in such cases that only the (singular) performer will be aware of exactly what the arrangement is.

<sup>30</sup> As explored in Chapter 2, arrangement features can become clear to an audience as the performance unfolds, or over the course of repeated listenings, through exposure to the same (or similar) utterances in multiple choruses, correspondences between the utterances of players, and so on.

those organized for a large ensemble, often involve a notated score, but this is not always the case. Small-ensemble arrangements especially may be communicated verbally or aurally. Whereas big-band arrangements often feature complex harmonizations of the melody, countermelodies, thick horn textures, *solis*, and so on, small-ensemble arrangements are often comparatively thin, featuring perhaps a particular melodic rhythm, contrapuntal line and/or harmonization for the melody, specified chord changes, and ensemble “hits” that the rhythm section emphasizes together.<sup>31</sup> Even in such cases, small deviations from the arrangement, especially creative ones such as reharmonizations, melodic embellishments, and antiphonal interpolations, may be considered acceptable or even desirable. Nonetheless, the arrangement arguably retains an identity separate from, but intertwined with, the tune-referent.

In such cases where the arrangement is internalized, it becomes a special kind of referent, albeit one with specific conditions attached to it that may constrain the kinds of improvisational decisions the performer makes.<sup>32</sup> A performer in this case may develop two referents for the same tune: a *tune-referent* and an *arrangement-referent*.<sup>33</sup> Whereas an arrangement-referent is understood by the improviser to constitute a special case in the form of an agreed-upon arrangement, and is therefore constituted by arrangement features rather than referent features, a tune-referent stands apart from this as a set of defaults (discussed in

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<sup>31</sup> A good example of a relatively small ensemble that frequently followed tight arrangements was Art Blakey’s Jazz Messengers. See for instance their 1959 recording of “Come Rain or Come Shine,” which features specific melodic rhythms and many ensemble hits over the course of its head.

<sup>32</sup> The line between referent and arrangement features can be blurry: for example, if an ensemble frequently plays a given arrangement, the improvisers’ referents may eventually come to mirror the arrangement.

<sup>33</sup> As we saw in Chapter 3, these arrangements can also impact the process of referent formation when arranged utterances become transcribed as tune-referent defaults. Features that might often be thought of as arrangement features, especially ensemble hits, can sometimes emerge as defaults in certain tunes. Take, for example, the rhythm section hits in Joe Henderson’s “Inner Urge,” which punctuate phrases and subphrases of the melody: in my experience, these hits are often considered by improvisers to be inextricable from the tune’s identity, and failing to perform them in a jam session could evince a lack of knowledge of the tune.

more detail below), representing what the improviser considers to be “the tune itself.” Tune-referent features may therefore be understood, in part, as those features that do not belong to a given arrangement but instead emerge organically through engagement with documents in an *avant-texte*.

Tune-referents must also be separated from the rest of an improviser’s *knowledge base* (Berkowitz 2010), which comprises the collection of learned formulas and gestures, techniques, music-theoretical knowledge, and so on, that aids an improviser in the generating of improvised utterances.<sup>34</sup> In his theorization of improvisation, Berkowitz refers to referents as a portion of the larger knowledge base constituting pre-learned materials (2010, 5). Yet separating the referent from the rest of the knowledge base is not always an easy task, and it may be more productive to complicate this relationship further, seeing referents and knowledge bases not as totally distinct entities but rather as fuzzy, overlapping categories. This is especially so because the structural qualities of a referent are arguably inseparable from the ways of knowing that help us define those structural qualities in the first place.<sup>35</sup> If an improviser has, for example, been taught to conceptualize harmonic structure through the popular (but controversial) framework of chord-scale theory, their knowledge of *what* the referent is and *how* to improvise over it become intertwined. Chord-scale theory conceptualizes chords and scales as one and the same, vertical and horizontal expressions of the same musical object, entailing a relatively fixed conception of each chord in a set of chord changes. A musician who is taught how to improvise mostly under this rubric has a knowledge base primarily comprised of various scales that fit over certain chords and a

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<sup>34</sup> The knowledge base may also be said to contain the schemata with which Chapter 5 is concerned.

<sup>35</sup> I borrow this phrase from Goldman (2016). The vast number of conceptualizations that this kind of perspective opens up is discussed in Stover (2013). I return to this point in Chapter 6.

referent comprised of chords over which those scales fit, along with a melody defined through chord-scale relationships.<sup>36</sup>

A picture begins to emerge of the referent in its cognitive context, deeply entangled amidst the many categories and distinctions discussed thus far, including array generators, audiation streams, acoustic signals, arrangements, considerations of musical style, and so on. While it is tempting to think of referents as set in relief to these other kinds of features, it is ultimately impossible to truly disentangle referents from their contexts. Even as we gradually carve away those categories that stand in seeming opposition to them, inching toward a clearer picture of their cognitive reality, referents will remain slippery and elusive.

## Referent Defaults

Even if they remain difficult to grasp and to separate from their context, one concrete way that we can begin to pin down referents from a musico-structural standpoint is through the notion of *defaults*.<sup>37</sup> My adoption of this term is inspired by its use in *Formenlehre* writings, especially those by James Hepokoski and Warren Darcy.<sup>38</sup> Indeed, their *Sonata Theory* has many resonances with the overarching project of this dissertation: their conformational approach to the analysis of form seeks to understand how sonata form prototypes emerge from the relationships established between individual documents in a large network of

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<sup>36</sup> This is, of course, probably an exaggeration: even students taught how to improvise *exclusively* through learning chord-scale theory would undoubtedly stumble upon alternative ways of understanding musical structure simply through their lived experiences, their situatedness in a musical culture.

<sup>37</sup> See also the discussion of determining defaults through analysis in Chapter 2.

<sup>38</sup> Sometimes called the “new Formenlehre” (see Riley 2010), this literature represents a renewed analytical engagement with concepts of classical form and is typified by the work of Caplin (2000), Hepokoski and Darcy (2006), Schmalfeldt (2011), and Monahan (2015). See also the collection of writings found in Bergé (2009).

eighteenth-century sonatas that share certain compositional procedures and formal scripts. Defaults comprise one of the core tenets of this conformational framework and are conceived in sonata theory using a hierarchical level system: first-level defaults are more common choices than second-level defaults, which are more common than third-level defaults, and so on. Defaults are not simply measures of frequency, however. Hepokoski and Darcy imbue the implementation of defaults with an air of automaticity, and reserve the act of deviation from defaults for moments of creative intentionality. They write:

First-level defaults were almost reflexive choices—the things that most composers might do as a matter of course, the first option that would normally occur to them. More than that: not to activate a first-level-default option [...] would require a more fully conscious decision—the striving for an effect different from that provided by the usual choice. An additional implication is that not to choose the first-level default would in most cases lead one to consider what the second-level default was—the next most obvious choice. If that, too, were rejected, then one was next invited to consider the third-level default (if it existed), and so on (Hepokoski and Darcy 2006, 10).

Although the authors highlight the creative agency of the composer, defaults are not compositional acts but rather exist in the domain of the prototype. By identifying multiple levels of defaults, Hepokoski and Darcy are able to ensure that the prototypes they develop are both not overly limited and are able to contain multiple concrete exemplars.

These terms carry much the same weight when dealing with tune-referents. In this context, defaults describe the most thoroughly internalized, automatic version of a particular passage of a given tune. Improvisers may often store multiple concrete exemplars as part of their referent, leading to first-, second-, and third-level defaults (Example 4.4). Like in *Sonata*

*Theory*, defaults are grounded in the emergent relations between various instantiations of the prototype.<sup>39</sup>

**Example 4.4: Illustration of possible first-, second-, and third-level harmonic defaults in m. 5 of Jerome Kern's "All the Things You Are."**

The image displays two staves of musical notation in G major (one sharp). The top staff shows the first four measures of a phrase with chords F-7, Bb-7, Eb7, and Abmaj7. The bottom staff shows the continuation of the phrase with chords Dbmaj7 and Cmaj7. Between the staves, a table defines the harmonic defaults for the notes in the bottom staff:

Third-level default:	D b 7	
Second-level default:	D-7 b 5	G7alt
First-level default:	G7	

In addition to defaults, one of the core concepts utilized by Hepokoski and Darcy is that of a formal *module*. Rather than trying to capture the entire formal script of sonata forms as singular prototypes with variable realizations, Hepokoski and Darcy break up larger-scale prototypes into much smaller modules, allowing for defaults to be applied to much smaller chunks of the musical surface. Tune-referents may most fruitfully be engaged with in smaller chunks as well, although the segmentation of the musical surface into clear modules is sometimes a challenging task. Various kinds of segmentation are discussed in the following sections, as well as in Chapter 5.

<sup>39</sup> Hepokoski and Darcy use the term “deformation” to describe deviations from defaults, a choice which has been controversial due to the word’s association with disability (see, for example, Straus 2006). Although Hepokoski and Darcy are careful to clarify that their use of the word is meant to be imbued with positive connotations of creative agency, other terms with less negative weight can reasonably be used to describe this relationship in a more neutral way. For this reason, I have opted not to adopt the use of the term here.

## The Musical Parameters of Tune-Referents

Tune-referents are most often employed in a head–solos–head format where a chorus of a set number of measures is repeated cyclically. Their features are typically assumed to resemble those of a lead sheet: melody, harmony, metric structure, and form. As Love notes, metric structure and form are in many ways the least negotiable aspects of a tune-based jazz performance. He argues that theorists frequently “ignore meter not because it is unimportant, but because it is rigid and taken for granted” (2011, 5). Yet whereas meter and form are absolutely crucial for ongoing temporal coordination between improvisers (and listeners more generally), melody and harmony are, as we have seen, far more flexible. This raises the question of what role melody and harmony serve as part of the contents of referents, and how these flexible domains might be conceptualized.

While it is important to move beyond the oversimplified definitions often given for what kinds of features constitute a jazz tune, namely melody and chord changes, it is equally important to acknowledge that such definitions can profoundly affect the way improvisers conceptualize tunes. It will therefore be useful to consider tune-referents through this lens, as a kind of combination of melody, harmony, and form, along with some other miscellaneous features that improvisers might identify as central to a given tune. Although the following discussion proceeds by taking these categories in turn, it is worth emphasizing that these categories often overlap and sometimes break down entirely.



## *Melody*

Johnson-Laird sees jazz improvisation as largely a process of fitting melodies into existing “chord sequences” (2002, 424–430). Indeed, for Johnson-Laird, referents consist *only* of static chord sequences.<sup>40</sup> Pressing (1988, 144–145) refers to repeating chord progressions as well, even if his broader theory of improvisation has room for various kinds of ornamented melody and melody types (1984, 348). Such views, which treat tune-referents as simply a series of static, unchanging chord progressions, sharply contrast with the views expressed by jazz practitioners, many of whom passionately assert that the melody (as well as other aspects of the tune, including more nebulous concepts like “mood” and emotional content) is just as important to the improvisational process during solos.<sup>41</sup> If this is the case, what exactly is the role of melody in the performance of tunes, and how does this translate to the referent?

I argue that the referent operates slightly differently in the head versus the solos of a performance. In the head, the melody is foregrounded and becomes essential to the performance. This is not to say, however, that there can be no variation. On the contrary, the head melody represents in some ways an ideal moment for subtle variation and paraphrase, especially in the case of familiar tunes. Because enculturated listeners will have internalized the head–solos–head script, there is a strong expectation that the performance

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<sup>40</sup> Johnson-Laird does not use the term “referent,” instead referring only to “chord sequences” in contexts where other writers might use “referent.” This is telling in that it suggests that Johnson-Laird’s model of jazz improvisation does not take tunes to be complicated sets of information but rather simple, objectively defined sequences of harmonies distilled from a fixed composition.

<sup>41</sup> A colleague of mine at The Juilliard School insists that those who do not actively improvise on the melody are in fact not improvising correctly. He cites Thelonious Monk’s conception of tunes as the reasoning behind this evaluative criteria. Such deferrals to authoritative figures from the jazz lineage are commonplace in much insider discourse on jazz, and disagreements between authoritative figures are capable of producing a tremendous amount of disagreement between even insiders who move through the same social and professional circles.

will begin and end with a statement of the melody, causing a listener to have their own learned prototype of the melody running through their head as they listen to these parts of the form, which they can then contrast against the unfolding performance. Benjamin Geyer refers to this process as a comparison between an *audiation stream* and the *acoustic signal* (2016, 9). For Geyer, the relations between audiation streams, acoustic signals, and referents (which he refers to as “schemes”)<sup>42</sup> are dense. “The acoustic signal,” he writes, “is conceptually separable into content expressive of the scheme and other, more freely invented content,” while “[e]xperienced listeners familiar with a performance’s underlying scheme have ongoing expectations about what might happen based on their own audiation streams” (Geyer 2016, 9–10).<sup>43</sup> The referent-melody is thus part of both the sounding musical surface and the audiation stream, although it is especially germane to the latter where it dictates, along with broader stylistic and contextual cues, a set of expectations for the unfolding performance. Indeed, referents are arguably most accessible to us in their manifestation as expectations in an audiation stream, where substantial deviations from these expectations are marked as unusual events belonging to the realm of the performance rather than that of the tune itself. In the head, the referent-melody plays an active role in the audiation stream, and much of the expressive character of individual melodic performances derives from the fluctuating distance between the audiation stream and the sounding melody.

In the chorus, the melody’s role is more flexible. It may, on the one hand, stay present in the improviser’s mind, informing improvisational choices and aiding coordination

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<sup>42</sup> Geyer does not use the term “referent,” instead adopting “scheme” from Love (2011) to mean much the same thing. I avoid using the term “scheme” here in part because it does not quite capture the complexity of ways in which referents are embedded in other cognitive processes, but also to avoid confusion with the discussion of schemata in Chapter 5.

<sup>43</sup> Geyer’s discussion of audiation streams has striking resonances with Garrett Michaelsen’s theorization of “referent projections” (see Michaelsen 2013a, 92–94), which constitute “an essential domain of interactional activity for a performance” (ibid., 90).

on an intermediate time scale, at the level of the phrase, section, or chorus. In such cases, actual references to the melody may or may not be manifest on the musical surface. As Henry Martin has persuasively argued, the melody is often implicit in the deep middleground voice-leading of expert players.<sup>44</sup> The melody may also be used primarily as a means of enriching the referent, for example by continually reminding the improviser of where exactly they are in the form. This information can prove useful in group interaction as well, not only as a means of coordination between players but also as a resource for what Givan (2016) terms “motivic interaction” with the theme. If any of the players, whether in the role of soloist or accompanist, do make clear reference to the melody, having the melody running actively in one’s auditory imagination will be useful for picking up on such references, which in turn opens opportunities for interaction. On the other hand, some improvisers may mostly ignore the melody and turn to the chords only. In this latter case, the referent becomes only a harmonic and metric prototype, at least as long as the improviser is ignoring the melody. This does not imply that such improvisers are unaware of the melody, only that they are not actively improvising it with it in mind.

Given the insistence of many jazz improvisers that the melody ought to be considered as part of what is being improvised on, including the melody as a feature of the referent is imperative. But while it is tempting to consider the irreducible entanglement of melody and harmony, I contend that, due to the extent to which the melody is often backgrounded, it is more useful to think of melody, on the one hand, and chord changes along with meter and form, on the other, as two distinct (but always closely related) aspects of a referent. This separation does not require that we engage with each aspect totally

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<sup>44</sup> See Martin (1996a). Martin’s influential study, which uses Schenkerian analysis to locate relations between the theme and solos, focuses on Charlie Parker but can likely be expanded to include many other expert improvisers.

separately but rather keeps open the possibility that improvisers may not be making use of the melodic aspects of the referent in their improvisations. As we will see, these aspects also operate in different ways when we consider each of them as flexible prototypes, where harmony, meter, and form are so densely entangled that separating them becomes impossible

In Chapter 3, I explored a number of ways in which performances might be understood to communicate aspects of a referent. The spectrum of textility shown in Example 3.10 is useful for determining how closely particular utterances relate to an emergent prototype of the melody. But what exactly might such a prototype look like? And can we separate it from the exemplars that emerge as we engage with individual documents from the *avant-texte*? In his study of the categories of jazz style, Daniel O'Meara (2016) uses prototype categorization to probe the boundaries of musical similarity relations, noting that “[j]ust as a category grows out of processing, interpreting, and grouping ideas and concepts together, a musical formula emerges through a listener evaluating a musical landscape and clustering certain resonant moments with one another” (93). To demonstrate this process, O'Meara groups together eight melodic statements from various Hank Mobley performances and abstracts from them six resemblance criteria shared by some of the recordings. Much like family resemblances, none of the criteria are applicable to all eight excerpts, but outliers emerge that feature less of the criteria than other excerpts.<sup>45</sup> Melodic prototypes for tune-referents emerge in a similar way. Example 4.5 provides a table comparing various features of the first two measures of the B section across nine recordings of Ellington and Strayhorn's “Satin Doll” (Example 3.12). As noted in Chapter 3, the particularities of a

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<sup>45</sup> See O'Meara (2016, 96–98). My Example 4.5 adapts O'Meara's Figure 3.2 and Table 3.1 to the melody of the B section of Ellington and Strayhorn's “Satin Doll.”

referent are not always determined by an exact average of all of the recordings. Instead, considerations as diverse as personal stylistic preferences, memetic responses to particular instruments, the historical and commercial weight of certain performances, as well as other considerations, can all come into play in establishing a prototype.

**Example 4.5:** Table comparing features between nine recordings of the first two measures of the B-section melody of Ellington and Strayhorn’s “Satin Doll” (see Example 3.12).

	Beat 1 always anticipated	Beat 3 always anticipated	Uses only eighth notes	Uses quarter-note triplets	Uses only tones found in Ellington’s original
Duke Ellington	x		x		x
Ella Fitzgerald			x		x
J. J. Johnson		x	x		x
Wes Montgomery	x	x	x		
Jimmy Smith			x		x
Erroll Garner				x	x
Count Basie	x		x		x
Clark Terry/ Oscar Peterson				x	
McCoy Tyner					

One final consideration is especially important when dealing with the melodies of the tune: namely that many tunes begin life as popular songs and therefore have *lyrics* that accompany their melody. Indeed, even standards that were originally written without words

would often later have lyrics added to them.<sup>46</sup> To what extent might words comprise part of a tune-referent? While a comprehensive study of word-music relations in jazz tunes is beyond the scope of the present project, it is worth briefly exploring this relationship, especially with regard to what it reveals about conceptions of melodic structure in tune-referents.

