

Chapter 1: Introduction

The goal of this study is to develop a four-mallet marimba technique that utilizes alternation within each hand on linear passages, then apply this technique to selected keyboard works of J. S. Bach. This paper provides a method of training the hands for this type of alternation and will hypothesize a conception of hand positions as a method of facing the visual logistical issues of marimba performance. A performance annotation chapter will then apply the alternation sticking, and its resultant positional concepts, to three new transcriptions of J. S. Bach's inventions and a prelude and fugue from his *Well-Tempered Clavier* (Book II).

This alternation technique is predicated on the hypothesis that certain linear passages for the two mallets of a single hand may be played with increased stability, accuracy, and efficiency using an alternation-based sticking in lieu of the repetition-based¹ sticking practice used by contemporary marimbists. In many passages, the player may simply apply standard two-mallet left and right sticking practices to the two mallets of a single hand. The increased stability mentioned above may also aid the marimbist's kinesthetic sense of the bars, thereby improving accuracy in one hand and freeing more of the player's visual attention for the non-linear (or "other-linear") hand. Finally, this improved kinesthetic sense can assist in sight-reading, where the player must rely on the "mind's eye" (a combination of the player's kinesthetic sense and a mental picture of the keyboard) for both hands while the eyes remain trained on the unfamiliar page.

¹ Throughout this paper "alternation sticking" shall refer to the use of alternation of the sticks within a single hand to play linear passages. Conversely, "repetition sticking" shall refer to the use of a repeating mallet to play a one-handed linear passage.

In Chapter 2, a brief look at four-mallet marimba technique through the latter half of the twentieth century will begin with some of the earliest examples of four-mallet playing in solo literature and progress to the modern practices of composers and significant performers. A cursory description of the grips available to marimbists at the turn of the twenty-first century will concentrate on the Musser grip,² as this paper will be primarily concerned with the application of alternation sticking to this grip.³

In Chapter 3, the types of passages that can benefit from alternation sticking will be discussed. Excerpts from contemporary marimba literature will show existing uses of single-handed narrow-interval and alternation sticking by composers and arrangers of the latter quarter of the twentieth century.

In Chapter 4, exercises and etudes will be presented to train a marimbist's hands for the challenges of playing at narrow intervals (required by alternation sticking). More specifically, the exercises and etudes will prepare the hands for four-mallet transcriptions of the keyboard music of J. S. Bach. Exercises will utilize familiar scalar "warm-ups," applications of snare drum rudiment patterns (a rich canon of binary-sticking pedagogy), and practice models taken from J. S. Bach's melodic-compositional technique. Bach themes and passages from existing

² This study will follow Leigh Howard Stevens' practice of using the term "Musser Grip" (named after marimbist Claire Omar Musser), even though most players today call the modern version, "Stevens-" or "Musser/Stevens- Grip." See Chapter 2 for a more specific description of the development of this grip.

³ This author primarily uses the Musser grip for the marimba, but his initial attempts at using alternation sticking with the Burton grip (named after vibraphonist Gary Burton) have been surprisingly effective. Players who are more experienced with the crossed-stick grips than the author of this study, may find that some (or even most) of the techniques described in this paper will apply to non-Musser players, however the author's lack of practical experience with these grips requires that that application lie outside the scope of the current study.

marimba literature wherein alternation sticking might assist the player will be discussed and alternative stickings will be presented. Original etudes, in contemporary styles, will specifically target the muscles needed to play narrow intervals and alternation sticking within a single hand. Finally, the relationship between a scale's visual-spatial profile and sticking selection will be examined and a procedure will be enumerated for generating efficient stickings regardless of the scale used by the composer.

Chapter 5 will provide annotated transcriptions of the "Prelude and Fugue in C Minor" from Bach's *Well-Tempered Clavier* (Book II) for "low-A" marimba, and his two-part inventions in F major, E major and Bb major for 5-octave marimba. The annotations for these transcriptions will include such information as: the interaction between the physical technique, the eye, the ear, and the kinesthetic sense; sticking selection (suggestions provided throughout); and recommended approaches to practicing the more technically challenging passages.