LARS BRINCK

Collective Creative Matters

Jazz band participation as learning

Introduction

For decades, living in Western post-industrial society has demanded that human beings develop high degrees of adaptability and creative skills. This is due to at least three salient factors: 1) replicable work routines are increasingly being supported and overtaken by programmable machinery, leaving performing and developing unpredictable and complex tasks to humans; 2) cooperative demands appear to be increasingly important; 3) the way we choose (or not) to apply digital and other technologies continues to play a more prominent role in human work processes.

Therefore, being both adaptable and skilled at working together is no longer sufficient to engage in and contribute to society's sustainable development and lifelong satisfactory, qualitative engagement as a citizen (UFM 2017; OECD 2008). Future Western society will require a workforce with a high degree of creative, courageous, and critical thinking and problem-solving (WEF 2016) that is highly skilled in empathetically developing new methods, models, standards, and practices in close cooperation with others, while simultaneously *critically engaging with* technological artifacts (Hansen 2017).

But how do we acquire and learn such cooperative, creative, and critical skills? How do we learn from each other when aiming to generate profoundly new ideas? How do our technological options play a part? In other words: How can we look at creative, collective work processes as processes of *learning*?

To investigate such questions, the present research takes a situated learning analytical perspective on two exemplary, highly cooperative, and highly creative practices, namely two jazz ensembles—a trio and a quintet. As this review will demonstrate, many scholars have investigated artists and their creative practices, often contributing interesting insights into other fields of practice and research. However, the novelty of this project's approach is its specific focus on the collective, improvisational practices of the jazz realm, where collectivity is a specific precondition for cooperative idea generation and production. And then carefully analyzing how musicians' ongoing changing participation in such practices can be perceived as learning. Furthermore, the study examines how musicians' changing participation and the changing music are continuously related.

State-of-the-art

Research on artists' creative practices and cultures has been a quite substantial field of study for many years, with many important contributions, especially from the fields of musicology, anthropology, psychology, and education.

From musicology, many scholars have contributed, especially on jazz cultures and musicians, musical and cultural characteristics, ways of living and working, etc. (Michaelsen 2013; Hargreaves 2012; Green 2002; 2008; Berliner 1994; Keil and Feld 1994; 2005; Keil 1995; Danielsen 2006; Turino 2009). These studies often include an interest in communication and relations between musicians or between musicians and their societal realities. Notably, a specific interest in personal development (i.e. learning) is rare. However, reading this literature from a (in my case: situated) learning perspective reveals bundles of interesting observations and reflections that point to how art practice is learned and developed.

From the field of anthropology, numerous scholars have taken a similar interest in artists lives and work routines, often unfolding a closer understanding of the processes of creating new material and how such processes must be understood as being closely related to societal, economic, and social matters (Schloss 2004; Folkestad 2006; Söderman 2001; 2007; Regis 1999; de Bruin 2016).

Also from psychology, a range of scholars has investigated the phenomena of creativity, improvisation, and idea generation (Tanggaard 2014; 2010; Chemi et al. 2015; Sawyer 2017; 2011; 2006; Simonton 2010; Langer 2005; Nielsen and Hartmann 2005). Specifically concerning musicians, a series of similar studies look into individual jazz musicians' idea development (Hargreaves 2012), inspiratory sources, and their impact on musical decisions (Michaelsen 2013). Also, a body of works apply discourse analytical perspectives on individual hip hop musicians' work strategies. Only a few psychology studies—and then mainly within design theory (Dorst et al. 2001)—have investigated the cooperative aspects of on-going creative endeavors.

Finally, within the educational realm, a body of scholars has been delving into how creativity should be taught in schools and workplaces (Sawyer 2017; Starko 2017; Tanggaard 2010; Kupferberg 2009; Green 2002; 2008; Westerlund 2006; Siedenburg and Nolte 2015).

In summary, the majority of research on how artists enact their profession and learn new skills appears to unfold the *phenomenon* of artistic creativity and how successful *individuals* explain their creative processes. Generally, research has developed important insights into the creative mindset, how inspiration may work, how new ideas may occur, and how cooperative exchange and experience can be a crucial resource for progress. In other words, empirical analyses of how outstanding *individual* artists, craftsmen, and business leaders *think* about their practice. Moreover, educational creativity research seems to be primarily occupied with reaching out for rather conventional "schoolish" conclusions regarding their didactic implications for teaching creative skills by setting off from cognitive and individual understandings of human activity.

We seem to lack research scrutinizing not only what artists learn from engaging in their creative and improvisational *cooperative* practices, but also research that offers analytical insights from a situated perspective, taking the many (historically constructed and constantly changing) relationships among humans and between humans and artifacts seriously. One might say that there is a lack of research that bridges anthropology's insightful unfolding of contextual, societal factors of importance with a learning perspective on what is actually going on, when bands work together. And hopefully, the situatedness of collective creative activity will find new ways into our educational institutions. Looking at collective band processes as learning, fully implicates the unfolding of the nuances of collaborative creative processes as messy, unpredictable, and diverse learning processes. Notably, there is a lack of scholarly knowledge about creative practices' dialectic, contextual, and cooperative processual nuances and potentials. Brinck and Tanggaard (2016) and Brinck (2014; 2017; 2018; In print) appear to be among the few such scholarly efforts. Norgaard (2011) agreed, on the need for more research on collective creativity, stating that "Further research should explore the effects of (…) interactivity on improvisational behavior and thinking" (123), while Sawyer (2017) argued for increased scientific scrutiny regarding the socio-cultural aspects of collective creative practices, such as the relations between "open-endedness and structure" in creative work processes to increase our scientific knowledge on how we "learn (…) in ways that prepare [us] to build [on existing knowledge] and create new knowledge—the key to a creative society in an age of innovation" (111).