Many improvisers learn tunes without learning the associated lyrics, regardless of whether or not the lyrics were written by the tune's composer(s) or published at the same time. If the words are learned, however, the effects on an improviser's structural conception of the melody can be profound. Consider the discussion of "What Is This Thing Called Love?" in Chapter 3. When faced with an instrumental rendition of the tune that deviated significantly from Porter's published melody, the referent I developed fixated on aspects of the resulting (embellished) melodic structure and thus differed from the specific pitches and rhythms implied by the song's lyrics. Once I became familiar with the lyrics of the song, however, the lyrics became a guide for phrasing the melody and for determining pitches and rhythms that were important to my new understanding of the tune's identity, causing new defaults to be established. This is especially the case in the opening gambit of the tune, which features the memorable title of the song.

In a more obvious way, vocalists singing the head melody of a tune with the lyrics must necessarily include the lyrics as part of their referent. When present, lyrics may constrain the extent to which the performer is able to embellish or otherwise alter the melody by requiring that words not be repeated, that syllables are mapped onto rhythms that capture appropriate syllabic accents, and that the correspondences between certain pitches, rhythms, and words are retained. Such constraints are not present in instrumental or

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<sup>46</sup> Famously, many of Duke Ellington's best-known songs were originally written as instrumental pieces.

wordless vocal performances of the melody.<sup>47</sup> An especially salient example of this contrast can be seen by examining the differences between the performance styles of Stan Getz and João Gilberto on their 1976 live recording *Getz/Gilberto '76*. As is characteristic of much of Gilberto's mature vocal style, his sung performances of the melody frequently involved altering the rhythms of the melody while retaining the pitch and words. This often results in a jarring rhythmic and metric displacement of certain utterances, encouraging the listener to maintain a heightened awareness of the melody throughout the performance. Getz's solos, by contrast, are nearly always paraphrases of the melody, interpolated with short flights of unrelated improvisation. Instead of retaining the pitches and words, and therefore much of the melodic character, of the melody, Getz lavishes the melody with embellishing tones, as well as other more elaborate additions. Both Gilberto and Getz establish and communicate a clear sense of how their performance of the melody relates to some prototypical version of it, but the methods by which they accomplish this are fundamentally shaped by whether or not words must be taken into consideration.

Beyond the implications lyrics have for the nuances of melodic execution, they can also affect the more ineffable aspects of referents (i.e., those qualities captured by Pressing's category of "mood") by lending associative meaning to the melody, or to the performance more generally. Such qualities have convinced some musicians that a tune's lyrics are utterly central to any performance of the tune, even if the performance is entirely instrumental. Perhaps the best-known anecdotal evidence of this mindset comes from pianist Ahmad Jamal's comments about playing with tenor saxophonist Ben Webster:

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<sup>47</sup> Despite this, a listener's referent may include the song's words, resulting in an ongoing comparison between the wordless, sounding melody and the listener's word-laden prototype as the performance unfolds.

I once heard Ben Webster playing his heart out on a ballad. All of a sudden he stopped. I asked him, “Why did you stop, Ben?” He said, “I forgot the lyrics” (Ahmad Jamal, in Waltzer 2001, A27).

The implication here seems to be that keeping the lyrics of a tune in mind is not merely helpful, but rather paramount to a successful performance. There are two possible interpretations as to why this could be the case for Webster. First, he may feel that the lyrics and the melody are so conceptually inseparable from one another that forgetting the lyrics results in forgetting the melody.<sup>48</sup> Second, he may feel as though playing the melody without the context of meaning provided by the lyrics renders the performance meaningless, or at least lacking in appropriate context. Jamal’s apparent surprise at Webster’s reasoning indicates both how unexpected this strict connection is and how profound that connection might be. Either way, this popular anecdote is often invoked in order to reinforce the idea that knowing a tune’s lyrics is at least important, or at most imperative.

Despite Jamal’s anecdote, it is important not to overstate the centrality of lyrics in tunes more generally. For one, many tunes do not have lyrics associated with them, or if they do they are lyrics that are not necessarily considered central to the identity of the tune. In cases where a tune has well-known lyrics, many improvisers will learn the tune apart from the lyrics, either by listening to instrumental recordings, reading a lead sheet that lacks lyrics, or some combination of these.<sup>49</sup> Even musicians who are well-acquainted with the lyrics of

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<sup>48</sup> This view runs counter to a division between melody and lyrics that is reinforced not only in musical practice (especially in instrumental practice) but also in popular print publications (especially the original *Real Book*, which features no lyrics) and in the prevalence of songwriting partnerships where one writer is (mostly) responsible for the music and the other is responsible for lyrics. This latter category comprises a number of well-known duos whose songs comprise a sizable portion of the standard jazz repertoire, including Richard Rodgers and Lorenz Hart (later Oscar Hammerstein II), Harold Arlen and Johnny Mercer, George and Ira Gershwin, and Antônio Carlos Jobim and Vinícius de Moraes.

<sup>49</sup> Some students are taught early on that learning the lyrics is a crucial part of one’s acquisition of repertoire knowledge. Conversely, some improvisers may not be aware that a given tune has lyrics, especially if their access to recordings, lead sheets with lyrics, or a jazz community in which they can learn, is limited.



tunes may not share Webster's conviction regarding the importance of the lyrics and, in practice, may continue playing the melody if the words escape them, or even intentionally choose to ignore the lyrics.

### *Harmony*

No other subject in jazz has received as much theoretical attention as harmony.<sup>50</sup> Although a detailed account of harmonic practices in jazz would be out of place in the current project, it is worth dwelling on how jazz harmony may be conceptualized by improvisers. Doing so will help to shed light on the role harmony plays in referents, and therefore also in determinations of tune identity.

As discussed above, numerous psychological accounts of jazz improvisation rest on the assumption that one of the fundamental activities performed by jazz musicians is fitting a melody into a static chord progression. It is easy to see why this view is so prevalent: tunes are, after all, often described as consisting of a melody and chord changes, and the emphasis that many improvising musicians place on the notion of "chord changes" (especially when qualified with the preceding article "the") perhaps overly reifies the concept, putting undue weight on the fixity that article implies.

This reification is furthered by lead sheet representations of tunes, which represent harmony using chord symbols. Chord symbols can be vague or specific, and their interpretation can change depending on the style of the tune in question. In earlier styles, the chord symbol "Bb7" may indicate only the pitches of the dominant seventh chord built on

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<sup>50</sup> For an overview and critique of recent approaches to harmony in jazz scholarship and education, see Stover (2015).

Bb: Bb, D, F, and Ab. In later styles and in certain contexts, extensions like the ninth, eleventh, and thirteenth (and their alterations) may be liberally added. Chord symbols are thus themselves indeterminate as signifiers of harmonic content and must be considered in their stylistic and functional contexts. Nonetheless, the repeated visual experience of reading discrete chord symbols in a score helps reify the idea that tunes contain fixed sequences of chords.<sup>51</sup>

While improvisers do often discuss chord changes as though there exists some fixed, “correct” version of the changes,<sup>52</sup> it will be useful for our purposes to move past this reified notion in order to explore how harmony becomes enmeshed at the phrase level with other musical parameters, especially meter and form. Indeed, the ways in which improvisers talk about musical structure do not always reflect the ways in which they conceptualize musical structure. This is not only because internalized conceptions of musical structure (as manifested in the improvisational moment) are difficult to access and articulate, but also because there is usually no strong motivation to *attempt* to access and articulate them. Even if improvisers are well-versed in established analytical methods, it is not always clear that such methods directly influence their approach to musical structure in improvisation. An expert improviser may be able to provide a detailed analytical reflection of a tune outside the context of improvisation, informed by deeply ingrained analytical methodologies, yet continue to perform the tune without bringing such analytical reflections to bear on their performances.

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<sup>51</sup> This conception does not entail that improvisers are unaware that chords may be interpolated or substituted, but rather implies that improvisers may assume that the chord symbols written on the page represent a clear and objective set of defaults.

<sup>52</sup> See for example Eitan Wilf’s (2014, 1–2) observation of a student at Berklee College of Music being chided by a faculty member for not knowing the changes to Miles Davis’s “Four,” and subsequently being corrected with an explanation of an exact chord sequence.

On the other hand, music-theoretical knowledge *can* act as a means of mediation, influencing the way musical structure is encoded in a referent, or how that referent is realized in the moment of improvisation.<sup>53</sup> In some circumstances, such knowledge may simply provide a framework for articulating intuitions or apperceptions of musical relationships arrived at prior to exposure to such a framework. Roman numerals often serve this purpose by making implicit knowledge explicit. For example, an observation such as “F7 to Bbmaj7 seems to be the same as Ab7 to Dbmaj7” can be assimilated into the broader framework of “V → I.” Exposure to Roman numerals can in turn help improvisers to articulate how harmonic relationships are embedded in more complicated tonal systems. Roman numerals may also help listeners to identify parallelisms between harmonic progressions. This is especially evident in how common progressions are most often identified (e.g., I–vi–ii–V is the progression most associated with the A section of “rhythm changes”; ii–V–I progressions are among the most common in bebop; and so on).

If lead sheets help reify the idea that the harmonic contents of tunes can be broken down into discrete chords that form the default progression of a piece,<sup>54</sup> reharmonization dictates the process by which these assumed defaults may be transformed. There are many kinds of reharmonization techniques, ranging from the simple and ubiquitous (e.g., tritone subs) to lengthier and more elaborate designs (e.g., “Coltrane changes”<sup>55</sup>) to deeply personal

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<sup>53</sup> See Berliner (1994, 73–74) for a discussion of the ways in which music theory may help advance improvisers’ understandings of musical structure. It should be noted as well that some musicians strongly reject standard views of music theory as a means of conceptualization, preferring instead to rely on personal conceptualizations more directly grounded in their own personal aural experiences.

<sup>54</sup> This view is problematized below and especially in Chapter 5.

<sup>55</sup> For more on Coltrane changes, see Santa (2003), Waters (2010), and Waters (2019, 21).

and idiosyncratic approaches.<sup>56</sup> Among the more sophisticated studies of reharmonization in a jazz context are Terefenko (2004, 2011) and McClimon (2016, 2017). While most accounts of reharmonization begin with a given chord progression and discuss the procedures by which chord substitutions and interpolations may be carried out, there are two notable problems with this view. First, there is, as we have seen, no single definitive set of chord changes for a given tune. The distinction between reharmonization and default can usually only be unambiguously made with regard to the contrast between an improviser's referent and the performance that results from it. Second, the harmonic content of tunes is, I argue, best understood not as a sequence of chords but rather as part of a larger harmonic-metric-formal complex wherein harmonic utterances are shaped not by their relation to a static chord progression but by the role they play in instantiating either a particular phrase-formal function or an established schema. This task is taken up more fully in Chapter 5.

My account here is anticipated in many ways by Dariusz Terefenko's (2004) work on phrase models in standard tunes.<sup>57</sup> Building on the work of David Beach (1995), Terefenko defines a phrase model as a description of a phrase's underlying melodic, contrapuntal, and harmonic structure (2004, 1). "In the case of standard tunes," he writes, "there appear to be a finite number of typical phrase models, each with its own distinctive melodic structure, essential jazz counterpoint, and supporting harmonies" (*ibid.*, 3).<sup>58</sup> Terefenko provides thirteen distinct phrase models, each represented as a Schenkerian deep middleground

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<sup>56</sup> Although reharmonization remains an understudied art, especially within academic circles, courses on the subject are taught at major university and conservatory programs, including Berklee College of Music and the New School for Jazz and Contemporary Music.

<sup>57</sup> Phrase models also appear in his later published textbook (see Terefenko [2014] 2018) but they are described in more theoretical detail in Terefenko (2004).

<sup>58</sup> Terefenko's phrase models are primarily centered around the repertoire called the Great American Songbook.

contrapuntal structure supplemented with harmonies in the form of Roman numerals. Each phrase model is divided into a tripartite scheme comprising an “initial projection” followed by a “harmonic departure” and finally “cadential closure.” These phrase models may be truncated, as for example when a tune’s bridge skips the initial projection of a stable tonality and begins instead with a harmonic departure, or when an opening phrase avoids cadential closure (*ibid.*, 4). Consider Terefenko’s fourth phrase model, shown in Example 4.6. Note that the “harmonic departure” section is left unspecified in the model itself; the accompanying table below the model explains what key areas are emphasized during the harmonic departure (if one occurs) in select examples.

Although they are not necessarily designed to capture how improvisers conceptualize the musical structure of tunes, Terefenko’s phrase models manage both to pin down features that are likely to be considered essential by many listeners and to relate those features to each other in a holistic fashion. Phrase models may be thought of as akin to a module in a larger prototype, where each module contains certain melodic, contrapuntal, and harmonic defaults. By refusing to separate harmony from melodic and contrapuntal elements, linking those elements to the notion of a prototypical musical phrase, and zooming out to more general characterizations of tonal movement and formal function (i.e., his tripartite model of projection-departure-closure) as applied to such phrases, Terefenko is able to move beyond oversimplified conceptions of tunes as chord sequences toward a nuanced modelling that more closely approximates the kinds of structures an improviser must consider on an “intermediate time scale” (Pressing 1984, 53). It is this lattermost consideration that makes Terefenko’s phrase models unique: whereas chord sequences imply a situation in which improvisers simply navigate from one chord to the next, phrase models help emphasize the

extent to which expert improvisers engage with musical structure on a more zoomed-out time scale.

**Example 4.6: Terefenko's Phrase Model 4 and accompanying table indicating types of harmonic departure (adapted from Terefenko 2004, 194–195).**

Initial Projection

Harmonic Departure

Cadential Closure

$I^7-6$   $vi^7$   $ii^7$   $V^7$   $ii^7$   $V^7$   $I^7-6$

Harmonic Departure			No Harmonic Departure
IV	VI	II	
Ain't Misbehavin	I Can't Get Started	My One and Only Love	Blue Moon
Bewitched	Time After Time	I've Never Been in Love Before	Don't Be That Way
Blue Room	The Touch of Your Lips	I've Got the World on a String	I Could Write a Book
But Not For Me		Deep Purple	For Sentimental Reason
Easy Living		Imagination	Have You Met Miss Jones
Easy Street			I'm in the Mood for Love
It's Only a Paper Moon			Long Ago and Far Away
Mean to Me			Taking a Chance on Love
These Foolish Things			Don't Get Around Much Anymore
You Took Advantage of Me			But Not for Me
Young and Foolish			Isn't It Romantic
			Stormy Weather
			Memories of You

Despite these benefits, however, a number of problems plague Terefenko's phrase models. First, they are presented as objective analyses of fixed compositions;<sup>59</sup> flexibility is permitted in the form of transformations, but only as a result of improvisation on the original, objectively defined model.<sup>60</sup> Second, their reliance on Schenkerian notions of underlying contrapuntal structure necessitates in most cases a clear *Urfinie*, which would seem to overdetermine the top line of the tunes in question. A related concern is Terefenko's commitment to tonal theoretical models derived from the analysis of Western classical music.<sup>61</sup> Finally, while phrase models represent useful ways of classifying the middleground structures of tunes, they arguably fail to capture the density of information that characterizes an improvisational referent.<sup>62</sup> Chapter 5 develops an updated methodology that seeks to accomplish many of the same tasks as Terefenko's phrase models, but from the standpoint of cognitive referents.

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<sup>59</sup> Terefenko hews to an outmoded, score-based dichotomy of "original versions" and "jazz versions." He writes that "the 'original' version of a tune corresponds to the [melody] together with a chord progression provided by the composer" while "the 'lead sheet' or 'jazz' version presents the melodic line with harmonization represented by jazz chord symbols" (Terefenko 2004, 3).

<sup>60</sup> This view roughly corresponds with what Kane (2018) terms a "realist" ontological model.

<sup>61</sup> Terefenko does acknowledge that the middleground prototypes he develops do not relate to the musical surface in the same hierarchical way that Schenkerian middlegrounds relate to other structural levels in classical works. Nonetheless, his emphasis on those elements of musical structure that are captured by Schenkerian graphs arguably prevents him from acknowledging the role that other parameters play. This is especially true with regard to meter: although meter is implicated by the regularity of phrase lengths in most of the standard jazz repertoire, Terefenko largely shies away from discussing the correlations between his phrase models and meter. The result is an occasionally problematic system where phrases that share harmonic progressions but not harmonic rhythm are lumped together despite being conceptually and aurally rather distinct.

<sup>62</sup> This is, of course, not so much an issue with Terefenko's phrase models as it is with the application of those phrase models to the study of referents. His phrase models were simply not designed for this purpose.

## Chapter 5

### Musical Schemata and Interaction

Describing the process of becoming familiar with tunes through their many versions, ethnomusicologist Paul Berliner writes that

collectively, the versions are models for realizing the piece's infinite possibilities surrounding the core of features that comprise its essence. Just as musicians infer the core from the patterns shared by many performances, they also note the varying subtleties of melodic embellishment, rhythmic phrasing, and chord movement that distinguish each rendition. Artists acquire options for their own performances by cataloguing the variants at corresponding positions within their *flexible conceptual maps* of pieces (Berliner 1994, 88, emphasis added).

Jazz musicians rely on these “flexible conceptual maps” of tunes in order to free up attention (Pressing 1998, 52) and facilitate interactive improvisation. Because these maps take shape over time as musicians come into contact with an increasing number of recordings, live performances, and written scores, they become both extremely complex and individualistic. Yet jazz practitioners typically have no trouble reconciling their own conceptual maps with those of other improvising musicians, suggesting that these maps share certain features that make improvised dialogue possible. Indeed, according to bassist Chuck Israels, an “essential ingredient in learning to be a musician is the ability to recognize a parallel case when you're confronted with one. If things remind you of other pieces when you approach a new piece, you generally catalogue them very quickly so that you can draw upon your accumulated knowledge” (quoted in Berliner 1994, 78).

