"Learning from musicians better than me": The practice of copying from recordings in jazz students' instrumental practise

Guro Gravem Johansen

Abstract

The article gives an account of the practice of copying from recordings, as a part of jazz students' instrumental practise. The article is based on a PhD thesis, which was designed as a qualitative interview study with 13 Norwegian and Swedish jazz students, within an activity theoretical framework. Results show that copying as learning practice is considered to have different outcomes, where acquiring a specific musical content or musical 'language', as well as developing a generic procedural improvisation competency were perceived outcomes. The character of the learning objects were connected to different copying modes, differentiated in three main categories: detail-oriented copying, concept-oriented copying, and improvising along with recordings. The three modes, though different in character, all involved improvising. This was interpreted as a means to personalizing the acquired knowledge in order to operationalize it in their improvisatory performing practice.

Keywords: instrumental practise, jazz, improvisation, copying, recordings, activity theory, learning outcome, learning object, copying

1. Introduction

How do jazz musicians learn to improvise? Since jazz musicians work with music which is created during the performance in an aural, interactive context, and unlike classical musicians seldom perform precomposed works, questions like *what* they practise, and *why* they practise what they do, seem just as relevant as the *how*-question. These questions were points of departure for the PhD study (Johansen 2013) which this article relies on. The study explored *instrumental practising as practice*

among students who work with developing their improvisation competence within the context of jazz education.¹

As the jazz tradition often is seen partly as being an oral music tradition (Prouty 2006; Whyton 2006), learning to play by imitating and copying music from recordings by ear is correspondingly considered a central practice for aspiring jazz musicians (Berliner 1994). In the study, this topic was one of several that was examined, and which will be focused on in this article.

The article will set out with giving a brief review on previous writings, followed by an account of some central theoretical concepts which framed the study as well as the research methods that were used, before presenting and discussing the data.

1.1 Previous literature

As mentioned above, recorded music is often held to be an important source for jazz musicians when it comes to both *choosing repertoire to play* for performing as well as *learning a style or genre* in general from recorded models. In a comparative study of performance practices among classical music students and jazz-/pop- and folk students,² the latter group spent far more practise time with copying and memorizing from recordings than the group of classical students (Creech et al. 2008). Copying as a learning practice seems to dominate the time spent on learning music within these genre groups (Creech et al. 2008; Kamin, Richards, & Collins 2007).

According to Berliner (1994), the practice of copying can offer a more meaningful learning motivation than another typical practising method for jazz musicians, the so-called *chord/scale method* (Kenny & Gellrich 2002). Shortly, the chord/scale method involves learning scales generated by spesific chords, and automatizing a repertoire of melodic patterns associated with specific chord progressions (Thompson & Lehmann 2004), as a means of building a musical vocabulary or 'storehouse' (Berliner 1994: 102). The chord/scale method is often criticised for offering merely 'correct notes' to play, without a deeper understanding or motivation for actual musical choices in the execution of an improvisation (Berliner 1994; Kenny & Gellrich 2002; Monson 1996). It has been claimed that building a vocabulary by copying by ear can compensate for

¹ *Practise* or *practising* will in the following refer to the ecquivalent of musicians *training* or *rehearsing* on their instruments, while *practice* will refer to the ecquivalent of *praxis* or *cultural patterns of action*, to keep a distinction.

² In the article mentioned, the term *non-classical* was used to include both jazz -, pop - and folk music students. Though the results presented are interesting, I consider this term both unpresise and biased, and prefer therefore to list the three different genres that *non-classical* was suppose to refer to in the mentioned article.

that (Berliner 1994). To illustrate this point, Berliner quotes a jazz musician who advocated copying by saying:

It may be helpful just to see what someone like Miles played, but the books don't really teach you anything about why Miles did what he did, what his thinking was. That's what's needed (Berliner 1994: 104).³

To build a musical 'storehouse' by copying involves, according to Berliner (ibid.), acquiring a complex vocabulary of conventional phrases and phrase components, by identifying and interpreting them (by ear) in such a distinct and presise manner that the perfomer is capable of performing them on her own instrument. In turn, they become a part of the improvisatory, expressive language. The deeper musical understanding that can promote the perfomers' own musical creative motivation comes from the factor that she internalizes phrase components and simultaneously establishes musical associations between musical patterns, forms and chord progressions. This can promote a holistic understanding of construction and application of phrases (ibid.) learnt from exemplary models on the recordings. In cognitive literature on improvisation, this application of pre-learned material is often described as 'string-ing' phrases together in an appropriate order (Johnson-Laird 2002; Pressing 2005).

Just *how* is copying carried out? In her study of how popular musicians learn, Green (2002) found that the subjects spent a lot of time listening to recordings as a learning activity, a finding that is in line with the studies on jazz, pop and folk students mentioned above. Green also differentiated listening as learning activity in three different forms, or modes: *purposive, attentive* and *distractive listening,* respectively. The first mode is the most relevant for my purpose, because what Green depicts as purposive listening involves learning through conscious and deliberate copying. It varies from meticulous copying of details to perfection, to the practice of *playing along* with the recording while trying to play or sing in accordance with "*the feel and form*" (ibid.: 62).