A situated learning analytical perspective

To develop new insights into how participation in cooperative creative practices can be perceived as processes of learning and change, I have chosen situated learning theory as my analytical approach. Situated learning theory was developed by Lave and Wenger (1991) and has been furthered by Lave (1997; 2011; 2019) and a range of other scholars, including myself. In both Brinck (2014) Brinck and Tanggaard (2016) and Lave (2019), the authors—from their own perspectives—discussed how situated learning theory, and especially the concept of "communities of practice" over the years has been applied in ways, not entirely in line with its analytical intentions. Some research and most prominently literature within management and education has missed the theory's analytical potential and instead applied the concept as a de- or prescriptive emblem for people working together. Therefore, the theoretical foundation of situated learning in social practice theory has been elaborated since the theory's first appearance (Lave and Wenger 1991) to clarify not only the theory's analytical intentions but also fundamental ideas about the dialectics of changing relations and the inseparability of theory and/in practice and of knowing and/in doing.

Situated learning theory's explicit offset in social practice theory, with its social ontological and practice epistemological foundation, provides the analytical framework

with a set of preconditions that have proven helpful for unfolding situated learning theory's analytical potential. And more importantly, helps avoiding the pitfalls of phenomenological, descriptive, or prescriptive accounts of how such practices unfold or should ideally advance. In fact, a social practice theoretical take on situated learning theory (Lave 2011; 2019) offers a convincing theoretical and analytic perspective on human beings' ongoing relational practices and how different ways of participation contain aspects of conflicts, concurrences, changes, opportunities, and approaches. This enables a nuanced analytical glance in detecting the intricate dialectic aspects of changing participation as learning embedded in practice. In other words, situated learning theory offers a saturated web of analytic concepts to help explain the character and importance of changing relations among humans and between humans and artifacts, and how these changing relations constitute moments of learning.

The analytical concepts of situated learning theory included in this study are founded on the theory's main analytical perspective of learning as "changing participation in changing practice." This perspective encapsulates how we, as humans—through (often intricate) changes in our ways of engaging in practice—not only change our participation (and learn) but also change the course of practice (including other participants' changing participation and learning) in the process. Practice changes as participants and their participation change in dialectical and inseparably embedded ways and manners. The theory's mid-level analytical concepts—selected for this study—are introduced as part of the empirical analyses to follow.

Empirical methodology

My empirical work took an anthropological approach (Hastrup 2010), not as a metric and linearly describable method, but as an "*overarching* qualitative method" (58, italics in original) [or rather methodology, ed.], seeing every human being as a "total person" (ibid.). This empirical approach suggests an anthropological take to fully grasp the nuances of change and difference in the scrutinized practices (Cerwonka and Malkki 2007).

Through ongoing ethnographic accounts, "thick descriptions" (Geertz 1973) of practice were required to fully grasp and communicate the nuances of cultural meanings and connotations of the artistic practice at hand. As Gupta and Ferguson (1997) articulate, "ethnography's strength has always been its explicit and well-developed sense of location" (35), while Nielsen (2010) noted how "social and cultural phenomena (...) are always engulfed in larger historical contexts and their processual relations" (35).

To produce empirical material for analysis, I engaged in a series of participant observation sessions (Atkinson and Hammersley 1994; Hastrup 2010) of two different jazz ensembles' cooperative work. Field observations and participatory engagement supplemented by focused, semi-structured interviews (Hastrup 2010; Brinkmann and Kvale 2014) were documented by audio, video, diary notes, and elaborate ethnographic accounts (Lave 2011) for subsequent analyses and discussions.

I observed and interviewed two jazz ensembles during the course of the study: A "free jazz" trio and a more "conventional" jazz quintet. I observed the trio's concerts over a period of 3 months in 2019–2020, attending four 2-hour concerts in Berlin, Copenhagen (2), and Skive (western Denmark). This was supplemented by a 3-hour collective interview with the three trio-members in early 2021. Moreover, I observed the quintet at a 3-hour rehearsal, followed by interviewing the band leader.

Through my empirical fieldwork and ongoing analyses, I aimed to "assert the inseparability of situated practices and their associated meanings" (…) and to "attend explicitly to ongoing *processes* of constitution" (Hart 2002, 296, italics in original) while attempting not to limit myself by prejudice or social, spatial or individual entities and matters.

Researcher position

My lifelong engagement in playing jazz served a salient role in maintaining such empirical, analytical approach. My personal experience as a jazz (and rock) musician impacted my preconditions for understanding and selecting interesting observations for the analyses. Artistically, I am an experienced rock and jazz musician in contact with and with knowledge about many different jazz ensembles. As such, I "*know* the language" (Hastrup 2010, 65, italics in orig., author's transl.).

Hence, my research experience in general has developed into having quite a composite nature, enforcing the dialectics of research, artistry, pedagogy, and so on. My career as a musician, composer, music educator, research manager, and scholar has inspired me to engage in empirical research unfolding such dialectic relations in non-hierarchical perspectives, discussing relations between amateurs and professional, institutions and artists' everyday lives in their bands or on the streets of New Orleans. And situated learning theory has been an apt approach for investigating these interests (Brinck 2014; 2016; 2017; 2018).

Observing and analyzing human behavior is always a matter of serious ethical concern. Anonymity was ensured for all participants and their informed consent was also obtained. Also, research outcomes hold an inherent risk of appearing omnipresent, whereas they merely represent strong, empirically supported examples of the kinds of practices under investigation. Thus, my analyses and conclusions are not presentations—but *re*presentations (Polkinghorne 1997; 2007) in the glance of the researcher—of the observed practices, the participating musicians and the music being played.

