

A Research about Rhythm and Phrase Recognition of Classical Music Performer Learning Jazz Ad-lib Solo Phrases based on Score

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Abstract. The author has conducted a survey that rhythm and phrase recognition when classical music performers score based sight-read about jazz ad-lib solo. Classical music performer generally takes the 1st and 3rd quarter as accented beat when they perform 4/4 beat phrases. However the jazz performer generates their ad-lib phrases, taking the 2nd and 4th quarter as accented beat. Thus for the classical music performers, sight-reading the generated jazz phrase is difficult.

In this paper, the author reports the survey that records the processes that the classical music performers sight-reading jazz blues ad-lib phrases, changing the accented beat. The targeted ad-lib phrase is Charlie Parker's blues solo which given by musical notated score. At first time, the performers sight-reading the target ad-lib phrase counting off beat (2nd and 4th quarter) as accented beat, jazz style. At second time, the performers do the same sight-reading counting on beat (1st and 3rd quarter) as accented beat, normal classical style. Final time, the performers do the same sight-reading counting all quarter. The performers records their stumbling phrases for the each different counting tried. As a result, most performers recorded different the stumbling phrases between the jazz style counting and the classical style counting. These results indicate that difference of their beat counting and accented beat, between classic style and jazz style, effect their recognition of the ad-lib phrases.

Keywords: Musical Recognition · Jazz Ad-lib Performance

1 Introduction

It is very difficult for the audience to observe not only the expression of music as expressing music but also the recognition of the performance expression of the performer. In this paper, we discuss the recognition of the phrase and its rhythm by the difference of position of accented beat between jazz style and classical music style, based on interviews conducted by classical music performers playing Ad-lib solo of jazz.

Butterfield discussed about a typical element of the jazz rhythm, "Swing" [1, 2]. However, Swing alone is not the typical rhythm of jazz compared to classical

music. The author thinks that it is important that jazz learners become sensitive to the difference of accented beat with classical music in order to acquire the jazz improvisation likelihood. The author expects that the problem of internalization of rhythm due to differences in the accented beat may be referred to as “Groove” in research field on music cognition and perception. Stupacher et al. did general discussions based on quantitative experiments from the viewpoint of brain cognitive science about “Groove” [4]. However, it is difficult to say that these experiments and discussions are not from music, musical theory and music educational perspective, thus the author thinks that they are out of the sense of actual jazz learners.

Figure 1 shows Charlie Parker’s own ad-lib solo in *Now’s the Time* [3]. The author predicts that classical music performers cannot internalize this ad lib phrase easily from the rhythmic point of view compared to regular classical music. Figure 2 shows several red square frames which means “stuck places” when the author, classical music singer in music academy major in old days, himself actually practiced this ad-lib phrase. The author analyzed that a type of phrases confused the author’s rhythm recognition. The typical phrases is which it begins with anacrusis then has a certain length non code tone at the head of bar. The cause is the different position of accented beat between jazz style and classical music style.

In classical music style, we feel accented beat in 1st and 3rd quarter. On the other hand, in jazz style, we feel accented beat in 2nd and 4th quarter. The author predicts that the differences of accented beats will affect the internalization of the phrase rhythm. The Charlie Parker’s ad-lib solo has a lot of phrases with a rhythm deviated from anacrusis and beat which is difficult to understand in the context of classical music. If those phrases are attributed to the jazz style accented beat, it makes it very difficult for classical music performers to internalize their phrases.

Therefore, the authors investigated the influence of differences in accented beat when classical musicians copied jazz ad-lib solo phrases on a score basis.

2 Experimental Detail and Result

The purpose of this experiment, to observe clear emergence of differences of rhythm recognition between jazz style accented beat and classical style accented beat in practice of jazz ad-lib solo copy based on score.

There were 4 subjects, classical saxophone performers. 2 subjects finished graduate master’s degrees and 2 other finished undergraduate degrees in music college. Experimental instruction was sent to subjects by e-mail with the score which shows as figure 1. The experimental instruction as follows:

Please sight-read this score. You can use or not use your instruments. The instruction sets limits to count beats of the sight-reading. Please do not use the metronome while you beat yourself.

1. 2 counts for a bar (2nd and 4th quarter)



Fig. 1. Charlie Parker *Now's the Time* Ad-lib Solo in *Charlie Parker Bee Bop-pers*(1945) **Fig. 2.** Mistake point of the author

2. 2 counts for a bar (1st and 3rd quarter)
3. 4 counts for a bar (every quarter)

At first, please sight-read while taking the count, indicated by 1. (2nd and 4th quarter). Please write down where you stucked places. The sight-read is done once or twice.

Secondly, please sight-read while taking the count, indicated by 2. (1st and 3rd quarter). Please write down where you stucked places, similarly.

Finally, please sight-read while taking the count, indicated by 3. (every quarter). Please write down where you stucked places, similarly.

Figures 3, 4, 5, 6 are result of subject 1, 2, 3, 4. Gray squares mean stucked places in the count style 1. (2nd and 4th quarters, jazz style), blue squares mean stucked places in the count style 2. (1st and 3rd quarters), and red squares mean stucked places in the count style 3. (every quarter).

Only the test subject 1 (figure 3), her stucked places in the count style 1. (2nd and 4th quarter) is improved by the count style 2. (1st and 3rd quarter) and the count style 3. (every quarter). On the other hand, subjects 2 (figure 4), 3 (figure 5), and 4 (figure 6) had different stucked places for the count style 1. (2nd and 4th quarters) and the count style 2. (1st and third quarters), respectively.



Fig. 3. Subject1

Fig. 4. Subject2



Fig. 5. Subject1

Fig. 6. Subject2

3 Discussion

3.1 Differences depends on Accented Beat

The result that, in subjects 2, 3, and 4, the stucked place was different depending on the difference in position between the jazz style and the classical music style of accented beat is observed. This result suggests that the internalization of the phrase's rhythm may be affected by the location of the accented beat.

3.2 Triplet with Anacrusis in Loose Rhythm Fluctuation

The 3 out of 4 subjects answered that they stucked at 28th and 51st bar measure. At the 28th bar measure, the subject 1 and 3 stucked with the count style 1. (2nd and 4th quarter), the subject 2 stucked with the count style 2. (1st and 3rd quarter). At the 51st bar measure, the subject 3 and 4 stucked with both count style 1. and 2. Note that both notes shape of the 28th and 51st bar measure, the bar's start is not note-on, then a phrase which begins at eighth off beat in 2nd quarter includes triplets and 16th notes. In jazz style 2nd quarter is accented beat, in classical music style 2nd quarter is up beat. Also Charlie Parker himself performed this phrase's rhythm not in just time, accompanied by a rather loose rhythm fluctuation at his CD[3]. The author predicts that the rather loose rhythm fluctuation is due to the difference in accented beat, and hence the difference between jazz and classical performers' rhythm cognition, thus this phrase arises from the sense of jazz style rhythm and it is difficult for classical music players to easily grasp this.

4 Conclusion

In this paper, the author predicted that the difference between jazz and accented beat of classical music might have influence on cognition of phrase, then had experiment to let actual classical music performer to sight-read the jazz ad-lib solo phrases changing accented beat. The result suggesting that the difference of accented beat has an influence on cognition of jazz phrases. In addition, the author speculated from classical experiments that classical musicians are hard to grasp the phrases in which the rhythm fluctuation is severely brought about in actual performance.

References

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