”What Is the Basic Rule of Outside”?

The Construction of a Jazz Improvisation Concept in On-line Environments

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Mariehamn October 2022,

Fredrik Erlandsson

Abstract

Jazz musicians often talk about the changes, referring to the chord sequences of a tune. The changes are the harmonic framework for improvisations, and as such they govern what the appropriate note choices are for improvising over a tune. The changes involve a strong connection between chords and scales, and these two are often understood as vertical vs. horizontal representations of the same tonal material. A musician can, depending on style, personal preferences etc., choose to follow or not to follow these tonal boundaries, improvising either inside the changes or outside the changes. Most of the scholarly writings on jazz have studied aspects of inside playing, such as harmonic-melodic structures and relationships. These boundaries are often understood as rules that govern the tonal content of jazz improvisation. Therefore, a simplified explanation would be to say that to obey these rules is to play inside, and to break them is to play outside. The research question this study attempts to answer is: What is outside said to be in on-line environments? And following that question: How is outside manifested in the recorded jazz improvisations that are used by the online writers to exemplify outside?

The term 'outside' is commonly used by jazz musicians playing in a post-bop idiom, but despite its frequent use in musicians' jargon there is no set or standardized definition for it. Using an approach grounded in discourse analysis, I study how the term 'outside' is constructed and what attributes are assigned to it. The research material used for analysis consists of posts from online forums, along with online lessons and blog posts. I also apply music analysis to the music examples found in these posts to identify how outside is performed in practice.

The study shows that the concept of outside, as it is explained in the online material, cannot be understood without considering its rule-based opposite, inside. Thus, outside is not a direct synonym to terms such as free improvisation, polytonality or atonality but a musical phenomenon in its own right. As the concept is constructed in the research material, outside concerns tonal tension; it does not involve breaking rhythmic, timbral or stylistic boundaries. Certain performance characteristics are as central in outside playing as they are in jazz improvisation in general: playing with good sound; with rhythmic drive and stability; and with confidence and conviction.

Finally, there seems to be a collection of rules that govern how, where and when an improviser can break rules of inside in order to achieve outside. These new rules govern how a jazz musician can break the old rules.

Sammanfattning på svenska

"Vad är den grundläggande regeln för outside?" Hur ett begrepp inom jazzimprovisation skapas i internet-miljöer.

Jazzmusiker talar ofta om *the changes*, och avser då ackordföljden i en låt. *The changes* utgör det harmoniska ramverket för musikernas improvisationer, och reglerar vilka toner som passar att spela under ett improviserat solo. *The changes* är nära knutet till begreppen 'skala' och 'ackord' och den starka kopplingen dem emellan, eftersom skalor och ackord ofta ses som vertikala respektive horisontala representationer av ett och samma tonala innehåll.

En musiker kan, beroende på stil, personliga preferenser etc., välja att följa eller att inte följa dessa tonala ramar, och improvisera innanför (*inside*) eller utanför (*outside*) *the changes*. De flesta studier kring jazz som musik har fokuserat på aspekter kring spel innanför de tonala gränserna, såsom analyser av harmoniska strukturer och harmonisk-melodiska förhållanden. Dessa ramar uppfattas ofta som regler som styr det tonala innehållet i jazzimprovisation. Att följa reglerna är att spela *inside*, medan att bryta mot reglerna är att spela *outside.*

Begreppet *outside* är vanligt förekommande i vokabulären bland jazzmusiker som spelar i ett post-bop idiom, men trots att ordet ofta används saknas en bestämd, allmänt accepterad definition. Genom att använda ett förhållningssätt som utgår från diskursanalysens metoder studerar jag hur begreppet *outside* konstrueras och vilka attribut som tillskrivs begreppet. Det empiriska materialet utgörs av inlägg från olika internetforum, tillsammans med blogginlägg och *online*-lektioner. Jag tillämpar även musikanalys på de musikexempel som nämns i materialet, för att identifiera hur *outside* spelas i praktiken.

Denna studie visar att begreppet *outside*, så som det förklaras i *online*-materialet, inte kan förstås utan sin motsats, *inside*. Sålunda är *outside* inte en synonym till begrepp som fri improvisation, polytonalitet eller atonalitet, utan ett musikaliskt begrepp som står på egna ben. *Outside* konstrueras i materialet som ett begrepp som rör tonal spänning: att överskrida rytmiska, klangmässiga eller stilistiska ramar ingår inte i begreppet. Vissa element som rör framförandet är lika centrala för *outside*-spel som de är för improvisation i allmänhet. Hit hör att spela med bra klang och sound, med rytmiskt driv och stabilitet, och att spela med övertygelse och självförtroende.

Studien visar att det finns en uppsättning regler som styr hur, var och när en improvisatör kan bryta mot reglerna för *inside*-spel, för att därigenom spela *outside.* Dessa nya regler styr hur en jazzmusiker kan bryta de gamla reglerna.

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1 Introduction

This study focuses on a specific element of jazz improvisation that jazz musicians call 'outside improvisation' or 'playing outside'. I refer to this concept simply as *outside.* Being an educated jazz trumpet player with a degree from the Royal College of Music in Stockholm, I would say I have, from a musician's point of view, quite a good idea of what outside is. I have personal experience of jazz musicians using the term outside in conversations about jazz and jazz improvisation, as well as jazz pedagogues using it in teaching situations discussing alternative improvisational approaches. However, as will be evident several times throughout this study, outside has no standardized definition, and no common terminology. Outside clearly concerns breaking rules, but there is also an idea that there is a rule for how to break the rules. A member in an online forum asked a question that many aspiring jazz improvisers have and that I have included in the title for this thesis: "What is the basic rule of outside?" ("iqi" 2009). The notion of a rule for breaking rules is also found in books on jazz improvisation, such as Coker (1991: 83), who explains the technique of outside playing as deriving the notes to play during an improvisation simply from focusing on the wrong notes of a chord. Coker also points out that an outside note is not the same as an error, which can be identified and separated from an outside note by an analyst of jazz solos. For me, as a young aspiring jazz musician, the ambiguity of a solo passage sounding right and wrong at the same time was what captured my ears and mind about outside playing. Many of the musicians in the research material seem to share my experience and seem equally intrigued by the idea of leaving rule-bound territory and stepping into uncharted land.

Outside is and has been defined in many ways, but a shared feature of the existing views is that they are formed around an opposition between an outside and an inside. Although inside is a term that as such is almost as uncovered as outside, the basic definition of inside could at a first glance be quite simple: inside is following the norm, agreeing to the common standards. It would be reasonably safe to say that playing a C major scale over a C major chord is an example of inside. Aspiring jazz players of today want to know how to transcend inside playing, but one can also imagine 18th-century composers testing the limits regarding how far from the C major scale the music can go and still be in C major.

In jazz harmony, the realms of inside are quite generous, as will be discussed later. The line between inside and outside has not been drawn once and for all. Instead, it is an ongoing process, so that depending on the situation at hand, and on what point in history one looks at, the line between outside and inside is constantly moving back and forth. In fact, what was considered outside before might now be considered inside (Polishook 2014; Levine 1995: 183). When

musicians and pedagogues share views on how to play outside, they are not discussing a pre-existing fixed border between inside and outside but in fact constructing the idea of such a border. This is a justification for why it is appropriate to study outside from a constructionist perspective rather than from an essentialist perspective. Since the internet is an important forum for pedagogy for anyone who wants to learn something, such as jazz improvisation, I study the descriptions and the advice on outside playing that can be found on the internet. In this thesis, I will not present my own definition of what outside is; nor will I summarize what established players think about outside. Instead, I analyze how the outside concept is constructed in online environments.

1.1 Aims and research questions

Although some studies have been conducted on topics adjacent to outside improvisation, many questions are still unanswered. For example, none of them give an in-depth definition of what outside improvisation is and how the concept is played out in practice. In such texts, the understanding of outside seems to be taken for granted, which from both a musician's and a scholar's point of view is deeply unsatisfying, as it leaves a fundamental question unanswered: what is outside?

The aim of this study is to analyze how outside is constructed in online writings that deal with jazz improvisation. More specifically, the aim of this research is to, first, examine how online writers express themselves about and define outside on online forums and, second, reveal any music theoretical rules or governing aesthetic principles attached of outside improvisation proposed in the writers' statements.

These aims include two different perspectives. Firstly, I study how the outside concept is described and defined in online writings. The purpose is not to give a final definition of outside or to sum up what master improvisers think, say or play. Instead, I study how the idea of outside is constructed by persons who communicate or publish online. This includes statements about performance characteristics and/or about rules and norms on harmony. Secondly, I study how the writers' texts and the solos mentioned relate to each other: what the examples reveal about outside and how it is understood. The online writers are, as far as I can tell, well acquainted with playing jazz. I cannot know whether that is the case, but the manner in which they formulate themselves suggest that the vast majority play musical instruments and are familiar with the jazz style. If they do or do not have enough knowledge and legitimacy to have an opinion on outside is not the relevant concern here. Instead, as they express their views online, they contribute to the construction of outside in online environments.

Thus, the research questions my study attempts to answer is: what is outside said to be in online environments, and following that question: how is outside manifested in the recorded jazz improvisations that are used by the online writers to exemplify outside?

1.2 Earlier research

Earlier research has approached deviations from tonality in jazz improvisation by categorizing and analyzing improvised solos by renowned jazz players. In doing so, researchers have touched on questions adjacent to outside playing. However, they have not delved into the actual outside concept or related matters such as how to play outside, where its boundaries are located or how different players/writers define outside. I find this rather surprising, given how common the term outside seems to be in contemporary jazz improvisation. I will in this section summarize the works that are adjacent to or partly overlap outside, beginning with those most closely related to my own study.

Jazz researcher Dean-Lewis's PhD thesis (2001) studies systems and strategies used by improvisers during excursions outside of the tonality. In Dean-Lewis's study, playing outside of the tonality is treated as an established phenomenon among musicians, but not as an improvisational concept in its own right. The idea of playing outside of the tonality is never questioned or problematized, rather it is held as an axiom. The study is a description of how notes outside of the tonality can be organized following an analysis of selected jazz solos. Presumably, premeditated elements of 'out improvisations' are also discussed. Such elements are patterns and mathematical systems that regulate note choices.

Dean-Lewis's thesis is closely linked to, and could even be considered a follow-up to, his 1996 article on strategies for pan-tonal improvisation (Dean-Lewis 1996). Again, focus is on conceptual improvisational strategies, but with a mathematical perspective, and a pedagogical purpose: Dean-Lewis presents three roadmaps for the improviser to play notes beyond the stated harmonic framework with an aim to show and educate. The three roadmaps described in the article require premeditation and calculation to a much higher degree than chord/scale concepts.

In his studies Dean-Lewis highlights and analyzes several important aspects of improvisations that transcend the rules on harmony and music theory that are taught in music schools. His analyses offer many insights but does not show what the outside concept is or might be.

In jazz trumpeter Richardson's PhD thesis (2006), the term *non-idiomatic chromatic patches* is used for phrases in, or segments of, an improvised solo that are characterized by chromaticism that exceed the embellishments, passing tones and patterns found in the bebop-based jazz idiom, i.e. phrases that cannot be explained through the concepts of conventional jazz harmony. According to Richardson, *non-idiomatic chromatic patches* can be divided into six categories: 1) disguised traditional or idiomatic chromaticism; 2) use of contour/ sequence; 3) progressive modal agreement; 4) use of rhythmic devices; 5) alternative dominant chord chromaticism; and 6) modal reharmonization. Some of Richardson's notions and categories relate to and overlap with the general understanding of what outside playing is, but they still do not explicate how the concept is usually understood.

Both Richardson and Dean-Lewis reveal many important insights about elements and aspects that seem essential in understanding the outside concept. However, these studies do not focus on outside playing as such, or put the individual insights together into a unified understanding of the concept. Neither do the few dictionaries and encyclopedias that explain the term outside, such as *New Grove Dictionary of Jazz* (Kernfeld 2002), *Wikipedia* ("Outside", Wikipedia) and the online *Jazz Glossary* (n.d.). From my own experience and understanding of the outside concept, the descriptions in these texts are brief and leave many aspects uncovered.

A study that delves deeper into outside is Williams's PhD thesis (2017). The purpose is to study how strategy-based generative mechanisms are developed and used in improvisatory practice. Such strategies are indeed part of the outside discourse, and Williams studies these strategies in the context of two musicians, Michael Brecker and Wayne Krantz. Williams explains two harmonic strategies for playing outside: side-stepping and superimposition (Williams 2017: 85). In short, side-stepping can be explained as playing the solo line a half step away from the prescribed tonality, and superimposition as playing one tonality on top of another tonality. These strategies are also mentioned by Dean-Lewis, Richardson and the encyclopedic texts, as well as by pedagogues, such as Levine (1995: 193ff) in his influential textbook on harmony and improvisation, *The Jazz Theory Book*. The terms side-stepping and superimposition are central for outside, and therefore they are discussed in depth in separate subchapters in this study.

In his doctoral dissertation, jazz trumpeter Karns (2016a) uses the free jazz procedures described by Waters (2011) as a tool to examine four key elements in Woody Shaw's solos: conventional and nonconventional scale choices, sequence and the sequential treatment of motifs, an intervallic and/or pentatonic approach to harmonic sequences, and atypical rhythmic phrasing (Karns 2016a: 2f). Karns also uses Waters' concept of *controlled freedom* to study how Shaw can both preserve and abandon elements of hard bop in combination with free jazz approaches. Most of the musical features discussed by Waters and Karns are similar to the features of outside that are discussed in the research material, even though their studies are not directed towards the outside concept as a whole.

Doctoral dissertations (by students at various music departments) that are adjacent to my study include Titus (2010) on modal theory with the Miles Davis album *Kind of Blue* as a case study; Cook (2012), who develops and applies a theory of referential sets, for analyzing and improvising over chromatic chord successions found in some contemporary jazz; McClimon (2016), who applies transformational music theory to jazz harmony; and Linna (2019) who studies the role of the dominant chord in modal jazz within the context of pianist McCoy Tyner's playing. These dissertations cover topics that are relevant for my discussion of outside, such as how improvisations outside of rules relate to harmony.

Several studies on what could be described as 'harmonically advanced jazz improvisation', which at times seems very similar to outside, that have been made up to this date concern a single musician: trumpeter Woody Shaw. Being an improviser that challenges harmonic regulations, Shaw has attracted much attention from scholars, as seen in works by Lilley (2000), Franklin (2001), Franklin & Murphy (2005), Richardson (2006), Puolakka (2013) Radivojevic (2014), Karns (2011, 2015, 2016a & 2016b), Burkhart (2017) and Walters (2011). It seems that these studies are written by fellow jazz trumpeters, which explains why they are rather trumpet-centered. Even though these studies deal mainly with the notes and the phrases of the trumpet solo, they share common ground with this study, in that the analyses concern note choices and harmonic relationships that transcend the norms of music, as taught in music theory and harmony classes.

Several researchers from different disciplines, active within various computational research fields, have transformed the chord/scale rules of harmony and improvisation into algorithms, using them for Markov chains, automated analysis tools and artificial jazz solo generators, e.g. Grachten (2001), Lhost & Ashley (2006), Bickerman, Bosley, Swire & Keller (2010), Bas W Haas, Magalhaes, Wiering, Veltkamp & Remco (2011), Granroth-Wilding & Steedman (2012) and Shanahan & Broze (2012). The musical results of jazz solo generators raise some interesting challenges for the developers; it turned out that the solos tended to be dull and uninteresting, even though they were in accordance with the rules. The researchers are instead trying to develop exceptions and limitations to the algorithms, seeking to achieve higher artistic content in the artificial solos (Johnson-Laird 2002; Pachet 2010; Eigenfeldt & Pasquier 2010; Bäckman 2013). Efforts are made to find ways to break the rules in a controlled manner. In other words, researchers are developing an algorithm for outside improvisation.

Many approaches can be taken when analyzing improvised jazz music. In jazz studies, it is common to take an interactionist approach to improvisation, where an improvisational process involves communication, interaction and issues of power that plays out within social, cultural and aesthetic contexts, negotiating these in relation to a jazz canon (Butterfield 2002: 325). Such an approach opens up an interdisciplinary field of investigation that includes concepts and methodologies from ethnomusicology, sociology and music perception, as found in Berliner (1994), Monson (1997), Reinholdsson (1998), Borgo (2004), Seddon (2005), Pinheiro (2012) and Bjerstedt (2014). Furthermore, the ways in which members of a jazz group creatively and collectively take risks in the midst of an improvised performance, has influenced organizational science to use jazz as a metaphor for flexibility and embracing the unstable in management, business and organizational contexts, as described and discussed in Pasmore & Hatch (1998), Holbrook (2008), Mills (2010) and Dennis (2015). Taking the jazz metaphor a step further, Barrett (2000), following complexity theory, argues that jazz improvisation is a self-organizing system in which a small change in one part can have substantial impacts overall.

However, as far as the present study is concerned, such interactionist approaches are not necessarily relevant for a study on how outside is constructed in online discussions on improvisation. When approaching outside playing from a constructivist perspective, it becomes clear that most jazz musicians and teachers view outside as a skill that musicians are expected to master by learning certain aspects of harmonic thinking rather than some particular way of interactionist thinking.

The subtitle of Berliner's cornerstone book states that jazz is an "infinite art of improvisation" (Berliner 1994), suggesting that jazz is not a music that is an ultimate performance or a recording of a specific tune. Following Berliner, I argue that it is not the performance of a given tune that is considered to be the work of art in jazz, it is the specific performance, of whatever tune it may be, that is considered the work of art. In other words, each single improvisation is a product, but a product that is not separable from the processes that shape(d) it. Other issues involved in defining jazz improvisation are two questions asked by musician/pedagogue Williams: where does improvisation start and end? Does it have to be completely novel to be improvised? (Williams 2017: 28). Such questions are as valid regarding outside improvisation as they are regarding jazz improvisation in general. These questions have a bearing on every aspect of outside discussed in this study. Every statement in the material could be used as arguments in answering Williams' questions. Therefore, in this study, I treat improvisation in the common sense as most jazz players seem to understand it, without delving deeply into the matters of the philosophy of improvised music, as discussed by DeMarco (2012: 249-274) or Nachmanovitch (2010 [1990]).

One particular book must be discussed at this point, David Liebman's *A Chromatic Approach to Jazz Harmony and Melody* (2013) [first edition published in 1991]. During my research process, fellow jazz researchers invariably posed questions regarding the research material, the idea of outside and of the relation between the outside concept and Liebman's book. Although it is not an academic study or a part of my research material, a few words about the book are in order. In many ways, it is an intriguing, inspiring and influential book that has been important to many musicians. It presents no music theory or a complete concept, but is more of an ear-opener for improvisers who seek a musical expression beyond functional chord progressions. Liebman discusses tonal chromaticism, albeit not limiting the concept to jazz music alone. Liebman's term for chromaticism that goes beyond tonality and idiom is *non-tonal chromaticism*. There are instructions on how to play chromatically over equally chromatic harmonic backgrounds, which in a sense is the same as following rules or playing inside.

Liebman's book is probably best described as a textbook, etude book and inspirational text combined. Although the word 'outside' is absent from the title and from the topics covered, I have on several occasions been faced with questions from fellow researchers about how Liebman's book relates to my research. Interestingly, and contrary to what many fellow researchers have assumed, the writers in my research material do not often refer to the book.

The research presented above shows similarities in approaches and methodological choices. Firstly, they study the improvisations of a monophonic instrument (when a keyboard solo is studied, only the single-note melody lines played by the right hand are examined) without regard to collective processes, such as what the rhythm section is playing, interaction between musicians/audience or other communicative processes that may occur during the improvisation. This monophonic hegemony is also reflected in the research material. Secondly, the analyses of harmonic-melodic relationships are based on the chord progressions that are found in collections of sheet music to jazz tunes, such as Real Books or Fake Books, not on the chord progressions that are actually played out behind the solo line during the performance. This means that the impact of lead sheets (i.e. the melody line written in staff notation along with the chord symbols) on the analyses is very high, which on the one hand can be seen as problematic but on the other hand falls in line with how jazz musicians seem to approach jazz improvisation.

As insightful as these earlier studies may be, some of them are based on – from a scholarly perspective – rather obvious observations about what happens in the music, an approach similar to that of a practicing musician rather than a researcher. My study seeks to fill a void in jazz research, as it aims to uncover how the improvisational concept called outside is constructed.

1.3 Material

As we are now in the Internet era, it seems likely to assume that questions regarding what outside is and how outside should be played are primarily raised in web forums dedicated to jazz improvisation and music theory rather than by sending a letter to a printed jazz magazine. Therefore, I have chosen to collect my empirical material on the web, in various online communities. As the term is commonly understood, an online community is almost any group of people who use Internet technologies to communicate with each other. For an in-depth discussion on the term, see Preece & Maloney-Krichmar (2005). The communities which I study can be seen as information systems where members can post, comment on discussions, give advice or collaborate, with jazz improvisation as a common interest. The members of these communities interact in forum threads, but based on references in comments, there also seem to be some connections between bloggers and blog readers. In these communities, categories such as age, gender, ethnicity or location are subordinate to the common interest in jazz improvisation. While such categories may influence the comments, the various categories are not in focus in the present study.

In addition to the explicit questions that are asked in forums and the answers given in subsequent threads, a plethora of bloggers and educational websites share their knowledge and their views on what outside is without any prior question. Mostly these opinions are in written form, but some lessons also include video clips. The statements, descriptions and discussions that I have

found in discussion threads (431 posts) emanate from 10 separate threads published on 6 forum platforms. There are 46 texts published in the form of blog posts and/or lessons (which often overlap), taken from 35 different blogs and websites. These 46 posts further include 63 comments and replies from both readers and authors. To account for the diversity of the origin of the statements on outside, I will refer to my research material collected on the web as online material or simply material.

Spelling and grammar errors are frequent in the online texts. When I have quoted the writers in the material, I have only corrected or added clarifications to the texts in such instances where the meaning of the statement might be unclear.

1.3.1 Ethnography on the Internet

One of the major advantages of Internet-based research on opinions and arguments is that subsequent debates and discussions are an integral part of the material. The researcher does not have to look for responses and comments elsewhere; these are found with the original statement. This leads to a coherent and democratic debate where all writers have equal access to and respond to the same texts. As it happens, the debates in web forums are far from coherent, but even though the writers often seem to have skipped or misunderstood previous posts in a forum thread, the writers nevertheless have the same opportunity to make balanced and coherent responses, because both the original post and the subsequent responses are located within the same forum thread.

The central material in my research consists of blog posts and discussions on various Internet-forums. Methodologically, this approach could be called internet-based ethnography. Although I have used an ethnographic approach on the internet to gather my empirical material, I do not wish to call my method netnography, as Kozinets (2011) and Berg (2015) describe the method. Observing as well as participating fieldwork within an online community is a necessary element in netnography, according to Kozinets (Kozinets 2011: 135). Similarly, Berg states that netnographic research should, if conducted seriously, contain interactivity. Furthermore, there should be a consistent frequency to the agents' communications (Berg 2015: 79-80). Netnography thus means learning and understanding the culture by participating in its activities in its internet-based context. Although I have collected data that is available on the Internet, I have not done any participant observation or interacted with members of the online communities I have studied. Instead, my material consists entirely of archived data that were written and published before my study began and to which I have not contributed, responded or otherwise elicited. Therefore, I consider myself more of an Internet archaeologist than a participating netnographer. A defining characteristic of archived data is that the data are located in the archives of the online culture at hand (Kozinets 2011: 147), in this case data in written form, saved in forums and on blogs. I am aware that an archeological standpoint is not unproblematic, not least from an ethical point of view. For example, how should the historical material be interpreted; is it

complete or edited? Would the persons who wrote the material consent to be a part of a study? Another concern is in the technological aspects, e.g. the algorithms that rule how a webpage is shown. A person's search history on Google or YouTube has an impact on future search results.

Web forums share characteristics with my experiences of conversations as a young musician, in that they facilitate peer-to-peer interaction, with the addition that they offer the possibility to anonymously ask the 'stupid questions' a physical meeting might not allow.

Indeed, on the Internet, it is very easy for anybody to ask a question, give somebody an answer or just share an opinion on a subject. Therefore, it is likely to assume that by using online statements as the material for my study, I will obtain a broad and diverse array of descriptions of features of outside. Were this study a pursuit of a once-and-for-all definition of outside, this procedure would maybe be irrelevant, but in relation to the aims of my research, I argue that my material can yield valid answers to my research questions.

I have not taken into consideration texts that give instructions for instance on 'how to play the blues' or 'good scales for a Dm7 chord'. Such subjects concern basic improvisation skills and are not within the scope of this study. While the basic levels of improvisation strongly affect how the more advanced levels are perceived, I have nevertheless limited my material to texts that specifically discuss outside improvisation and similar or related advanced concepts.

The timeframe for my empirical material is anything up to 2018. I have not used any starting date for what constitutes my material, since I am interested in everything that has been written online about outside, from as early on as possible. The earliest writing I have found about outside is a forum thread from 2009. I drew the line at 2018 simply because that was the time I started doing my analyses. There are no specific publications or posts that have influenced me to set 2018 as the limit; it is only a result of the timing of my research process. Based on my analyses of the material, the timeframe does not seem to affect the result, since there does not seem to be any change over time regarding how outside is constructed in the online writings. Also, the volume of the research material seems appropriate, as it is not likely that adding posts written after 2018 would have any impact on the results of the analysis.

For my study, I have to a large extent used the procedures that Kozinets (2011: 125, 147) suggests for internet-based ethnography. Following those, I browsed the Internet using Google as the search engine, using and combining many different search phrases ranging from explicit formulations such as 'how to play out' and 'what is outside playing' to more general formulations such as 'jazz improvisation' and 'advanced jazz theory concepts'. For any results that seemed even remotely related to my research questions, I saved them digitally and printed them out for evaluation and analysis. I also followed article suggestions and links to related subjects given on the various sites and evaluated their outside-related content and relevance for my study. I did not search directly on video sites such as YouTube for my material, because my focus was on written statements, not oral statements or statements expressed by body language.

However, when content of specific YouTube videos were linked to or referred to in the online texts, I used the videos in my analyses, as they were a part of the written text.

All the written material that I gathered is printed out on paper, while YouTube videos are downloaded and archived on a USB memory stick. The complete collection of material is archived at the Sibelius Museum archive in Turku, Finland.

1.3.2 Ethics

Any internet-mediated research faces issues of research ethics. Hewson, Vogel & Laurent (2016: 11) use the ethical guidelines of the British Psychological Society as a starting point in their discussions of and recommendations for internet-mediated research. According to the BPS, the only information that should be used as potential data in observational research without gaining consent is information sourced from “public situations”, where those involved would expect to be observed by strangers (BPS 2014). One can only assume that writers who publish themselves online (on open access blogs and educational sites) do so with the intent of being read by strangers, and likely do so using real names instead of aliases. In open discussion forum contexts, nicknames are almost exclusively used, but I argue that the intention to be read is likely to be the same. However, in internet-mediated research, there seem to be some ambiguity regarding public vs. private situations (Hewson, Vogel & Laurent 2016: 111). Given my interpretation of the forum discussions as public by nature, the fact that the identity of the participants is covered by their use of pseudonyms, and the non-sensitive character of the topics discussed, I have decided to treat open forums as public situations. To this extent, my research framework resembles that of jazz ethnologist Prouty’s (2012) study on online jazz communities, which is based on analyses of Wikipedia articles and message boards. However, as he does not discuss methodology in his book, I can only assume we have the same methodological point of view.

Following Kozinets (2011: 208) and Bruckman (2006: 229f), I have decided to treat aliases and pseudonyms unmasked, i.e. as if they were real names, in order to give due credit to thoughts and ideas that these authors put forth in the material. I find support for this choice in Berg (2015: 131), who proposes a contextual risk-evaluation for the online writers: the researcher must in each situation assess what kind of information is revealed. If the information revealed by an online writer is not seen as harmful, it should be considered ethically correct for the researcher to use the information without consent. However, arguments against this choice can be found in Hewson, Vogel & Laurent (2016:113ff), where confidentiality for the individuals in the study seem to be ranked above credit.

Furthermore, I have followed the guidelines proposed by the Association of Internet Researchers (Markham & Buchanan 2012) and based on what those guidelines suggest, I see minimal risks for the individuals behind the aliases,

were they to be exposed and confronted with their expressions on outside improvisation in jazz. I also see much research potential in an investigation of what the individuals have written about outside improvisation in jazz.
The search results I have used as material can be found in open forums that do not require any form of membership to access. There are no exclusivity or 'for members only' situations involved. There is, however, one case that forms an exception. When I collected my material, the site *jazzadvice.com* was completely open and free of charge, but after that research stage, during my analysis process, access was restricted. Some articles are now free, and some are for paying premium members only. The writers on *jazzadvice.com* are still the same: two young musicians who appear on the site with full names, biographies and by-line photos, which shows that anonymity and masked identities are not an issue in that case. I therefore argue that these texts can be considered public and that it therefore is not unethical to use them without informed consent as my research material.

I thus argue that, by following the suggested methodological procedures presented above, I have collected my material in an ethical manner. I am aware of the many complexities inherent in public/private domains online and in matters of anonymity, and I have at all stages been cautious regarding ethical aspects of collecting my material. In any situation of uncertainty, I claim that I have made informed decisions, after taking into consideration several different points of view.

1.3.3 Pedagogical material

As stated above, the primary analysis material of my study consists of online writings. However, influential views on outside improvisation are also presented by established pedagogues who publish themselves in books rather than online. In the research material that I have collected online, textbooks, theory books and harmony books are often referred to either as answers, as sources of knowledge or as starting points for new questions. These published works do not specifically teach a theory or a method for outside playing. Rather, they cover more general subjects such as pentatonic improvisation, modern licks or advanced improvisation. Furthermore, they do so from a practical and performance-oriented standpoint. In fact, the online writers in my research material often adopt formulations and descriptions from these printed works as they share their opinions about outside. The textbooks thus play an important role in shaping the opinions and statements about outside that constitutes my empirical material. In other words, they serve as an important historic framework and a context for the writings in this study, as they provide models for how jazz musicians come to understand harmonic processes in jazz improvisation, processes that lead to the question of how outside is played.

There are books that explicitly use the term outside (Liebman 2015 and Kemp n.d.). These are best described as etude books rather than textbooks or sources of academical-theoretical concepts. Likewise, there are a number of books with improvisation methods, etudes, technical studies and advanced improvisational

concepts for jazz instrumentalists that cover what is in the material described as key elements of outside, such as pentatonics, symmetric patterns and chromatic lines (Ricker 1976, Baker 1979, Waite 1987, Santisi 1993, Isacoff & Pulliam 1994, Bergonzi 1994, Steinel 1995, Ligon 1999, O'Gallagher 2013, Liebman 2013). If and when these books elaborate on the harmonic context connected to the melody lines, they give no names or terms to the concepts they present. However, these books are relevant to this study because some of them are mentioned and referred to in the material, but also because they can be useful for contextualizing on a more general level how jazz improvisers might have come to perceive 'wrong' notes as 'right' notes.

The research material mentions books but also transcriptions, solos, artists and recordings that are said to exemplify aspects of outside playing. I include these music examples in the analysis chapters in order to study what the online texts explain to be descriptive examples of outside playing. The music examples are extensions of what is written online, and I therefore consider the music examples part of my research material.

When specific solos are mentioned in the material, a YouTube link is almost always included, often with a marker in the video clip, pointing to the exact passage of the solo that the online writer refers to. When a writer refers to a specific artist but not a specific recording of that artist, I have chosen not to analyze any examples, with one exception. The writers in the material often refers to trumpeter Woody Shaw (Shaw is by far the most frequently mentioned example of a musician that plays outside) without referring to specific recordings or specific solos. Other writers refer to specific recordings of Woody Shaw, without pointing out specific features of the music (i.e. West 2013). In such cases, I have combined these statements with the earlier research on outside and Woody Shaw, presented in section 1.2 Earlier Research. The existing research on Shaw is extensive and varied and partly concerns the same recordings that are referred to in the material. Therefore, I have chosen to build upon the earlier research and use other scholars' examples and transcriptions for my analysis of the various aspects of outside. In doing so, I can combine old and new: evolving the existing research while still breaking new ground through my study of what the research material says about Woody Shaw and about outside.

1.3.4 Character of statements

Some writers in the material discuss outside using very precise and well-established terms from music theory, while others use metaphors or slang terms. This correlates with descriptions of how jazz musicians talk to each other (Monson 1997: 93), and with the results of studies by Berliner (1994) and Lemponen (2001). My experience is that jazz musicians with good practical skills often are very well trained in music theory as well. This is probably related to the fact that jazz improvisation more than many other kinds of music making is theory put to practice, on the spot – if a jazz musician does not know the harmonic structures of a tune, or how different notes correlate to different harmonic backgrounds, the musician will not be able to perform a solo in a way

that is considered ‘good’ in the jazz idiom. A jazz musician must also know chord functions, alterations and reharmonizations and to be able to play tunes in all keys. These demands on a performer and the duality of jazz as both theory and ear music is described by Berliner (1994: 63-94). That some writers in the material use very exact terminology, while others use slang, has more to do with personal linguistic preferences rather than the individual writer’s level of knowledge, as Monson (1997: 93) has noted.

Regardless of terminology and expressive means, I find that the statements in the material come from musicians who are familiar with principles of harmony and music theory (as the term is used in music schools). The questions asked and the answers given are formulated with concepts found in jazz pedagogy and textbooks on the harmonic structures of jazz. Other aspects of jazz improvisation, such as communication, swing or interaction, are rarely addressed in the material, and are in such cases subordinate to concerns regarding music theory. Furthermore, the writers do not discuss large-scale questions of improvisation, such as freedom, structure, communication or inventiveness, but delve into technicalities and very specific applications of music theory. It seems that outside lies within the domains of the educated musician rather than the common jazz fan or the general jazz scholar.

A noteworthy detail regarding the material is that most of the online lessons on subjects such as ‘basic outside playing’ are made by and intended for guitarists. The printed textbooks are in most cases written by saxophone players, while books on general harmony are written from a pianist’s perspective. It seems that brass players do not discuss outside as frequently as other instrumentalists do, while piano players seem to prefer to address topics on advanced harmony, or modifications of chord changes, rather than the creation of outside solo lines. This is probably related to the transposition-friendly fretboard design of the guitar, the possibilities for polyphony inherent in the piano, and the technical difficulties with playing a brass instrument compared to a saxophone. Furthermore, this tendency correlates with the instrumentation in the examples of outside solos found in the study by Dean-Lewis (2001).

Yet another interesting aspect in the material is that many online lessons give instructions for playing outside over only one chord, instead of playing outside over multi-chord progressions. It seems that the online instructors go for an approach based on the easiest way to show them when they explain strategies for playing outside (e.g. Zucker 2010). For the most part, questions in forums about outside do not actually address modal playing or how to play outside over only one chord, but how to play outside over standard progressions such as the iim7-V7-I. This shows that questions and answers do not always meet, which is an important aspect of how outside improvisation is described and defined in the material.

At times, my research material and the academic works, as well as the pedagogical books, are not easily separated. Some bloggers are active in forums, and at least one researcher has a blog. The categorizations seem to bleed into

each other, making it a complex task to define what texts belong to what category. In my analyses, I aim to separate the types of texts, so that the location of a statement does not interfere with other statements of the same author.

A final remark on the material is that the forum threads evolve rather fast: often the majority of replies are made within 48 hours of the original post. There seems to be a core of forum members who are active in the threads on outside, as well as a distinction between those who strictly discuss the original post and those who seem to easily stray away from the question in the original post. Lastly, there is the perhaps unavoidable segment of forum posters who make humorous comments and puns about how to go out of the house and play outside.

1.4 Methods

To answer my research questions, I have used different methods. Since my point of departure has been to study how outside is constructed in online writings, I started by collecting the empirical material using internet-based ethnography. I then analyzed this material as discourses, in order to show how the texts not only reflect existing musical structures, but also create the idea of outside and the improvisational practice of playing outside. To deepen the analyses, I have also transcribed and analyzed the solos that are mentioned in the online texts as examples of outside. As I have studied the discourses of outside playing and the solo examples, I have used music analysis as a general framework, especially regarding more detailed descriptions of harmonic aspects of outside playing.

1.4.1 Discourse analysis

Discourse analysis is not a single method, but can be seen as several analytical approaches that overlap and intertwine (see e.g. Potter 1996, Winther Jørgensen & Philips 2000, Granholm 2004 and Svensson 2019). A common ground for the approaches that go under the umbrella-term discourse analysis is that they aim to describe how cultural meanings are socially constructed, while acknowledging the role of interpretation of the researcher. Discourses, or meaning systems, affect social reality by constructing knowledge, ideas and ideologies.

A quick overview of how outside is discussed shows that no unified, common definition exists. Still the concept is used both in explanations of how jazz musicians have played and how jazz musicians should play. I have chosen to analyze how outside is constructed in these discussions. In other words, the discussions about outside are part of socially constructing the phenomenon. I consider outside as a concept that shapes the musicians' understanding of the music and as a consequence, how they play the music. As ethnomusicologist Merriam puts it: without an understanding of concept there is no real understanding of music (Merriam 1964: 84). My study on outside concerns what both music analyst Rosen (Cook 1987: 13) and Merriam are pointing at: the conceptual musical thinking behind the sounding music, and the ways it relates

to the practice of the performers. To study and understand these processes, I use discourse analysis.

One core element in discourse analysis is that language is action, not an abstract system. In using language in relations and actions, humans construct cultural phenomena such as norms, rules and routines, in short what we call society. This leads to a view on the world in which cultural phenomena are constructed; they do not carry any essentiality by an order given by natural law, as is the case with such phenomena as dogs, gravitation or viruses. This relates to ethnomusicologist Merriam's view on music: "music is a human phenomenon produced by people for people and existing and functioning in a social situation" (Merriam 1964: 187), and to Gabbard's view on jazz music: "Jazz is a construct. Nothing can be called jazz simply because of its 'nature'" (Gabbard 2002: 1).

Social, cultural and conceptual meanings are constructed and recreated whenever language is used. Furthermore, this perspective opens up for paradigm-shifts: unlike phenomena such as gravitation, social, cultural and conceptual changes are possible. Another core element in discourse analysis is that our knowledge and our experiences of the world are language-based and social constructs that set boundaries for what we can see, experience and feel: "discourse analysis is to study discourses and social constructs, [which means to] contemplate what is said, how it is said, and how it else way could be said" (Svensson 2019: 22). The use of certain words on one conceptual level can tell something about another level. Discourse analysis uses language to reveal things about the society that are on higher levels, or further away from the discourse. A discourse could be explained as a context where language is put to use, such as discussions and opinions about minorities' rights or CO_2 emissions.

Discourses are situational and contextual, so understanding the context in which they occur is central in discourse analysis. However, the researcher must also be prepared to study an idea or a concept as something that has appeared more or less out of thin air, disregarding the traditions and evolutions that have led to the present concept. This means that the researcher acknowledges that cultural concepts are not essential, but culturally constructed, and that the researcher's own point of view is biased by his or her own culturally constructed concepts. Furthermore, the focus of discourse analysis is not to account for all the facts of the text, but to make an informed interpretation, guided by the research questions and the theoretical-methodological angle. Thus, discourses exist not only in the data, but also in the researcher's interpretation.

The practical aspects of discourse analysis depend on the research situation. A given set of instructions for doing discourse analysis does not exist, just like when riding a bicycle (Potter & Wetherell 1987: 168f), so "the best way to become familiar with, and successful at, discourse analysis is to throw yourself into the data and practice" (Goodman 2017: 144). This rather playful approach can open up for new perspectives to often-familiar terminology, genealogy and history. Svensson (2019) suggests that the analyst ask questions like 'What is going on here?' for each line or statement in the empirical material. Other questions could be 'How is this phenomenon described?' or 'How is this

phenomenon achieved?'. Nevertheless, Svensson points out that analysis is a skill that demands both systematics and creativity (Svensson 2019: 24).

I use discourse analysis as a general approach when I study the material rather than as a specific research method. This approach towards the concept outside will help the identification of many aspects and practices of the concept and show how it can have relevance for concrete practices. When the concept is constructed in some particular way in the online material, this construct then has concrete consequences for how the people who read and participate in the online discussions improvise.

Discourse analysis will furthermore affect the rest of this study, as it raises questions regarding the musical content of outside that music analysis will have to answer.

1.4.2 Transcription

In this study, I have transcribed solos that are mentioned in the material. The writers in the material sometimes publish transcribed solo segments along with their statements about outside, and in those instances, I have used their transcriptions as a basis for my own transcription of the segment.