Two jazz ensembles working

The two ensembles—a trio and a quintet—had very different approaches to developing their music together. The trio only played free impro-concerts and never rehearsed, while the quintet played specific compositions and rehearsed before playing a concert.

The trio

The trio consists of pianist Joachim, drummer Andrea, and alto saxophonist Zana.[1] The artistic realm of their common interest may be coined "experimental, atonal, free jazz." The performances hold no composed themes and no agreed musical forms. The music is invented and created on the spot. The members do not even agree on who initiates the single concert pieces, how they will advance, or how and when they will conclude. To radicalize this artistic approach, the trio works with performances *only*. Thus, they have no rehearsals, no predetermined compositions, and no agreed-upon arrangements or progress. The artistic aim of total spontaneity and on-the-spot inspiration, interaction, and response was the trio's pivotal mutual artistic emblem. All concerts were recorded and subsequently analysed for potential publication. As analyses demonstrate, the concert recordings were also utilized for personal musical development and collective debates on musical quality, mutual artistic intentions, etc.

Consequently, the venues for concerts were of utmost significance. During my observation period, the four venues for the trio's concerts were very different, yet also similar. They differed in terms of room size, ambiance (wall, floor, and ceiling surfaces), and the size of the "stage." Each time, the trio preferred to be placed on the floor with the audience. The venues' similarities included the presence of chairs (and even tables in some places) for the audience and also the number of people in the audience (approx. between 25 and 50). Two of the venues were former church rooms, which were high-ceilinged and spacious with a stage-like setting (at floor level) on one end, chairs with small café tables just in front of the empty floor, and seat rows loosely placed facing the stage floor. At the back of the room opposite the stage were counters and tables with coffee and wine for purchase. Both these venues also offered a balcony at the rear of the room. The other two venues were more mundane, multipurpose rooms with chairs and tables that were arranged for the events. All four venues included a grand piano.

The quintet

The other jazz ensemble is a quintet (Jason on double bass, Jack on drums, Milton on saxophone, Eric on piano, and Uriah on electric guitar) formed around one of the musicians (the band leader) and (mainly) his compositions. The quintet's repertoire being based on compositions results in a somewhat more "conventional" approach to jazz. Notably, the performance is founded in specific grooves or rhythmic significances, a melodic theme, a series of chords, and a preliminary outline of a form/arrangement, including options for soloing on top of a set chord structure.

As a consequence of the repertoire being based on compositions, the members meet for rehearsals before engaging in a scheduled performance. They use sheet music and sound files to communicate the themes, chords, and structures of each composition.

1 Musician and band names were anonymized. Instrument identification is kept public to provide for a somewhat authentic musical reference throughout the descriptions and analyses.

The musicians are all excellent sight readers and mastered the skills of "translating" annotated melodies and chords into coherent musical entities in collaboration with the rest of the band. Although the material is rehearsed before the concerts, the idea behind this approach is to be partly prepared and agree on some points while partly keeping the spontaneity of improvised music intact. Surprises *will* appear and unexpected improvisation *will* occur at their concerts, which is also an important part of playing jazz in this more "conventional" quintet.

Analyzing jazz ensemble participation as learning

Three analytical perspectives hoisted from situated learning analysis and my previous research enhance the analytical perspective on the musicians' changing participation in changing practice as learning, including how participation is related to different uses of technological artifacts.

In a recent research project closely connected to the present study and reported in Brinck (In print), I analyse two rock bands writing songs together from a situated learning theoretical viewpoint and how—in a dialectical relation with iteratively changing music—such collective work processes constitute learning. Analytical findings suggest that rock musicians "designate their access" to diverse forms of participation through their collaborative work processes, "explore and (ex)change knowledgeabilities" in generous and often boundary-crossing ways, and "attend to the aboutness" of the collective task before them. Findings also suggest that when producing final (often recorded) songs, rock bands apply high degrees of ongoing documentation of partial products and sketches through the use of technology (laptops, etc.). The three aforementioned analytical concepts have proven helpful in understanding how rock musicians learn new skills and methods to produce new music through their engagement in the collective songwriting processes. Moreover, the analytical concepts have also demonstrated how changing music and musicians' changing participation in changing practices (analysed as learning) are dialectically related.

In the analyses for the present study, I found it productive to examine the two jazz ensembles' practices from the same three analytical perspectives.[2] My argument is that rock bands develop, record, and produce songs and arrangements for publication through extensive processes of refinement, correction, substitution, deletion, etc. toward a final, publishable artwork, while jazz bands work quite differently by allowing the spontaneity of the musical moment to play a significant role. Jazz is signified by high degrees of unpredictability, lack of control, and even a lack of option for correction, which fortifies the need for often long-term, collective processes of unplanned musical interaction.

2 As I argue in my funding application, analyzing rock musicians' collective song development through the extensive use of editing right up to final publication is interesting to compare to analyses of jazz musicians working with only spontaneous, collective art production.

In other words, the research on jazz ensemble practices reported here furthers the three analytical findings from rock band research by adding perspectives of radical, spontaneous, and collective creative practices *without* the option of detailed editing and revision.

I now turn to the empirical analysis based on the three selected perspectives:

1. Designating access

How do musicians learn to establish the most adequate ways of engaging in collective work processes? The situated learning analytical perspective of "access" supports us in detecting (not only) "the epistemological role of artifacts in the context of the social organization of knowledge" (Lave and Wenger 1991, 102), but also how access to participation in practice can be enabled or obstructed. In Brinck (In print), I propose the conceptual analytical pair of "designating access" to further emblemize a perspective on how participants, as active agents, seem to purposely engage differently in these collective, creative practices to participate adequately in "spur-of-the-moment" meaningful ways and manners. I also demonstrate how the rock musicians change their participation (learn) in the process.