Referent features may be separated into those that are shared between many tunes and those that are unique to a given tune and therefore help to make the tune identifiable.



Unique features may be idiosyncrasies (e.g., the marked sus chord in m. 8 of Joe Henderson’s otherwise mostly normative blues tune “Isotope”) or simple convergences of otherwise common features (e.g., the climactic cadence in C minor in m. 31 of Rodgers and Hart’s “My Funny Valentine,” which occurs after the leaps up to a higher register and delays large-scale melodic and harmonic closure at the formal moment where we might expect to find it), while shared features are most often patterns that appear in countless pieces and may include harmonic progressions (e.g., ii–V–I<sup>1</sup>), contrapuntal frameworks (e.g., descending guide tone lines<sup>2</sup>), and melodic formulas (e.g., compositional uses of the many bebop formulas listed in Owen 1974).

It is important to distinguish unique referent features from idiosyncratic replications. Whereas many performances feature unique contributions in the form of arrangements or improvised utterances, unique referent features are part of an improviser’s conceptualization of a tune. Crucially, they help listeners to distinguish tunes from one another. This is especially helpful when tunes are closely related, as is the case, for instance, with contrafacts and larger tune-families such as the 12-bar blues and rhythm changes. On a more local level, such features can help distinguish between similar phrase models. Take for example Bart Howard’s “Fly Me to the Moon,” which begins with a descending fifths sequence that starts on a minor chord and continues until it arrives back at that same minor chord. “All the Things You Are” begins with a similar descending fifths sequence, perhaps establishing an expectation that it will follow a similar course, but soon deviates in m. 6 with a tonicization of C major.<sup>3</sup> This parallelism is reflected in the melodies of each tune as well: “Fly Me to the

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<sup>1</sup> I discuss the use of ii–V–I progressions as a schema in more detail below.

<sup>2</sup> For more on guide-tone lines and their influence on tonality, see Smither (2019).

<sup>3</sup> Because the descending fifths sequence begins on a minor tonic but soon moves to the relative major, the tonal gravity wavers in both pieces. The return to the minor tonic in “Fly Me to the Moon” arguably confirms

Moon” begins on the third of its minor tonic, then descends to the third of the next chord before ascending to the third of the following chord, and so on; “All the Things You Are” emphasizes these same chordal thirds but reverses the pattern of ascents and descents.<sup>4</sup> While both tunes share the opening projection of a descending fifths sequence, the harmonic twist in m. 6 of “All the Things You Are,” one of the tune’s most striking features, helps make the tune immediately aurally identifiable.

Unique and shared features play off of one another to provide a blend of familiar and novel contexts. Unique referent features are rendered unique by the very presence of other familiar surroundings in the form of shared features. This chapter takes into consideration these shared features as musical *schemata*, prototypes that are generated from exposure to many exemplars and which are simple but characteristic patterns that can be fleshed out in many ways. By virtue of their prevalence throughout the tonal jazz repertoire, we will see how these schemata help simplify the attentional load required for recalling a referent while facilitating interaction between improvisers and providing clear opportunities for the coordination and negotiation of individual improvisers’ referents. Taking Berliner’s above-quoted phrase as a point of departure, I further argue that tune-referents are underlain by “Flexible Conceptual Maps” (henceforth FCMs), subjective mappings of musical structure that are malleable and open to negotiation over the course of an improvised performance.

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its opening chord as a local tonic, whereas the minor tonic is never truly tonicized in “All the Things You Are,” making the relative major the more likely candidate for a local tonic. It is for this reason that the tonicization of C major in m. 6 of “All the Things You Are” is more typically heard as a tonicization of the mediant of the major key (Ab) rather than the dominant of the minor key (f).

<sup>4</sup> Notably, the tonicization in the A section of “All the Things You Are” works primarily due to common-tone voice leading sounded in both the harmonic plan and the melody.

This chapter unfolds in three broad sections. First, I provide an overview of schema-theoretic and other related approaches to jazz analysis and explore the ramifications such approaches can have in addressing important issues of tune and referent identity. I then examine a number of familiar patterns drawn from the compositional and improvisational norms of jazz practice through the lens of schema theory, showing how some schemata may be generalized in order to accommodate more elaborate patterns. Finally, I demonstrate how these schemata may be weaved together with other more idiosyncratic features to furnish FCMs of tunes. I provide case studies of two tunes, Richard Rodgers and Lorenz Hart's "My Funny Valentine" and Miles Davis's "Tune Up,"<sup>5</sup> and present my own FCMs of those tunes; these FCMs invite questions about analysis, intersubjectivity, and the relationship between composition and improvisation, which in turn shed light on how FCMs mediate the negotiation of compositional structure in interactional improvisation.

While much of this chapter is concerned with theorizing common and familiar schemata as found in the standard jazz repertoire, my reason for doing so is not to construct a comprehensive theory of schemata in jazz, nor to compile an exhaustive list of schemata found in that repertoire. Instead, I focus on what schemata can reveal about jazz tunes as referents and as objects of analysis. Since there is no one definitive version of a given tune, schemata allow us to engage closely with abstract patterns that occur in many different versions. It is my contention that jazz improvisers, through the familiarity that they gain with such schemata, come to conceptualize tunes as comprising of two main types of components—schemata and more idiosyncratic features—and that the temporal

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<sup>5</sup> As with many tunes credited to Miles Davis, the authorship of "Tune Up" is contested, with some claiming that, along with "Four," the tune was actually composed by Eddie Vinson (see Sandke 2010, 215).

arrangement of these components forms a Flexible Conceptual Map (FCM). This conceptual map underlies a referent for improvisation.

FCMs are subjective *mappings* of a flexible musical structure and as such will vary from one improviser to the next. According to Judy Lochhead, mapping constitutes “an active engagement with musical works that results in the making of maps, a process of making that generates knowledge about a work” (2015, 9). Following Deleuze and Guattari (2005) and Wood (1992), Lochhead is careful to emphasize that mappings are distinct from *tracings*; the process of mapping does not trace or “reproduce” an existing structure, but rather “constructs” it (Lochhead 2015, 95). The fact that different improvisers’ maps are likely to contrast sharply with one another is therefore not problematic—on the contrary, it serves to help capture the plurality of a given tune’s identity. As Lochhead writes, “[m]appings focus on the musical things of a work in all their diversity; and, in the same way that some geographical region might have multiple mappings depending on the interests of the mapmaker, a musical work generates diverse mappings” (2015, 95).

While FCMs do not offer definitive answers to the ontological dilemmas discussed in much analytic philosophy, they do allow us to sidestep some of the issues such discussions raise with regard to analysis. Rather than selecting an arbitrarily fixed musical structure from the extant realizations of a tune (e.g., recordings, lead sheets), risking the mischaracterization of the way a tune might be played or heard in a particular instantiation, FCMs allow us to specify common features while avoiding the overdetermination of other aspects of a tune. FCMs must therefore be understood not as fixed, objective texts but rather as contingent mappings of musical structures that undergo revision with each successive encounter. As mappings, they also encourage us to engage more closely with how improvisers might conceive of tunes, and how those conceptions are negotiated between individual

subjectivities. Because of the impracticality of determining with any certainty the precise content of a given improviser's referent for a particular tune, FCMs may be employed as critical postulations that help to capture the subjective and contingent nature of improvisational referents while allowing analysts to engage with particulars of musical structure.

Although radical differences may exist between two FCMs, such differences are often easily negotiated on the bandstand. I contend that this negotiation is made possible in part thanks to the fact that FCMs tend to share a number of widely understood and agreed-upon features in the form of musical schemata. That such schemata are flexible prototypes with many aesthetically viable realizations helps to ensure that jazz tunes remain both malleable and negotiable. The following section explores how schemata pertain to standard jazz practice and details several schemata that are widely known by improvisers through jazz education and pedagogical manuals.

### **Schemata in Standard Jazz Practice**

The notion of schemata is perhaps most familiar to music theorists from Robert Gjerdingen's influential book *Music in the Galant Style* (2007) and its predecessor *A Classic Turn of Phrase* (1988).<sup>6</sup> According to Gjerdingen, a schema is "an abstracted prototype" or "a well-learned exemplar" (2007, 11).<sup>7</sup> While the term is sometimes used broadly to refer to any

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<sup>6</sup> Gjerdingen's use of the term is strongly influenced by the work of Leonard Meyer (see especially Meyer 1973 and 1989). For a detailed look at Meyer's use of the term and its transference into Gjerdingen's work, see Byros (2012). Notable recent developments in schema theory include Froebe (2014) and Gjerdingen and Bourne (2015).

<sup>7</sup> In what follows, I use the term "prototype" to refer an abstract representation of a schema. Crucially, the prototypes that are visually portrayed in the examples must be understood only as *representations* of a schema, as schemata exist not on the page but in the mind.

recurring pattern, Gjerdingen is careful to delineate the multiplicity of ways that schemata might be conceptualized, and, correspondingly, the caution that theorists must take if we wish to profitably employ the concept.<sup>8</sup> The first appendix of *Music in the Galant Style*, for instance, features detailed diagrams of galant schema prototypes accompanied by lists of features and variants. Gjerdingen's intentionally delicate handling of the prototype representations seems to be the result of his acknowledgement that "[t]here are both temptations to over-systematize ... and temptations to oversimplify" (2007, 11) a schema. Such warnings are worth bearing in mind for the present chapter: the descriptions and diagrams I offer throughout are convenient but ultimately incomplete ways of accessing intuited notions (or apperceptions) of musical structure. My theorization of these schemata, and the FCMs that they help to comprise, is therefore constantly bound in a tug-of-war between over- and under-specification.<sup>9</sup>

Although the term has been adopted casually by a number of jazz theorists, few authors have explored the ramifications that a schema-theoretic approach might have for jazz analysis.<sup>10</sup> Early attempts at excavating common patterns in jazz composition and

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<sup>8</sup> Gjerdingen (1988) explores the many ways that a single schema archetype (the "changing note") may be conceived and, in doing so, represents an attempt at explicating the multiplicity entailed by a schema-theoretic approach.

<sup>9</sup> To some extent, schemata resemble and may overlap with referent defaults. Like the leveled default system developed in Chapter 4, schemata can be understood as groups of tightly related exemplars, where one some exemplars are more central to the category, and therefore more typical, than others. Despite this similarity, referent defaults do not always overlap with schemata, and the two concepts remain distinct. Referent defaults may include both familiar patterns like the schemata discussed throughout this chapter or more idiosyncratic features.

<sup>10</sup> Keith Waters, for example, claims that "1960s postbop compositions adopted (and often transformed) significant schemata of works of the late 1950s" (2010, 38). In a subsequent article, Waters takes this argument as one of the central means by which postbop emerged from earlier forms of bebop; he identifies various schemata, including the M3 axis that characterizes John Coltrane's "Giant Steps" (2019, 18–22), as well as turnarounds (*ibid.*, 98). Because Waters's concern is primarily with the evolution of these schemata from familiar patterns to new compositional devices, he does not engage the notion of schemata in more detail. Other notable approaches include Williams (1988), whose work predates Gjerdingen's best-known work on the subject; he synthesizes the output of Leonard Meyer and Eugene Narmour in order to identify a number of

improvisation often resulted in studies of melodic formulae used by renowned improvisers such as Charlie Parker (Owens 1974), John Coltrane (Kernfeld 1983), and Bill Evans (Smith 1983).<sup>11</sup> While these formulae bear some conceptual resemblance to schemata in their paradigmatic organization and partially automatic, rehearsed employment in improvisation, they are distinct in the sense that they may be employed in many contexts within a particular compositional framework and are therefore attributable to the improvised solo rather than to the structure of the underlying tune.<sup>12</sup> Indeed, formulae may themselves be understood to fit within the larger-scale melodic schemata that help to comprise a tune, which in turn are engendered by possible voice-leading paths through chord changes.<sup>13</sup> The relationship between such chord changes and other kinds of tonal schemata is not always a straightforward one, however, because chord changes often differ between performances of the same tune and may represent varying levels of embellishment.<sup>14</sup>

Closer to the present work in its concern with prototypical tonal frameworks is Terefenko's (2004, 2018) theory of phrase models.<sup>15</sup> As noted in the previous chapter, the

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"archetypal schemata" in the melodies of jazz tunes, demonstrating that melodic processes are not generated by chord changes. The term "schema" is used alongside a number of similar approaches regarding reharmonization and various improvisational strategies in Stover (2016b).

<sup>11</sup> More recent approaches to the analysis of formulae include Benjamin Givan's studies of Django Reinhardt (2010) and Sonny Rollins (2014), as well as Austin Gross's study of Bill Evans (2011). In a similar vein, Givan (2014) demonstrates that what Schuller (1958) described as motivic development in a Sonny Rollins solo in fact constitutes liberal use of formulae common to Rollins's output.

<sup>12</sup> The relationship between compositional (referent-based) and improvisational schemata is somewhat slippery and is discussed in greater detail below.

<sup>13</sup> Love (2012) identifies a series of melodic schemata or "paths" used by Charlie Parker to navigate the twelve-bar blues. Martin (2012) disentangles several related concepts, including various types of formulae, licks, and melodic paths.

<sup>14</sup> Broze and Shanahan (2016) establish a number of recurring harmonic progressions (which may be understood as candidates for harmonic schemata) based on the identification of common adjacencies and patterns in a large-scale corpus analysis. The problem of harmonic embellishment at the musical surface in jazz is addressed using modified Schenkerian approaches in Strunk (1979), Martin (1988), and Martin (1996a).

<sup>15</sup> See also the discussion of Terefenko's phrase models in Chapter 4.

thirteen phrase models that these classifications result in are each divided into three generic sections: phrase identifier, harmonic departure, and cadential confirmation. While the first and last of these sections are specified by particular harmonic-melodic events, the middle section is typically left unspecified, indicating the potential for a wide variety of permissible utterances to fill this space.<sup>16</sup> For Terefenko, phrase models are determined by the counterpoint of their outer voices (not unlike Gjerdingen's schemata) and therefore allow for extensive embellishment whilst retaining an essential character and sense of identity.<sup>17</sup> Phrase models are further distinguished from smaller idiomatic patterns, which more closely resemble the schemata discussed below.<sup>18</sup> Although Terefenko's extensive discussion of his thirteen phrase models is richly suggestive, he does not explore the ramifications of using prototypical models in jazz analysis. An explicit schema-theoretic approach to the analysis of jazz tunes may therefore benefit from a study of the conceptual implications afforded by schema theory and their analytical ramifications, especially inasmuch as schemata combine to form larger FCMs.

Although music-theoretical accounts of schemata are still just emerging in the scholarly literature on jazz, the concept is nonetheless implicit in the literature of jazz theory pedagogy. According to Keith Salley (2018), many pedagogical manuals serve similar roles to budding improvisers as the *partimenti* that Gjerdingen centers his approach around.

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<sup>16</sup> Terefenko's visual rendering of his phrase models suggestively represents the "harmonic departure" section with a wavy line extending horizontally across several empty measures. See for example his Figure 21.1 (Terefenko 2018, 260).

<sup>17</sup> Also similar to Gjerdingen's work is Terefenko's choice to present, alongside each phrase model, a list of standard tunes in which that phrase model may be found (see Terefenko 2018, 264–281). Like the schemata presented in this chapter, Terefenko's phrase models may be understood as components of referents for improvisation.

<sup>18</sup> For a list of what Terefenko considers to be idiomatic progressions, see Terefenko (2018, 134–151). A few of these are conceptualized below as schemata, a view which affords such patterns a similar compositional status as Terefenko's phrase models.



Prominent jazz theory texts from throughout the second half of the twentieth century go to great lengths to appear comprehensive, offering every permutation of a given concept. For example, John Mehegan's influential text *Jazz Improvisation* catalogs what Mehegan sees as all possible jazz chords, resulting in what he titles "The Sixty Chord System" (1959, 1:20–21).<sup>19</sup> But while the comprehensiveness of these materials is suggestive, many of these tools are simply illustrations of abstract concepts that aim to communicate the vast possibilities offered by jazz improvisation. More striking is the prevalence of "pattern" books, which offer explicit exemplars to be learned and practiced.<sup>20</sup> Many of these patterns are melodic formulae intended to be used to gain a sense of how to craft idiomatic statements during the moment of improvisation. However, pattern books sometimes also contain exemplars of common chord progressions and compositional patterns, suggesting in certain cases exemplars of melodic and harmonic realizations of these schemata.<sup>21</sup> Under these and similar regimens, students may quickly learn how to improvise over harmonic patterns that are common to many standard tunes.

Notably, none of the schemata identified in this chapter are concealed patterns revealed through the analysis of large-scale corpora.<sup>22</sup> Instead, the schemata described below

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<sup>19</sup> Henry Martin writes that, despite the germinal ideas presented in Russell (1959), Mehegan's book is largely responsible for many of the widely held assumptions that jazz theorists and pedagogues often make, including the fundamental nature of the seventh chord and most contemporary conceptions of chord-scale equivalence (Martin 1997, 8–9). Similar approaches include many seemingly exhaustive treatments of chord-scale relationships, such as those in Mehegan (1959), Reeves (2006), and Mulholland and Hojnacki (2013), as well as various attempts at compiling a "scale syllabus," as in Baker (1985, 40–42) and Aebersold (1996).

<sup>20</sup> Examples of pattern books include Nelson (1966), Coker (1970), Haerle (1975b), Ricker (1976a), Ricker (1976b), Baker (1979), Baker (1985–1986), and Aebersold (1996).

<sup>21</sup> For example, pattern books that provide exemplars of melodic lines to be played over ii–V progressions include Coker (1970, 123–128), and Baker (1979, 1:14–103; 2:14–42).