Transcription in jazz is often presented by pedagogues as both a skill and a necessary task, not unlike the ability to play scales fluently or to play solo lines with swing and gusto. Perhaps as a consequence relation to such a view, musicians often analyze their transcriptions for the purpose of learning new tunes and approaches to performance, improve their playing ability, and extend their vocabulary of licks and phrases (Berliner 1996: 121). In fact, transcribing jazz solos has always been an established element of learning jazz improvisation (Aebersold 2000, Coker 1980: 7, Berliner 1994: 507-511). Scholars have also used similar approaches, analyzing solos for the purpose of describing the improvisational techniques and styles of leading musicians. These include Morgan (2000) and McEvoy (2014) on Herbie Hancock, Sagee (2003) on Miles Davis, and Al-Zand (2005) on Julian 'Cannonball' Adderley. This means that the transcriptions in the material, in the work of scholars, as well as in my transcriptions for this study, share a common starting point, although the purposes of the individual transcriptions may differ.

Conventional analytical practice requires recordings for the analysis of jazz improvisation: they enable repeated listening, which favors the kind of in-depth exploration that characterizes analysis; they guarantee the potential for intersubjective testing of analytical insights; and their textualization through transcription facilitates the application of common analytical tools (Butterfield 2002). As Winkler has pointed out, the English language can express the absorption of music in two ways: to read music and to listen to music (Winkler 1997: 171). In Western art music, the score exists before a sounding performance of the piece, as "a 'script' for musicians' interaction" (Schuiling 2019: 439), whereas in a highly improvised type of music such as jazz, a score

must be written down after the performance, like a dictation. Problems that arise with this approach are described by Seeger (1958) and Winkler (1997). Obviously, the musicians who originally improvised the solos rarely make the transcriptions, so the task of transcribing a solo, or portion of a solo, involves making certain interpretive and analytical choices. Immediately, several challenges and concerns arise: what should be transcribed and to what degree of detail? Should the transcription be presented in Western notation, or would other graphic representations be more efficient? How can the transcription be controlled and verified?

Winkler avoids such difficulties by suggesting that transcription should be seen as an art form in itself, analogous with the work of a translator (Winkler 1997:200). Hereby, we can acknowledge that transcription is not objective, neutral or detached neither from the researcher nor the object of study, but that it still possesses a value and relevance in music research. Stanyek points out that by comparing transcriptions by different transcribers, one can learn both from the transcriptions and from the transcribed music (Stanyek 2014: 122). In other words, transcriptions are never simply unbiased visualizations of an auditive material (for additional discussions on transcription, see Koskimäki 2006 and Klapuri 2006).

Despite its importance, the writers in the online material I analyze do not problematize transcription as a method. Transcription seems to be a skill that is not necessary to explain or discuss, instead it seems to be something that 'you just do'. This perspective is also present in many scholarly texts on jazz. Perhaps this is because of the traditions of education in jazz, as well as the jazz research tradition. In jazz music, Western staff notation has always been used to communicate music in written form via lead sheets and the instrumental parts of big bands. In jazz magazines such as *Downbeat*, transcriptions of jazz solos have been included, and the notation has followed the standard of big band parts. This means that swing phrasing is written as even eighth notes, and that a set of symbols for inflections have been standardized. These features can be found in early transcription books such as *Louis Armstrong's 50 hot choruses for the cornet* from 1927 (Armstrong 1951[1927]) and in early textbooks (Coker 1987 [1964]). The notation standard has then been further established in textbooks and transcription books (e.g. Armstrong (1975 [1961]), Slone (1977 & 1980), Aebersold (1978) Sickler (1978) and Niehaus (1979)). In a jazz research context, the notation standard was set by an article on Sonny Rollins thematic improvisation (Schuller 1958), and further established in a PhD dissertation on Charlie Parker solos (Owens 1974). A central element in these transcription books is that the reader, be it an instrumentalist or a researcher, must listen to the recordings along with reading the transcribed music. This requirement is written out in the foreword to all the books, and the claim is unanimous: "It is through listening *and* analytics that music is grasped in its full dimensions" (Friedman 2014).

Jazz practice and jazz research goes hand in hand in their approaches to notation, probably because many of the researchers - myself included - are trained jazz musicians, who have always transcribed improvised jazz solos for educational purposes. Thus, to write down solos in notated form is a tool to remember the solos and a prerequisite to analyze them. It seems reasonable that jazz practitioners and jazz researchers also share the view that a transcription is only a shorthand used for communication and as a memory aid, and that sounding music is needed to complete the understanding. Nevertheless, when making transcriptions of jazz performances, the transcriber is faced with a number of decisions, such as which passages contain 'mistakes', how precise the notation of durations should be, if/where should one notate a change of meter, to which 'voice' does a certain note belong or which notes are 'ornaments'? Because the transcriptions reflect these decisions, they may be considered, to some extent, "analyses of the performances" (Larson 2009: 2), in that the transcriber's spelling of pitches can assign function to those pitches or can imply tonal centers. Similarly, Berliner (1994) discusses methods, strategies and problems in jazz transcription (as does Winkler (1997)). Many of the problems Berliner faces are connected to sounding and rhythmic aspects of transcription, such as timbral shifts or rhythmic modulations, or the spelling of complex harmonies (Berliner 1994: 507-511).

For the purpose of this study, however, many of the pitfalls that a transcriber has to tackle can be avoided, because of the relatively simple requirements of a transcription in this study. With this, I mean that the purpose of this study calls for a transcription that includes only pitches and approximate durations. There is no need to measure more than what can be written down using a notation standard based in the jazz big band tradition and found for example in commercial transcription books or in free online transcription pages. In this notation standard, inflections are marked with a standardized set of symbols and variations in timbre, timing or expressiveness are described with words. I argue that transcriptions that follow such a standard are sufficient as a material for music analysis in this study.

To ensure that the transcriptions in this study are correct, I have listened to the transcribed phrase, read the notated music and also played along with the recording, following the notations. In cases where transcriptions are included in the online research material, I have compared these transcriptions with my own transcriptions, to avoid mistakes made by someone else. When possible, commercially available transcriptions have also been used as a reference. If there have been any discrepancies between the transcriptions and/or the sound recordings, these are accounted for in the analysis.

1.4.3 Music analysis

Most of the writers who explain outside use concepts and terms from music theory, together with rules concerning the harmonic structures of music, to describe the concept.

In the research material, as well as in jazz studies, studies on harmony are often labelled *jazz theory*, or *jazz music theory*. The term music theory is used without reflections over what the concept involves. In jazz, music theory or jazz theory are often seen as synonymous to what is taught to jazz instrumentalists and jazz singers in harmony and music theory classes at music schools, in other words "how jazz *works* as music" (Martin 1996b: 4). For example, the special issue of *Annual Review of Jazz studies 8* (1996) has the subtitle "Jazz Theory: An Overview", and is devoted entirely to subjects that fall into the realms of jazz music theory taught at music schools. Other articles with a similar type of jazz theory are found in publications such as *Journal of Music Theory* (Al-Zand (2005)) or *Music Theory Spectrum* (Larson (1998)). This shows that, from a jazz perspective, music theory is an established term for studying and explaining concepts about rules, principles and norms for harmonic structures. From an ethnomusicological or musicological perspective, this might seem a much too casual approach to the term 'music theory'. After all, conservatory music theory is an outgrowth of Western art music and is not suitable for describing or analyzing all sorts of music, as every musical culture has its own theoretical framework. As far as this study is concerned, I argue that an understanding of harmony as something that is in accordance with what is taught in jazz music theory classes in music schools, will suffice in order to understand the research material and the analyses in this study.

According to jazz theorist Henry Martin's overview on jazz music theory (Martin 1996b:2ff), jazz music theory can be subdivided into pedagogical, analytical and speculative music theory. Pedagogical theory could also be called normative, as it gives answers to what notes are wrong and what notes are right. The aspiring musician learns a norm for (good) jazz, harmonically and theoretically speaking. Early jazz theory was mainly pedagogical, consisting mostly of transcriptions that showed the student how to play a jazz solo over lead sheet: a descriptive, musician-based theory.

Speculative music theory can be seen as a higher level of pedagogical music theory, as it suggests new methods and more advanced approaches for musicians, opening up new wells of creativity for improvisation or composition. Jazz composer George Russell's *The Lydian Chromatic Concept of Tonal Organization* (1953) is often considered the first work of speculative jazz theory.

Analytical jazz theory has a listener's perspective and asks specific questions and problematizes specific aspects of jazz music. Analytical jazz theory is studied as an end in itself, not as a guide for improvisation or composition. The focus of analytical theory lies beyond the conscious intention of musicians. The aim is to reveal 'what is heard' by showing elements of structure, general stylistic trends, or connections to other pieces by the same or stylistically similar artists. It is jazz writing with the sole purpose of showing structural depth (Martin 1996b: 2ff).

In the online material analyzed in this study, all three types of jazz theory are represented. Examples of pedagogical and speculative music theory are mostly found in forum posts and discussions, while examples of analytical music theory are mostly found in blog posts and in lessons. These statements regard rules for harmonic structure in performed solo lines over a chordal accompaniment and are often presented together with and in relation to music examples.

A central part of the material, as well as in jazz analysis, is how to explain harmonies and present them in written form. The most common method is to use Roman numerals.

To label and analyze harmonic progressions using Roman numerals has been used in academic works throughout the history of jazz research (see e.g. Mehegan 1959; Owens 1974; Martin 1996a). Jazz pedagogy has also been using the Roman numeral system throughout its history, as can be seen in the works of Coker (1987 [1964]), Baker (1969) and Aebersold (1992 [1967]). There are variations in nomenclature, where for example a minor chord on the second degree could be written either as *ii* or as *IIm*, but the underlying principle remains the same: a harmony is seen as a chord built upon a scale degree. Cook gives several probable reasons for the frequent use of Roman numerals (Cook 2012: 11ff). They facilitate transposition, which is common in jazz (especially in vocal jazz), they indicate chord relationships and functions, and from a performer's point of view, they are visually easy and fast to read, making them suitable both for preparing and performing an improvisation and for analyzing a performance afterwards.

According to Henriksson (1998: 210) functional theory offers more to the researcher than the Roman Numeral system or the Schenkerian method, but since the ii-V-I progression is central in jazz music/ jazz theory, and since it represents the way musicians think and are taught music theory, it makes ii-V-I a necessary supplement to functional theory. Henriksson's contribution to this methodology is to use chord note numbers in combination with functional theory and Roman Numerals to show what kind of voice leading the player uses to resolve one chord to another. By numbering the individual notes in a solo line with the degree the note holds in relation to the chord that is being played at the moment, this method reveals, on a note-for-note level, how the improviser approaches chord changes and negotiates different chord qualities. Both Cook (2012: 13) and Titus (2010: 58) discuss similar ideas of combining analytical strategies.

One of the central elements of tonal jazz is a voice leading model that is based on a preference for stepwise motion in the upper voices, and descending fifth-related root motion, usually in the bass. Dissonant tones in the melody or solo line carry with them the implication of resolution, though this can be accomplished or diverted in several different ways. When voice leading is explicitly addressed in jazz pedagogy, it is usually presented as a set of rules governing so-called guide tones. These pitches are analogous to what Common Practice Theory calls "tendency tones": notes that carry with them the implication of stepwise resolution (Titus 2010: 58). In the study of jazz harmony

as a part of the music theory research field, there seems to have been a slight dominance of Schenkerian theory in the last 25 years (McClimon 2016: 8-9), exemplified in works by Martin (1988), Larson (1998), Larson (2009), McFarland (2012) or Pellegrin (2016). What is fundamental to the Schenkerian approach is the relatively equal balance of harmony and voice leading, whereas for jazz musicians, this balance is heavily weighted toward the harmonic, with a strong focus on chords: "most jazz musicians conceive of the melody in terms of harmony" (Henriksson 1998: 209). However, within the outside discourse, voice leading seems to be of greater importance than within jazz improvisation in general.

In opposition to these theory-heavy methods of analyzing music, the interviewed musicians in Reinholdsson's dissertation use note names or interval names, not functions, when describing the music (e.g. "G scale to E scale to C# scale"), while Reinholdsson himself uses Roman numerals (Reinholdsson 1998: 345). The contradiction may in this case be explained by the fact that the interviewees are older amateur musicians without much formal education. Nevertheless, it shows that several traditions exist simultaneously, among musicians and analysts alike.

The statements that form the research material for this study mostly use the Roman numeral system. I assume the reason is that they follow the pedagogical tradition in jazz, in which Roman numerals are used. However, some functional terms are used as well, such as *dominant, tonic, third,* and *passing note*. To meet this circumstance, and to account for all aspects of harmonic relationships and voice leading, I will adopt Henriksson's (1998) methodology in my analysis, using Roman numerals in combination with both functional theory terms and note numbering.

1.5 The disposition of the study

So far, I have introduced the topic, the aims and the research question for this study. I have also accounted for relevant earlier research on outside and related topics, as well as the methods and the material I use in this study.

In chapter 2, I discuss the key concepts in this study. These concepts are essential for identifying features in the research material and for understanding the context for the outside discourse. These concepts could be described as the threads of which the outside fabric is woven. In the research material, some elements and concepts exist on a very visible level, such as *chords* and *changes*, while other concepts are more of an undercurrent in the material, such as *education* and *dichotomies*. By discussing what these concepts consist of and how they relate to what the writers in the research material say about outside, I hope to have addressed the central elements in the discourses connected to outside that are the prerequisites for my analysis.

The material seems to describe outside through three main categories. Based on their content, I label these categories *intention*, *clashing* and *resolving*. These categories are presented and discussed by the writers in the material as

necessary elements in outside playing, and the categories are studied in separate chapters, one analysis-chapter per category.

In chapter 3, I address intention, i.e. the importance of a plan or a premeditated approach when playing outside. Intention is thus to be understood as an opposite to free playing or random note selection. In this chapter, I show how the material describes and discusses performative and knowledge-based characteristics of outside playing. Two recurring themes in the material concern playing outside purposely and performing the outside segments with confidence, both of which are discussed in chapter 3.

In chapter 4, I cover harmonic-melodic relationships, which constitute the category clashing/clouding. A central theme in the material is the need for harmonic collisions and dissonances in outside playing. A dissonance can of course be conceived in various ways, and in this chapter, I account for the perspectives on dissonance and harmony that stand forth in the material.

The last analyses are found in chapter 5, where I address how outside is resolved. Resolving here means returning to inside after an outside passage. This chapter takes into consideration the migration process of a solo line from inside to outside and back again to inside.

Each of the three analysis chapters include analyses of the statements found in the material together with analyses of music examples.

The study ends with a chapter that contains a conclusion and a discussion about the results of this study. I account for what has been gained and what is still not fully studied. I also propose possible ways to proceed research regarding the outside concept.

2 Key concepts and themes

In this chapter, I guide the reader towards a deeper understanding of some of the discourses that jazz improvisers are involved in. Because of the many facets of jazz music, or as Beard & Gloag explains (2005: 96) “jazz may be best understood as a context rather than a concept, but it is a context that reflects the operations of a number of related concepts, some of which are specific to jazz, others absorbed from other contexts”. The concepts and themes in this chapter constitute the framework for the statements in the research material and for the outside discourse as a whole. They are both EMIC and ETIC-terms: both research concepts, musician-based terms and themes found in the material. My analyses of the material, both of discourse and music, are conducted in the light of my understanding of these concepts. A comprehension of them is thus crucial for approaching the outside discourse and for how my analysis of the material relates to the research question.

2.1 Harmony

According to jazz music theorist Cook (2012), one of the important tasks of any kind of music theory is to describe the basic elements involved and to explain the

principles by which these elements are connected to other elements. There is no controversy among jazz musicians and theorists about the basic elements in jazz: they are scales and chords (Cook 2012: 10ff; Titus 2010: 94ff). However, this assessment leaves out several elements that could be called basic or even central in jazz music, such as swing phrasing, groove or sound/timbre. Obviously, a music theorist will focus on the elements closest to his or her own field, but one should keep in mind that scales and chords are not the only basic elements of jazz music, and that the research material in this study might also refer to other elements as basic elements of jazz music.

That being said, harmony is indeed one of the oldest and most debated topics in music theory. Harmony is often understood as an opposite to counterpoint; counterpoint concerns individual melodic – horizontal – voices, while harmony concerns voices that are grouped together vertically. In other traditions (such as the Schenkerian), harmony is understood to be an outgrowth of counterpoint: vertical sonorities appear as an effect of horizontal processes.

Jazz music theorist McClimon (2016: 2f) points out that in jazz and classical music, the study of harmony is often divided into sub-genres: "tonal harmony" is treated differently than "chromatic harmony" in both theoretical research and pedagogy. The present study concerns both sub-genres, as the statements in the material suggest that outside includes features of both types of harmony.

Jazz researcher Henriksson claims that "most jazz musicians conceive of the melody in terms of harmony" (Henriksson 1998: 209), and indeed, harmony in jazz music seems to be an equivalent to chords and scales. My use of the terms scale and chord are the same as in the material analyzed and follow these rather standard definitions: a scale is a collection of tones (in some theoretical contexts called pitch classes), consisting of a tonic (in some theoretical contexts called a referential scale degree) to which the other notes may refer in some way.

A chord is an ordering of some of the notes of a scale, so that one note (often the root) is heard as the lowest and the other notes are then ordered above it. Chords are mostly conceived as tertian, meaning that the notes in a chord may be arranged as a series of thirds from the root.

An important thing to consider regarding chords as basic harmonic elements is how they are ordered and how they interact with other chords in progressions and sequences. Intra-chordal relationships contribute to structure and musical continuity. In pre-1960s jazz, most chord successions in jazz tunes could be described as functional within a major or minor diatonic key: they tended to be ordered so that their series of roots descended by fifths, such as in the common practice harmonic progression ii7 → V7 → I. This approach assigns a specific harmonic function – tonic, dominant, or subdominant – to each chord. The function of a chord determines how that chord moves in relation to the key. This functional model still dominates jazz pedagogy, as found in both textbooks and in online writings. Thus, when jazz musicians discuss harmony and music theory, they do it with this model as the frame of understanding.

Some jazz styles that emerged in the late 1950s and the 1960s began to suppress or ignore harmonic function. Many jazz compositions during this

period featured harmonic sequences that moved in ways not necessarily governed by chord function. In such compositions, the root relationships between adjacent chords are typically not fifths, and successive chords may belong to different diatonic sets. Such chord progressions are in this study referred to as non-functional. A common version of a non-functional sequence is characterized by a single harmonic object – often a minor seventh chord – transposed across a melody line. Other compositions from this period did not utilize harmonic relationships at all, so that the harmony was static instead of progressing. Although it is a term which is in fact more detailed and multifaceted than the previous description, I refer to such harmonically static compositions (or parts thereof) as modal, since it is well established by scholars as well as musicians.

Early in my research process, I noticed that questions in the material mainly regarded improvising over functional harmony, i.e. ii7-V7-I progressions, whereas many of the answers regarded improvisations over one single chord. The chord being used in such cases is most often a minor seventh chord, connected to a Dorian scale, which gives a modal approach to playing outside. This conceptual connection between scales and chords is central in the outside discourse as is discussed in the following section.

2.2 Chord/scale theory

Chord/scale theory (sometimes called the chord/scale concept or the chord/scale system) is the foundation upon which the writers in my research material formulate themselves. The concept is the basis for jazz pedagogy and thus shapes both the terminology and the notions of what jazz improvisation is.

The knowledge of which scales to use with which chords is central or even essential in jazz improvisation (Smith 2008: 76). Before the conceptualization of chord/scale theory as it is currently understood, jazz musicians tended to use the melody of the tune that they were performing as the base for their solos, as well as the specific chord tones of the harmony that they were improvising over (Martin & Waters 2006: 64, see also Berliner 1994: 159-163). With the addition of extensions (the seventh, the ninth, eleventh, and thirteenth) to a chord, performers had a complete diatonic collection at their disposal. As jazz musicians realized, a reordering of these chord tones produces a stepwise scale. The basic premise of chord/scale theory is thus that "the current chord in a harmonic sequence suggests a particular scale from which the notes to be improvised should be drawn" (Johnson-Laird 2002: 436). However, in jazz, the conceptualization of a scale was different from how the concept is usually understood in Western art music. Jazz theorists made a distinction between the concept of a 'scale' that, in a classical sense, refers to a stepwise collection of notes or pitch classes that corresponds to or expresses a key; and the concept of a 'chord scale', which is a stepwise collection of notes or pitch classes that melodically expresses a chord, without explicit reference to a particular key. Early incorporation of chromaticism into improvised melodies was a result of using standard chromatic chords, such as secondary dominants. In cases such as

these, an improvised line would retain the chord scale of the chord being tonicized, but temporarily modify some of its notes in order to accommodate the applied chord.

Following this, a chord scale was understood as an arpeggiated seventh chord filled in with passing tones. Filling in empty spaces between chord tones, resulting in scales, is proposed by jazz pedagogues such as Baker (1969: 53) among others and is now an established method for beginning jazz improvisers. One of the benefits with the chord scale system is that the melodic lines that are created are consistent with the given harmonic context (Pease & Pullig 2001: 41). This is a more complete method compared to approaches that utilizes parent keys with temporary chromatic additions, described by Bendigkeit (1987: 30). A more advanced version of the chord/scale concept is found in Pease & Pullig (2001: 41-61 & 2003: 15-24), where a new scale (and a subsequent chord) can be constructed from any note degree of any scale, not just the major scale.

Chord/scale theory cannot be discussed without mentioning George Russell and his landmark book *The Lydian Chromatic Concept of Tonal Organization*, first published in 1953, with revised 4th edition published in 2001 (Russell 2001). Russell himself describes an alternate approach to improvising, *horizontal polymodality*. In horizontal polymodality, Russell adds two more 'horizontal' scales to his collection: the major (Ionian) scale and the blues scale (Russell 2001: 35). These scales can be used in cases where two or more chords suggest a particular tonic. For example, in a 12-bar blues in the key of A, a single A blues scale can be used to improvise over all twelve measures. Russell's choice to use horizontal polymodality is based on three factors: the resolving tendency of two or more chords (functional chord progressions), the key of the music and aesthetic judgment (Cook 2012: 49).

Furthermore, in 1959 jazz pedagogue John Mehegan published the first of four pedagogical volumes titled *Jazz improvisation*, codifying what is now standard in jazz theory: designated seventh chords as normative, the use of Roman numerals to simplify description of function, the five seventh-chord qualities, the seven diatonic modes and the relating of chord type to various scales and modes in ways that still underlie much jazz theory (Martin 1996b: 8).

The realization that rearranging stacked thirds resulted in a scale led to what is now a central element of chord/scale theory: any chord can be expressed linearly by a corresponding scale, and any scale can be manifested vertically as a chord. In the research material, chords and scales are often described as two sides of the same coin: a chord is a vertical representation of a scale, and a scale is a horizontal representation of a chord. Thus, the chord symbol Dm7 implies a D Dorian scale rather than just the notes D–F–A–C. Because any of the notes of the D Dorian scale will sound relatively consonant over a Dm7 chord, the chord symbol functions as a shorthand for a particular way of playing for a jazz improviser. Textbooks, such as Bendigkeit (1987: 14f), describe the same principle, The pedagogical tool *The scale syllabus,* first presented by Aebersold in 1967, with a revised 6th edition in 1992 (Aebersold 1992), lists all the common chords in mainstream jazz and connects them with a scale, including available

options and alternative scales for some of the chords. The syllabus states that a C minor seven chord is associated with a C Dorian scale, or that a G dominant seven chord is associated with either a G Mixolydian, a G whole-tone, a G symmetrical diminished or a G altered scale. From an educational point of view, the scale syllabus and the chord/scale concept are rather similar in that they present the first basic choices for a beginning improviser.

A large number of post-bop tunes feature non-diatonic chord successions that seem to lack harmonic continuity, such as modal tunes. These tunes often encourage a chord/scale approach to realizing and improvising on them, in effect asking the player to concentrate on what notes to play on each chord rather than on continuities across multiple chord changes. Analyses of such chord progressions often focus simply on identifying a scale for each chord, not on keys or harmonic progression (Cook 2012: 79). Chord/scale theory only considers tones outside the local scalar collection to be dissonances. Because of this, the analytical value of chord-scale theory has been questioned: foreground harmonies are always assumed to be "tall chords" comprised of stacked thirds, and therefore any scale tone that belongs to that harmony's chord-scale can be seen as a chord member, and thus as a consonance, which may seriously impede its ability to describe voice leading, and consequently harmonic progressions, in a meaningful way (Titus 2010: 95f).

More recent variants of chord-scale theory have made attempts to correct this oversight, via a concept called avoid notes (Graf & Nettles 1997: 17). This concept is a distinction between tones in the scale that can function as members of harmonies and tones that are melodically available but harmonically unstable. These pitches are referred to as *avoid notes*. I also have personal experience of pedagogues that preferred using the term "handle with care" notes. This concept eliminates the possibility of harmonic constructions where the function of a pitch in a chord contradicts another pitch and also opens up for the use of voice leading. However, the avoid note concept is also criticized for removing identifying features of a tonal collection, since scales do not define the features of the chords with which they interact (Stover 2014: 190).

Here it must be noted that Aebersold's pedagogical tool, the scale syllabus, steers clear of such objections from music theorists, by presenting several scale options for each chord (see e.g. Aebersold 1992). A practical approach is also adapted by Smith, who suggests that chord scale theory is most properly used as a planning tool to help the musician map out a sequence of scales to be used as material for improvisation, which should be done before an actual performance rather than "on the fly" during a solo (Smith 2008: 73). An online lesson in the material takes an even simpler approach to scales and improvisation: here, "one only needs to know five different scales as a help for improvising" (van Hemert 1998).

Critiques against the chord/scale improvisation method have been raised, claiming that students of this system come to sound very much alike. Educator Steinel has pointed out that "scales and modes are just the 'alphabet' of jazz, not the 'vocabulary'" (Steinel 2015). I have taken part in informal conversations

where it has been suggested that students need to abandon chord/scale thinking, so that instead of thinking "Dorian to Mixolydian" for every ii-V in a tune, one should think along the lines of broader tonal areas (including gravitating towards them or pulling away from them). Following this argument, which concerns chord-scale compatibility, the goal for a musician seems to be to move beyond changing one's scale-orientation every time a chord changes towards thinking of ii-V-I as a single unit that typically suggests a single scale for a long passage of chords (Smith 2008: 73).

Online writers also point out shortcomings with the chord-scale system, accusing it of promoting "shortcut" thinking rather than a deep understanding of chords, progressions, and chord tones, allowing a musician to not understand chords mentally and aurally, putting a mental divide between linear and vertical thinking and suggesting that jazz improvisation is merely mixing up notes of a scale (Wernick 2017). Scholars such as Prouty have questioned the chord/scale system, saying that the jazz world has been "glutted with young musicians with no real professional experience, and who perform in very codified, standardized ways" (Prouty 2012: 46). Solutions to such problems have been suggested, among others by Salley (2007: 101).

2.3 Improvisation

In this study, I refer to improvisation as the process in which a jazz soloist creates melodic lines over a harmonic background within a performative situation. This definition excludes many aspects of improvisation but reflects how improvisation is generally understood in jazz studies. This view on improvisation is also congruent with how the writers in the material discuss improvisation.

Improvisation is often said to be a central element in jazz music. This notion is seldom questioned, and for the most part it seems to be held as a truth. However, many improvisatory aspects of jazz performance are not as extemporaneous as one might think, as revealed for example by Berliner (1994). Knowledge of jazz tradition, harmony and instrumental skills, has a deep impact on the course of a musician's improvisation, functioning as constraints and prescriptions. As music philosopher DeMarco (2012) points out in his PhD dissertation, for a musician, there are several such constraints, and they appear on different levels. Since music is a subset of sound, the constraints will involve the production of sound and its properties, such as pitch, timbre, duration, rhythm and volume. According to DeMarco, properties of music which supervene on those of sound are harmony, melody, counterpoint, phrase, theme, large-scale structural/organisational properties (such as AABA forms), expressive properties, dynamics, time signature, beat, key and mode (DeMarco 2012: 188). In jazz improvisation, players negotiate these constraints by "navigating the boundary between inside and outside, between what the laws of Western harmony and the traditions of African-American music allow and something other", to use the wording of Schwartz (1996).

In *The New Grove Dictionary of Jazz*, Kernfeld (2002) lists different types of improvisation.

Paraphrase improvisation, which was frequent before the Swing era, is a musician referring closely to the original melody of a piece, ornamenting, varying or reworking it.

Typical of bebop (and post-bop styles) is *chorus phrase improvisation*, where soloists improvise without much reference to a tune's theme, instead inventing new lines that fit the harmonies of the original composition. Often, this strategy relies on a vocabulary of formulas, patterns or 'licks' which are woven into ever-changing melodic lines, or *formulaic improvisation*. The usage of repeated patterns during improvisation has become one of the main issues in both jazz pedagogy (see e.g. Coker, Casale, Campbell & Greene 1970 and Steinel 1995) and the scholarly study of jazz improvisation (see e.g. Owens 1974, Berliner 1994 and Poutianen 1999). Patterns and formulas seem to be essential building blocks in the outside discourse and will be discussed and analyzed in chapter 3.6.

Often found in modal jazz, avant-garde jazz and fusion jazz, where harmonic progressions are slow or even static, *motivic improvisation* means that the improviser varies one or several motifs, using strategies such as ornamentation, transposition, rhythmic displacement, expansion, compression etc. The motifs can be taken from the theme of a piece but are often drawn from the ongoing stream of improvisational ideas. This type of improvisation often flourished within modal jazz, avant-garde jazz and fusion music, since in those styles the musician is for the most part free from rapidly changing chords. Studies that discuss motivic improvisation include Dean-Lewis (2001) and Morgan (2000).

In addition to Kernfeld's systematization of improvisational approaches, Pfleiderer (2017) highlights further dimensions and creative principles to be investigated within research on improvised jazz music. These include the tonal and harmonic implications of improvised melodic lines, as well as their relation to the original melody and the chords they are based on, but also the rhythmic features of the improvised lines, including particular features such as cross rhythms or micro-rhythmic play that contribute to the overall 'feel', 'swing' or 'drive' of a solo (Pfleiderer 2017: 8).

Improvisation is central in jazz, arguably the most important tool a jazz musician uses in order to find and develop an individual and original style. As Prouty notes, although improvisation is not the only practice that characterizes jazz, improvisation represents the core activity in the music (Prouty 2012: 60). This is in line with how improvisation is discussed in the research material: improvisation is the defining feature of jazz. Questions and answers about outside concern ways to transcend the harmonic-melodic limits of music theory within an improvisational context. The material does not delve into the question whether improvisation is a process or a product. Instead, it seems that improvisation is treated both as a task to fulfill and the tool to fulfill it with. As Al-Zand has noted, jazz improvisers engage in at least two interrelated thought processes: a reflective process that relates to the soloist's individual skills and knowledge as he or she spins out phrases in interesting ways, and a reactive

process that relates to the soloist's ability to interact with and respond to other players in the ensemble (Al-Zand 2005: 209).

It must be noted that Al-Zand and most of the other scholars study improvisation with the focus on an individual soloist. Studies on group interaction are rare, compared to the number of studies on individual soloists, with Monson (1997) and Reinholdsson (1998) being two exceptions. This tendency correlates with the views on improvisation expressed in the research material: improvisation is a soloist's concern. However, the material is collected using search keywords that might render soloist-centered results, but the absence of statements on outside and group-centered interaction is noteworthy. In fact, the material seems to suggest that outside can only take place when the rhythm section does not follow the soloist beyond the realms of the chord-scale paradigm.

2.4 Form and structure

Jazz improvisation, particularly its flexibility in following as well as bending rules, has intrigued and inspired members of many academic fields other than musicology. In mathematics, psychology, marketing science, epidemiology and organizational science, jazz improvisation has been used as a metaphor, describing a different approach, especially in terms of going outside of boundaries (Lewin 1998; Pasmore & Hatch 1998; Hatch 1999; Barrett 2000; Kamoche & Cunha 2001; Porta 2003; Borgo 2004; Neyland 2004a & 2004b; Barratt & Moore 2005; Oakes 2009). The analogy is that new ideas are created when one is thinking outside of the ordinary boundaries, or *thinking outside the box,* as the phrase is often put in everyday language. Organization science scholar Neyland describes outside playing in jazz like this:

> If done properly, it creates a heightened feeling of tension in the music; a kind of expectant discomfort. Listeners find themselves wanting some sort of resolution to something harmonious. It leads to the structure being challenged. It is a kind of assertion that structure is secondary to creativity. If playing outside is not allowed, or is impossible, then structure is too dominant. Playing outside asks structure to re-examine itself. Sometimes new ways of thinking result from such experiments. [—] Playing outside is a sign of organisational health, and both organisational and personal learning. (Neyland 2003: 6-7.)

The key word here is structure. Based on what I have discussed so far, it might be tempting to say that the restraints of tonality, chord changes etc. are the box, and outside is to think and play outside of that box. That would not necessarily be false, but the research material gives a broader picture. For example, it seems that outside is not only about playing harmonically challenging notes or phrases that create tension, but that it also concerns longer passages on a large-scale structural level, such as chord sequences or sections of a tune.

The material addresses harmony and melody as being intertwined, e.g. an improvised line that relates to an underlying harmony. According to Cook (2012: 29f), for a jazz practitioner, these elements are understood together with a third element: form. Harmonic progressions and solo developments take shape within a (cyclical) form (Squinobal 2019: 2). Here, it seems that form is not primarily an element of its own, but an arena where the outside concept can take place. The terms 'form' and 'structure' are very similar but not synonyms. In the material, however, they are mostly used interchangeably, and therefore I will not separate them in the analyses.

2.5 Changes and lead sheets

When jazz musicians refer to harmony, they are typically referring to chord changes (McClimon 2016: 3). Thus, the common short expression 'changes' basically means the harmonic progression as it is written down as chord symbols on a lead sheet or in an arrangement. The changes order individual chords into chord progressions and outline the form and the structure of the tune. Regardless of whether the chord symbols are read *prima vista* or memorized, or even if chords are only identified by ear during the performance, the chord symbol is the basic unit of harmonic understanding for a jazz musician. In his PhD dissertation, McClimon (2016: 1) points out that the reason for this is largely practical: a chord symbol is a concise way of referring to a particular sound, and improvising musicians must be able to understand this information quickly (when reading music) and to recall it easily (when improvising).

According to McClimon (ibid.), harmony has a much larger role in determining the course of a particular jazz performance than melody. McClimon's argument is that jazz essentially is a harmonic music. In a typical jazz performance, the melody of the tune is heard only twice (at the beginning and the end), while the harmonic structure is heard throughout, determining the structure of the performance. Each soloist typically plays one or more improvised choruses, where each chorus is an iteration of the harmonic structure of the tune. Improvisers will typically improvise a melodic line, a counterpoint of sorts, which fits with the underlying harmonic framework. Harmony is thus the main restraining factor of a tune, and it is a principal factor in creating coherence. In other words, for jazz musicians, the changes <u>are</u> the actual tune.

Most lead sheets, as found in various Fake Books or Real Books, show the basic outline of a melody, along with a set of chord symbols that prescribe the harmonic structure of a piece. Beyond these instructions, other aspects of performing the music, such as voicings, dynamics or rhythmic patterns, are left up to the performers. This is common practice among jazz musicians (Berliner 1994: 82ff; "Lead sheets" Wikipedia).

The first Real Book was a compilation of transcribed tunes, although original compositions by the authors were also included, and was organized as a collection of lead sheets in the early 1970s by students at the Berklee School of Music. It was spread and sold without consideration of copyright laws. Several

versions, including authorized, legal New Real Books, have since then emerged, but the impact of Real Books on jazz students and jazz players has been constant (see e.g. Kernfeld 2006).

From an analytical point of view, a complicating feature of lead sheets is that chord symbols are intentionally imprecise. Sometimes the chords and/or progressions are "raw or incorrect" (Berliner 1994: 89). In most situations, jazz musicians do not want to be told exactly what notes they should play: "if they did, they probably would not have become jazz musicians" (McClimon 2016: 1).

In his overview of jazz theory, Martin notes that as early as the 1920s, following the influence of 'barbershop', chords with sevenths and/or ninths from the root were recognized as basic in jazz harmony, with the plain triad reserved for special situations (Martin 1996b: 10). Various types of seventh chords and other extended harmonies are used in other musical genres, but they are especially characteristic of jazz.

Again, as Berliner shows, it is common practice among jazz musicians to treat chord symbols (only) as guidelines (Berliner 1994: 82ff). A lead sheet prescribing a G7 chord would most likely result in the root, major third, and minor seventh (G, B, and F) being played, since they are the defining tones of a G7 chord. However, the G7 might also be played with the inclusion of the sharp eleventh (C#), the flat ninth (Ab), or the thirteenth (E), depending on the situation: the melody might suggest certain alterations, or a performer might prefer some extension and alterations over others.

According to Smith, such tensions are used freely during improvisations, they require no resolutions, and they should be viewed as standard skills for jazz players (Smith 2008: 78). This correlates to the post bop jazz idiom, and its principles are explained in most jazz pedagogy books (see e.g. Levine 1995; Steinel 1995; Crook 1991; Coker 1987 [1964]: 63).

Chord/scale theory implies that, for a performing jazz musician, jazz harmony involves more than merely knowing and understanding functional relationships between chords. The duality of the chord/scale concept as it is used by musicians means that scale choices affect chord tensions/alterations and vice versa. Obviously, the result of a music analysis of a jazz solo that only considers the chord alterations played by performers will be fundamentally different from an analysis that instead (or also) considers the original changes. The former will say something about a specific collective performance by a group of players, the latter something about how the musical structure is treated and how it affects individual stylistic differences regarding harmony in an improvised solo. Personal preferences and stylistic aspects are likely to influence what chord alterations the individual performer will consider as the correct or original changes. To put it simply: what chords (including extensions) are the correct ones: those on the lead sheet or those being played?

The solution, found in education, Real Books, Fake Books and textbooks, as well as in the online writings in the research material, is to condense the chord structure to what Martin (1996b: 5f) has called the "ideal changes"; a hypothetical set of chords used as a basis for understanding the many variations

that might occur in actual performance. This simplification likely contains only information regarding the root and the quality of the chord. Function, scale choices and additional tensions will depend on the performer and the musical context, thus reflecting the improviser's skills, knowledge and personal style.

2.6 Rules for making music

In Western art music, harmony is based on rules that regulate the use and limitations of different types of harmonies and harmonic progressions. As described in encyclopedias as well as taught in music theory classes in schools, the rules on harmony have evolved and changed over the centuries, from fourths and fifths being the only allowed harmonies, to expanding the palette by adding thirds, dominant sevenths, diminished chords and so forth. Strict harmonic progressions, functions and cadential formulas have evolved to non-functional harmony, polytonality and atonality. Jazz harmony stems from this tradition, so subsequently rules regarding e.g. voice leading and guide tones found within the jazz harmony discourse are in accordance with the rules in Western art music tradition (Rawlins & Bahha 2005: 6). The hegemony of rules is evident from the quote in the title of this study: "what is the basic rule of outside" ("iqi" 2009).

Jazz musicians of today are more likely to have received their education in a school-like setting than in an informal peer-to-peer setting, as was the case in for example the bebop era of the 1940s. When jazz improvisation is taught to students, it is generally presented as a set of rules: when such-and-such chords are played, such-and-such notes will be appropriate to play over them (O'Gallagher 2013: 8). Instructions on the basis of learning how to 'play inside' (using correct scales with given harmony) before 'playing outside' (extending harmony further) is a common feature in jazz pedagogy, according to jazz pedagogue Boyle (2012: 11). The Jamey Aebersold play-a-long series and the scale syllabus presented therein have been influential in this respect. Also, the chord-scale concept is a popular tool to explain harmony: in fact, I cannot recall any book on how to improvise jazz that does not begin with spelling out chord tones and scale tones. In addition, the research material I study often use this chord-scale presentation as a starting point. Although they are almost never called rules in the pedagogical books, the 'this note over that chord'-approach is presented as the correct way to approach jazz improvisation. These normative guidelines might indeed be helpful for the beginner to avoid sounding bad or become lost when improvising a jazz solo. Renowned jazz clarinetist Ken Peplowski even states that "jazz is a rule-bound activity. What jazz improvisers do when they're playing is to follow those chord changes like they're a road map. To play outside of those chord changes is to break a rule. You can't do that." (Barrett & Peplowski 1998). Just like in other school subjects, systems and rules dominate the content of the education of improvisation. A discussion forum member says learning the proper scales is "just like school, you have to learn grammar, before you write your own story" (JazzNuts n.d.).