In the two jazz ensembles, designating one's access to the most relevant ways of participation seems to appear on different levels: 1) on a micro-level by negotiating the on-site arrangement of instruments and recording technology; 2) on an intermediate level based on how recordings are integrated as developmental tools in different ways; 3) on a macro-level, where arguments for choosing to be a member of a trio/quintet in the first place may surface.

Arranging of instruments and technology

In the trio as well as in the quintet, carefully setting up instruments and recording devices may appear colloquial and mundane. However, this is not the case since the physical setup of such equipment is of the utmost importance for the musicians to be able to participate relevantly in the music-making.

> I arrive at the trio's venue at the same time as drummer Andrea. The other two band members have not yet arrived. I assist Andrea in carrying his drums inside and leave him to unpack and position the drums.
>
> Saxophonist Zana arrives shortly after, approaches us, says hello, but quite soon leaves us and strolls around the concert room, seeming like he is inhaling the atmosphere, getting acquainted with the acoustics of today's room.
>
> During the time of arrival and setting up the instruments, I experience a very delicate, almost solemn atmosphere among the musicians. The musicians either talk in a very soft and gentle tone or not at all. Where do you want the grand piano to be in relation to your chair? It seems as if the soon-to-come concert has already started. Sensibility, concentration, nuanced communication.
>
> (Author's fieldnotes)

The trio's setup is very simple and (as I discover during the subsequent rehearsal and concert observations) standardized: Pianist Joachim sits to the left of the stage with his grand piano at a 45-degree angle. Joachim is facing the other ensemble members, turning his right side and part of his back to the audience. The grand piano has the lid in a fully open position, reflecting the piano sound toward the other musicians and the audience.[3] Drummer Andrea places his drum set on the opposite side of the stage, almost facing the audience stage at a 45-degree angle with the grand piano to his right. In the center of the stage, between the grand piano and the drum set, alto saxophonist Zana places his chair right next to the wide-open grand piano lid.

The trio's work form involves recording all live concerts for potential publication. Four microphones are placed at strategically adequate positions: 1) two microphones recording the piano (for stereo); 2) an overhead microphone hovering over the drum set; 3) an integrated stereo microphone at the center of the stage (at the position of the audience in the front row)

Since the trio works solely with acoustic, un-amplified instruments, this aesthetic position holds some imminent acoustic consequences regarding the balance of volume between the instruments to—first of all—ensure a nice experience for the audience. Andrea stated:

> "We first and foremost create a good sound for those who sit here, and *then* we can start thinking about where the microphones should stand (...) It's not a studio session with an audience. It's a concert being recorded. In that order, right?"[4]

After setting up the instruments, the musicians sometimes started playing either by themselves or together to refine their "place" and experience with the room; however, they sometimes did not. It all depends. Pianist Joachim had this to say: "It's a matter of getting to know the instrument (...) but it can also be charming if only touch it for the first time in front of the audience. If it's a bad instrument, it's nice to be prepared."[5] For drummer Andrea, it's mostly about the relationship between the drum sounds and the room's ambiance: "It's mostly about getting used to how the dynamics between the drums are in that particular room. Different sounds can stick out."[6]

The musicians designate their access to participation in the soon-to-come concert in ways that enable them to hear and see what they need to perform with *these* fellow musicians, *this* music, before *this* audience, in *this* room. And by discussing different experiences and solutions, they become increasingly aware of various aspects and perspectives.[7]

3 At another venue, Joachim suggested a slightly different position of the grand piano (or actually the saxophonist), having sensed during previous concerts that the saxophonist's position gave him (the saxophonist) too strong a piano sound, which resulted in not displaying balance between the instruments for the audience.
4 Andrea, interview, p. 18, author's transl.
5 Joachim, interview, p. 21, author's transl.
6 Andrea, interview, p. 22, author's transl.
7 cf. also analyses of exploring and (ex)changing knowledgeabilities

In the quintet, the physical arrangement of persons and instruments was of equal significance. At the rehearsal, the musicians formed a circle, looking inward toward each other. Jason (bass) prefers to sit/stand next to the drum set, and with the piano on the other side. Jason explains his considerations:

> "In jazz, I often find that the bass player can unintentionally end up turning his volume up too high if he's too close to the piano, with his head almost 'under the grand piano lid.' I try to take a playing position at the end of the grand piano."[8]

Moving from the rehearsal circle to the concert formation with an audience then simply involves the saxophone player turning around, facing the audience. The rest of the quintet more or less maintains the (now) semicircle. Rehearsing and performing become two slightly different practices in terms of how to position oneself physically. However, in both cases, the intricate balance of sound—acoustically or aided by an amplifier—is pivotal for being able to participate with the necessary richness of both details and overview.

Utilizing recordings

Designating one's access through listening to the recorded material—hence pursuing ideas of improving one's playing through studies of earlier concerts—naturally becomes a pivotal issue in the trio. During interviews, it became obvious, how differently the three musicians utilize the recorded material between the concerts as well as how often they listen to their own playing on recordings. The ensemble's youngest member often listens to concert recordings to analyze his playing. Being from a generation growing up with computers and highly accessible digital recording technology, this is a very common element in the creative development process. He stated how he "listens a lot to [him]self as part of the process. But [he] also grew up in a different time as a musician, when we can do that all the time."[9]

For another trio member, listening to his playing in retrospect was mostly unpleasant and definitely not *his* approach to artistic development. Zana explains: "I have a hard time listening to myself playing. Usually, it's torture."[10] He then elaborated: "For me, when I listen to a recording [of the trio, ed.], it's always *before* I discovered that... I'm always on my way, in a process."[11] Joachim is more ambivalent on these matters:

> "When I started listening [to the concert recordings after the tour, ed.], I found that there were many things I wish I had heard *during* the tour rather than after (...) but I don't know if it would have been better listening directly after the concert (...) When I now listen to the recordings of the consecutive concerts, I think that I may repeat some ideas that I would have *never* returned to had I listened

8 Jason, interview, p. 7
9 Andrea, interview, p. 6, author's transl.
10 Zana, interview, p. 6, author's transl.
11 Zana, interview, p. 6, author's transl.

