Illusions of meter and form in Linda May Han Oh's 'Yoda'

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Originality Statement

I hereby declare that this submission is my own work and, to the best of my knowledge, it contains no materials previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at UNSW or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by others, with whom I have worked at UNSW or elsewhere, is explicitly acknowledged in the thesis. I also declare that the intellectual content of this thesis is the product of my own work, except to the extent that assistance from others in the project's design and conception or style, presentation and linguistic expression is acknowledged.

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Abstract

Bassist Linda May Han Oh has become a prominent figure in the world of jazz over the past decade, recognised for her work as a side musician as well as a composer and bandleader in her own right. This thesis presents an intra-musical analysis of Oh's composition 'Yoda' as recorded on *Sun Pictures* (2013) with saxophonist Ben Wendel, guitarist James Muller and drummer Ted Poor. The research expands upon a concise analysis of the same recording by Marc Hannaford (2017), which is currently the only known musicological investigation of Linda May Han Oh's work. Texts in the broader field of jazz studies were examined for investigative methodologies and a unique analytical perspective for the present study was developed in response to critiques made by Givan (2016) and Butterfield (2008). This perspective manifests as a set of design principles for aesthetic inquiry into improvised music. The analysis in this thesis opens with an investigation of each musician's improvisational vocabulary, and proceeds to examine how elements of these individual vocabularies combine and interact in performance to create illusions of additive metric substructure and/or obscure the formal and harmonic boundaries of the composition. Finally, some reflections on the findings are offered, as well as suggestions for future research.

Acknowledgements

Foremost, I would like to thank my supervisors Dr. John Peterson and Dr. Alister Spence for their invaluable guidance, feedback and support throughout the course of my Honours research. I extend thanks to all of the music staff I have had the pleasure of learning from as an undergraduate at UNSW, and particularly acknowledge the ongoing support of Dr. Manolete Mora and Dr. John Napier, respective previous and present program conveners. I also wish to acknowledge the support of my peers: saxophonist Greg Stopic and drummer Ryu Kodama, two phenomenal musicians who graciously shared their instrumental expertise and assisted in proofreading my transcriptions; and the ever-brilliant pianist/poet Annabelle Riger Bregovic, who has always helped me find the words I'm looking for.

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Introduction

Over the past decade, Malaysian-born and Australian-raised bassist, composer and educator Linda May Han Oh (b. 1984, now based in New York) has established herself as a prominent figure in the sphere of jazz, recognised for her work as a side musician, as well as a composer and bandleader in her own right. Described as ″prolific" in The New York City Jazz Record (Matzner, 2019), Oh's strength and innovation as a musician, composer and leader is evident through the consistent quality of her recorded live performances and studio albums. As a composer and bandleader she directs ensembles to produce rhythmically and harmonically complex surface textures, and regardless of the particular lineup of musicians, her music abounds with feats of rhythmic interplay in both the pre-composed material and the spontaneous performance decisions. Whether live or in the studio, Linda May Han Oh's music possesses an unmistakable sonic signature.

Oh's musical output and career achievements have captured the attention of many, and numerous published interviews with her are to be found online.[1] These articles often address topics such as her musical, cultural and educational background, current projects, equipment used, her experience as a female instrumentalist in music performance, and her advice for aspiring musicians – especially young women. Naturally, Oh's name appears with some frequency in feminist discourses within contemporary jazz and art music spheres, both public and academic.[2] However, the body of published musicological study pertaining to Oh's work is at the time of writing quite limited: anyone interested in understanding the reasons why Oh's music functions the way it does has only a few scattered resources to start with, and must discover other innovations through their own analyses.

As a contribution to that body of scholarship, this paper presents an analysis of the manipulation of form and meter at different structural levels in Oh's recording 'Yoda', the fifth track from her album *Sun Pictures* (Oh, 2013a). The analysis extends research into the same piece presented in Marc Hannaford's article 'Subjective (Re)Positioning in

[1] See BIMHUIS (2019), Himes (2019), Scheinin (2019), Lorge (2019), Freeman (2019), CapitalBop (2019), Schreil (2018), Fotakis (2018), Leonardi (2018), Liebman (2018), Downbeat (2017), Guiliani (2017), Horvat (2017), Kee (2015), Sheridan (2015), Sun (2014) and JazzTimesVideos (2012).
[2] See Milkowski (2019), Russonello (2018), Wimbish (2018), All In (2018), Leonard (2009). Hannaford (2017) is discussed in Chapter 2.

Musical Improvisation' (2017), which is discussed briefly in Chapter 1. Chapter 2 summarises peripheral research into analytical methodologies used within the broader sphere of jazz studies, and Chapter 3 proposes an analytical perspective which emerged in response to problems identified by Givan (2016) and Butterfield (2008), and describes the process of investigation used herein. Chapter 4 investigates the distinct sound of Oh's *Sun Pictures* quartet (saxophonist Ben Wendel, guitarist James Muller, bassist Oh and drummer Ted Poor) within the recording 'Yoda', by examining musical relationships both *within* and *between* the captured performances of each musician. Reflections on the analytical findings and methodology, and possible avenues for further research are suggested in Chapter 5.

Chapter 1. Existing musicological scholarship: Hannaford's 'Subjective (Re)Positioning'

At the time of writing, the only known musicological study of Oh's work as a bandleader exists in the second chapter of Marc Hannaford's article 'Subjective (Re)Positioning in Musical Improvisation: Analysing the Work of Five Female Improvisers' (2017).[3] Hannaford discusses the practice of jazz musicians Anna Weber (b. 1984), Linda May Han Oh, Ingrid Laubrock (b. 1970), Caroline Davis (b. 1981) and Shannon Barnett (b. 1982) through a feminist hermeneutical lens, drawing on interviews conducted with each artist and musical analyses of a selected work from each artist's catalogue. His study draws on ethnographic research methods and intra-musical analysis to argue that today's female improvising musicians are engaged in an act/process which Hannaford encases in the term "subjective (re)positioning":

> " [...] during musical improvisation, musicians inhabit (that is, position themselves) and/or move through (that is, reposition themselves) a conceptual space that comprises various conceptions of identity, which are given by dominant discourses. This conceptual space includes, amongst others, musical qualities such as the sonic or visual projection of strength or vulnerability in performance." (Hannaford, 2017, par. 10)

Hannaford's chapter on Linda May Han Oh presents a number of quotes from her interview, and a partial transcription and analysis of her composition 'Yoda' (as recorded on *Sun Pictures* (Oh, 2013a) with saxophonist Ben Wendel, guitarist James Muller and drummer Ted Poor). Importantly, Oh nominated 'Yoda' as an object of musicological inquiry which, in Hannaford's words, "exemplifies her preferred subjective position" (2017, par. 27); one of "agonism" which resists "condescendingly careful improvisation". Hannaford's analysis attempts to demonstrate, from a musical standpoint, how Oh positions herself as an *agonistic* voice in her ensemble work – and by extension, how her playing on 'Yoda' exemplifies Hannaford's concept of *subjective (re)positioning*. The focus is exclusively on the rhythmic interplay which takes place between bassist Oh and drummer Ted Poor throughout the first two minutes (10 choruses) of the recording. Hannaford's analysis is accompanied by annotated transcriptions which feature Oh's bassline laid against a 'shell' transcription of Poor's metric accents, sufficient to illustrate Poor's beat groupings. For Hannaford's purposes, it is not necessary to include the other two voices in order to state and support his argument.

[3] Marc Hannaford is an Australian jazz pianist, composer, and lecturer at Columbia University.

It is worth acknowledging that Hannaford's article demonstrates an act of scholarly risk-taking on a number of levels: firstly, it represents Hannaford's commendable attempt to proactively and respectfully engage with contemporary feminist discourses as a "straight white male" (Hannaford, 2017, par 6); and secondly, it features a serious effort – not once, but at least five times – to present the explicit findings of traditional musicological study as supporting evidence within this contribution to feminist discourses in jazz. Whether Hannaford is successful in either endeavour will not be discussed herein, but the open-endedness of such debates is sufficient to discourage the present author from attempting to incorporate the concept of *subjective (re)positioning* into this paper. However, Hannaford's methods of musicological inquiry – particularly transcription as a means of identifying patterns in improvised music – form the basis of the methodology and presentation style used in the present study. The analysis in Chapter 4 of this paper expands upon Hannaford's analysis of 'Yoda' to include an overview of the compositional vocabulary used by each individual voice (tenor saxophone, guitar, bass and drums), followed by an investigation into how the superimposition of these vocabularies can obscure the formal boundaries of the composition and/or contribute to the illusion of an additive metric substructure.

The following chapter will contextualise the present study within the sphere of jazz interaction studies, and summarise background research which was conducted into analytical methodologies within the field of jazz studies in order to arrive at a suitable analytical methodology for use in this paper.

Chapter 2. Background research into relevant analytical models

'Interaction studies' (or 'jazz interaction studies') is a field of research within jazz and improvised music scholarship which engages with questions of how performers improvise collectively in ensemble settings, particularly in small groups. Benjamin Givan (2016) describes how "landmark" texts in interaction studies such as Berliner (1994) and Monson (1996) have drawn on a combination of ethnographic and musicological methods of enquiry to examine instances of "dialogical interplay" in jazz music. As compared with other fields of jazz research which tend to focus on the style of individual musicians across a range of recordings, interaction studies typically place equal weight on every instrumental part and trace developments in musical-interpersonal relationships throughout recorded performances.

The present study, an analysis of how individual improvised instrumental lines superimpose and "interact" to create a final musical object, inevitably engages with discourses in jazz interaction studies – and perhaps qualifies as an interaction study of Linda May Han Oh's music. Not without some irony, the articles which have had greatest influence on the analytical methodology employed in this paper are in fact critical responses to methods and claims that have emerged from the jazz interaction discourse: namely, Benjamin Givan's 'Rethinking interaction in Jazz Improvisation' (2016), and to a lesser extent Matthew Butterfield's (2008) review of Robert Hodson's *Interaction, Improvisation and Interplay in Jazz* (2007). Secondary research was also conducted into the varied methodologies employed in other focus areas in jazz scholarship, specifically investigation into individual performers (Orgill, 2008), jazz transcription as an area of inquiry (Rusch, Salley & Stover, 2016) and empirical musicology as applied in jazz analysis (Butterfield, 2010; London, 2010; and Abeßer, Frieler, Cano, Pfleiderer & Zaddach, 2017). Within the scope of this study, it is not possible to address every study above, but it is noted that aspects of Orgill (2008) and Abeßer et al. (2017) did bear a significant effect on the analytical methodologies employed.[4]

[4] Abeßer et al. (2017) provides an account of computer analysis methods applied to a digital database of 47 mainstream jazz recordings and transcriptions, with the intention of identifying general tendencies in the performance style of 'mainstream' jazz. The results yielded in each case were generally inconclusive or statistically ambiguous, suggesting that few strict patterns for "standard practice" exist in jazz music. Amongst other issues with the experimental design, it was realised that the analytical methodologies employed in the study seem to measure human deviation from imaginary 'fixed' traditions, practices and standards of jazz performance.

Hodson (2007) and Ingrid Monson's *Saying Something: Jazz Improvisation and Interaction* (1996) were identified as two highly-regarded publications of close relation to the initial intentions of this study, and were examined for analytical methodologies. In addition to presenting different analytical case studies, Monson and Hodson's books are distinguished by the extent to which ethnographic research contributes to their respective analytical arguments: Monson (1996) presents an ethnomusicological study of interaction in jazz, where Hodson (2007) places more emphasis on intra-musical study. Unfortunately, due to fundamental differences in analytical objectives neither text featured analytical models suitable for the specific needs of this paper.

Givan (2016) presents a meta-analysis of landmark texts in jazz interaction studies, and the findings have directly and significantly informed the perspective of this analysis. With a critical eye, Givan examines a number of landmark texts under the umbrella of jazz interaction studies and defines three main levels of musical interaction which feature in discussions by jazz analysts: "microinteraction", "macrointeraction" and "motivic interaction".

> "Microinteraction takes place at a very fine level of musical detail, too small in scale to be quantified by standard Western notation, and includes such phenomena as the tiny adjustments in tempo, dynamics, pitch, and articulation that musicians make while playing together." (Givan 2016, par. 7)

> "'macrointeraction' [...] involves the broad sorts of collective coordination whereby improvising musicians play in unified (or at least compatible) stylistic idioms [...] and at mutually coherent intensity levels." (Givan 2016, par. 10).

> "'motivic interaction' [...] involves one musician playing a perceptible figure or gesture and others responding with gestures of their own" (Givan 2016, par. 11).

Givan argues that those particular interactions between musicians which are so widely considered essential in jazz performance, are in many ways comparable to inter- and reactive performance behaviours found in any other genre of Western chamber music: specifically in the sense that *micro-* and *macrointeractions* are seen to be widespread in jazz performance, where *motivic* interactions occur as isolated events; constituting both a rarity and a disputed idea in jazz performance. Thinking further about the implications of Givan's argument in the context of predominantly verbally- and visually-communicated musicology, an analyst who identifies phenomena of motivic interaction between improvisers in a recorded performance – manifesting as either "monologic" or "dialogic"

imitation (Givan 2016, par. 14) – risks trespassing onto the problem of performer intention: especially so in situations where a direct quote from the performers about the specific example has not been (or cannot be) obtained. Matthew Butterfield (2008) raises this issue in a review of Hodson's *Interaction, Improvisation and Interplay in Jazz*, remarking that:

> "Hodson's emphasis on interaction occasionally leads him to over-interpret harmonic convergences in this way. This is not to say that jazz musicians do not have significant interactions about harmony in the midst of performance, but cause and effect may not be as instantaneous as Hodson often suggests. Harmony is complicated—it takes time for even the best musicians to perceive and process harmonic information and more time still to formulate an appropriate response. Hence coincidence may play a larger role than Hodson would care to acknowledge." (Butterfield, 2008, p. 245)

The problem of performer intentionality is also raised in the methodology section of Edward Orgill's dissertation on saxophonist Tubby Hayes (2008). Citing Henry Martin, Orgill offers some useful insight on the problem of performer intention in jazz analysis:

> "[Henry Martin (1996)] further proclaims that while determining the thought process of great improvisers can be helpful to the aspiring musician, "guessing the intention of the soloist" in the case of complex thematic relationships can be "more troublesome than enlightening."" (Orgill, 2008)

Orgill's (and Martin's) case for entirely avoiding the matter of performer intention in a jazz analysis is quite compelling: the analyst is no longer obliged to strike a balance between act of investigative musicology with the question of performer intention, nor required to decide what quality or quantity of evidence is required to sufficiently prove that a given performer was in fact interacting motivically with another musician (or musical element) at any point in time. The following chapter outlines an analytical perspective which emerged in response to issues of performer intention in jazz research, and describes the process of inquiry used to produce the analysis of Chapter 4.

Chapter 3. Analytical perspective and methodology

Matthew Butterfield predicted that "as the study of jazz enters the mainstream of music theory [...] one might expect jazz analysis in general to turn increasingly away from poiesis to esthetics" (2008, p. 242). In line with this prediction, the analysis in Chapter 4 seeks to avoid engagement with the previously identified issues of performer intention in jazz improvisation and focus instead on the aesthetic content of the recording. An analytical perspective was developed to help inform the methods of inquiry for the present study, summarised in the following set of musicological 'design principles': the analysis should concern, above all else, the aesthetic content of the recording in question; recognise the contributions of the individual musicians to the overall work; and only where necessary consider links between those individual contributions and broader genre-based improvisational practices. Significantly, this perspective does not actively attempt to situate a given improvisatory performance within a genre; nor does it deny the possibility of influences derived from a codified (or codifiable) practice.[5] In line with this perspective, the forthcoming analysis of Linda May Han Oh's 'Yoda' embraces the importance of individual contribution and collective composition integral to much of Linda May Han Oh's work as a bandleader (Sheridan, 2015), and recognises that these individual contributions are guided by and converge under Oh's leadership, producing an ensemble texture which bears the distinct sonic signature of her work.

The process of investigation began with a complete transcription of every instrumental part (tenor saxophone, electric guitar, double bass and drums), conducted aurally to the best of the author's ability – with occasional consultation of saxophone and drum set specialists, and limited use of audio visualisation software when necessary. The transcription serves three purposes: it facilitates the separation of the instrumental layers; provides a written record of musical events (insofar as pitch and duration are concerned); and provides a visual aid to help illustrate analytical arguments. In tandem with the transcription process, recurring patterns or 'vocabulary' were identified within each instrumental part, and distinctive musical phenomena in the overall ensemble texture were noted. Throughout the transcription process, regular revision of the findings quickly revealed the primary analytical foci for this thesis. These are the musical features, patterns and events which contribute to the illusion of an additive metric substructure and/or obscure the boundaries of the pre-composed chorus form.

[5] Needless to say that this perspective cannot be used for evaluating other methods of inquiry which operate under different value structures; it merely represents an attempt to sidestep an existing problem in jazz studies.

The following analysis consists of six main sections: a general overview of 'Yoda' as both a musical composition and a recording; four separate "horizontal" analyses – overviews of the general performance styles and musical structures employed by tenor saxophonist Ben Wendel, guitarist James Muller, bassist/composer Linda May Han Oh and drummer Ted Poor throughout the recording; and finally a number of "vertical" analyses presenting examples of how these four voices interact to create distinctive musical phenomena.