The rules and systems for jazz harmony are often clear and well-formulated in pedagogical books, such as Levine (1995), Aebersold (2000), Rawlins & Bahha (2005) and Terefenko (2014), but the jazz players that express their views in the online material show various levels of detail in their statements. At times, they use exact terminology, referring to precise rules and systems, but just as often the writers use slang and home-made terminology with much nonchalance.

This discrepancy is interesting: forum discussions and online lessons regarding the harmony and theory behind outside mostly take place on a complicated level, whereas the actual words and terms vary from very advanced to rather blunt. In a way, it represents the idea of outside: by using slang terms instead of proper terminology, jazz musicians break the rules of education. Outside can thus be seen as an act of rebellion against rules, both regarding harmony and terminology.

Rules seem to be the basis of shaping the thinking and the understanding of jazz improvisation among jazz musicians. Academic writings also note the many imperatives involved in jazz improvisation and in jazz harmony (Titus 2010: 63; Karns 2016: 3f). There are many testimonies in the material about how jazz improvisation is conceived as a set of rules. When a novice improviser goes outside, a question such as this is typical: "what is the basic rule of playing outside?" ("iqi" 2009). Answers are often in the style of "Mark Levine's rule for more complex songs is this:", "knowing inside playing is very helpful (to understand and *hear* what 'rules' you are breaking)" ("Gkorm" 2009) or "using Barry Harris rules we can say the pentatonics to play over G7 are G, Bb, Db or E" ("Jonah" 2010).

It even seems that rules are necessary for jazz improvisers. A blog post by a musician/educator describes the problems that can arise when rules are lifted away:

> We spend all our time learning rules (quick-- what's the chord scale that works over D7alt? trick question: there's more than one), memorizing scales, songs and chord voicings. So it's not unusual for someone when first asked to play outside to just go blank. How do you deal with no rules and all that freedom? You're so trained to color inside the lines, the very idea of coloring outside of them gives you the sweats. Even worse is the fear that if you're playing free, you're just bullshitting-- none of your notes or phrases has any meaning. (Driscoll 2016.)

However, this is not a phenomenon unique to jazz. A newspaper interview on the future of heavy metal shows apparent similarities to outside and rule-breaking:

> It's a paradox, really. Metal has always been the avantgarde, it is about expressing oneself violently and loudly. At the same time there seem to be very clear rules. Which is odd because the rules were born by breaking other rules. (Söderberg 2017, translation by author.)

However, although there is a general agreement regarding the importance and impact of rules within the outside discourse, other opinions do exist in the surrounding context, such as this quote from a~~n~~ textbook/theory book:

> Chord scale theory provides some guidelines (not rules) for choosing scales in this situation. Chord scale theory is most properly used as a planning tool to help the musician map out a sequence of scales to be used as material for improvisation. (Smith 2008: 73.)

However, this rule-oriented approach is not unique for jazz improvisation education. It also dominates jazz arranging education, where chords, scales, options for harmonization and reharmonization are presented as rules that first must be learned and mastered before disregarding them can be an option (Dobbins 1986; Pease & Pullig 2001).

It may seem exaggerated to say that improvising jazz solos is equal to following rules and prescriptions. After all, jazz improvisation is often understood as expressing oneself in the moment, playing what comes to mind, seemingly picking notes out of thin air. This is thoroughly discussed in Berliner's cornerstone *Thinking In Jazz* (Berliner 1996), where he uncovers the many processes involved in a jazz performance, and also for example in *Pressing* (2002). The assumption of harmonic rules being the main governing factor in jazz improvisation is valid, as it is in fact grounded in the material: "what is the basic rule of playing outside?" ("iqi" 2009). It seems safe to say that rules are central in how beginning jazz improvisers conceive of jazz improvisation, and that rules presumably also affect how improvisers think and communicate about outside.

2.7 Education

In the late 1960s, jazz began to be accepted into the academia, and an increasing number of young jazz musicians began learning to play the music in schools rather than exclusively from older musicians. The influence of university jazz studies in relation to jazz performance cannot be overestimated. The closing of jazz clubs, the passing of the great masters of the genre, and easier access to alternate forms of entertainment has forced the transfer of jazz knowledge to shift from apprenticeship to the classroom, a process studied for example by Bjerstedt (2017). As a consequence, it has been stated that nowadays fewer people are interested in hearing jazz but more people are interested in learning it (Boyle 2012: 13). To supplement this teaching, a great deal of pedagogical material has appeared that aims to teach (young) musicians how to play jazz.

In the pursuit of revealing what or how jazz musicians think, we can obtain some good insights by examining jazz pedagogical materials. It is through pedagogical materials such as books and school curriculums that both the terminology and different ways of thinking about and relating to jazz improvisation are introduced to jazz students. Education sets up rules and establishes a dichotomy of a right and a wrong, which in the context of this study

can be seen as defining an inside. It thus seems that it is as a consequence of jazz education that a rule-breaking concept such as outside can arise. Jazz educator Boyle states that "instruction on the basis of learning how to 'play inside' (using correct scales with given harmony) before 'playing outside' (extending harmony further) is a common feature in jazz (Boyle 2012: 10-12). I argue that to understand the discourses that construct the outside concept, we must emphasize the first word in Boyle's statement: instruction is a common feature in jazz.

Concerns have been raised that the jazz world has been "glutted with young musicians with no real professional experience, and who perform in very codified, standardized ways" (Prouty 2012: 46). This connects to Berliner's work, where in an entire chapter jazz improvisation is said to be a "very structured thing" (Berliner 1996). According to jazz musician and educator John Marshall, by teaching bebop and big band, which are the easiest to teach in the sense there are rules, "you teach the students the rules and they negotiate the obstacle course, as it were", resulting in a passionless and bland, albeit well-balanced, playing (Nicholson 2005: 183). Jazz educator Boyle agrees: "One can immediately distinguish those who play with good time, remain in-tune, nailing the changes and playing together from those who do not: criteria which creates fertile ground for a state of mind preoccupied with sounding right, therefore rightfully making bebop the perfect context for evaluation in university jazz programs" (Boyle 2012: 10-12). The codified and standardized ways in which young musicians perform seems to be a direct consequence of the methods of a codified and standardized jazz education (see also Karns 2016b).

The rules of jazz harmony have been described by jazz education, but it is also jazz education that sets up the rules of jazz harmony in the first place. This means both that jazz education cannot be separated from how musicians think about and perform harmony or improvise in general and that it is hard for jazz education to at the same time formulate the rules of playing inside and how to break those rules by playing outside.

As was discussed in chapter 2.2, chord/scale theory is both an analytical method and an improvisational tool. In this chapter, focus is on the latter. To the beginning improviser, chords and scales are essential components of learning jazz vocabulary. They offer building blocks for creating a suitable improvisation. Although many practitioners will argue that the craft to play jazz comes from listening to other players, transcribing recorded performances, and playing live together with more advanced players, chord/scale theory provides students of jazz improvisation with a guide for choosing appropriate pitches for their solos. According to a lesson that is part of the analysis material of this thesis, the chord/scale system helps an improviser to think linearly over harmony and to improvise using the upper chord tones. Furthermore, it provides

> a beginning mental-model for harmony and melody – when you see/hear a chord, it's advantageous to know what notes 'work' over the chord. Knowing a scale for a chord gives you a very broad understanding of this. (Wernick 2017.)

Of the many books written on jazz improvisation, most are pedagogical, and aiming towards those who are new to the practice. These books often focus on describing which type of scale fit with what type of chord when improvising, i.e. the chord/scale concept. However, very few of these books cover areas and subjects beyond chord/scale theory. Other aspects of jazz improvisation than harmony are rarely addressed in books or class-room situations, but left to workshops, band rehearsals or more abstract education. Concepts like swing, style, phrasing, timing, communication etc. are not easily put to paper and compiled into a manual. As an example, *The Jazz Theory Book* (Levine 1995) is 500 pages, while the text part of the playalong set *It's about time* (Strandberg 1998), focusing on timing and time-keeping, is six pages. The risk is that jazz players end up with a highly developed harmonic language and a thorough theoretical understanding of the music, but with other aspects of jazz improvisation much less developed and worked through (Squinobal 2005). Cook notes that what many textbooks lack are ways to develop one's playing beyond the chord/scale approach and to improvise expressively, which is not taught (Cook 2012: 20-22). Prouty (2004) and Monson (1997) are also critical of pedagogy and its use of harmony/melody as the prevailing focus (Monson 1997: 83). It seems that the almost total absence of other approaches to jazz improvisation in education materials renders the ability to play harmonically inside as the most important aspect of a jazz improvisation discourse.

Jazz pedagogue Meehan points out that it is the tune that should be performed, not the chord progression (Meehan 2004). This could perhaps be called a more holistic perspective on jazz improvisation, where a player expands the composition by adding his or her improvisations. Meehan includes a quote by Miles Davis that supports that idea: “You have to treat the song the way it should be interpreted. Why distract from its meaning by messing around with a lot of variations and stuff?” Contrary to this quote, Meehan suggests using different improvisational approaches to connect the improvised solo line closer to the composed melody: paraphrasing, using small segments from the melody, or using sequences (ibid.). Similarly, pedagogue Shevitz advices to always “be open to playing melodies regardless of how advanced the harmonic approach may be” (Shevitz 2010).

In an online lesson, the curriculum for aspiring jazz students is summarized, with the following list of steps:

> listen to many different styles of jazz
> understand jazz fundamentals
> learn chord/scale relationships
> learn how to apply the theory to jazz improvisation
> learn how to accompany other soloists
> play with others
> listen analytically
> break the rules
>
> (Sabatella n.d.)

What this list indicates is not only a learning process and a leveling of skills needed for jazz improvisation, but a jazz discourse which establishes and reinforces an idea of right and wrong that governs improvisation.

2.8 Dichotomies

The inside-outside boundary is not the only dichotomy connected to this study. Following the role-oriented focus in jazz education discourses, the dichotomy of right vs. wrong is also valid. In short, the right note choices, according to chord/scale theory, render inside, while note choices that do not follow the chord/scale theory, i.e. wrong notes, will render outside. Jazz pedagogue Boyle (2012) discusses the politics of wrong and right in improvisation and the application of harmony and music theory, where he is equally concerned with both the idea and experience of improvisation and the idea and experience of error and choice as they relate to improvised music. He notes that "fear of sounding bad and the humiliation of not knowing what to play" are main concerns among jazz, resulting in students asking questions about what notes are the right notes or how to obtain the right time feel (Boyle 2012: 8f).

There is a story about pianist and bebop pioneer Thelonious Monk, who was complaining after a concert, saying that "I played the *wrong* wrong notes" (Shawn 2003). The story might not be true, but the saying is nonetheless relevant as a point of departure for my following arguments, as it points to the thin line present in any artistic endeavor: either you play safe and the results may become boring or blunt, as indicated by the problems with jazz solo generators mentioned in chapter 1.2, or you take chances and it may turn out awful.

Monk's quote is actually what one could call a 'double dichotomy', a subdivision that adds a second level to right and wrong. In addition to wrong notes and right notes, among the wrong notes are also 'wrong wrong notes'. Naturally this leads to the conclusion that there also should be 'right wrong notes'. Furthermore, if we subdivide 'wrong notes' into 'wrong wrong notes' or 'right wrong notes', why not divide it the other way around? In Monk's terms, there could be 'right right notes' and 'wrong right notes' as well.

As the matter is sometimes understood, it is possible to value music based on how it follows rules. 'Good' or 'bad' are perhaps the most common dichotomies when judging works of music, but in the light of the Monk quote, 'right' or 'wrong' could also be considered valid aesthetic judgements, in jazz, but also works of Western art music in the serialist tradition, where a composition can be judged as correct/good or incorrect/bad from a serialist point-of-view, by just analyzing the notes on the paper, disregarding how the music sounds.

Upon reading jazz theory books, it seems possible to deem an improvised phrase 'good' or 'bad' depending on how close the improviser follows the rules established by the chord/scale theory. What the Thelonious Monk quote is pointing at, is that there are some rules regarding harmony that can be broken given that they are broken in the right way.

For an improviser, navigating between right notes and wrong notes may be hard to accomplish in practice, i.e. when playing an instrument as a part of a band. For actual listeners, the distinction is quite easy, as Järvinen (1997) has shown: the notes of a C major scale are considered suitable when a C major chord is played, while the notes of a C sharp major scale are considered less suitable when a C major chord is played.

Going to the next level in Monk's dichotomy, finding out which wrong notes might become 'right wrong notes' and which wrong notes are still just 'wrong wrong notes', concerns "navigating the boundary between inside and outside, between what the laws of Western harmony and the traditions of African-American music allow and something other" (Schwartz 1996). This "something other" could be interpreted as some kind of aesthetic awareness regarding the realms of the dichotomies. As far as Monk is concerned, this might be what the title of the tune 'Ugly Beauty' from Monk's 1968 album *Underground* is aiming for. Interestingly, a newspaper review of a concert performing new music uses the same words for a similar pursuit, describing a jazz arranger "boldly working with dissonances, but skillfully balancing between beautiful beauty and ugly beauty" (Holmberg 2015, transl. by author).

Artists in all art forms have always been trying out new things, looking for something that has not been done before or rebelling against tradition. The process involves questions of taste, experience or artistic visions, and are often considered provocative or shocking by its day. The results are progress and evolution, and they can be traced throughout the history of art. Outside is a part of that artistic progress too, although being an established concept since the 1960s, it is no longer provocative or shocking to play outside, if it ever was. At the present, outside seems to be an established, but ill-defined, concept. As the discussions above and Monk quote suggests, there seems to be a factor that turns some wrong notes into right notes, i.e. creating outside, and keeps other notes just plain wrong. The unknown ingredient, the 'X factor', is not discussed *per se* in the writings examined in this study, but there are many references to artistic choices and personal preferences, which indirectly deal with this question. This 'X factor' is at the core of the dichotomies concerning outside, as it from an artist's point of view could be more influential than the chord-scale concept in shaping outside.

This 'X factor' is one of the central points in this thesis. Indeed, there is often something metaphysical, even Zen-like, to how outside is described: outside can´t be explained in words, outside slips through your fingers when trying to capture it, it is mystical, fluctuating and transforms into inside when you understand it. This is because outside is a social construct, which is the reason I use discourse analysis to study the concept.

2.9 Chapter summary

In this chapter, I have described and contextualized the key concepts and themes that are essential for my study and in my material. Apart from an understanding

of how I approach and interpret these key concepts, the reader has also gained insights into and an understanding of the discourses that intersect in the outside discourse. In short, these are that jazz education relies on a thorough knowledge of the harmonic structure of music, with chord/scale theory serving as the predominant model of understanding harmony. From this perspective it is interesting how the chord/scale concept has been the norm and has offered a set of rules which the improviser breaks when playing outside. One could say that to play outside is to not follow the norm and to break the rules. Yet it is obvious that playing outside is, esthetically speaking, desirable and that it is possible to play outside in a right way and in a wrong way. I will now move on to the research material and analyze how this process takes place.

3 Intention

Writing about their early experiences as listeners, not yet familiar with outside playing, many of the writers in material share testimonies of how they believed what they heard to be chaotic melodies or series of notes played more or less at random. These initial impressions lead to a central question in the material: is outside structured or just free playing (for example "JazzWee" 2013a).

During my analyses of the statements in the material, I have discovered two recurring themes that seem crucial to how the outside concept is constructed. These are that the soloist should play outside purposely and that the outside segments should be performed with confidence. In this study, I use *intention* as an umbrella term for all the views on the two themes that are presented in the material. It is not a term used by the writers in the material, but I use this term since I find intention to include most of the aspects of how the practice of outside playing is described in the material. Intention can be manifested through several parameters, and in this chapter, I show how the material describes and discusses performative and knowledge-based characteristics of outside playing. The structure of this chapter is formed by the aspects of intention given in the material.

Drummer Elvin Jones does not express himself as a writer in my material. However, in an interview he discusses the balance between freedom and control in the music of John Coltrane's 1960s quartet, of which he was a member: "even though [the music] gave the impression of freedom, it was basically a well thought out and highly disciplined piece of work" (Cox & Warner 2004: 250). This concept of "controlled freedom" has been described in similar terms by pianist Herbie Hancock of the Miles Davis Quintet (Waters 2011). I have included the Elvin Jones quote because I find it to be a key for the understanding of outside, as well as of this study. The music of the John Coltrane Quartet remains influential for young players (Liebman 2013: 9) and, it seems, for the outside concept as a whole. Elvin Jones' statement also shows that outside improvisation, even in its early stages, was grounded in self-control and intention, not in anarchy, freedom or abandonment of theoretical constraints.

Similar tendencies are presented both among researchers and in the material that I study. Researcher Dean-Lewis has found that 'out' strategies used by jazz musicians are usually highly organised, with an order of complexity equal to more well-defined 'in' strategies (Dean-Lewis 2001: vol.I,25) and Williams studied Michael Brecker's side-stepping, superimposition and 'out' strategies (Williams 2017: 102). A blogger implies that outside improvisations are based on organized strategies and previous knowledge:

> It's not simply throwing chaotic note choices into the mix of 'inside' notes. [---] merely haphazardly playing random note choices isn't necessarily the most effective use of the outside concept. But rather, it is the careful and deliberate choice of notes, superimposed from an opposing construct. (Jones 2015.)

A forum member further exemplifies what is not outside:

> Outside for me is I suppose stepping outside of the changes while keeping the form? There has to be an inside to be outside to if that makes sense - so to call Schoenberg or Derek Bailey 'outside' isn't how I understand it. ("christianm77" 2015.)

In the material, the statements, answers and discussions about how to play outside regard matters of execution as well as matters of note choices, as forum member "wolflen" (2016) puts it: "the players that seem to weave melodic lines with both in and out flavors know how to get that effect and are confident in playing that style. [---] it's much more than just 'playing a scale a half step away'". This indicates that such elements are grounded in established harmony and music theory, but also that outside involves elements that go beyond common rules of music. Discussions about note choices, i.e. what notes will render an outside sound, involve music theory and chord/scale theory, and are apparent in all parts of the material. Discussions regarding execution, i.e. how outside segments should be performed on a musical instrument, are not as common as the matter of note choices. However, comments on execution are both mentioned, discussed and emphasized often enough to make execution stand out in the material as an important aspect of outside playing: "Intention is often more important than the notes themselves" (Winter 2013). Obviously, there is an aspect of *what,* (meaning what notes to play), but also an aspect of *how* (meaning the characteristics of a performance) involved in outside playing that links intention to execution.

As I show in the first section of this chapter, intention involves both control over the instrument, in terms of sound and flow – confidence – and control over the musical proceedings in the performance – purpose – in terms of ability to navigate chords and their substitutions. A player must have confidence in what he or she is doing in the improvisation and on the instrument. The next sections show that intention, as an aspect of outside improvisation, requires considerable theoretical knowledge and different premeditated plans for structuring the improvisational process. According to the material, these plans include ways in

which a player consciously and in a controlled manner steer from inside to outside and back again, with the improvisational aesthetics of post-1950s jazz kept intact. This can be done by using techniques such as premeditated sequences, motifs and patterns. The note choices used in these improvisational techniques could be any notes that the improviser finds appropriate, but the material shows that two tonal structures are pre-dominant: pentatonics and triads. These structures are familiar and established within music theory and jazz improvisation, making them clearly premeditated. Since they are so central in how the material describes outside playing, pentatonics and triads are discussed in separate subchapters.

3.1 Confidence: to convince a listener

An often-mentioned element of intention is to play the improvised solo lines with confidence (e.g. "Mr.Beaumont" 2017). In some statements in the material, the term 'conviction' is used instead of 'confidence', but although they are not synonyms, the underlying opinions and thoughts they represent in this context are similar. Therefore, I interpret confidence and conviction as terms that refer to the same idea. It seems that an improviser must perform outside segments with confidence for two reasons: to make the outside segments sound good and to keep the listener under the impression that the played notes are the right and intended ones, as a forum member puts it: "Either the player in question meant to play what they did, or they were just messing around without conviction" ("Spirit59" 2013).

A forum member also underlines the importance of sounding good on one's instrument:

> Out sounds good only if overal[l] it sounds as if it was in, with the rest of the music. [---] No ammount [amount] of tone, attitude and learned tricks will help your personal lack of musicalty [musicality]. [---] There's no point in playing out and not sounding good [---]. Not sounding bad is equal to not sounding good. First you have to sound good, even if you play out, but good must be the music you produce. Tone and attitude are not music. They can only add to the charm. They can not cover for sounding bad, out of key, being repetitive, unimaginative and calculated. ("Vladan" 2016.)

From this statement, it seems clear that outside playing is not an excuse for inferior standards of sound or skills, or a substitute for not knowing how to play. Instead, outside is constructed as an expansion, as based on the standards of regular musical performance.

In a forum thread, Michael Brecker's solo on *Oleo* from 1983 is given as an example of both confidence and good outside playing:

> Brecker played with so much balls and momentum he could assemble any collection of notes into a line. [---] Take away one element, the others must compensate. For outside lines, the conviction has to be there, the momentum, the phrasing,

> rhythm, articulation, tone, explosiveness. [---] [Brecker's] timing is perfect, articulation spot on, rhythm, phrasing. [---] when he did go outside the changes it sounded right. It was no awkward transition, but a perfect flow because unlike most others, there was no hesitation. ("AmundLauritzen" 2013.)

Example 1 shows the second A section of the tune *Oleo*, and highlights the qualities that "AmundLauritzen" was describing. Here, the solo line consists of a steady flow of eight notes that includes both notes that can be found within the chord-scale concept and notes that are very distant from the underlying harmony. When listening to this passage, I cannot notice any difference in sound, phrasing or other aspects that would indicate hesitation or lack of momentum or confidence. Instead, the inside and the outside segments are performed with the same level of articulated output and controlled energy, which are explained to be central aspects of outside playing by the writers in the material. For further discussions and examples on how to analyze different types of energy in jazz improvisations, see Cugny (2018).

Example 1. Michael Brecker's solo on 'Oleo' (1'47-1'53) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

Although outside is rooted in music theory and harmony, some writers in the material seem to devaluate theoretical knowledge in favor of performative aspects:

> outside really shouldn't have a theoretical impetus, it truly should be an act of the unconscious married with the most important thing which I don't think anyone mentioned...... CONFIDENCE! Any half hearted apologetic attempt to expand the harmonic moment will sound exactly like that- half hearted [-] but marry that harmonic concept happening at that moment with a stare into the eyes of your audience and played with an unflinching passion and confidence- [then] you are playing out for real. ("JazzVocab" 2014.)

The listener/ the audience is thus central for intention: according to this statement, the improviser must exhibit self-certainty and convince the listener. However, outside is also connected to the listener's previous experiences of jazz and ability to follow a tune ("docbop" 2013; "JakeAcci" 2013). Two online lessons say that it is important that the improviser leads the listener through the solo (Warnock 2013) in order to maintain an impression of normality and control (Arcidiacono 2011). Statements like these put the listener in the spotlight in a way that contrasts to the musician-centered way in which questions about outside tend to be asked. The listener must be taken care of by the improviser: it seems that is not (good) outside playing if the listener has reason to question what the improviser is doing. Thus, the impression of 'outsideness' in the solo line is central. Although focus here is on the listener's perception of the solo, outside playing is not merely upholding a facade of right and wrong. A forum member quotes renowned saxophonist Jerry Bergonzi who says "it's not what you play, it's HOW you play", and then adds that "a 'wrong' note played with conviction can sometimes have more merit than a 'right' note played without it" ("JPWGibson" 2015). Similarly, a blogger discusses dissonances, saying that "[renowned saxophonist] Javon Jackson's C sharp will sound less questionable than a timid junior high player playing a C sharp over a C chord. The tone, the intent, and the confidence all make a difference in how we perceive what people play" (Rowe 2010). Exemplifying with how saxophonist Cannonball Adderley begins his solo on the tune 'The other side', an online lesson teacher says that "more important than the notes themselves is the way the soloist approaches each note" (O'Donnell 2016a). A forum member agrees: "attitude is critical for outside playing. If you're tentative with it, it just sounds wrong. If you play it with balls, it sounds out but right" ("Boston Joe" 2016). Example 2 shows the first 14 bars of Adderley's solo on 'The Other Side'. The first four bars are inside, exhibiting a two note-motif, the root and the minor seventh. The following four bars are outside, as they are a transposition a half step up of the same motif. In the recording, Adderley plays with an energy that I find even more powerful than the output he which generally plays with. I find that Adderley's playing involves the characteristics that were mentioned in the quotes above: conviction, tone quality and rhythmic drive.

Example 2. Cannonball Adderley's solo on 'The Other Side' (1'02-1'17) from the record Why Am I Treated So Bad *by The Cannonball Adderley Quintet (Adderley 1967). Transcription by Fredrik Erlandsson.*

Although the matters above concern music perception rather than harmony, terminology and a way of thinking that stems from harmony, jazz education and textbooks is used in the material to discuss and describe matters of confidence. This is the case even when the writers in the material suggest that harmony and music theory is not the only thing that ignites outside.

However, confidence in improvised solos cannot be transcribed with standard music notation, nor analyzed with conventional music analysis methods. Even the idea of measuring confidence raises questions: exactly what is to be measured, how should it be executed and how should it be graphically rendered? To answer such methodological questions is beyond the scope of this study, so at this point I find it sufficient to use discourse analysis on descriptive words instead of graphic representations of the sounding solo lines. In fact, it is not always necessary to transcribe levels of confidence in performances. I argue that, for the purpose of this study, simply listening to recorded examples of what the material calls outside segments and comparing them to inside segments, is a sufficient method for understanding the notion of confidence. A comparative approach of sounding solo lines will answer the questions: Are the outside segments at hand played with the same or even a higher level of confidence as inside segments, or does outside lines? How is that confidence manifested in sound? Or, to simplify, based on the listener-oriented advice in the material: Can you hear a difference in sound when an improviser starts to play outside? In fact, a forum post discusses outsideness in a solo using the same method:

> The music I heard was not what I would call 'outside' playing because there is no evidence of inside' playing. His 'sonic rambling' was without a tonal centre and had a very weak form and structure which did not develop into anything. You can easily hear this by randomly moving up and down the recording... there is no discernable difference in character anywhere along the track. ("Jazzaluk" 2009.)

But how does one play with confidence? The voices in the material suggest different approaches to outside playing that all fall under the category confidence. These approaches are for example that an improviser should play with attitude, be sure in oneself, have faith in the notes one is playing, trust one's ears and to keep a strong and steady flow in both the lines and the groove. According to a blog lesson, one must play with "utter authority and total conviction" and "with complete assuredness, lest you sound lost or uncertain". This requires "intensity and conviction, zero uncertainty" and that one plays with

> CONVICTION....if you are taking chances that YOU don't back up with authority, then the listener will think you are nuts, and tune you out....if you launch EVERY idea with an attitude of complete control, you will convince the listener as well as yourself. (Jones 2015.)

Another blogger agrees: "make it sound convincing as opposed to making it sound like you are just playing a bunch of wrong notes" (Standring n.d.). A central notion seems to be how something sounds. Within the outside discourse, how something sound regards both the general appearance of the solo line as well as the actual sounds that a listener hear.

3.1.1 Sound

The material shows that confidence in outside lines is manifested mainly through three parameters: sound, rhythm and phrasing. Sound seems to be discussed on two levels. On a very hands-on level, sound involves the quality of tone and timbre of the instrument during outside passages, meaning that the outside solo line should not sound weaker or more hesitating than inside lines. However, the material also involves sound on a more general level, where sound affects the listener's perception of the musical performance as a whole and is a part of the improviser's musical personality. Thus, stability regarding the sound of the instrument is an important feature of confidence.

In this context, the connection between sound and stability seems to include parameters such as rhythmic drive, loudness and instrumental timbre. Any sounding signs of the improviser being insecure, such as a decrease in tone quality or groove, would then be out of character according to the outside discourse. One might be tempted to equal output (volume levels) and confidence, but the material suggests that outside is more about a straight-forward approach than a specific dB level, as an online lesson formulates it: "Think about sound and effect; the outside ideas will be of no use unless they sound good on their own [---] play with attitude to sound like you mean to play the notes!" (Williams 2011). Trumpeter Joe Magnarelli is quoted by a blogger, saying that outside requires "being sure of yourself and having faith in yourself to play something that doesn't sound good and then play your way out of it" (Rowe 2010).

An online lesson and two forum posts mention a live video recording of a solo by saxophonist Michael Brecker on the tune 'Blue Bossa' as an example of a solo

which contains many outside passages (O'Donnell 2011 "jayx123" 2013 and "emiliocantini" 2013). When listening to the solo it is very clear that Brecker plays with the same attitude, sound and volume throughout the entire solo. In other words, he plays with the same level of confidence in his inside phrases as he does in his outside phrases. Of course, two trademarks of Brecker's personal style are his sound and his ability to play outside, studied in dissertations by Poutianen (1999) and Williams (2017), so it is not surprising that the *Blue Bossa* solo exhibits the attributes for outside outlined in the material: the writers in the material are to some degree describing solos by master players such as Brecker when they describe the outside phenomenon.

Forum member "wolflen" gives suggestions on some other players to listen to regarding outside playing: John Scofield, [Herbie] Hancock, [Chick] Corea, Miles [Davis], Wayne Shorter, Bill Evans and Ben Monder. After I listened to a random selection of recordings with these artists, it stood clear that there is no lack in timbral or rhythmical energy and output between inside and outside phrases in their solos: they seem to play both inside and outside with the same level of confidence. From my listening point of view, I cannot say that I hear an increase in energy in outside lines compared to inside lines. However, it seems that outside phrases occur in solos with rather high over-all energy. These players can therefore be seen as a standard for measuring or discussing levels of confidence in outside playing.

The list given by "wolflen" also puts focus on another aspect of how outside playing, and jazz improvisation in general, is approached, namely by setting up a canon of master jazz improvisers and letting their playing rule the definitions and aesthetics of jazz. This approach permeates the pedagogical tradition in jazz, as can be found in virtually any textbook on jazz improvisation, as well as in Berliner's *Thinking in Jazz* (1995). This master-apprentice perspective has an impact on all aspects of how outside is socially constructed and understood by jazz players: the masters are never (and can by definition never be) wrong, so what and how they play by default sets a standard for what (good) outside is.

3.1.2 Keep the rhythm

If sound is a rather intangible manifestation of confidence, rhythm is all the more accessible. Rhythm is in the material described as a glue that adds coherence to at times unrelated harmonic material. Rhythm as a musical component is easier to transcribe than sound, therefore making it less complicated to analyze. For instance, a single listening through the 'Blue Bossa' solo mentioned above, reveals that the basic post-bop rhythms, based primarily on consecutive eight notes, are the rhythmic foundation in the solo.

To play with rhythmic stability is an important aspect of jazz playing in general and jazz improvisation as a whole, but it seems even more crucial within the outside discourse. A forum member recalls a band director who told the youngster that "it's ok to play wrong notes, but please don't screw up the rhythm" ("SuperAction80" 2015). The forum member then relates to incidents of being lost during a solo, resulting in interesting phrases, and speculates if that might

be the case even for established soloists such as Mike Stern and Wayne Krantz. If we elaborate further on that thought, could it be that a strong rhythm not only is essential in delivering an outside line, but that it also could help cover improvisational mistakes and instances of being lost? As I have shown earlier in this chapter, the impression of being in control is an important aspect of confidence and intention, according to the material. Writers in the material link this to rhythmic aspects of improvising (e.g. "docbop" 2017, "Ian" 2015 and Standring n.d..)

An online lesson explains why trumpeter Woody Shaw can play wrong notes that sound right: "These outside notes work because he makes a solid melodic statement with rhythmic confidence. As a result these highly dissonant note choices work within the larger phrase." (O'Donnell 2016a). Thus, it seems that a certain gusto and rhythmic push is required to make outside lines work. Forum members suggest that one should be "playing rhythmically driven phrases" ("TH" 2017) and notes that "[it is] easier to go outside with faster movements, as the closer collection of notes gives a stronger harmonic/vertical message" ("Runepune 2016").

According to these statements, intention can be manifested not only as confidence, but more specifically as rhythmic confidence. The result could be described as an impression that the wrong notes are not so wrong after all. Contrastingly, forum member "docbop" (2017) puts focus on how one uses very subtle tools: "You can take an inside line and shift it over an eighth note and now it sounds out".

The music examples mentioned in the material all range from medium to up-tempo tunes, performed in the post-bop idiom, including even eights-grooves, such as funk and Latin tunes. No examples of ballads or medium-slow tunes are mentioned, which indicates that outside playing is understood to require a steady groove in the accompaniment and a certain flow in the solo lines. Ballad soloing involves rhythmic approaches such as hemiolas, rubato playing and time-stretching. Apparently, neither these approaches nor slower tempos are well suited to outside playing, as the material discusses and exemplifies only faster tempos and more straight-ahead rhythmic approaches. The most striking statement about tempo is forum member "christianm77" (2016), who quotes guitarist Allan Holdsworth: "anything sounds good if you play it fast enough". However, in the same forum thread, "Boston Joe" (2016) replies: "It's that pattern recognition thing", suggesting that it may not only be the tempo, but that the tonal structures are so strong in themselves that they work even though the harmony is wrong.

3.1.3 Phrasing

A third manifestation of confidence is phrasing, which partly overlaps rhythm, as phrasing can be understood as the manner in which rhythms are combined and performed. In the material, phrasing also includes comments on melodic detail, balance between outside and inside, and timing, as a forum member says: "It's hard to give general guidelines about what works if you want an outside sound,

because really anything can work, it's really about phrasing" ("MortenFaerestrand" 2011). Forum member "Boston Joe" has one of the most defining formulations on the importance of phrasing as a means of showing intention:

> it seems like it's not so much notes, per se, that are outside. It's more like collections of notes - phrases and such that are outside. It's how you frame the collections that make it sound cool as opposed to, 'What the crack is this guy playing?' ("Boston Joe" 2016.)

Here, the framing of the tonal material, i.e. phrasing, seem more important for the outside concept than the tonal content. Outside notes have to be placed in the right octave and register to sound right ("8-5-b5-5-s5-5-7-8" 2015), as outside can work due to overtone series and equal temperament, which is also the foundation for upper structure harmony (Hertzog 2012).

Along with phrasing as a manifestation of musical taste, it seems that elegance in playing is also called for. In two different online lessons, the writers advise to "incorporate the same level of melodic detail you would in your normal lines – don't just hammer the wrong notes!" (Williams 2011) and specify that "if you treat EVERY NOTE as a part of a melody, if you phrase the notes as such, no matter how much you stretch the boundaries, it will have a more pleasing sound and will be more palatable" (Jones 2015). A third lesson reveals that "the trick is to play these outside harmonies as you would well placed lines" (O'Donnell 2011), and exemplifies with the Michael Brecker solo on 'Blue Bossa' which has been discussed earlier in this chapter.

For the most part, advice on how to play outside addresses matters of music theory. As I have shown, there are also statements that relate to performance aesthetics. Discussing the solos of an outside player, a forum member states that "it's also a matter of not just what notes he plays, but how and when he plays them that makes it sound good ("Mahlerbone" n.d.). Thus, the use of advanced theoretical concepts should, at least according to "Mahlerbone", be combined with a musical taste that in turn should govern the appropriate setting for the outside phrases. In this respect, there is no dramatic difference between inside and outside, as an online lesson teaches: "Improvising outside of the chord progression has to be approached musically just like any other notes that you play. [---] For the best improvisers, these outside harmonies are used as a way to create tension and excitement in their established musical approach." (O'Donnell 2016a). This notion is backed by another online lesson, which also advises caution and taste: "sometimes a well-placed, single sub or superimposed chord is much more effective than a chorus filles [filled] with them [---] deliberately bring these ideas into your playing without overdoing it" (Warnock 2012). A video lesson says that "you can use any note over any chord, as long as you're logically identifying and by sound identifying something that's gonna resolve at some point in the future" (Zucker 2010b, at 2'55). This statement connects sound and musical structure, the latter of which will be discussed in the following section.

3.2 Theoretical knowledge and premeditated improvisation

In the material, one of the most emphasized aspects of outside is that the improviser must know what he or she is doing. One has to know the scales, the chords and their extensions, the substitutions; in short, one has to master harmony and chord/scale theory.

A forum member and a blogger point out the need for knowledge of different improvisational techniques and approaches:

> the players that seem to weave melodic lines with both in and out flavors know how to get that effect and are confident in playing that style...its [it's] much more than just 'playing a scale a half-step away.("wolflen" 2016.)

> Of course you need to master 'inside' playing before going 'outside'. You need to understand well how each technique works, otherwise you'll sound like a player who plays a set of random notes through the fretboard. (Arcidiacono 2011.)

Again, it is clear that an improviser must be aware of the sound that one produces for a listener when playing outside. Although it is not written out, it often seems that the writers in the material are not referring to a concert audience or someone listening to a record. Instead, their statements can be interpreted as concerning fellow musicians and band members, or even concerning themselves, listening to other musicians or to what they play themselves.
There seems to be a standard of performance level that has to be met, regarding sound, for example. However, there also seems to be a standard regarding improvisational control and knowledge of improvisational techniques.

Forum posts like "If you want it to sound good, you really have to know what you are doing and when to do it" ("JL" 2015) or online lesson advice like "if you don't know the theory behind what you are playing you are more likely to sound like you don't know what you are doing and are just playing random notes" (Winter 2013) and "it's very important for the soloist to know exactly what notes will make happen his/her intentions" (myguitarsolo.com n.d.) are typical for setting the standard for just how much knowledge is needed. In fact, not only one but two requirements are implied in these statements. The improviser must have a knowledge of music theory and harmony and the chord/scale concept but must also master them in practice so that he/she is able to transform theory into musical statements on a musical instrument during an improvisation. These requirements are expressed rather explicitly in the material, as when forum members say that "to really be able to use and control the devices that take you away from the home harmony and back takes a lot of knowledge and work, particularly at the 'speed of jazz'" ("StanG" 2016) and "how can you even call it outside playing if you don't have a firm grasp on 'in?' What are you playing

‘outside’ of?” (“mr. beaumont” 2013), but they are also found elsewhere, like on the cover to Levine’s *The Jazz Theory Book*, where pianist Jim McNeely is quoted, saying that the author “never loses sight of the fact that you use theory in order to play and compose music” (Levine 1995).

At the other end of the spectrum of mastery of chords and scales, a forum member feels insecure and confused by his/her lack of theoretical understanding of outside playing and the fact that outside solos still sound right:

> I have seen a lot of guitar players playing fusion rock but never understood what is actually going on in the theory. When watching them play, it sounds like they're not in key and just essentially playing random notes with no musical thought to the backing track. Yet it sounds like it is in key as well. (“Dave” 2014.)

This clearly connects outside to harmony and the idea of harmonic clashing, which is discussed in the following chapter.

A forum member notes that the logics of functional harmony, chord substitutions and applications of the chord/scale concept, as well as different tonal approaches for outside playing, are interpretations of harmony, and that these are based on some kind of musical structure: “when we make note choices for melody we already organise these changes basing on some musical concept” (“Jonah” 2016). Thus, the element of harmony and music theory in jazz improvisation is both premeditated and a part of a specific improvisational concept or approach, two essential features of outside segments in improvised jazz solo lines.

The line between premeditated, often rather advanced concepts and more intuitive improvisation, with decisions made more or less on the spot, is not crystal clear. A central term in jazz vocabulary for premeditated material is ‘licks’, which usually refers to fixed musical patterns or phrases used by an improviser, often in contexts similar to those where they were originally conceived. In jazz education, many books focus on learning licks, as these constitute both a vocabulary and a knowledge base (see e.g. Coker, Casale, Campbell & Greene 1970 and Steinel 1995). Here, licks are tools that an improviser can use to perform well within a jazz idiom. Contrastingly, I have personal experience of improvisation teachers who condemn licks and other versions of muscle memory based improvisation as not ‘true improvisation’ but a ‘routine’. The music would then not be ‘improvised’, but ‘performed’. In the outside discourse, licks are central because of their familiarity. Being well-practiced phrases, they can be a key to move the solo line outside in a controlled, confident and convincing way, a theme also found in music philosopher DeMarco’s discussion about licks and prepared improvisation (DeMarco 2012: 18). Nevertheless, breaking harmonic rules by accident or by playing notes at random is not outside playing, according to the material. It seems that knowledge and control are essential to outside playing, as a video lesson says: “think ahead so that you know how to get out and how to get in” (Larsen 2016). However, outside is not entirely an endeavor of theory, as a forum member says:

"sometimes it is a mix of intuition and then slipping in a bit of theory" ("pauln" 2014).