> to the recording in between [before the next concert, ed.]. But it might not have been as fun."[12]

Evidently, although options for listening to the recordings are there, the musicians have very differentiated ideas about how to *designate* the option of *access* to (improved) participation. The musicians' exchange of viewpoints and experiences becomes a salient part of the collective artistic practice. The musicians change their participation accordingly.

In the quintet, the rehearsals were recorded from start to finish for two reasons: 1) for the composer to evaluate and potentially revise his composition or the arrangement; 2) for all members to listen back to the repertoire when preparing for a performance. The latter function is especially very useful should a member be unable to attend a rehearsal. "I'll just bounce the whole recording to you all", ensemble leader Jason stated during rehearsal. As Jason explained during an interview, he spends a lot of time in the studio to listen back to the recorded material from the rehearsals, and—similar to the rock bands involved in my previous research (Brinck, In print)—applies advanced digital editing tools to experiment with alternative sequences of the different parts of the composition. The revised sequences are then bounced to all the members before the next rehearsal. One might say that the jazz quintet leader here *designate*s the fellow musicians' *access* to relevant participation at the next rehearsal by using digital technology.

Why this jazz ensemble?

On a macro-level, designating access to participation implicates arguments for choosing to be a member of this particular ensemble. As for joining the trio, Joachim said:

> "In some ways, it [the trio, ed.] just emerged by itself. Somehow, it just occurred. As you say, we just met a couple of times and just played, and nothing noteworthy happened. Then we met again and played some more. And then, we somehow felt something worth holding on to."[13]

Also, the fact that the trio never rehearses but specifically aims to improvise collectively in front of an audience as their "trademark" appears to be significant for the musicians. According to Zana, "this is only possible because we represent this constellation of different temperaments that complement each other"[14] and Joachim added that he "find[s] it extremely nice, because I have played in many improvising ensembles over time, and I rarely get such strong a band feeling as I get here."[15]

All three musicians in the trio have clearly chosen to participate in this jazz ensemble for a reason, and they even seem to somewhat agree on why this is a nice way to produce music together.

12 Joachim, interview p. 1, author's transl.
13 Joachim, interview, p. 25, author's transl.
14 Zana, interview, p. 24, author's transl.
15 Joachim, interview, p. 25, author's transl.

These matters appear quite differently in the quintet. Here, the initiator (i.e., the ensemble leader) had specific musicians in mind for bringing particular compositions "to life" in a performance. Ensemble leader Jason explained how some of the current members have been among his favorite co-musicians for years, whereas pianist Eric is a rather new acquaintance. Jason also explained how he initially met his pianist at a brief studio session that he asked him to participate in, and how the relationship has developed over time:

> "As it turned out, he played really well, so it was a chance to take [not knowing him that well, ed.]. And since then, we've had the opportunity to play together on different projects, where the take-off is quite different—free impro and such. He's a pianist with a modern approach. He knows the conventional jazz approach, but his playing is not tied up in it the way that I hear other pianists are (...). But Eric is very liberated from this tradition and can easily play in a different direction. There's no tradition holding on to him. That's what I mean about modern."[16]

Ensemble leader Jason reflected on the reasons why he chose Eric as a pianist on this particular occasion. In Jason's view, Eric's modern style suits Jason's music well. By choosing Eric, Jason *designated* his *access* to relevant participation in the ensemble. By accepting the invitation, Eric similarly *designated* his *access* to participation in Jason's ensemble, getting the opportunity to play Jason's compositions.

Later in the interview, Jason argued for his choice of drummer:

> Jack, a young drummer, only 22 (...) I think he plays really well. And he's creative, and that's a rare thing in our town, at least—finding a drummer with that rhythmical language. And then he's tight, lively, and great to play with. I can just play as I please and he hears that and relates to it. I got to know him a couple of years ago.[17]

Again, as the ensemble leader, Jason has chosen his drummer for a number of reasons to optimize the potential for creating the kind of music that he likes. Through choices of specific musicians, Jason has designated his and his fellow musicians' access to participating in creating this specific music together. And not as a set, cemented practice but as a practice to be evolved, modulated, explored, and learned from.

Commentary

At the micro level, *designating* one's *access* to specific forms of participation through negotiating the positioning of instruments in a room is—for natural reasons—crucial to a band playing acoustically. The process is directly comparable to rock bands' sound check and the imminent adjustment of monitor settings with larger bands and stages: Can I hear and sense what I *need* to hear and sense for me to act and react relevantly in the course of the musical endeavors? Is my place a pleasant, relevant "place"? In terms of digital tool decisions, the analytical perspective of *designating access*

16 Jason, interview, p. 2, author's transl.
17 Jason, interview, p. 1, author's transl.

surfaces a similar potential, when analyzing the significance of how microphones are placed and the arguments regarding their placement.

At the intermediate level, my analysis reveals how differently the musicians find the recorded material relevant and at what stages in the musical endeavor. Most imminently, the highly differentiated usage of this digital option by the three musicians in the trio illustrates how each musician can "find his own path" through these otherwise deeply collective and interdependent creative processes. The recordings become an individual space for exploration in due time (or not at all). Selecting recordings for publication appears to be a more collective matter (cf. *Attending to aboutness)*.