1.2 Theoretical framework

An important premise for the PhD study was that practising practices develops within specific music cultural frames, and activity theory was chosen as the theoretical basis for the project. An *activity* is understood on a social/collective and historical level, and is constituted by individual and time-limited *actions* (Engeström 1987,

^{3~} 'The books' in this statement refers to instructional method-books on improvisation, often based on the chord-/scale approach.

2001; Leontiev 1978). A collective activity as well as an individual action is always directed towards an object. This has been described as the *raw material* the subjects are working with, a *problem space* or a *target* for the activity or action (Hardman 2008). In an educational context, the object can be seen as the content of a learning activity. Working with the object is directed towards concrete and specific *goals* on the individual action level, and towards an overall *motive* on the activity level. The motive of the activity is embedded in the object, and transformed to an *outcome* through activity.

The meaning and coherence inherent in an activity is loaded with historically and socially developed values and norms, continuously appropriated and/or negotiated by acting subjects on the concrete action level (Engeström 2001). In line with this premise, instrumental practising was regarded as a culturally shared activity in the study, where the daily, individual practising gains its meaning and coherence from a culturally developed activity of learning to improvise in the jazz tradition, *learning activity* (Engeström 1987).

Practising must also be seen in relation to the *activity of playing and performing*, or, in correspondance with Engeström's terminology, the *basic work activity* (Engeström 1987). The subject's intentionality and choice of learning objects and goals depends on collective norms, values and accessible resources from the performing arena, which is the culture of improvising within a jazz context. In improvised music, the music is created during the performance, interactively with others who also improvise. The musical outcome is therefore unpredictable (Johansson 2008). Also, an underlying value of the activity of performing in jazz (basic work activity), is the expectation that each performer should construct her personal, musical voice on a long term basis, that is, creating something new (Berliner 1994; Johansen 2013).

1.2.1 Expansive learning

Different norms and values can come into conflict. In an improvised musical practice, a subject might want to acquire pre-defined musical material or pre-played music by others (i.e. by copying from recordings), and thus 'attach' herself stylistically to the history of improvising musicians. At the same time she might experience an urge to set aside rehearsed skills or patterns to be able to play spontaneously, to interact with others in an authentic playing situation, and to develop a personal and new musical voice on a longer term basis. The following quote from the bass player Cecil McBee in an interview with Ingrid Monson is illustrative: *"You're not going to play what you practised. Something else is going to happen."* (Monson 1996: 84).

These dilemmas can be characterized as typical *double bind-situations*, and can be connected to how activities, according to Engeström (2001), are filled with inner contradictions that create such double binds. Contradictions can create a constant instability and thus a potential for change. Coping with *overcoming* them, in a strive for continuity and coherence in one's life, can be seen as a driving, developmental force (Engeström 2001). Subjects who experience double binds when trying to learn, often start to question and negotiate the meaning inherent in the object of the activity. This can lead to a redefinition and re-interpretations of the object, and thus an enriched and expanded repertoir of actions for the subject. In this way, the learning activity has a potential of not only creating changes in the learning subject, but also changes in the *object*, described as *expansive learning*, where (the meaning of) the object expands as a result of the learning process.

1.2.2 The use of cultural tools: entering an intersubjective space

Object-oriented activity is always mediated by *tools* (Vygotsky 1978), which can be understood as physical, external artefacts as well as symbolic or psychological, internal signs, e.g. language. According to Engeström (2005), the theory about mediation provided an understanding of how humans can control their own behaviour "(...) *'from the outside', using and creating artifacts.*" (ibid.: 28-29). When subjects utilize existing cultural tools they need to internalize their cultural meaning and function. This is how acting by the use of a tool indirectly can be a means of participating in a specific culture (Wertsch 2007). But subjects can also create new tools or new ways of using existing tools (remediation) (Engeström 2005). The use of tools therefore has a creative potential.

According to Wertsch (2007), a person can use a new tool before she understands the meaning and function of it, just by imitating others. Wertsch claims: "*Not only may it be possible, but it may be desirable for students to say and do things that seem to extend beyond their level of understanding.*" (ibid.: 188). He uses a metaphor adopted from Bakhtin (1982, in Wertsch 2007), *ventriloquation,* and argues that by speaking with 'other peoples voices', students acquire a social language that creates a possibility for entering a communicative, intersubjective space with more competent or experienced persons, and thus access to knowledge not yet appropriated. This can be seen as a redefinition of *the proximal zone of development* (Vygotsky 1978).