Chapter 4. Analysis of 'Yoda'

Anecdotally, many listeners report difficulty in identifying the timekeeping pattern of 'Yoda' – particularly upon first hearing. Hannaford (2017) identifies some of the "curve balls" in Oh and Poor's playing which serve to obscure the metric substructure from the beginning of the recording; these and other performance factors combine to produce phenomenally acrobatic rhythmic events in the ears of the listener. "Phenomenally" possesses a double-meaning here: there is no doubt that the quartet's performance is of an exceptionally high calibre, but the phenomenon of rhythmic acrobatics is enabled (at least in part) by the predetermined complexity of Oh's pre-composed material. This chapter illustrates how ambiguities of meter and form arise as a result of interactions between performers' improvisational vocabularies and Oh's pre-composed material.

All musical excerpts in this analysis are presented in concert pitch, with tuned instruments written one octave above sounding pitch.

4.1 Structural overview

Linda May Han Oh's lead sheet for 'Yoda' (**Fig. 4.1a**) presents a twelve-measure chorus form in a fast $\frac{4}{4}$ featuring a bassline, contrasting melody, and prescribed harmonic progression.[6] Without an external reference pulse, the heavily syncopated contours and 'weak beat' accents of the pre-composed material create the impression of an additive rhythmic structure to the composition, rather than a steady quadruple meter. The provided chord symbols quantise the harmonic movement of the bassline to the nearest measure, and indicate a two-measure harmonic rhythm until mm. 9-12, through which a G/A♭ harmony is sustained for four measures.[7] Though it is not the intention of this study to compare the recorded performance with the written score, Oh's original lead sheet is an invaluable reference for understanding the underlying structure of the pre-composed material and subsequent improvisations.

[6] In jazz practice, one 'chorus' describes one full cycle of a pre-composed musical form. A piece in 'chorus form' indicates that the pre-composed material is to be repeated many times and extemporized upon in performance.

[7] References to points in the transcriptions to follow are given as 'chorus x, measure (m.) x, beat x', with timecodes in square brackets [min:seconds] that refer to the recording. Choruses are numbered 1-25 from the beginning, measures within each chorus are numbered 1-12, beats are generally given in quarter-note values (1, 1&, 2, etc.). All musical excerpts presented in C concert.

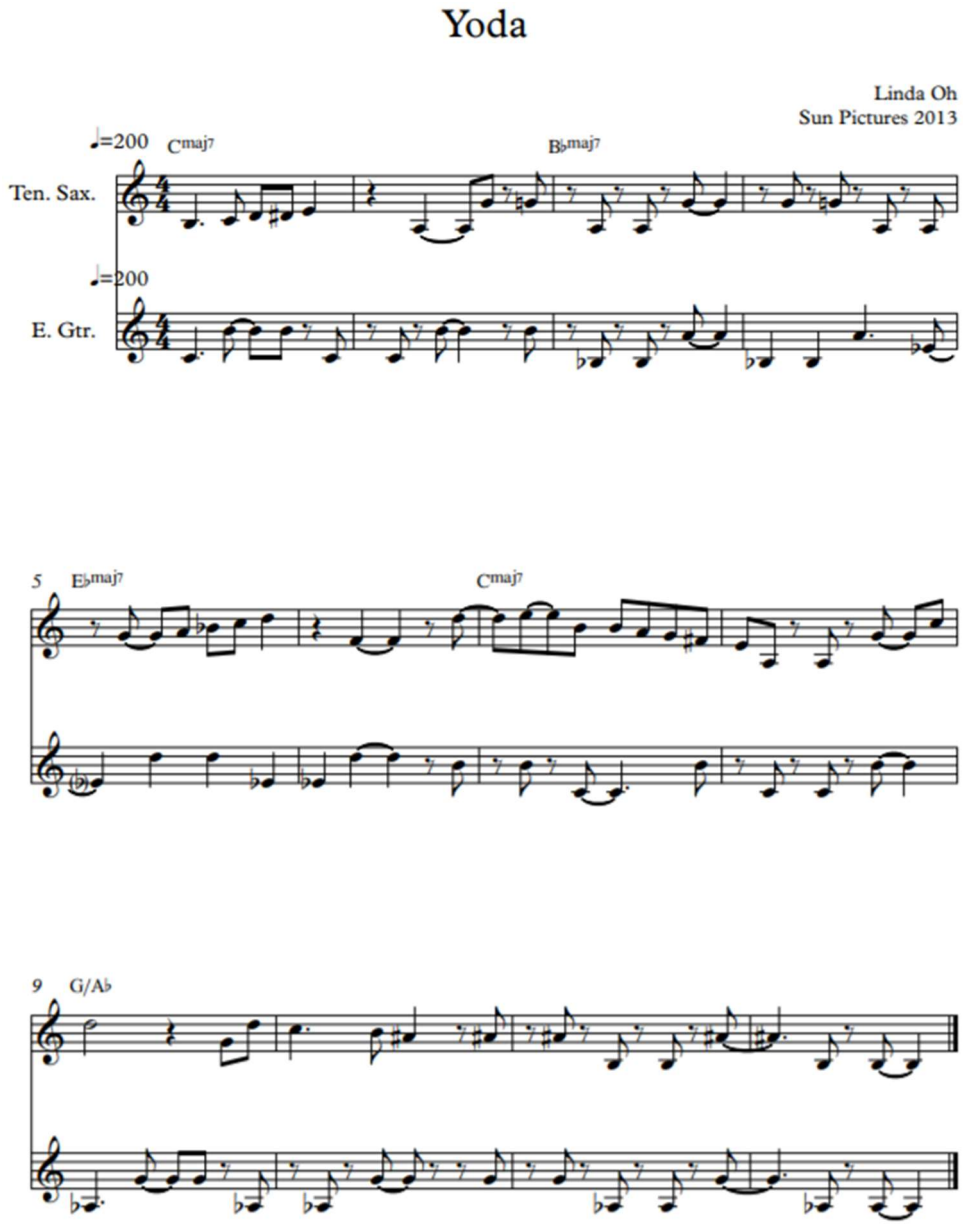

Fig. 4.1a 'Yoda' lead sheet (Oh, 2013b).[8] (Both parts in concert pitch.)

A textural map of the recording is provided in **Fig 4.1b**. the quartet plays exactly 25 choruses throughout the recording: 6 choruses for the 'head in' (4 choruses of bassline only, 2 choruses of bassline and melody) [0:00]-[1:11]; 13 choruses of solos, in which Ben Wendel (T.S.) 'trades' choruses with James Muller (Gtr.) [1:11]-[3:47]; 4 choruses of group improvisation [3:47]-[4:35]; and finally 2 choruses for the 'head out' (bassline

[8] Complete lead sheets for *Sun Pictures* are available from Greenleaf Music – see Oh (2013b) in references.

and melody) [4:35]-[5:00].[9] The tempo of the recording is approximately quarter-note equals 240bpm, and quite steady overall: each chorus is almost exactly 12 seconds long.

	Head in						Solos													Group improvisation				Head out	
T.S.					m	m	s		s		s		s		s		s		s					m	m
Gtr.		b	b	b	b	m		s		s	c	s	c	s	c	s	c	s	c					m	m
Bs.	b	b	b	b	m	b																		b	b
Dr.																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Key
m pre-composed melody
b pre-composed bassline
s improvised solo
c comp (improvised chordal accompaniment)

Fig. 4.1b Structural map of 'Yoda'.

Empty coloured spaces in **Fig. 4.1b** indicate improvisation through the chorus which is neither strictly soloistic nor accompaniment, stylistically speaking – an important quality of bassist Oh and drummer Poor's playing through 'Yoda' (addressed under headings 4.2.3 and 4.2.4 respectively).

4.2 Horizontal analyses

The importance of individual vocabularies, and the value of studying them, cannot be overstated: in improvised music, meter, harmony and form are emergent qualities which arise from independently-made performer decisions. In the case of 'Yoda', these decisions are informed by Oh's pre-composed material, and presumably refined by some kind of a rehearsal process – but during performance, the tangible musical possibilities available to each musician are products of individual experience. The following four headings offer a brief overview of style, vocabulary and phraseology employed by each musician through choruses 1-20, presented in typical top-down score order for a jazz ensemble. These analyses identify important musical elements which, when overlaid simultaneously in group improvisation, contribute to illusions of additive metric substructure and obscured formal and harmonic boundaries in 'Yoda'.

[9] 'Trading' in jazz practice is where two or more musicians alternately improvise (as soloists) over a fixed number of measures. Trading durations are generally short spans of musical time (2, 4 or 8 measures) in a chorus form of 12 to 32 measures.

4.2.1 Ben Wendel (tenor saxophone)

Saxophonist Ben Wendel enters in chorus 3 [0:24] with a flexible manipulation of Oh's pre-composed material: voice-leading through the prescribed harmony, largely in rhythmic unison with the pre-composed bassline. Subsequent choruses 4-6 are approached with a cleaner articulation and stricter adherence to the pre-composed material, which continues into Wendel's first solo at chorus 7 [1:11]. The solo opens with a direct segue of syncopated 8th-notes, beginning at the last note of the pre-composed melody (chorus 6, m. 12, beat 3&): the head in is seemingly extended for six measures. Wendel's indication that the music has departed from Oh's pre-composed material comes in mm. 5-6, with the subtle transition towards a more *tenuto* articulation (annotated in **Fig. 4.2.1b**).

Chorus 7 exposes much of Wendel's improvisational 'toolkit' for melody and phraseology within 'Yoda', shown in **Fig. 4.2.1a** and **b**. **Fig 4.2.1a** highlights some fundamental units of Wendel's melodic vocabulary: arpeggiated triads and 7th chords, chromatic and diatonic enclosures, and chromatic passing note figures.[10] Each of these melodic units serves to demarcate (or imply) certain metric stresses and harmonic colours. Throughout Wendel's improvisations, the varying placement of these gestures in each measure (with regards to the underlying quadruple meter) contributes to the impression of irregular spacing between metric and harmonic downbeats.

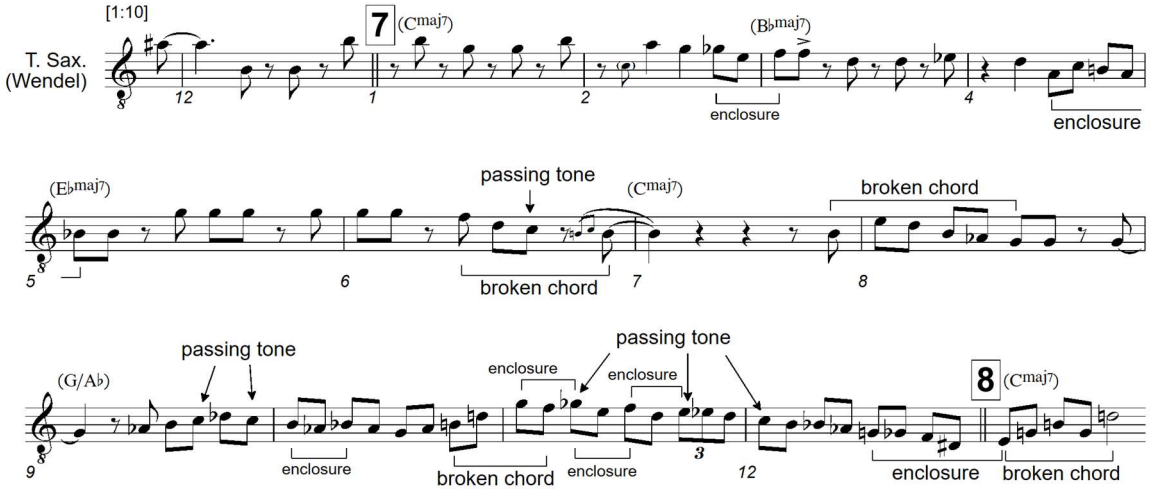

Fig. 4.2.1a Ben Wendel, chorus 7: melodic vocabulary.

Fig. 4.2.1b highlights distinct aspects of Wendel's melodic phrase structure and timbre in the same chorus. Boxes of matching colour here indicate 'rhyming' melodic gestures,

[10] 'Enclosure' is a term used by various schools of jazz theory to describe a range of ornamentations which involve playing neighbour tones above and below a given melody note before arriving at the desired pitch.

indicating a pattern of immediate continuation and development of recent musical motifs – an aspect of Wendel's playing also heard quite clearly in the macro-context of the recording (for example, at handovers between Muller and Wendel during the solos). It is also important to note Wendel's tendency to play beyond the borders of the 12-measure chorus form. Throughout the solo trading, Wendel commences every one of his choruses (7, 9, 11, 13, 15, 17, 19) slightly in advance of the hyper-downbeat, and concludes his final phrase in either the first or second measure of the following chorus, with the exceptions of chorus 17 (which concludes on the following hyper-downbeat) and chorus 19 (which ends at the final 8th-note of the twelfth measure).

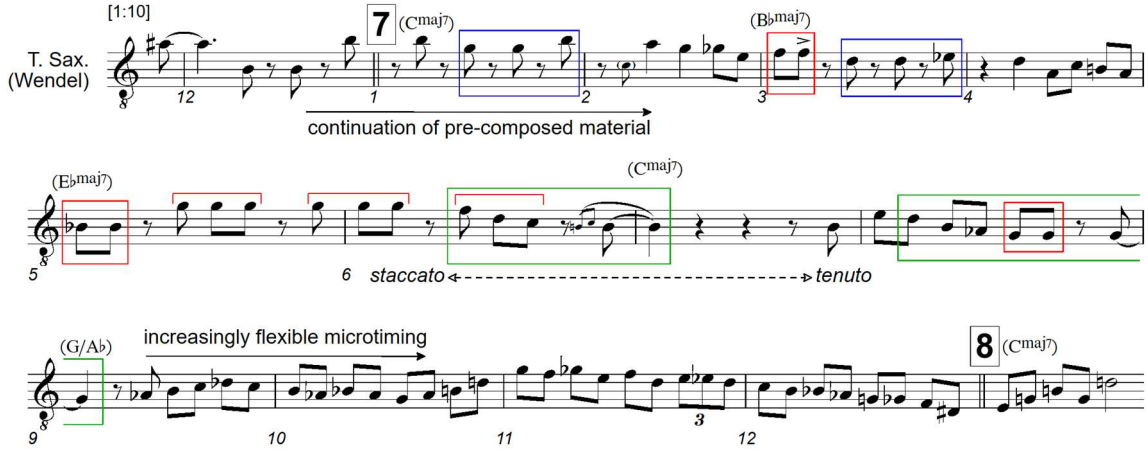

Fig 4.2.1b Ben Wendel, chorus 7: phrasing, rhyme structures and affect.

Wendel's next solo in chorus 9 (**Fig. 4.2.1c**) exhibits many of the features described above, as well as a notable addition to his vocabulary: a distinctive broken-chord figure, six 8th-notes in duration.

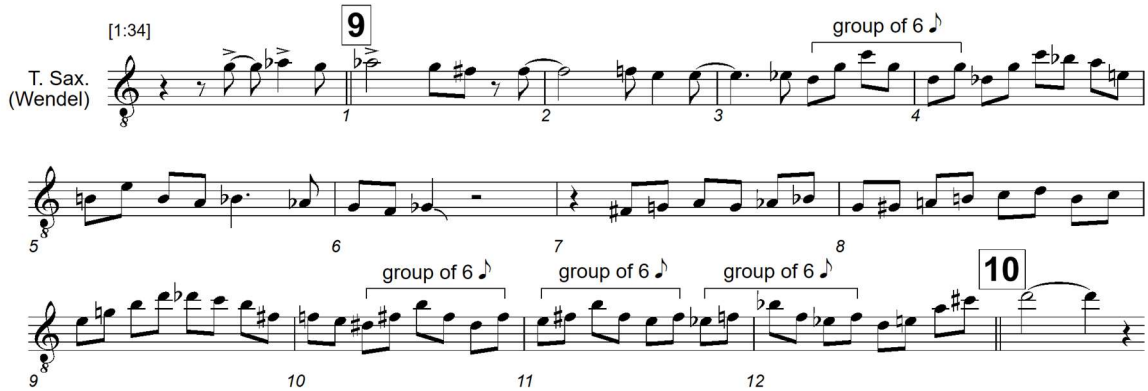

Fig. 4.2.1c Ben Wendel, chorus 9: broken-chord groups of six 8th-notes.

The contour of this broken-chord gesture becomes a distinctive part of Wendel's sound, although it only reappears few times. Its appearance in chorus 9 offers a clear demonstration

of how Wendel superimposes metric groupings which subvert the underlying duple meter, and draws attention to the specific harmonic structures used. Objects from the particular harmonic sequence of chorus 9, mm. 10-12 do appear several times throughout Wendel's subsequent choruses; with one notable transformation of the figure appearing in m. 5-6 of chorus 15, shown in **Fig. 4.2.1d**.

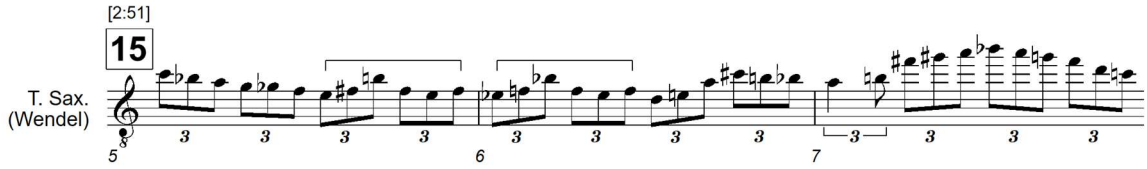

Fig. 4.2.1d Ben Wendel, chorus 15, mm. 5-7.