Knowledge about inside is often seen as the key to outside playing. If one knows what will sound inside, one simply has to play something else to sound outside. A forum member explains using the wrong notes as "I use anti-scales to play outside of chords" ("nick1994" 2014). This point of view is also found in pedagogical books. Liebman's textbook on chromatic improvisation states that knowledge is freedom: in order to avoid specific harmonic relationships, i.e. that might sound too diatonic, one must be fully aware of them (Liebman 2013[1991]: 35). Liebman clearly indicates the same need for mastery of music theory expressed in the material, even though he does so from the other way around, i.e. to avoid certain diatonic harmonies instead of returning to them after an outside venture. A forum member found Liebman's book enlightening in comparison to the forum discussions on outside playing: "[D]david [L]liebman's chromatic approach to jazz harmony somehow more makes sense to me. H]he addressed some of the approach[es] in [a] tonality [tonal] context. [F]for instance improvising on A blues progression while the actual progression is in Bb" ("EJguitar" 2016).

However, awareness and command of music theory and its applications are not exclusive for outside improvisation, as researchers has shown. Much of the work in the improvisational process in jazz involve detailed, methodical preparation in advance of the actual performance (Boyle 2012: 7f, Dean-Lewis vol.I: 25, also Berliner 1994) which raises questions about how much an improviser relies on preformed material and how much is formed in the moment of improvisation (Williams 2017: 28).

In the material, premeditated improvisational devices are treated as a natural way of approaching outside improvisation. Premeditated approaches do in no way diminish the value of the improvisation, or the musical personality of the improviser. Instead, the material seems to take premeditated improvisational devices for granted. Forum members state that "you should learn how to shift to different tonalities, not just chords" ("warp x" 2015) and that when using parallel tonalities or bitonality, you should "arrange your music so that you layer over the given progression" ("gary" 2015), in order to create "an added progression" (ibid.).

Writers thus advise players to learn different approaches and to use them in their own solos, and connect inside playing with outside playing:

> there are many concepts or methods of organizing what you play from outside the tonal area. Just as you try and organise, shape and balance what and how your trying to play, compose etc... on the 'inside'. What ever concept(s) your using to play on the outside... usually needs the same organization. [---] You probable [probably] know enough to organise playing outside methods already. ("Reg" 2012.)

Luckily for the aspiring outside improviser, it seems possible to achieve much with little, as an online lesson says: "You need ONE good trick, and then you need

to master it" (Zillio 2015). A forum member thinks along the same lines: "I tend to think in small units and focus on doing more with less when it comes to moving outside of the harmony" ("JazzVocab" 2014). This is contradictory to the statements requiring mastery of theory found earlier in this section. However, it seems that mastery of inside yields enough tools to play outside.

3.2.1 Premeditated models

The approaches or improvisational devices for playing outside are premeditated, but the actual notes are improvised in the moment, as a result of the chosen approach and depending on the chord progression at hand. In an online lesson, Michael Brecker is quoted, replying to the question "what is that you're playing?: [---] 'oh, I don't know. It's basically a half-step up, half-step down kind of thing'" (Whitty 2014). A blogger highlights the values of premeditated devices in outside playing, saying that the idea of playing outside is "creating tension for the listener. And that tension having an actual form, shape, or formula provides a clarity rather than simply imposing chaos with no underlying framework" (Jones 2015). In addition, the quote from Jones also shows that to improvise with no underlying framework is not an equivalent to playing outside. Example 3 is an example of the half step thinking Michael Brecker might have been referring to in the online lesson, but it also shows that the tension comes in structured forms, such as triadic shapes. The F minor segment in inside, but instead of leading to the root of the Fm7 chord, the solo line lands a half step up on a F# and then outlines a F# minor triad. The Eb major triad and the Db major triad are linked together with a segment from C major. Three of the four notes in the C major segment is in fact a C major triad, making both the F# minor triad and the Db major triad "a half step [---] kinda thing", as the Brecker quote put it.

Example 3. Michael Brecker's solo on 'Blue Bossa' (1'16-1'23) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

The writers in the material often tend to show and explain different approaches and ways of thinking in a rather general way rather than writing out specific licks or phrases, as in Whitty's online lesson: "we think like we're in the progression Bb7alt to Ebmaj7 over a C Minor chord, and then play a Bm6 penta over the

Bb7alt chord" (Whitty 2014). Such premeditated ways of thinking over chords and progressions show that knowledge of harmony is needed, but also that there are many intentional choices involved in approaching outside improvisation, and that there is much room for personal choices in how the approach is realized and played out.

Although theoretical knowledge puts focus on how an improviser thinks over chords and progressions, the aural aspects of improvisation such as playing by ear are not forgotten, as two forum members state: "I like to pivot off chord tones and extensions as an entry to going outside by ear" ("henryrobinett" 2014) and "I don't like to use the terms 'outside' and 'inside'. To me it's all inside the harmony, you just have to hear it." ("jtizzle" 2014). Other forum members say: "Michael Brecker said he played by ear" ("StanG" 2014) and

> in a Jerry Bergonzi interview he talks about Michael Brecker, himself and I forget who else he mentioned would get together all the time and jam constantly pushing the envelope developing their ears and the playing. Got to get the sound in your ear to play it with conviction. Even as a listener you have to grow your ears to appreciate. ("docbop" 2014.)

Thus, it is clear that what a player is accustomed to hearing and playing depend on experience and practice. Therefore, listening experience is a factor in drawing out the boundaries for outside. The skill to play complex or unfamiliar phrases within a given harmonic context is also a factor for setting the boundaries for outside. Playing with what is often called *muscle memory* and using premeditated models seem central in achieving that skill.

3.2.2 Theory put to practice

Following what is written in the material, both jazz improvisation and outside playing could be called 'applied music theory'. A forum member states that a jazz player

> has to process more information, has to thoroughly understand theory, harmony, etc, in order to be a competent improviser--to play inside and out. (no controversy here: the clarinetist Don Byron once quipped, 'even the saddest bebop trumpeter has to understand harmony, in a symphony, it's usually the composer and/or pianist who digests this to the same extent, while the orchestra players generally are concerned with their own parts and instruments'). Thus, in order to play out, you have to master theory, harmony, playing inside. I agree that this is different than playing 'free/avant guarde [garde]'. ("NSJ" 2011.)

Of course, all music has some type of music theory that can explain how the music works or what norms form the music. It seems that jazz and outside are to a large extent based on knowledge of such theoretical structures as a prerequisite: outside could not exist were it not for the rules on harmony and music theory.

However, merely using advanced harmonic techniques does not automatically make the improvisation outside, according to a forum member:

> Jumping right into modality and eastern scales may give the impression that you're expanding your harmonic vocabulary, but to more advanced listeners, it'll just sound like you're meandering. ("BATMAN" 2015.)

There seem to be aspects of outside that combine harmony and music theory with something else that goes beyond a well-executed performance. The online writers clearly state that the improviser should consciously and intentionally take the solo line outside and then bring it back in. Again, the improviser must have theoretical knowledge to play inside and be able to manifest that knowledge on a musical instrument, but also to be able to take the solo line beyond the realms of inside in a way that manifests consciousness and intention.

A forum member puts forth a warning regarding outside, saying that the improviser must not let himself/herself rely too heavily on premeditated knowledge and phrases from muscle memory:

> If your ear knows where the music is going, it's musical. If my ear knows what you're thinking, it's musical. If your hands are playing for your ears, it's noodling. If I hear your hands more than I believe your ear, it sounds like noodling. Two to tango. If you're not following the music, it's not dancing. ("TH" 2017.)

It seems that it is important for the soloist to exhibit knowledge and phrases that are premeditated, but also that melodic material based on premeditation must not take over and interfere with what the listener should perceive as musical.

3.3 Sequences: transpose and repeat

In the material, a sequence is often understood as the more or less exact repetition of a passage at a higher or lower level of pitch, much like how Kernfeld (2002) explains motivic improvisation. When discussed within the discourses connected to the outside concept, sequences are primarily intervallic rather than diatonic. In other words, in an outside context, intervallic structures used in sequencing and motivic improvisation are defined based on their shape and setup rather than their tonal and harmonic content. A forum member puts it this way: "Sequences are great. Play a short phrase that's inside the changes, then play it up a step, then play it up another step and repeat until you're done." ("RajinIII" 2015).

In the material, to sequence using set intervallic structures is recommended for two reasons. Firstly because the note combinations are derived from existing shapes, so they may actually contain notes that are common to the given key, providing a connection between the inside notes and the outside ones (e.g. Jones 2015).

Secondly, abstract tonal structures are made more easily accessible to the listener's ears by using repetition (e.g. "Mokapot" 2017). It thus seems that

intervallic structures allow more dissonance than other types of melodic constructs, as the structure can include a mixture of inside and outside notes. A forum member explains that sequencing is to "repeat melodic ideas without entirely respecting the harmony" ("Costagero" 2015) and states that the listener will hear the sequencing as a repetition and therefore accept the line as coherent despite harmonic discrepancies.

As a form of motivic improvisation, intervallic improvisation is generally understood as improvisations where the intervallic emphasis of the solo line is neither on seconds, readily derived from scales, nor thirds, readily derived from chords, but on fourths and fifths. Jazz musicians can use such larger intervals and combine them into interval sequences that weave in and out of the harmony rather than into long flowing lines of small intervals. (Berliner 1994: 163, also Burkhart 2017).

However, an emphasis on larger intervals in improvised solos does not exclude stepwise movements or more melodic ways of improvising: it seems that large intervals stringed together can also be conceived as scales. A linear reorganization of notes from interval sequences can form pentatonic scales and blues scales, which is the same principle as behind the chord/scale concept.

3.3.1 Motifs

A motif is a term known from many other musics. In the outside discourse, it seems to have the same meaning as generally understood in Western art music. An online lesson says that "the first way that many improvisers utilize dissonant notes or outside playing is part of a motif – a musical statement or phrase that they develop and vary throughout a solo" (O'Donnell 2016a). Here, a motif is explained as a sort of building block, that can be changed and developed during an improvisation. I interpret such alterations as signs of intention and improvisational control.

Example 4 is used by a blogger as an example of how Woody Shaw "was employing larger intervals, such as perfect 4ths and 5ths in his melodic lines" (Wilken 2010). The first bar consists of two consecutive perfect fourths, followed in the second bar by a three note-motif, a perfect fourth up and a minor third down, that is played four times. The motif is transposed upwards in major seconds, resulting in a sequence that does not follow the underlying harmony.

Example 4. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (4'03-4'06) from the record Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

An online lesson shows how renowned saxophonist Rich Perry uses a sequence of non-diatonic notes: "you hear him utilize a number of nontraditional note choices: playing the Major 7th on a minor 7 chord, playing the Major 7th on a V7 chord, playing the b13 on a minor chord" (O'Donnell 2016b). Example 5 is a screenshot of a transcription of the Rich Perry solo segment published in that lesson. The solo segment is taken from an album that seems to be out of print and is not available on services like Spotify or YouTube, but the solo segment is published as an audio clip together with the transcription in the online lesson. Here, the motif is introduced in the second bar: two ascending eighth notes and a descending half note. The motif is then transposed in a downwards sequence, with alterations of both rhythms and intervals. The result is a solo line that includes many dissonant notes, but also some consonances. For instance, over the tonic (Cm7) in the third bar, the motif starts on a consonant note, the fifth, and via the major seventh lands on the flat fifth. Similarly, in bar five, the motif starts on a rather consonant ninth, and moves via the flat thirteenth to the flat ninth.

Example 5. Rich Perry's solo on 'Softly as in a morning sunrise' from the album Oatts & Perry *by the Harold Danko Quintet (Danko 2006). Transcription by Eric O'Donnell (O'Donnell 2016b), edited by Fredrik Erlandsson.*

Michael Brecker's 'Blue Bossa' solo is used as an example in another online lesson (O'Donnell 2016a); it exhibits passages where sequences are used, as shown in Example 6. This solo excerpt furthermore exemplifies another statement by "Costagero" (2015): "You can also make sequences out of just the rhythmic information in the phrase. If you do that, use one of the other methods to pick the notes". In the solo passage, Brecker modifies and embellishes a motif, an Eb major triad over a Cm7 chord, using only chord and scale tones. After that, Brecker plays outside by shifting between D major and Db major triads over the diatonic chord progression. This passage is sequential on two levels, as it is sequential both rhythmically and interval-wise. Furthermore, the rhythmic figure is strong and the variations are equally strong, just as the triad with the addition of the second (Eb and E, respectively) is very clear and melodically defining.

Example 6. Michael Brecker's solo on 'Blue Bossa' (1'04-1'13) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

Sequencing is not limited to half step variations. A forum member advises to

> start with 'tried and true' examples [---] and see what your ear thinks. For example, try the old play a line over the ii, play it up a m3 over the V. If that sounds 'outside', explore it. If it sounds in, hey, maybe you're ready for heavier stuff. ("mr beaumont" 2017.)

To substitute chords and phrases a third away from the original chord is also discussed in an online lesson where John Coltrane, Joe Henderson and McCoy Tyner are said to be masters of that technique (Wernick 2011).

The statements and music examples above indicate that sequencing is a structured and predetermined way of improvising, e.g. an essential aspect of outside. Sequencing in the outside discourse often seems to be unrelated to the underlying harmony. In some cases, the harmony even seems separated from the sequenced motif. This appears to be common among guitarists, who use 'shapes' based on the layout of the fretboard instead of intervallic patterns (Quayle n.d.). Forum member "mr.beaumont" (2017) says that "the guitar is a visual instrument. Don't overlook creating visual patterns for 'out' sounds". Warnock (2013) suggests using ascending half step motifs by moving melodic units horizontally up the guitar neck. The outcome of such a sequencing technique is the same, i.e. a half step up transposition, but the approach to achieve it is not based on transposition of notes per se, but of moving the hand one fret up or down on the fretboard. This approach is specific to the guitar, as it is the only common contemporary jazz solo instrument designed with a fretboard. For other instruments, miscalculations regarding the pattern can instead lead to the invention of new patterns, as described by Berliner (1994: 208).

3.3.2 Patterns

In the material, patterns are generally understood as melodic units that can be sequenced during an improvisation. It seems that a pattern can be any melodic unit, regardless of which intervals it contains. A blog lesson explains the concept:

“patterns are a sequence of notes given a numerical value based on the degree of the scale. This num[b]ering system applies to all 12 keys. Shorter patterns (2, 3, 4 notes) are often called ‘motifs’” (Winter 2013). Here, patterns are explained as being longer than motifs, and as derived from a set structure rather than being a structure resulting from a melodic phrase. Harmonic relationships are acknowledged by giving the notes in a pattern a number that relates to the underlying chord. A rather humorous example of how this numbering system works, is the forum member alias “8-5-b5-5-s5-5-7-8”. The numbers in the alias form an extended variation of the little quirky melody ‘Shave and a haircut, two bits’.

The concept of patterns probably originates from jazz education: the same blog post suggests jazz pedagogue Jerry Coker’s etude book *Patterns for jazz* for deeper study (Winter 2013). Coker actually explains this note numbering system in the first paragraph on the first page of his book, which underlines the significance of the concept (Coker, Casale, Campbell & Greene 1970: 1). In Steinel’s textbook, units such as 1235 or 1231 patterns are codified as cells, which are four-note elements that are the building blocks for longer solo lines (Steinel 1995:12). Jazz researcher Squinobal uses the same codification (Squinobal 2019: 19), and they both consider permutations of the pentatonic cell 1235 to be the most essential material for melodic development. The nomenclature behind patterns and motifs is basically the same note-numbering methodology presented by jazz researcher Henriksson, where chord-note numbers are used in combination with functional theory and Roman numerals to show what kind of voice leading the player uses to resolve one chord to another (Henriksson 1998). Generally, in research the perspective is analytical and descriptive, while in the material, the purpose is pedagogical and prescriptive.

Blogger “Sweets” shares a pattern that exemplifies the concept of patterns, as seen in Example 7. Here, the pattern is: 1-b7-1-b7-5-4, which in bar 2 is transposed up a half step, with the intervallic relationships between the notes kept intact. This pattern could be interpreted as a phrase derived from a C blues scale, a C minor pentatonic scale, or even a G minor pentatonic scale.

Example 7. Screenshot from a blog post by “Sweets” (2009b).

The material also contains warnings for overusing patterns and sequences. If phrases are too premeditated, they become in-line and predictable and lack the outside vibe: “too many [minor third intervals after one another] in a row can take away the effectiveness of the technique (Warnock 2013).

Set structures, such as patterns or motifs, can be manifested in different ways. A blogger identifies some of these structures within the outside context:

“deliberate note choices can be scales, triads, intervals, arpeggios that fall outside the the harmonic surroundings” (Jones 2015). Indeed, such structures are common in nearly all Western music. However, within the outside discourse, these structures are treated somewhat differently. For instance, the concept of sequencing does not focus on individual notes, but on intervallic relationships. Therefore, a pattern with general harmonic coherence with the underlying harmony could be seen as inside, while a pattern with very little coherence could be seen as outside. However, the use of patterns is more connected to outside, according to a forum member: “I find with outside playing you actually need more of a pattern – intervallic often – than when you are inside, but that might be me” (“christianm77” 2015). Furthermore, it appears that outside, in terms of tension and release, can be achieved both on a structural level and on a note-by-note level, i.e. through a solo line rooted in chord/scale relationships. By using a set structure that is strong in itself, outside can be created, maintained and resolved through that very structure.

A video-lesson explains a large-scale sequencing concept, based on longer phrases: first playing a pattern resolving to the note Bb, then the same pattern leading to the note Ab, then resolving to the chord tone A (Neff 2014a). Here, the target notes form an enclosure, so perhaps one might interpret the whole sequence as a structural enclosure, i.e. an enclosure built of phrases rather than individual notes. Other cases of large-scale sequencing concepts have been noted by researchers, e.g. in a study on Woody Shaw, where the improvised solo on ‘If’ contains larger units that move outside as a whole (Walters 2011: 16f).

A textbook that seems to be fairly unknown to the writers in the material, at least in comparison to Liebman’s textbook, as only a few writers mention or seem to be aware of it, is O’Gallagher’s book on twelve tone row improvisation (O’Gallagher 2013). The solo lines in the book are mathematical models, formed as intervallic shapes, not as dissonant clashes against a harmonic progression that has to be resolved. There is some connection to scale/chord theory, in that each tone set is spelled out both horizontally (as units of a solo line) and vertically (as suggested chord voicing).

The use of set intervallic and melodic structures is an approach to outside improvisation that can be said to show intention. This large-scale approach to outside clearly shows elements of intention but is not solely dependent on knowledge of harmony and music theory.

3.4 Using set structures: premeditation and muscle memory

In a forum thread, a forum member states that “structures are really important. Triads, motifs, pentatonic cells and intervallic things [---] work well because the ear can hear them, even though they might not be in direct relation to the underlying harmony” (“christianm77” 2016). Thus, structures help the listener to perceive dissonances as intended outside passages instead of unstructured chromaticism or ‘free playing’. Furthermore, it seems that using set structures

can be seen as evidence of intention. According to my analysis, the use of set structures shows that the improviser has studied the vocabulary of jazz and practiced the structures, so that the structures are under the improviser's command.

3.4.1 Pentatonics

A particular set structure that can also be seen as an improvisational device stands out in the material: the pentatonic scale. Generally, the pentatonic scale is understood and referred to both as a scale and as an approach to improvisation, often called 'pentatonics' by jazz improvisers.

Although a pentatonic scale could be understood as any five-note scale, the writers in the material seem to perceive the minor pentatonic scale (1-b3-4-5-b7) as the prevailing pentatonic scale. Some writers seem to enharmonically name pentatonic scales by their minor or major relative, so that A minor pentatonic (with the notes A-C-D-E-G) is sometimes called C major pentatonic (with the notes C-D-E-G-A). The tonal content between minor-major relatives is identical, but the intervallic structure is different. Many textbooks and etude books delve into pentatonics, and present different definitions and utilizations of pentatonics: Ricker (1976), Baker (1979), Roidinger (1987), Waite (1987), Crook (1991), Santisi (1993), Bergonzi (1994), Levine (1995) and Steinel (1995). The space given to pentatonics in textbooks indicates that pentatonics is a central tool in the education of contemporary jazz improvisation. However, these books are, with the exception of Baker, not mentioned in the online material, which indicates that there is a difference between how pentatonics is conceptualized in the online writings and in textbooks.

The pentatonic approach, or the pentatonic concept, can be seen as an opposite to linear playing, where a solo is constructed mainly by stepwise melodies, i.e. scale segments and arpeggios. Pentatonic solos thus have the five-note pentatonic scale as the main building block and use the pentatonic scale as a unit that can be sequenced, transposed and altered. The pentatonic scale is a strong structure because it contains only five notes. Among those five there are three notes that form an even stronger structure: the major triad. Both the complete pentatonic scale and its compressed version the triad are central elements in the outside discourse. In this discourse, the technique of pentatonics means combining a pentatonic scale with a chord or with other pentatonic scales over any given harmonic background. Some writers seem to equate outside and pentatonics: forum member "Secco" (2012) asks about the use and "theory of pentatonic scales and/or 'outside' playing" as if they were possible synonyms. Another forum member makes a distinction between linear chromatics and pentatonics: "I love the 'tension' of chromatic lines, but – for me – those sounds have nothing like the abiding presence of the pentatonic" ("Destinytot" 2016).

Different pentatonic scales will have their own sound over the same dominant chord, as described for example in a blog lesson (Wilson 2011). Forum member "Theorynerd" (2015) elaborates on this: "You can go various degrees of outside the changes with these; say you're playing over Cmaj7. If you start playing using

the D pentatonic scale it won't sound very out, A pentatonic will sound more out, and like Db or F# pentatonic will sound super out." "Theorynerd" does not specify what type of pentatonic scale is referred to, but I interpret them as major pentatonic scales. If "Theorynerd" would mean minor pentatonic scales, the A minor pentatonic scale would not contain any dissonant notes at all, and the F# minor pentatonic scale would contain two dissonant notes and two notes included in the underlying chord Cmaj7. In Example 8, the relationships between the pentatonic scales explained by "Theorynerd" and the Cmaj7 chord is spelled out. There is indeed a gradual shift from the Lydian sound of the D major pentatonic scale to the dissonant F# major pentatonic scale.

Example 8. Notation by Fredrik Erlandsson of a statement by "Theorynerd" (2015).

In what could be described as an online theory book, several combinations of a single pentatonic scale and different chords are listed and evaluated (van Hemert 1998). Example 9 is from that online theory book and shows a C major pentatonic scale over a G minor chord, which can be used "as an outside-scale, but you'd have to be an experienced player for that!" (ibid.)

Example 9. Notation by Fredrik Erlandsson of a statement by van Hemert (1998).

A forum member suggests using a pentatonic scale starting on an extension of the V7 chord ("Henry Dotson" 2015). Over a G7b9 chord, an Ab minor pentatonic scale could be played, Ab being the b9 of G7. To use a pentatonic scale starting on an extension results in many dissonant notes, as shown in Example 10.

Example 10. Notation by Fredrik Erlandsson of a statement by "Henry Dotson" (2015).

A blog-lesson explains why pentatonics are so popular within the outside discourse: "the structure implied by pentatonics is so strong that you can even deliberately play the wrong ones and it'll sound good" (Lyon 2013). A video lesson even says that "you really can take any pentatonic scale and superimpose it over any of these chords" (Zucker 2010b). A response in a forum thread states that a pentatonic scale "has a very clear structure and sound which the listener is familiar with. Due to its simplicity and familiarity, you can get away with playing it, even if it does not fit the harmony in a traditional sense" ("Matt L." 2015). The same response also mentions avoiding the most tempting thing: a stepwise transposition of the same phrase. Instead, "Matt L." suggests moving the melodic line downwards in the phrase but using the pentatonic scale that was a half step up. Half step up and tritone away also works, but "just experiment and trust your ears" (ibid.). Pentatonic scales can also be used to simplify the scale choices in an improvising situation, as a reply on a blog suggests: "for fast, complex songs like Giant Steps, simplify ii-V7-I into a single pentatonic scale that works over all 3 chords with no avoid notes. This is the major pentatonic of the V" ("Jonah" 2010).

Although forum members direct each other to textbooks, they are also aware that "the books/Techinique [technique] are only HALF the story. You use books-patterns to aquire the technique. You need to LISTEN to learn application", as forum member "jimmyjazz1968" (2012) puts it. "Jimmyjazz1968" therefore advises other players to listen to and study players like Woody Shaw and Chick Corea, who are said to be masters of using pentatonic patterns in their solos. Woody Shaw is often mentioned in the material as a master outside player, and as was shown in chapter 1.2 on earlier research, studies on the music of Woody Shaw are also frequent in scholarly works. Pentatonics are not necessarily the primary focus in these works, but the nature of Shaw's improvisational style makes pentatonics central in research on Shaw: for example, Lilley's Master's thesis includes several analyses of Shaw's use of pentatonics:

> Woody Shaw played outside the chord changes but in a clearly ordered and structured way. For example, he knew that to obtain the alterations over a C7 chord he wanted, he only had to play a specific pentatonic. For example F

> sharp minor pentatonic would yield the following alterations; flat 9, natural 7, sharp 11. Different pentatonics would yield different alterations. Although it is impossible to say exactly how Woody Shaw himself conceived his playing style, there are clear patterns that enable one to see the structure underlying his playing. He was definitely a chord player. (Lilley 2000: 44f.)

The pentatonic approach is put to practice in outside playing. According to a textbook, "Outside pentatonics are best reserved for use in sequences" (Ricker 1976: 14). An online lesson agrees, saying that "sequential patterns are another way to create symmetry in a line that goes outside of the written harmony", and exemplifies with a segment from a Woody Shaw solo containing a pentatonic pattern that descends by half step from F# to F, as shown in Example 11, a screenshot taken from the lesson (O'Donnell 2016b).

Example 11. Woody Shaw's solo on 'Stepping Stone' (1'11-1'15) from a live video recording (Shaw 1979). Transcription by Eric O'Donnell (O'Donnell 2016b).

However, there are other pentatonic motifs and sequential patterns involved in this phrase, as shown in Example 12. Motif 1 is the same segment that O'Donnell identified in Example 11. Although no minor third is included in the pattern, I interpret it as a minor pentatonic phrase, since the second exhibition of the motif aligns with the underlying Fm7 chord if seen as a minor pentatonic. Motif 2 is a G minor pentatonic segment that like motif 1 is sequenced by transposition down a half step to F#. Coherence and symmetry are created by the use of repetition, as O'Donnell stated.

Example 12. Woody Shaw's solo on 'Stepping Stone' (1'11-1'15) from a live video recording (Shaw 1979). Transcription by Eric O'Donnell (O'Donnell 2016b), edited by Fredrik Erlandsson.

Another Woody Shaw solo is posted on the blog Wilktone, from which the passage in Example 13 is taken. Here, the descending pentatonic scales A minor to Ab minor to G minor are not identical in their construction, but the clear descending structure of the top note in each four-note cell makes them coherent and gives an intentional impression. This impression is further underlined by the chosen pentatonic scales. A common harmonic progression in bebop and post-bop jazz is to insert a ii-V7 progression before any chord, in this case the Gm7. Such a ii-V7 would in this case be Am7-D7, or with a tritone substitution, Am7-Ab7. This model of reharmonization is stylistically idiomatic, and Shaw seems to play over that reharmonization using the Ab minor pentatonic scale to outline the modal interchange chord Abm7 as a tension before landing on the G minor pentatonic scale, outlining a Gm triad. Thus, this passage is outside, but clearly based on an idiomatic sequencing of a pentatonic structure.

Example 13. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (5'23-5'25) from the record Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

Pentatonic sequences are often constructed by half step transpositions, as seen in Examples 12 and 13. However, pentatonic sequences can also be constructed using other intervals. A blogger introduces "a [---] pentatonic pattern [---] [that] starts off with a minor pentatonic scale, then you go down a Major third, outside the key and do another pentatonic scale", as shown in Example 14. In the first bar, the E minor pentatonic scale is played as a descending figure, before the line begins alternating ascending and descending skips within the scale. The note G in the second bar is a pivot point, where the scale changes from E minor pentatonic to C minor pentatonic. At the end of the third bar, the shift back to E minor is done in countermotion: The scale moves upwards from C to E, while the solo line moves downwards from an F to an E.

Example 14. Notation by Fredrik Erlandsson of a phrase published in a blog post by "Sweets" (2009b).

In longer pentatonic sequences like the one found in Example 14, a set structure which is inherent in the pentatonic scale becomes visible: the triad.

3.4.2 Triads

Jazz musicians have been using triads as a basis for improvisations since the 1920s and have been experimenting with chord extensions in the form of superimposed triads since the 1950s (Berliner 1994: 160). In textbooks and theory books, the triad is often used as superimposition material for reharmonization purposes. When used in a superimposition context, triads are also labeled "upper structure triads" (Santisi 1993: 41), "slash chords" (Levine 1995: 310), "polychordalism" (Waite 1987: 30, 58) or all three synonymously (Smith 2008: 71ff).

Within the outside discourse, triads are a common structure to use as elements in an outside solo. A blog lesson explains why:

> the clearest structures for indicating harmony are triads, particularly major ones. There's the added benefit that most musicians have an easy familiarity with triads – in fact, people learning to play jazz usually spend ages trying to get beyond playing in simple triads (Lyon 2008.)

One might add that there are only 12 major triads to choose from, which makes them easier to navigate and handle in an improvising situation, compared to the five permutations of the 12 five-note pentatonic scales or any of the modes of a seven-note scale based on the 12 chromatic notes.

It is not only musicians that are familiar with triads. Listeners are accustomed to the sound of the triad, according to a forum member: "triads, and pentatonic shapes, are very familiar and harmonic to us humans. They're kinda justified in themselves, even when they are way outside" ("Runepune 2016"). This statement should be understood in a jazz context, where listeners are likely to be shaped by harmonic structures that emanate from European art music rather than an innate, universal understanding of a major triad.

Triads can be used for sequencing, but also as a tool for adding dissonant notes to a solo line. An article published on a blog states that "when we play 'upper structure' triads [---], the ear simultaneously understands the notes as part of the underlying chord and as a coherent triad in their own right" (Lyon 2008). This notion is supported in an online lesson where it is stated that triads are "melodic devices that the listener can recognize and follow" and that triads could be used "to lead the listen through your outside lines rather than sudden shifts or too many scale or chromatic lines" (Warnock 2013).

Triads are easy to identify in a music analysis of a solo, and because of their supposed familiarity among listeners, triads are also recognizable for a listener's ear. Therefore, triads are often suggested as the first step towards playing outside, as a forum member explains:

> Triads and scales are taught as ways to outline the harmony that's there already but they're also so ingrained in our musical lives that they also represent incredible melodic strength. Play an Ab triad over an A7 chord and your ear will tolerate that for much longer than you might think because the melodic shape is so familiar to us. How long you can maintain that dissonance before it just sounds bad depends on how strong your melodic ideas are as well as your personal preferences and those of your listeners. ("pamosmusic" 2014.)

A forum member suggests using triads as a starting point for sidestepping and tells how he/she has tried playing a certain row of triads over the first four bars of a Bb blues ("mokapot" 2017). In the forum post, "mokapot" uses words instead of notation to describe this. In Example 15, I have transcribed the words of "mokapot" to notation. The notated rhythms are not included in the original statement, but they are included here to make the triads easier to identify while reading. The row of triads that "mokapot" tried to play were all major triads: Bb – B – Db – B – A and Bb. The notes included in the triads are often dissonant, but according to the writers in the material, their familiar structure can help a listener accept the dissonances.

Example 15. Transcription by Fredrik Erlandsson of a written description of a phrase ("mokapot" 2017).

Forum member "CrownStarr" (2015) gives advice on how triads can be used as a pattern and how they can be developed into a complex line. The advice represents how the material tend to approach techniques such as sequencing. In the forum post, "CrownStarr" does not use notation, but words and note numbers to describe the concept. In Examples 16, 17 and 18, I have transcribed the written advice that "CrownStarr" gives. "CrownStarr" begins by stating that you achieve the most effective sound by playing things that are tonal in isolation, or at least sound sort of tonal, but that clash with the underlying harmony ("CrownStarr" 2015). The next step is to disguise the triads by adding an acciaccatura to the first note, as seen in Example 17. "CrownStarr" then continues to develop the phrase rhythmically (similar advice regarding triads is also give in a different forum by member member "Boston Joe" 2016), as seen in Example 18.

Example 16. Transcription by Fredrik Erlandsson of a written description of a phrase ("CrownStarr" 2015).

Example 17. Transcription by Fredrik Erlandsson of a written description of a phrase ("CrownStarr" 2015).

Example 18. Transcription by Fredrik Erlandsson of a written description of a phrase ("CrownStarr" 2015).

The result of the advice of "CrownStarr" is a phrase that might look and sound rather complex but is in fact built upon basic building blocks: a major triad that moves up in whole steps. According to what is stated in the material, a phrase like this would sound outside but still have a sense of coherence and familiarity. As it is clearly based upon premeditated techniques, a phrase like Example 18 exhibits intention by the improviser.

Another example of a premeditated, triad-based approach is found in a blog-post that offers advice on how to use triadic patterns as a means to create outside lines that exhibit coherence:

> In the key of C major: A C E is an Amin triad in the key, but the SHAPE also appears as the upper extension E G B, of the A minor 9 chord: A C E G B. Realizing this, you can move chromatically in half-steps from the A C E up or down, using the same SHAPE, toward the E G B extension. It creates a chromatic descent (or ascent) of minor triads, until it reappears as the related extension. (Jones 2015.)

The suggested pattern, a minor triad, is transcribed to music notation in Example 19, as an ascending and descending figure that descends from A minor to E minor. The blogger notes that a minor triad occurs in two instances in an Am9 chord, both as an Am triad and as an Em triad. The blog post continues: "this can be applied to any triadic shape in this fashion, as well as four note, tetra chord shapes or motivic cells based on those same triads" (Jones 2015). Example 20 is a notation of a motivic cell, as suggested in the blog post. If an improviser follows this advice, the result is a phrase that has many dissonant notes but is also

coherent due to the recurring triadic structures, thus exhibiting intentional outside playing.

Example 19. Transcription by Fredrik Erlandsson of a phrase described by Jones (2015).

Example 20. Transcription by Fredrik Erlandsson of a phrase described by Jones (2015).

Some writers in the material elaborate further on triads and develop triadic approaches that move beyond major or minor triads. A jazz guitarist suggests on their homepage that one could "arpeggiate the 5 outside notes of a 12-tone scale with triads or 4note-chords, arpeggiate non-diatonic triads and/or seventh chords with the outside note as a root" (Pelletier-Bacquaert n.d.). A forum member suggests using triads from compound scales to achieve sounds that go beyond the diatonic triad ("bako" 2016). When constructing triads from compound scales, the result will be major and minor triads, but also augmented and diminished triads. Augmented and diminished triadic or tetrad structures will undoubtedly render sounds and solo lines that do not carry the same familiarity as the major triad. Although the solo line will sound outside, the element of coherence and intention will be obscured for a listener.

Another forum member says that "symmetric sounds, such as playing C major, E major and Ab major on a Cmaj7, sound great." ("8-5-b5-5-s5-5-7-8" 2015). Here it must be noted that although a major triad may sound symmetrical in the ears of a listener, a triad is not symmetrical in itself. However, the roots of the chords mentioned by "8-5-b5-5-s5-5-7-8" form an augmented triad, which in fact is a symmetrical triad, as shown in Example 21. In this case, it seems that the symmetry lies in how the triadic structure is used rather than in the symmetry of the triadic structure.

Example 21. Transcription by Fredrik Erlandsson of a written description of a phrase ((“8-5-b5-5-s5-5-7-8” 2015).

So far, writers in the material have constructed the examples of triadic sequencing themselves, for pedagogical purposes, instead of pointing to examples taken from transcribed solos. However, there are also examples of actual solos in the material, as in Example 22, which is taken from an online lesson that uses a solo segment by guitarist Pat Metheny as an example of incorporating triads in a solo line (Warnock 2013). In the lesson, Warnock writes that the triads help bring in outside sounds in a structured way.

Example 22. Transcription, probably by Matt Warnock (Warnock 2013) (edited by Fredrik Erlandsson), of Pat Metheny’s solo on an unidentified tune from an unidentified recording.

Here, the triads are only played once, and very briefly, as part of a longer line. A longer example is found in Example 23, from a solo by Michael Brecker that online forum member “destinytot” refers to as an example of controlled outside playing. It shows the principle of superimposition: a Db major triad over an E7 chord. The Db triad is arpeggiated several times, spanning almost two octaves, which makes it clear for a listener that the Db triad is a deliberate choice, a result of intention.

Example 23. Michael Brecker's solo on 'I Really Hope It's You' (1'46-1'50) from the album Sleeping Gypsy *by Michael Franks (Franks 1977). Transcription by Moffet (2004). Edited by Fredrik Erlandsson.*

In a blog lesson, Lyon presents a chart listing how inside or outside the 12 different major triads will sound over a given dominant chord, by counting consonant tones (C), i.e. chord/scale tones, alterations (A), i.e. alterations of ninths and fifths, and outside tones (O), i.e. the major seventh, the only tone not categorized as (C) or (A) (Lyon 2008). Example 23 above has a Db triad on top of a E7 chord. According to Lyon's table, a Db triad over E7 contains the notes "13(C) b9(A) 5(C) – two consonant tones, one alteration" and links it to "7b9 (diminished scale) – a legitimate alteration" (Lyon 2008). According to this table, the Db triad over the E7 belongs to the E whole-half diminished scale, resulting in a b9 alteration of the dominant chord. Following the chord/scale concept, the solo line and its harmonic implications could thus be considered rather inside, which is quite the opposite to the point that forum member "destinytot" was trying to make when referring to the solo passage in the first place. Chord/scale theory (or the scale syllabus in the Aebersold systematization) gives several possibilities for superimposing triads that are inherent in the chord/scale system. A chord/scale triadic approach to dominant chords could include for example E and D triads over a E7 chord or a F# triad over a E7 chord for a Lydian dominant sound. A diminished sound could be achieved by playing Bb, Db, E and/or G major (or minor) triads over an E7 chord. These triads are inside, according to the chord/scale concept, but might sound outside to a listener.

Example 24 is an eight bar segment of Michael Brecker playing triads over the second A section of so called 'rhythm changes' (a chord progression based on the tune 'I Got Rhythm'). This solo is mentioned by forum members "AmundLauritzen" (2013) and "0zoro" (2012) as an example of good outside playing. The first half of the example contains occasional triads, while the last four bars consist of a line of descending triads, first descending by half steps, F - E - Eb, and then by whole steps Eb - Db - Cb - A. The E major triad over the G7 has the same intervallic relationships as the Db major triad over E7 shown in Example 23, and the position in Lyon's table with "13(C) b9(A) 5(C) – two consonant tones, one alteration" is also the same (Lyon 2008).

The string of descending triads in the last bars of Example 24 are not played over a single dominant chord, but over a longer chord progression. The solo line over the last four bars bears many similarities to what was shown in Example 15, where major triads were played over a blues progression, especially considering that the very last note of the phrase is an F, the fifth of the Bb major seven chord, thus suggesting a resolution to the Bbmaj7 chord. Also, this solo

passage also highlights Williams's points on how Brecker uses major triads as wrong superimpositions (Williams 2017: 104).

Example 24. Michael Brecker's solo on 'Oleo' (1'22-1'28) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

Lyon's somewhat mathematical approach is one of the most systematic presentations of the different degrees of outside playing that I have found in the material. However, Lyon also gives more a general advice on how to use a triadic approach in improvisations. He reminds the reader that several triads can be stringed together in random order and in different inversions that one does not have to play complete triads in an improvised line, but that the line will seem more structured if one conveys at least some sense of the triads (Lyon 2008). An online lesson and two forum posts mention a solo by saxophonist Michael Brecker on the tune 'Blue Bossa' as an example of a solo which contains many outside passages (O'Donnell 2011; "jayx123" 2013; "emiliocantini" 2013). Example 25 is from that solo and shows a series of triads played over a chord progression. The solo segment exemplifies what Lyon advises, as it has different triads stringed together in a very structured way. The first triad lands on a quarter note, and the following triad starts a fourth up from that quarter note. That pattern is then repeated four times. The solo segment could thus be seen as an example of triadic sequencing.