Copying from recordings can be seen as a means of internalizing an existing social *musical* language through an indirect participation with more experienced musicians. Entering this new zone of development creates a potential for learning new ways of 'speaking'. However, before the learner has appropriated the language and 'made it

her own', her musical expression might be experienced as too much influenced by what she has copied and as 'speaking with another person's voice'. Given the inherent cultural value that a jazz musician should develop her own musical voice, the question is how jazz students who do copy as a part of their practising, tackles the potential risk of not 'getting rid of the ventriloquist'.

2. Method

The study was conducted as a qualitative research project, with an ecological approach (Hallam 1997; Merriam 1998). That is, in this case to study practising practices as they already occur, in the participants everyday-environment, from their point of view, or "the emic, or insider's perspective" (Merriam 1998: 6). In this section I will give an account of the recruitment of participants, how the gathering of data was conducted, and procedures for analysis and interpretation.

2.1 Participants

The participants were 13 students recruited from jazz programmes in four higher music education institutions in Norway and Sweden. I visited the institutions, informed students about the research project, and invited them to sign up for the study voluntarily. They were then selected based on a desired variation among the criteria *instruments, sex, year of study, and genre preferences.* Most of the participants were recruited from this procedure, but in order to cover sufficient variation in the criteria mentioned, it was necessary to make use of an *ongoing sample* (Merriam 1998). The rest of the participants were recruited by email conveyed by 'gatekeepers' (Creswell 1998) of local teachers.

The selected students ranged from their 1st to their 3rd year, and were typically in their twenties of age. There were 5 females and 8 males in the participant group, and their main instruments covered vocals, trumpet, saxophone, trombone, piano, guitar, bass and drums. Their genre interests varied from be-bop/mainstream jazz, ECM-inspired jazz,⁴ Scandinavian folk music, pop music, to free improvisation, among others – all with an improvisatory approach as the common ground.

⁴ The acronym ECM (European Contemporary Music) refers to the European record company ECM Records, established in 1969 by Manfred Eicher. Its musical profile is associated with contemporary crossover genres with an improvisational approach. By the participants in the study ECM was associated with

2.2 Data gathering

The data was gathered by using a semi-structured qualitative interview (Kvale 2001) with each of the participants. The interviews were mainly oriented towards the following themes: musical background, values connected to musical improvisation in general, personal achievement goals, specific questions regarding contents and objects in the students ' practising, perceived and experienced relations between individual and collective practising, and between practising and performing. In the study, the motives, goals and objects the jazz students set for their own performing and thus their practising, were seen in relation to concrete learning actions which the students initiated for themselves in the 'practise room'.

An epistemology of qualitative research has the premise that knowledge derived from the interview is a mutual construction of meaning through interaction of the two parties, the participant and the researcher (Kvale 2001). This means that the researcher necessarily influences the data, mentioned as *the researcher effect* (Repstad 2007). Nevertheless, given the emic perspective, I strived to capture the students' own experiences, and to compensate for the researcher effect by avoiding normative questions. I also attempted to explicitly adress my own subjective assumptions and use *validation questions* (Kvale 2001) during the conversation. The data were also subsequently validated by using *member check* (Merriam 1998), where the participants had the opportunity to read through the interview transcriptions.

In accordance with criteria for the qualitative interview, emergent themes that seemed relevant for the individual participant were followed up, whereas less relevant themes were left out, in order to capture his or her subjective meaning making in relation to the overall theme of the study (cf. Kvale 2001).

2.3 Analysis and interpretation

The 13 interviews were transcribed with an emphasis on detailed verbal reproduction. The transcriptions were individually coded, subsequently categorized in broader categories across the 13 interviews. Variation and specifically interesting instances were emphasized when deciding on categories, rather than generalizable patterns. These broad categories were then interpreted holistically, using an abductive approach (Alvesson & Sköldberg 2008). This means that the researcher, while searching for emergent themes, continuously and reflectively makes comparisons of

^{&#}x27;open' or modal improvisation, free form improvisation, a 'Nordic sound', folk music and electronic music. For more information: http://en.wikipedia.org/wiki/ECM_Records

different observations and hypothetical interpretations of the data, and that the interpretations successively are informed by the researcher's preconceptions as well as theory and previous research.

3. Results and discussion

In this section I will describe and discuss the results from the study regarding practices that involved *copying*. By copying I refer to all kinds of listening actions that involve active and intentional internalizing of musical elements from listening to recordings. ⁵ In musicians' daily speech, the term copying can refer to learning the framework of tunes (melody and chord progression), as well as learning improvised solos or other improvised elements such as comping figures, chord voicings, etc. I here refer to the latter meaning, i.e. learning improvised solos or elements.

The section is structured around three thematic aspects. The first aspect is *attitudes* towards copying as a learning practice, including reflections on perceived outcomes, potential shortcomings, i.e. the *why*- (or 'why not'-) questions related to copying. The second aspect is *the objects of copying*, i.e. *what* (or *who*, which performers) do they copy. This question includes whether there were any specific musical material or musical structures the students were going for, specific styles/genres or specific performers they were particularly interested in copying from. The third aspect is concerned with the actions involved, i.e. *modes of copying*, the *how* – question. The second and third aspect were closely related, and will therefore be presented together.