A final significant addition Wendel's melodic vocabulary is the minor pentatonic gesture which opens the final phrase of chorus 13 (**Fig. 4.2.1e**). This gesture finds a rhyming answer in the descending sequence of chorus 15, mm. 10-12 (**Fig. 4.2.1f**); and linear pentatonic gesture subsequently becomes a distinct presence in Wendel's phraseology.[11]

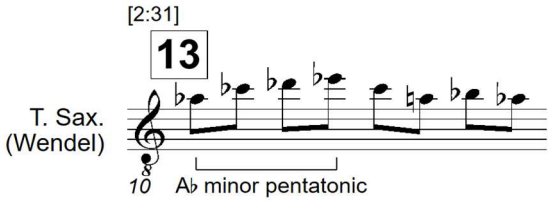

Fig. 4.2.1e Ben Wendel, chorus 13, m. 10.

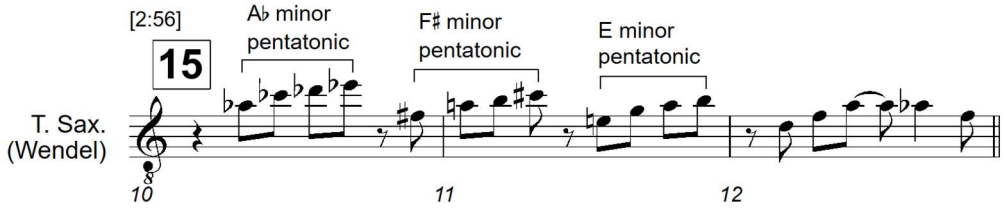

Fig. 4.2.1f Ben Wendel, chorus 15, mm. 10-12.

With the majority of Wendel's melodic vocabulary being gradually introduced in his first four solo choruses (7, 9, 11, 13), a broad glance at the fluctuations in affect (or expressive stylization) throughout Wendel's improvisation can offer some insight into Wendel's musical trajectory and development of ideas throughout 'Yoda'. **Fig. 4.2.1g** shows chorus-by-chorus the changes in instrumental range; this generally correlates to Wendel's average phrase length, density and overall dynamic. While such a presentation

[11] The same A♭ minor pentatonic gesture functions alongside a G-A♭ trill to subvert the harmony at the beginning of chorus 21 – see **Fig. 4.3.6b**.

obviously omits a lot of data, it is adequate to demonstrate a general trend of increasing intensity throughout Wendel's improvisations, with a marked decrease at structural boundaries (chorus 20, between solo trading and group improvisation; and again in the final stretch of improvisation over chorus 23).

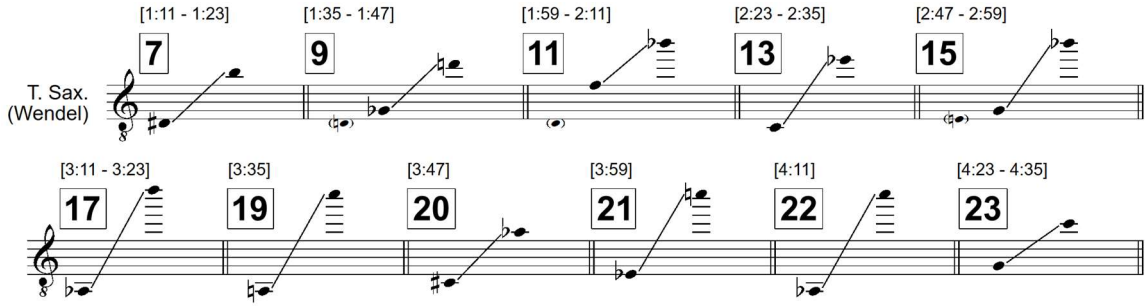

Fig. 4.2.1g Ben Wendel's range through improvised choruses.

4.2.2 James Muller (electric guitar)

Muller's muted execution of the pre-composed bassline throughout choruses 2-5 features occasional added ghost notes, appearing every two to four measures. His presentation of the melody in chorus 6, no longer muted, features a distinct substitution of the final B in m. 12 with A♯ in anticipation of the structural boundary (**Fig 4.2.2a**) – Muller notably mirrors this deviation in the final note of the head out, playing the dyad B-C (**Fig. 4.2.2b**).

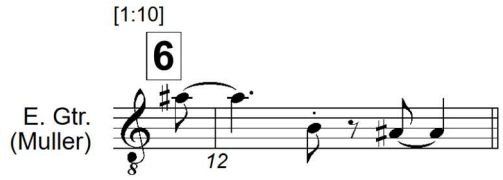

Fig. 4.2.2a James Muller, chorus 6, m. 12.

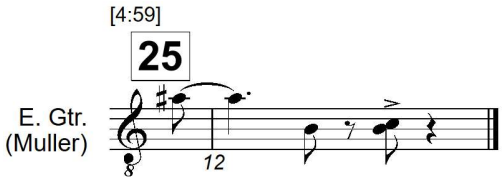

Fig. 4.2.2b James Muller, chorus 25, m. 12.

Chorus 8 exposes some of Muller's fundamental melodic vocabulary (annotated in **Fig. 4.2.2c**), aspects of which are shared with saxophonist Wendel – although the soloists' individual melodic styles are quite distinct. Repetition structures form a notable point of difference between the two players: Muller's melodies generally do not exhibit rhyme in the same manner as Wendel's (although chorus 8 is an exception), nor is immediate continuation and development of recent material a major component of Muller's melodic

style. More frequently, repetition structures in Muller's playing manifest as 'riffing' on a musical gesture through varied repetition (see **Fig. 4.2.2c**, mm. 9-12) – in some cases, these variations are suggestive of additive or superimposed metric structures.

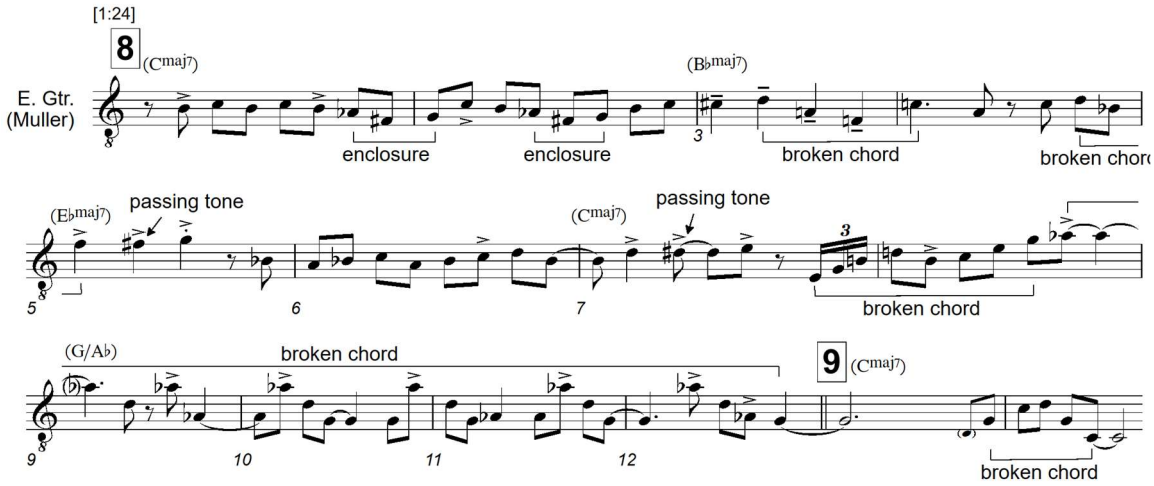

Fig. 4.2.2c James Muller, chorus 8.

Chorus 8 also exhibits notable structural tendencies found throughout Muller's later improvisations. First among these is a tendency to begin his solos very near to the hyper-downbeat:[12] out of his seven solo entries, two begin on the second 8th-note in measure 1 (choruses 8 and 18), two begin exactly on the downbeat (choruses 10 and 16), two begin with an 8th-note anacrusis into the downbeat (choruses 12 and 14), and only at the beginning of the group improvisation in chorus 20 does Muller lead with a slightly longer anacrusis of three 8th-notes. The second tendency is for Muller to anticipate the hyper-downbeat which formally marks the end of Muller's chorus – in chorus 8, this is seen in the weak resolution of A♭ to G at chorus 8, m. 12, beat 4.[13] The third tendency is for Muller to play a delayed 'strong' melodic resolution through mm. 1-2 of the following chorus, as seen above in chorus 9, mm. 1-2.[14]

These three tendencies in Muller's improvisation play a significant role in subverting form, harmony and meter in 'Yoda', and point to a general quality of Muller's melodic improvisation: a flexible approach to points of harmonic arrival within the 12-measure form, found in both harmonic (vertical) and temporal (horizontal) capacities. An important

[12] Hyper-downbeat in this analysis refers only to the first beat of the first measure of each chorus.
[13] *Weak* because G is a common tone to both the G/A♭ harmony of mm. 9-12 and the C major harmony of mm. 1-2. In context, Muller's anticipatory 'resolution' does not clearly indicate one harmony or the other.
[14] Similar trailing resolutions occur at every solo ending except for chorus 16 (which features strong F to E resolution at the hyper-downbeat of chorus 17). Chorus 20 is excluded from this count. Although Muller begins the chorus as a soloist, this stream of improvisation does not end until the head out (chorus 24).

example of this is seen in Muller's use of pitch through the first two measures of chorus 8: the pitch collection F♯, G, A♭, B, C, which reappears with the addition of D♭ at the beginning of choruses 12 (**Fig. 4.2.2d**) and 20 (**Fig. 4.2.2e**).

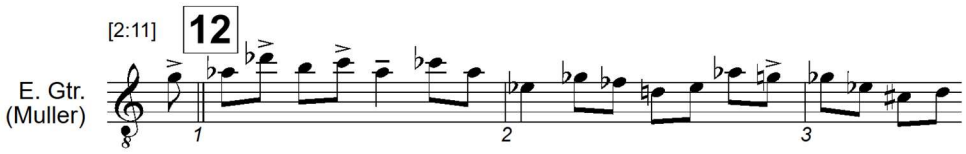

Fig. 4.2.2d James Muller, chorus 12, mm. 1-2.

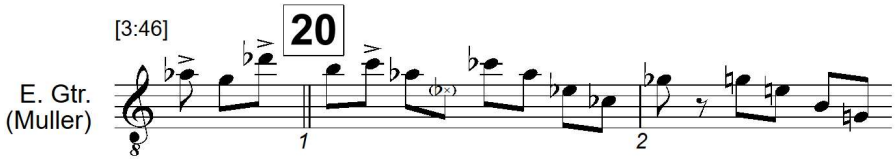

Fig. 4.2.2e James Muller, chorus 20, mm. 1-2.

The excerpts above (**Figs. 4.2.2d** and **e**) exhibit Muller's superimposition of an A♭ minor triad in the first two measures – an explicit subversion of the formal-harmonic boundary between the prescribed G/A♭ harmony of mm. 9-12 and the C major tonality of mm. 1-2. Melodic constructs of a similar function are also found at the end of chorus 14, the start of chorus 18, and at the boundary between choruses 20-21.[15]

Muller introduces chordal 'comping' in chorus 11, m. 2.[16] Unlike the flexible realisation of harmony in Muller's solos, his chords consistently align with the prescribed harmonic form, executing each harmonic change either on the downbeat or with an 8th-note anacrusis. **Fig. 4.2.2f** presents transcriptions of Muller's five comping choruses, which show a general pattern of comping commencing in the second measure, continuing until around the sixth measure, and then rest for the remainder of the chorus – chorus 15 is an outlier. There is a noteworthy moment in chorus 13: the final 8th-note of measure 6 conflicts with the expected C major harmony, generating a huge amount of harmonic and formal tension.

[15] In jazz practice, there are numerous valid choices through which one can imply a G/A♭ harmony, including the A♭ ascending melodic minor scale and C harmonic minor scale.
[16] A jazz term for 'accompanying' (Butterfield, 2010).

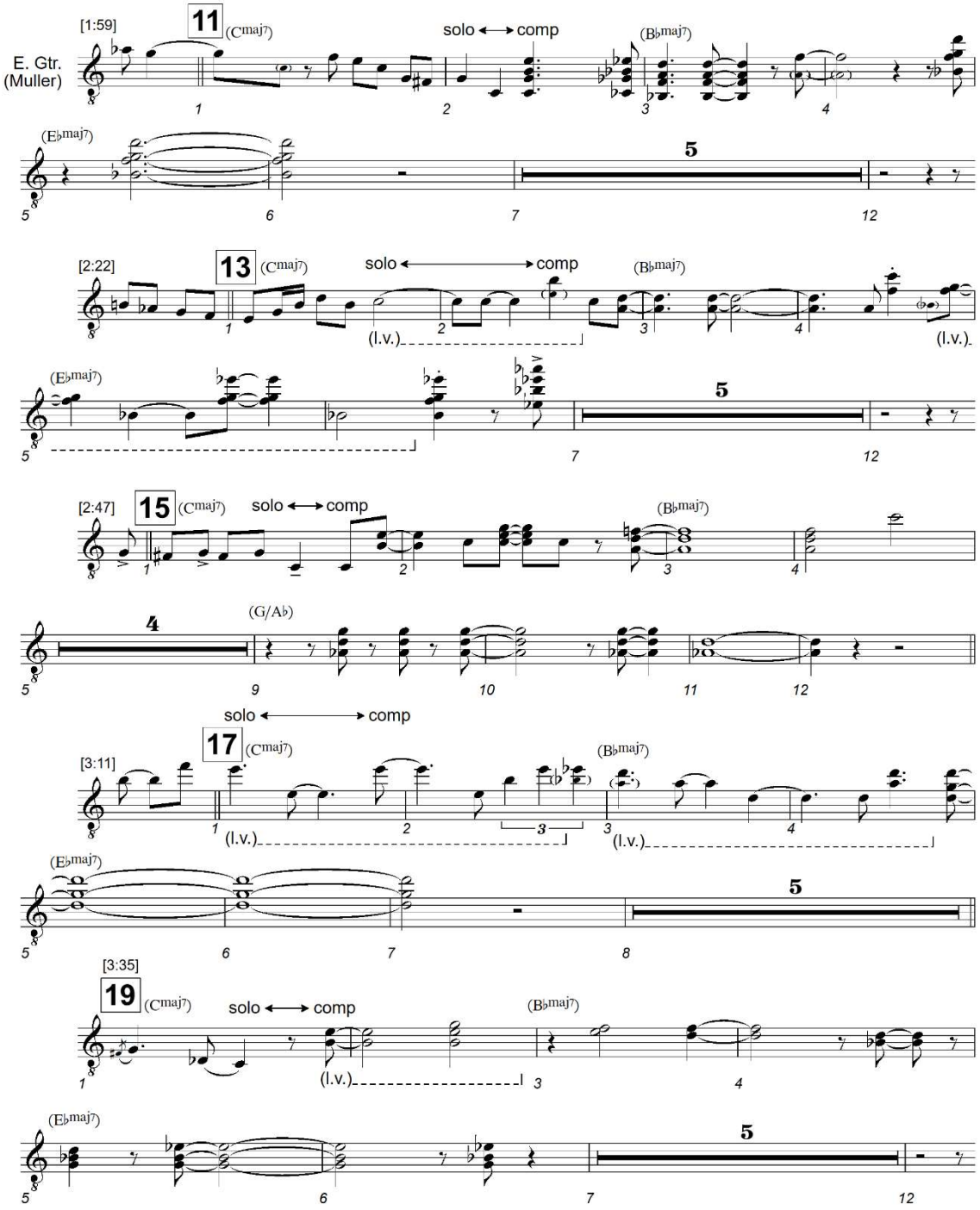

Fig. 4.2.2f James Muller, 'comping' choruses.

Changes in affect throughout Muller's improvisation are predominantly driven by textural shifts such as the introduction of chords at chorus 11, instrumental range (shown in **Fig. 4.2.2g** below), and density of notes in a given phrase. Phrase lengths in Muller's melodic playing through choruses 8-20 are fairly consistent, ranging from around six quarter-notes to six measures.

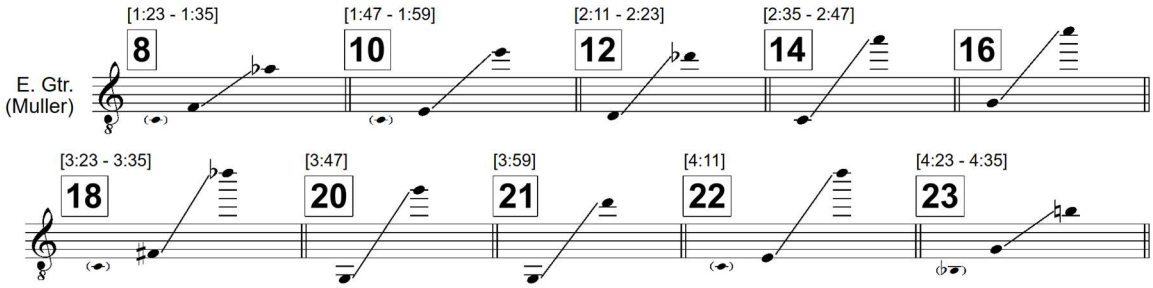

Fig. 4.2.2g James Muller, range in melodic improvisations.