Example 25. Michael Brecker's solo on 'Blue Bossa' (1'47-1'51) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

Diminished chords are, in a jazz context, generally not understood as triads, since they include four notes. In the material, however, they are often treated as triads. A forum member does in two separate threads refer to a violin solo from 1936 by Stuff Smith as a pre-bop example of triadic patterns, as shown in my own transcription of the solo, example 3.4/19 ("christianm77" (2015 & 2016). Similar diminished arpeggios also appear later in the solo, where the pattern repeats itself with small embellishments. The basic principle in Smith's solo is the same as in Examples 16, 17 and 18 earlier in this chapter, where a basic triad is developed to a longer melodic unit. A member in the same forum then responds to "christianm77"'s post and the music example: "That's what I would really call 'outside' - because in reference to style they really sound so" ("jonah" 2016). Indeed, being a solo from the swing era, the solo line contains many notes that are not easily dubbed inside. An explanation might be that the fretboard design of the violin facilitates chromatic transposition of patterns, a phenomenon that has been mentioned earlier in this chapter.

Example 26. Stuff Smith's solo on 'You'se a viper' (0'54-0'58) from the album Reefer Blues: Vintage Songs About Marijuana Volume 3 *by Stuff Smith & His Onyx Club Boys. Transcription by Fredrik Erlandsson.*

In the material, triads are explained to be a central tonal structure in outside playing, but also to be a way for the improviser to exhibit intention to the listener. It thus seems that the insideness or outsideness of a phrase takes place at the intersection of advanced harmonic techniques and the strong familiarity of the sound of the triad.

3.5 Chapter summary and conclusion

Within the outside discourse, outside playing is described as deliberate and intended. The analyses in this chapter show that, as how the concept is constructed in the material, outside is not to play randomly, without a plan, harmonically free or to abandon rules completely. Some degree of intention must be inherent in the outside solo lines. This chapter has also shown that intention can be manifested in various ways, grounded in application of rules from harmony and music theory as well as in performance characteristics.

The initial question in this chapter is formulated by, among others, blogger "JazzWee": "Is it 'structured' or just 'free play'? ("JazzWee" 2013a). "JazzWee" also gives a possible answer: "From what I know, going outside has always been a structured matter, where one becomes ever so conscious of the underlying harmony and selectively choosing just a note or two outside of the expected harmony to titillate the senses" (ibid.). A forum member agrees with that opinion, expressing a point that seems to be a fitting summarization of this chapter: "what I like about these examples is that they're over common progressions. Same goes for Brecker - I like the effect of his controlled outside playing [---] It's formulaic - and that's the point. It's repeatable. [---] I like it kept on a leash, reined in" ("destinytot" 2016).

Outside is a structured approach to jazz improvisation, and it seems essential to clearly manifest that structure, as a blog post states: "some sense of structure should be evident when you're against the harmony" (Lyon 2008). In this context, structure means both the use of large-scale building blocks for making music, and the use of theoretical constructs used to organize tonal material: to apply structures give melodic cohesion and clarity, forum members "JPWGibson" (2015) and "8-5-b5-5-s5-5-7-8" (2015) say. Set structures are thus melodic units that give coherence, familiarity and an impression of control, despite harmonically distant notes in the solo line. All of these features can be seen as aspects of intention. By highlighting a certain tonal structure that contains harmonically wrong notes, the improviser shows that the chord/scale-wise incorrect notes within that structure are played on purpose, thus manifesting intention. Therefore, within the outside discourse, a triad consisting of notes not found in the chord/scale concept is still legitimate because of its triadic structure, not because of its tonal content.

To improvise in such a manner that the improviser shows his or her theoretical knowledge seems to be another of the ways in which intention can be manifested. However, merely using advanced harmonic concepts does not

automatically make the improvisation outside, nor does it justify playing with weak rhythmic drive or diminished tone-quality.
Thus, confidence and stability in performance are also important. Good skills on a musical instrument are the foundation upon which harmonic concepts and theoretical knowledge are played out.

The writers in the material that answer questions about how to play outside point out several prerequisites or characteristics for successful outside playing. Four of those concern intention:

1. Thorough knowledge and understanding of chord/scale theory, including the idiomatic alterations for different chords and chord sequences, so that one can be in command of both outside and inside processes
2. An adaptation of a pattern, structure or note choice system. This could be pentatonic scales, shapes on the fretboard of a guitar or transposed patterns
3. Unchanged (or not decreased) levels of intensity and gusto regarding rhythmic drive, phrasing and fluency compared to inside passages
4. Strong and convincing playing on the instrument, regarding timbre, articulation and output, i.e. energy.

According to my analysis of the material, the goal of outside improvisation is to lead the listener from inside to outside and back inside again rather than simply jumping back and forth between inside and outside. It seems that shifts between inside and outside should be executed with elegance and smoothness, so that the improvised line is weaving in and out of the harmony with both some sense of structure and cohesion, as well as some sense of unpredictability.

The material advocates recognizable and premeditated structures such as triads, pentatonics, patterns and similar tone sets stored in muscle memory for outside improvisations. This advice is somewhat striking, since such improvisational tools are often considered suspect in jazz improvisation, because of their predictability and impersonal-ness: Berliner's 800+ page *Thinking in Jazz* has its starting point in such a notion. I have personal experience of jazz teachers saying that 'Miles Davis never played patterns', implying that patterns and other kinds of premeditated note choices are not 'true' improvisation. It is possible that patterns, licks and heavily practiced phrases are justified only in an outside context. If so, that would imply that the outside concept has different aesthetics compared to other jazz improvisation concepts, making it a style of jazz improvisation.

4 Clashing and clouding

As was shown in the previous chapter, a central aspect of the outside construct is intention, meaning that outside segments should originate from and/or reflect premeditated and knowledge-based materials such as patterns, pentatonics or triads, and/or be performed with confidence and authority. Random playing or

fishing around for notes is not considered part of the outside concept, according to how it is constructed in the material. Indeed, one could argue that intention is central in any jazz improvisation context, but within the outside discourse, its importance lies in its connection with another essential concept: dissonance. Some of the writers in the material even seem to equate dissonance, tonal tension and outside playing and treat these as synonymous concepts and as features that can replace a consonant inside, since creating "intentional dissonance" in a solo is said to result in a "more exciting and interesting solo" (e.g. "inwalkedbud" 2014; Parker 2013). Here we can see that the outside discourse links intentionality to the concept of dissonance, but also that dissonance, a presumed synonym to outside, is said to be something good and desirable.

The idea of harmonic tension and release is central in many types of music, jazz not excepted, and it is even more crucial within the outside discourse. In a way, the question of what outside is can be translated into what a dissonance and a consonance are, and how one relates the outside concept to idioms, genres and styles within a jazz harmony context.

This chapter focuses on dissonances, which are approached in different ways by the online writers. That the concept of dissonance is central in outside discourse is established, but the idea of dissonance is explained and exemplified in different ways. I have found that there are two categories of dissonance in the material. Some dissonances are obvious harmonic collisions, sometimes called 'clashes' in the material. In a blog post lesson, it is indicated where dissonances are located: "What makes good outside playing? The notes should be identifiably and clearly *against* the underlying harmony" (Lyon 2008). This suggests that outside in terms of dissonance and harmonic tension takes place in relation to something else, e.g. a chord or a chord progression. Furthermore, it indicates that outside solo lines should not be harmonically compatible with the underlying chord. Other dissonances are seemingly milder and can be seen to only diminish or obscure the harmonic clarity of the solo line in relation to the underlying harmony rather than to clearly collide with the harmony. A video lesson shows "lines to play over various chords [---] to play inside/outside over [a] chord progression" (Zucker 2010a). Based on how these two types of dissonances are described in the material, I call them *clashing* and *clouding.*

I will discuss clashing, how solo lines are incompatible with underlying chords, in subchapter 4.1, together with concepts and techniques like bitonality and superimposition. Clouding, i.e. obscuring the tonality by adding non-diatonic tones to the solo line, is discussed in subchapter 4.2, together with concepts and techniques like side-stepping and bar-line displacements. However, there are also aspects of the outside concept that concern the underlying chords rather than solo lines that are played on top of them. Such matters are addressed in subchapter 4.3.

4.1 Clashing: dramatic dissonances

The first category of dissonances, clashing, concerns clearly dissonant note choices in relation to a chord. In online lessons, outside is explained as playing notes that clash against or seem unrelated to the background in order to create tension (Williams 2011; Myette 2015). When choosing notes for a solo line, it is not only single notes that should be dissonant. Instead, to achieve an outside phrase, a blogger suggests that the improviser should use

> *series of notes that create tension, momentarily, by using notes that are in dissonance with [the] current environment. [---] What gives outside playing it's power [---] is the fact that the notes used are actually inside a melodic space that simply is not where the current harmony resides, thus creating tension. (Jones 2015.)*

This quote gives several insights to the outside discourse. Firstly, it is evident that harmonic tension and dissonance are central in outside playing. Secondly, tension is created by using melodic units that consists of several notes. Based on other statements in the material, it seems that an occasional dissonant note is perceived primarily as a stylistic device: as a passing note or part of general bebop vocabulary. Also, if the intention behind the one dissonant note is unclear, the note might be perceived as a mistake. Thirdly, tension is created in relation to a harmonic environment, i.e. a tonality. Again, it stands clear that atonality and free playing is not synonymous to outside playing. Fourthly, the notes used belong to a melodic space, which I interpret as a harmonic structure, such as a scale. This links dissonances to premeditated materials and intentions. It also links outside to inside. Inside as a prerequisite for outside is a theme that runs through the material. As it is explained, playing outside only works if one first defines what is inside, and therefore the improviser needs to set up the outside phrases by first outlining inside phrases.

Many writers in the material point out that to play outside, the improviser must first have a good understanding of what sounds inside, which seems to imply a deeper level than just knowing what scale to play over a certain chord. Inside concerns "the harmonic background *and* the stylistic context in which the piece exists", according to an online lesson (Williams 2011). This shows that both inside and outside are governed by stylistic rules, although it seems that the rules for inside are not the same as the rules for outside.

According to the statements in the material, it seems that outside has a particular sound. Descriptions of an 'outside sound', 'non-functional sound', 'non-diatonic sound', or descriptions of inside as sounding 'un-hip' or 'simple' indicate that outside has an own sound that differs it from the sound of inside playing, e.g. diatonic or chord/scale-based playing. A forum member asks rhetorically: "isn't 'outside' just a word for 'more dissonant than I'm used to hearing' or 'more dissonant than I can understand' or 'sounds bad to me'?" ("JakeAcci" 2013). It thus seems that the possible harmonic distance between melody and chord is placed on a continuum of parameters such as situation, style

and experience. Above all, these statements show that there is an auditive aspect of outside: outside has characteristics that you can hear, and a listener's former experiences have an impact on how those characteristics are perceived.

However, the mere usage of dissonant tones and chromaticism does not make a solo line outside, as a forum member states: "passing tones, leading tones, neighbor tones, enclosure, bebop scale, blues scale [---] are all methods for adding interest and melodic ideas using chromatic tones, but don't really take you 'outside'"("JL" 2015). In the same forum thread, another member agrees: "[chromatic notes] lack the vibe I'm calling outside because they are very in-line and predictable" ("Balladeer" 2015). According to these statements, outside and harmonic tension can, or even should, be achieved using approaches that concern more large-scale perspectives rather than focusing on single notes. The jazz idiom seems to allow so many different types of chromatic notes that the boundary for outside is stretched well beyond mere dissonant tones and chromaticism. A forum member states that "if you really want to play outside you should learn how to shift to different tonalities, [---] don't just alter a chord, but rather alter a chord sequence of 4, 8 or 16 bars or so" ("Warp x" 2015), and forum member "8-5-b5-5-s5-5-7-8" (2015) suggests implying new changes over the standard or normal chord sequence. In an informal e-mail discussion on jazz theory in the late 1990s, on the *SMT-JZ* mailing list of which I was a member, a renowned jazz music theorist put forth that modern players are skipping from tonal area to tonal area in a very general sense, sometimes using substitute tonal areas. This approach would not be chord-scale thinking, according to the theorist, but improvisation rooted in a more general understanding of tonality and harmony. It thus seems that an option for an improviser to move a solo line outside would be to think in terms of broader tonal areas, not only by negotiating the dissonant possibilities in every single chord in a progression.

In two online lessons, it is suggested that non-diatonic note choices are not only central but essential to the outside concept: "in general, playing 'outside' means playing notes that are not contained in the diatonic scale. This will create tension and can help make a phrase sound more exciting" (Behr 2003) and playing outside is "using the wrong notes in the right way" (O'Donnell 2016a). Outside is here constructed as an audible feature that, if done in accordance with the outside norms, brings additional interest to a solo line. It must also be noted that tension, both in these quotes and in statements elsewhere in the material, refers to tonal tension. Other musical features, such as rhythmic density or timbral intensity, specifically their audible qualities, are never connected to tension in the statements in the material. Any tension other than harmonic/melodic is not within the scope of outside discourse, perhaps as a consequence of the harmonic focus in jazz improvisation education in general. A forum member explains outside in similar terms: "since jazz is a fairly chromatic music that uses lots of chord tones that are dissonant, [outside] frequently refers to an entire motive or group of notes that fall outside the harmony as opposed to chromatic passing notes or color notes on a chord" ("inwalkedbud" 2014). Furthermore, in the material, tonal tension is understood to be located within a

post-bop jazz idiom. This is manifested not only by the solo examples referred to by the writers in the material, but also by the players, tunes and albums that are given as good examples in resolving the tonal tension. Idiomatic or stylistic tension, such as the use of New Orleans jazz phrasing or similar improvisational devices from the early stages of jazz, is never mentioned as a means to play outside, even though such methods arguably would have an impact on tonal tension. The writers in the material do not include stylistic crossbreeding as a part of the outside concept.

4.1.1 Bitonality: two simultaneous tonalities

Bitonality is not an uncommon concept in musicology or in music in general. The material often suggests bitonality as a means to achieve outside, as in an online lesson: “with bitonality, you can travel to space and come back to the earth safely” (Onyemachi n.d.), meaning that bitonality can take you outside of the tonality in a controlled manner.

For the sake of contextualizing the concept, Example 27 is from Levine’s *The Jazz Theory Book* (Levine 1995), a textbook used and referred to by many writers in the material. It is included here together with Levine’s description, since this example is likely to have influenced how writers in the material perceive and think about bitonality. In Example 27, Levine uses bitonality to describe the dissonant relationship between two harmonic units but also stresses the performative aspects of outside playing: these approaches to create dissonance and tension require conviction and confidence.

Example 27. A segment of page 184 from The Jazz Theory Book (Levine 1995).

Many of the best examples of "outside" playing are really *bitonality,* or two tonalities at the same time.[1] The pianist or guitarist may be 'comping in one key, while the soloist goes outside and plays in another. To make this sound good, and not like a bunch of wrong notes, you must outline the second tonality clearly and play *with authority.* If you're the least bit wimpy about it, it's going to sound wrong. Someone once described playing outside as making the "wrong" notes sound "right." As for a definition of the difference between "right" and "wrong" notes, remember this: *You can play any note on any chord. If it sounds "right" to you, then it is. If it sounds "wrong" to you, then it is.*

Play **figure 8-1**. Sounds like A major, right? Now play **figure 8-2**, the same phrase but played over a piano voicing for G-7. An A major phrase played over a G-7 chord is bitonality. This is from Woody Shaw's solo on his tune "Rosewood."[2] As shown here, this example doesn't do justice to the music at all; the dissonance is much too harsh. You have to listen to Woody's recording to really hear how it sounds.

Let's examine several ways to get "outside."

Figure 8-1

Figure 8-2

G –7

Forum member "fasstrack" (2016) mentions "cool bitonal playing" in a segment of a solo by saxophonist Sonny Rollins. The segment in question is the final cadenza of the tune *Alfie*, seen in Example 28. Rollins superimposes a D major scale over a fermata-held Fmaj7/G chord. In this example, the bitonality is obvious, as only two harmonic entities are present. The harmonic clash is also obvious: the F# defines the major quality of the D major scale and is a half step from both the root F in the Fmaj7 chord and the bass note G. The C# separates the D major scale quality from other D scales with a major third, such as D Mixolydian. The C# furthermore creates a dissonance with the bass note G, as they form a tritone interval.

Example 28. Sonny Rollins's solo on 'On Impulse' (4'10- 4'18), from the album Alfie *by Sonny Rollins (Rollins 1966). Transcription by Fredrik Erlandsson.*

Fmaj7/G

cadenza

8vb

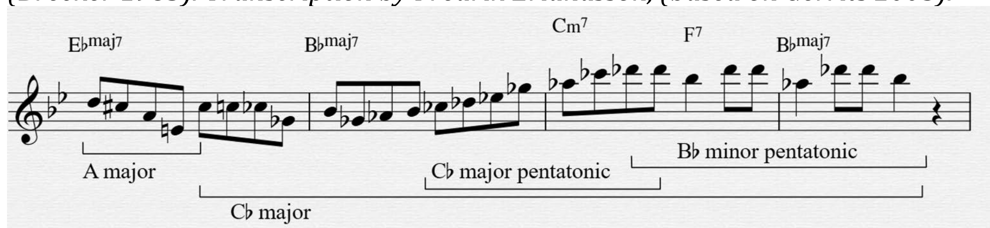
Example 29 is a screenshot from a blog post, exemplifying the concept of

bitonality by showing how pianist Paul Bley superimposes a phrase in Db major over a Gmaj7 chord (Polishook 2014). This solo has had an impact on other jazz musicians: guitarist Pat Metheny says that Bley's solo on 'All the Things You Are' had a great influence on his playing, calling the solo a "shot heard 'round the world'" (Freedman 2019). Here, only one of the notes is inside or consonant, the other ten notes are dissonant. The only inside note is the second note, Gb, which is the enharmonic equivalent of F#, the major seventh of the Gmaj7 chord, and does not arguably carry much consonance. As a matter of fact, the notes in the phrase could also be interpreted as implying Gb major and could thus also be an example of side-stepping. However, the melodic gravity in the line points to Db major, as the line is Db major in its entirety, I label this superimposition rather than side-stepping.

Example 29. Paul Bley's solo on 'All The Things You Are' (3'33-3'36), from the album Sonny Meets Hawk *(Rollins & Hawkins 1963). Transcription (probably) by Mark Polishook. (Polishook 2014.)*

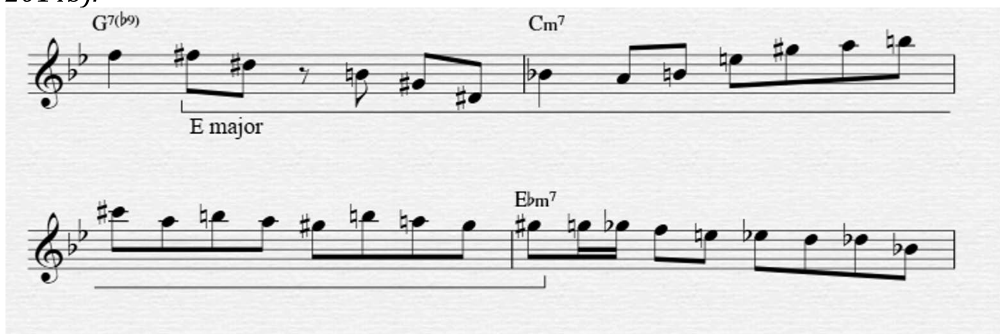
A solo line with a longer bitonal passage is found in Example 30, which is a segment from Michael Brecker's solo on 'Oleo', mentioned by forum members "AmundLauritzen" (2013) and "0zoro" (2012) as a good example of outside playing. Here, the solo line begins with a brief superimposition of A major over an Ebmaj7 chord. In fact, it would be possible to interpret the whole first bar as A major, given that the C is treated as a passing note. However, since the remainder of the relatively long phrase is clearly Cb major, I have chosen to interpret this phrase as a superimposed Cb major tonality over a ii-V7-I progression in Bb major. Within the long Cb major phrase is embedded a Cb major pentatonic scale. The repeated last three pitches (Db, Bb and Ab) in the phrase gravitate towards a Bb, hinting at a Bb minor pentatonic superimposition, but they still are a part of the Cb major tonality.

Example 30. Michael Brecker's solo on 'Oleo' (3'22-3'27) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).



In an online lesson, Brecker's control of harmony is said to be so great that he "can literally play anything he wants over any chord" (O'Donnell 2011). Another example of bitonality, where Brecker plays dissonant harmonic structures over a chord progression, is found in Brecker's solo on 'Blue Bossa', a solo mentioned by forum member "jayx123" (2013), as shown in Example 31. Here, Brecker plays an E major phrase for almost three full bars over a V7-i progression in C minor. There is one note that stands out in the phrase as not being from E major. The Bb over Cm7 in bar two indicates E Lydian rather than E major, but I have chosen to interpret it as an acciaccatura rather than a change of modality. Note for note, E major produces many dissonant notes, such as the major seventh (F#) over G7b9, the major third (E) and the augmented octave (C#) over Cm7. However, here Brecker seems to be thinking in terms of a longer tonal area rather than focusing on the dissonant possibilities of single notes. In other words, I interpret the dissonances as a consequence of an intended E major over G7b9 and Cm7 instead of E major being a consequence of a number of individually chosen dissonant notes.

Example 31. Michael Brecker's solo on 'Blue Bossa' (1'25-1'29) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).



Jazz improvisation includes playing over 12-bar blues progressions, which is often understood as an improvisational style of its own. Blues playing seem to follow its own rules, meaning that what is idiomatic in a blues can be said to take precedence over chord/scale theory. The blues scale is inside over a blues, but the blues is also "a prime example of outside playing. The minor over major sound is exactly that", as a forum member points out ("Ragman1" 2017). In fact, "Ragman1" describes a case of bitonality, but uses the term outside instead of bitonality.

It seems that bitonality overlaps many aspects of the outside concept. However, I argue that in the material outside is constructed by using several additional elements that are not linked to bitonality. Thus, bitonality and outside are not constructed as synonymous concepts in the material. Instead, the writers seem to favor a different term, which albeit its resemblance to bitonality seems to be a concept of its own: superimposition. According to my analysis of the statements in the material, bitonality is constructed as a possible result of

playing outside and superimposition is constructed as a possible technique to achieve outside.

4.1.2 Superimposition: one thing on top of another

Superimposition is, in short, putting one thing on top of another. However, in the material, the technique is often paired with another concept: substitution. Within research and the academic field, there is a clear difference between the two, as the following text from Williams's PhD dissertation shows:

> superimposition is not to be confused with substitution, where the rhythm section may play an alternate set of chord changes (often to increase harmonic complexity and harmonic tempi) which would direct the improviser's melodic choices. In superimposition, the rhythm section continues to play the original chord changes or harmony, while the improviser leads his phrases through substitutions of his own choosing despite clashing against the rhythm sections suggested harmony, thus creating a superimposition. To summarise, the aim of substitution is to accentuate the tonality, through extending and replacing chord forms, whereby superimposition aims to override and disregard it, to deliberately clash against the harmony. (Williams 2017: 89.)

However, within the material I study, writers do not always share the same view. It seems that a blog lesson by Warnock says just the opposite:

> There are two main ways to approach playing one chord over a different chord change, superimposed chords and substituted chords (often called chord subs or simply subs). Both of these concepts offer unique ways to play one chord over another, with superimposition focusing on altering the color of the underlying chord, and substitution creating tension over the underlying chord. When you are superimposing one chord over another during your comping or improvising, this means that you are using a different chord from what is on the leadsheet, but one that is directly related to that given chord. [---] Substituting a chord means that the chart says to play one chord, such as the F7 in the example below, and you are playing a chord that is not built from or directly related to that particular chord, such as the E7 in the example below. Whereas superimposed chords come from the chord extensions or chord scale that is related to the chord in the chart, chord subs are often used to relate to a previous or subsequent chord in the progression. (Warnock 2012.)

The descriptions on superimposition found in the material are somewhat varied, and writers have different understandings of the term. For the most part, they seem to be in line with Williams's definitions rather than Warnock's. Despite differences in terminology and shifting approaches, superimposition seems to refer to the same principle: a harmonic unit placed on top of another (unrelated) harmonic unit.

Many writers in the material equal outside and superimposition (e.g. Burr 2013 and Polishook 2014). From a chord/scale point of view, such an interpretation seems logical: by superimposing tonal material that do not belong to the chord/scale options, the solo line will consist of tonal material outside of the chord/scale system, thus making the solo line outside. However, as we have seen, the outside concept involves more aspects than merely playing tones outside of the chord/scale system.

An online lesson explains the benefits with superimposition, while also seemingly mixing up, or equaling, the concepts superimposition and substitution:

> Playing other chords instead of the original chords is often called superimposition. Superimposing these substitutions on-top of the original set of chords allows you to keep a logical structure, while escaping the typical path. (Wernick 2011.)

The quote indicates that superimposition makes it possible to maintain a coherent structure, while simultaneously playing dissonant tonal material. As is often the case in the material, terminology is not stringent.

Full harmonic control over each note or phrase do not seem to be necessary when superimposing. Research points out that superimpositions can become instantly accessible to any improviser, using their current knowledge base as a basis for a rich harmonic approach (Williams 2017:110). It seems that a strong structure and coherence in the superimposed material replace the need for knowledge and control, so that full control over each individual tone is not necessary, something which has been previously indicated as a crucial part of the outside concept.

A longer solo line with two different bitonal passages is found in Example 32, which is a passage from Michael Brecker's solo on 'Oleo', mentioned by forum members "AmundLauritzen" (2013) and "0zoro" (2012) as a good example of outside playing. Here, Brecker first plays eight beats of A Mixolydian over a V7-I progression in Bb major, then returns inside for two beats over the F7 chord, before playing two full bars of B major over a I-ii-V7 progression in Bb. In my analysis, the durations of the A Mixolydian and B major segments are long enough to establish them as tonalities and not just shorter alterations or results of idiomatic chromaticism. This example coincides with statements in the material that suggest using longer series of notes that collide with the underlying harmony.

Example 32. Michael Brecker's solo on 'Oleo' (3'50-3'54) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

Example 33 is a Woody Shaw solo mentioned by forum member "destinytot" (2016) and studied by scholars Karns (2016a) and Walters (2011). It shows a motif that is played as a sequence, first in A major, then transposed down to F# major. The motif is clearly diatonic in relation to the superimposed key. The last note of the F# major segment (Bb) is the enharmonic equivalent of A# and is a pivot tone to the home key, Eb major. After a brief return to Eb major, the line migrates to an E major scale for five beats. The line ends with a variation of the motif, where the first two notes of the motif are lowered one step but the last three notes follow the original motif. This example shows that superimposition and dissonance are closely linked to intention, in that the superimposition comes from "an opposing construct", in the wordings of a blogger (Jones 2015). The superimposed motif is a premeditated construct, in this case segments of different major scales, which through their use in sequence indicate that the improviser plays these dissonances on purpose.

Example 33. Woody Shaw's solo on 'There Will Never Be Another You' (1'10-1'16) from the album Solid *by Woody Shaw (Shaw 1987). Transcription by Fredrik Erlandsson.*

In the material, what emerges as crucial is that the superimposed structures are distinct: “Clarity is important. Simple melodic ideas will cut through, and the 'outsideness' will be clearer” (“8-5-b5-5-s5-5-7-8” 2015). Exactly what “simple melodic ideas” consist of is not explained by the writer, but it seems reasonable to include pentatonic melodies in that category. If so, an effective use of pentatonics could be one factor to the frequent mentioning of Woody Shaw as a master outside player in the material. Furthermore, a blogger writes that Shaw’s “[k]aleidoscopic approach involved zipping across multiple tonalities on each chord by using collections of pentatonics” (Lyon 2013), which shows that pentatonics is an established means of superimposing dissonant materials, to achieve a bitonal effect.

4.1.3 Imaginary chords: tonalities that do not exist

One blogger stretches the utility of superimposition beyond just chords and tonalities, writing that one can try “superimposing chord changes where there are none” (Jones 2015). The result, the sounding dissonance or outside phrase, is heard, but the dissonance is a consequence of the improviser thinking of and intentionally aiming for a consonance or an inside phrase that is not heard, only imagined.

One forum member formulates what seems to be a good summary of this approach: “reharmonize the tune and then play on the reharm changes against the original changes” (“rpjazzguitar” 2017). The same forum member elaborates further: “if it's going to sound good outside one harmony, it ought to sound good inside against a different harmony. That is, every good outside line will sound good inside against a different harmony. That's because a good melodic and rhythmic line is necessary” (“rpjazzguitar” 2017). This quote suggests that an outside line should, taken out of its harmonic context, sound good (as in having a coherent inside structure to it) when played on its own. I find this conclusion rather contradictory compared to the general tendency found in the material. Most statements in the material indicate that outside solo lines have an ambiguous, even intangible quality. In my interpretation, it seems that outside playing clouds the inside-ness of a solo line both vertically, in relationship to the underlying harmony, but also horizontally, in relationship to the inherent tonal clarity of the solo line. Even though “rpjazzguitar” seem to suggest something else, my interpretation of the statements in the material is that they imply that if one should remove the chordal accompaniment, the solo line in itself should still generate an outside ’sound’ or ’vibe’. Outside sounds are mainly vertically dissonant, but also horizontally, if not dissonant, at least ambiguous.

Example 34 shows a segment that was already analyzed in Example 13. However, this example exhibits inside playing over imaginary chords that renders an outside phrase. Here, Woody Shaw seem to insert an Am7 and an Abm7 chord in bar 2, leading into the Gm7 chord in bar 3, instead of playing the F7 (or the D7) that would be more along the lines of the chords in a blues

progression. This passage could also be interpreted as a phrase emanating from a bebop idiom, where adding chords to a blues progression is not uncommon.

Example 34. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (5'23-5'25) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

Similarly, Example 35 shows 'rhythm changes' (a typical chord progression based on the tune 'I Got Rhythm') superimposed over a blues progression in Bb. Example 35 is not from a solo that is explicitly mentioned in the material. However, it is included in Richardson's PhD thesis (2006), and since it is a solo by one of the most frequently mentioned improvisers in the material, Woody Shaw, I have chosen to include it here to illustrate points made by the writers in the material. Here, the two progressions start identically, where tonality is established through a Bb major triad. In bar 2, an implied ii-#iio-iii progression (Cm7-C#o-Dm7) is superimposed, which in my opinion is to be considered as within the standard vocabulary of post-bop mainstream jazz. Actually, it is possible to interpret bar 3 as a continuation of bar 2, in that the top notes of the solo line outline a chromatic line that could very well have ended on Ab in bar 4, the minor third of Fm7. Both the superimposed 'rhythm changes' chord progression and the original blues progression move to Eb in bar 5, and the solo line follows that chord change, thus making the solo line return inside. The phrase has a strong inherent voice leading and a familiarity as common vocabulary, and therefore the phrase serves to show the improviser's knowledge of the rules and the intention.

Example 35. Woody Shaw's solo on 'Hub-Tones' (1'09-1'14) from the album Double Take by Woody Shaw & Freddie Hubbard (Shaw & Hubbard 1985). Transcription by Rex Richardson, (Richardson 2006), edited by Fredrik Erlandsson.

In the material, one form of superimposition seems to exist on the border of outside and inside: tritone substitution. Tritone substitution is in the material treated both as an outside tool and as a common improvisational tool that is idiomatic in all post-bop jazz. It seems that the writers in the material, like textbooks, have variable views regarding in which situations a tritone substitution can be used. Many writers in the material seem to treat tritone substitutions as idiomatic chromatics (emanating e.g. from secondary dominants or bebop vocabulary) rather than an outside element. An online lesson suggests that "inside chromatics" only have an "outside sound", as opposed to actually being outside (Laukens & Warnock n.d.). I interpret this paradox as a difference between what one may *hear* as an "outside sound" – which nevertheless is a result of following norms such as idiomatic chromaticism, tritone substitutions or other inside techniques – and what *is* outside in terms of breaking such norms and rules. How you perceive a phrase seem subordinate to what rules it obeys: the inside rules or the outside rules.

From my own experience, substituting a dominant chord for another dominant chord a tritone away is presented as an inside tool by educators and textbooks, in that they consider for instance a substituted Gb7 for a C7 as a part of standard jazz harmony, rooted in the bebop idiom. Thus, such a chord substitution would only alter the bass line of the chord progression, not the function of the chord. However, when discussing also substituting the ii chords that are connected to V7 chords in a ii-V progression, educators and textbooks are no longer in unison. Some seem to think of the ii chord as a natural extension of the V7 chord (in which case the substituted ii chord is an inside element), while others seem to think of the ii-V7 progression as outside if the ii chord is included in the progression.

However, the tritone substitution is not the only form of common substitution mentioned in the material. In a blog lesson, three ii-V substitutions are listed as

> devices that composers have used for centuries to add tension directly before a resolution point (V7 to I). The first substitution is simply what jazz educators call the 'backdoor ii – V' (iv-bVII7- I). And you can find it in many tunes. The second sub[stitution] is a common V7 substitute, the bVI of the dominant, so over D7 it would be Bb7. This is also very common to see in tunes. The third sub is simply a tritone sub, which again is very common. The point is, these substitutions are not used solely in improvisation and they're not some hip modern device; they were used to reharmonize the original pre-jazz changes of tunes to create the versions of tunes that jazz musicians have been playing for years. They are essentially composition tools. (Wernick 2011.)

According to this statement, old and established inside techniques can come to life in an outside context, where they can be used in a new way to create tension and dissonance, for example as models for superimposing chord progressions that are only imagined, not heard. It furthermore seems that the line between

tension created by outside approaches and inside approaches is not always clear and definite. Inside techniques can be used in new ways to create outside solo lines, thus blurring the boundaries between consonance and dissonance.

4.2 Clouding: obscuring and diffusing

The second category of dissonances, clouding, does not exhibit the same focus on collision between melody and harmony as the first category. Instead, statements in this category seem to suggest moderation and recommend obscuring the consonances in the solo line by mixing tones from the chord/scale concept with tones from other concepts. A common wording in the material is to “weave in and out” of the solo line (e.g. “wolflen” 2016; Neff 2017), which indicates that this category seeks to avoid harmonic clarity, both regarding consonance (inside) and dissonance (outside). Ambiguity is key here rather than dramatic collisions. It seems that pivot notes are central for clouding: a forum member suggests creating new arpeggios from altered tones in a solo line (“henryrobinett” 2014), and a blog lesson explains that certain pentatonic scales played over dominant chords can simultaneously be partly inside and partly outside (Wilson 2011). Another blogger discusses that by using existing shapes such as triads and pentatonics to build the outside solo line, the line might come to include notes that belong to the given key or chord:

> the cool thing is that those note combinations [pentatonics] ARE derived from existing shapes, so they may actually contain notes that are common to the given key. Those common tones then provide a connection between the ‘inside’ chord tones, scales, intervals, and the ‘outside’ ones. (Jones 2015.)

The result is that the harmonic foundation of the solo line is obscured, or clouded, since the solo line is neither entirely constructed of dissonances, nor inside according to the regulations of chord/scale-theory. Another blogger states that obscuring an inside phrase with occasional outside notes is preferable: “The best outside lines seem to be the ones that only highlight a note or two as having dissonance” (“jazzwee” 2013b). A forum member agrees: “a good outside line may only have one or two notes that are actually outside the scale. It isn't necessary to play entirely outside the current scale (“rpjazzguitar” 2017). This position stands in opposition to the statements presented in the previous category, where stark harmonic contrasts were advised.

However, not all statements in the material are as precise as the quotes above. A significant percentage of the statements in the material approach outside using rather imprecise terminology. The impreciseness is especially evident in statements regarding harmonic ambiguity, i.e. clouding. A video lesson uses sweeping terms when demonstrating “how to play outside of a chord while in a different chord...but still be in that chord...it sounds like magic…” (Martin 2017). An online lesson offers descriptions of outside playing as “a soloist selecting notes for his solo that shouldn’t fit with the chord over which he is soloing, and yet the result sounds… kinda awesome” (Myette n.d.).

In a way, statements like these could be considered typical for how the writers in material approach outside: the idea of clouding cannot be easily explained with standardized musical terms, because the idea of something being wrong and right at the same time is not an option in harmony. Instead, the writers seem to turn to metaphors and slang-like expressions. When it comes to specifics and details, the material is not as unified as when it comes to the general features of what outside is.

4.2.1 Side-stepping: moving to a neighboring tonality

In the material, different methods are described for achieving harmonic clashing and clouding in a controlled and intentional manner. A concept that is often mentioned is *side-stepping,* or *side-slipping*, as some writers call it. Advice that includes using side-stepping can be found in videos, forums, lessons and blogs: it is the most common answer regarding how to play outside. One video lesson explains why side-stepping is so common by noting that it is "the easiest way to start" (Zucker 2010).

The writers in the material describe side-stepping as using tonal material derived from the chord/scale concept but playing those tones a half step up or half step down:

> I found many videos about this and all say the same thing: if you play the scale x from the sound y then you have to play the same scale x from y#. ("stworzenie" 2016.)
>
> side slipping is basically taking whatever scale you're playing and moving it up or down a semitone, then resolving back to an inside note. So for example playing in Db major over a C major chord ("theorynerd" 2015).

The following quote from an online lesson exhibits more aspects of side-stepping:

> [s]ide [s]tepping involves improvising in the one key and then switching to improvising [d]iatonically in a different key. This creates tension. Often the resolution is created by switching back to playing in the original key but the improviser can switch through multiple keys before resolving back to the original if they so choose. Most commonly this technique is applied to soloing a half-step away but can be run through any of the intervals at the improviser[']s discretion. I should point out that many improvisers do not only play diatonically when [s]ide [s]tepping. That when they are in the different key they are able to apply all the same alterations and patterns they would in the original key. The term diatonic is only being used to aid in the simple nature of what [s]ide [s]tepping is all about. (Winter 2013.)

Side-stepping is thus a technique that is mostly applied using half steps, but it can in fact be applied using any interval, with little regard to the underlying harmony ("henryrobinett" 2014). Using side-stepping leads to a situation where the improviser does not have control or harmonic awareness regarding the

dissonance carried by each individual note in the phrase. This presumable lack of control is not problematic, according to what is stated in an online lesson: "Side-stepping is quite a 'shot in the dark' approach, it is a great way to get the sound and phrasing into your head before refining what you are playing" (Williams 2011). Williams' PhD dissertation similarly notes the utility of side-stepping for novice outside players and explains the benefits:

> Sidestepping can be an easy route for students to take when trying to assimilate the sound of outside tonalities, as it does not require an overly advanced understanding of harmony, and for positional led instruments requires only a singular positional shift to achieve the desired effect, removing any prerequisites for extensive theoretical awareness. (Williams 2017: 87.)

This is also mentioned in Berliner's *Thinking In Jazz*: "Initially, the qualities of logic that define nonthematic formulations can be more difficult to grasp for learners than those presented by motivic treatments" (Berliner 1996: 198). Even though the outside phrase may not be fully controlled as it is being side-stepped, it seems that the control, coherence and logic within the original phrase migrates along as the phrase is side-stepped, thus making the phrase valid as outside, although one might say that a lower level of control over the solo line decreases the level of intention in the solo.

Side-stepping might be an easy way to start, but there seem to be standards to reach and pitfalls to avoid when using the technique. Commenting on the playing of renowned saxophonist Kenny Garrett, a forum member says "I love the way he does that. He's really good at side-slipping without making it obvious" ("Spirit59" 2011). In my analysis, this indicates that beginners tend to side-step in an obvious, noticeable manner, while masters such as Garrett let their side-steps blend in with the solo line in a more refined manner. This would also differentiate a beginner's dissonant side-steppings from a master's more discrete harmonically ambiguous side-steppings.

These quotes bear many similarities with how textbooks describe side-stepping. Levine's *The Jazz Theory Book*, a textbook used and referred to by many writers in the material, presents the example of side-stepping (Levine 1995: 187f) seen in Example 36. It is included here to contextualize the concept, since it is likely to have influenced how the writers in the material perceive and think about side-stepping. Here, after the first bar, the solo line migrates a half step up and outlines a C#m7 chord over the prescribed Cm. This phrase could also be interpreted as a C# minor pentatonic superimposition. Note that Levine identifies the side-stepped C#m7 as a C#7 chord, although the solo line is clearly C# minor, with the note E instead of E#.

Example 36. A section a page from The Jazz Theory Book (Levine 1995: 187).

G7♭9 C– C♯7

Figure 8-7 shows a fragment of Joe Henderson's solo on Horace Silver's "Nutville."[4] Joe plays four notes on the G7♭9 chord, and then instead of playing C- he moves the tonality up a half step, playing on C♯7.

[4] Horace Silver, *The Cape Verdean Blues*, Blue Note, 1965.