3.1 Why copy? Attitudes towards copying as a learning practice

As expected, there was variation in the degree to which participants in the study copied from recordings as part of their practising. Some students seldom copied explicitly, because they experienced it as time-consuming, hard work compared to the experienced outcome, or they only did it if it was an assignment given from a teacher. Still, most of the participants explained that they emphazised copying, and these students advocated it strongly. They explained how they used recordings to pick up different musical aspects from "*musicians who are better than me*" as Robert (pseudonym), a 1st year guitarist, put it.

⁵ Listening as such, without actively trying to internalize selected elements, is primarily not included in my use of the term here, though there are not necessarily sharp distinctions between copying and listening in terms of learning intentions and learning outcomes.

Such aspects could vary from technical skills of the recorded performer, ear training, rhythmic and tonal skills, stylistic phrasing, how the recorded performer utilized a particular chord progression melodically, or more general playing styles or concepts. Kristian, a 2nd year trombone player, described that the outcome of copying could be about "(...) *getting inside another person's solo, how he builds phrases, and stuff.*" Some students mentioned the *joy* of listening and liking a piece of music or a particular musician, and thus a desire to learn how to sound the same way as an important reason for copying at all. Georg, a guitar player in his 3rd year, explained: "*You get to understand how people have been thinking, people you like… how they have worked. How it has been done.*" This quote connects with a point several students made, namely an urge to *understand* artistic intentions as well as the technical moment-to-moment execution of ideas, as a reason for copying.

Emma, a pianist in her 3rd year, explained the outcome she experienced by copying:

Well, you get everything out of it, (...) from a feeling of metric form, to follow harmonic structures, to feel the harmonies inside you, to learn to hear, to sing, to play lines with coherence and continuity... and play hip [laughs]. But you don't become a better musician just by copying, right.

In this quote Emma pointed not only to the skills she thought she developed through copying. Another central aspect for her was namely the learning of *creative* aspects of her own improvising, since she highlighted the more abstract and generic aspects of an improvisation, such as musical coherence and continuity, as learning outcomes. This point of view is consistent with the point Berliner (1994) makes about outcomes of copying. But the last sentence in the quote from Emma, implies that copying alone can have it's insuffiencies in terms of learning to improvise: it is not enough alone. This leads to a closer look at a potential contradiction related to the practice of copying, the one between the overall motive of developing ones own style and voice, and sounding like someone else one has copied.

Interestingly, all the students who liked to copy displayed an articulated awareness of this potential problem. Vibeke, a saxophonist in the 1st year, said:

Why I find it important [to copy]? It has to do with finding your own style. Because, if I find Dexter Gordon's solo on a certain tune incredible, then I just want to learn it, and then I can draw out from it what it was that made it incredible. (...) I will never sound like him anyway. For Vibeke, searching for her own style was actually the motivation for copying, which at first can seem paradoxical. Vibeke didn't worry about sounding too much like Dexter Gordon, because when she played (i.e. improvised) herself, in her own voice, it never sounded the same as the copied performer or material.

Robert (guitar) problematized a similar case, when he explained:

Well, you don't need to take something, and... like "he plays like this, then I will do it, too", but you can get ideas about how musicians better than me play, sort of.

For Robert, the purpose of copying was to get ideas, not to apply pre-learned material directly in his solos. This point of view was also expressed by Ingrid, a 1st year trumpeter, when I asked her if she was worried that pre-copied material would 'come out' when she improvised herself:

No (...). I don't think you should play a lot of [pre-learned] licks, like..."right, here comes that chord, so now I have to play that phrase". That's not what you do when you copy and sing along.

Georg (guitar) explained in more detail about why *he* felt he never sounded like someone else when playing:

When you copy that much different things (...), from different genres, you become a product of all of it. It won't be similar to anything else. It's different if you only copy one guitar player, with the same sound, and everything... and a lot of people have done that, especially Americans. They are often like blueprints. (...) I notice that I often use things I have copied. But in another tune and another setting. I don't think that is a problem, because then it works as a stepstone to develop your own improvisation further, and if you hadn't played that thing first, then you wouldn't have gotten that new idea. So stealing from others, that is something I do light-hearted!

Copying from *different sources* thus seemed like a precondition to avoid becoming 'blueprints', so did deliberately using copied material in different musical contexts. Several of the participants also displayed a highly *selective* approach as to what they chose to copy, when it came to which recordings, which performers, or which elements in the recordings or performers they picked. This aspect can shed light on the paradox presented by Vibeke (sax), that copying can enhance the development

of a personal voice, since the selectivity in *choosing* reflected their subjectivity and personal preferences. But the outcome of copying was not always under conscious control, as Vibeke pointed to: "*You also have the intuitive part, that if you have copied something, it can just "pop out" when you least expect it.*" When this happened she experienced it as a positive outcome, maybe because the "intuitive part" was felt like an expression of her own musical personality.