<sup>22</sup> This is not to say that such an approach would not be fruitful; on the contrary, such an approach would greatly complement the present study and would help to offer a more complete understanding of how tunes may be conceptualized. Nonetheless, such an approach falls outside the scope of this dissertation.

constitute patterns with which many jazz musicians are likely to be familiar and which are named and treated in popular pedagogical manuals.<sup>23</sup> By privileging widely disseminated terminology and sometimes controversial conceptualizations of jazz practices, such a theory arguably risks advocating a paint-by-numbers approach to improvisation while deemphasizing notions of individuality prized by many in the jazz community.<sup>24</sup> It is therefore important to foreground that FCMs are an analytic device, *not* a pedagogical one, and as such they may be used by the analyst to mediate between well-known pedagogical systems and more idiosyncratic approaches to improvisation, allowing them to highlight the individualistic ways in which jazz improvisers understand tunes while acknowledging shared patterns. Nonetheless, FCMs may themselves prove useful pedagogically. Students may, for instance, produce an FCM as the result of an analysis of a tune and use the resulting map (and its component schemata) as a way to identify segments over which they can either employ familiar improvisational strategies or actively avoid such well-worn paths. These activities may then be used to open important discussions about subjectivity and individuality as they pertain to the conceptualization of musical structure.<sup>25</sup>

In order to negotiate this balance between established norms and subjective perception, we must exercise caution in how we choose to represent schemata and the features that give rise to them. Many schema-theoretic approaches are oriented around outer

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<sup>23</sup> While exposure to certain pedagogies will inevitably condition the extent to which particular patterns are schematized, it is worth noting that many patterns may be schematized even without the presence of such pedagogies through repeated exposure to common norms in recordings and live performances.

<sup>24</sup> The valorization of individuality in the jazz community is discussed in Berliner (1994, 120–121), Love (2016), and Bailey (1980, 64–75). The pedagogical system taught at Berklee College of Music has received criticism from within the music-theoretical community; a critique of aspects of this system (as presented in Mulholland and Hojnacki 2013) can be found in Stover (2014–2015).

<sup>25</sup> Such discussions resonate with the open and improvisatory approach to pedagogy advocated in Stover (2013), where alternative, contradictory readings are understood to enrich one another rather than to be a source of consternation.

voice leading and for this reason emphasize contrapuntal convergences between voices, typically represented visually by scale degrees enclosed in grey ovals.<sup>26</sup> Yet such schematic diagrams are as notable for what is left *indeterminate*. While metric strong and weak beats are often indicated along with the order in which events appear, no other rhythmic or even temporal features are specified. Likewise, only outer voices are indicated; other tones may be sounded to complete the chords, but they need not comprise part of the schema. Particular variants need not be specified because the figure simply represents a prototype, which by definition permits many different realizations and is simply a “good” or representative example of a category.<sup>27</sup>

While most of the schemata that Gjerdingen codifies are contrapuntal, focusing on relations between outer voices, the concept of schemata is not limited to contrapuntal voice leading.<sup>28</sup> In order to theorize the schemata that appear in jazz tunes, we will need to take into consideration the kinds of features prioritized in jazz practice. I detail three unique schemata here, each of which is configured primarily through harmonic, metric/hypermetric, and voice-leading relationships.<sup>29</sup>

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<sup>26</sup> See for example the many schema prototypes listed in Gjerdingen’s Appendix A (2007, 453–464).

<sup>27</sup> For more on prototypes and their music-theoretical applications, see Zbikowski (2000, 23–62).

<sup>28</sup> Gjerdingen’s focus on outer-voice schemata emerges from his engagement with the galant style, influenced in part by the preferences of galant composers as well as the ways in which the music can be accessed, namely through scores and collections of *partimenti*.

<sup>29</sup> Many more schemata are possible, of course. Salley (2018) reveals many schemata that do not already have names; in this regard, his work more closely approximates that of Gjerdingen (2007).

### *The ii–V Schema*

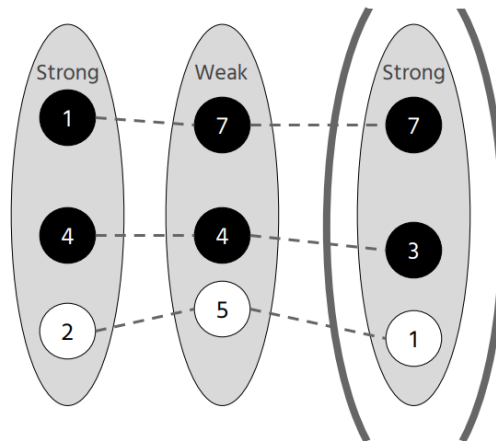
One schema that resembles Gjerdingen’s outer-voice models is the ii–V, a prototype for which is shown in Example 5.1.<sup>30</sup> Among the most prevalent harmonic progressions in jazz, the ii–V is found in many, if not most, jazz standards and represented in the 1940s and 1950s a convenient way for jazz musicians to decorate otherwise simple chord changes; this practice is perhaps epitomized by Charlie Parker’s “Blues for Alice,” which ornaments a twelve-bar blues with seemingly as many ii–Vs as possible (see Example 5.2). The ii–V would become a stock progression in many original jazz tunes. Yet the ii–V schema transcends the mere pattern of Roman numerals ii→V: the most salient features include not only the root progression but also the voice leading between the thirds and sevenths of each chord and particular metric and hypermetric constraints (discussed in more detail below). The frequent appearance of ii–Vs in various keys throughout many jazz tunes suggests that it is not only a means for embellishing existing harmonic structures, but also became for many jazz composers a fundamental compositional technique whereby tonicizations of nearby and distant keys are suggested through the use of frequent ii–Vs. For this and other reasons, not every adjacency of the ii and V chords may be considered to be a ii–V.<sup>31</sup>

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<sup>30</sup> The ii–V has been discussed extensively in the music-theoretical literature and is a common staple of jazz pedagogy books. For general features, see Martin (1988) and Terefenko (2009). Its status as a schema is discussed in Salley and Shanahan (2016). McClimon (2017) conceives of ii–Vs as a network-based transformational space, a conception that comports well with similar network-oriented conceptions of schemata and may be considered a complementary theoretical apparatus to the present approach, especially as it regards connections between contiguous ii–Vs and their tritone-sub variants. Pedagogical manuals featuring discussions of ii–Vs include Nettles (1987b, 5–6), Nettles and Graf (1997, 67–73), Levine (1995, 15–30), Rawlins and Bahha (2005, 42–48), Sarath (2010, 109–110), Mulholland and Hojancki (2013, 38–61), and Terefenko (2018, 63–68).

<sup>31</sup> See, for instance, the discussion of the ii–V progression in the A section of Jerome Kern’s “All the Things You Are” in Salley and Shanahan (2016, 11–12), where the hypermetric irregularity of the progression calls into question whether or not the instance might be heard as schematic, or as a rare, “off-kilter” variant.

Example 5.1. ii–V schema prototype, emphasizing voice leading and metric/hypermetric properties.



Example 5.2. The chord changes of “Blues for Alice” (Parker) embellish a prototypical twelve-bar blues in F with ii–Vs.

m.	1	2	3	4			
12-bar blues changes:	F7	%	%	%			
"Blues for Alice" changes:	F	E-7 <sup>b5</sup>	A7 <sup>b9</sup>	D-7	G7	C-7	F7
ii-Vs added:	(I)	ii	V	ii	V	ii	V

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m.	5	6	7	8			
12-bar blues changes:	B ♭ 7	%	F7	%			
"Blues for Alice" changes:	B ♭ 7	B ♭ -7	E ♭ 7	A-7	D7	A ♭ -7	D ♭ 7
ii-Vs added:	(I)	ii	V	ii	V	ii	V

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m.	9	10	11	12		
12-bar blues changes:	C7	%	F7	%		
"Blues for Alice" changes:	G-7	C7	F	D-7	G-7	C7
ii-Vs added:	ii	V	I	ii	V	

The ii–V features two or three events, represented here as grey ovals, which are usually equally spaced. Rarely, the first event is extended. Each event typically falls either on a downbeat or on a strong beat; the second event, however, is metrically or hypermetrically weaker than the first and third events.<sup>32</sup> The third event is typically twice the length of the first two events, but is frequently omitted. However, the first two events derive their tonal meaning from the implied third event. This conceptualization is confirmed by the common descriptive phrase “ii–V in/to X,” where X is the root of the I chord (and therefore the context through which the previous chords emerge as ii and V). There is nearly always smooth voice leading between the thirds and sevenths of the chords, known as guide tones.<sup>33</sup> When moving between events, a common guide tone is held in one voice while the other moves down by step. In the bass, there is an emphasis on the chord roots, scale degrees 2, 5, and 1.<sup>34</sup> The prototypical chord qualities are minor-seventh, dominant-seventh, and major-seventh, respectively, but there are many variants; a selection of these are shown in Example 5.3.<sup>35</sup> One especially common variant is the “tritone substitute,” often shortened to “tritone sub,” in which the bass of the second event is substituted with b2; the resulting chord is termed a tritone substitute because the tritone between the chordal third and seventh is

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<sup>32</sup> Salley and Shanahan (2016) provide an in-depth discussion of the ii–V’s relationship with hypermeter and phrase rhythm.

<sup>33</sup> Guide tones are discussed in many jazz pedagogy textbooks, including Nettles (1987b, 26–27), Nettles and Graf (1997, 178), and Rawlins and Bahha (2005, 70–72).

<sup>34</sup> This preference for fifths-based root progressions in the bass is widespread in jazz syntax and is explored in great detail in Martin (1988). Michael McClimon also notes that, when considered as a trichord of root, third, and seventh, a single transformation (which he calls TF) can be applied to each chord member in order to move between each chord in the progression (that is,  $TF(ii)=V$  and  $TF(V)=I$ ); see McClimon (2017, 1.8).

<sup>35</sup> For further transformations of the ii–V schema, see Terefenko’s discussion of ii–V transformations (2018, 54–64) and tritone substitutes (2018, 136). Ulanowski demonstrates how ii–Vs may link together, a device he refers to as “contiguous II V’s” (1988, 6–7).

preserved and the bass note is a tritone away from the substituted one.<sup>36</sup> This substitution may be conceptualized as a replacement of the V<sup>7</sup> chord with bII<sup>7</sup>. Another notable variant is the “minor ii–V,” where the first event is a half-diminished (or “minor-seven-flat-five”) quality, the dominant chord is altered,<sup>37</sup> and the third event is a minor triad (seventh omitted), minor-seventh chord, minor-sixth chord, or major-minor-seventh chord.<sup>38</sup>

**Example 5.3. Some common ii–V variants in the key of C.**

1	2	3
D-7	G7	Cmaj7
D-7	Db7	Cmaj7
D-7b5	G7	Cmaj7
D-7b5	Db7	Cmaj7
D-7b5	G7	C-
D-7b5	Db7	C-

When a schema is slotted into a larger structure like a tune, the detailed prototype shown in Example 5.1 becomes an unwieldy way to represent the information. Example 5.4 shows a simpler, higher-level representation of a ii–V prototype more suitable for easily representing the schema in an FCM. This prototype resembles analytical notation often taught to undergraduate students at jazz conservatory programs. The ii and V are bracketed

<sup>36</sup> For more on tritone substitutes, see Martin (1988, 11), Biamonte (2008), and McClimon (2017, 2.1–2.10).

<sup>37</sup> In a jazz context, an altered chord is a dominant harmony featuring several “altered” tensions, usually including a lowered or raised ninth, lowered thirteenth, and raised eleventh. Some authors conceive of the raised eleventh as the enharmonically equivalent lowered fifth; for a clear explanation of the distinction between these two conceptualizations and their theoretical ramifications, see Stover (2014–2015, 190–191). Levine equates altered chords with the altered scale (1995, 70–77), a scale that is enharmonically equivalent to the super-locrian mode.

<sup>38</sup> McGowan (2011) considers the selective use of one of these sonorities to evince a particular harmonic dialect (see especially 158–160).

together, constituting the most essential parts of the schema, while the arrow to the X signifies that the two chords are both in the key of X and lead toward the X teleologically (even if the X is not sounded).

**Example 5.4. ii–V schema prototype (higher level).**



As with all schemata, we must remember that the prototype shown in Example 5.4 is only a visual representation of an abstract cognitive structure used to make sense of experiential phenomena, and therefore can differ between individuals. A conservatory student who has come into contact with this common analytical notation is perhaps more likely to schematize the pattern like this; however, since the prototype is still an abstraction of the features of the more detailed schema and is therefore based on many essential and recurring aspects of ii–V progressions generally, it is not necessary for an improviser to have experience with the analytical notation to cognize the schema in a similar way. This higher-level prototype, though far simpler than the oval-based one shown in Example 5.1, relies on the more detailed knowledge of that lower-level prototype.<sup>39</sup> For an improviser, the root motion and inner voice leading are likely to become automatic with practice; recalling this simpler, higher-level representation is therefore all that is needed to set the rest of the features in motion. The schema in Example 5.4 thus represents an abstract kind of knowledge that relies on the recall of more detailed, rehearsed knowledge. This kind of

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<sup>39</sup> In other words, although their visualizations of the components of the schema are different, these higher- and lower-level prototypes both represent the same schema in varying degrees of specificity.



multileveled schematization will prove useful for understanding how common patterns can be embedded in more complex FCMs.

Although they are prevalent in written compositions like popular standards and original jazz tunes, it is important to note that ii–Vs are also frequently added in the act of improvisation to embellish the chord changes and create a sense of increased forward momentum. Indeed, among the more interesting aspects of the ii–V *as a schema* is the fact that it may be found in two different parts of the improvisational process, as part of an improviser’s referent and/or as an improvised addition to that referent’s harmonic structure. It will therefore be useful to distinguish between these two uses of a schema as *referent-based* and *improvisation-based*: whereas a referent-based ii–V is part of an improviser’s FCM, an improvisation-based ii–V is added in the heat of the moment, opening opportunities for interactional convergence and divergence.<sup>40</sup> The distinction between these two uses is not always aurally clear: In many cases, a thorough knowledge of the history of a particular tune is necessary to tease out which features of the musical surface are likely to be referent-based. Nonetheless, such a distinction becomes crucial in the analysis of jazz tunes: If we automatically interpret every sounding ii–V to be referent-based, we risk grossly misconstruing the structure of a tune as well as the unique play of composition and improvisation that so many jazz musicians and listeners value.

In addition to being a referent- and improvisation-based schema in jazz, the ii–V–I is also a clear example of that familiar model of functional harmony, predominant–dominant–tonic. Learning to recognize this more general pattern and its connection to the ii–V allows jazz musicians to expand the number of approaches they can take in realizing either progression. In order to make clear its affinity with the ii–V schema, I will refer to the

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<sup>40</sup> For more on interactional convergence and divergence, see Michaelsen (2013a, 2019).

resulting generalized schema as the *P–D* schema (Example 5.5). A *P–D* schema essentially overlaps with any predominant–dominant progression or a corresponding phrase or subphrase. A *ii–V* can sometimes substitute for another *P–D* and vice versa, although the former is far more common than the latter. While it is tempting to collapse the two schemata into a single overarching one, the *ii–V* is arguably quite distinct from the *P–D*.<sup>41</sup> Unlike *ii–Vs*, *P–Ds* are not discussed as patterns in the pedagogical literature (and appear only in more wide-ranging discussions of harmonic function and phrase models), do not appear in pattern books in any explicit way, and are more typically referent-based than improvisation-based.

**Example 5.5.** The *ii–V* schema generalized to the isomorphic *P–D* schema.



### *The Turnaround Schema*

Similar to the *ii–V* in its teleological drive toward a goal is the turnaround. Probably originating as a technique used to fill the space of a static tonic harmony occurring at the end of a section or chorus (Choi 2011, 54), the turnaround builds or preserves momentum through increased or maintained harmonic rhythm, with individual chords smoothly leading from one to another and eventually to a target chord.<sup>42</sup> Turnarounds often function as

<sup>41</sup> Terefenko’s discussion of *ii–Vs* includes many examples of progressions in which *P–D* is composed out using *ii–Vs* or vice versa (2018, 54–64).

<sup>42</sup> See also Steven Strunk’s definition in his “Harmony” entry to the *New Grove Dictionary of Jazz* (Strunk 1988, 490). Turnarounds, sometimes referred to as “turnbacks,” feature widely in jazz pedagogy books; see for instance Mehegan (1965, 235–237), Coker (1970, 118–119), Baker (1979, 37–42), and Terefenko (2018, 136–140).

suffixes that serve to avoid dull or awkward transitions when a non-cyclic harmonic structure is appropriated for use in chorus form. Because of this, they do not always appear in the source material of a tune, and their inclusion in popular lead sheets varies. Sometimes the chords are marked in parentheses to indicate that they are ornamental in nature, while other times they are written in as if to indicate that they are an essential part of the chord changes.<sup>43</sup> The schema may be both referent-based and improvisation-based: many tunes rely on turnarounds for part of their structure, but the schema is also an invaluable tool for improvising musicians who often must navigate added turnarounds on the fly.

The turnaround, a prototype for which is shown in Example 5.6, consists of two stages. The first usually consists of four events (but may contain less), while the second stage features a single event, the “target” harmony, represented by the hollow tonic-functioning oval.<sup>44</sup> The entire sequence usually constitutes a “prolongation by arrival” (Martin 1980, 33–38) of the target harmony.<sup>45</sup> The first stage occurs at the end of a section or chorus, while the second stage may occur at the beginning of the following section or at the top of the head. Like the ii–V, the target chord in the final stage is ultimately optional, and is sometimes deceptively resolved or otherwise lacks resolution. Even if it never appears, however, the target chord is a necessary component of the schema, as the rest of the events derive their tonal meaning from it. The target chord typically functions as a tonic or is at least tonicized,

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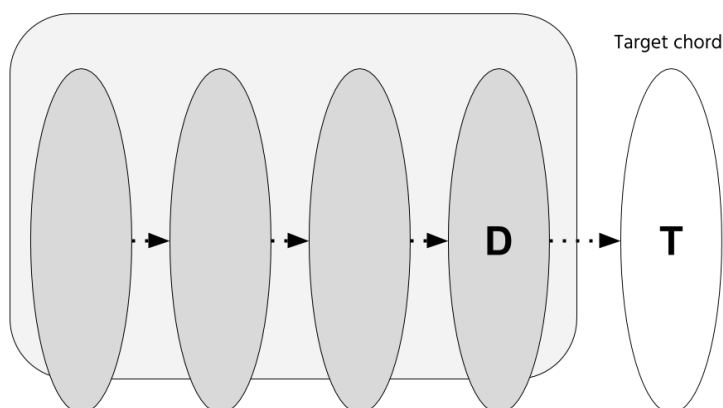
<sup>43</sup> See Kernfeld (2006) for a history of fake books and an exploration of the implications of the format. The fact that various typesetting marks on a lead sheet can influence the way an improviser understands the structure of a tune makes the lead sheet format an especially powerful one, especially if a claim of authenticity is made by the authors or compilers of the fake book. The use of fake books as a tool to reify certain conceptions of musical structure and improvisational strategies is controversial and has wider implications for issues of authenticity and canonicity in jazz.