At the macro-level, choosing a specific ensemble with specific musicians to be a "place" to devote time and attention to, is a complex matter involving both musical and personal considerations. The trio musicians seem to acknowledge different aspects of "temperaments" supplementing each other, and analyses also demonstrate how the mutual musical experiences grew and evolved over time. In the quintet, analysis shows how musical relationships arise and develop from the perspective of the ensemble leader, and how carefully considered the choice of fellow musicians was. Choosing fellow musicians appears to play a pivotal part in the collective art-making process, where the potentials of specific forms of participation are given high priority. The analytical perspective of *designating* one's *access* to participating in this specific band illuminates this significance.

2. *Exploring, (ex)changing knowledgeabilities*

The situated learning analytical concept of knowledgeability takes the perspective that "Thinking or knowing or knowledge is always a part of praxis, captured through notions of identity, personal—of course, social-relational—and collective with respect to various social arrangements" (Lave 2011, 153). This concept underlines the fundamental perspective that knowledge *per se* is inseparable from actions, artifacts (in this case also meaning the music).

Skills and knowledge as well as actions and thoughts being deeply and inseparably entangled, surfaces particularly clearly in musical practices such as the ones from the study: Developing and playing improvised music represents ongoing verbal as well as musical exchanges of impressions and expressions, of ideas and emotions.[18] The analyses to follow will reveal such examples.

A state of mind

What state of mind suits each musician when preparing for and engaging in concerts, and how is this explored and shared among musicians? These questions appeared to hold some interesting exchanges of experience and sensation, especially among the trio's musicians.

18 Analyzing these musical outcomes in detail is beyond the scope of this study. However, listening to the concerts informed my understanding of the musicians' dialogues on matters that closely relate to the musical processes of (ex)changing knowledgeabilities.

For Zana, the audience—whether at a concert venue or record-buying fans—are not the only ones listening:

> "We don't play for the spirits, right? Or... we don't dare say out loud that we do. I must admit that for me, it's not just the audience—the few people sitting there—there's also a quite substantive audience that we can't see. Out in the void, the nothingness. That's also very important for me."[19]

Zana elaborates, how "you identify—after having done it thousands of times—the state of mind you need to be in, for that to happen. (...) It's something about: totally relaxed, not some argument going on. Simply emptying your head."[20] Reaching this state of mind for playing a concert can sometimes be a challenging matter. Andrea recalled the following:

> "This time [this tour, ed.], because we decided to record every concert, me having to set up the gear before we play, it disturbs me a little. I've had to get used to that. Especially one time in [venue], we were busy [setting up] because there was a [quick] change of bands on the scene."[21]

The trio musicians' reflections and generous sharing of experiences became a reservoir of mutual knowledgeabilities to not only be individually explored but generously exchanged. These explorations and exchanges seemed to change the musicians' participation by furthering each musician's development in a dialectic relational process as the ensemble's artistic outcomes emerged.

When asked whether he found that the quintet seems to "hit" the musical atmosphere that he aims for, ensemble leader Jason responded as follows:

> Yes, I do. I also like that there's something left to the situation because we can't make specific deals about every little detail and I can't write everything down to ensure that everything is 'bulletproof'. And I don't want it that way, either. Basically, we're all improvisers, so we know for sure that something good is gonna come out of any situation.[22]

During the quintet rehearsal, I observed, how this approach to balancing between the compositional proposition on the sheet and the actual "bringing the music to life" was continuously debated. How do you think this idea fits the song? What chord voicing do you like the best? Should I play an octave lower here? Mutual explorations and exchanges were a built-in part of the rehearsal, with the musicians collectively pursuing a specific musical expression. Such exchanges clearly constitute changes of knowledgeability (learning) on behalf of the musicians, inseparable from the musical developments and changes involved.

19 Zana, interview, p. 19, author's transl.
20 Zana, interview, p. 21, author's transl.
21 Andrea, interview, p. 18, author's transl.
22 Jason, interview, p. 4, author's transl.

Technology as choice

Technological artifacts play a salient role in how members of both ensembles explore and exchange insights and experiences, and how these practices of exploration and exchange change each musician's participation and the collective practice.

In the trio, addressing a particularly successful concert recording involves discussing options regarding adjusting the balance and placement of the instruments:

> Zana: "But can you do something to bring the saxophone a little further back in the soundscape? Or ...?"
> Andrea: "You can compress it all, which means that everything becomes closer to the same level [of volume, ed.]."
> Zana: "OK."
> Joachim: "Yeah, I think you can come a long way by doing that. Another thing you can do—instead of panning the whole thing [all the instruments] out [to the sides]—is pan the piano channel in [toward the center, ed.] and turn the drum channel down some."[23]

Expert knowledge on the specific live recording and mixing process was shared and exchanged. Notably, not as individual areas of privileged expertise but rather as (historically construed) insights that need to be shared for the best possible music to become a potential subject for publication. And each exchange changes each musician's knowledgeability.

In the quintet, technological artifacts include not only the use of sheet music but also whether the sheet music is presented and utilized as paper copies on a music stand or through the use of digital technology (in this case, the iPad). Some of the musicians (including the ensemble leader) preferred using the iPad for presenting sheet music, while others preferred printed sheets. These different technological priorities were interesting to observe and analyze.