4.2.3 Linda May Han Oh (contrabass)

Choruses 1-6 establish Linda May Han Oh's *pizzicato* bass as the centre of the quartet, from which all else grows. Her pre-composed bassline is presented with exacting consistency and hardly a perceptible deviation across repeats. At the core of Oh's improvised comping throughout 'Yoda' is a thoroughly refined musical vocabulary, which exhibits important fundamental components: explicit use of, and allusive reference to, the pre-composed bassline; dotted-quarter-note gestures; contours that imply groups of three quarter-notes; broken-chord figures; and linear diatonic and pentatonic gestures. **Fig. 4.2.3a** presents a transcription of Oh's comping in choruses 7 through 9, with annotations highlighting these components of vocabulary.

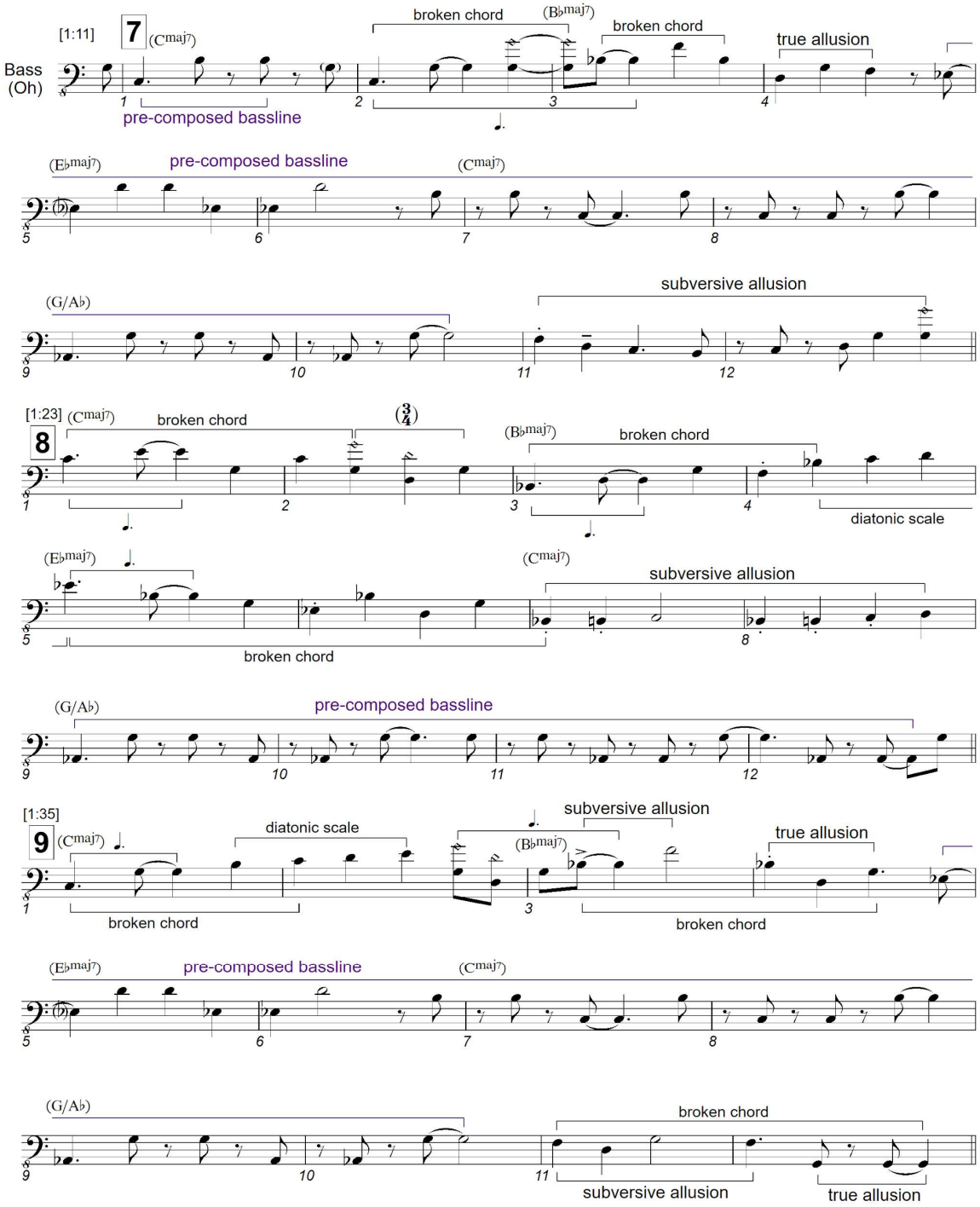

Fig. 4.2.3a Linda May Han Oh, choruses 7 through 9.

Metric groupings, broken-chord figures and linear movement are quite apparent to both the ear and the eye; as are explicit uses of the pre-composed bassline. Allusive references to the pre-composed material require a definition, as allusion in Oh's playing is an essential part of how formal boundaries are demarcated through the improvised sections of 'Yoda'. As allusion is subject to listener perception, allusive gestures are categorised as either *true* or *subversive* based on how direct the connection is between the event in question and Oh's pre-composed material. *True* allusive references describe

gestures in which the rhythmic gesture is identical to that of the pre-composed bassline at the same point in the chorus form (allowing for the omission of 'unstressed' rhythms), but some or all of the pitches have been changed. *Subversive* allusion describe a gesture which bears general semblance to the pre-composed material, but does not align rhythmically – these events may be interpreted as true allusions by the listener, who in turn becomes susceptible to altered perception of the form and/or meter. Such gestures in Oh's playing are deceptively simple events in notation, frequently appearing as two quarter-notes followed by a longer duration, and/or resembling a two-measure *clave*, as in chorus 7, mm. 11-12.[17]

One may notice the prominence of pitches G and D in **Fig. 4.2.3a** above. These two pitches are used by Oh as common tones across the entire 12-measure form, with varying weight over each harmony. The prominence of G and D especially in measures 2-4 results in a peculiar harmonic (and therefore formal) effect in some choruses, blurring the metric and harmonic boundary between the C major tonality of mm. 1-2 and the B♭ major tonality of mm. 3-4. The first instance of such an event is arguably found in chorus 10, m. 2 (**Fig. 4.2.3b**).

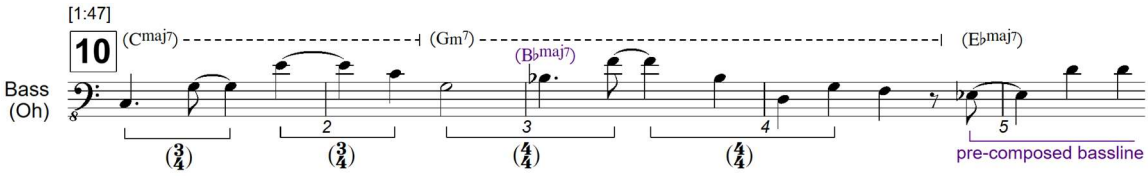

Fig. 4.2.3b Linda May Han Oh, chorus 10, mm. 1-5.

Here, Oh's dotted quarter-notes through m. 1 suggests an initial $\frac{3}{4}$ meter, supported by the contour and the arrival of two subsequent false downbeats (m. 1, beat 4 and m. 2, beat 3). Lacking explicit metric and/or harmonic clarity from the other voices (guitar and drums), the listener's perception re-orientates around the perceived harmonic downbeat at m. 2, beat 3 – which, being a strong beat in quadruple meter, also lures those who retained a sense of duple/quadruple time through the first measure. The metric structure at this false Gm^7 downbeat instantly reverts to some kind of duple time, while the false

[17] Rhythmic figures akin to the *clave* patterns of Latin American (among other) musics form a significant portion of Oh's playing in 'Yoda'; particularly around the beginning of each chorus, as seen clearly in the repeated two-measure rhythm of chorus 8, mm. 1-6 (**Fig. 4.2.3a**). However, the term *clave* has been avoided in this analysis due to – above all else – its connotations with time-keeping function: In 'Yoda', the appearance of a *clave*-like figure can either strengthen or weaken the listener's perception of a regular metric substructure, depending on its placement within the chorus form. Thus, in line with the analytical perspective defined in Chapter 3, the likeness of a given pattern to any *clave* rhythm is considered here to be an emergent (rather than intrinsic) phenomenon.

Gm^7 harmony is supported by the peaks and troughs of Oh's contour until the return of pre-composed material in m. 5. A very similar event is found in chorus 14 (**Fig. 4.2.3c**), except that in this instance the implied triple meter continues through the false harmonic change:[18]

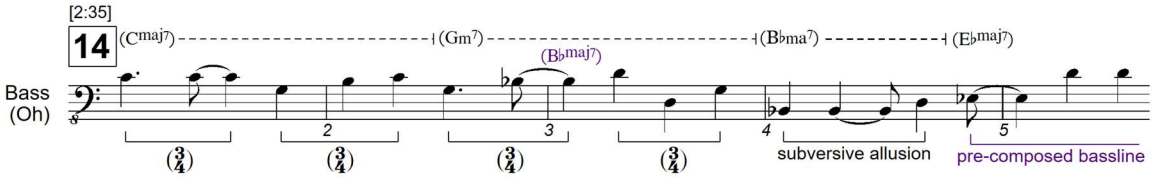

Fig. 4.2.3c Linda May Han Oh, chorus 14, mm. 1-5.[19]

Fluctuations in affect emerge primarily from Oh's departure from expected patterns – examples of this are seen clearly in Choruses 17 through 19 (**Fig. 4.2.3d**). Chorus 17 exhibits the introduction of an 8th-note tonic-fifth oscillation (mm. 3-4), repeated 8th-note pitch (m. 5) and subversive metric displacement (mm. 7-8); chorus 18 exhibits the first chromatic passing tone to appear in Oh's playing (m. 2); and in both choruses Oh completely subverts the expectation of a return to the pre-composed bassline between mm. 5-8. Chorus 19 begins with an intensely chromatic dotted-quarter note figure that echoes the gestures presented by Wendel and Muller's playing since chorus 7, but has been completely absent from Oh's comping until this point.

[18] The formal-harmonic effects described in **Figs. 4.2.3b** and **c** should not be misinterpreted as phenomena of substituted harmonic function for two reasons. Firstly, no substitution of function occurs: the prescribed $B♭maj^7$ and perceived Gm^7 harmonies offer the same basic voice-leading possibilities for improvising soloists. Secondly, this thesis abstains from discussing harmonic function in Oh's pre-composed material because there are few arguments to be made in favour of vertical tonality as a primary reference point for the listener, especially prior to chorus 11: due to the highly chromaticised improvisations of the soloists, mix factors, and complexity of the rhythmic foreground across all parts, harmonic function in 'Yoda' is predominantly emergent rather than intrinsic.

[19] Regarding metric annotations: $\frac{6}{8}$ and $\frac{3}{4}$ are often considered completely interchangeable in contemporary straight-8ths jazz; emphasis shifts instantaneously and constantly between the two voices of hemiola. Using the same time signature for each bracket in **Fig. 4.2.3c** more clearly illustrates the causal effect at play – $\frac{3}{4}$ was chosen for the example simply because it bears a closer relationship to the true underlying meter from a notational standpoint.

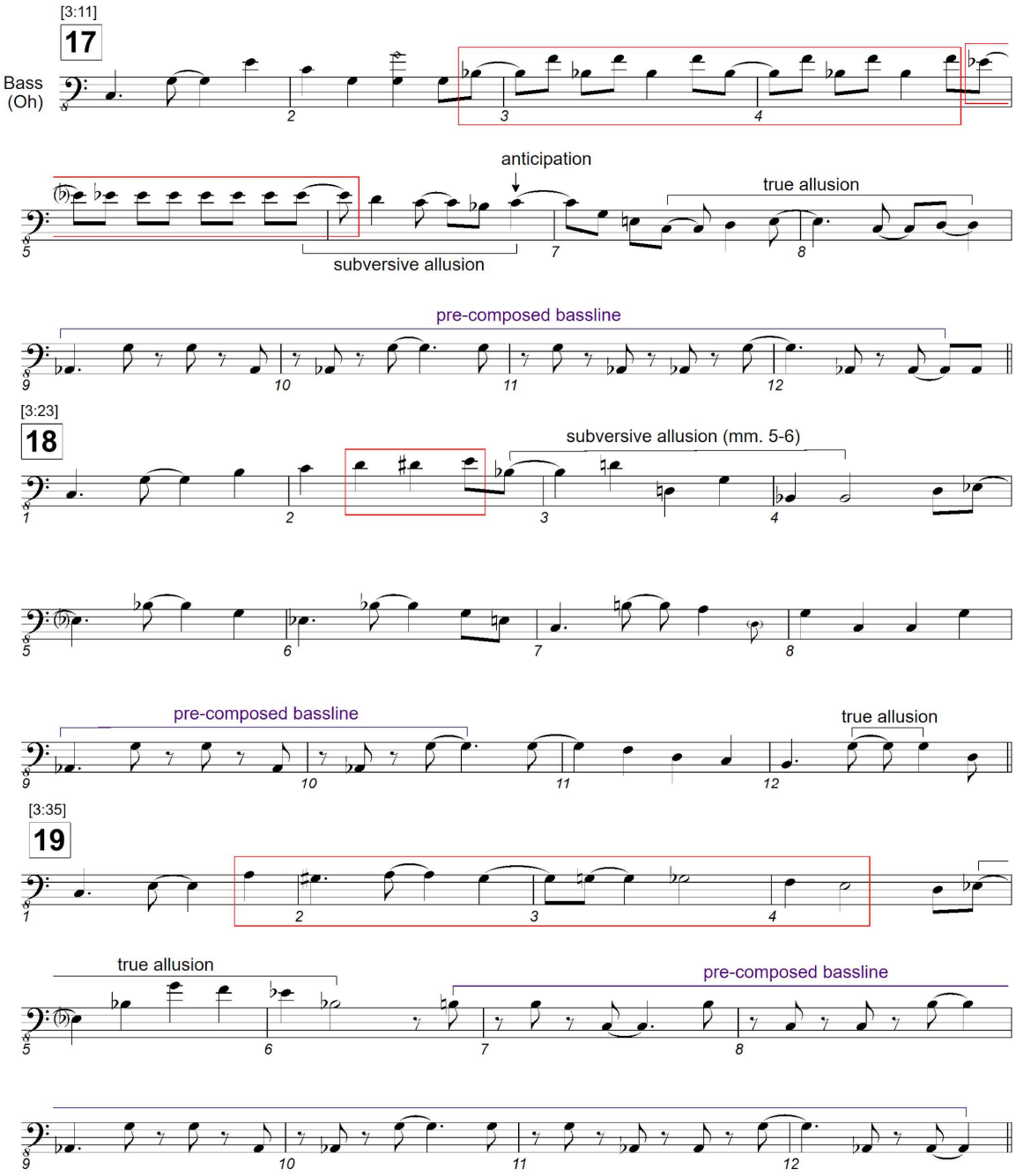

Fig. 4.2.3d Linda May Han Oh, choruses 17-19.

4.2.4 Ted Poor (drum set)

In the opening six choruses, Ted Poor plays an essential role in dissuading the listener from perceiving the underlying duple/quadruple meter. Poor's playing makes a numbers game of the 12 measure form: his phraseology in 'Yoda' is constituted of a constant alternation between references to Oh's pre-composed material (a numbers game in its own right); gestures that utilize superimposed metric groupings; and simple timekeeping figures such as backbeat hi-hat and straight-8ths ride cymbal patterns. The flexible approach taken by Poor is properly confirmed in the first measures of chorus 2 [0:12];

here it becomes obvious that the presentation and orchestration are not at all fixed. Poor's independent metric groupings begin to appear from chorus 3 onwards (annotated in **Fig. 4.2.4a**).

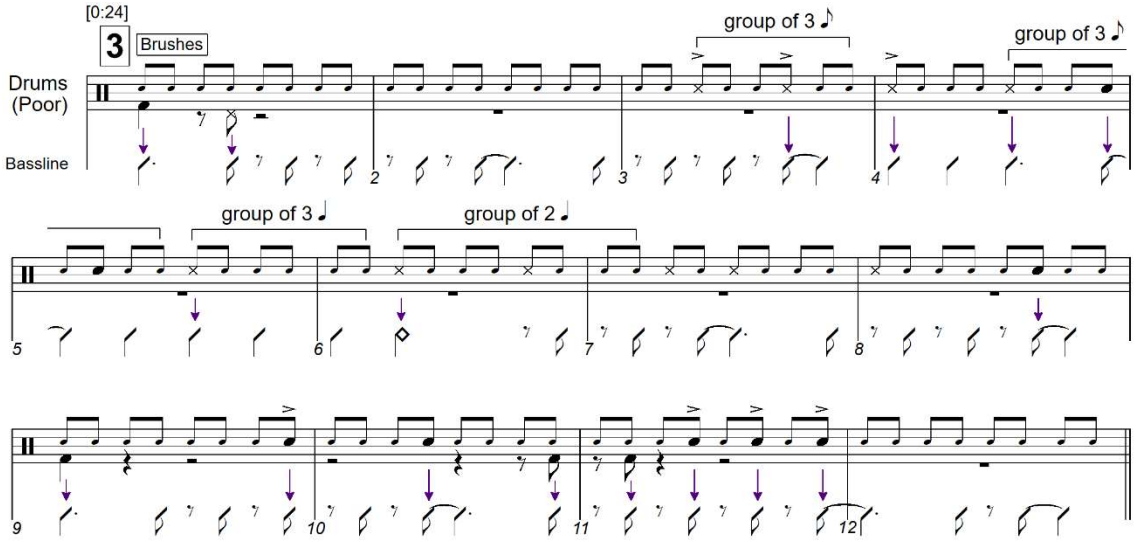

Fig. 4.2.4a Ted Poor, chorus 3 compared to pre-composed bassline.