<sup>44</sup> Berliner characterizes the turnaround as “excursions of four chords that lead back to the initial chord” (1994, 85).

<sup>45</sup> This notion is introduced in Martin (1980) and is developed further in Martin (1988, 12–25), Martin (1996a, 9–10), and Martin (2012–2013, 199–202).

but the chord may not necessarily be a global or even local tonic. The final chord in the first stage is generally dominant-functioning with respect to the target chord. Usually, most of the chords are linked via a circle-of-fifths progression, as in the last three chords of a I–vi–ii–V turnaround.<sup>46</sup>

**Example 5.6. Turnaround schema prototype (lower level).**



Common variants are shown in Example 5.7.<sup>47</sup> These include the use of only one event in the first stage, consisting of a V chord or tritone sub (often manifested as a dominant pedal played by the bassist or the left hand of the keyboard); the use of a ii–V schema, which, when appearing at the end of a formal section, may fulfill the functions of a turnaround; and the progression I–bIII–bVI–bII, often termed the “Lady Bird” for its use in the Tadd Dameron tune of the same name.<sup>48</sup>

<sup>46</sup> The prevalence of circle-of-fifths progressions in jazz is detailed in Martin (1988). For a selection of common turnaround patterns, see Coker (1970, 174–177).

<sup>47</sup> Waters (2019) discusses a variety of postbop transformations of the turnaround, especially in Chick Corea’s compositions (see especially Waters 2019, 98–99, 106).

<sup>48</sup> The Lady Bird schema is listed, although not always named as such, in Coker (1970, 118–119), Levine (1995, 357), and Terefenko (2018, 139–140) and appears in well-known lead sheets for Miles Davis’s “Half Nelson” and Johnny Carisi’s “Israel,” though it is more frequently added on the fly in place of a more normative

**Example 5.7. Common major-key turnaround variants.**

1	2	3	4
I	ⅴ	ⅴ	V
I	ⅴ	V	ⅴ
V	ⅴ	ⅴ	ⅴ
I	ⅴ	ii	V
I	vi	ii	V
I	VI	ii	♭ II
I	VI	II	V
iii	vi	ii	V
iii	♭ III	ii	V
iii	♭ III	ii	♭ II
I	♭ III	♭ VI	♭ V
I	♭ III	♭ VI	♭ II

It is worth dwelling on the variability of the turnaround's content. Unlike the ii–V, which has a set number of events or stages, the turnaround may feature anywhere from one to four events, and the events themselves are far less determined than the ii–V. This is reflected in the empty ovals of Example 5.6: so many turnaround variants are possible that an exemplar-based prototype would seem to overspecify the schema. Indeed, it may be more accurate to characterize the turnaround not as a single schema but rather as a schema family comprising a number of memetically related schemata that fulfill a particular formal function.<sup>49</sup> A “turnaround” in this conception is a formal container with a particular kind of

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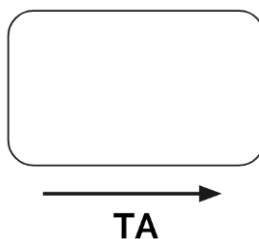
turnaround. Salley (2018) notes that the Lady Bird schema represents a fruitful point of contact between schema-theoretic approaches to jazz analysis and popular jazz pedagogies.

<sup>49</sup> Jan (2007) develops a “memetic” approach to musical schema theory whereby schemata are understood as memes that mutate over time until they may be considered new schemata. While he does not specifically apply this theory to jazz, Jan’s work is especially suggestive for this repertoire due to the role tradition plays in molding works across jazz history (c.f. Bowen 1993). Drawing a clear distinction between a schema (which already denotes a family of related patterns representable by an exemplar or prototype) and a schema *family* is

formal function (suffix) and harmonic function (dominant prolongation), into which familiar schemata are frequently placed. Progressions such as I–vi–ii–V and I–bIII–ii–bII are therefore variants of the same schema, while a standalone V chord, although still fulfilling the formal function of the turnaround and therefore a part of the schema family, does not constitute a variant of the same schema as those other progressions.

In order to account for the openness of turnaround schemata, I represent the higher-level prototype using a container paired with an arrow (Example 5.8). This combination of embodied image schemata,<sup>50</sup> derived from aspects of the lower-level schema prototype, captures the teleological drive of the turnaround as a unit as well as its flexibility, suggesting that ostensibly anything can be “put into” the turnaround, as long as it builds or maintains momentum toward the goal.

**Example 5.8. Turnaround schema prototype (higher level).**




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difficult, but there does seem to be a qualitative difference between, for example, a I–vi–ii–V turnaround and a turnaround consisting only of a V chord (or a “standing on the dominant” gesture). Another way to put this is that the network of possible utterances that comprise the turnaround schema may be more heterogeneous than other schemata, with certain turnaround types clustering together into more distinct groups based on particular shared features.

<sup>50</sup> Image schemata are patterns derived from our embodied experience of the world and which structure metaphorical conceptualizations. They are a central feature of many theories of embodied cognition, including that put forth in Lakoff and Johnson (1980). For more on image schemata and the ways in which they influence our thinking about musical experience and music theory, see Saslaw (1996) and Brower (2000).

*The CESH schema*

Whereas the turnaround functions as a suffix that follows cadential closure, the CESH (Contrapuntal Elaboration of Static Harmony<sup>51</sup>) typically functions as an opening gambit, initiating motion away from an opening tonic chord. The CESH, a prototype for which is shown in Example 5.9, typically consists of a descending voice-leading line against a prolonged harmony. It may be related to, but is arguably distinct from, the familiar lament bass pattern.<sup>52</sup> It became popular in the late 1920s and 1930s with Irving Berlin's "Blue Skies" and "Puttin' on the Ritz" and is sometimes referred to polemically as the "line cliché" to caution against its overuse.<sup>53</sup>

The CESH usually contains four events, but can be expanded or contracted. Note that the filled-in scale degree  $\downarrow 6$  may not constitute a separate stage, instead representing

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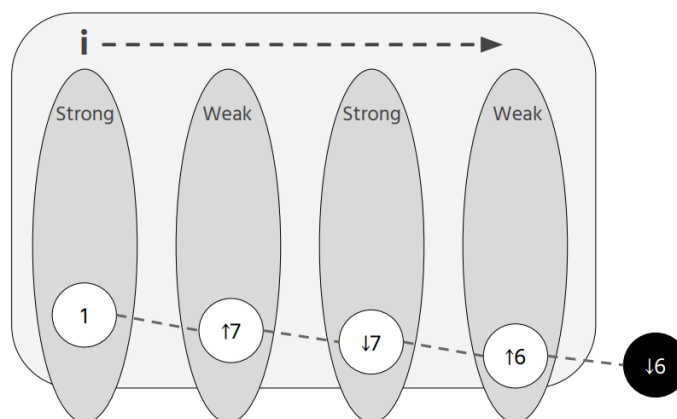
<sup>51</sup> The earliest appearance of this acronym that I have found is Coker (1991, 41–43). It has appeared since in other jazz pedagogy books, including Rawlins and Baahia (2005, 108–110). The words for which each letter stands sometimes vary: C may stand for chromatic or contrapuntal, E for embellishment or elaboration, and S for static or stable.

<sup>52</sup> Many uses of the CESH schema seem to align with lament topics, including "My Funny Valentine" and Jerome Kern's "Yesterdays." While the musical similarities between the lament bass and the CESH are suggestive, it is worth noting that the CESH is considerably more flexible than the lament bass in at least three ways: (1) the line is frequently found in a voice other than the bass; (2) the line does not typically continue down to the dominant or, if it does, there is typically a lengthy predominant prolongation preceding the arrival of the dominant; and (3) the line may ascend, or it may descend through a different part of scale-degree space (see for instance the opening measures of Arthur Hamilton's "Cry Me a River" and Freddie Hubbard's "Crisis," respectively). This flexibility also affiliates the CESH with the notion of Ordered Step Motives (Salley 2012), which constitute stepwise voice-leading lines that lend linear coherence to tunes of varying tonal stability. Importantly, the existence of CESH schemata across a variety of jazz repertoires does not preclude the use of lament basses. Antonio Carlos Jobim's "Insensatez" features a chromatic descent in the bass voice and changing rather than static harmonies, aligning it more with the lament bass topic. Future research might seek to further determine the historical and theoretical distinctions between these related concepts.

<sup>53</sup> This term is primarily used at Berklee College of Music; see for instance Nettles (1987b, 40–42), Nettles and Graf (1997, 95–97), Mulholland and Hojnacki (2013, 106–107). Notably, some conceptions (as in Nettles 1987b) do not necessitate a continued descent and instead permit changes of direction within the chromatic elaboration. Christopher Doll (2017, 283) refers to this pattern as the "droop" and categorizes it not as a schema but rather as a "meta-schema."

how the line is typically voice-led to the following musical event.<sup>54</sup> The CESH is usually in minor, but major variants do exist, hence the use of up and down arrows to indicate the modal neutrality of the scale degrees.<sup>55</sup> Typically, a single locally tonic harmony is prolonged. A chromatic, stepwise descent, often in an inner voice though sometimes in the bass, leads from scale degree 1 down to the upper scale degree  $\uparrow 6$ . This is usually followed by lower scale degree  $\downarrow 6$ , but this final tone is seldom sounded with the tonic chord and sometimes appears in a different voice, hence why it is filled in in the prototype. The higher-level prototype of the CESH (Example 5.10) features only the tones of the descent with a line indicating their descending direction. Variants include diatonic, rather than chromatic, descents, combinations of chromatic and diatonic descents, and chromatic and diatonic ascents (see Example 5.11).

**Example 5.9. CESH schema prototype (lower level).**

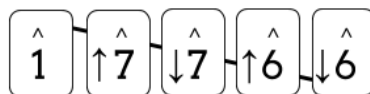


<sup>54</sup> Similarly, scale-degree 5 may in some cases be considered part of the CESH, as in a few of the exemplars of Example 5.11. Whether or not a given tone is included as part of the schema depends on the extent to which these tones continue to elaborate a static harmony.

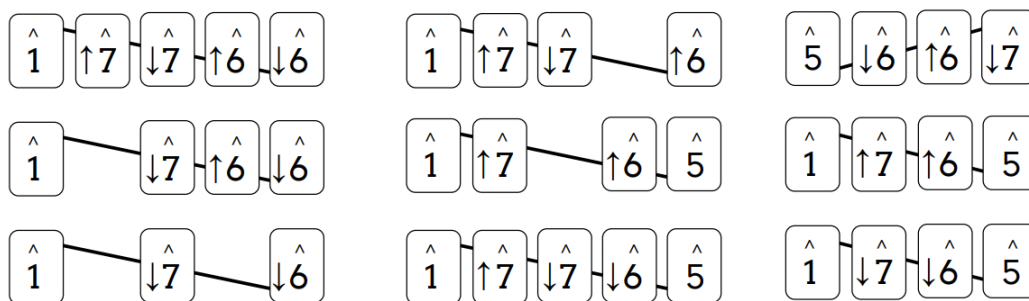
<sup>55</sup> I adopt this notational style from Doll (2017, 36).



**Example 5.10. CESH schema prototype (higher level).**



**Example 5.11. Selection of CESH variants. Note the variability with regard to the number of events, as well as whether motion between tones is ascending or descending, chromatic or diatonic.**



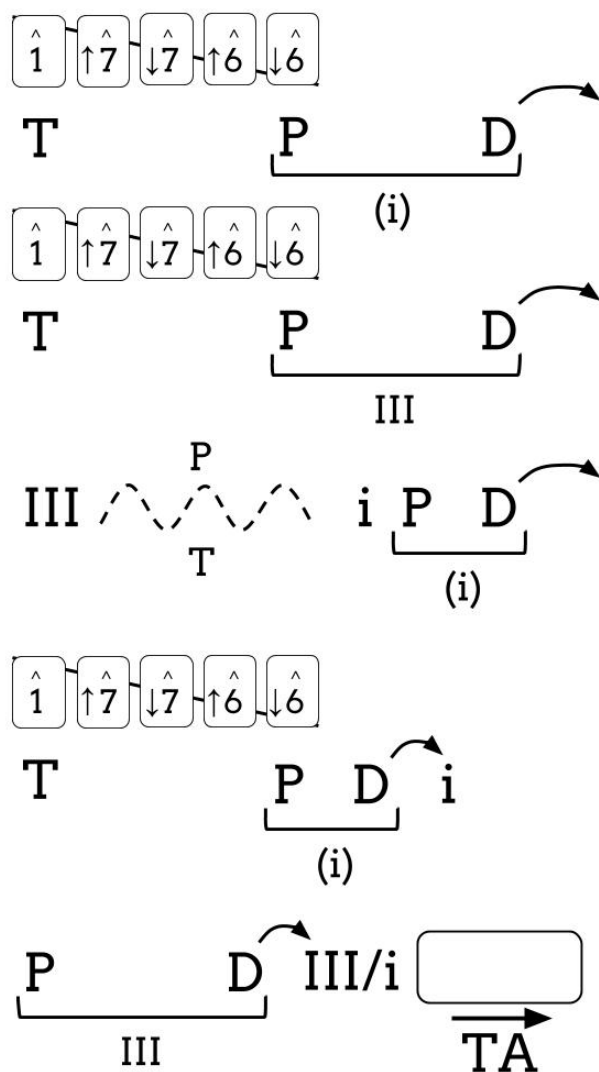
**Flexible Conceptual Maps: Two Case Studies**

*“My Funny Valentine” (Richard Rodgers)*

Example 5.12 shows an FCM for “My Funny Valentine.” The tune consists almost exclusively of CESHs, P–Ds, and turnarounds. Only one section does not rely on any of these schemata: my representation of that passage is more personal and shows an oscillation between tonic and predominant chords in the key of III, the relative major. With the exception of this section, the entire tune can be quickly memorized because it is comprised of so many familiar schemata. Note that, in comparison with other visual representations of the tune’s structure (for example the popular lead sheet from the fifth edition of *The Real*

*Book*, Example 5.13),<sup>56</sup> the FCM is simple and intuitive, noting only essential features and accounting for variants that may be enacted in improvisation.

**Example 5.12. Flexible Conceptual Map (FCM) of “My Funny Valentine” (Rodgers and Hart).**



<sup>56</sup> *The Real Book*, Vol. 1, 5th Ed. (n.d., 308). Kernfeld (2006) provides a history of lead sheets and fake books and discusses *The Real Book* in detail.

Example 5.13. Lead sheet for “My Funny Valentine.”<sup>57</sup>

The lead sheet for "My Funny Valentine" is written in 4/4 time with a key signature of two flats (B-flat and E-flat). The melody is presented on a single staff with chord changes indicated above the notes. The chords are as follows:

- Measures 1-4: C<sup>-</sup>, C<sup>-(maj7)</sup>, C<sup>-7</sup>, C<sup>-6</sup>
- Measures 5-8: A<sup>b</sup>maj<sup>7</sup>, F<sup>-7</sup>, D<sup>-7b5</sup>, G<sup>7b9</sup>
- Measures 9-12: C<sup>-</sup>, C<sup>-(maj7)</sup>, C<sup>-7</sup>, C<sup>-6</sup>
- Measures 13-16: A<sup>b</sup>maj<sup>7</sup>, F<sup>-7</sup>, A<sup>b-6</sup>, B<sup>b7(b9)</sup>
- Measures 17-20: E<sup>b</sup>maj<sup>7</sup>, F<sup>-7</sup>, G<sup>-7</sup>, F<sup>-7</sup>, E<sup>b</sup>maj<sup>7</sup>, F<sup>-7</sup>, G<sup>-7</sup>, F<sup>-7</sup>
- Measures 21-24: E<sup>b</sup>, G<sup>7</sup>, C<sup>-</sup>, B<sup>b-7</sup>, A<sup>7</sup>, A<sup>b</sup>maj<sup>7</sup>, D<sup>-7b5</sup>, G<sup>7b9</sup>
- Measures 25-28: C<sup>-</sup>, C<sup>-(maj7)</sup>, C<sup>-7</sup>, C<sup>-6</sup>
- Measures 29-32: A<sup>b</sup>maj<sup>7</sup>, D<sup>-7b5</sup>, G<sup>7b9</sup>, C<sup>-</sup>, B<sup>b-7</sup>, A<sup>7(#11)</sup>
- Measures 33-36: A<sup>b</sup>maj<sup>7</sup>, F<sup>-7</sup>, B<sup>b7(b9)</sup>, E<sup>b6</sup>, (D<sup>-7b5</sup> G<sup>7b9</sup>)

The table in Example 5.14 compares the chord changes of three versions of “My Funny Valentine”: the Miles Davis Quintet’s 1957 recording from *Cookin’ with the Miles Davis Quintet*, Chet Baker’s 1954 vocal performance from *Chet Baker Sings*, and the lead sheet found in *The Real Book*. Comparing the *Real Book* lead sheet to Baker’s recording, only the progression in mm. 34–35 is substantially different, with Baker’s recording featuring a deceptive return to the tonic C minor at the climax of the tune and *The Real Book* indicating a

<sup>57</sup> Adapted from *The Real Book* (n.d., 308).