Two of the musicians had chosen the iPad as their "sheet music holder." They both highlighted the fact that choosing the iPad has the advantage that all compositions could be sent via e-mail before the rehearsal. The iPad represented a "briefcase," holding all the compositions from all the bands that they played with. Thus, it was a very manageable way to keep track of a large number of different materials for them. Specific software allowed for personal notes and comments. Also, musical recordings were easily accessible on that same platform, and sending new sheet versions and new songs was very easy. Challenges with the iPad included shifting pages while playing with both hands (as most musicians do all the time) and also the challenge of finding a music stand strong and stable enough to withstand the weight of the iPad.

On the other hand, the musicians preferring paper versions of the sheet music enjoyed the tangible nature of the paper, being able to use an old-fashioned pencil for

23 Dialogue from collective interview with the trio

notes and corrections. Challenges included how to fit four or five paper sheets on one stand and also, on one occasion, how to get hold of new songs quickly.

At the rehearsal, I observed how ensemble leader Jason had already considered the fact that some used iPads and others preferred paper versions: To rehearse a new composition that he just finished the night before, Jason had prepared paper copies for some of the musicians, while he "bounced" the digital versions to the fellow musicians using iPads.

The practice allowed for different forms of participation with regards to the preferred sheet music technology, while advantages and challenges with specific technological choices were openly explored and shared.

Commentary

My analyses illustrate how the musicians generously shared insights and detailed knowledge as an inherent part of their mutual artistic practice. This not only occurred through playing and exchanging their musical ideas and inspirations, but certainly also through detailed dialogues about preparing and practicing, arriving at venues, getting into a suitable state of mind, and even the technological options for publishing the strongest possible artistic statements from the trio. In the quintet, I noticed how musical choices were openly discussed during rehearsal and how different technological solutions existed side-by-side for different—and equally legitimate—reasons.

Knowledge and skills, sensations and experiences, history and the present. It all comes together as (ex)changeable matters, changing the musicians' ongoing participation in this band, other bands, and even everyday lives. The analytical scope of *exploring and (ex)changing knowledgeabilities* enables us to see and appreciate the significance of these mutual border-crossing practices. It also reminds us of how professional generosity (not always a self-evident approach in a competitive world) appears to be an omnipresent condition for developing new and interesting art in these cases.

Attending to aboutness

Through my research and musical practice within the areas of jamming and learning, I have often found myself needing an analytical handle to encapsulate how participants' ongoing decisions when participating in such practices are continuously qualified and guided by collective overall perceptions of meaning and intentions as they are culturally and historically construed. I needed a concept that was "neither too individual, too linear and decisive nor too cognitive and introverted" (Brinck, In print). Lave and Wenger (1991) and later Lave (1996) suggested analyzing the "telos" of participation to emblemize how goals and directions for practice guide participation. In Brinck (2014), I argued that "telos" might signify a too definite, non-negotiable "goal" for practice, whereas my suggested concept of "aboutness" seems to indicate a broader, more negotiable—and also culturally contextualized—direction for participation in practice (228): For the interviewed New Orleans musicians, participation in New Orleans second-line parades and funk jams was guided by an overall aboutness. The

sensation of being "embodied in the sound and the feel of the music, in the groove being 'dancy' and strong. The sensation of the groove (i.e. the music) becomes inseparable from the changing participation, consequently of what is being learned (...)" (140).

In later publications (Brinck 2017, In print) I further developed the concept and its arguments by analyzing participants' attention to the aboutness of practice "to grasp the overall notions directing person's decisions, actions, ways of participation, degrees of peripherality, and so on" (Brinck, In print).

Live concerts and records

The musicians in both ensembles spent a lot of time attending to the aboutness of their mutual artistic endeavor. During observations and interviews with the trio, it was noteworthy how dialogues around the musical quality and artistic significance of the concerts and their potential for publishing became an important arena for attending to the musicians' impressions and experiences as well as the entire project's aboutness.

Andrea from the trio found that "some things are completely awesome to experience live that are not as... not only may it not record well (...) but you're in another atmosphere at home. It's something else to listen to the music coming from speakers at home than live."[24] With reference to a specific concert, Joachim noted how "it was probably a good concert. I think I can sense that. To me, it's also something about the choice of form, the duration of things, and that's not as much of an issue live. Or, it can be difficult to sense in a recording, if it just felt right in the room."[25]

Of course, conflictual positions constantly appeared. Andrea reported the following about a concert: "When we recorded the album [mentioned earlier in the conversation, ed.], it was also a very molested piano. And you, Joachim, found that the piano at the venue was even more terrible and that they shouldn't record this concert. But I set it up anyway, and after, you were like, 'This you may definitely publish!'"[26] On the issue of playing on a beat up (upright, often) piano, pianist Joachim stated: "When I play on a really nice grand piano, I often miss the 'resistance' (...) I can get this feeling that the piano was *too* good for our band (...) I couldn't figure out how to play *this* piano in *this* band (...) it has to do with some kind of 'wellness' (...) it becomes another expression."[27]

In the quintet, the rehearsal aimed at the musicians getting familiar with the repertoire before an upcoming concert. Thus, ideas about future publication were not imminent. However, ensemble leader Jason's approach to living off being a professional jazz musician was partly built on composing, recording, and publishing material. As such, during the rehearsal as well as the interview, it became obvious that inviting specific musicians and playing specific compositions were firstly directed toward a series of live performances and eventually the recording and publishing of the material.

24 Andrea, interview p. 4, author's transl.
25 Joachim, interview, p. 5, author's transl.
26 Andrea, interview p. 26, author's transl.
27 Joachim, interview p. 26, author's transl.