To sum up this section, the outcome of copying can be understood as two-dimensional. The first dimension is linked to acquiring *specific musical objects*, such as musical materials, patterns, characteristic elements of styles, i.e. the specific content inherent in the music they copy.

The second dimension has to do with more *generic procedural competencies*. This dimension of outcome seemed to be important for several of the participants, and can be linked to aspects such as training the musical ear and the ability to memorize as such; strengthening the sense of rhythmic time feel; gaining experiences with the act of creating improvised, e.g. improvising coherent melodic lines, or building up a tension curve during an improvised solo.

3.2 What and how do students copy? Objects and related action modes

As mentioned, the object of an activity or practice can be understood as the content or raw material the subject is working with. Objects that the participants revealed have already been implied in the previous section connected to perceived outcome, but in this section I will show further examples and go into detail. The study revealed, as mentioned earlier, that different objects the students wanted to work with were closely related to what I depict as different *modes of copying* on the action level. I will therefore describe the two categories *objects* and *actions* in relation to each other.

3.2.1 Detail-oriented copying: imitation and transcription

Detailed and meticulous copying was a practice some of the participants dedicated themselves to.

The objects that were in focus among the participants who indulged in detailed copying, were often related to analytic understanding of musical structures such as scales and chords. Hence, this copying mode was not common among the two drummers, but was more often used by the chord instrumentalists I interviewed.⁶ I will give

⁶ Although I can not claim that this is a consistent pattern for all chord instrumentalists, since the number of participants was small.

an example from the interview with Emma, a piano player. She described a process where she wanted to copy a recorded solo by Bill Evans on the tune *Five*, that is built on Rhythm Changes.⁷ The object was to depict exactly what notes he played, in order to see how Evans built a melodic line, and how he utilized the chord progression to do so.

In this solo Evans had reharmonized several chords, using harmonic progressions with SubV7-chords.⁸ Melodically, Emma had trouble perceiving the exact notes in the solo. A solution became to analyze his use of scales, and by listening she found that he used a Lydian-dominant scale from the root F, which equals an Altered scale from the root B. After having established the scales, she discovered how Evans circled around the #11-note in the chords, and created a sequenced melodic motive around his chord note, using chromatics. Emma practised singing and playing #11-notes in different Dominant chords, to strengthen her perception of this particular note and the *character* it added. Her perception of Bill Evans´melodic improvisation thus became much easier, she explained. She then practised playing his phrases on the piano, and demonstrated it in the following way:

In his solo, right, he goes like this [Emma plays on the piano, while commenting]:





⁷ *Rhythm changes* refer to a standard chord progression derived from Gershwin's composition *I got rhythm*. Rhythm changes typically has a 32 bar AABA form, where the A section is built around a s.c. *turnaround* (a I-VI-II-V progression), and the B section consists of Dominant chords in a cycle of fifths. 8 A *subV7-chord* refers to a tritone substitute chord, i.e. playing a B7b5 chord instead of a F7b5, as the case was in this example.

And then, this can become an exercise in learning these scales, and then maybe choose a very simple melodic motive, and sequence it, descending:





You know, from #11 to root, to #11, to root, etc. But it's just a chromatic thing, you can just as well play:





This excerpt, showing how Emma demonstrated by playing, also clarifies a point Emma made in an earlier quote, when she stated that copying alone doesn't make you develop as an improviser. It exemplifies how it is possible to draw generative

aspects from musical material, and use the principles that are derived to construct a melodic-harmonic exercise as well as an exercise in melodic-motivic development. Interestingly, Emma emphasized the auditive, embodied experience from copying, and she said: *"[I have to] have the solo in my ears, and my fingers, you know. (...) And then, the next time I come across an altered chord, it lies there, as an experience in my body."*⁹ For Emma, the analytic-theoretical understanding seemed to be intertwined with the embodied experience related to chords and scales as objects, because the analysis created an access to *hearing* the #11 note and the actual scales, and thus learning the solo as a holistic and auditive experience. Further, this experience opened possibilites to an expanded analytic understanding of the building of motives from scales.

In some cases processes of learning from copying was self-initiated, while in others it had been an assignment given from teachers. Ingrid (trumpet) explained how a teacher instructed the ear training class to learn a solo from a recording: *"In this exercise we were supposed to sing along with the solo, then write it down, and then learn [to play it on the instrument] exactly as we had written it."* Kristian (trombone) described a similar procedure, where he often first transcribed a solo (wrote it down), and then learned to play it on trombone, as written.