Example 37 is a segment of a Woody Shaw solo published on the blog Wilktone (Wilken 2010). This particular solo segment is not analyzed or referred to in the written text in Wilktone's post, but I have chosen to include it here, since it exemplifies the essence of side-stepping as described in the material. In relation to the prevailing key of F major (the last two bars of an F blues chord progression), the majority of the tones would not be compatible according to the chord/scale concept. The note numbers for each note in relation to F major are shown in the bottom line in the example. However, in relation to the implied key of Gb major, the majority of the tones are inside. The note numbers for Gb major are also shown in the example. Interpreted as a line in Gb Mixolydian, all tones except two passing tones are compatible with the chord/scale concept, as the b7 in the second bar indicates a Mixolydian scale. This segment is thus an inside phrase in Gb played over a chord progression in F.

Example 37. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (5'02-5'04 from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

F7 D7(b9) Gm7 C7

Gb: 3 (pn)2 3 1 2 3 4 5 b7 (pn)5 4
F: 4 3 b3 4 b2 b3 4 b5 b6 7 6 b6 b5

Example 38 is a segment of the same Woody Shaw solo, a screenshot taken from the Wilktone blog post. When writing about this solo passage, the author points out that Shaw's "use of bitonality is particularly interesting" (Wilken 2010). The blog post analyses measure 124 in this example as a superimposed "B7 sound" which resolves down to Bb7.

Example 38. Woody Shaw's solo on 'The Blues Walk' (5'40-5'48) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010).*

However, I find that there are additional insights to be extracted from this example, as shown in Example 39. Here, I have edited the same solo segment as Example 38, using the same bar numbers, but also added a more elaborate analysis. First of all, the first two bars consist of a line constructed on a Bb minor pentatonic scale superimposed over an F7 chord. There are two passing notes in the phrase on A, which opens up for an interpretation that the first bar is in fact an idiomatic blues-type phrase. The third bar is a descending F major triad starting with a B natural as an acciaccatura, which in turn is followed by a B flat and an A that further establishes F major as the key. Measure 124 can be interpreted as some sort of B tonality or a "B7 sound", as Wilken does, but it can also be conceived as some sort of Gb tonality that mixes both major and minor thirds and sevenths. From a side-stepping point of view, it is possible to interpret the last two notes in measure 123 and the first five notes in measure 124 as a typical jazz phrase based on a Gb major scale. The last four notes in measure 124 are based on the Gb minor pentatonic scale, also forming a Gbm7 chord, before the phrase lands on the note F, the fifth of Bb7. This interpretation correlates with statements by two forum members who advise using pentatonic scales either a tritone or a half step away from the chord root ("Stuart Elliott" 2014, "nick1994" 2014). The passage at hand can be said to showcase both alternatives.

Example 39. Woody Shaw's solo on 'The Blues Walk' (5'40-5'48) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

My analysis of Example 39 shows that the harmonic relationships between the solo line and the underlying chords are clearly dissonant, thus supporting the aspect of dissonance as a part of the outside concept. However, since the solo line is harmonically ambiguous, it can also be interpreted as clouding the impression of the underlying harmony. Both clouding and clashing with the harmony belong to the realm of dissonance. In fact, Example 39 is also a good example of structured and intentional playing, and of balance between outside and inside, as Shaw moves from outside back to inside twice in the same phrase. These aspects have been discussed previously in this study.

In a way, side-stepping is a form of superimposition. As these concepts are generally understood, superimposition can be any melodic or harmonic structure placed over a different harmonic structure, whereas side-stepping is limited to a correct, or inside, phrase (from a chord/scale perspective) that is transposed to a new key while played over the original chord. However, according to some writers in the material, the side-stepping technique can also be applied to larger structural units. A forum member suggests "using triads as a starting point for side-stepping" ("mokapot" 2017), while a blogger writes that side-stepping can be applied to "an entire modality, motif, scale system, triad, interval, etc...within a single phrase" (Jones 2015).

In the material, Winter (2013) mentions Michael Brecker as a prominent sidestepper. Forum member "jayx123" (2013) posts a Brecker video with 'Blue Bossa' from 1985, saying it is "serious side stepping". This post receives a supporting comment from "emiliocantini" (2013): "Really it is outside almost all the time!". That there is a close relationship between superimposition and sidestepping is evident in Example 40, a segment from Brecker's solo on 'Blue bossa'. Here, a scale is superimposed over one bar each of Cm7 and Ebm7. The scale could be named either E Mixolydian or B Dorian, as those scales consist of the same notes. Considering that the correct scale over minor seventh chords according to the chord/scale concept is a Dorian scale, and that the first note in the phrase is a B, it seems reasonable to use the B Dorian interpretation. That the solo line consists of B Dorian instead of C Dorian could also be seen as an example

of side-stepping. However, the first note in the second bar is an E, which supports an interpretation where the scale is an E Mixolydian. If seen as an E Mixolydian scale over an Ebm7 chord, then the second bar could also be seen as an example of side-stepping.

Example 40. Michael Brecker's solo on 'Blue Bossa' (1'59-2'03) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

Example 40 is perhaps more of a superimposition than a side-stepped phrase, as superimpositions seem to stretch out over longer periods of time, often more than two bars, which is the case in this example. What complicates this interpretation is the fact that the underlying chords modulate in the middle of the superimposed phrase, so that the superimposed phrase also can be seen as an example of side-stepping. Regardless of how one interprets this phrase, it clearly shows that side-stepping and superimposition techniques are closely related and that at times they can overlap.

As a contrast to these statements, some writers in the material advocate caution in the use of side-stepping. Forum member "Jimieultra" (2011) advises not to "focus on such tricks like - play your pentatonics or Arpeggios (or chords or 2-5s...) an half-step up, or down or whatever - cause it[']s not that musical". Another forum member warns against over-simplifying the concepts of side-stepping and parallel tonalities and says one should "use [them] with care" ("JL" 2015). Here, side-stepping is described as a trick, which I interpret to mean a technique that is easy to use yet sounds more advanced than it actually is. The presumed lack of musicality in the side-stepping technique might be related to the writer's perception of side-stepping as a trick or a formula. If a side-stepped phrase is perceived as a formula rather than a melodic statement, then it makes sense that "Jimieultra" questions the inherent musicality of that technique.

4.2.2 Directions: upwards or downwards?

To play a phrase a half step away from what the chord/scale concept stipulates is the most common way to explain sidestepping in the material. Although side-stepping is described an above or below-technique, there seem to be a slight bent towards moving the phrase a half step up rather than half step down. According to the piano playing teacher in a video lesson, playing a half step up "is sort of the obvious place to go" (Martin 2017). The Woody Shaw solo in Example 39 was a case in point: the outside segments in bar 124 can be seen as a Gb tonality, which

is a half step up from the underlying chord, or as a B tonality, which is a half step up from the succeeding target chord Bb7.

Example 41 is mentioned by blogger Rich (2012), forum member "destinytot" (2016) and others, including studies by Karns (2016a) and Walters (2011), and clearly illustrates the principle of side-stepping up a half step from the tonality. Here, Shaw shifts back and forth between tonalities separated by half steps over the chord progression in the last four bars of a standard tune. It seems that Shaw negotiates not the individual chord tones but the four bar progression as a whole, presumably because it is the final turnaround of the tune. In the example, bar 1 is Eb major and bar 2 is E major, which is a half step up from bar 1. Bar 2 could also be considered a half step below the key of the prescribed chords Gm7-C7 in bar 2, e.g. being in E major instead of F major. However, Gm7 and C7 function as a iii chord and as a V7/ii chord, respectively, rather than a ii-V progression, which undermines such an interpretation. Bar 3 starts with a pivot tone that enharmonically is found in both Eb and E major, Ab/G#. Additionally, the note Ab is the third of the chord of the moment, Fm7. The second half of bar 3 and the whole bar 4 is E Mixolydian, a half step above the key of the prescribed chord progression. If one chooses to include the tone G (third note in bar 3) in the E tonality, the result is a four-beat passage of E minor. Regardless of how one wants to interpret that passage, the underlying tonal structure of the solo line still moves by half steps: Eb-E-Eb-E-Eb. Besides illustrating how side-stepping is played in practice, and that it has a tendency to be a half step up, this example shows that other aspects of the outside concept, as described in the material, still apply: the tonalities shift smoothly, and the use of half steps, in the underlying structure as well as in how the solo line moves away from the chord/scale prescriptions and comes back inside, shows intention, logic and balance.

Example 41. Woody Shaw's solo on 'There Will Never Be Another You' (1'47-1'53) from the album Solid *by Woody Shaw (Shaw 1987). Transcription by Fredrik* Erlandsson.

In guitar-based contexts, the side-stepping concept is especially common, as an online lesson shows: "side-stepping is the easiest way to get into outside playing. The basic principle is that by default on the guitar, you can take the shape that you would normal play in and move it up or down a fret to give you access to the dissonances" (Willams 2011). A forum member notes that "fretboard symmetry opens up a lot of doors on guitar since it is easy to exploit. So using a symmetrical

scale, or moving a melodic pattern in fixed intervals towards a destination are very easy to do" ("soto" 2014). It also seems that the visibility and design of the guitar fretboard makes guitar players more versatile in what direction they side-step, while other instrumentalists are inclined towards playing half step up. Similar tendencies have been noted in academic research:

> to sidestep on the guitar a working knowledge of harmony and pitch is not necessary as the musician needs only move his left hand up or down by one fret from his original phrase and play the same finger pattern again. Non positional instruments must adopt new fingerings to support a sidestep modulation. (Williams 2017: 87.)

However, one forum member has a different opinion: "I think some instruments, particularly horns[---], are more suited to bebop and playing more outside lines" ("Targuit" 2013). This post received a response that adds a perspective linked to matters of intention and performance: "I don't see how horns [---] are more suited to playing outside than a guitar -- it's not like the inside notes on the fretboard light up! But on horns [---] it's easier to burn and spill the notes out, maybe that's it" ("BigDaddyLoveHandles" 2013). Myself being a trumpet player, I find this discussion startling: in discussions with fellow brass players, we have envied guitar and saxophone players for the ease with which they can play fast lines on their instruments. Perhaps the discussion is best understood as a novice player's envy of anyone who can play faster than themself. Regardless of such matters, this forum post discussion is in fact as much about playing dissonant solo lines as it is about the performative aspect of playing with drive and conviction. Again, it stands clear that the outside concept involves many aspects that exist simultaneously.

Side-stepping a melody does not always produce an outside phrase. In an online lesson, a Maceo Parker live recording of the tune 'Shake everything you've got' (from the CD *Life on Planet Groove*) is given as an example of the side-stepping technique: "Maceo is playing along with the drummer and goes through all of the keys in half-step motion before returning to the original key at which point the whole band comes back in" (Winter 2013). In the solo, Parker starts elaborating on a D blues scale phrase at 7'42. At 7'56 Parker starts to focus on the fifth and the flatted fifth – A and Ab, respectively – in his solo. From there, he plays rhythmic variations on the fifth (A) raising it a half step every fourth bar until he arrives at an F, the minor third in D minor. Then the band re-enters and establishes the key. Although this is a prime example of moving a phrase upwards in half step motion, the example does not support other descriptions of side-stepping found in the material. There are two reasons for this: first, the side-stepping at hand is not a melodic line but a single pitch that is transposed upwards chromatically. Descriptions of side-stepping imply a melodic line containing several different pitches. Second, there is no underlying harmony played behind Parker's solo. The tune is modal, with a Dm as its only chord, so a strong sense of underlying harmony has been established when the drum-and-sax passage begins, but no harmony is heard against which the side-stepping

could clash. One can argue that the solo clashes against an established sense of D minor and the listener's memory of how the key sounded, but there is no explicit support for that argument in the material. Instead, the writers in the material say in unison that a solo line should clash against an underlying harmony.

4.2.3 Bar-line shifts: the right chord in the wrong place

Another way of creating outside lines, according to the writers in the material, is to use bar-line shifts. As it is explained in the material, a bar-line shift occurs when the solo line harmonically outlines a previous or upcoming chord instead of the chord that is presently prescribed in the tune. A forum thread asks how jazz musicians play outside the changes. One answer is to "play notes fitting the chord/scale of a given measure in it's [its] preceding measure. The other way around, too" ("paranach9" 2015). Another method is to divide or double the duration of a chord or a bar ("henryrobinett" 2014). These advices indicate that the impact and the governing of the chord/scale system as such is not neglected, but that the harmonies are displaced, so that the sounding result is a solo line that clashes with the underlying chord.

In Example 42, from a blog, the blogger shows how bar-lines can be moved to achieve dissonance. The example shows the last two measures of the first chorus from a Paul Bley solo on *All the Things You Are*:

> The simple thing Paul Bley superimposes over the Abmaj7 chord is a scale. It's a scale that fits perfectly over the C7 in the next measure. That scale doesn't fit perfectly over the Abmaj7 - it's dissonant over the chord. The big idea is [that] C7 is [the] destination. Paul Bley arrives at the C7 a measure before the tune does (or should). In other words, he treats the destination of C7 as something elastic to be stretched back according to how he'd like to hear it. (Polishook 2014.)

The phrase that is played over Abmaj7 can be interpreted in several ways. It can be seen as based on a C altered scale, as based on a C half/whole diminished scale (both related to the C7 in the next bar) or as based on a B major scale. Whichever way, the phrase does not fit harmonically with Abmaj7. The blogger apparently considers the phrase played over Abmaj7 to be of a C7 origin, making it an example of how bar-lines can be stretched.

Example 42. Paul Bley's solo on 'All The Things You Are' (3'59-4'02), from the album Sonny Meets Hawk *by Sonny Rollins (Rollins & Hawkins 1963). Transcription (probably) by Mark Polishook, edited by Fredrik Erlandsson.*

A♭maj7 C7

Example 43 is from Michael Brecker's solo on 'Blue Bossa', mentioned for

example by “jayx123” (2013). Here, Brecker first begins to play over Dm7b5 one bar earlier than prescribed and then continues to play a G Spanish/Jewish scale over Cm7 for one bar longer than prescribed. The Spanish/Jewish scale (sometimes also called Spanish/Phrygian) is one of the alternatives for V7b9 chords according to Aebersold’s *The Scale Syllabus* (1992).

Example 43. Michael Brecker’s solo on ‘Blue Bossa’ (1’16-1’23) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

Just like side-stepping, a bar-line shift results in, or even is in itself, a form of superimposition. However, as the material explains these concepts, they are understood as slightly different approaches to achieving an outside line. A technique that is closely linked to moving bar-lines is to insert extra bars in the solo line.

4.2.4 Inserting bars: creating extra space for tonalities

A special case of bar-line shifts can occur by inserting bars into the structure of the tune. Example 44 is a screenshot, taken from a blog post, exemplifying this principle with a solo excerpt from pianist Herbie Hancock. The blogger explains the concept of bar-line shifts:

> What [Hancock] and Paul Bley have also shown is elasticity regarding when exactly a chord is heard and for how long it lasts. In other words the underlying form of a tune is fixed. But the when and where of chords and harmonies - when and for how long they're heard - can be stretched or compressed. (Polishook 2014.)

Although the technique of inserting bars is not explicitly mentioned here, it is a consequence of stretching the duration of a chord beyond its prescribed length. In Example 44, the first chord (Gm7) is outlined in the solo also in the second bar. In the third bar, the solo outlines F# Dorian over an Fmaj7 chord. This can be seen as sidestepping, but I would like to interpret the phrase as a form of tritone substitution, where a F# Dorian is substituted for a C Mixolydian. In such an

interpretation, Gm7 is outlined for two bars, followed by one bar of C7 and one bar of Fmaj7. Following that, the F# Dorian is played over a C7, which is a tritone away. The phrase then ends on a G, the ninth of Fmaj7, which I argue is an extension of Fmaj7, making it a consonant tone.

Example 44. Herbie Hancock's solo on 'Seven steps to heaven' (4'39-4'43) from the album Seven Steps To Heaven *by Miles Davis (Davis 1963). Transcription (probably) by blogger Polishook (Polishook 2014).*

The concept of moving bar-lines is called "rhythmic displacement" by another blogger:

> it's not so interesting when used for example in delaying the ii in a ii-V (sounds like a Sus chord) or anticipating the V (sounds like a ii(m6)). It has to be used where the next chord or prior chord is a modulation or at least enough difference in the notes that you know exactly which note is being sounded out as dissonant. ("jazzwee" 2013b.)

This statement not only underlines the importance of dissonances in the solo line, but also the importance of theoretical knowledge and intention. Ironically, what this statement advises not to do is exactly what Herbie Hancock does in Example 44.

Similar concepts, such as metric displacements, polymeter and hypermeter, have been studied by Opstad (2009) and Waters (1996), the latter of whom also gives an overview of relevant literature (1996: 19ff).

4.3 Complicated consonances and the influence of an idiom

According to a forum member, merely changing to a scale or mode which is not in line with the chord/scale concept is not the same as outside playing, unless the notes clash or are unrelated to the original mode ("EJGuitar" 2016). In the responses that follow that post, the forum thread divides into several parallel discussions, one of them being a discussion about John O'Gallagher's textbook on 12-tone improvisation. In the discussion, "christianm77" (2016) says that

> I'm thinking 12-tone music doesn't count as outside, because in order to be outside something has to be defined as inside. Outside playing is outside because eventually it comes inside. Dissonance and resolution. 12-tone stuff is all about organising music in a way that doesn't reference tonal harmony, although Webern IIRC did make a conscious effort to avoid consonant intervals and harmony, so I suppose in a weird way his inside was our outside. ("christianm77" 2016.)

In this quote, outside is clearly defined as an opposite to inside, and explained as differing from dodecaphonic or other atonal music. The central point here is that outside is a contrast to an inside, which is rooted in a jazz style or idiom. This jazz idiom is thought of as based on tonal harmony, consonant intervals and resolution of dissonances.

Another forum response suggests that inside/consonant tones and harmonies seem to be just as important as outside/dissonant tones and harmonic relationships in the outside discourse: "Outside is always in relation to what you hear as inside" ("Jonah" 2016). The post argues that what you hear as inside is a description of a hearing experience that occurs in relation to one's expectations, which is something that might change and evolve over time.

There are also other aspects which concern the listener. In a forum thread, discussing a presumed music theory that governs fusion jazz, a member writes:

> There are mainly three things that might sound strange or unexpected to the uninitiated:
>
> 1. the chord changes may be unconventional. If the soloist simply plays the appropriate chords scales over the unconventional changes, then the melodies may sound a bit random [....]
> 2. [---] quite a lot of chromaticism (approach notes, neighboring notes)
> 3. the concept of outside playing
>
> ("Matt L." 2014.)

Here, outside is explained as being something else than unconventional chord changes or idiomatic chromaticism such as approach notes. Upon analysis, this quote reveals several insights. Solos over unconventional chord changes, with the use of appropriate note choices, might appear "a bit random" or outside to a listener, but such solo lines are in fact inside, as they do not carry any dissonances. Just because something might sound outside (or otherwise "strange or unexpected"), does not mean that it is outside. Similarly, extensive use of idiomatic chromaticism might sound "strange or unexpected", but since approach notes and neighboring notes are common in many jazz idioms, it seems that they are something else than outside phrases. It seems that how strange they sound depends on the listener and on the idiom at hand. Only after ruling out these two factors is outside given as a potential reason for why a phrase sounds strange. This clearly separates outside playing from playing inside over unconventional chord progressions or using extensive idiomatic chromaticism.

A forum post argues that although a musical passage might sound outside to the listener, it does not necessarily have to be outside:

> One may use any adjective to describe one's perception of written music, 'dissonant' or whatever, but the harmonic content of the composition is intended that way so 'outside' wouldn't mean much.
> Outside of what? I see the term (in this context) as a description of improvisational movement indicating harmonic structures outside of/not belonging to written or underlying harmony. ("Runepune" 2016.)

Here it is clear that a listener's perception of a solo is not what defines outside: without harmonic clashing, there is no outside, although the solo line might sound so.

In my analysis of these quotes, an idiomatically defined inside is actually a prerequisite for outside. Outside cannot exist in a context where there is no inside. Therefore, atonal approaches are not essentially equivalents to outside. However, a forum post states that outside lines can be the outcome of techniques that are used in ways for which they were not intended ("BostonJoe" 2016). Thus, for example, dodecaphonic tone rows can be used to achieve outside phrases, similar to how patterns or pentatonics can be used, although dodecaphonic techniques as such are not understood as being outside.

These quotes also indicate that these particular writers perceive inside to be a relative and subjective description of a musical statement, based on listening experience and the musical style at hand, whereas outside seems to be constructed as an objective description, which is based upon how an improviser breaks the rules of harmony and music theory. This perspective means that inside is what a listener is accustomed to hearing and outside occurs when a rule is broken. This is the opposite of other statements in the material, where outside is described as an experience of listening, by some writers explained as a physical experience, whereas inside is described merely as a consequence of following rules. This contradiction shows that outside is a complex concept and that the understanding of it is not always unified: outside and inside are understood to involve both objective aspects which can be studied empirically by music analysis (is a rule broken or not?) and subjective aspects that depend on the listener's perception (is the sound of this solo line beyond what I am used to hearing?).

Yet another perspective found in the material is a tendency to renegotiate what a consonance is. In the introduction to an instructional video by saxophonist Jerry Bergonzi, it is noted that "Jerry purposely plays outside, using different substitutions, or 'tonal expansions' [---]. He expands the chord beyond the 13th, coming up with sharp 15, sharp 19, sharp 23" (Willis 2012). In this quote, the chord/scale concept can be extended beyond the usual 13th note of a scale. According to my analysis, this approach could be interpreted as a means to make notes such as a sharp 19th part of an extended chord rather than part of a superimposed chord which in turn creates a clash. Notes belonging to an extended chord would be a logical consequence of the chord/scale system, thus being inside, instead of unrelated notes that clash with the underlying chord. One forum member thinks along the same lines:

> what might sound 'intentionally out of key' to you might be part of an organised harmonic approach that directly relates to the key. I mean, a really really simple example is, over a Cmaj7 vamp, playing a line that implies G altered then resolves into notes of Cmaj7. Is that 'outside?' We might have a Bb, Ab, and F notes over a Cmaj7. It's not in the C major scale, but it's directly in a very functional and 'inside' reference - G7alt to Cma7. Or here's another

> really simple example. Cadence to Cma7 in the key of C, then resolution to Cmaj7. Soloist plays the notes E F# G over the Cma7. F# isn't in the C major scale. Is that inside or outside? F# isn't in the key, so it's outside? Oh, it's in lydian, and the #11 is an acceptable tension for Cmaj7. So it's inside...because it's inside a system we are familiar with? So what if when we hear things as 'outside' they are just inside a system we aren't yet familiar with? [---] when people are talking about inside/outside, it is entirely in reference towards what they are simply already familiar with. ("JakeAcci" 2013.)

This seems to be a central part in how the outside concept is constructed by the writers in the material. A recurring theme in the material is that what is inside for one person might be outside for another. This is explained both as a matter of personal taste, based on how accustomed one is to outside sounds, and as a matter of time in terms of jazz styles and harmonic evolution. From a musician's point of view, it seems that the latter have played a role in what has come to be included in the chord/scale concept:

> Since the bebop days, players have pushed that so a lot of what might have been considered outside at the time (altered stuff, diminished stuff, etc.) is pretty standard and not really thought of as outside anymore. But, for example, superimposing a Coltrane cycle over a [ii-V7-I] would be something I'd consider outside. You're visiting three key areas where the background stays in one. "Boston Joe" (2016.)

The quote above relates to idiomatic distinctions, such as the realms of consonance and functional harmony. Writers in the material point out that what is considered inside in jazz might be considered outside in other styles of music (e.g. "Jonah" 2016, "Runepune" 2016), and that different styles of jazz have different idiomatic norms that (can) change over time. It thus seems that using a historical perspective in defining outside would be rather ineffective, as the boundaries for outside are not static. Instead, following my analysis, because the outside concept is an evolving process, today's outside might very well be tomorrow's inside.

4.3.1 The complexity of dominant chords: inside or outside

The V7 chord holds a special position in the material, as it resides at the intersection between consonance/dissonance and functional harmony. So far in this study, we have seen that almost any harmonic-melodic structure can be superimposed over a dominant chord. From a perspective of dissonance and consonance, the same seem to be valid for scales. Forum member "fumblefingers" (2013) assumes a situation with a ii-V7 progression, where instead of playing Mixolydian over the V7 chord, one uses the altered scale, and then asks if "you are playing inside or outside, or if something else is going on?" Aebersold's *The Scale Syllabus* (1992) offers both of these scales as valid choices (together with some scales that are not mentioned in these forum posts), as does another forum member:

> On a V7 two choices are just as common - Mixolydian and the altered scale. The notes of those scales together cover the entire chromatic scale except for the major seventh interval relative to this V7 chord. Point is, using quoted techniques above might be a difficult way to get a satisfactory 'out' or 'non functional' sound over a V7 resolving to I. Manipulation of the major seventh interval might be key in crossing over that line. [---] Since it is convention to use V7 as an exploitation of dissonance before the resolution, I think it's harder to play something surprisingly dissonant just in terms of single note choices. (“JakeAcci” 2012.)

The same crucial question, although from the opposite perspective, is posed by another forum member: “Does playing raised and lowered 9ths and 5ths on dominants even count as ‘outside’? I don't think so” (“Spirit59” 2013).

The chord/scale concept gives many options regarding what scales an improviser can play over dominant chords. In fact, it seems that any tonal possibilities are valid, according to several statements in the material (e.g. “mokapot” 2017, “mr. beaumont” 2011, O’Donnell 2011, Zucker 2010b).

In my analysis of these statements, there is a difference between alterations of V7 chords and outside playing. For example, an altered scale is inside according to the chord/scale concept, but the solo lines constructed from an altered scale will contain many dissonant notes in relation to a V7 chord. In an online lesson, the idea of expanding consonances is seen as stretching harmonic relationships:

> By superimposing the notes of the ‘B’ lydian dominant scale over F7, we are able to get some of that ‘outside the changes’ sound that is so pro, so advanced, and so hip! By using ‘outside’ notes we stretch the relationship between the chord and the scale and build tension in the solo, seemingly taking it ‘outside’ of F7 (even though we know F7 and B7 are related). (Myette 2015.)

Example 45 is a screenshot from Myette’s lesson. Here, the author acknowledges that F7 and B7 are related and that the B Lydian dominant scale contains the same notes as the F altered scale. Nevertheless, the passage is called outside, although F altered is a valid scale choice in for example Aebersold’s Scale Syllabus (Aebersold 2000) and then would be inside. For some reason, the author opts for the arguably more far-fetched derivation B Lydian dominant rather than the arguably more accessible F altered.

Example 45. Screenshot from an online lesson (Myette 2015).

To renegotiate the relationship between chords and scales might not affect how a listener perceives the solo line in terms of inside or outside, but according to my analysis of the statements in the material, it affects how the improviser thinks about his/her solo line in terms of inside and outside. In such cases, other aspects such as intention can also weigh in and be a determining factor for the improviser, whether they play outside or inside. It seems that this might very well be the case with Myette's example.

Another aspect of dominant chords is tritone substitution. Tritone substitutions are common within jazz improvisation in general, and the technique is rooted in inside improvisation. Yet the technique is mentioned by writers in the material as a tool to achieve dissonances and outside lines.

In my interpretation, the writers in the material are asking for a clear line or a set limit regarding the boundaries for outside/inside over dominant chords. In other words, how much dissonance can a dominant chord carry and still be inside? However, there are no straight answers in the material. The advice is mostly sweeping, bordering on self-evident, given the context. A typical example is found in an online harmony and music theory lesson: "a dominant chord is what allows outside notes the most" (Sollitto 2016). Likewise, a video lesson says that "the further you take it outside, the further away it comes from being a consonance/dissonance thing and just becomes a totally out thing" (Zucker 2010b). It seems obvious that issues of idiom and style are central when a soloist determines how to navigate between inside and outside lines. The chord/scale concept contains many options, and the evolution of harmony has moved the limits of consonance so far that it seems inadequate to use chord/scale-based approaches as a measurement for 'outsideness' over V7 chords.

4.3.2 Chord considerations: avoid complexities

Having studied how the outside concept is constructed in the material, I have noticed one aspect that is important for accompanying harmony instrument players. A forum member urges to "make sure the chordal instrument stays inside while the solo goes outside. If you both go outside at the same time, it's

more likely to sound chaotic ("rpjazzguitar" 2017). This statement thus warns the accompanist against playing outside using chords: by doing so they might interfere with the soloist's intentions. It seems that in the best case, the result is a chaotic harmonic progression, and in the worst case, the intended outside phrase becomes inside due to the change of harmonic backdrop. Furthermore, that inside phrase would inside over a chord that is not prescribed in the chord progression of the tune.

For pianists, yet another dimension is added, since they can outline different harmonies in each hand simultaneously. A video lesson shows several outside approaches on the piano, but in the video examples, the tones in the left hand follow tones played by the solo line in the right hand, so that the solo line is always inside in relation to what is played underneath at that moment (Martin 2017). Discussing chromatic chord movements over a single chord, a concept which the writer in question claims to have copied from Herbie Hancock, a blogger says: "if a tune stays for a long time in Cm7, then one can voice C#m7, Bm7 as passing chords. This means the melodic lines can sway back and forth like that too" ("Jazzwee" 2013b). A similar situation is found in a video clip that is presented as an example of outside playing by forum member "yebdox" (2015). In the video, the soloist, guitarist Bryan Baker, clearly plays anything but the modes and chords implied in the composition. However, as the accompanying chords are also substituted and move beyond the original harmony, both the original harmony and the presumably intended clashes between solo line and chords are obscured. In such cases, the solo lines might "sound a bit random", as "rpjazzguitar" puts it, but the lines do not clash with the underlying harmony and are therefore not outside, according to how outside is described by the writers in the material.

Contrastingly, there seem to be situations where also the soloist should be cautious about complexity, as a blogger suggests: "play simply over substituted chords. The substitution is hip enough on its own - attempts to 'hip' it up further will usually result in 'unhipping' it…" (Lyon 2008).

There are also situations where the underlying harmony is not clearly stated, for example when the chord is played with quartal voicings instead of triadic voicings. "Quartal voicings are versatile and also harmonically ambiguous, since they don't outline typical guide tones like thirds and sevenths" says renowned pianist Andy LaVerne in a lesson in an online magazine (LaVerne 2014). In LaVerne's lesson, the written music examples might be perceived as sounding out, but they are inside, according to chord/scale theory. The quartal disposition of the notes clouds the clarity of the harmony but contains no harmonic clashes.

4.4 Conclusions

The question that this study aims to answer is what outside is said to be in online environments. Regarding the themes covered in this chapter, the answer in the research material is unanimous: to play outside is to play something else than the tonal options provided by chord/scale theory. The aim in outside playing is to achieve a clash between harmony and solo line, which I interpret as an

essential feature in the outside concept. Here it must be noted that I have not found evidence for rhythmic or timbral tension in the solos, only harmonic.

According to an online lesson, playing outside is "using the wrong notes in the right way" (O'Donnell 2016a). In combination with what we have seen so far in this study, it seems that the 'right wrong notes' have to be combined and performed in such a way that they are not heard or perceived as the 'wrong right notes'. Thus, outside is explained to concern both intentional aspects, as well as the sound of something beyond the norms and rules of diatonic, chord/scale-based playing. These criteria make it difficult to determine if a solo is outside or not. From my analysis of the online writings, it seems that a solo line has to sound outside to a listener but also be outside in relation to the rules of harmony and music theory. However, the online writers seem to suggest that what a listener perceives as sounding outside might not always be outside in the sense that it does not break the rules of chord/scale theory or diatonic harmony. Similarly, what a listener perceives as sounding inside can be outside upon an analysis. In my reading of the statements found in the material, it seems that without harmonic clashing, there is no outside, although the solo line might sound so.

Regarding the techniques for playing outside, this chapter has shown that side-stepping is central, but at the same time that playing outside involves more than just playing a phrase a half step up. The concept of side-stepping can be applied on many levels – individual notes and phrases as well as chords and longer segments of a solo line. Another, slightly more advanced way of achieving outside described in this chapter is to superimpose patterns, scales, chords or chord progressions over existing chords. These techniques seem to bleed into each other, side-stepping in fact also being a superimposition, as they share the same foundation: to use an imagined chord as the harmonic basis for the solo line.

So far in this study, it seems that outside, in terms of harmonic clashes, cannot be achieved using just any solo line whatsoever. This is not a statement explicitly expressed in the material but is rather an implied prerequisite for outside that stands out from what is presented and discussed in both chapter 3 and chapter 4. It seems that the outside solo must be idiomatic regarding style and harmonic/rhythmic complexity. For instance, a simple children's song played over a complex harmony or a harmonic progression would presumably be an outside line in relation to the harmony and what the chord/scale concept suggests. However, it is doubtful whether the online writers would agree that a superimposition of a children's song is outside, as the melody line lacks idiomatic complexity. The material indicates that outside solo lines should sound complicated, or at least be played on a corresponding stylistic level of melody, harmony and rhythm style compared to adjacent inside phrases. Descriptions of outside with formulations such as "a pro, advanced sound" or "crazy lines" that contain "wrong notes" imply that superimposing simple diatonic melodies is not a primary method to construct outside lines. Instead, according to my analysis, the idea of outside seems to be to add excitement to a solo by using non-diatonic notes.

Outside harmony is explained to exist on many layers, ranging from general tonal contexts to specific harmonies, so that outside is playing that takes place outside of the harmonic context in the accompaniment. It also seems to be up to the improviser to choose the amount of dissonance, regarding how long the outside segments are, the ratio between outside and inside notes within a phrase and how dissonant the notes are in relation to the underlying harmony (see also Järvinen 1997).

As the outside concept is constructed by the online writers in the material, various aspects of bitonality are central to outside. In my analysis, bitonality is understood as a possible result of playing outside, whereas side-stepping and superimposition are understood as a possible technique to achieve outside. It seems reasonable to consider outside a synonym to bitonality, as it is often described as such. However, I argue that outside and bitonality cannot be seen as identical. Firstly, bitonality is a concept of its own, whilst outside is a concept encompassing many existing concepts, including bitonality. Secondly, I have found that the material seems to give two directions for the use of bitonality in outside playing. In the absence of a common terminology, and in accordance with how different harmonic approaches in improvisation are discussed in the material and otherwise, I label these two directions *vertical bitonality* and *horizontal bitonality*. Vertical bitonality is explained as two tonalities are sounding at the same time, layered vertically, and is achieved through superimposing triads, chords, substitutions or sequential patterns on top of an existing vertical harmony, i.e. a chord. Horizontal bitonality is explained as a solo line that in itself is made up of more than one tonality. The material proposes that two scales and modes can be mixed up and intertwined or that the improviser uses side-slipping to create an outside line. The solo line is in turn played over longer segments of a chord progression, and the two tonalities shift back and forth seemingly without regard to the underlying chord changes. The effect of using horizontal bitonality is often described in the material as a solo line "weaving in and out" of the harmony. Ambiguity is key here rather than dramatic collisions. It seems that pivot notes are central in horizontal bitonality that weaves in an out of a solo line: notes and structures can be both inside and outside at the same time. This two-way division of vertical and horizontal bitonality is not to my knowledge part of any other multi-tonal concept, which makes this feature unique for the outside concept.

Issues of idiom and style are central when a soloist determines how to navigate between inside and outside lines. As this chapter has shown, the chord/scale concept contains many tonal options, and the evolution of harmony has moved the limits of consonance, especially for dominant chords. The contemporary idiom for playing over V7 chords includes so many tonal alternatives beyond the actual chord tones that some writers in the material even seem to think that it is unfruitful to talk about outside in a dominant seventh context.

All in all, outside is a concept that puts dissonances in focus. This chapter has shown that the material discusses dissonances in various ways but that the idea of harmonic nonconformity is central. The outside discourse is built around the idea of harmonic clashes and the tension between solo line and underlying harmony. One online lesson comes with a reminder: "players must remember that the purpose of using dissonances in this way is to create and release tension" (Williams 2011). As this study has shown, both intention and clashing are common and useful tools to achieve harmonic tension. The next chapter focuses on what follows the tension: release.

5 Resolving

A feature of outside that is often mentioned in the research material is resolving. The writers in the material often discuss this feature as a verb, *to resolve*, while textbooks and academic texts mostly discuss the same feature as a noun, *resolution*. However, it is not uncommon for writers in the material also to use the word 'resolution'. Resolution is generally conceived as a harmonic move from a dissonant chord to a consonant chord within a key. Resolving seems to be understood as a synonym to resolution and the concepts are used interchangeably in the material. Within the outside discourse, resolving and resolution are also seen as a moving from an 'outside' key to an 'inside' key. In that way, regardless of what word form is used, the phenomenon described is the same: a musical tension (in some form of dissonant melodic-harmonic relationship) that is followed by a musical release (in some form of consonant melodic-harmonic relationship). In this chapter I will, following the research material, use the words resolving and resolution interchangeably: I discuss the act of resolving that makes resolution take place.

The following quotes, from a forum discussion and an online lesson, respectively, serve as a good introduction to this chapter:

> the most important thing about playing outside is how you depart from the tonality and return to it. For effect, there can be sudden, drastic changes to the tonalities, but generally, especially in the beginning, it's smoother to ease in and out of the 'outside' licks or phrases. ("gary" 2015.)

> Playing 'outside' means you're using information from a tonal center that radically differs from the chords or key in which you're playing overall. As you begin adding these outside sounds, you'll ultimately have two choices: either build more tension and dissonance by continuing to avoid the original key or tonality, or resolve the tension by returning to the home key in a smooth, tasteful way. (Brewster 2017.)

These quotes share two important features that are linked together: outside concerns tonal tension, i.e. dissonances and tonal organizations not based on the chord/scale concept, followed by a smooth and tasteful resolution. Similar

formulations are common in the material, e.g. in statements by Williams (2011), "AlteredDave" (2016), "mr. beaumont" (2015), Winter (2013), "mokapot"(2017), Jones (2015) "docbop" (2013 & 2017), "Matt L." (2015), and "Chris Zoupa" (2015).

So far in this study, I have presented a large number of precise statements from the material on how to play outside, regarding for example performance characteristics and harmonic approaches. Regarding how to resolve back inside, the advice is scarce and much less detailed, with statements like: "I do best when I have the melody of the song going thru my head during improvisation. I can get a little outside and hear how to come back and resolve that way" (forum member "bobby d" 2017) and "playing outside is all about playing out at the right time and KNOWING HOW AND WHEN TO RESOLVE!!" [capital letters in original] (forum member "Oleo20" 2009) are typical. In a discussion on intuition when playing outside, a forum member formulates similar notions: "Perhaps the intuition in playing is when to move out and when to move in" ("Stuart Elliott" 2014). According to these statements, the improviser must hear, feel or intuitively know a proper time and method for resolving.

In one of his textbooks, Liebman states that the goal of chromaticism is "to become free from a tonal anchor when desired and still maintain a sense of coherence, logic and beauty" (Liebman 1998: 2). Both Liebman and the writers in the material thus seem to rely on intuition rather than measurable units, such as amounts of time or dissonance, in knowing when and how to resolve. Intuitively, the improviser will know what a good solo line needs in terms of coherence, logic and smoothness. I find this intuitive approach to stand in sharp contrast to the highly detailed and specific advice on using techniques such as superimpositions and pentatonics that have been discussed so far in this study. However, it correlates with the research of Monson (1997) and Prouty (2012). According to Monson, most jazz musicians are able to discuss musical elements using terminology from classical theory, but when talking with other jazz musicians, they prefer metaphorical descriptions to convey aesthetic dimensions of jazz improvisation: analytical vocabulary seems 'soulless' to many (Monson 1997: 93).

Statements from the material show that outside playing is not about total freedom, or randomly playing non-chord tones, but that it requires knowledge of harmony, and intentionality and personal taste regarding how and when to incorporate outside segments into a solo line and to resolve them. A saxophonist blogger holds Woody Shaw in high esteem in this regard:

> It's cool to see the different ways Woody plays outside and how he resolves those lines. I also enjoying seeing how clear and deliberate each phrase was. As a listener, I had the feeling that, at the end of each phrase, Woody Shaw waited until he was ready with a strong melodic idea before playing again. (Rich 2012.)

This quote indicates several things: Shaw is perceived as controlling not only when and how to play outside but also how and when to resolve. Shaw can do

this in many different ways and does so with obvious intent. Finally, Shaw has the patience to wait for the right moment before he continues the solo line. Rich's description of Shaw's playing thereby lives up to the standards of forum member "Oleo20" for what outside playing is all about, as presented in the earlier paragraph.