Jason explained his ideas about the ideal relationship between the compositions and musicians' live performance approach, and how he

> " (...) set up the building blocks, so there's a block called 'solo', a mark for 'cue'—so we know how to move on. There need to be free sections, places when we 'cut loose.' I like the tight melody (...) the goal must be that—let's say we have two or three concerts—so that by that third concert, you can start tearing the shapes apart a little again, crush it a little. When you know the material so well, you can rip it up. (...) It may be an unavoidable development that each musician starts relating more and more freely to this starting point."[28]

From the rehearsal to the live performances and back to the recording studio, the music and the musicians' approaches to playing it changes. And through specific attention to the "aboutness" of the music produced, a mutual sensation about where "this is taking us" seems to evolve.

Our sound

Regarding the sound of the trio on records as part of their artistic profile or image, the musicians at one point talked about how to combine two concerts (that also seemed to work fine on the recording) on *one* album. One for each side to compare the two recordings from very different venues, Andrea found that "there's no doubt that the other concert will have a much more advanced hi-fi sound"[29]. Joachim suggested that

> "no matter which [concert], we need to make it sound good and the 'trash' it. I guess [the studio technician]'s approach will be to balance it as well as possible and then do something so that [it sounds like] it comes from the backseat of a car, coming out of a small speaker. Like the first record, it should sound like a cassette tape that you bought at a market... rather than something from [acknowledged national jazz label]."[30]

Deciding on material for the next record involved balancing considerations related to the band's preferred "sound profile" on the one hand and the concert or "home listening" experiences (i.e., publishing) on the other:

> Andrea: "I'm not sure [a specific concert] was *that* great of an experience for the audience. But I think it will be nice on record, although it's recorded with only two mikes and in a quite poor quality. The one from [venue] this summer"
> Joachim: "Yeah, when we were all in perfect shape after [many consecutive concerts at a national festival]. You have to remember that. It was just at the end of the festival."

28 Jason, interview, p. 4, author's transl.
29 Andrea, interview, p. 33, author's transl.
30 Joachim, interview, p. 33, author's transl.

Andrea: "It sounds incredibly good! And I also think the sound on it... I like that sense of unity in the sound."[31]

Discussing the publication of material for a wider audience than that appearing at a specific concert provides room for negotiation, which involves *attending to the aboutness* of the trio's music.

In the quintet, discussions around sound and artistic expression surfaced repeatedly during rehearsal. Should it be more like this? This rhythmic pattern or this? Ensemble leader Jason remembered a dialogue with drummer Jack:

Jason: "There was this song going 1-2-3, 1-2-3, shifting to 4/4, when I wanted the drummer to... I didn't say anything at first, but he played something, and..."
Author: "What song was that?"
Jason: "It's called (...). With some extended melodic lines (...) And Jack took a very cautious approach at first. Then, after our first run-through, I told him: 'You *are* this song, you are the one to give it life. Be insisting and lively. Because, we have a slow and dragging melody and chord progression, and the lively part should come from the drums'. Then he really got it in our next run-through!"[32]

After Jack had presented the revised drum part, Jason exclaimed with enthusiasm: "This was a 1000 times better; this I liked."

Author: "Yeah, but then Jack also said that he actually liked the quiet version better, and then you had this debate."
Jason: "I clearly liked the lively, insisting version better."

Here, this debate on the character of a specific musical part ends up with the composer more or less deciding on the version he prefers. Providing attention to the music's aboutness becomes a collective process at first, but ultimately ends with the composer (in this case also the leader of the ensemble) asking for a specific solution—the one closest to his personal musical preference or idea.

Commentary

The analytic emblem of *aboutness* helps us to discover aspects of more overall goals and aspirations connected to the decisions that musicians make during their work processes. Through dialogues on material that is worth or not worth publishing, as well as dialogues on specific instrumental or musical parts, the musicians explicitly and implicitly appear to engage in profound conversations about the musical qualities that they are working to produce together. This involves sharing differences in artistic perspectives, preferences, and opinions about the relationship between concerts and records, listening positions, and ultimately what the trio's or quintet's music is *about*.

31 Interview, p. 2.
32 Interview with Jason, p. 5

Summary and new questions

Analyzing the collective practices of the jazz trio and the jazz quintet through the lens of situated learning theory has highlighted a number of interesting aspects on how participating in such practices can be acknowledged as learning. And—equally significant—how relations between the musicians' changing participation and the changing music appear inseparable and dialectically entwined.

The musicians appear to carefully attend to the overall intentions, goals, and meanings of their mutual endeavors, the *aboutness*. In their quest to reach those goals, they investigate and generously share their insights and experiences as these change over time. They *explore and (ex)change knowledgeabilities*. The musicians demonstrate, how they carefully ensure that they participate in ways—and at times and places—that preeminently supported those aspirations. They *designate* their *access* to participation. Being a member of a trio or quintet seems to be an ongoing process of change, of learning.

This research has provided a potentially rich scientific palette of new knowledge about the circumstances under which creative actions and thinking are learned within different and deeply cooperative creative practices. Detailed knowledge about "the whats and hows" of collaborative creative work processes and the role of digital tools presented herein holds potential for future research in the design of workplaces and routines, the arrangement of school activities and curricula, and arguably also—in a longer scope—how future schools, homes, and offices might be perceived and built.

From a research educational perspective, this research contributes a set of novel analytical takes on creative human relations as not only unpredictable, unsolidified, and even "unmanageable," but indeed creatively productive and visionary if the aforementioned analytic perspectives are taken seriously into consideration.

New questions arise: How do we design "schoolish" activities to facilitate and enable such intricate practices as the ones brought forward here? How do we facilitate the many different forms of participation—including the individual's option to choose and adjust such access to a preferred mode of participation—in our educational environments? Finally, how do we ensure that such "schoolish" environments become places for experts *and* novices to flourish and (ex)change in strong, saturated practices of presence and creativity?

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