resolution on the relative major, Eb. The only other discrepancy arises when *The Real Book* indicates a tritone sub in the ii–V of m. 32. Note how the CESH schema is implemented in both the lead sheet and the Baker version: the static tonic harmony, C minor, is chromatically embellished with a descending line, resulting first in a move from C- to C-<sup>maj7</sup>, then to C-<sup>7</sup>, and finally to C-<sup>6</sup>. It is worth noting that the embellishment in Baker’s recording is in an inner voice, indicated by bassist Carson Smith’s repeated sounding of the C an octave below the descending line. This is also reflected in the chord symbols used in *The Real Book*: were the descent to be realized in the bass, the chord symbols would instead be written as “slash chords,” with the bass note appearing after the slash.<sup>58</sup>

**Example 5.14. Table comparing chord changes in three versions of “My Funny Valentine.”<sup>59</sup>**

m.	1	2	3	4	5	6	7	8
Davis	C-	Ab7 G7	C-7	F	Abmaj7	F-7	D-7b5	G7
Baker	C-	C-(maj7)	C-7	C-6	Abmaj7	F-7	D-7b5	G7b9
RB	C-	C-(maj7)	C-7	C-6	Abmaj7	F-7	D-7b5	G7b9
m.	9	10	11	12	13	14	15	16
Davis	C-	Ab7 G7	C-7	F	Abmaj7	A-7 D7b9 G-7 C7b9	F-7	Bb7(#11)
Baker	C-	C-(maj7)	C-7	C-6	Abmaj7	F-7	Ab-6	Bb7(b9)
RB	C-	C-(maj7)	C-7	C-6	Abmaj7	F-7	Ab-6	Bb7(b9)
m.	17	18	19	20	21	22	23	24
Davis	Ebmaj7 F-7	G-7 F-7	Ebmaj7 F-7	G-7 F-7	Ebmaj7 D-7b5 G7b9	C-7 B-7 Bb-7 Eb7	Abmaj7	D-7b5 G7b9
Baker	Ebmaj7 F-7	G-7 F-7	Ebmaj7 F-7	G-7 F-7	Ebmaj7 G7	C- Bb-7 A7	Abmaj7	D-7b5 G7b9
RB	Ebmaj7 F-7	G-7 F-7	Ebmaj7 F-7	G-7 F-7	Ebmaj7 G7	C- Bb-7 A7	Abmaj7	D-7b5 G7b9
m.	25	26	27	28	29	30	31	32
Davis	C-	Ab7 G7b9	C-7	F7#11	Abmaj7	D-7b5 G7b9	C- B7	Bb-7 Eb7
Baker	C-	C-(maj7)	C-7	C-6	Abmaj7	D-7b5 G7b9	C-	Bb-7 Eb7
RB	C-	C-(maj7)	C-7	C-6	Abmaj7	D-7b5 G7b9	C-	Bb-7 A7(#11)
m.	33	34	35	36				
Davis	Abmaj7 G-7 Gb7	F-7 Bb7(b9)	G-7/Bb F-7 Bb	G-7/Bb F-7 Bb				
Baker	Abmaj7	D-7b5 G7	C-	(D-7b5 G7b9)				
RB	Abmaj7	F-7 Bb7(b9)	Eb6	(D-7b5 G7b9)				

<sup>58</sup> A well-known example that is typically represented as a bass motion using slash-chords is Jerome Kern’s “Yesterdays.”

<sup>59</sup> In the example, “Davis” refers to Miles Davis’s recording on *Cookin’ with the Miles Davis Quintet* (1957), “Baker” to Chet Baker’s recording on *Chet Baker Sings* (1954), and “RB” to *The Real Book*, Vol. 1, 5th Ed. (n.d., 308).

The Davis quintet's performance departs from this norm in numerous ways. Most notably, the CESH progression appears not over a tonic harmony but rather as an implied voice-leading line through the progression  $C \rightarrow A\flat^7 \rightarrow G^7 \rightarrow C^{-7} \rightarrow F^7$  (Example 5.15). This innovation, which plays with listeners' expectations to explicitly hear the chromatic descent, appears to be part of the Davis quintet's arrangement, as it happens in place of the more standard tonic harmony in every A section of the recording. While the CESH is not always realized in the sounding music, the arrangement still comports with the CESH *schema* because, at a deeper structural level, these four measures still constitute a prolongation of the tonic harmony, and the descending chromatic line is able to be realized in the inner voice leading. This ensures that players who are familiar with the more typical realization found in the Baker recording and *The Real Book* are able to converse with the Davis quintet's arranged variant with minimal conflict. For this reason, the FCM more faithfully represents the tune than any lead sheet could: although the Chet Baker, Miles Davis, and *The Real Book* versions cannot all be represented by a single lead sheet, the FCM succinctly summarizes their family resemblances.

**Example 5.15. Chromatic descent through voice leading in the Miles Davis Quintet's arrangement of "My Funny Valentine."**

C-      A $\flat$  7      G 7      C- 7      F 7

In mm. 7–8 and 14–17 of the Davis quintet’s recording, ii–Vs are inserted within the larger P–D schemata (Example 5.16). These clear instantiations of the ii–V schema within the P–D raise questions about the relationship between improvised utterances and compositional frameworks. Rather than problematizing the “P–Dness” of mm. 5–8 and 13–16, the ii–Vs in Example 5.16 may be understood as improvised embellishments that serve not to disrupt the underlying P–D schema but to elaborate it. They are, in other words, improvisation-based rather than referent-based. Whereas referent-based schemata exist prior to a performance as part of an improviser’s referent, these ii–Vs appear to have been added in the act of improvisation. This distinction is important because these improvised ii–Vs may be understood to have opened new dialogic avenues within the performance, influencing the improvisational decisions made by other performers.

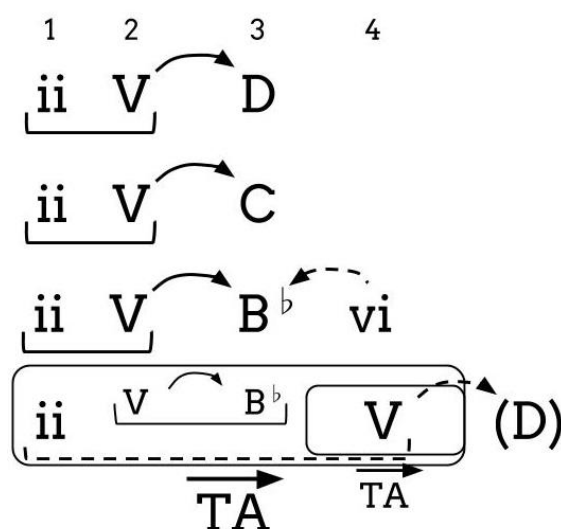
**Example 5.16. My transcription of mm. 1–16 of the Miles Davis Quintet’s 1957 recording of “My Funny Valentine,” with both referent-based and improvisation-based schemata overlaid.**

The image displays a musical score for the Miles Davis Quintet's 1957 recording of "My Funny Valentine," specifically measures 1 through 16. The score is presented in two systems, each with a Trumpet and Bass line. The key signature is B-flat major (two flats), and the time signature is 4/4. The score is annotated with various musical notations, including chords (C, Ab7, G7, C7, F7, D7b9, G7b9, A7, D7b9, G7, C7b9, F7, Eb7b9), accidentals, and articulation marks. Overlaid on the score are four schematic boxes, each containing a diagram of a P-D (Pre-Dominant-Dominant) schema. The top-left box, labeled "Implied CESH", shows a sequence of four circles: 1, 7, 7, 6. The top-right box, labeled "PD (→ i)", shows a sequence of four circles: 1, 7, 7, 6. The bottom-left box, labeled "Implied CESH", shows a sequence of four circles: 1, 7, 7, 6. The bottom-right box, labeled "PD → III", shows a sequence of four circles: 1, 7, 7, 6. The score also includes a "ii-V" label above the D7b9 chord in measure 14 and a "ii-V" label below the G7b9 chord in measure 15.

*“Tune Up” (Miles Davis/Eddie Vinson)*

Example 5.17 shows an FCM for “Tune Up,” while Example 5.18 displays a lead sheet for the same composition. The sixteen-bar tune easily divides into four units of four measures each; these four-measure units are indicated by measure numbers on the top line of the FCM. The tune is comprised almost entirely of ii–Vs in various keys, with an overlapping turnaround and ii–Vs linking the end of the form back to the beginning. Only two events are not represented as ii–Vs or turnarounds, yet these events may nonetheless make economical use of the component symbols of those schemata. The first such event uses the Roman numeral *vi* to indicate G minor, the *vi* chord in B $\flat$  major. The second stretches the ii–V across the final four-measure unit and embeds a V to B $\flat$  in between. These unique features of the tune emerge when familiar schemata cast them into relief.

**Example 5.17. Flexible Conceptual Map (FCM) of “Tune Up” (Davis).**



Example 5.18. Lead sheet for “Tune Up.”<sup>60</sup>

The last four measures are especially notable for their schematic richness. The FCM in Example 5.18 displays these measures in two overlapping ways, as a turnaround and as an elaborated ii–V with an embedded V–I progression and turnaround. Neither of these solutions adequately describes the passage independently, however. As a ii–V, it is hypermetrically offset, with the V chord appearing in a hypermetrically weak position.<sup>61</sup> As a turnaround, the chord progression is unusual. Only John Coltrane’s “Countdown” (a contrafact on “Tune Up”) uses this particular turnaround variant.<sup>62</sup> Yet the status of the last four measures as a turnaround seems clear: it constitutes four events, functions as a suffix, and initiates harmonic motion back to the top of the chorus. A particularly interesting corroboration of what we might call the “turnaroundness” of these last four measures can be

<sup>60</sup> Lead sheet adapted from *The Real Book*, Vol. 1, 6th ed. (2004, 418).

<sup>61</sup> In addition, this hypermetric irregularity disrupts the spacing between events, which normatively is evenly spaced.

<sup>62</sup> The relationship between “Countdown” and “Tune Up” is discussed in Waters (2010, 135). Santa (2003, 18) features further analysis of Coltrane’s reharmonization of the ii–V schemata that characterize “Tune Up.”



found in Sonny Stitt's 1959 recording from the album *The Hard Swing*, where the unusual four-chord progression is eschewed in nearly every chorus. Instead, the E<sup>-7</sup> in m. 13 dissolves immediately into a dominant pedal, indicating that the specific turnaround found in many other versions is being exchanged for a single-event turnaround constituting a lone dominant chord.

How might we account for this ambiguity? It is my contention that these last four measures blend together the ii–V and turnaround, permitting the use of either schema (and the flexibility they entail) while projecting a relatively unique set of harmonies. The E<sup>-7</sup> that begins this passage contrasts markedly with the previous Bb-major tonicization in mm. 9–12, signifying a return to the D-major tonality that began the piece. The parallelism established between the E<sup>-7</sup> chord and the chords of the same quality in mm. 1, 5, and 9 suggests that another ii–V–I is about to emerge. Before this can happen, however, the ii–V *dissolves* into a turnaround, itself a rare but not implausible variant, possibly based on the “Lady Bird” schema. Example 5.19 postulates how the ii–V and turnaround may individually “mutate” into this rare variant, converging onto one another at some point in the process.<sup>63</sup>

It is worth noting that, in Davis's original 1956 recording of “Tune Up” on *Blue Haze*, the last four measures alternate between two endings (see Example 5.20).<sup>64</sup> The similarity of these two endings seems to have led some later ensembles to assume that the tune has only one ending: for example, Chet Baker's 1959 recording of “Tune Up” on *Chet Baker in Milan* features only the second ending, while Sonny Rollins's 1959 recording on *Newk's Time* features only the first. These later versions' adherence to only one of the two

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<sup>63</sup> For more on schemata mutations, see Jan (2007).

<sup>64</sup> See Davis (1956).

endings, along with the schematic ambiguity described above, likely added to the confusion surrounding these last four measures, resulting in many more variants.

**Example 5.19.** Table showing how the ii–V and turnaround schemata may have “mutated” into mm. 13–16 of “Tune Up.”

ii-V Schema Mutation				Operation
E-7		A7		
ii		V		
E-7		A7		V is displaced
ii		V		
E-7		Bb7	A7	bII/V embellishes V
ii		subV/V	V	
E-7	F7	Bb7	A7	Applied dominant embellishes bII/V
ii	V/bII/V	subV/V	V	
E-7	F7	Bbmaj7	A7	Quality of subV/V changed to maj7
ii	V/bII/V	bII/V	V	

Turnaround Schema Mutation				Operation
Dmaj7	B-7	E-7	A7	
I	vi	ii	V	
Dmaj7	B7	E-7	A7	vi is replaced with applied dominant of ii
I	V/ii	ii	V	
Dmaj7	F7	E-7	A7	vi is replaced with tritone sub of V/ii
I	subV/ii	ii	V	
Dmaj7	F7	Bb7	A7	ii is replaced with subV/V
I	subV/ii	subV/V	V	
Dmaj7	F7	Bbmaj7	A7	Quality of subV/V changed to maj7
I	subV/ii	bII/V	V	
E-7	F7	Bbmaj7	A7	I is replaced with ii
ii	subV/ii	bII/V	V	

**Example 5.20.** My transcription of the first and second endings in Davis’s original recording of “Tune Up.”

1.

E-7F7Bbmaj7A7

2.

E-7A7Dmaj7

## Interactive Improvisation and Emergent Musical Structure

In addition to representing how various schemata can be used to conceptualize a larger compositional structure, FCMs are relatively simple and require little effort to memorize. The most distinguishing features of the “Tune Up” FCM in Example 5.17, for instance, are the tonal centers that each ii–V leads to, and the features that either do not fall into schemata or blend and overlap them (such as m. 12 and mm. 13–16). Rather than memorizing a series of harmonies across sixteen measures, the schemata ensure that only a few details need to be memorized. This simplification of information facilitates interactive improvisation both by freeing up attention and ensuring that all improvisers can form utterances that will qualify as recognizable variants of the schemata.

Intersubjective understandings of tunes may be modeled as negotiations between individual improvisers’ FCMs. For instance, consider a hypothetical scenario where Musician A and Musician B jam together on “My Funny Valentine.” Musician A has learned the tune primarily from listening to the Davis and Baker recordings, while Musician B is familiar with Baker’s rendition, as well as the lead sheet from *The Real Book*. The musicians’ FCMs, shown as circles in Example 5.21, are developed from their *avant-textes*, comprising the versions with which they are familiar (shown as square nodes in Example 5.21), and will therefore differ from one another. These differences, which emerge from the relations between versions, represented in Example 5.21 as the dotted lines connecting each node of the network, may or may not be worked out during the improvised performance.<sup>65</sup> If the differences are

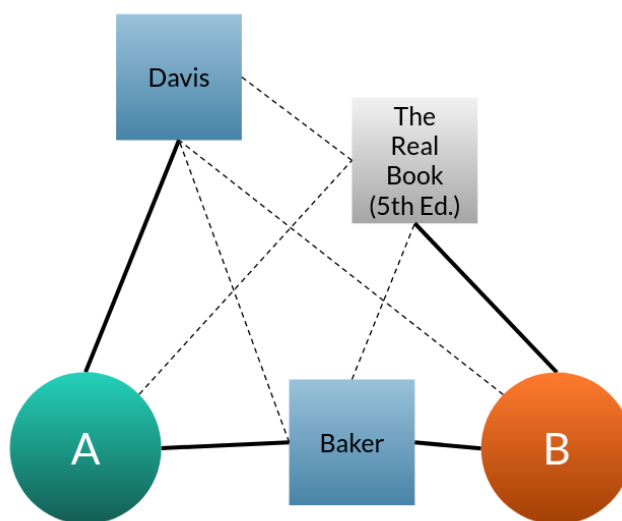
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<sup>65</sup> This approach resembles Brian Kane’s (2018) network-based ontology of jazz tunes, as well as Nicholas Cook’s (1999) earlier notion of a multitext, a network of nominally identical and structurally similar texts that together comprise a work. Both Kane and Cook conceive of works as networks of texts sharing family resemblances, with edges specifying the shared features between text-nodes in the network.

enough to produce unwanted musical conflict, the improvisers may try to understand what is different about their conceptual maps (or in other words, what variants the other player is realizing).<sup>66</sup> The resulting negotiation, *this performance of “My Funny Valentine,”*<sup>67</sup> constitutes an emergent product of their FCMs and is therefore irreducibly determined by musicians A and B, their personal conceptualizations of musical structure, and the ways in which they interact with one another (Example 5.22).

**Example 5.21. Network showing how versions of “My Funny Valentine” help to form FCMs.**

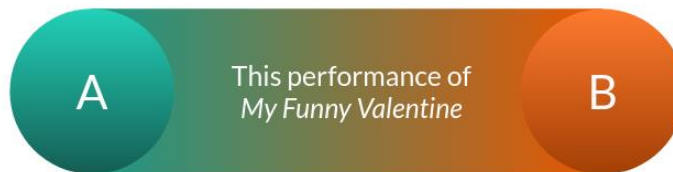
Square nodes represent recorded or printed versions of the tune, circular nodes represent musicians A and B and their FCMs, solid lines represent contact between musicians A and B and the various versions, and dotted lines represent differences between versions.



<sup>66</sup> Issues of conflict and divergence in interactional improvisation are among the central topics of Monson (1996), Hodson (2007), and Michaelsen (2013).

<sup>67</sup> I borrow this phraseology from Stover (2016), who contextualizes a performance of Victor Young’s “Stella by Starlight” as an emergent object within various improvisational processes.

**Example 5.22.** Diagram depicting *this performance of “My Funny Valentine”* as an emergent object constituted by the FCMs of musicians A and B.<sup>68</sup>



This hypothetical scenario is admittedly simplistic and sterile compared to the contextualized reality of live, improvised performance.<sup>69</sup> Improvising musicians bring with them to each performance an enormous amount of experience with the tune: the live performances they have heard, the recordings that they have repeatedly listened to, the lead sheets they have read, solos that they have transcribed, their previous experiences improvising over the tune, and so on. These differences are difficult (perhaps impossible) to trace, but the flexibility inherent in FCMs makes them a useful starting point for analysis. FCMs are not fixed, objective structures but rather critical postulations that allow us to set aside some of the ontological complexity that characterizes the jazz repertoire and embrace the divergent utterances that flexible schemata make possible.