Hannaford (2017) identifies that superimposed groupings of three 8th-notes are a staple of Poor's vocabulary through 'Yoda'. These appear in almost every chorus, and notably across the boundary between the head in and solos, as shown in **Fig. 4.2.4b**. This excerpt also demonstrates two important aspects of Poor's playing through 'Yoda': firstly, a tendency to begin new ideas in anticipation of formal and harmonic boundaries (seen in chorus 6, m. 12, beat 3); and secondly, the phenomenon in which Poor's non-referential gestures slip in and out of alignment with Oh's pre-composed material (seen in chorus 7, mm. 1-2).

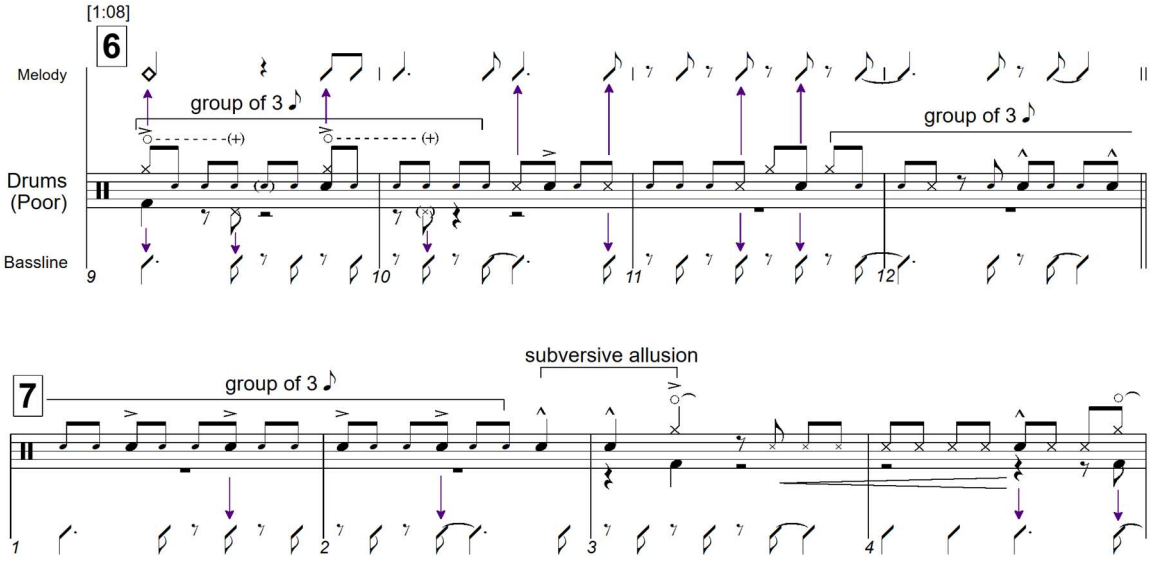

Fig. 4.2.4b Ted Poor, groups of three 8th-notes across the boundary of choruses 6-7.

Other groupings that surface throughout Poor's playing include those of five quarter-notes, five 8th-notes (3+2 or 2+3) and seven 8th-notes (usually 2+2+3, akin to m. 4 of the pre-composed bassline – see **Fig. 4.2.4d**). These structures can function as subversive allusions (similar to gestures in Oh's playing), or else are simply heard as superimpositions contributing to the overall sense of additive metric structure. The appearance of such groupings is often short-lived, nested within a longer phrase of irregular accent patterns, and arising as a result of Poor moving between individual two- or three-8th groups and references to the pre-composed material (usually the bassline). A clear example of this process is heard at the beginning of chorus 13 – the annotations of **Fig. 4.2.4c** offer one of many possible interpretations of Poor's groupings here:

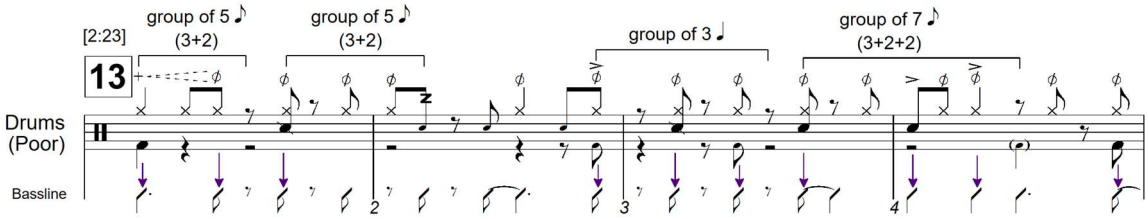

Fig. 4.2.4c Ted Poor, chorus 13, mm. 1-4.

Affect is conveyed by Poor's manipulation of volume, timbre, texture and density. Having used brushes and a restrained palette of bass drum, snare drum and closed hi-hat for normal playing (with the open hi-hat for punctuation), a dramatic change occurs across choruses 10-11 when Poor swaps brushes for sticks (**Fig. 4.2.4d**). This results in an overall volume increase and sharpened stroke articulation, and cymbal noise from the newly introduced ride cymbal (and later, half-open hi-hat) becomes prominent in the mix from Chorus 11 onwards. The textural thinning that occurs between the physical change at chorus 10, m. 8, beat 3 and the gradual return to flowing improvisation at chorus 11, m. 2 becomes a powerful moment in Poor's performance.

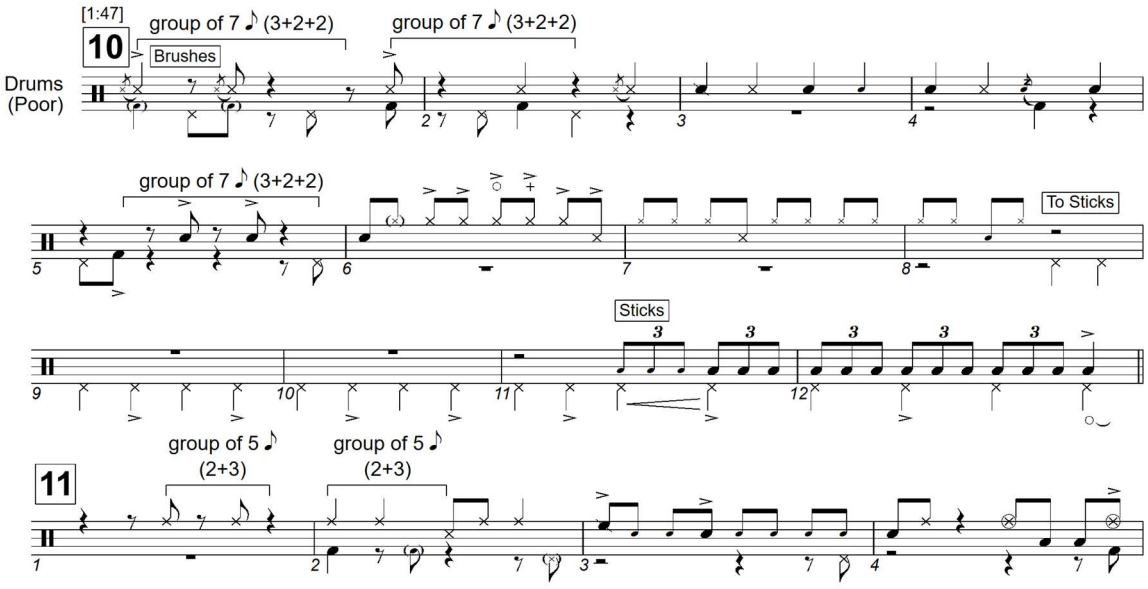

Fig. 4.2.4d Ted Poor, chorus 10 to chorus 11, m. 4.

Poor's thinning of texture and density creates impact again with the heavy cymbal crashes of chorus 15, m. 9 through chorus 16 [2:55]. Although Poor's hits are – at least initially – in agreement with the underlying meter, the silencing of Poor's quaver pulse tends to make the metric structure *more* ambiguous in context. A contrasting shift in affect occurs at the hyper-downbeat of chorus 17, which sports perhaps Poor's most unambiguous demarcation of the hyper-downbeat and metric structure – Poor's role throughout this chorus is discussed under heading 4.3.5.

4.3 Vertical analysis

The following presentation of case studies of specific performance aspects and musical events within 'Yoda' that clearly function to subvert or disrupt the listener's perception of meter and/or form, is categorised by the use of sub-headings. As will be seen, disruptive musical events are usually preceded by a brief period of ambiguity within the ensemble texture: it is this crucial set-up period which enables the listener to reorient her/his perception of time and form around the subversive event. This process takes place continuously throughout almost the entire recording on a number of different levels; but for the sake of clarity, only the most obvious features and events will be discussed. Some of the events discussed do recur elsewhere in the recording, and others are quite anomalous.

4.3.1 Playing the pre-composed bassline (Linda May Han Oh & Ted Poor)

Oh's pre-composed bassline remains a significant point of departure and arrival within Oh and Poor's improvisation. As seen in **Fig. 4.3.1a**, Oh usually returns to the pre-composed bassline in the latter 8 measures and Poor tends to preference the beginning of the form: there are instances overlap between Oh and Poor's explicit return to the pre-composed parts, and instances of "agonism" or "chaffing" (Hannaford, 2017) wherein one player makes an explicit return to the pre-composed bassline and the other superimposes different gestures.[20] The lack of overlap leaves a large proportion of each chorus of solos completely open to collective regrouping of 8th-notes into new metric hierarchies, as returning fragments of the pre-composed bassline do not clarify the quadruple metric substructure. Nonetheless, these fragments do offer clues as to the general position of the group within the chorus form.

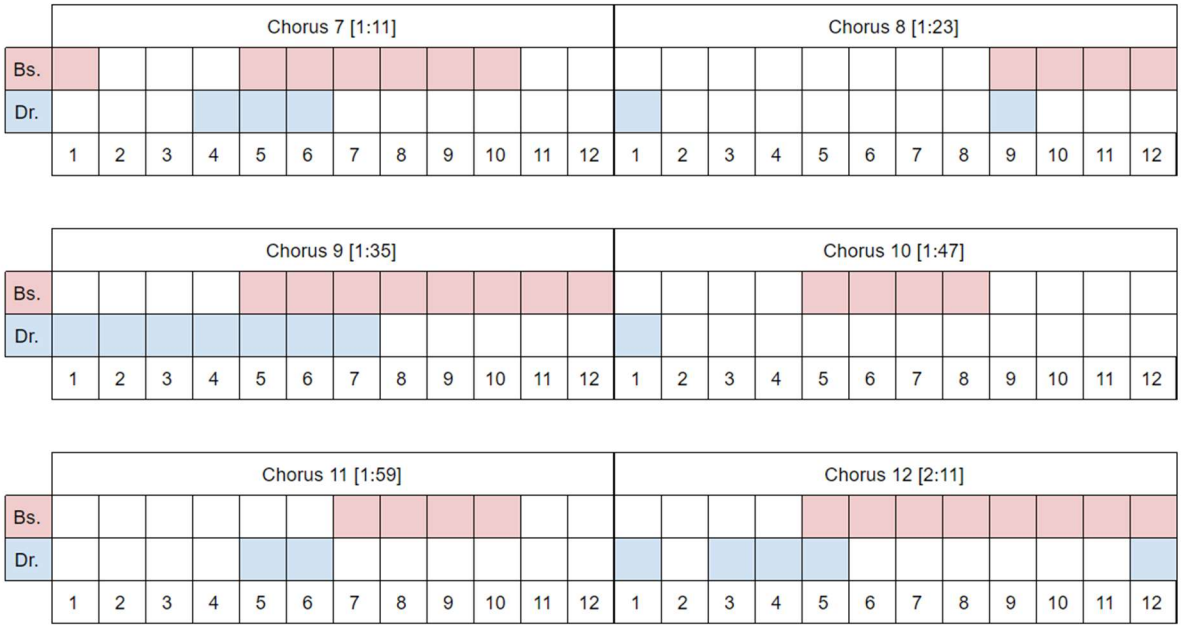

Fig. 4.3.1a Explicit returns to the pre-composed bassline by Oh (Bs.) and Poor (Dr.).

[20] Superimposed gestures may or may not function as subversive allusions in some instances.

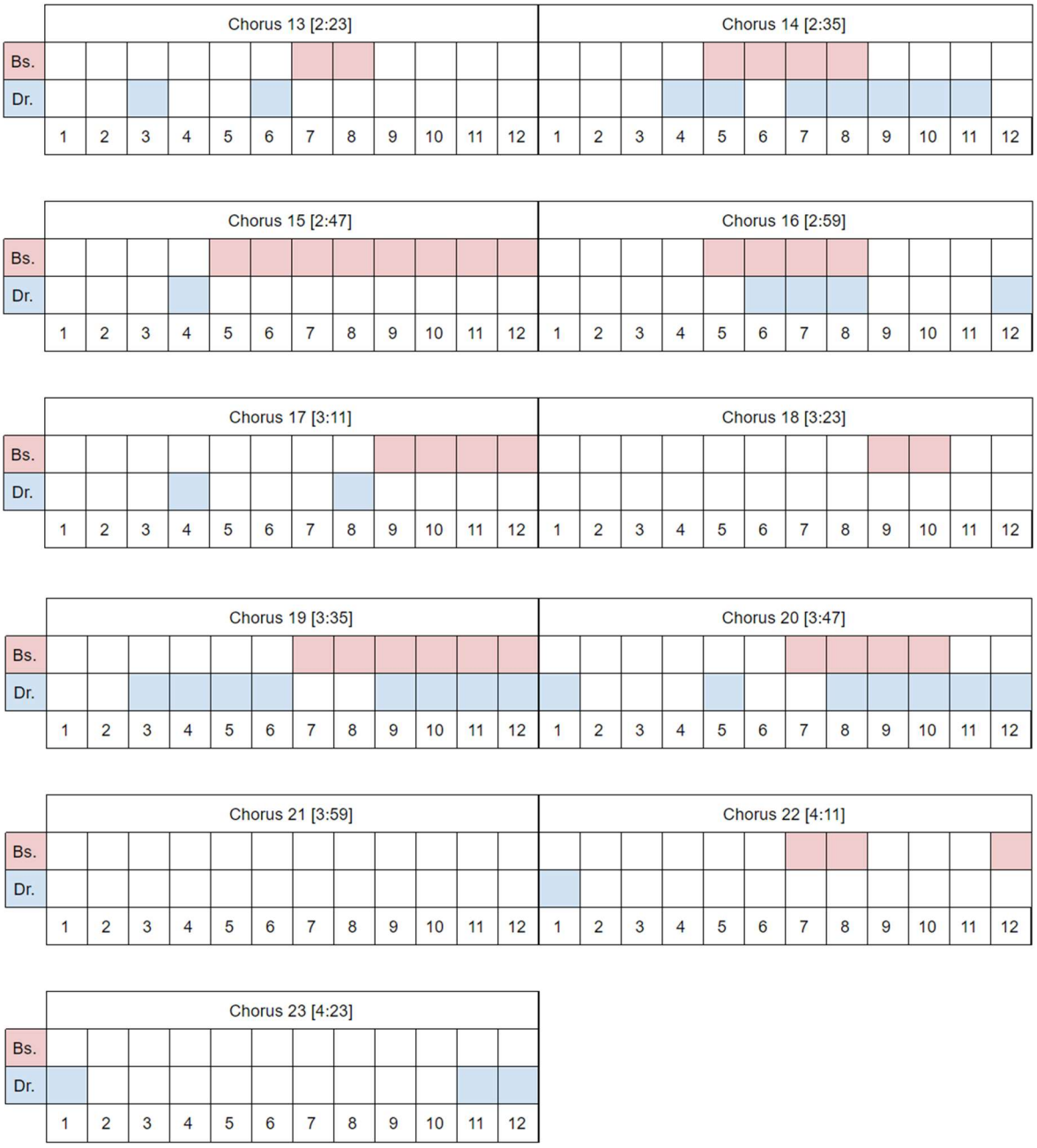

Fig 4.3.1a (cont.) Explicit returns to the pre-composed bassline by Oh (Bs.) and Poor (Dr.).

Consider an interesting transaction between Oh and Poor which occurs across chorus 14, m. 9 through chorus 15 (**Fig. 4.3.1b**). At chorus 14, m. 9, Poor is indisputably referencing the pre-composed bassline (even matching the contour on the bass drum and snare), while Oh begins the line with a *true* allusion which then separates into a syncopated quarter-note line. Poor's explicit reference begins to morph into a new syncopated quarter-note gesture from the third 8th-note in m. 11; and Oh returns to a walking figure in m. 12. The *chaffing* between the bass and drums from chorus 14, m. 12 destabilizes the meter, weakening Oh's arrival at root note C on the true hyper-downbeat

of chorus 15. (The formal boundary is in no way reinforced by Wendel's anticipatory entry in chorus 14, m. 12 and Muller's trailing resolution at root note C on beat 3 of chorus 15, m. 1.) *Chaffing* syncopations continue until Oh and Poor align at chorus 15, m. 4: Oh proceeds with the precomposed bassline from the anacrusis to m. 5, only to *chafe* against Poor's subversive allusion for another two measures (mm. 5-6).