Georg (guitar) copied a lot and often, but used an opposite procedure:

I sit with the guitar and learn the whole solo directly on the instrument. Maybe for three or four weeks. Then I write it in Sibelius, print it out, and analyze what is happening. I draw a little in the score, use colours, and so on (...).¹⁰

In the imitation phase he was very thorough in terms of phrasing and rhythmic nuances, but tried *not* to analyze and *think* too much. In the transcription phase, on the other hand, he analyzed the use of scales in relation to harmony. But then he was not too concerned with writing down detailed phrasing, as this aspect were 'contained' on the aural, embodied level when he sang or played it on the guitar.

Anders, a bass player, used yet another procedure, as described in the following quote:

The first step is to sing it, in pitch and time and everything, perfect. And this is the hard part, not to move to fast to the next step, which is to play it on the bass. But you must not play it on the bass too soon, because if I do, I will rehearse mistakes. And I really could be more thorough with the first step,

⁹ An altered chord is a Dominant chord that has a b5 (#11), #5, b9 and #9 as options.

¹⁰ *Sibelius* is a music notation software programme.

because maybe I can hear it and all, but if I can't really sing it, if I can't do it ten times in a row, perfect [then I don't know it well enough].

When Anders here so strongly emphasized the importance of singing the music before he took it to the bass, I understand it as an emphasis on using as auditive an approach as possible, given that the voice is so strongly linked to an inner ear. And unlike some of the other participants, he did not use transcription at all.

As we have seen, there were different procedures related to detailed copying. Holding together the excerpts above, they exemplify three different approaches to detailed copying, i.e. a *primarily auditive* approach (prioritizing singing and then playing); an *auditive-motor* approach (using the instrument to learn the material); and an *auditive-visual* approach (transcribing first, and then learn to sing or play the written material).

3.2.2 Concept-oriented copying: listening and playing

Typically, the drummers in the study displayed a practice I chose to label *concept*oriented copying. The drummer Martin, 3rd year, gave an explanation of how he copied, which can serve as a definition: "*I never copy anything note by note. Instead, I try to pick up the concept of what they are doing, and the sound, maybe.*" Such concepts could refer to an overriding idea in the playing, choices in dynamic levels, density, and perceiving *typical* phrases more than necessary *exact* phrases from the performer one listens to.

Alex, the other drummer, in his 1st year, described a similar learning practice which was connected to the object, i.e. what he was interested in learning. His preferences when it came to drummer models were those who played in a loose and improvised style in their approach to comping others in a jazzband.¹¹ This, and the factor that improvised drumming not necessarily relates to harmonic progressions, makes copying challenging, as there are fewer 'cue points' related to form, in comparison with melodic instruments. I thus asked Alex how he mentally structured the music in order to memorize it.

¹¹ By *loose style* I mean a drumming style with few repeated patterns, and instead continuous variations in accents and rhythmic figures. Jack DeJohnette's playing is an example of this style within the modern swing idiom, and one of Alex's favourites.

Guro (researcher): It's quite difficult, isn't it?

Alex: Yes, but it works, when one understands what they do. That there are a lot of repeated licks, and you recognize it quite easily when you have listened a lot. And you know approximately how they do it, maybe you have seen a video of how they play.

Since he repeatedly had listened to specific performers, he could recognize characteristics and patterns quickly, without having to decode every detail. From Alex' accumulated experience in listening and copying in general, he was, in my interpretation, *sensitized* to common patterns. His experience thus consisted of cross modal impressions (Sloboda 2005), i.e. auditive, visual and motor related, which contributed to the holistic understanding.

Markus, a bass player in his 2nd year, seldom copied very detailed, but he listened a lot to bass players in order to pick up general aspects of bass playing:

I don't mean exact notes, but more a kind of attitude in the music. Because there is a big difference, e.g. in mainstream jazz, if someone tells you, like, "in mainstream, the bass plays quarter notes", between someone's telling you, and actually hearing someone playing it. And how. (...) Through listening I've gained a certain perception of how it should sound.

In this quote, Markus referred to the concept of playing *walking bass*. As a learning object, Markus did not link it to specific notes in isolation (on his level of musicianship, which was advanced), but just as much the phrasing/placing of the quarter notes in relation to a beat (which there is a specter of personal approaches to), and the creating of bass lines based on chord progressions. These generic aspects could be learned without having to copy exact what the performer played.

Alex (drums), higlighted an interesting point with regard to the relationship between the learning object, and the mode of copying. Earlier on he listened to drummers like Max Roach and Philly Joe Jones, and then he used to copy details a lot. These drummers can be characterized by the usage of stylistic patterns. Lately he had grown an interest towards jazz from the record label ECM, and he listened in particular to the Norwegian drummer Jon Christensen. Christensen's playing style is known for being very free and loose (i.e., not following patterns or defined musical frames). By the same time Alex's interest in Christensen and ECM grew, he had more or less quit copying. This new stylistic orientation was mentioned as an explanation of why he had moved on to a less detail-oriented and more concept-oriented listening. Thus, this can be interpreted as a connection between the degree of improvisation and unpredictability in the performers' playing style, and the character of copying mode. A concept-oriented mode is more relevant than a detail-oriented mode in free (or freer) improvised music.