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<sup>68</sup> This view assumes a relatively even distribution of influence amongst the improvisers, but in many performance situations power dynamics make the negotiation of structure considerably more complex. In Example 5.22, for instance, we could imagine a scenario where improviser A has more influence (perhaps they are more experienced, better known, more established on the scene, etc.) and the green on the gradient shifts rightward, coloring even parts of Improviser B’s referent.

<sup>69</sup> This context is captured beautifully by Chris Stover in his description of playing Benny Golson’s “Stablemates” in an unnamed jazz club in New York City’s West Village neighborhood (see Stover 2017, 2.15).

## FCMs and the Analysis of Musical Structure

In addition to clarifying certain improvisational processes, FCMs also help solve the problem of locating a text for analysis. In an article analyzing Wayne Shorter's tune "Yes and No,"<sup>70</sup> Steven Strunk notes that "when attempting to analyze jazz, one must first locate the thing that is to be analyzed. In the case of a jazz tune, this requirement is not a simple matter, because of the variability of performances and written representations of the tune" (2003, 41). Strunk's solution is to compile a composite lead sheet that acts as a compromise between several written lead sheets and transcribed performances. By doing so, however, he must necessarily decide between several chord choices in order to erase any discrepancies. The result is that he is able to arrive at a fixed text that can be analyzed but which may not faithfully represent the composition as the musicians might have understood it at the time of a given performance.

What, then, could an analyst gain from examining a composite lead sheet? If the analyst's goal is to reveal aspects of compositional structure, the composite lead sheet acts as a mere compromise between versions and may not faithfully represent how the tune is instantiated.<sup>71</sup> If the analyst, on the other hand, wishes to compare specific performances of the tune against its compositional structure—to determine, for instance, whether certain tones are consonant or dissonant, structural or ornamental, against the tune's harmonic framework, or to determine what kinds of substitutions are occurring—there is seldom hard

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<sup>70</sup> The tune is also sometimes known as "Yes or No" (Strunk 2003, 41).

<sup>71</sup> José Bowen argues that although lead sheets attempt to be (or are often conceived as) intersection sets documenting the essential features of a tune, they are in reality simply another version and are no more or less structurally accurate than any other instantiation of the tune, whether aural or textual (1993, 147–48).

evidence affirming which set of changes the performers had in mind.<sup>72</sup> The problem is at least partly due to the type of text-artifact composite lead sheets constitute, and the kinds of musico-structural information they specify and privilege. Whereas lead sheets require constant qualification as to whether musicians are playing the specified chords, the prototypical, inherently flexible quality of FCMs ensures that small deviations require no qualification; they are expected, and do not constitute a “change” to the tune. By using schemata as a starting point, FCMs *necessarily* permit many variants. Even if the FCM postulated in analysis does not exactly reflect a given improviser’s personal conceptualization of the tune’s structure, the inherent flexibility of the schemata gives them an advantage over lead sheets: the chord changes and melodic characteristics of a given version may be understood as variants of the component schemata of FCMs, an approach which more faithfully captures the flexibility of improvisational practices.

In the next and final chapter of this dissertation, I dive deeper into the issues surrounding the analysis of jazz tunes and their performances and further explore problematics of musical structure and subjectivity that have mostly loomed in the background throughout the preceding chapters.

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<sup>72</sup> Strunk (2005) is able to provide caveats throughout his analysis, specifying how the subtle changes between versions might alter his analysis. But this is a result of the fact that only three lead sheets and one recording are under consideration. In the case of a tune with a storied history such as “My Funny Valentine,” the sheer number of variants makes the sufficient use of such caveats impossible. Attempts have been made at jointly revealing the identity of jazz standards and are collected in Emmenegger and Senn (2011) and a special issue of the *Annual Review of Jazz Studies* (9, 1997–1998).

## Chapter 6

### Analyzing Tunes

A recurring theme throughout this dissertation has been the *analysis* of jazz tunes. Analyzing tunes, as we have seen, is seldom a straightforward process because there is no definitive version of a tune, and any given performance relies on one or more underlying conceptions of the tune in the form of one or multiple flexible referents. Fixing a structure for analysis is, for these reasons, an exceedingly slippery exercise. In the previous chapter, I developed a partial solution to this problem by suggesting that the features shared between tunes—musical schemata—can be used to postulate a referent for analysis. The resulting flexible conceptual map (FCM) essentially acts as a musico-structural starting point for analysis, one that is grounded in a tune’s many versions but does not necessitate the sometimes-cumbersome tracings of mediations involved in the construction of an *avant-texte*.

In this final chapter, I explore issues of analysis in more detail. I begin by asking what music analysis involves, especially with regard to the objects of analytical acts. Central to this discussion is the nature of musical *structure* and its relationships with music theory and subjectivity. Drawing on Chris Stover’s notion of *analysis-as-multiplicity*, I highlight resonances between Stover’s Deleuzian framework of analysis and my own theorization of tunes. In doing so, I suggest a means of analytically reconciling the contradictions that emerge throughout a tune’s cyclical becoming.



## The Objects of Music Analysis

Throughout much of the history of Western music theory, most music-analytic activities could be fairly categorized as involving the analysis of works of music, especially notated compositions. Indeed, broader questions surrounding music analysis are often underlain by the assumption that music analysis always involves, if not a totally fixed composition, then some kind of work. This is not to say that analysts ignore small, momentary details—indeed, smaller segmentations, whether they are brief moments, phrases, sections, and so on, are frequently taken as the objects of focused analytic inquiry—but rather that, until recently, analysis as practiced in Western music theory has tended to focus on that which is notated or easily notatable, on *works* rather than *performances*. Put differently, the object of most music analysis has usually been a score, taken to be synonymous with the work in question.<sup>1</sup>

In the late twentieth and early twenty-first centuries, this paradigm came under increased scrutiny, especially with the advent of what became known as the New Musicology.<sup>2</sup> Amongst other things, writers such as Susan McClary and Lawrence Kramer sought to undermine the primacy of what Goehr had then-recently identified as the work-concept. These writers sought to reveal the illusory nature of the work-concept and, as Matthew Butterfield writes, to therefore “undermine the work-concept and the practice it represents, as though exposing the false ontology of this object would dismantle the entire

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<sup>1</sup> Leo Treitler (1993) argues that this and other habits adopted by music theorists and analysts throughout most of the twentieth century rely on tacit assumptions about the relations between works and performances.

<sup>2</sup> Joseph Kerman’s (1980) essay “How We Got Into Analysis and How to Get Out” is generally considered to be representative of many of the early concerns of the New Musicology. Work by, among others, Susan McClary, Lawrence Kramer, and Suzanne Cusick further set out to dismantle many of what they saw as the hegemonic norms of music scholarship at the time, including privileging the analysis of musical structure. Kofi Agawu offers a polemic history and critique of the New Musicology, and especially their adversity toward analysis, in “How We Got Out of Analysis and How to Get Back In” (2004).

edifice” (2002, 330). A new strand of research centered around performance began to emerge with the writings of Christopher Small (1998) and Nicholas Cook (2001), each offering ontological alternatives to the dominant, work-centric view. In an attempt to avoid the objectification of music and to account for a broader diversity of musical practices, especially non-Western ones, Small recast the noun “music” as a verb, “musicking,” highlighting music not as an object to be observed but as an activity one participates in. Scores, when present, were seen only as a means to an end. Cook, hoping not to throw the baby out with the bathwater, searched for a way to capture the role that notation and written scores play in the processes of performance. His solution adapts the notion of a “script” to describe how works inform performances, effectively decentering the work as an object of attention while still accounting for its role in the larger ontology of Western musical practice.<sup>3</sup>

Over the course of the last few decades, theorists and analysts focusing on jazz have charted a course of inquiry both in tandem with and in opposition to the dominant streams of music scholarship described above. The objects of analytical attention within the field have shifted over time and are intimately tied up with the aims of analysts and the kinds of theories or theorization with which they are concerned. In an early state-of-the-discipline overview, Henry Martin identified two “principal ways jazz theory can be pursued,” namely (1) from the perspective of the player or composer (“musician-based”), and (2) from the perspective of the analyst (1996b, 1–2). Three categories of jazz-theoretical work emerge from these two perspectives: speculative, pedagogical, and analytical. While analysts deal

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<sup>3</sup> These are only some of the more notable ways in which music scholars have sought to reframe music as process rather than product in recent years. Butterfield (2002) offers a helpful overview of some of these approaches up to the time his article was written. While some of the more radical approaches to this problem were taken up in the 1990s and early 2000s, attempts to accentuate the process-oriented aspects of musical practice have continued to preoccupy music scholars in the years since.

chiefly with the lattermost category, the speculative and pedagogical types of work are under the purview of “musician-based” theories: when practically oriented, “musician-based” theory is pedagogical; when such work assumes rudimental knowledge and strives to invent “creative strategies” it becomes speculative (1996b, 1–2).<sup>4</sup>

The objects of “musician-based” theories are difficult to pin down, for their goals are generally focused on the act of *creating* music; they do not consistently focus on any one particular object of analysis because their practical aims necessitate a diffuse methodology. Because of this, a pronounced tension exists between analytical jazz theory, especially as an academic discipline, and “musician-based” theory. Chris Stover (2014–2015) has addressed this tension in a review-article that examines several recent pedagogical works and doubles as a follow up to Martin’s 1996 article. Identifying an “irreducible link between jazz theory and practice” (ibid., 157), Stover’s work is among the first academic writings to take seriously works of pedagogical jazz theory and their attendant speculative aspects. He reads the work of Joe Mulholland and Tom Hojnacki (2013), David Berkman (2013), and Darius Terefenko ([2014] 2018) in terms of theoretical methodology and considers the analytical implications of various aspects of each work. As such, Stover’s article represents one of the first steps toward closing the gap between musician-based and analytical theories.<sup>5</sup>

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<sup>4</sup> The speculative category is epitomized by George Russell’s influential *The Lydian Chromatic Concept of Tonal Organization* (1959), a somewhat controversial work concerned with “tonal gravity” that posits the lydian mode as acoustically prioritized (as compared with the other diatonic modes) and links particular vertical sonorities to pitch-class collections via chord-scales. Although the focus on tonal gravity has received little attention, the latter innovation was the source of both modal jazz practice and chord-scale theory, a pedagogical technique that has been promulgated by a number of institutions but especially Berklee College of Music for several decades. The pedagogical tradition is epitomized by the works of John Mehegan, whose adaptation of chord-scale theory proved more influential than Russell’s esoteric theory.

<sup>5</sup> A similar review by Keith Salley of Mulholland and Hojnacki and Terefenko’s books considers the analytical import of each work: see Salley (2015). In an event signaling the increasing interest of academic theorists to engage in dialogue with jazz pedagogues, Hojnacki gave a presentation on Berklee’s harmony system at the SMT Jazz Interest Group meeting at the 2015 Annual Meeting of the Society for Music Theory (October 2015, St. Louis, MO), with the influential music theorist Daniel Harrison acting as respondent.

At the risk of oversimplifying, it will be useful to identify two main approaches of analytical jazz theory, each with their own sets of priorities and ontological assumptions and preferences. I will refer to these categories as *reductive* and *generative*.<sup>6</sup> By *reductive*, I refer to analytical work that takes as its primary object the *recorded performance* (generally engaged with through transcription) and is concerned with elucidating jazz practice with reference to specific musical utterances. A reductive approach begins with a transcription and pulls it apart in an attempt to figure out how it is put together. Reductive analytical methodologies are therefore able to capture the specific musical utterances of improvisation and their attendant stylistic qualities. This approach is perhaps epitomized by Steve Larson's work.<sup>7</sup> In much of his work, Larson begins with complete transcriptions of recorded performances and analyzes them using orthodox Schenkerian tools.<sup>8</sup> By *generative*, I refer to analytical work that takes a tune as its primary object and is concerned with elucidating the structure of that tune, often but not always with the implicit goal of demonstrating how that structure may engender (or "generate") musical utterances when combined with particular sets of aesthetic and stylistic preferences and improvisational strategies.<sup>9</sup> This approach is perhaps most common in the work of Steven Strunk.<sup>10</sup> Strunk usually began his analyses with a lead sheet, often taken from *The Real Book*, copyright deposits, or some composite of the two.<sup>11</sup>

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<sup>6</sup> My use of the reductive/generative distinction is influenced by Kofi Agawu's use of these terms; see for example Agawu (2008, 113).

<sup>7</sup> See especially Larson's dissertation, later published with few modifications as *Analyzing Jazz: A Schenkerian Approach* (2009).

<sup>8</sup> Early precedents of this approach include the influential work of Thomas Owens (1974) on Charlie Parker, Milton Stewart (1975) on Clifford Brown, and to a lesser extent Gunther Schuller (1958) on Sonny Rollins.

<sup>9</sup> The term "generative" is perhaps most familiar from Chomskyan generative grammar and its most extensive adaptation to music, Lerdahl and Jackendoff (1983).

<sup>10</sup> See for example Strunk (1996) and Strunk (2003).

<sup>11</sup> See also the discussion on composite lead sheets in Chapter 5.

Two primary analytical objects occupy the discourse and methodologies of jazz analysts: (1) *recordings*, as made tangible by transcriptions, and (2) *tunes*. The issues surrounding the latter have been the subject of the present work, but it is worth dwelling briefly on the problematics of taking a transcribed recording as the primary object of analysis. Apart from the issues of representation inherent in the subjectivity of transcription (Rusch et al. 2016), transcribed performances of tunes must always be considered in relation to the tunes on which they are based, and therefore to the processual tune-concept developed throughout this dissertation.

To begin, let us consider a methodology which takes Charlie Parker's recorded studio performance of "Confirmation," released on the 1953 Verve album *Charlie Parker*, as its primary analytical object. In order to render the recording intelligible to our analytical tools, we transcribe the recording. This immediately invites a number of problems, as decisions made in the necessarily imperfect transcription process reflect, as we have seen, subjective conceptualizations; those conceptualizations may then be carried through to later stages of the analytical process. For example: the ii–V harmonic progression heard in the sixth bar of the first head chorus may be heard and spelled as A-7<sup>b5</sup>–D7 (ii7–V7 of a G minor ii–V progression) or Eb7–D7 (where Eb7 acts as a tritone substitute of V/V in the G major/minor progression V/V–V). The difference is subtle and depends on how one interprets the role of the bass: is the E-flat in the bass a generating fundamental and thus a determinant of harmony (resulting in Eb7) or is it simply a linear decoration of D (an incomplete neighbor to D above which an A-7<sup>b5</sup> chord is played)? Whichever we choose will determine which tones are relatively more or less stable in the chord (that is, which are chord tones and which are chord extensions), and may dictate how we interpret each appearance of this chord throughout the recording.

This leads us to another problem: when analyzing the transcription, how are we to make sense of the relationships between the musical surface and the referents that lead to its creation and that inform its reception? While a recording-centric methodology may seem at first to avoid the problem of identifying specific features of the tune, the referent remains pervasively influential both on how the musical structure was produced and how it is received by the analyst: not only are the improvisers relying on their referents to generate and negotiate the improvised performance, listeners will bring their own referent of the tune to bear on their hearing of the performance in order to make sense of the improvisation in relation to the tune and its history. By focusing on a recording as an isolated artifact, we risk ignoring the relations it establishes with other versions in the *avant-texte*, therefore the ways in which it might signify on past versions and on shared conceptions of the tune. Analyzing a transcription without taking into consideration the ontological precarity of the tune that underlies it would seem to suggest that the tune is simply a fixed, a priori structure, but this is, as we have seen, deeply problematic. After all, the structure of “Confirmation” that we elucidate when analyzing the transcription of Parker’s 1953 recording may be different from even the structure of Parker’s 1947 Carnegie Hall recording. This is not to say that the analysis of a single recording cannot be worthwhile, but rather that ignoring the ontological complexity of jazz improvisation can easily lead to problematic claims regarding the relationship between performance in question and the tune on which it is based.

Most authors do put performances and tunes in dialogue with one another. Yet even in such cases, issues of clarity remain. For example, in Larson’s book, transcriptions and analyses of several performances of Thelonious Monk’s “Round Midnight” by various artists are displayed, with “the tune” (what Larson calls “the theme,” partly in reference to his theme-and-variations conceptualization) being dealt with primarily through two of

Monk's own recordings. Yet when Larson repeatedly discusses the "structure" of "Round Midnight," it is unclear what he is referring to, for he often is pointing to aspects of his Schenkerian analyses of transcriptions of Monk's recordings. In his book, Larson transcribes many complete solo performances and one trio performance, including transcriptions of the bass, drums and both hands of the piano, meaning that full harmonies as they sound in the recording can be indicated and analyzed. By contrast, Henry Martin's *Charlie Parker and Thematic Improvisation* (1996a) contains transcriptions both of tunes and solos in lead sheet format (i.e., without the context of the particular utterances of the accompanists). Martin takes a harmonic structure of a tune, as well as an original melody, to be given, then determines the consonant or dissonant status of foreground tones based on their relationship to the underlying changes.<sup>12</sup> The status of the changes in these analytical methodologies is far from inconsequential, inviting a series of questions: Are we to assume that the improviser had in mind the changes we might find on a lead sheet? Are the changes with which the improviser is in dialogue exactly the same as those with which the other players in the ensemble are in dialogue? Are they the same as the emergent set of changes that a listener might hear? How might reharmonizations, chord substitutions, and similar alterations be accommodated? And so on.

These questions and others like them highlight the extent of the influence of subjectivity on claims regarding musical structure. The next section engages these issues in earnest.

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<sup>12</sup> See Martin (1996a). It should be noted too that the changes are themselves hierarchically organized, with many harmonic style markers (especially the functional dominant-tonic chains endemic to bebop) understood under the rubric of "prolongation by arrival" (Martin 1996a, 9–11). Martin would later deal with issues of tune ontology in Martin (2018b, forthcoming).