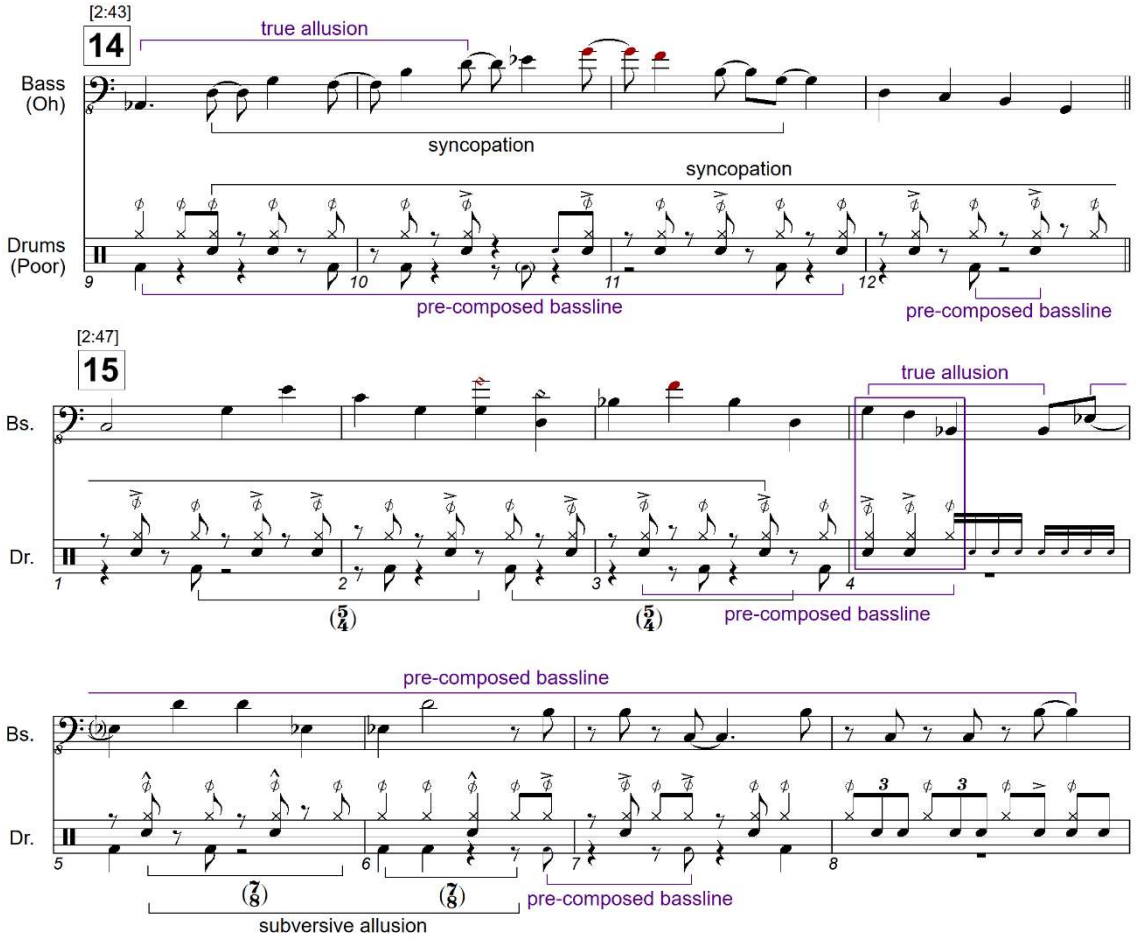

Fig. 4.3.1b Linda May Han Oh and Ted Poor, chorus 14, m. 9 to chorus 15, m. 8.

Chorus 20 (**Fig. 4.3.1c**) also makes for an interesting example, as it exhibits the grounding effect of Oh and Poor's overlapping returns to pre-composed material (m. 8) following overlapping subversive illusions (m. 6).

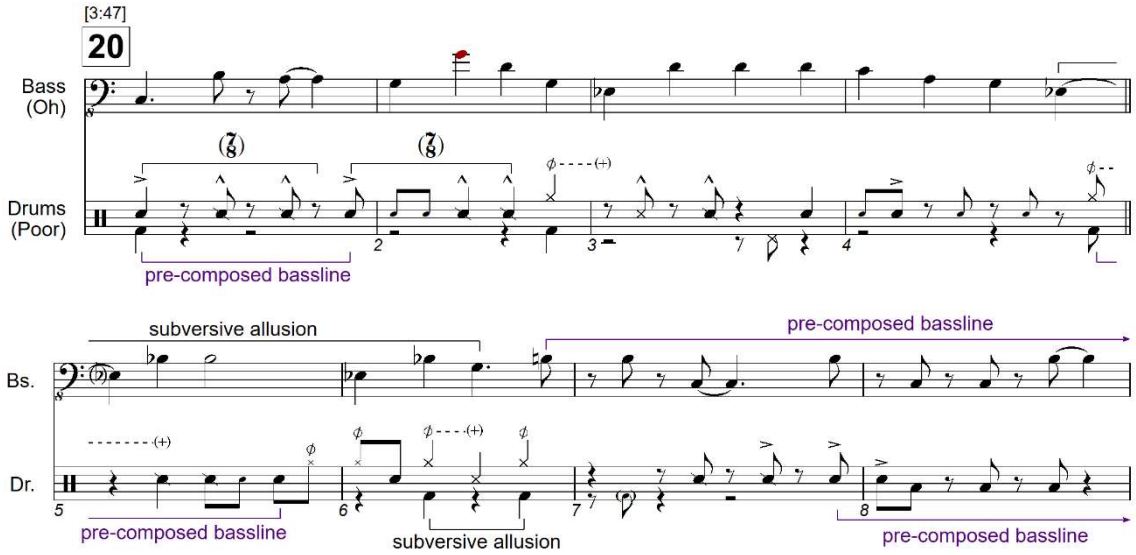

Fig. 4.3.1c Linda May Han Oh and Ted Poor, chorus 20 mm. 1-8.

4.3.2 Swing articulation (Ben Wendel and James Muller)

The general articulation styles employed by guitarist Muller and saxophonist Wendel in 'Yoda' bear similarities to the 'back-tonguing' articulation commonly used throughout jazz practice since around 1950 (Tague 2017, p. 26). Essentially, back-tongued articulation places a slight stress or accent on the off-beat notes in an 8th-note line, creating an impression of "swing" – regardless of whether the beat structure is truly asymmetrical or actually "straight" (even). Muller's 8th-notes are as a general rule very even throughout the recording, and his time feel is generally centered on or slightly in front of the beat (using Oh and Poor as a reference). Wendel's execution is more flexible, moving fluidly between straight and variously swung 8ths, with overall note placement usually resting slightly behind the beat. In either case, off-beat accents in the soloists' improvised melodic lines interact with Oh and Poor's syncopated gestures (pre-composed, referential or otherwise improvised) to suggest illusory false downbeats, both metric and formal.

Perhaps not the best example of this effect, but interesting nonetheless, is Muller's first solo entry at chorus 8 (**Fig. 4.3.2a**), which can be easily misheard as beginning on the downbeat. The primary mechanism at work here is the strength with which Muller accents m. 1 beat 1&, m. 1 beat 3&, and m. 2 beat 1&. Secondly, very audible but not so easily represented in notation is the fact that Poor's gentle backbeat hi-hat blends with the colours of his brushed snare, and the tail of Wendel's solo masks Oh's hyper-downbeat. The product of these two factors is that Muller's slightly 'ahead' entry at the second 8th-note is heard as a 'laid-back' entry on the downbeat.

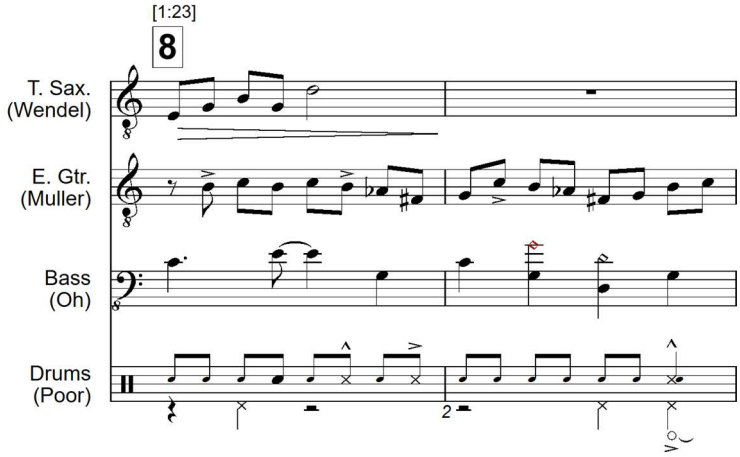

Fig. 4.3.2a Chorus 8, mm. 1-2.

Muller's anacrusis into chorus 20 (**Fig. 4.3.2b**) operates on the same primary mechanism, this time preceded by two measures of destabilisation in which Wendel, Oh and Poor all align to emphasise off-beat 8th-notes through chorus 19, mm. 11-12. In this case there are plural hyper-downbeats: while the content of Muller's phrase produces a false hyper-downbeat on beat 1& of chorus 20, m. 1, Wendel's last note arrives on (or just behind) the last 8th-note of chorus 19, m. 12; and Oh and Poor decidedly proclaim the beginning of chorus 20. Thus, the formal boundary is clearly demarcated by the entire ensemble within a span of three 8th-notes, but the location of the exact beginning is blurred.

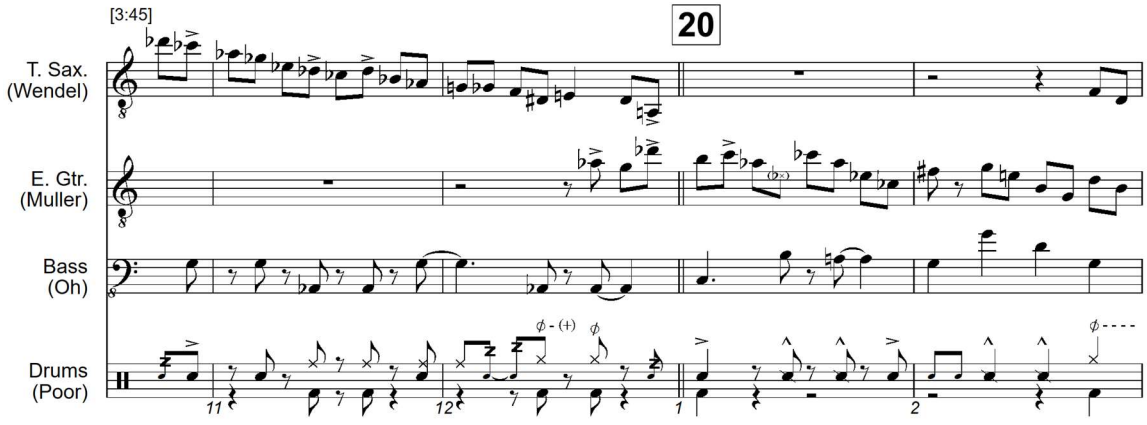

Fig. 4.3.2b Chorus 19, m. 11 to chorus 20, m. 2.

In some instances, Wendel's manipulation of micro-time couples with his off-beat accents to create the effect of a displaced swing feel. This is particularly audible in the final measures of chorus 11 (**Fig. 4.3.2c**), reinforced in both meter and contour by bassist Oh's syncopated quarter-note descent. Wendel's use of displaced swing here reinforces the illusory 'strong beats' that are created in the syncopations of Oh's pre-composed bassline, and therefore operates as an 'argument' in favour of an additive, rather than

regular, metric substructure.

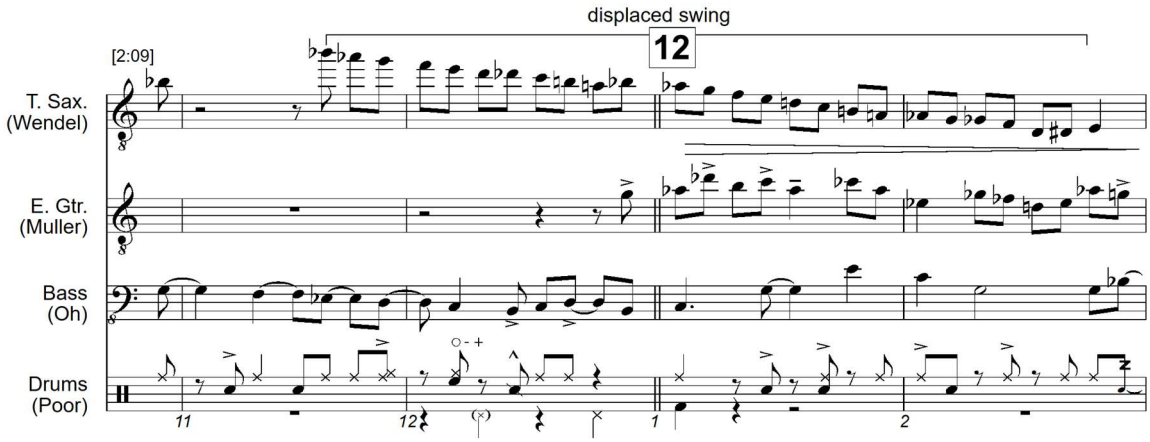

Fig. 4.3.2c Chorus 11 m. 11 to chorus 12 m. 2.

4.3.3 Colouring outside the lines

This heading illustrates how the phraseological tendencies of each musician combine to blur formal and harmonic boundaries across solo handovers. 'Blur' here describes a period of instability/ambiguity which arises between the twelfth measure of one chorus and the first measure of the next chorus, particularly when the ensemble texture is most dense (such as when Wendel and Muller play overlapping melodic phrases). In such cases, harmonic and formal clarity are typically restored by the third measure of the latter chorus as a result of thinning texture (and, from chorus 11, harmonic reinforcement provided by Muller's comping). Blurring events can arise as a result of 'disagreement' between individual parts, auditory masking, and/or coinciding gestures which subvert the chorus form in some way.

Chorus 7 (**Fig. 4.3.3a**) is an excellent example of this: the interaction between saxophonist Wendel's continuation of the pre-composed melody and drummer Poor's across-the-barline groups of three 8th-notes creates a tension across the formal boundary that is arguably not resolved until m. 6, with Poor and Oh's unison hit and the relaxation of Wendel's saxophone timbre.

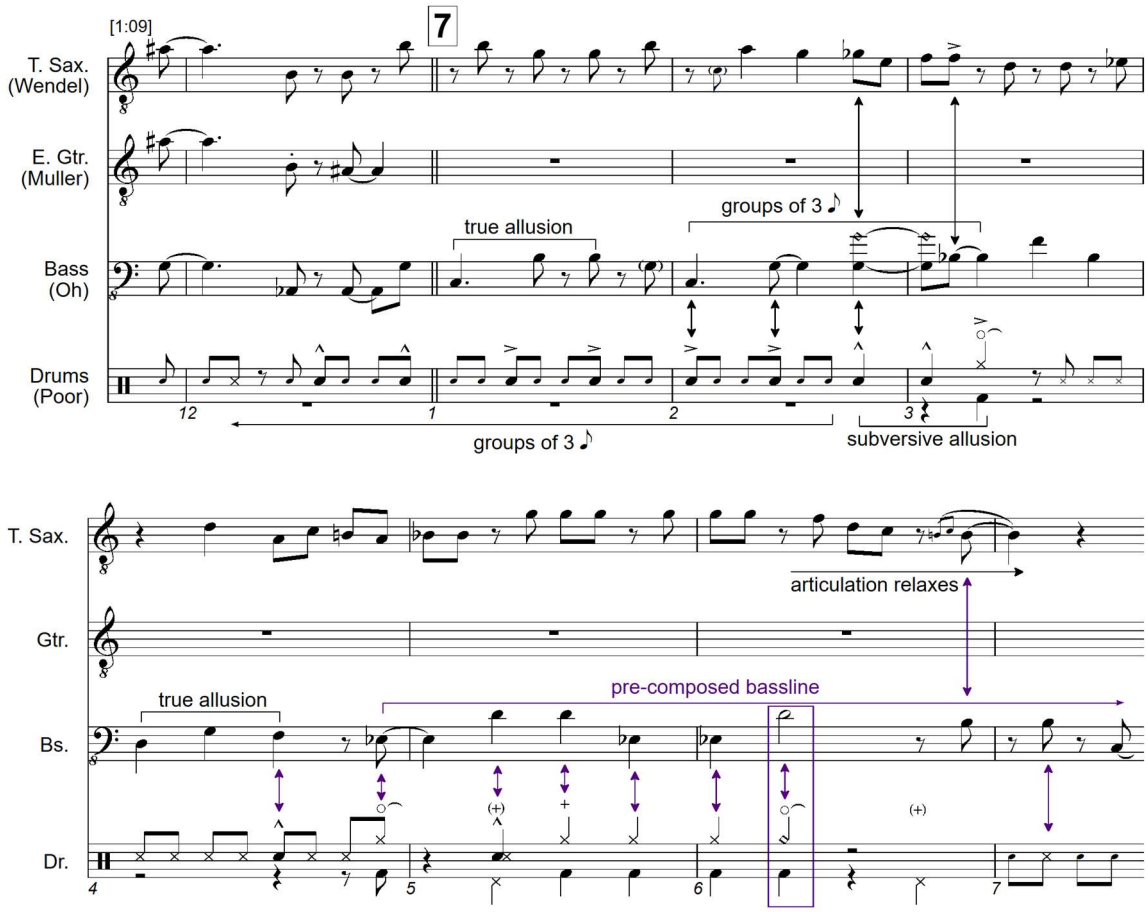

Fig. 4.3.3a Chorus 6, m. 12 to chorus 7, m. 6.