According to the material, resolving is crucial in determining whether a solo phrase is outside or sounds wrong, like a mistake or that "you don't know what you are doing", as the material often puts it. This is explicit in different types of statements; in forum member posts "stevehollx" (2015), "Pauln" (2017), in a video lesson (Zucker 2010, at 5'10 in the video), in blog posts (Rowe 2010; Jones 2015), and in online lessons (Wernick 2011; Warnock 2012; Hertzog 2012; O'Donnell 2013; Zillio 2015).

Apparently, to resolve an outside phrase is an important factor in outside playing. According to my analysis, it is an essential part of the outside concept to resolve outside phrases. Resolving is central because a resolution of an outside passage shows that the player is in command of inside and that the outside passage was intentional. Thus, resolving is closely connected to intention, another essential feature of the outside concept. One could say that intent, along with harmonic, melodic and structural awareness, is manifested in the form of controlled and intentional handling and resolving of tonal tension: "the most important thing when playing out is resolution. One note can make the difference between 'He's playing random shit and it sounds bad' and 'He's a jazz genius'" ("Theorynerd" 2015). Another forum member agrees, saying that an improviser has to come up with

> brilliant solutions to an exit thoward [towards] the outside and a return to the inside that makes musical sense to the listener. And you only can do this, if at ANY moment you need, you are able to return to the inside easily. ("emiliocantini" 2013.)

In the statements about outside found in the material, special attention is given to what established improvisers have said. Established improvisers are treated as masters, or geniuses, in the words of forum member "Theorynerd", and their words are given much weight. For the sake of contextualizing the importance of resolving expressed in the material, I include some quotes from established players that are included in texts by the writers in the material: saxophonist Ralph LaLama says that "It's all in the resolution" (Rowe 2010). Trumpeter Miles Davis says "If you hit a wrong note, it's the next note that determines if it's good or bad" (O'Donnell 2016), while jazz guitar legend Joe Pass is quoted saying "if you hit a wrong note, then make it right by what you play afterwards" (Hart n.d.). Not everyone finds it easy to put to practice, as blues guitarist Stevie Ray Vaughan says: "It's very easy to go outside, but very hard to get back in" (Warnock 2013).

With these quotes as a framework, the connection between resolving and a mastery of outside playing becomes clearer. A blogger states that "the art of

playing outside lies not only in the choice of the outside notes but also in the way you move outside and back inside again" (Lang 2013). To find one's way back in after an outside venture has even been described as a sign of genius by writers in the material ("Theorynerd" 2015; Craig n.d.).

Clearly, it is crucial part of the outside concept that the improviser leads the solo line to a resolution after a dissonant passage has been played. A forum member notes that "when the big guys use these devices, it doesn't sound outside as much as another means to add and control tension" ("StanG" 2016). It thus seems that when an improviser has mastered how to play outside lines and how to resolve back inside, they have acquired a tool to master tension and release.

This chapter highlights two important features that are linked together: tonal tension, i.e. dissonances and tonal organizations that are not based on the chord/scale concept, and dissonances being followed by a smooth and tasteful resolution. In this chapter, I study the impact these features have on what outside is said to be in online environments, and how balance and contrast used in connection to resolving tension are manifested in the recorded jazz improvisations that are used to exemplify outside.

5.1 Balance

The appropriate level or amount of dissonance and tension in an improvised outside solo seems to be relative to how tense and dissonant the solo was before the outside segment, not relative to a set standard or a fixed point of reference. A forum member says that you "don't get that 'ah, I'm home!' feeling without traveling a little" ("Thumpalumpacus" 2016), meaning that the improviser has to exceed the prevailing harmonic intensity in order to create a sense of relief in the return to the harmonic scheme. According to my analysis, there is no percentage limit or minimum number of outside notes that must be fulfilled to achieve tension. Instead, it seems more important to resolve the line musically, as a forum member states: "I use the 'playing outside' thing sparingly and return home in a timely fashion so the listener can hopefully appreciate the contrast" ("gremboul" 2009).

A formula often found in the material is *inside-outside-inside*, presented both as a technique and as a measure for balancing the two improvisational approaches. The inside-outside-inside formula can be understood as *tension and release*, and is valid in music in general, according to a response to a blog post: "if more musicians understood the basic concepts of melody and intervals and what is tension and release, we'd hear more musical playing overall whether 'inside' or 'outside'" ("Reuel Lubag" 2014).

The link between inside and outside is evident in posts by forum members who suggest that one should become good at playing inside before worrying about what outside playing is ("Mr.Beaumont" 2017), or that learning to play outside is the same as learning to play inside ("Docbop" 2017). Following the rules all the time would lead to predictable and boring music, while paying no attention whatsoever to the rules could easily lead to music that is ultimately boring in its randomness (Sabatella n.d.). However, in the outside discourse,

aesthetic and idiomatic regulations seem to change over time. A forum member says that "post-60s players have used creative schemes to sound "other than diatonic" or "outside the mode of the moment" [---] what was formally thought of as 'outside' has become 'standard' or 'modern' or 'hip', while inside playing sounds un-hip, square, simple, corny, old-fashioned etc" ("fumblefingers" 2013). In the discussion that follows, the need for resolution is questioned: "some of the best playing I've ever heard, if analyzed, would reveal phrases that purposely stopped short of their resolution, and it's a beautiful effect. Wayne Shorter comes to mind when I think of this kind of thing" ("Spirit59" 2013). As the discussion goes on, resolution seems to be relativized: "It depends on the context too. Wayne has for the most of his career played in groups where the group dynamics allow him to get away with more dissonant playing in general. It's part of the aesthetic" ("AmundLauritzen" 2013), "Maybe the 'as long as you know how to resolve it' is better than the more typical, 'as long as you resolve it'. One should definitely 'know how', but ultimately the choice is an aesthetic one" ("Spirit59" 2013).

In a way, these statements can be interpreted as devaluing the importance of rules for how to play outside as well as the demands for resolving. Such an interpretation is supported in a PhD thesis on Michael Brecker, where the impact of different aesthetics and personal artistic preferences is also noted, as Brecker does not always resolve his lines following the inside-outside-inside formula (Williams 2017: 104). However, according to "Spirit59", the demand for knowledge is still untouched, meaning that the standards for outside presented in this study are not lowered. I argue that, although there are individual players and certain instances that serve as exceptions, the outside concept is constructed with resolving as an essential and compulsory feature.

A forum member says that resolving is important as a "touching base" that is used to "check in" on the tonality during the improvisation to show the listener that the player is in control over the harmonic progression ("Docbop" 2017), thus indicating intention. This shows that the matters that must be negotiated by the player to achieve outside include not only resolving tonal tension but also balancing instability, uncertainty and unpredictability with stability and predictability. These aspects of outside must be regarded as important characteristics that differentiate outside from atonality and also from free jazz. A forum member says: "I'm sure there's folks out there who feel liberated by weighing all 12 tones more equally, but I love push and pull in music, pretty and ugly, fast and slow...contrasts" ("mr. beaumont" 2015). According to my analysis, outside is not atonality: outside just momentarily neglects the principal tonality of the piece, or replaces the tonality with another tonality, in order to create contrast. That being said, the length of the outside segment seems to be an individual and artistic judgement. A forum member says that "by nature, that ratio of in vs. out is going to be a grey area for different ears and tastes on how far out and how long" ("stevehollx" 2015). Therefore, outside is not something that follows a set standard, but something that is relative to the improviser's taste, knowledge and experience.

5.1.1 Contrast: first outside, then inside

Structure is crucial to outside playing and also has a bearing on resolving. A forum member states: "you can play whatever you want as long as you know how to resolve it. Outside playing sounds wrong if it isn't resolved elegantly or *if it doesn't make sense as a component in a larger musical statement*" ("AmundLauritzen" 2013, my italics). Two online lessons state that "'Out' lines only work when they are played after or in between 'in' lines that give them their contrast" (Laukens & Wernock n.d.) or that "an 'inside' phrase may sound even better if it succeeds an 'outside' phrase because of the contrast" (Behr 2003). These statements indicate that outside is a structural contrast to inside and that a resolution of an outside phrase can enhance the effect of the subsequent inside phrase.

A solo line that weaves in and out of the tonality creates an inherent tonal contrast within the line. However, the contrast exists on more than one level. Not only can the contrast be found in original tonal material vs. non-tonal material, it also lies between the structural organization of the tonal material and the non-tonal material, i.e. between discernible scales and triads on the one hand and non-established organizations of tones on the other. Resolving horizontal bitonality is therefore connected to balance, both as a verb and as a noun: resolving horizontal bitonality is balancing the contrast between tonal and non-tonal in order to achieve a state of balance.

The need for balance is also discussed by Liebman (2013), who, although his textbook does not address resolving as a harmonic topic, argues that in chromatic contexts some tonal anchor is needed. His point is to achieve balance between 'out' and 'in' rather than resolving chromaticism harmonically. Complex chromaticism should be followed by simpler structures, such as diatonic sounds: "diatonic lyricism [---] balances the tension set up by the chromatic melodies and harmonies" (Liebman 2013:16). This striving for balance seems like a synonym for the need to resolve tension. Liebman, like the online writers, leaves it up to the player to determine *when*, *how* and *for how long* regarding the process of creating balance (e.g. resolving). Liebman does so with a crucial difference: being an established jazz musician, he discusses the aesthetics of music and encourages the reader to find his or her own artistic voice, whereas the online texts in the material for the most part simply leave out such matters or address them without much detail. As forum member says that "by nature, that ratio of in vs. out is going to be a grey area for different ears and tastes on how far out and how long" ("stevehollx" 2015). Here, the application of the outside concept is explained as something that cannot be captured in rules and norms, as it is by nature a grey area that depends on taste and listening experience.

However, there are approaches to tonality and resolutions in the online material that echoes Liebman's views. A video lesson formulates some axioms in order to explain the music theory used in improvisations. Among these axioms are that there are consonances and dissonances, and that tonal centers can be established by different means:

> A tonal center could be the first or the last note you play (in a scale), the highest or lowest, the loudest or the most repeated note. All other notes will be heard in relation to that note, the tonal centre, regardless of whether they are inside or outside the scale, giving them a certain level of tension dissonance, with a need to resolve to the tonal centre (another axiom). ("Walk That Bass" 2016.)

This view equals Liebman's approach, in that focus is not on a specific note, key or chord, but on broader parameters such as tonal density, balance and repetitious familiarity. It seems that a wider view of what a tonal center is may be fruitful when analyzing music that is not clearly functional or note/key/chord-based and may be an important part of understanding what is included in the outside discourse.

Dean-Lewis's study on improvisational excursions outside the tonality (2001) does not consider either contrast or resolving as such, as his analytical focus is on explaining harmonic-melodic relationships in the phrases outside of the tonality that he is examining. However, his text has a passage on compensation, which seems to border or equal resolving and contrast (Dean-Lewis 2001: 175). Here, he has found that improvisers use "particularly resolved set of notes as 'compensation' for the excursion away from the underlying tonality" in his analysis material. This means that passages outside of the tonality are followed by very inside passages that compensate for the tonal excursions. Dean-Lewis lists ten forms of compensation, which from the perspective of this thesis can be seen as ten ways of playing inside. These inside passages (or sets of notes) can appear anywhere in the solo, since they are inside, but Dean-Lewis has found that these inside sets of notes are more frequent, more complete and with a higher note-per-bar density after an outside passage than before an outside passage (ibid.). That indicates that these ten compensations are similar to resolving outside, or to be more accurate, to re-establishing inside. I will return to this theme later in this chapter and discuss how re-establishing inside is connected to resolving outside.

5.1.2 Double resolution: two resolutions at once

The solo examples in this study show that heavy alterations of chords can in fact be inside rather than outside. This primarily concerns dominant chords: the material often advices to play outside segments over dominant chords, since the dominant is the least stable chord and naturally wants to resolve (e.g. Hart n.d., Standring n.d., "Oleo20" 2009, Sollitto 2016). The tension inherent in a dominant chord is so strong that, as a forum member says, "you can play almost anything over [---] an altered dominant, if you do it with conviction and resolve cleanly" ("mr.beaumont" 2011). It seems that the improviser can take advantage of the tension in the dominant chord and use the dominant chord to disguise the outside lines, and to use the resolution of the dominant chord to strengthen the resolution of the outside segment.

On one level, the outside line resolves inside, as it must do regardless of the underlying chord. Indeed, the outside solo line can resolve at any time, to any chord. However, on another level, the harmonic instability of the dominant can be seen as affecting both the note choices for the solo line and the chord's need for a resolution to a stable tonic. It seems likely that the tension/release in a V7-I, along with idiomatic considerations and playing habits, will affect the improviser and lead to a resolution of the outside line over the V7 chord. I argue that when improvising an outside line over a dominant chord, the player must negotiate resolutions on both levels simultaneously. As this aspect is not mentioned in the material, I have chosen to call it a *double resolution*. Double resolution appears by nature only in functional V7-I progressions, where it seems to underline the importance of the rules of harmony.

In his jazz theory/improvisation/arranging course book, Smith points out that a feature of much jazz harmony is that chords tend to occur in a strong-weak alternation, creating a downbeat-upbeat feel within the harmonic rhythm. The typical example of this feature is the ii-V7-I chord progression. As generally used, I and ii are strong chords, while V7 is a weak chord (Smith 2008: 53). Obviously, this contrast between strong and weak is similar to the general concept of tension and release and explains the special position in resolving outside lines held by the V7 chord. The connection between weak/tension and outside is not expressed in the material, even though it would seem to be a logical step.

The writers in the material give several suggestions for what to play over dominant chords: altered, diminished or pentatonic scales as well as various substitutions. However, an online lesson warns that "simply inserting these notes or an altered scale based on music theory is not enough, you need to know how to use them melodically [---] [and to] hear the unique sounds of these altered dominant notes by ear" (O'Donnell 2016b). Regardless of what improvisational device one chooses to use, it is important to "resolve the line to the original tonic, not the substitute tonic" and to "engage your ear to make it *sound* right", as another online lesson says (Wernick 2011). However, a third online lesson points out that "there is a vital difference between V7 chords that appear in a ii-V7-I progression and V7 chords that stand on their own and don't resolve" (O'Donnell 2011). Such independent V7 chords, found for example in blues progressions and in modal and non-functional compositions, are arguably not dominant chords, since they do not carry functionality in a tonal chord progression. However, according to an online lesson, "great improvisers aren't just thinking about that dominant chord the whole time. Many players use the bebop reharmonization technique of implying a ii-V7 over the static V7 chord (D-7 G7 instead of G7)" (O'Donnell 2011). I interpret such reharmonizations as a sign that the improviser has structural control and flexibility, so that they can modify static V7 chords into more fluent and perhaps more well-known ii-V7 units. The importance of resolving the V7 is not diminished, but the solo line obtains more tonal options before the resolution when the V7 is thought of as a ii-V7.

Two forum members discuss this (in the same thread), focusing on altering the functional harmony system on which the chord/scale concept relies: "for me 'outside' playing is about groups of notes pulling against the harmonic function rather than individual pitches that are considered dissonant against the chord" ("Rich Cochrane" 2012). This post regards playing outside as an act of overriding or renegotiating functional harmony. The second post regards outside playing over dominant seventh chords and connects it to functional harmony:

> how do we play truly 'out' on a V7? [---] My first thought is to look at harmony that doesn't seem to function congruently. Example being over G7 to play off of the chord as if it was Ema9 or Bma7. ("JakeAcci" 2012.)

In several solo examples in this study, outside segments occur over dominant chords. One can ask whether non-diatonic playing over dominant chords is outside or a result of merely following the prescriptions of the chord-scale concept. From a resolving point of view, that question is rather irrelevant. The writers in the material are unanimous in that if there is a tension, it has to be resolved, regardless of how the tension is achieved. However, a solo line played over a dominant can be interpreted either as inside/tonal or outside, depending on some crucial elements. It can be perceived as inside, if the solo phrase is seen as stylistically idiomatic and based upon expanded chord/scale-options. The solo line can be perceived as outside, if the phrase is seen as going beyond stylistically idiomatic chord/scale alternatives.

In the material, there seems to be an acceptance of the coexistence of both resolutions. In this interpretation, both resolutions exist side by side, simultaneously, albeit on different levels. Within an outside context, outside resolves to inside, and within a tonal/functional context, dominant chords resolve to a chord with a tonic function. The writers do not state this explicitly, but it seems that when an outside solo line is played over a dominant chord, there are two tensions that have to be resolved: the tension inherent in the dominant chord and the tension between the solo line and the underlying chord.

5.2 Moving from outside to inside

So far in this study, I have shown how the writers in the material discuss how to migrate a solo line from inside to outside and how to maintain outside. This chapter shows that one of the most important factors in outside playing is that an outside phrase must be resolved. However, exactly how it is resolved seems secondary. I will next discuss just that, the transition back to inside.

Answering a question about which book or theory could explain outside playing, a forum member answers: "It's all about how you get back in" ("mr. beaumont" 2014). Other forum members agree: "outside playing has to do more about how you resolve inside rather than what you actually play when outside, theoretically anything goes since outside notes are no longer theoretically correct, pun intended lol" ("AlteredDave" 2016) and "from my transcribing it seems to me that it doesn't matter too much WHAT you play when you're going

outside. The important thing is how you RESOLVE it. That is pulling it back inside" ("aniss1001" 2012). It seems that the outside segment in itself is rather unimportant compared to resolving back inside, as "there is no 'out' without 'in'" ("mr. beaumont" 2014). However, according to the writers in the material, to possess knowledge of harmony and the music theory used in jazz improvisation does not automatically give the musician an ability to transform that knowledge into a coherent solo line within a musical situation. Coherence and balance are crucial: an online lesson says that the improviser should "lead the listeners from inside, to outside, and back inside again, rather than simply jumping back and forth" (Wernock 2013).

Many writers mention Michael Brecker as a prominent outside player in this regard: "[he] had a most natural, fluid and lyrical way of passing outside the written changes and gracefully hitting the window back in" ("TH" 2013). A forum member ("0zoro" 2012) mentions Becker's solo on *Oleo*, from which Example 46 is taken, as a good example of outside playing. Here, the outside segment is a Cb major pentatonic phrase that resolves to the note D in bar 3. The four-note figure that precedes the note D is called a "chromatic cell" by a textbook, described as a common building block in jazz vocabulary (Steinel 1995: 12). The lead-in to the chromatic cell is by a half step, from Gb to F, which might be an aspect of what the description by "TH" is referring to.

Example 46. Michael Brecker's solo on 'Oleo' (1'13-1'16) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

Examples 47 and 48 are two different notations of the same solo passage, which is taken from a blogger who also presents an analysis of the passage:

> moving outside: by moving down a half-step, which takes him from F# minor pentatonic to Gm pentatonic. Note that he does not move up, even though the scales move up from F# to G!
>
> playing outside: he uses the G minor pentatonic scale, which contains 3 outside notes (Bb, C, and F) and two inside notes (G and D). It is important to

> connect the outside notes in some 'logical' and musical way, and using the familiar pentatonic scale is one great way of doing this.
>
> moving back inside: he plays a chromatically ascending run which adds a lot of tension before it resolves back to E, the root of the tonality. From there he stays inside by playing another pentatonic lick. (Lang 2013.)

In his analysis, Lang says that outside is achieved by moving down a half step from F# minor pentatonic to G minor pentatonic. At first, this seems incorrect, as G is a half step up from F#, instead of a halt step down. However, when considering Lang's transcription in guitar tablature, it becomes clear that the position on the guitar neck moves down a fret when entering the G minor pentatonic segment. Thus, the physical movement is downwards, but the tonal movement is upwards.

Example 47. Chick Corea's solo on 'Vulcan Worlds' (2'54-3'02) from the album Where Have I Known You Before *by Return To Forever featuring Chick Corea (Return To Forever (1974). Screenshot of a transcription by Mattias Lang (Lang 2013).*

Example 48. Chick Corea's solo on 'Vulcan Worlds' (2'54-3'02) from the album Where Have I Known You Before *by Return To Forever featuring Chick Corea (Return To Forever (1974). Transcription by Mattias Lang (Lang 2013), edited by Fredrik Erlandsson.*

Just like in Example 46, the transition from outside to inside in Examples 47 and 48 is accomplished by using a chromatic phrase. However, outside lines does not necessarily have to resolve chromatically. Instead, I have found that the writers in the material present techniques and approaches that can be divided into three categories: 1. stepwise resolution, 2. targeting a chord tone, and 3. using a strong rhythm. These approaches are mentioned in discussions and lessons as well as manifested in solos mentioned in the material, where they appear one by one or in combination.

5.2.1 Stepwise resolution and enclosures

The first approach, stepwise resolution, is favored when resolving outside segments, according to the writers in the material. More specifically, using half steps is the preferred way to resolve. A forum member says that "half-steps are your friend. If you want to create tension, the tension and resolution of just playing a half-step above or below of where you 'should' play can be very satisfying" ("Mr.beaumont" 2017). This quote is a description of horizontal bitonality in the form of side-stepping, which according to the quote seems to have inherent possibilities for good resolution. However, to focus on tones that are common in two adjacent chords when moving from one chord to another, for example when using superimposed triads, is not considered as effective as half step motion, according to the material. Interestingly, this is the opposite of how voice leading between chords is taught in jazz piano textbooks or in arranging books, where common tones between chords are desirable. Still, within the outside discourse as constructed by the writers in the material, the harmonic relationships between a specific note and a specific chord are equally complex in chord voicing contexts as they are in solo line contexts.

According to my analysis, melodic activity is preferred over melodic passivity when it comes to resolving outside lines: half step movement is more desirable than utilizing common tones. Furthermore, it seems that no direction is preferred, i.e. whether the half step movement comes from above or from beneath. A similar observation is made by Titus (2010: 63), albeit resolving here forms part of a general jazz theory and improvisation discourse.

Half step resolutions are sometimes described in similar terms as approach notes, according to an online lesson: "approach notes are notes leading into a resolution or 'target note'. If you want to play something melodic, harmonious, or 'inside' of the chord, you can approach a resolution or target note that is a chord tone, or a note in the chord scale" (Sollitto 2016). In the material, the half step is often part of an enclosure, i.e. in combination with another half step or with a whole-step. A blogger defines enclosure as approaching a target note from both above and below either diatonically or chromatically (Vaartstra 2016). Study books also call this device *rotation* (either diatonic or chromatic) (Steinel 1995: 70), *delayed resolution* (Santisi 1993: 54), *above/below approach* (Crook 1991: 36) or *indirect resolution* (Pease & Pullig 2003: 1).

In the material, enclosures are treated as an inside improvisational device that expands the tonal possibilities and "gets into chromaticism without getting too far outside" ("bobby d" 2017). In this respect, I argue that enclosures can be interpreted as related to pentatonics: both are short melodic units that carry a strong internal structure and coherence, and because of that quality, both can be used to take a solo line beyond the limitations of chord/scale theory.

Example 49 is a screenshot taken from an online lesson. Using different three-note enclosures that always land on the note B, the third of G7, this example illustrates the basic principle of enclosures.

Example 49. Screenshot from an online lesson (Sollitto 2016).

Actually, three of these examples do not meet the criteria for an enclosure, according to the description of enclosures found in the material: the first

example, G-A-A#-B is an ascending line, and bars 7-8 and 13-14 are descending lines, without any above/below-rotation. These three examples are instead a string of approach notes, an approach note that leads to an approach note that leads to a target note. Enclosures can be used in combination with approach notes within a single solo line, as seen in Example 50, which is a solo segment

> from Sonny Rollins's solo on *The Way You Look Tonight* from the album 'Thelonious Monk with Sonny Rollins'. Here he uses approach note combinations and enclosures over a II – V – I to C major. When labeling this concept, there is a lot of gray area because, for example, a resolution note could also be considered part of the next enclosure. So often times there is no right or wrong way to analyze this concept, but what's important is to be able to see and hear when it is used, and have an idea of what notes they're landing on and how they're approaching the resolutions. (Sollitto 2016).

As Sollitto notes in his lesson, enclosures are often used in sequence, so that the functions of the individual notes in the enclosures overlap: a resolution note from one enclosure might also be the starting note for a new enclosure.

The addition of approach notes results in a highly chromatic solo line. Indeed, the Sonny Rollins solo segment in Example 50 could be seen more as a typical bebop line than as an outside line. My point, however, is that the tension created in the first two bars is resolved in bar 3, and the solo line resolves through an enclosure.

Example 50. Screenshot from an online lesson (Sollitto 2016).

Sonny Rollins Approach Note and Enclosure Example

LEGEND:
AN = Approach Note Combo
ENC = Enclosure

Dm7 G7 Cmaj7 etc.

3

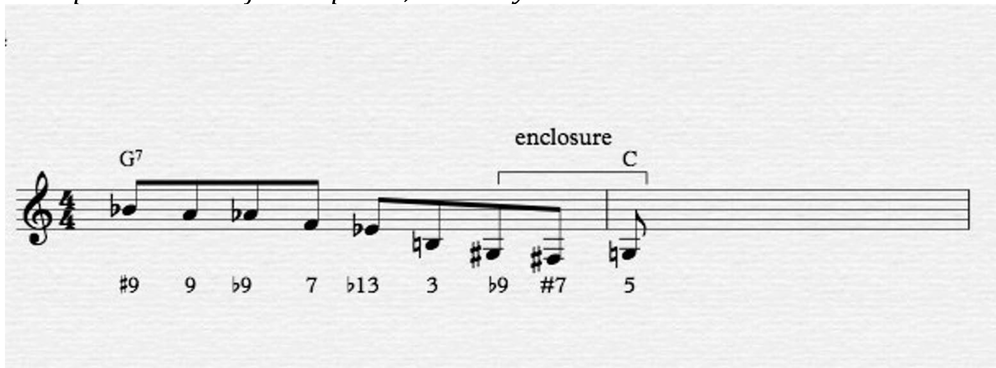
AN 3rd ENC root ENC 3rd ENC 5th

Tension created by chromatic tones within a solo line is not a feature exclusive to outside playing. In fact, it could be considered as one of the characteristics of bebop. Example 51 is a screenshot from an online lesson showing an excerpt from saxophonist Charlie Parker's solo on the tune 'Cheryl'. Here, Charlie Parker plays a line that includes several alterations over a V7 chord (G7), ending with an enclosure that leads to the chord C. From an outside point of view, Parker's solos are generally considered more inside than outside by the writers in the material. This segment is in fact a rather typical bebop line and contains many notes that do not belong to the G7 chord or its horizontal counterpart G Mixolydian, as seen in Example 52. For instance, there is a superimposed G#m7 chord over the last two beats of G7 (the Eb is the harmonic equivalent of D#, the

fifth of G#m7). However, the notes over G7 follow the chord-scale concept if seen as belonging to G altered, which is one of the options found in Aebersold's Scale Syllabus (e.g. Aebersold 2000). Nevertheless, the line is a clear example of how to resolve to a chord tone by a half step, as a part of an enclosure.

Example 51. Screenshot from an online lesson, showing a transcription by Eric O'Donnell of Charlie Parker's solo on the tune 'Cheryl' (O'Donnell 2016b). However, this segment is not found in any of Charlie Parker's versions of 'Cheryl' that I have listened to.

Example 52. Bar 3 of Example 51, edited by Fredrik Erlandsson.



Example 53 is an example of a clearly outside phrase that is resolved through an enclosure, taken from Michael Brecker's solo on 'Blue Bossa', mentioned e.g. in an online lesson (O'Donnell 2011). Here, Brecker plays a segment of an Ab half/whole diminished scale over Ab7, and a segment of E major over the first bar of Dbmaj7. In the third bar, enclosures lead to the notes F and Db, the third and the root of Dbmaj7.

Example 53. Michael Brecker's solo on 'Blue Bossa' (2'01-2'04) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

Enclosures are developed further in a video lesson that describes a concept called *approach note matrix*. An approach note matrix is several enclosures played in sequence as a means to achieve an outside sound while still resolving structurally (Neff 2014a). In this technique, each enclosure is treated as a unit, and several enclosure units are arranged to form a larger enclosure. I have not found this technique elsewhere in the material, but the approach meets the criteria of outside presented so far in this study: being premeditated, it shows intention, and as it involves notes that are not within the prevailing tonality, it results in a harmonic clash. Finally, its stepwise structure enables smooth and logical resolutions of the harmonic tension.

However, the use of concepts like the approach note matrix, as well as other structural patterns, raises questions regarding resolving. For example, a unit such as a pentatonic pattern is harmonically coherent in itself, regardless of which harmonic background it is played over, so the pattern carries no internal tension that must be resolved. At the same time, it can carry tension in relation to the harmonic background. The first question is: must such a pattern resolve? Furthermore, does the pattern resolve as a unit, or is it only the last note(s) of the pattern that needs to resolve? The writers in the material do not address these matters. According to my analysis, it seems that in relation to harmonic clashing and resolving, a pattern is mostly treated as a single entity, e.g. a melodic unit compressed into one or two notes, and that it is only those notes (often the last sounding notes of the pattern) that have a bearing on the resolution. Furthermore, since voice leading is central to an improviser's personal style, it must be taken into consideration that half steps leading in to a target note may be part of an enclosure, as well as an individual note that moves by a half step to an inside note. Thus, the enclosure in itself may be the resolving factor, but more likely it is the approach note leading into the target that carries the resolution. The conception of a structural unit as a single entity thus seems to diminish the importance of structural resolving, i.e. that a pentatonic pattern must be resolved as a whole. This means that although tension can take place both on a note-for-

note level and on a phrase-by-phrase level, the resolution takes place mainly on a note-for-note level.

Example 54 shows enclosures resolving to the note F over F7 and the note Bb over Bb7. In the first bar, Shaw outlines a Gb7 chord, where the two last notes, Gb and E, form an enclosure to the root of the prescribed chord, F. The second enclosure is not as dissonant as the first, as the first note, C, is included in Bb Mixolydian and the second note, A, is an approach note. Instead, the last enclosure could be interpreted as a part of a longer series of half steps, where the two enclosures envelope two half steps in the second bar. However, as a result of Shaw's voice leading in the solo line, the two half step movements between these enclosures are in fact also two complete diatonic enclosures.

Example 54. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (5'19-5'21) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

Example 55 is a passage from a Woody Shaw solo mentioned by forum member "destinytot" (2016) and shows a relatively short outside segment. In this passage, it is only the D major pentatonic segment that is outside. Of the three outside notes, the last two are also part of an enclosure that leads to note Eb, the fifth of the Ab maj7 chord. Not only is the resolution accomplished by an enclosure that ends with ascending half steps, but this is also an example of sidestepping. The D major pentatonic segment F#-E-D is a half step below the tonality that precedes it (Eb Mixolydian), and the notes that follow (Eb-F-G) form a retrograde version of the segment but played in the original tonality. Noteworthy, this resolution moves up by a half step both notewise and on a structural level.

Example 55. Woody Shaw's solo on 'There Will Never Be Another You' (1'02-1'09) from the album Solid *by Woody Shaw (Shaw 1987). Transcription by Fredrik Erlandsson.*

Examples 54 and 55 are cases in point regarding what the material says about Shaw. A blogger says that "It's cool to see the different ways Woody plays outside

and how he resolves those lines” (Rich 2012). Shaw himself is quoted by a forum member, saying that “I like to play it, deliberately in another key, then resolve it” (“eh6794” 2014). These examples show that what Shaw says in the quote can be seen in the analyzed solo passages.

Example 56 is from a solo by tenor saxophonist Michael Brecker that online forum member “destinytot” (2016) thinks of as an example of good tension and release. The same passage was analyzed from a superimposition point of view in Example 23. However, this passage also includes perspectives on enclosures. The solo line resolves into bar 3 through an enclosure that rotates with half steps around the target tone E, which is a chord tone, the fifth of Am7. The first note of the enclosure, F, is the third of the superimposed Db major triad, and the flat ninth of the prescribed chord E7. The second note in the enclosure, Eb, is the ninth of the superimposed Db major chord, thus making that note a diatonic addition to the solo line. The Eb could also be could seen as a chromatic approach note that leads to the E. The last three notes in the example could be interpreted as a ‘backup’ resolution. In case the enclosure F-Eb-E should not be efficient enough, it is followed by a diatonic enclosure that lands on the root of Am7: B-G-A. Regardless of interpretation, the last enclosure adds coherence and balance to the solo passage and indicates that the soloist has control over the solo line.

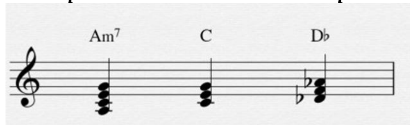
Example 56. Michael Brecker’s solo on ‘I Really Hope It’s You’ (1’46-1’50) from the album Sleeping Gypsy *by Michael Franks (Franks 1977). Transcription by Moffet (2004). Edited by Fredrik Erlandsson.*

However, there is more to be extracted from this example. The Db major triad is the enharmonic equivalent of a C# major triad. As Example 57 shows, the notes of the C# triad function as the major third, the minor ninth and the major thirteenth of an E13(b9) chord, thus implying an E half-whole diminished scale.

Example 57. The relationship between Db and E13b9.

An Am7 chord is a C major triad with an added A. The half step connection between the C and Db triads is embedded in the relationship between the Am7 and Db chords, as shown in Example 58.

Example 58. The relationship between Am7 and Db.



The superimposed Db triad in Example 56 thus has a half step relationship to the Am7 chord. This structural relationship is further manifested in the solo line: the Db triad superimposition starts on the tone F in bar 1, and resolves to the tone E in bar 3, a half step down from the initial F. The solo line between the F and the E has a mirrored shape; first ascending and then descending, using the same tones, before landing in a logical and smooth resolution. Why "destinytot" thinks of the solo from which Example 56 is taken as a good example of tension and release is not further elaborated on in the forum thread, but after a close reading we see that the solo line has the characteristics of good resolving as described in the material: a half step movement and an overall structural balance and logic.

5.2.2 Targeting chord tones

The second feature, targeting chord tones, is a recommendation that is not unique neither for playing outside nor for jazz education in general. Probably all improvisation students, myself included, have been instructed to aim for chord tones at chord changes. Target tones are a very basic approach in jazz education, and it seems that the writers in the material are as familiar with the concept, as they are with a term such as triads. This is because one of the clearest manifestations of inside is to play chord tones. It seems that triads and chord tones are central for outside playing, regarding both the actual outside segment and the resolution, according to a forum member:

> When you leave the tonality it creates tension, how and when to resolve that tension (returning to the tonality) is what it's all about IMHO. I like to use outside triads since triads are a strong sound by themselves, and when I return I try to make sure to land on a chord tone of the original tonality. ("Toughtenor" 2015.)

In a video lesson showing outside lines, the instructor describes his own playing in the video, saying he "made sure to resolve to some chord tones" (Zucker 2010b). An online lesson gives the same advice: "resolve it back to a note from the scale or arpeggio" (Warnock 2013). Among the notes in a chord or a scale, the third stands out, which is evident in the examples in this chapter. An online lesson argues that an important and masterful aspect of the improvisational technique of Woody Shaw, is how he "follows the 'rules' of melodic construction by resolving to or emphasizing the 3rd of the chord" (Wernick 2016).

To contextualize the statements in the material, and to show the reader the assumptions that I base my analyses on, I will now shortly resume how target tones are presented in textbooks.

Some textbooks, such as Campbell (2005) and Steinel (1995), suggest that beginner improvisation students should use target notes such as thirds, instead of complete scales, to outline chord progressions and, in the light of this study, establish inside. Target tones are not limited to thirds but can be any chord notes that are played at the shift from one chord to the next. Understandably, the textbooks do not consider target tones from an outside perspective, only as a means to underline the inside harmony. However, Ricker's textbook (1976) has some examples with lines that move from outside back inside, but Ricker gives no actual advice on how to accomplish a resolution, either in the text sections or in the section with exercises and homework assignments. In some of the examples, half steps are indicated with brackets but with no further analysis or explanations. However, the examples use the idea of target notes when the line re-enters inside, but with no explicit explanation, as seen in the excerpt below, Example 59, which is copied from Ricker's book.

Example 59. Part of a page from a textbook (Ricker 1976: 6).

Example 5
a.
C7 (most outside) resolves ——→ FΔ7 (most inside)
Swing

In this example, Ricker explains that the most dissonant or 'outside' pentatonic scale over a C7 chord is a B major pentatonic. Arguably, other pentatonic scales would be equally far away from C7, but it seems that Ricker takes the home key, F major, into consideration. When the key is weighed in, B major pentatonic is in fact the most outside pentatonic in this situation. The B major pentatonic is followed by the most consonant or 'inside' pentatonic scale over an Fmaj7 chord, F major pentatonic. The resolution occurs with the note A, the third of the chord Fmaj7, leading into bar 3. However, Ricker does not explain the resolution in other ways than seen in Example 59. Despite the lack of verbal explanation, this notated example contains the same characteristics as the text-based statements on how to resolve that are found in my research material: stepwise resolution (e.g. Standring n.d.), more specifically by a half step (e.g. Lyon 2008; Warnock 2013; Zillio 2015), and to "resolve on strong beats, with the right rhythms" (e.g. "Ian" 6/8 2015).

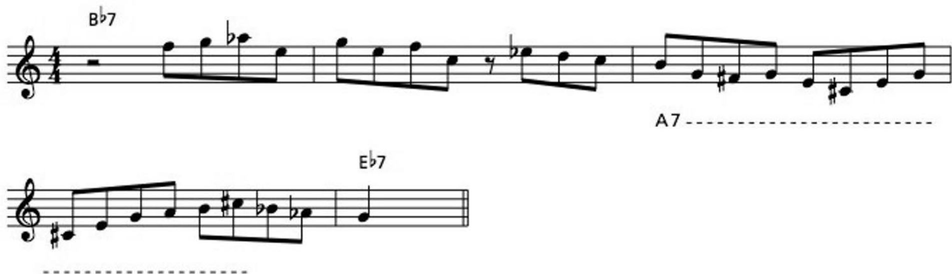
A textbook which is highly influential on writers in the online material, and which I discuss here for that reason, Levine's *The Jazz Theory Book,* stresses and explicitly mentions the relationship and the movement inside-outside-inside

several times (Levine 1995: 184-189). In the book as a whole, focus is on the first inside in the inside-outside-inside formula, but the book also presents several ways to transition to outside. However, Levine never explains how to move back to the second inside in the formula. In his examples, Levine merely points out when a solo line is outside and when it is inside, not by what approaches the line is transformed and resolved. In fact, Levine is generally very thorough and precise, but when it comes to explaining outside he becomes vague and hasty, as Example 60 copied from the book illustrates. This correlates with how the writers in the material express themselves, as they also use rather general and vague terms when explaining resolving back inside.

Example 60. Part of a page from a textbook (Levine 1995: 189).

Figure 8-8 is from Freddie Hubbard's solo on "Hub Tones."[5] Instead of playing on the written four bars of B♭7, Freddie plays B♭7 for only two bars, then dips a half step below to A7 for most of the next two bars before returning to B♭7 just before the chord changes to E♭7. *Inside-outside-inside.*

Figure 8-8



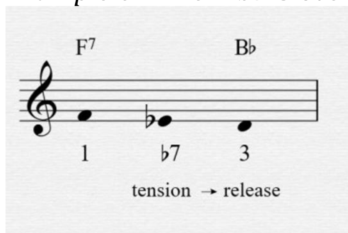
By analyzing this example, it is possible to extract information that is not explicitly explained by Levine. The descending pick-up in bar 2 that leads to the outside segment in bar 3 is stepwise, the last step being a half step from C to B, followed by the half step phrase G-F#-G in bar 3. Bar 4 ends with a transition from A7 tonality to Bb7 tonality, before going to Eb7 landing on the major third G in bar 5. The last four notes in bar 4, B-C#-Bb-Ab, are derived from a Bb altered scale (or a Bb half-whole diminished scale).

Example 61. The last five notes of Example 60.

The B and C# are pivot tones: they belong to both the superimposed A7 tonality and the altered Bb7 tonality that follows. The resolution is completed by the tones Bb-Ab-G, so that the resolution ends with a half step, Ab to G. Even though Levine does not mention it, the solo line in this example moves both outside and back inside logically and smoothly using half steps. Thus, we can see that the often mentioned half step not only appears in resolving outside but can also be used to start an outside passage. What this example also shows us is a 1-b7-3 formula that appears to be very common in outside playing and in jazz improvisation in general.

The notes 1-b7-3 over a V7 - I chord progression is a very basic, even quintessential, version of tension and release in most Western music, as illustrated in Example 62. The note F is the root of F7, Eb is the minor seventh of F7, and D is the major third of Bb.

Example 62. The 1-b7-3 over a V7 - I chord progression.