## Music Analysis, Subjectivity, and Musical Structure

Matthew Butterfield (2002) notes that musical works and other musical phenomena are often *objectified*. Using the categorization theories of Eleanor Rosch (et al. 1976) and the conceptual metaphor and embodied image schema theories of George Lakoff and Mark Johnson (1980), Butterfield theorizes an “idealized cognitive model” that reveals how musical works are understood, and therefore also treated, as objects:

The image schemata of part-whole and container structure our perception of basic-level physical objects, as well as our thinking about them. In other words, we cannot interact with or even visualise an object without seeing it as contained within a boundary and organised in terms of a specific configuration of parts in a unified whole (Butterfield 2002, 336).

The conceptual metaphor SOUNDS ARE OBJECTS helps to explain the relationship between the listening subject and the musical object. For Butterfield, the “otherness” required to understand something as an object disproves notions of “subject/object fusion through musical listening” (2002, 344) espoused by some musicologists.<sup>13</sup> At the same time, however, Butterfield’s cognitive model highlights where subject and object meet *in the mind*, suggesting that the objects of music analysis are not static and out there in the world but rather are conceptualizations, the product of the interaction between the listening subject and sound.<sup>14</sup>

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<sup>13</sup> Butterfield specifically argues against this perspective as expressed by Patricia Carpenter (1967) and Nicholas Cook (1990), although he suggests that this view is more widespread.

<sup>14</sup> Marion Guck (2006) makes a similar distinction between “real” and “intentional” objects, where real objects might include a score or the actual sound, and intentional objects refer to the music as understood by the listener.



This pivot away from the score and toward the mind of the listener resonates with the notions of transcriptions and referents developed throughout this dissertation and resembles Marion Guck's emphasis on "hearings" rather than "works" (2006, 193). By turning away from accounts of fixed musical texts and toward hearings, the subjectivity of analysis is given room to breathe. Indeed, for Guck, even the *term* "analysis" carries with it too much of the weight of objectivity, suggesting a straightforward relationship whereby an analyst simply applies tools to a static object. She notes that even seemingly objective observations, such as two tones being a seventh apart and moving to a sixth apart, are conditioned by music-theoretical knowledge and hence "begin to make something of the sounds" (2006, 194).<sup>15</sup> Guck reframes analysis as *interpretation*, highlighting the subjectivity inherent in the activity. She notes, for example, that "[a]nalyses necessarily bear the traces of the personal sensibilities, experiences, and inclinations of their authors," their "intellectual, social, and disciplinary commitments" (2006, 197). Following Tia DeNora (2000), Guck sees the category "music" as "a particular case of interaction between a human agent and a cultural artifact" (Guck 2006, 195) whereby both the agent and artifact are involved in a process of "mutually structuring" one another (DeNora 2000, 36).

One of the tensions that emerges in Guck's recasting of analysis as interpretation is the status of *musical structure*. This term, ubiquitous in music scholarship, is often somewhat ambiguous in meaning. According to Guck, structure may simply be correlated with certain perceptions and their affective qualities. "What we so often refer to as musical structure," she writes, can be "correlated with a web of musical feelings that we experience and understand as tonic, V, suspension, 3/4, etc." (2006, 202). Guck seems content to allow

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<sup>15</sup> Guck notes that these kinds of conditioned observations are akin to what Ludwig Wittgenstein often referred to as "hearing as"; see Wittgenstein (1953, 30–40).

structure to be inferred, to “take care of itself” (ibid., 206), while she foregrounds other (presumably more subjective) aspects of interpretation. Yet although the term is often used to refer to what appear to be neutral musical relationships, authors have continually grappled with whether and to what extent musical structure is subjective.

Perhaps the most thorough recent treatment of musical structure and its relationship to other aspects of musical experience comes from Dora Hanninen’s monograph *A Theory of Musical Analysis* (2012). In her book, Hanninen separates theories of musical structure from more direct, less-mediated observations about music. What she calls the “structural domain” of analysis is separated from the “sonic” and “contextual” domains, where the “sonic domain” refers to musical events or segmentations (distinguished from one another through ascriptions of difference) and the “contextual domain” refers to collections of segmentations related to one another by identity or similarity. The “structural domain” refers only to segments that are defined by an existing theory of musical structure (Hanninen uses primarily Schenkerian and 12-tone theory as well-established examples). Her theorization ensures that musical structure is seen as a framework existing *outside of* analysis; as Judith Lochhead puts it, Hanninen’s framework “takes pre-existing theories—basic and higher level—as *prior to* analytical engagement” (Lochhead in Boerner et al. 2014, 147, emphasis added). In this sense, musical structure is to be understood as the product of music theory, and should therefore not be taken as self-evident: theorists and analysts do not “reveal” some kind of objective musical structure lurking beneath the surface of a piece but rather make subjective claims about how the music might make sense to an observer, whether a hypothetical listener or the analyst themselves.

Hanninen’s notion of musical structure, which requires that analytical observations be conditioned by theory in order to be considered “structural,” arguably recalls the critiques

of structural analysis so prominent in the writings of the New Musicologists. For these analysts, musical structure implies an approach that focuses *only* on abstract relations between notes and ignores the many kinds of meanings and affects those notes (and other aspects of the sonic signal) afford. But as Joseph Dubiel has noted, the term “structural” remains rather ambiguous in its many meanings and uses. Responding to a critique by Rose Rosengard Subotnik (1988), who writes that musical structure suggests that a work’s “internal components and relationships are presumed to have attained something like a status of necessity which disallows alternative versions” (1988, 101), Dubiel counters that musical structure need not be defined in such a constrained way. Indeed, following Benjamin Boretz, Dubiel claims that musical structure simply refers to anything that pertains to a work’s identity. He writes that, “simply put, the structure of a work is *whatever happens in it*—whatever happens, as characterized through the deployment of whatever concepts help to make the work’s identity specific and interesting for us” (Dubiel 1996, 19). In this conception, musical structure and ontology become one and the same.

### **Analysis as Multiplicity**

The direct, one-to-one relationship that Dubiel suggests between work identity and musical structure might at first seem problematic for jazz tunes, where musical structure is so diffusely distributed through a network of performances and referents that no such one-to-one relationship ever seems to emerge. Yet Dubiel offers a solution to this dilemma by emphasizing the central role of subjectivity in conceptions of musical structure. For Dubiel, musical structure is only useful insofar as it is “the designation of a certain direction of interpretive activity—the direction concerned with emphasizing the openness of each

sound's identity to definition through the relationships in which we understand it to participate" (Dubiel 1996, 20).

In his radical reinterpretation of the meaning of musical structure, Dubiel suggests a kind of analytical process that relies on subjective observations, which in turn structure a piece for each individual listener and help define how its identity is negotiated between subjectivities. This turn toward subjective understandings of musical structure and identity resembles a pedagogical approach developed by Chris Stover (2013) called *analysis-as-multiplicity*, wherein a musical piece or moment is engaged from a number of different angles and methodological proclivities, each reading enriching the others.<sup>16</sup> Stover develops this framework in part as a solution to the issue of analyzing what he calls a "work-for-improvisation" (2013, 1). According to Stover, the work-for-improvisation describes

the multiple scores, historical performances, performance practices, and so on that interconnect to form something like a "text" from which to begin. [...] Our thesis, then, begins with a two-part question: for an improvising musician, what is the improvisational object; and how might one engage that object *as and how it presents itself*? (1–2, emphasis added).

These questions are similar to those that have framed the present discussion, but are mobilized toward a different end. Whereas I have been chiefly concerned here with analytical methodologies, Stover's concerns are explicitly pedagogical, beginning not with the professional music theorist but with the improvising musician. His answer to the latter question quoted above is to take a pluralistic approach to analysis, asking questions from different angles that provide "multiple correct readings [that] question, challenge, and enrich

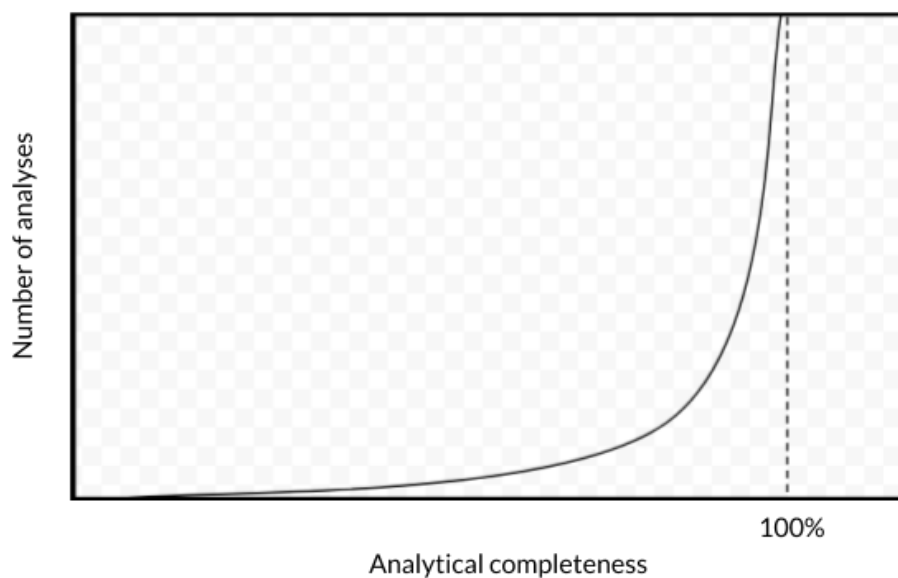
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<sup>16</sup> Although Stover's article is entitled "Analysis as Multiplicity," he never uses the phrase as a concise representation of his suggested pedagogical methodology. I have hyphenated the phrase and use it here in order to facilitate discussion of his approach.

each other” (ibid., 2). The multiplicity of analytical acts mirrors the multiplicity inherent in the identities of jazz tunes. They both arise from subjective interpretations of musical structure, but operate from opposing positionalities: improvisation from the poietic, analysis from the esthetic.

For Stover, analysis is an activity that we can *continually* do: the more we do analysis, the more we approach, but never reach, a complete reading of a given work. I find it useful to think of reading-as-multiplicity (and, by extension, the analytical enterprise generally) as asymptotic, represented by the graph in Example 6.1: The curve represents the continuous activities of analysis, while the asymptote of that curve represents an impossible-to-reach, complete reading of the analytical object.

**Example 6.1: Complete analysis as asymptote.**



The pluralism of this asymptotic perspective manifests not only as the accumulation of analyses by a single analyst, but also through the multiple, potentially conflicting analyses that can be offered by multiple analysts in dialogue with one another. In their article making

use of this kind of plural analysis, René Rusch, Keith Salley, and Stover write that “[b]y carefully turning our focus from one interpretation to the next, further aspects of the performance’s complex structure emerge. In a sense, then, a multi-author project such as this amounts to an ongoing phenomenological engagement, providing an array of listening perspectives that others can bring to bear on their own experiences” (Rusch et al. 2016, 5.8). Analytical multiplicities that include analyses from multiple analysts arguably help to best capture how subjectivity shapes the pluralistic identity of a tune.

One of the appeals of Stover’s methodology is its morphological similarity to the *avant-texte*: both are diffuse and embrace pluralism rather than working against it. Because Stover stops short of offering a suggested series of analytical activities, we are free to explore the *avant-texte*, as well as to explore how subjective engagement with the documents of the *avant-texte* are constituted into a referent. Analysis-as-multiplicity encourages us to engage elements one at a time, moving back and forth between elements as our given analytical aims impel, while keeping track of the broader picture.

To gain a sense of how this might be put into practice, and the challenges that are involved in doing so, let us consider a hypothetical analysis of Charlie Parker’s “Confirmation.” I begin by transcribing Parker’s solo from his 1947 Carnegie Hall performance of the tune with the aim of elucidating the voice-leading mechanics that ensure a sense of tonal cohesion in Parker’s playing. I choose to use modified Schenkerian tools, which are especially well equipped to uncover tonal voice-leading structures. Since Parker’s instrument, the alto saxophone, is a melodic (non-chordal) instrument, the heard harmony is determined by more than just Parker’s solo line. I decide to transcribe the piano and bass parts (played by John Lewis and Al McKibbon, respectively) in order to determine the sounding sonorities. I arrive at one analysis that lists as harmonies my hearing of those

sounding sonorities. But small conflicts between the players encourage other analytical possibilities: What might have been the referents from which the players were working? What might a rehearsed reharmonization of that score have involved? In what ways might the players have conceived of the underlying structure differently? I seek to answer these questions by analyzing each chorus of the recording, comparing the resulting changes from chorus to chorus. I then analyze each part individually in an attempt to determine what harmonies might have been implied by each player. I compare each of these to the composite analyses. Yet this is still is not the complete picture. I perform similar analyses on Charlie Parker's other recordings of "Confirmation," then on recordings by other players. I then look for intertextual resonances, especially those afforded by generic and stylistic markers. "Confirmation" may be characterized as a sort of hybrid between a standard AABA form and the blues (the dominant-quality subdominant chord that begins in m. 5 of the form parallels the paradigmatic turn to the subdominant in m. 5 of a twelve-bar blues). The invocation of the generic conventions of the blues makes available certain melodic formulae that are able to overlap and conflict with other harmonic devices.<sup>17</sup> And so on. An emergent sense of the harmonic nature of "Confirmation" becomes apparent as I engage with more and more elements of the various documents in the *avant-texte*, approaching (but never reaching) a "complete" harmonic analysis.

As is evident from the above scenario, such considerations can quickly make one lose focus, reaching around for anything and everything that might help illuminate the structure of the tune. If we were to dogmatically assert that analysts *must* engage the entire *avant-texte*, it is easy to imagine the methodology quickly getting out of hand. How, for instance, could we deal with each new instantiation of the tune: every new recording that is

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<sup>17</sup> See Love (2012) for examples of the kinds of melodic formulae used by Charlie Parker over blues changes.

released, every lead sheet that is published, every performance in every club, conservatory ensemble room, apartment, and so on. For this reason, practicality must dictate scope, and we must therefore acknowledge that we may only engage a subsection of the *avant-texte*.

Finally, it is worth dwelling momentarily on the benefit of the associative, capricious attitude this framework encourages. For while it may be difficult to retain continual focus, pluralistic analysis reconciles many kinds of different approaches. A reversal of analytical perspective, like that suggested by Stover's pedagogically-oriented, improvisation-centric methodology, may help further illuminate the kinds of relationships that bind and blur elements within the *avant-texte*. In what is perhaps the most concise summary of the benefits of a pluralistic analytic methodology, Stover writes:

A creative, plural reading of [a] work can engender a dogma-free engagement with its essence (or bundle of essences), and open a horizon of interpretive possibilities, enriching a work's expressive potential and how that potential might be realized in performance. This way of thinking in turn intensifies the connection between theory and practice, locating the former as an important, creative way of gaining access to the latter in increasingly nuanced expressive ways (Stover 2015, 76).

Engaging the tunes through analysis-as-multiplicity may serve to enlarge the scope of jazz analysis, extending its reach past the realm of "analytical theory" and out toward the realms of speculative and pedagogical theories, then, through them, to jazz practice and listening. This, in effect, begins to align the focus of each disciplinary category, locking into place a series of conduits that increase the flow of information between the work of music theorists, jazz musicians, and the listening public.



## Future Research

The model presented throughout this dissertation is, in some ways, still incomplete, or at least preliminary. In the process of writing, loose threads have emerged and certain ideas have necessarily been forced onto the back burner. Each component of the model, from *avant-textes* to the negotiation of referents in interactive performance, is deserving of far more space and attention than I am able to offer here. In this final section of the dissertation, I wish to highlight only a few of the ways in which the research presented here might be expanded.

There are a number of approaches that were briefly introduced but not considered at length. Chief among these is the issue of embodiment, especially as it pertains to cognition.<sup>18</sup> While I have represented referent formation as happening in the minds of improvisers, the role of the body in the learning and conceptualization of tunes is deserving of more attention. One of the more obvious ways in which embodiment would seem to play a role in referent formation is through motor memory: there is a sense in which learning a tune is like learning a more fixed composition, where one physically fumbles through the piece before gradually mastering how it is played. Increased familiarity and comfort with physically playing a tune likewise seems to open up more possibilities in terms of embellishing and altering the tune.<sup>19</sup>

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<sup>18</sup> Along similar lines, ecological approaches like those explored in Love (2017) and Hannaford (2019) have shed further light on the relationship between perception, the body, and improvisation and would help to contextualize the processes discussed here.

<sup>19</sup> Andrew Goldman discusses the coupling of motor and sensory systems as a crucial part of how improvisation constitutes a “way of knowing”; see for example Goldman (2016, 4.6).

Situational concerns have also been largely factored out of my discussions.<sup>20</sup> In the interest of clarity, the model I have developed throughout is general enough to be applicable in many diverse contexts. That said, the specificities of more localized contexts would shed light on how these processes function in particular scenes, subcultures, institutions, and so on.<sup>21</sup> Ethnographic research focusing specifically on the way tunes are talked about and conceptualized, especially through more thorough examination of the discourse of musicians, audiences, and other members of jazz communities, would be especially enlightening in this regard. In addition to focusing on particular communities, a broader look at how these processes have changed over the course of the history of jazz may help clarify the extent to which my model is contingent on a particular set of historical practices.<sup>22</sup>

Finally, it may be worth considering the extent to which the processes outlined in this dissertation may (or may not) be applicable to non-jazz repertoires and practices featuring a blend of fixed composition and improvisation. I suspect that the model developed here would be especially relevant in musical traditions where a single work or composition has or can have multiple versions. An exploration of how this model might best be modified to fit other musical practices would help shed light not only on the musical practices in question but on the model itself, and could suggest new ways of configuring the components of the model.

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<sup>20</sup> The relationship of improvisation to embodied and situated cognition is a persistent theme in Vijay Iyer's writings; see Iyer (1998, 2002, 2004, 2014).

<sup>21</sup> Stover (2017) portrays improvisation in an especially dense web of entanglements; see for example his description of the contexts that lead up to an improvised solo on Benny Golson's "Stablemates" (Stover 2017, 2.15).

<sup>22</sup> For example, Benjamin Baker's recent work on the relationship between contemporary jazz practices and popular music shows how drastically this model has been revised when jazz musicians use songs by more recent popular music artists as a basis for performance; see for example Baker (forthcoming).

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