The interview with Martin (drums), illuminated the action aspect of conceptoriented copying. As mentioned earlier, his copying was seldom detailed-oriented. In situations where he did listen to music, he seldom had access to his drum-set, as he mostly listened at home and the drum-set was rigged at the school:

When I listen to something [that I want to play], I really go into it and memorize it. And then, when I get back to the practise room, I remember the sound, and try to recreate it.(...) Try to use my own technique to make it work. Maybe it becomes something else, something similar but not exact. But it can still work and be interesting.

It was not important to play exactly the same as the performers on the recording, instead he emphasized that his own physical playing technique and subjective memory led what he actually played. Due to the absence of his instrument in the listening situations, he relied on his memory and recreated the *concepts* and overall ideas that he memorized. This needs not necessarily to be seen as an approximate reconstruction to compensate for the lack of access to the drumset. Instead, in my interpretation, not only did his copying procedure strengthen his memory. Since revealing a general creative concept from a musical excerpt presupposes an advanced understanding, this procedure possibly also enhanced a deeper understanding of what Martin had listened to as well as activating his immediate creativity with the material.

3.2.3 Playing along: Improvising with recordings

A third mode of utilizing recordings for learning purposes is where the students put on the recording and improvise along with it. A couple of the participants reported that they used to practise like this, often in addition or a variation to the detailed copying. Ingrid (trumpet) was one of them, and she described it like this:

Ingrid: Sometimes I like to play along with records. Trying to imitate, and play with [them], as if I was there. I think you learn a lot from that. (...) I then try to react to what is played, and then play something that is similar, only slightly different.

Guro: Do you feel that you learn as much from that, as from copying [detailed]?

Ingrid: Yes, definitely, because you pick up phrasings when you play along, and part of the tonal language.

When Ingrid copied in a detailed manner, as she expressed liking, she connected it to the learning goal of decoding and analyzing something exact, for the sake of understanding. Here, she displayed a different kind of learning goal, as I interpret it, that is to practise the *ability to react*. Simultaneously as reacting to the music, she tried to improvise close in style to the performers on the recording. In this way, a transmisson from the recording to her own playing took place, even though she improvised at the same time.

4. Conclusion

In this article I have wanted to give an account of the usage of recordings as learning tools and the practice of copying, seen as an integral part of jazz students' individual practising practices. In order to get insight into the values and norms embedded in this activity, and thus understand the meaning and motivation underlying the practice, questions were asked about perceived and expected outcome of copying, of which learning objects were focused, and of how copying was executed in its different modes.

With regard to learning outcomes, two dimensions were highlighted. The first was outcomes related to *objects, or content*, whereas the second was related to *generic procedural competencies*. When Berliner (1994) describes imitation as a central learning practice among American jazz musicians, he emphasizes the building of a 'repertory storehouse' consisting of musical motives, phrases and patterns, which I will connect to what I depict as the object/content related dimension. According to Berliner, the purpose of building a repertoir of phrases is to establish mental association between harmonic progressions and melodic phrases, and from that, being able to construct and apply phrases from this repertoir during an improvisation. This 'application theory' related to copying has been referred to in several writings.

The findings in my study indicate that, though direct application sometimes is the case, they also show that this is not the dominating desired outcome of copying. On the contrary, several participants emphasized that they did *not* apply 'ready-made', internalized phrases into associated harmonic contexts. Rather than leading to direct and concious reproduction when it comes to the musical content, copying can enhance the development of a *reflective meta-understanding* of real-time composition

and expression among the performers they copy, that on a longer term basis can be absorbed in their own expression and 'voice'. A precondition for a personal expressive development based on copying is that the learner must elaborate on and be creative with the learned material. Creative elaboration on and expansion of the object can thus enhance a generic procedural improvisation competency.

Based on the descriptions of concept-oriented copying, this mode can be seen as a form of indirect imitation, where the holistic impression of the music is what is emphasized and absorbed. There can be a distance in time and place between the listening experience and the recreation on the instrument, unlike the detail-oriented copying that often were executed with an immediate access to the instrument (in fact, the instrument was central in the working process). The abstract recreation of a subjective memory had an element of creating, which implies that there is an *incremental improvisation* involved in this copying mode.

The practice of improvising along with a recording can be seen as a (more or less) intentional learning practice where one involves ones creativity immediately in the imitation process – though this may sound as a contradiction-in-terms. This mode has similarities to the concept-oriented mode, as they both focus on playing within a similar, overall style and atmosphere without too much focus on details. A difference is that while the concept-oriented, as we saw an example of, can be detached from the listening act itself, the 'improvising along'-mode necessarily needs this connection in real time, due to the learning goal of practising *improvisatory reactiveness*, or response. Seen like this, and speaking in terms of the language metaphor (with reference to Wertsch 2007), playing along can be a way not only to learn phrases and grammar – the *content* of language – but also to learn *how to communicate with it.* Thus, the recording as a tool can be seen as a substitute for playing with fellow musicians or peers in an individual practise situation, without access to a band.