Wendel's imitation-continuation operates again at the boundary between choruses 8 and 9 (**Fig. 4.3.3b**), this time obscuring the harmonic shift at the formal boundary. As guitarist Muller anticipates the hyper-downbeat with a mild A♭-G resolution (chorus 8, m. 12, beat 4), Wendel counters his efforts by extending the A♭ in Muller's top voice (chorus 9, m. 1), and proceeding to descend chromatically. Muller's trailing arrival at a low C (chorus 9, m. 2, beat 3) leaves bassist Oh alone in expressing the C major tonality of chorus 9, m. 1 – but Oh's line through chorus 9, mm. 1-3 is undermined by Poor's bold expression of the pre-composed bassline until their eventual agreement at m. 4.

Fig. 4.3.3b Chorus 8, m. 11 to chorus 9, m. 4.

In the final measure of chorus 10, Wendel, Muller and Poor spectacularly combine on beat 4 to suggest that the hyper-downbeat of chorus 11 has already occurred. There are several factors that enable this effect, shown in the annotations of **Fig. 4.3.3c**: the initial destabilisation of pulse beginning around chorus 10, m. 5; the auditory masking of Oh's bassline across the formal boundary; the synchronised hit in chorus 10, m. 12; the subsequent omission of the true hyper-downbeat by Wendel, Muller and Poor; and Wendel and Muller's delayed resolution to C major from chorus 11, m. 1 beat 3.

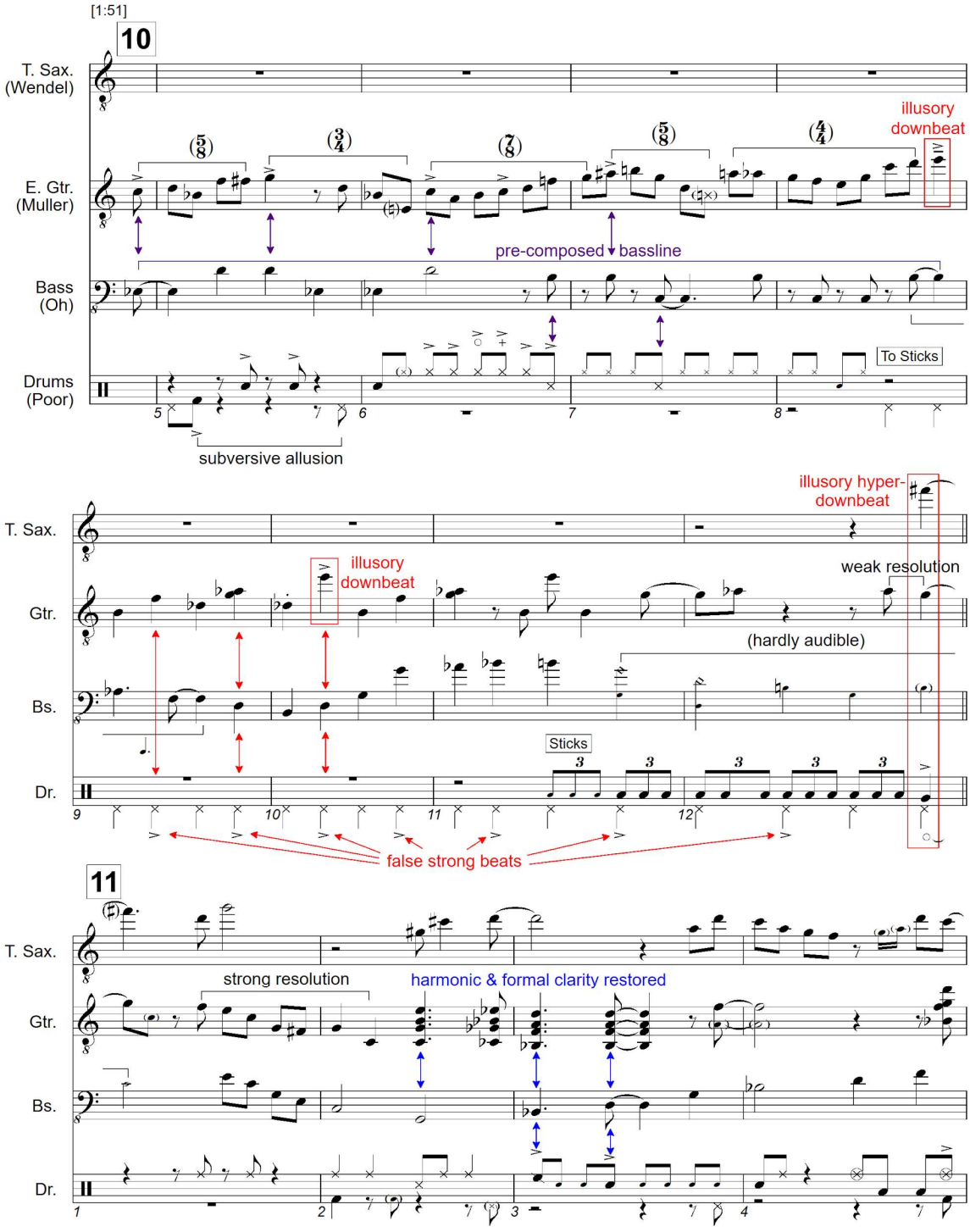

Fig. 4.3.3c Chorus 10, m. 5 to chorus 11, m. 4.

4.3.4 Greatest hits (choruses 15-16)

The outstanding intensity throughout choruses 15-16 is a product not just of the quartet's collective volume and density, but also the ambiguity of meter and harmony which persists throughout. A complete transcription of chorus 15 is given in **Fig. 4.3.4a** (mm. 10-12 provide an indication of the types of interactions that continue throughout chorus 16). Numerous factors facilitate the layered metric illusions in this chorus: agonistic

tensions between Oh and Poor (refer to **Fig. 4.3.1b**), alignment on syncopations between Poor and Muller, and the metric ambiguity and flexible micro-timing of Wendel's rapid slurred passages (approximated to triplet 8ths below). Some points of interest have been annotated, but the layered metric tensions through these two choruses are largely self-evident.

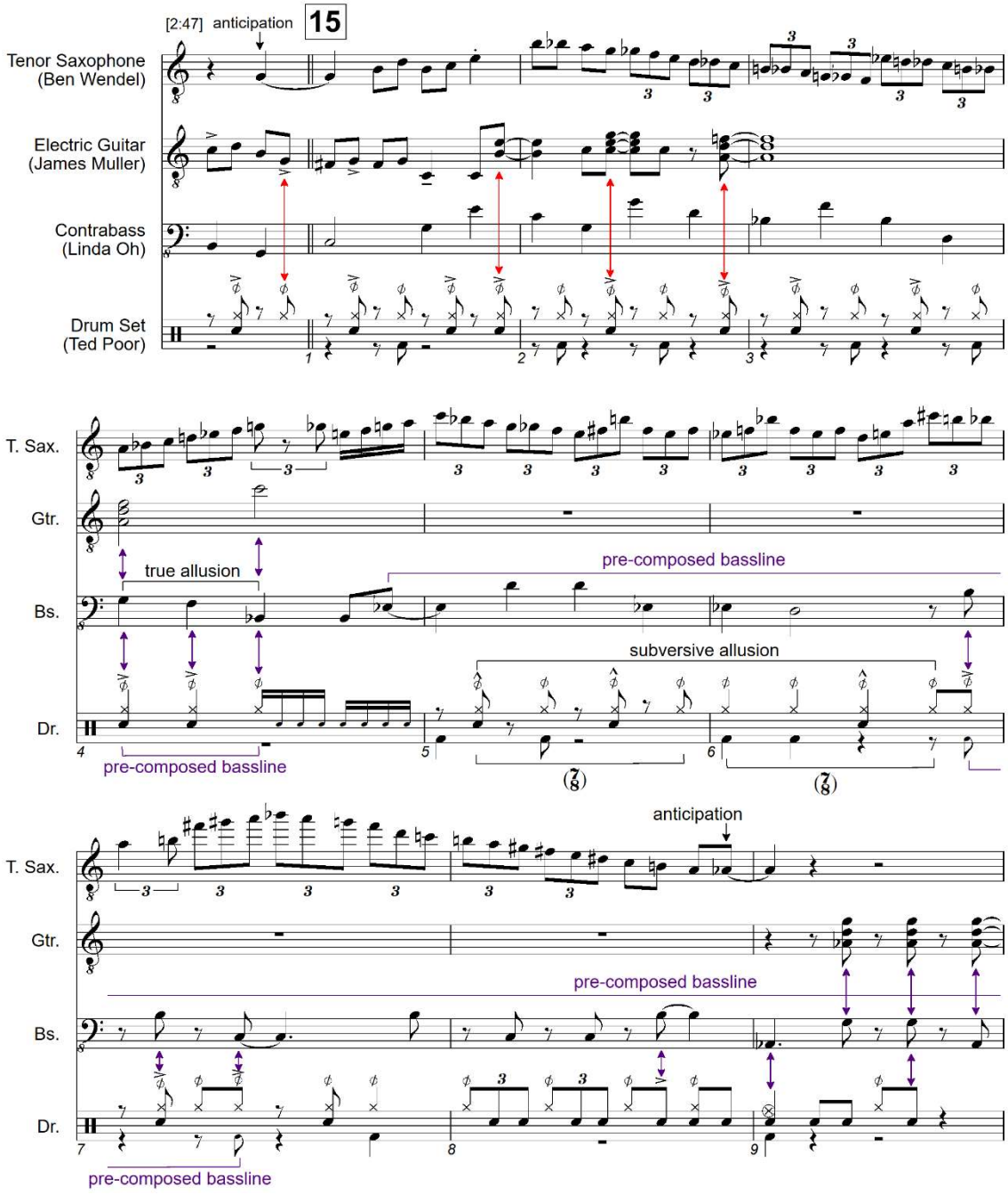

Fig. 4.3.4a Chorus 15 to chorus 16, m. 1.

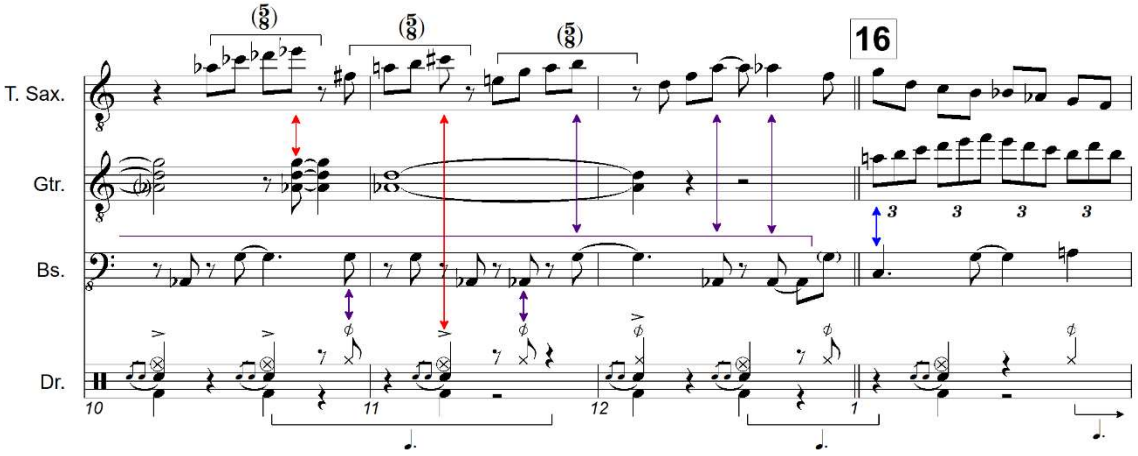

Fig. 4.3.4a (cont.) Chorus 15 to chorus 16, m. 1.

4.3.5 Playing time (choruses 17-19)

The hyper-downbeat of chorus 17 sports the most unanimous demarcation of the formal boundaries in the solo choruses, and arguably the most complete resolution of harmonic and metric tension in the entire recording, as seen in **Fig. 4.3.5a**. Poor's execution of a typical straight-8ths $\frac{4}{4}$ ride cymbal pattern diffuses the metric tension which has been accumulating not only through choruses 15 and 16, but from the very beginning of the performance.

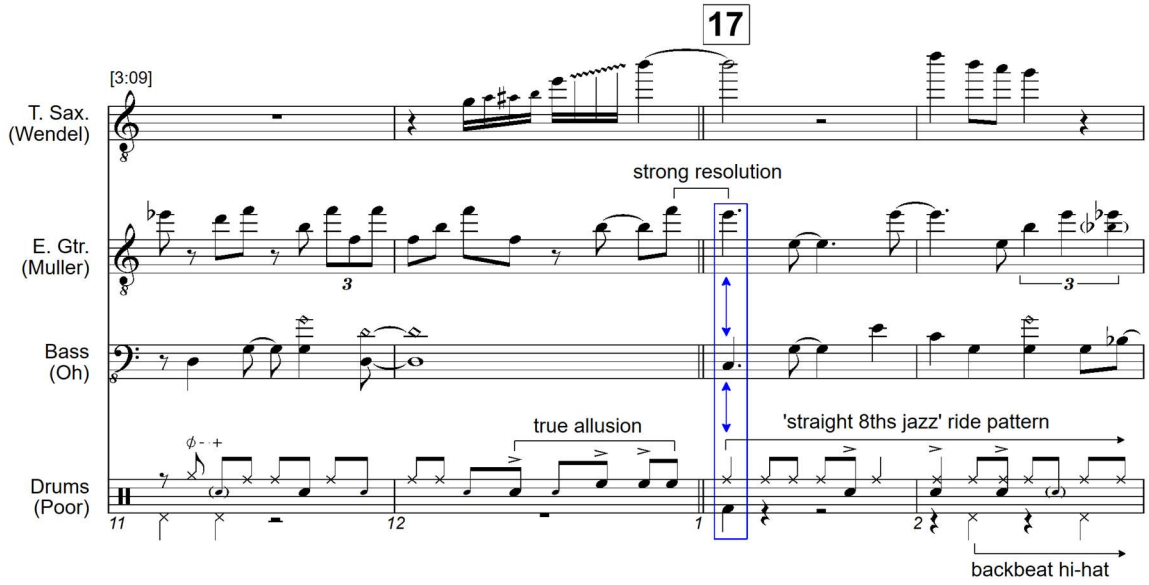

Fig. 4.3.5a Chorus 16, m. 11 to chorus 17, m. 2.

The unambiguous duple/quadruple meter does continue through chorus 18, but is increasingly punctuated with hits from the pre-composed material and begins to break apart. By chorus 19 Poor has swapped out the backbeat pedalled hi-hat in favour of a dotted quarter-note figure played between half-open hi-hat and ride cymbal; this is laid

against a simple bass drum *clave*-style figure for two measures, which eases into the return of the pre-composed bassline hits at mm. 3-4. Some listeners may retain a sense of the true quadruple meter for a while, although Oh and Poor's unison hits through the remainder of chorus 19 exert a powerful gravity.

4.3.6 Group jam (choruses 20-23)

The group improvisations exhibit some significant departures from the basic vocabularies identified throughout this chapter. Aspects of chorus 20 have already featured previously, but here note bassist Oh's placement of E♭ in chorus 20, m. 3: supported by saxophonist Wendel's timely entry, the result is an apparent displacement of the harmonic form, in which the E♭ major harmony (expected at m. 5) arrives early and lasts twice as long (**Fig. 4.3.6a**).

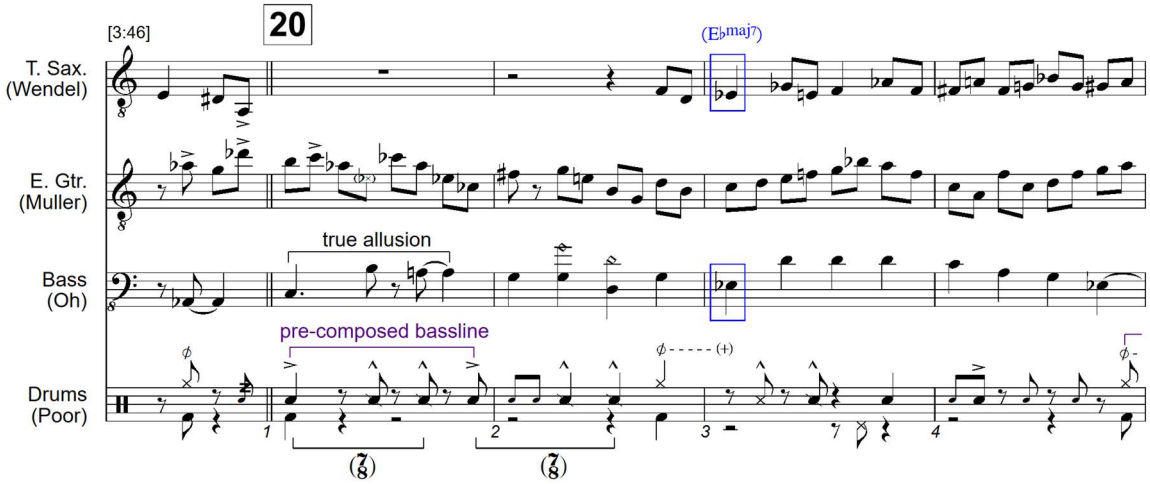

Fig. 4.3.6a Chorus 20, mm. 1-4.