This 1-7-3 formula is found in several solos that are referred to by the writers in the material. Example 63 is a passage from a Freddie Hubbard solo. A segment of this solo is used in an online lesson (O'Donnell 2016b) as an example of how to begin introducing outside notes in soloing. Here, the lead-in to the outside segment in bar 2 (D-C-B) has the same structure as the 1-b7-3 formula in Example 62: whole step – half step, but the notes and their functions against the underlying chord are different. Despite the difference in pitches, there is a structural coherence regarding how the line moves inside-outside-inside, as the same melodic 1-b7-3 unit is used both to move outside and to resolve back inside.

Example 63 shows bars 4-8 in a 12-bar blues form, so that Bb7 is the fifth bar of the blues. Here, the solo line establishes inside in bar 1 by playing an F Mixolydian segment over an F7 chord. Bar 2 can be interpreted as notes from an F altered scale, but since bar 2 is so distinctly F Mixolydian, I argue that bar 2 is better seen as a phrase built upon a new tonic, F#, rather than a different scale choice based on the same root as in bar 1. This is because the outlined scale in the three first beats of bar 2 is a distinct F#m pentatonic scale. There are many notes missing from a complete altered scale, which supports the F#m pentatonic outside interpretation rather than the F altered scale interpretation. If interpreted as an F#m pentatonic, bar 2 is also an example of an outside phrase constructed by side-stepping a phrase upwards by a half step. The resolution is a half step, not back to F7 (which carries a dominant function in relation to the

following chord), but landing on D, the third of Bb7. Thus, this is in fact a double resolution, where the solo line resolves by a half step to a chord tone.

Example 63. Freddie Hubbard's solo on 'Birdlike' (3'55-3'59) from the album Ready For Freddie *by Freddie Hubbard (Hubbard 1962). Transcription of Eric O'Donnell (O'Donnell 2016b), edited by Fredrik Erlandsson.*

It is also worth noting the very three last notes of the example, which show a chromatic enclosure leading to the note F over F7. However, following the construction of outside in the material, the non-diatonic notes E and F# should be seen as a consequence of Hubbard's idiomatic hardbop-based voice leading rather than an example of outside playing.

Example 64 is from a solo posted on a blog (Wilken 2010) showing the same double resolution as in the Hubbard solo segment in Example 63. Both examples are from a blues in F, and they both show F# minor material (pentatonic and minor, respectively) played over the fourth bar of the 12-bar blues chord progression, resolving stepwise to Bb7 in the fifth bar of the blues, through a three note unit, F- Eb-D; a whole step followed by a half step.

Example 64. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (4'03-4'08) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

The same principle is also found in Example 65, which is taken from the same solo as Example 63. Here, the inside-outside-inside passage begins with a half step/whole step unit leading into bar 2 and resolving into bar 3. In both cases, the line has a half step leading up to the (implied) minor third; Db on the

superimposed Bbm7b5 chord and a Bb on the Gm7 chord, followed by a whole step to the (implied) fourth: Eb on the superimposed Bbm7b5 chord and C on the Gm7 chord.

Example 65. Freddie Hubbard's solo on 'Birdlike' (3'12-3'19) from the album Ready For Freddie *by Freddie Hubbard (Hubbard 1962). Transcription of Eric O'Donnell (O'Donnell 2016b), edited by Fredrik Erlandsson.*

The notes in bar 4, just like the notes in bar 2, can be interpreted as a superimposed Bbm7b5 chord, but the segment can also be seen as derived from the C altered scale, given that the last note Cb is treated as a chromatic neighboring tone. A third option is to consider bar 4 as an Ab minor pentatonic phrase, predominantly moving in larger intervals that skip notes from the pentatonic scale. When the Ab minor pentatonic resolves to the note C, the fifth of the F7 chord, it is yet again a double resolution, where the solo line resolves simultaneously with the dominant chord C7 to its tonic F. In fact, a fourth interpretation is possible. Both bars 2 and 4 can be interpreted as derived from Gb major, which underline the technique of side-stepping inherent in the outside concept. Regardless of what analytical alternatives one may opt for, it is clear that using whole step / half step units strengthens the sense of inside in bar 3.

Whole step / half step units, as well as enclosures, point to the importance of voice leading in outside playing, in combination with chord tones and target notes.

5.2.3 Strong rhythms

So far in this study, there has been an emphasis in the material on harmony and melodic-harmonic relationships in the makeup of the outside concept. The two features of resolving presented so far, stepwise resolution and targeting chord tones, are consequences of that emphasis. By contrast, the third feature of resolving outside is the rhythmic aspect, and this relates to what has been discussed previously in this study regarding intention, confidence and rhythmic stability. Forum members state: "if it makes rhythmic sense, pitch becomes almost completely irrelevant" ("ottocat" 2012), "whether to resolve an idea now

or keep the listener in suspense is a creative choice. [---] Rhythm is also a factor in resolution" ("bako" 2013). Additionally, saxophonist George Garzone is quoted saying that "harmonic relationships are less important than rhythm and phrasing" ("SuperAction80" 2015).

Although statements that rank rhythm over harmony are not very frequent, the statements in the material are unison in that resolving should be done with rhythmic consideration, no matter if the resolution is on a downbeat, on the first beat in a bar or simply on "strong beats, with the right rhythms" ("Ian" 6/8 2015).

The last quote – indicating that resolving should occur on strong beats and with right rhythms – is somewhat cryptical. In jazz based on triplet swing, the drummer generally emphasizes beats two and four, mostly on the hi-hat. Harmonic progressions often move in four or eight bar phrases, often so that tonally defining harmonies appear on beat one in bar 1 and/or on beat one in bar 5. If there are several chords in the bar, they mostly change on beat one and three, which make these beats stand out as strong beats. This harmonic rhythm could be exemplified by almost any tune in The Real Book. Therefore, in a jazz context, any of the four beats in a bar could be named the emphasized or strong beat. Therefore, when the material uses words like 'strong' and 'right', it seems like a call for a general rhythmic drive and stability in the performance, so that the soloist uses clear and precise rhythms instead of uncertain phrasing.

It is tempting to raise a flag at this point, objecting that these statements leave out elements such as resolving on upbeats or resolving within longer syncopated lines, features that are otherwise common, even central, in jazz phrasing. But as forum member "Ian" points out, the "right rhythm" is important, and one of the most important rhythmic concepts in jazz is arguably the syncopation. Therefore, resolving on a syncopation could be perceived as a "right rhythm" in a jazz context, although it is not on a (strong) downbeat. In addition to these notions, it could also be perceived from the material that resolving should appear in a strong place within the harmonic structure, for example at the beginning of a four-bar period rather than on a specific beat.

Example 66 is from a solo posted on a blog (Wilken 2010). Here, Shaw superimposes a Gb major pentatonic phrase over a C7 in the first bar, and then resolves it through an enclosure, to the first beat in bar 2, the note A, which is the third of F7. The F7 is the first chord of the last four-bar period of a 12-bar blues, a strong place in the chord progression structure. The resolution is both rhythmically and harmonically strong, as it outlines a F7 arpeggio with two eighth notes and two quarter notes. Also, the phrase ends with that rhythm, which gives it strength from a structural point of view.

Example 66. Woody Shaw's solo on 'The Blues Walk (Loose Walk)' (4'37-4'39) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Dave Wilken (Wilken 2010), edited by Fredrik Erlandsson.*

Forum poster "destinytot" (2016)_mentions guitarist George Benson's solo on the blues "Gotham city" as an example of resolving outside. Example 67 is an excerpt from that solo and shows two consecutive I-V7/ii-ii-V7 chord progressions. The first progression is four bars long and includes a Bbmaj7 arpeggio over Cm7 that is then sequenced down a half step, to an Amaj7 over F7. The Amaj7 phrase is outside, and it is resolved through a 1-b7-3 unit and lands on the third of the Bb7 in bar 5. The harmonic rhythm in the second progression is twice as fast, played over two bars instead of four. This time the outside segment is a Bmaj7 arpeggio over two octaves. The resolution is achieved with the same notes, G#-F#-F-Eb-D, albeit with an octave displacement, and is completed by three quarter notes, which adds strength and stability.

Example 67. George Benson's solo on 'Gotham City' (03'33-03'42) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Fredrik Erlandsson.*

The rhythms in the examples in chapter 5 are strong and very idiomatic to post-bop jazz phrasing. The examples mostly resolve on the first beat in the bar, and at the same place as the chord change, often resulting in double resolutions. There are several passages in the analyzed solos where the solo line continues inside after the resolution, in order to re-establish inside. There seem to be

different ways of re-establishing inside, but based on the solo examples in the material, they have one frequent feature in common: strong rhythmic projections. The following subchapter will cover this theme, and instead of presenting separate examples of strong rhythms in this section, I will include the rhythmic aspect in the analyses and discussions in the remainder of this study.

5.3 Re-establishing inside

According to several statements in the material, a solo line should build up a tonal center again after the resolution. By doing so, harmonic stability and predictability is achieved, compensating for the unstable and unpredictable outside passage. In many of the examples so far in chapter 5, the tonal center was re-established with a rhythmically solid single note (often a chord tone) that marked the boundary between outside and inside the solo line. However, the material does not state that the solo line must end after a resolution. In fact, many solo lines referred to in the material continue after resolving an outside passage.

An online guitar lesson states: "phrasing outside playing – it should lead out, but ultimately lead back in to strengthen the harmony" (Williams 2013). Thus, the aim of the resolution and the notes that follow it, is to bring back a clear tonality, a sense of inside. In an online lesson, a summary on how to resolve and re-establish inside is listed:

1. Targeting home key tones
2. By step, that is falling naturally on to strong, essential chord tones
3. Stressing your home key by outlining a triad (Standring n.d..)

According to the research of Dean-Lewis (2001), the improviser must compensate for the tonal ambiguities and clashes that appeared during an excursion away from the underlying tonality by playing something that is clearly and undoubtedly inside. In his list over forms of such compensations, four concern melodic-harmonic relationships within solo lines (which is the basis for outside, as it is constructed in the material, and therefore relevant for this study): repeated tonic notes, tonic chord arpeggios, adjacent scale tone melodies with simple contour and conventional chord progressions (Dean-Lewis 2001: 175).

I have found that the writers in the material express similar notions. In the material, the ways of re-establishing inside after the resolution are: playing scales (that are diatonic, i.e. follow chord/scale relationships), playing a triad (or a four-note chord) and playing a long note (or repeated notes of the same pitch). After having analyzed solos mentioned in the material, a fourth way of re-establishing inside became evident: to play an idiomatic phrase that by its familiarity indicates a tonality. This method of re-establishing inside is not specifically mentioned but is manifested in the solos that are used as examples of outside playing. In these solos, such a phrase is either a combination of the three other techniques, i.e. scales, triads and long notes, or a phrase that is so common in the jazz improvisation vocabulary that it has the same familiarity as a scale segment or a triad. This is probably the reason why the idiomatic

technique is not mentioned in the material: playing inside is to play familiar phrases, even if they are idiomatic, bordering on clichés.

5.3.1 Scales

For the first category, in the material it is suggested that home keys – i.e. inside tonalities – can be re-established by playing a diatonic or pentatonic scale or parts of such a scale (stated for example in the video lesson by Lowe n.d.). The online writers often seem to take a modal approach to home keys: as long as the tonal material is presented, it does not matter whether the notes are organized as a specific scale or as diatonic triads. The definition of a scale seems to be, in my reading, a set of notes that are for the most part distributed stepwise rather than an ascending scale starting from the root. To be precise, it is not always even a complete scale that is suggested, just a section of a scale seems to be enough to re-establish inside. Therefore, *scalar* or *scale-like* would probably be more accurate terms.

It is important to note that diatonic scales are suggested by the writers in the material. They imply simplicity, clarity and familiarity, serving the purpose of re-establishing inside.

Example 68 is a segment from a solo mentioned by forum member "destinytot" (2016) as an example of tension and release. The outside segment is a phrase built exclusively by an F minor pentatonic scale. The resolution into the Cmaj7 chord is not stepwise but a major seventh leap. However, the F on the last beat in bar 2 can be interpreted as a stepping stone to the E on the first beat in bar 3: a low note that ends the jagged pentatonic line and launches the inside C Lydian scale which is played in stepwise movements. The C Lydian scale is played for two bars, so an inside is clearly re-established. The Cmaj7 chord is the IV chord of G major, so the C Lydian scale is the appropriate scale choice according to chord-scale theory.

Example 68. Michael Brecker's solo on 'I Really Hope It's You' (1'58-2'03) from the album Sleeping Gypsy *by Michael Franks (Franks 1977). Transcription by Doug Moffet (Moffet 2004). Edited by Fredrik Erlandsson.*

E7(b9)

F minor pentatonic

Cmaj7

C lydian

Example 69 is from another solo by Michael Brecker. Brecker is praised for his outside playing in this solo for example by forum members "AmundLauritzen" (2013) and "0zoro" (2012). This passage is from the B section of so called 'rhythm changes'. The outside segment in Ab minor could also be seen as derived from a G altered scale, with the exception of the note Gb. However, as the line is constructed as a descending Ab minor eleventh arpeggio, I argue that Ab minor is the appropriate interpretation. Nevertheless, the line moves into G minor by a descending half step / whole step figure, followed by a complete G Dorian scale to re-establish inside. Here, attention should also be paid to the rhythmic stability with which the G Dorian line is played. The long string of eighth notes might not be considered as typically strong, but the rhythmic flow is definitely steady. Moreover, at this point in the solo, the pianist does not play at all, which makes the bass line the only sounding harmonic anchor. Although no chords are played, both the saxophone and the bass use the prescribed chord scheme of the tune as a harmonic point of departure for their lines. According to my analysis, by playing a full G Dorian scale, Brecker clearly re-establishes inside, because or in spite of the absence of a piano.

Example 69. Michael Brecker's solo on 'Oleo' (1'04-1'08) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

5.3.2 Triads

In the second category, the material suggests using triads to re-establish inside. Previously in this study, we have seen that triads are central in the outside discourse: because triadic units are melodically and structurally strong in themselves, they are useful when moving the solo line outside. However, the same qualities can be used to take the solo line inside. An online lesson says the player should aim for a strong chordal figure (Lyon 2008), which seems synonymous to aiming for a triad. In the material, it seems implied that the triads used to re-establish inside are diatonic and not upper structure triads, for the same reasons discussed regarding scales: their simplicity, clarity and familiarity.

As was discussed regarding target tones, triads are common knowledge among the writers in the material, following instruction given in harmony classes or textbooks. The only textbook to use triads in a more advanced way is Liebman (2013). He uses arpeggios for inside-like purposes, but for a different reason. In his context, triads or arpeggios are not used for resolving harmonic relationships or because of their strong tonal tendencies but to give balance to the chromatic lines. As chromatic lines are built using close intervals, while arpeggiated triads have a different, e.g. wider, shape and structure, the latter give the line contrast and balance (Liebman 2013: 114). This correlates with the compensation strategies discussed in Dean-Lewis PhD thesis (Dean-Lewis 2001: 175).

Woody Shaw is mentioned often in the material, and his solo on 'There will never be another you' is referred to several times. The solo ends with a triad to re-establish inside after the actual resolution, as seen in Example 70. This solo passage was analyzed from a harmonic point of view above in Example 41, but here I will only highlight how Shaw re-establishes the tonality. Shaw ends the line with an Eb major triad. It includes the only descending fourth in this passage, and the last note is also the longest note in the phrase. Together with a strong rhythmic figure, the triad enhances the re-establishing of the original tonality.

Example 70. Woody Shaw's solo on 'There Will Never Be Another You' (1'47-1'53) from the album Solid *by Woody Shaw (Shaw 1987). Transcription by Fredrik Erlandsson.*

Example 71, from a solo mentioned by forum member "destinytot" (2016), shows guitar player George Benson playing outside (Cb major over F7) in bar 10 of a 12-bar blues form, resolving through a half step and re-establishing with a rhythmically strong triad in bar 11. The three last notes of the Cb major segment form a Cb major triad, although the octave displacement of the tone Eb disguises the triad. The re-establishing effect of the Bb triad is not diminished although the Cb major triad is somewhat masked. Furthermore, this is also an example of side-stepping and of a double resolution.

Example 71. George Benson's solo on 'Gotham City' (03'21-03'23) from the album Gotham City *by Dexter Gordon (Gordon 1981). Transcription by Fredrik Erlandsson.*

5.3.3 Long notes

In the third category, the material suggests using long notes to re-establish inside. Again, it seems necessary to contextualize the usage of long notes by turning to a textbook. In his textbook on chromatic improvisation, Liebman analyzes one of his own solos from a chromatic perspective, pointing out how target pitches and repeated pitches are used to establish a tonal center or a tonal anchor (Liebman 2013: 114). Target pitches in this case include longer tones that give a release from the melodic and harmonic tension, not a specific chord note that one should aim for. Liebman stresses the need for some kind of tonal center, but states that any pitch can function as a tonal center. Thus, tension and release do not need to be related to a specific key or tonality. Instead, tension and release are the result of atonal lines coming to a temporary rest, giving the illusion of resolving. It seems that, in this context, a better word would perhaps be relief rather than resolution. A video-lesson gives a similar description: a tonal center could be the highest or lowest, the loudest or the most repeated note. All other

notes will be heard in relation to that note, making it a tonal center ("Walk that Bass" 2016).

Even though this approach makes a lot of sense regarding how an improviser should handle solo lines that are outside of a tonality, it is not outside according to other descriptions in the material; in this case there is no chordal background, no tonality in the resolution or any inside before outside began. In chromaticism, all pitches have equal value, or the same sound, so there is no clashing, as there must be in outside, according to the material.

One blog post includes several solo examples from Woody Shaw, including the passage shown in Example 72 (Karns 2016a). Here, Shaw first superimposes a Gb major segment over a ii-V7 progression in Bb major, then superimposes an A major segment over the V7 chord in that progression. The resolution is not as abrupt as it first may seem, as the last two notes of the A major segment, F# and G#, are the b9 and the #9, respectively, of the F7 chord. On a structural level, the resolution is in fact by a half step, from the A major segment in the solo line to the Bb major chord that follows. The Bb major tonality is re-established first by the note F, played as a long note, and again manifested by a F Mixolydian scale, which of course is a Bb major scale that begins and ends with an F. I argue that the enclosure that connects the long note F in the third bar with the F Mixolydian in the fourth bar is not an example of outside, but an enclosure that is a result of Shaw's idiomatic hardbop-based voice leading.

Example 72. Woody Shaw's solo on 'There Is No Greater Love' (0'50-0'54) from the album Setting Standards *by Woody Shaw (Shaw 1985). Transcription by Keith Karns (Karns 2016a), edited by Fredrik Erlandsson.*

5.3.4 Idiomatic phrases

Re-establishing inside using several devices simultaneously makes up the fourth category: using idiomatic phrases. With idiomatic phrases, I mean phrases that are both so frequent and stylistically defining in post-bop jazz vocabulary that they can be considered basic and common parts of a post-bop improviser's soloing. To use idiomatic phrases is not mentioned explicitly by the writers in the material, but according to my analysis of their statements and the solos they refer to, I have found this category to be just as valid as the previous.

Michael Brecker's solo on 'Oleo', mentioned by forum members "AmundLauritzen" (2013) and "0zoro" (2012), includes the passage in Example 74. The outside segment is primarily bitonal, as it is a Cb major tonality over a ii-V7-I in Bb major. The resolution in this example carries several of the aspects of resolving that has been discussed in this chapter. Firstly, it can be argued that the outside line does not resolve at all, since the Cb major tonality prevails

throughout the passage. However, the last note of the phrase is Bb, the root of the Bb major 7 chord. That Bb is not a long note, but it is connected to the other Bb, four beats earlier, and the repetitive character of the segment establishes Bb as a tonal center. The same could of course be said about the six Db notes that form part of the Bb minor segment. However, I argue that the melodic shape of the phrase gravitates towards Bb as the tonal center rather than Db. This interpretation is supported by the strong rhythmic figure where the quarter notes lands on strong beats.

Example 74. Michael Brecker's solo on 'Oleo' (3'22-3'27) from a live video recording (Brecker 1983). Transcription by Fredrik Erlandsson, (based on Gerrits 2005).

Michael Brecker: *Oleo*
https://youtu.be/Ns02jzH8Ccw
3'22
E♭maj7 B♭maj7 Cm7 F7 B♭maj7
B♭ minor (B♭ minor pentaonic)
A major
C♭ major pentatonic
C♭ major

Example 75 is from Michael Brecker's solo on 'Blue Bossa', mentioned by "jayx123" (2013) as an example of how great Brecker is at side-stepping. Not only does Brecker side-step over Ab7 by playing an almost complete A Dorian scale, but the same phrase can also be interpreted as a tritone substitution, since the A Dorian can also be spelled as a D Mixolydian over Ab7. Tritone substitution could be considered an idiomatic rather than an outside device, but in this case, I argue that it is a sign of outside playing. The reason for this is that Brecker uses a third way of creating tonal tension, a bar-line shift, when the D Mixolydian / A Dorian segment stretches over the Dbmaj7 chord. The stepwise resolution takes place in the form of an enclosure over Dbmaj7. The phrase that re-establishes inside begins with an Ab major pentatonic phrase and leads into a Dbmaj9 arpeggio. The re-establishment is neither a scale, a triad nor a long note but a very idiomatic post-bebop phrase that clearly grounds the phrase on the inside.

Example 75. Michael Brecker's solo on 'Blue Bossa' (2'33-2'37) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

E♭m7 A♭7 D♭maj7
D mixolydian (A dorian)
Ab major pentatonic

Example 76 is from the same solo. This passage was analyzed from a stepwise resolution point of view in Example 53. Here, Brecker plays outside using Ab half/whole diminished over Ab7, and E major over the first bar of Dbmaj7. Inside is re-established in bar 3 by two consecutive enclosures followed by Db major triad with half steps leading into each note. These half steps are idiomatic in a bebop or post-bop idiom, although their chromatic content could be said to be non-diatonic, or even outside. By using idiomatic techniques in bar 3, a sense of inside is re-established, which contrasts to the outside segments in bars 1 and 2.

Example 76. Michael Brecker's solo on 'Blue Bossa' (2'01-2'04) from a live video recording (Brecker 1985). Transcription by Fredrik Erlandsson (based on Neff 2014b).

5.4 Conclusions

In this chapter I have shown that in the online environments resolving is described as important, even decisive to outside. Many statements formulate general advice and opinions about resolving, but only a few writers express themselves explicitly regarding how the resolution should be executed in practice. Given the large number of statements, the material contains relatively few rules and recommendations on how to link outside and inside segments to each other, compared to the amount of advice given e.g. on pentatonics and side-stepping and to the plethora of prescriptions regarding playing inside.

Regardless of what terminology is used and how deep the writers in the material delve into the subject, their statements have one thing in common. Resolving outside is always about resolving the relationship between an improvised solo line and the underlying chord. There is nothing in the analyzed texts, nor in the solos in this chapter, that contradicts that conclusion. Resolving takes place in the transition from something unstable to something that is stable. Indeed, resolving is that transition.

Resolving is a tonal process, and as it is discussed in the material, resolving takes only little consideration to other musical parameters than harmonic relationships. The idea of resolving could be distilled into this axiom: when a melody line has a dissonant harmonic relationship with the underlying chord or

chord progression, it has to resolve back to a consonant harmonic relationship. However, how such a shift should be performed is not discussed in much detail.

It seems that the blog/forum readers understand the concept of inside in an implicit way, which would explain why there is no advice for inside playing in a post on how to resolve outside*:* any such advice would be seen as redundant or misplaced. Nevertheless, the fact that so little explicit information is found in the material regarding which techniques and approaches one could use to bridge the gap between outside and inside in a smooth or tasteful way does raise questions. In the material, resolving is described as an art and as a sign of genius, which of course would decrease the number of potential experts among aspiring jazz players. Furthermore, when resolution is explained in the material by referring to musicians such as Woody Shaw and Michael Brecker, the tone is very idolizing, which seems to indicate that the writers in the material think of resolution as something that they themselves cannot perform or explain. Or if they actually do know, they think of resolution as something that cannot be learned in lessons, only acquired by growing into it.

In the material, there is a vagueness and impreciseness to the discussions of resolving that is very striking, in comparison to the exactness in descriptions of other features of outside. Advanced concepts from harmony and music theory along with other technical terms are otherwise common in online forums and textbooks, which makes their absence from this portion of the outside discourse noteworthy. One possible reason could be that notions of how characteristics such as logic and smoothness are performed in practice are considered intuitive rather than rational, and therefore the formulations are governed by the improviser's aesthetic and artistic perception of the musical situation at hand rather than premeditated rules. To resolve outside smoothly, logically and tastefully is not a definite task determined by a preset rational standard but a grey area that involves intuition and personal taste.

A formula that is often mentioned in the material is inside-outside-inside. In this formula, as it is understood by the online writers, there must be a balance between outside and inside, and the contrast between outside phrases and inside phrases is needed to make the outside lines work musically. Outside is not a constant state of dissonance or ambiguity but a temporary tension. Furthermore, that dissonances and harmonic clashes must be resolved is an essential feature of the outside concept. This feature also separates outside from other concepts like free improvisation or atonality.

At times, just a few dissonant tones need to be resolved, whereas at other times resolving can be about regaining stability on a more structural level. Many statements and solo examples show that the resolution of outside phrases often coincides with functional resolution, which for the most part concerns a dominant chord. I call this aspect of resolving *double resolution*, as it shows two simultaneous resolutions: of the solo line and of the underlying chord progression. This feature adds strength to the notions of resolving as a transition, and of resolving as an important general musical principle.

In the analyzed solo excerpts, there are no examples of outside passages that are not resolved. I have also listened through additional recordings and browsed transcriptions beyond the scope of the research material, but not found any clear examples of unresolved outside lines. This correlates with the importance of resolving expressed in the material and is of course connected: like myself, the writers have not found any unresolved outside passages in solos, and logically they have reached the conclusion that outside must be resolved.

Although the writers in the material repeatedly stress the importance of knowledge of harmony and the music theory used in jazz improvisation, they make it very clear that knowledge alone does not automatically give the musician an ability to transform said knowledge into a coherent solo line within a musical situation. My interpretation of the material is that knowledge of harmony is a basic requirement, but that it must be combined with what seems to be an intuitive sense for musical structure and balance.

It is established that resolving is central to outside. As my analysis shows, resolving by half steps is the most common form of resolution. For the most part, half steps are found in the solo line, on a note-for-note level. Half steps are often included in a predominantly three-note unit called an enclosure. However, it is not uncommon to resolve by half step also on higher structural levels, such as shifting tonalities by half step between four-note segments, for example. Even from a bitonal point of view, it is not uncommon to return to the home tonal center from an extended passage on a tonal center that is a half step away. This is of course connected to, and a result of, side-stepping and superimpositions.

The writers in the material state that resolutions should land on a target note. The examples show that target tones are often chord tones, and more specifically thirds, as seen in the common voice leading formula 1-b7-3.

The rhythmical implications of resolving outside are not very clear, based on the analyses. All the examples show solo lines with a rhythmic drive, but not in a manner that distinguishes the resolution from the outside or the inside passages. The rhythmic aspects of resolving are subordinate to the general rhythmic features of post-bop mainstream jazz with a triplet-swing eighth-note subdivision.

The analyzed solos confirm that there is such a thing as compensation, or in my words re-establishing inside, as shown by jazz researcher Dean-Lewis (1996). I have found that the re-establishment process outlined in the material takes shape in the three ways: using scales (or parts of scales), triads (mainly major) and long notes (often a chord tone). Occasionally, re-establishing is manifested also in a fourth way, which is not explicitly mentioned but which is something that I discovered in my analysis to be an implicit defining character of outside as discussed in the online material, namely using idiomatic phrases. An idiomatic phrase could be described as a well-known, even cliché-like, stylistic melodic segment. The re-establishment (or compensation) functions as a counterpart that gives balance to outside passages, which again confirms that balance and contrast are important elements of outside and of the process of resolving. Furthermore, re-establishing an inside shows that the improviser has

knowledge of dissonances and consonances and can control tension as well as release.

When analyzing the statements and the solo examples in the material, I found another aspect of resolving that the writers seem unaware of. When tension is created by a solo line played over a dominant chord, there are two separate tensions that have to be negotiated and resolved: firstly, the tension inherent in the chord; and secondly, the tension embedded in the solo line and/or its relationship to the underlying chord. In cases where a resolving outside solo line is played over a functional dominant chord that resolves to a functional tonic chord, two resolutions appear simultaneously. On one level, the outside line resolves inside, and on another level, the unstable dominant resolves to a stable tonic. I have chosen to call this feature *double resolution*. Double resolution appears in V7-I progressions, where it seems to underline the importance of rules of harmony. In a way, double resolution carries a paradox: an outside line is created by violating the chord/scale concept, while the resolution inside is based on following the regulations of consonance in harmony and music theory.

A conclusion of my interpretations in this chapter is that it is only by leaving outside territory and re-entering the realm of inside that one can tell if the solo line was actually outside, and not just an incident, a mistake, or simply playing notes at random. Indeed, resolving must be done in accordance with some sort of logic and rules, and that it has to be performed with some kind of artistic finesse. Also, the improviser must be true to their musical vision but at the same time be aware of general principles such as balancing tension and release, as well as handling harmonic considerations and chord/scale applications. These demands are of course valid for many other forms of music too. In this case, however, the balance between tension and release and the contrast between inside and outside is not only important in order to make individual outside lines work musically in a 'hip' or 'cool' fashion, as the writers in the material would have it. This balance is an essential feature of outside as a concept. Contrast is needed for outside to exist at all.

6 Conclusion and discussion

In this thesis, I have studied how writers in various online environments construct outside when they describe, discuss and conceptualize outside playing. Having analyzed their texts, using discourse analysis and music analysis, I have found that outside is a complex concept that involves many aspects of jazz improvisation. The online writers construct outside as an opponent to the rules of inside, but outside also has its own rules that must be followed, even so that outside can be understood as being a set of rules. Outside can thus be described as a way of breaking old rules by inventing and following new ones: a concept that simultaneously follows rules and ignores them.

In short, outside is a method for improvisation which consists of three steps. These steps correlate with the formula inside – outside – inside, which is often explicitly mentioned in my research material but also seems to reflect how

outside is understood among many jazz musicians. Furthermore, the formula correlates with how Western harmony is often understood: consonance – dissonance – consonance.

The first step is the establishment of a sense of inside. This does not necessarily have to mean emphasized playing in one clearly stated tonality or to avoid chromatics, but rather to set a stylistic and idiomatic norm for the solo, or to simply follow the rules of chord/scale theory. This is done by outlining the chord progressions and by choosing notes in accordance with the chord/scale concept.

The second step is to disregard the common rules of jazz harmony and play to outside of the harmonic framework. This means choosing notes that have no or very little harmonic connection to the notes prescribed by the chord/scale concept. As the notes in the solo line clash against the chords, the result is tension.

Finally, the third step is to resolve the outside lines back inside. Instead of playing notes that are harmonically distant from the chord for the rest of the solo, or just stopping the solo line altogether, thus leaving the outside phrases unresolved, the line is brought back to a close with a sense of a tonal home, that was established in step one.

The result of going through these steps is that contrast between tension/release is created in a manner that gives structure to the performance. Indeed, the sense of structure, as well as the principle of tension/release and other concepts, are also socially constructed, as a part of the traditions of both jazz and Western art music.

This inside-outside-inside formula is in a way the essence of the method of playing outside. Outside is a contrast to inside, which in turn is a synonym to a way of improvisation that follows the chord-scale system. In other words, outside is a technique for breaking the rules of chord-scale theory. Thus, the idea of outside can only exist in relationship with a discourse of Western harmony and Western principles of music.

I have identified three elements that are central in the outside discourse. These are:

1. playing with confidence and intention,
2. improvising lines that contain harmonic clashes, and
3. resolving dissonances and outside lines to an inside.

The online writers in my research material construct outside with these elements as the core of the concept. They also serve as an answer to the question by forum member "iqi" quoted in the title of this study, as these elements are seen as more than a technique: together they constitute the basic rule of outside playing.

I have presented and discussed these elements above in dedicated chapters in this study, along with conclusions after each chapter. At this point, I will only summarize them.

The outside concept is based on general jazz improvisation approaches. For instance, when jazz musicians improvise a solo, they often tend to look for notes that create harmonic consonance in relation to the notes that the rest of the band is playing. In post-swing jazz soloing, focus often lies on outlining and manifesting the harmonic progressions through scales and arpeggios. Outside is described as an approach where the soloist intentionally outlines something else than the prescribed harmony or plays notes that create dissonance against what the rest of the band is playing. Besides a rather large percentage of the notes played being harmonically unfamiliar, outside playing also involves playing the notes as if most of them actually did fit harmonically, i.e. with strong confidence.

In the outside discourse, the intention is to convince the listener that the played phrases are the right ones, even if the tonal content might appear unfamiliar. This is accomplished by playing with conviction, maintaining a good sound, rhythmic stability and a good sense of phrasing, regardless of the tonal material. Intention can also be manifested by playing phrases that exhibit knowledge of harmony and music theory and by using premeditated techniques and improvisational models during improvisations. Such knowledge and techniques include sequencing of motifs and patterns as well as using set structures such as triads and pentatonic scales as the basis for improvisations. In an outside context, using premeditated techniques and structures is not a sign of lack of originality. Instead, using them exhibits that the improviser is well-trained and capable of playing phrases beyond the chord-scale system in a controlled manner.

Harmonic clashes and dissonances are results of note choices that are not in accordance with the chord-scale system. However, there is a difference between idiomatic chromaticism, which often resides within the realm of inside improvisation, and a chromaticism that could be labelled outside playing. Dissonant harmonies and melodies can in fact be inside according to the idioms of post-bop jazz although they might sound outside, and vice versa. Often this complexity is connected to the position of the dominant chord, both within functional harmony and within the outside discourse.

Outside harmonic clashes can be achieved by using techniques such as superimposition, sidestepping and bar-line adjustments, often in combination with premeditated elements of improvisation. However, outside is not only about playing weird-sounding notes, or playing something that is a bit harmonically odd, or even harmonically free. A central element in playing outside, which distinguishes the concept from, say, idiomatic chromaticism, is mixing right notes with seemingly wrong notes (both according to the rules of inside playing).

Resolution, returning inside, is the final element of outside playing. Resolving dissonant outside phrases back to a consonant inside is what is said to distinguish a master from a novice, but it also separates random or free playing from the outside concept. Resolving should preferably be accomplished by stepwise movements that target chord tones. The resolution is often followed by a re-establishment of the inside tonality. This can be done by playing a scale, a

long note or a stylistically typical and idiomatic phrase. Resolving is not only important but essential to the outside concept, according to some writers in the material.

In the material, outside is constructed as a set of rules, and the writers for the most part agree concerning the contents of outside. However, some writers seem to occasionally take a step back and view the outside discourse which they are a part of from a distance. Often they question the heavy focus on note choice in favor of more intangible aspects such as balance, phrasing and the impact of making and handling mistakes during improvisation. However, in such instances, the importance of harmony and music theory are not diminished, but other factors are elevated and acknowledged as being equally important for the outside concept.

When I began this study, I expected to find many statements about established players and how they play outside. I did indeed find many references to Michael Brecker and Woody Shaw, but I was surprised that the players I personally believed would be central are rarely mentioned, or not discussed at all. Pianists Chick Corea and Herbie Hancock are referred to only once. Pianist Keith Jarrett, saxophonists John Coltrane or Joe Henderson or trumpet players Miles Davis and Tom Harrell are musicians that I expected to find, but they have not been mentioned at all.

Outside is a system of organizing music, in that the concept sets central aesthetic values for improvised solo lines. The writers in the material express norms and regulations of what outside should sound like, how it should feel and how it should be performed, but also show the negative limits of these factors: how it should not sound, feel or be performed. Such norms and rules are not unlike the content of traditional jazz improvisation education, where students are trained in swing phrasing, bebop vocabulary or the rhythms of Latin jazz. Therefore, outside can be seen as an improvisational style of its own, albeit deeply rooted in postbop jazz. Outside is constructed as an opponent to the rules of inside, but it also has its own rules that must be followed. Outside can thus be described as a way of breaking old rules by inventing and following new ones: a concept that simultaneously follows rules and ignores them. As a style of jazz improvisation, outside has its own sets of rules: conceptually, it is a set of rules.

In one of his textbooks on chromatic improvisation, Liebman asks a question that could very well be a leading theme for this study: "Is there a system of thought which gives order to these [non-diatonic note] choices, or is it just chance?" (Liebman 1998: 2). A system of thought, in this context, can be interpreted as an equivalent of a set of rules, and the answer, according to my analysis, is *yes*: there is a system of thought that gives order to non-diatonic note choices. That system of thought could be summarized as follows. Firstly, obeying common rules for chords and scales is the same as playing inside. Secondly, to play outside is to build upon inside playing and to adopt new ways of treating the rules. Thirdly, the principles according to which chord/scale rules are supposed to be treated are understood as a new set of rules: rules on how to play outside. These three aspects are important building blocks in the outside discourse and

for outside as a concept in general jazz improvisation. In other words, outside is a conceived of as a set of rules created in relation to the rules of inside.

Both artistic awareness and musical content in jazz are rooted in norms. To remove rules and norms completely is not the best option for improvisational progress, according to my analysis of the material. A better solution is to mature and grow out of the beginner's obedience of rules. A writer in an online lesson captures the evolution process: "we learn these rules in the classroom and ingrain them in the practice room, but when you get on stage you need to adopt a different mindset" (O'Donnell 2016b). My analysis of the statements in the material shows that, despite problems that might arise with a rule-bound approach to jazz improvisations, regulations are unavoidable. The rules still apply, but the mindset of the improviser should change: the rules should be treated or obeyed differently. The way a player utilizes these rules will shape how they sound, and how a player breaks the rules will similarly help define their own style. In other words, outside is a technique for a certain kind of musical expression, and using it or not using it is an artistic choice.

In the research material, it seems that the foundation for an outside concept is at times questioned. Is outside an empirical fact (in relation to rules of harmony and music theory) or based on experience (beyond such sounds and norms which the listener understands or is accustomed to)?

A common understanding of outside is that it is something 'outside of the box': unexpected, atypical or even a little bit wrong. In studying the material and discussing the term with fellow musicians, I have found that an important aspect of outside is the unexpected: there is something unstable and unpredictable about outside. Outside is not something that you see coming, so to speak. However, the material clearly says that outside requires intention, control, rules and stability, elements that are linked to predictability and rules rather than surprises. This paradox is, again, at the heart of the outside concept: rules are important. Outside is to break the rules of inside by using another set of rules.

In the material, it is stated that one needs to understand structure to achieve freedom. This is an important point that is made several times in the material: to play outside is not to ignore the structure completely. Parameters such as time, meter and 4-bar periods remain intact, although the melodic-harmonic basis for what is inside is altered. Chords are not abandoned, they are only given new functions, both in terms of functional harmony and in terms of musical elements. Chords can, for instance, be imagined rather than heard.

Outside is both an empirical fact and a sounding experience: for the improviser, it is a rule for breaking the rules of jazz harmony. In that sense, a solo line is discernible by music analysis as either inside or outside. For the listener, outside is a sound rather than a rule, and as this study has shown, sounds and rules do not always correlate. For a listener, a given solo line might sound outside, but it if lacks the contrast between in/out, it is not outside, based on how the outside concept is constructed in the research material. Although the boundary between the rule and sound experience is not clear, the understanding of outside involves both aspects. In many cases, it seems that the context

determines whether a note that is a wrong note as per the rules is outside or just wrong.

This study has established that outside playing is a concept and an improvisational approach in its own right. It has also identified and described central elements of the concept. Considering how often outside is referred to among jazz musicians, it is rather startling that so few studies are devoted to understanding or using the concept. . Although I have studied many aspects of outside, the origins of the concept is still not clear. One interesting perspective would therefore be to study if there are specific locations, communities, individuals or time-periods that are central to the idea of outside playing. Some musical elements are only briefly mentioned in the analysis and in the research material, such as rhythm, texture, and timbre, and these would be interesting topics for analytical exploration. Likewise, elements of music perception and music cognition are still un-explored, although it is evident that what sounds outside for one listener might sound inside to another.

I also leave it to future research projects to study topics such as how the outside concept is explained and constructed in textbooks and other printed pedagogical material. Another approach for fresh insights might be conducting in-depth interviews with established jazz improvisers, both those who are often described as outside players and those who are not. Furthermore, existing studies on artists such as Michael Brecker and Woody Shaw could be revisited, applying to them the perspectives on outside that are presented in this study. Last but not least, there are potential applications for the findings of this study in jazz improvisation pedagogy.

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