All three copying modes had elements of *improvising* connected to the course of learning actions. Generally speaking, I understand this element as a means to not only internalize the learning object, but taking it a step further, i. e. *personalizing* the object. I also suggest that the lack of detailed accuracy in concept-oriented copying and improvising along with recordings should not be seen as a lack, as stemming from laziness or interpreted as taking 'learning shortcuts'. Instead, they can be valued as constructive and intentional strategies to *practise improvisation* based on an existing aural source. With reference to the language metaphor (Wertsch 2007), recordings function as a cultural available 'pool' of musical utterances and conversations, where students subjectively and selectively pick and choose. They learn to express themselves personally through an immediate elaboration in a social zone of proximal development, with an indirect, suggestive guidance from recorded musicians.

References

- Alvesson, Mats, & Sköldberg, Kaj. (2008). *Tolkning och reflektion. Vetenskapsfilosofi* och kvalitativ metod. (Andre opplag). Danmark: Studentlitteratur.
- Berliner, Paul. (1994). *Thinking in jazz: The Infinite Art of Improvisation*. Chicago: University of Chicago Press.

Creech, A., Papageorgi, I., Potter, J., Haddon, E., Duffy, C., & Morton, F. (2008). Investigating musical performance: Commonality and diversity amongst classical and non-classical musicians. *Music Education Research*, *10*(2), 215-234.

Creswell, John W. (1998). *Qualitative Inquiry and Research Design. Choosing Among Five Traditions.* Thousand Oaks, California.: Sage Publications, Inc.

Engeström, Yrjö. (1987). *Learning by Expanding. An Activity-theoretical approach to Developmental Research*. Helsinki: Orienta-Konsultit Oy.

Engeström, Yrjö. (2001). Expansive Learning at Work: toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 24.

Green, Lucy. (2002). *How Popular Musicians Learn. A Way Ahead for Music Education.* Hants, England/Burlington USA: Ashgate.

Hallam, Susan. (1997). What do we know about practising? Toward a model sythesising the research literature. In Harald Jørgensen & Andreas C. Lehmann (Eds.), *Does practice make perfect? Current theory and research on instrumental music practice.* Oslo: Norges Musikkhøgskole. NMH-publikasjoner 1997:1.

- Johansen, Guro Gravem. (2013). Å øve på improvisasjon. Ein kvalitativ studie av øvepraksisar hos jazzstudentar, med fokus på utvikling av improvisasjonskompetanse. [To practise improvisation. A qualitative study of practising practices among jazz students, with a focus on developing improvisation competence]. PhD Thesis. (PhD), Norges Musikkhøgskole [Norwegian Academy of Music], Oslo.
- Kamin, Sara, Richards, Hugh, & Collins, Dave. (2007). Influences on the talent development of non-classical musicians: psychological, social and environmental influences. *Music Education Research*, *9*(3), 449-468.
- Kenny, Barry J., & Gellrich, Martin. (2002). Improvisation. In Richard Parncutt
 & Gary McPherson (Eds.), *The Science and Psychology of Music Performance*. *Creative strategies for teaching and learning*. Oxford: Oxford University Press.

Kvale, Steinar. (2001). Det kvalitative forskningsintervju. Oslo: Ad Notam Gyldendal.

- Leontiev, Aleksej N. (1978). *Activity, Conciousness and Personality*. Hillsdale: Prentice-Hall.
- Merriam, Sharan B. (1998). *Qualitative Research and Case Study Applications in Education*. USA: Jossey-Bass.

- Monson, Ingrid. (1996). *Saying something. Jazz improvisation and interaction*. Chicago/London: The University of Chicago Press.
- Prouty, Kenneth E. (2006). Orality, Literacy, and Mediating Musical Experience: Rethinking Oral Tradition in the Learning of Jazz Improvisation. *Popular Music and Society*, 29(3), 317-334.
- Repstad, Pål. (2007). *Mellom nærhet og distanse. Kvalitative metoder i samfunnsfag.* Oslo: Universitetsforlaget.
- Sloboda, John. (2005). *Exploring the Musical Mind: Cognition, Emotion, Ability, Function*. Oxford: Oxford University Press.
- Thompson, Sam, & Lehmann, Andreas C. (2004). Strategies for sight-reading and improvising music. In Aaron Williamon (Ed.), *Musical Excellence. Strategies and techniques to enhance performance.* OXford: Oxford University Press.
- Wertsch, James V. (2007). Mediation. In Harry Daniels, Michael Cole & James V. Wertsch (Eds.), *The Cambridge Companion to Vygotsky*. New York: Cambridge University Press.
- Whyton, Tony. (2006). Birth of the school: discursive methodologies in jazz education. *Music Education Research*, *8*(1), 65-81.