Wendel's G-Ab trill (starting in chorus 20, m. 9) and guitarist Muller's syncopated 8th-note figure (from chorus 20, m. 5) both transgress the formal and harmonic boundary of chorus 21 (**Fig. 4.3.6b**), which is also anticipated by Oh, but drummer Poor neatly articulates the hyper-downbeat to begin a very soft single-stroke roll. Oh walks quarter-notes while Wendel and Muller engage in playful imitation before separating into descending gestures – Muller utilizing a pentatonic sequence and Wendel employing chromaticised diatonic lines at a pace that echoes Poor's snare triplets through mm. 5-6. Poor and Muller arrive at the downbeat of m. 9 together, joined on long tones by Oh one measure later: each engages a separate logic for their hits through mm. 9-12, though Poor's hits bear strong semblance to his heavy crashes of chorus 15.

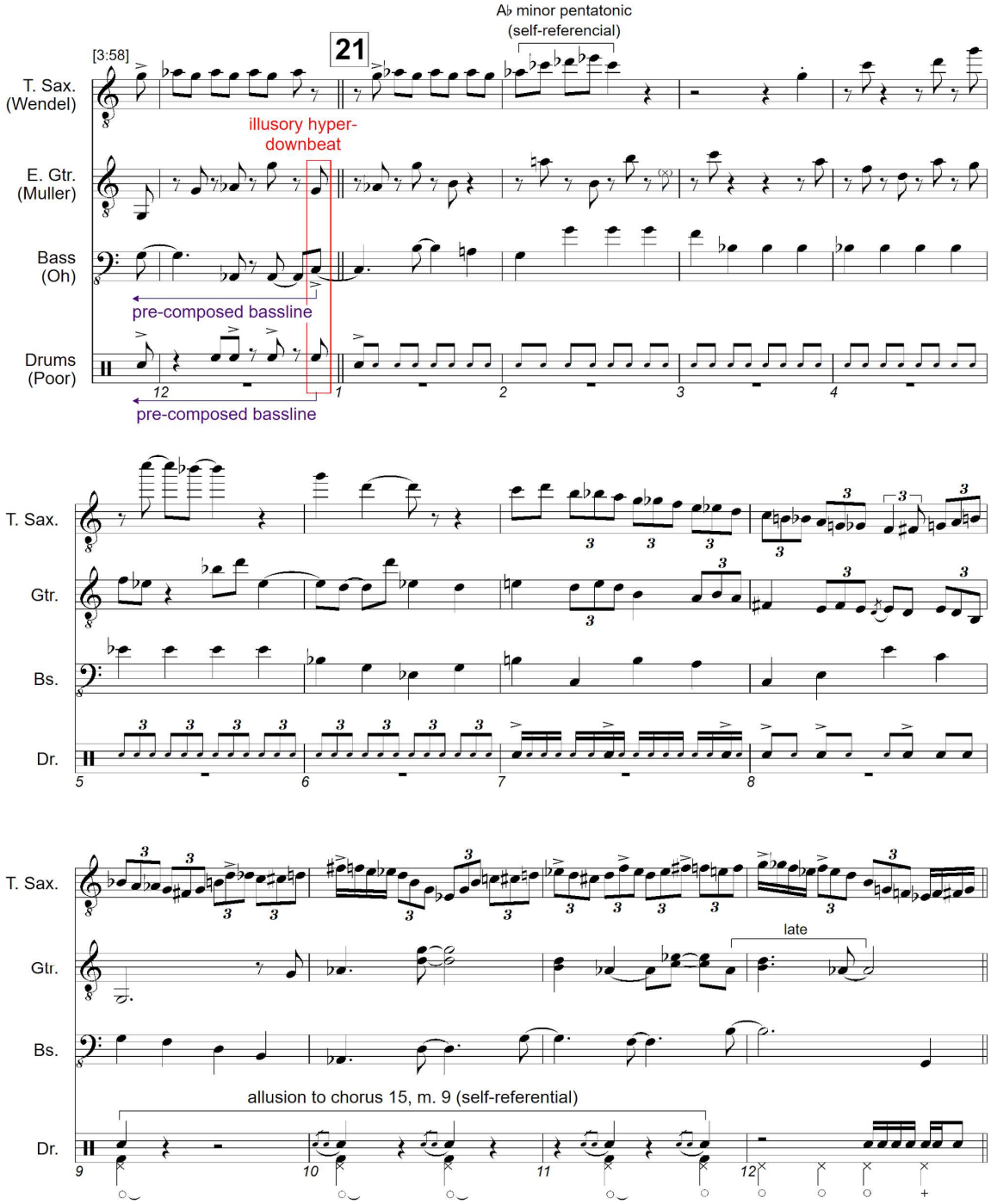

Fig. 4.3.6b Chorus 20, m. 11 to chorus 21, m. 12.

Following Poor's hi-hat lead-in, the quartet immediately changes tack at the hyper-downbeat of chorus 22 (**Fig. 4.3.6c**). Oh and Poor initiate the chorus with fury; Muller takes over Wendel's triplet-8th line, and the two lead players take it in turns to fill the space between each others' phrases. The band's intensity subsides promisingly through mm. 9-12; Poor heralds the approaching hyper-downbeat with an 8th-note roll on the snare drum…

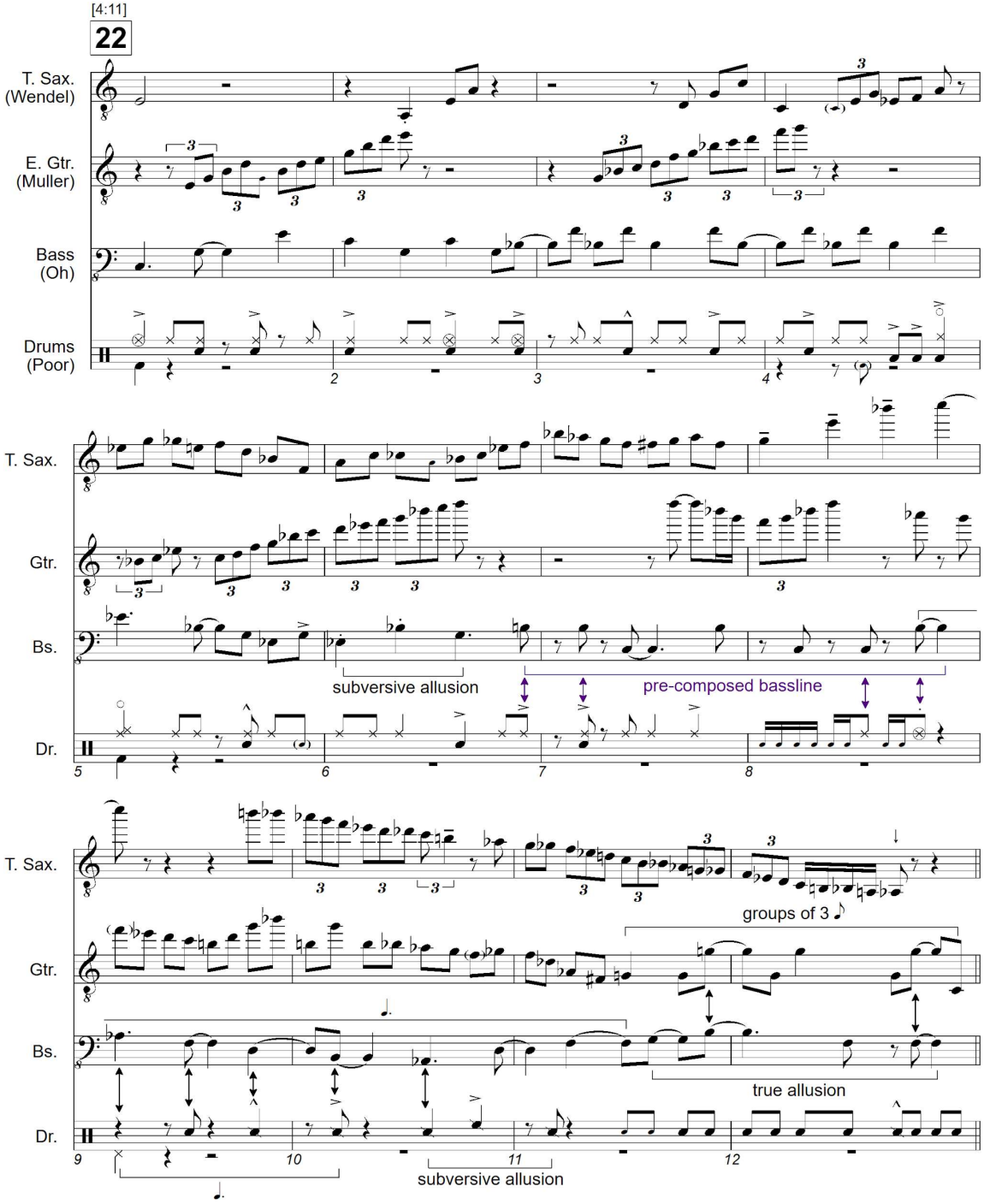

Fig. 4.3.6c Chorus 22.

'Failed head out' is the best way to describe chorus 23 (**Fig. 4.3.6d**).[21] Muller and Poor make a convincing start with the melody in the first measure, but Oh substitutes pitches of her pre-composed bassline and Wendel is silent until the second measure – where he

[21] The term 'fail' is not an assumption about performer intention, but rather a summary of the overall melodic, rhythmic and textural function and trajectory from an aesthetic standpoint: in other words, chorus 23 dissipates (rather than resolves) the tension which grew throughout the final measures of chorus 22.

rightly enters on beat 2. From measure 3, Wendel and Muller begin a colourful deconstruction of Oh's pre-composed material, joined by Oh and Poor in m. 5. The group finds an alarming amount of flex in the meter and harmony of the middle four measures – but evidently nothing breaks, for at m. 9 Muller initiates the quartet's preparation for the head out.

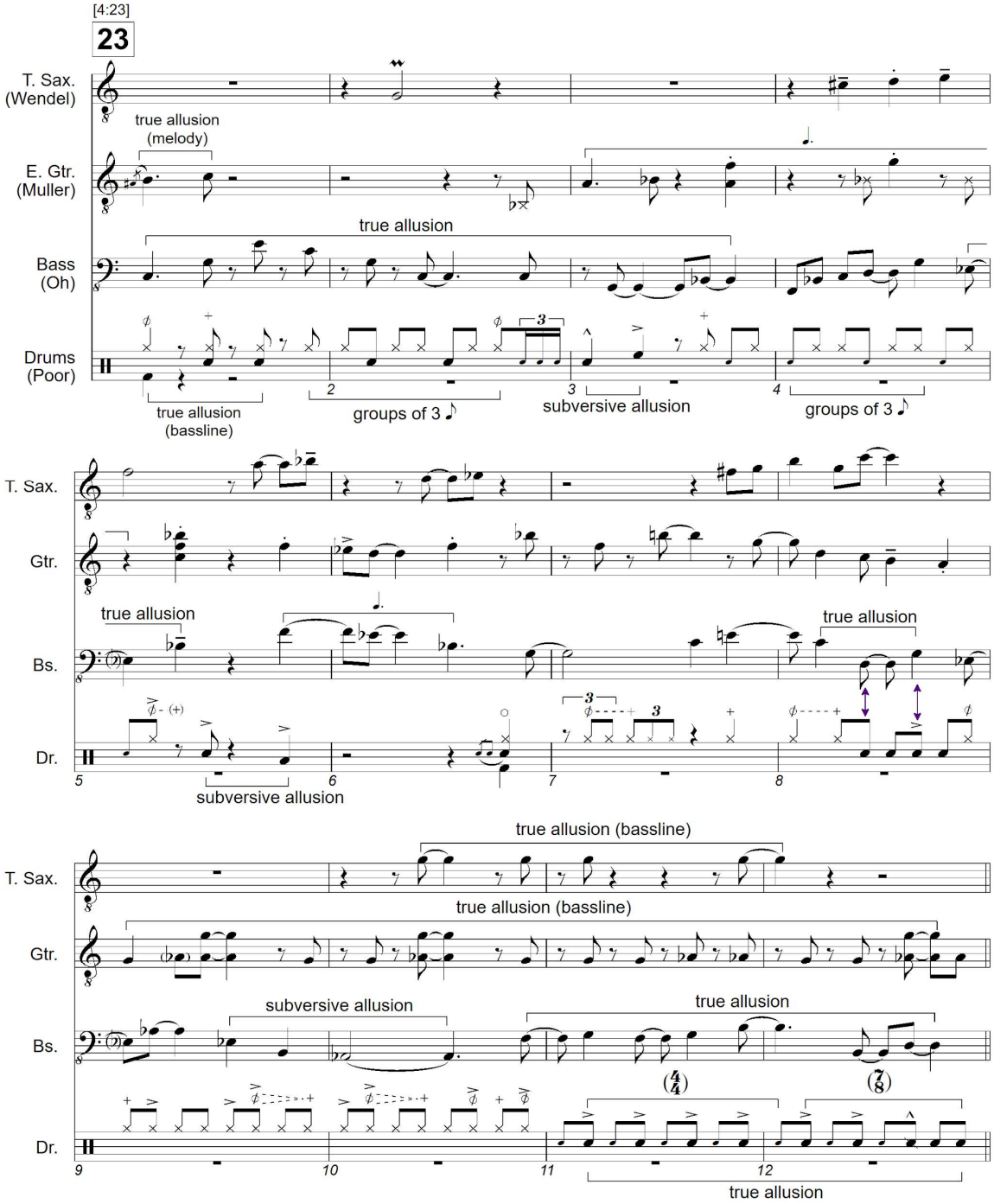

Fig. 4.3.6d Chorus 23.

The examples presented in this chapter have illustrated how in Linda May Han Oh's 'Yoda', the intra-musical interactions that occur between Oh's pre-composed material

and the individual improvisations of each musician can obscure the underlying formal boundaries of the composition and create the illusion of an additive metric substructure where the true substructure is a simple quadruple meter. The next and final chapter briefly situates the findings within the broader sphere of jazz practice, evaluates the analytical methodology and perspective, and outlines possibilities for future research.

Chapter 5. Reflection

The collective analyses within this thesis form one example of how within group improvisation, standard vocabularies and phraseologies of instrumental post-bop jazz practice can interact with a pre-composed form in such a way as to obscure the underlying metric and formal structures of the composition, and potentially create new points of reference for the external listener. In Linda May Han Oh's 'Yoda', the ongoing emergence of interactions between Oh's heavily syncopated pre-composed material and the wider sphere of contemporary jazz improvisation practices – both within and between individual parts – continuously injects (and refreshes) tension, energy and forward momentum throughout the performance. In line with commentaries made by Givan (2016) and Butterfield (2008), such interactions are treated as an emergent property of the music brought about by the coinciding of independently-made performers' decisions (which have presumably been informed and refined by some kind of rehearsal process).

The specific analytical findings of this paper are projected to be most useful for study by composers and improvising musicians seeking to achieve particular improvised ensemble textures in their own work. Broader audiences may find significant value in the analytical perspective adopted in this study, detailed in Chapter 3. The perspective was found to be useful in restricting methodologies employed and arguments presented in the analysis, ultimately producing a primary focus on the aesthetic content of the object of inquiry, and yielding findings in a format useful for creative practitioners and pedagogues (particularly art music specialists, speaking broadly).

Regarding methodology, the comprehensive transcription process surfaced valuable analytical arguments which may have otherwise been overlooked, and yielded a considerable excess of material which can be used in future research. There were however notable downsides: transcription is a time-consuming process, and as noted by Rusch, Salley & Stover (2016, par. 1.5), throughout the repeated active listening and background research, the analyst-transcriber's stance as a listener changes to occupy dualistic spaces of external observer and embedded performer. It was therefore necessary to embrace a subjective stance as the analyst/listener in order to present analytical arguments. It is significant that while the descriptions and annotations herein only represent the author's comprehension of musical events in 'Yoda', many listeners anecdotally report similar experiences in listening to the recording (i.e. difficulty tracing the form and meter): the value of the research therefore lies in the attempt to comprehend the events that give rise to such shared human experience.

The analytical perspective defined in Chapter 3 and the analysis of Chapter 4 each open doors to possible future research. Like many current innovators in the jazz world, Linda May Han Oh's catalogue remains largely unexplored by academia at present, and many aesthetic and technical secrets remain to be unearthed in her work as a bassist, composer and bandleader. Nonetheless, it does seem probable that scholarship will gradually catch up to her career success. Beyond Oh's work, there is good cause for study of the improvisational practice and style of the members of saxophonist Ben Wendel, guitarist James Muller and Ted Poor – some findings presented in this thesis may be useful in research of this nature. Looking further afield, the analytical perspective of this paper is well-suited for application in myriad aesthetic and technical studies not only within contemporary improvised music, but conceivably any predominantly aural-based musical practice; regardless of whether the focus is on individual recordings or look more broadly at an artist, ensemble, or localised genre. As a concluding thought, it is essential to consider the perspectives which inform musicological study; particularly so when the work(s) or artist(s) in question are engaged with (or by) ongoing sociocultural discourses. It is the author's hope that the analytical perspective employed in this thesis has facilitated the development of a study which recognises artistic merit for its own sake.

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