Chapter 2: A Brief History of Four-Mallet Technique

Initially, music for the concert marimba was an outgrowth of two-mallet xylophone technique, which was primarily linear in nature. When players started using two mallets in each hand, the third and fourth mallets were used for fleshing out linear passages by adding double stops[1] to what was still essentially conceived as two-mallet playing. These new four-mallet parts enabled the players to play three- and four-voiced chordal structures, but the music rarely, if ever, demanded true independence between the two mallets of a single hand.

Clair Omar Musser's etudes in C major and B major, published in 1948, illustrate the early use of four-mallet technique to play music that was conceived as an alternation between left and right hands. The extra mallet in each hand simply allowed for double-stops to be added to the two-mallet line.

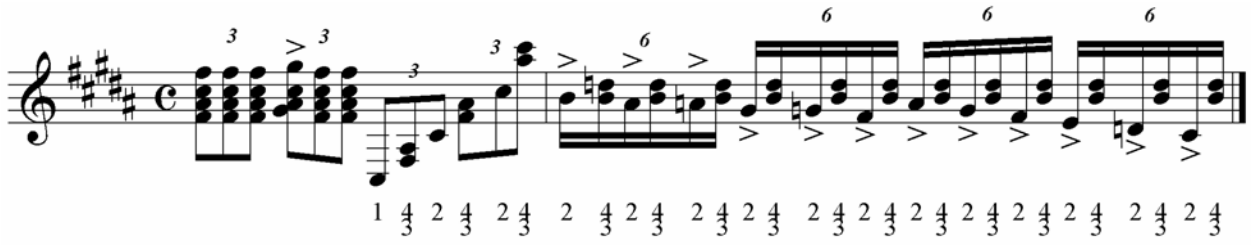

Figure 2.1: Example of use of four mallets to flesh out music that was conceived as a two-mallet line. Clair Omar Musser, *Etude Op. 6, No. 9* mm.8-9.

In Musser's B and C etudes, the player is never required to play mallet 1 followed by 2, or 3 followed by 4 in rapid succession–either one hand plays a double-stop,[2] or it is immediately

[1] "Double-stops" refers to the playing of two notes simultaneously and is borrowed from nomenclature used by string players. "Triple" and "quadruple" stops are, respectively, the playing of three and four notes simultaneously.

[2] This study will number the mallets, following the example of Leigh Howard Stevens, in ascending order from left to high).

followed by the other hand. Measure 9 of Musser's B Major *Etude* (see Figure 2.1) uses a descending left-hand melody (chromatic, then diatonic) with a tonic pedal in the right hand separating each melodic tone. Musser adds the major third as a double-stop in conjunction with the tonic pedal to thicken the texture—while technically three parts may be heard, only two of the parts are independent. This type of dependence is typical of early uses of mallets 1 and 4.

Subsequent marimba music required the alternation of mallets within one hand, but mostly in limited circumstances where broken chords were found. These circumstances often resulted in a repetitive-sticking sequence such as the 1-3-2-4 "rain" passage of Mitchell Peters' *Yellow After the Rain* (1971) shown in Figure 2.2.

Single-hand linear passages, such as the one at the beginning of the piece, however, were meant to be played by the repetition of a single mallet. Figure 2.3 shows the second statement of this theme (in the left hand).[3]

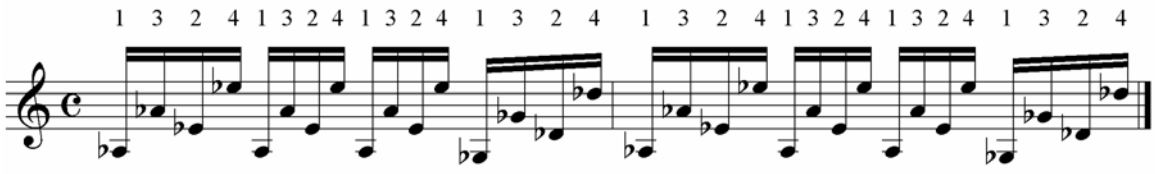

Figure 2.2: Example of early use of four mallets to flesh out music that was conceived as a two-mallet line. Mitchell Peters, *Yellow After the Rain* mm.46-7 [Stickings from Peters' text.]

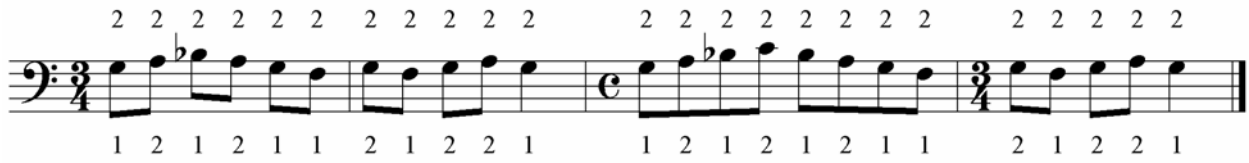

Figure 2.3: Illustration of a simple melody with repetitive stickings (above—supplied by Peters' text), and alternation stickings (below—new to this study). Mitchell Peters, *Yellow After the Rain* mm. 16-9.

[3] Chapter 4 of this paper will address this very passage from an alternation-sticking perspective.

The use of repetition of a single mallet to play a linear passage in one hand remains a common practice today—although the increasing complexity of marimba literature requires the player to perform this technique with any of the four mallets (including the exterior mallets of each hand). Many contemporary, single-handed linear passages use the extra mallet only when a leap is encountered such as in the ostinato left hand figure near the beginning of Keiko Abe's *Michi for Marimba* (1978) which uses mallet 1 to reach across a leap of a fourth, then follows with 2-2-2… for the subsequent stepwise notes (see Figure 2.4). Leigh Howard Stevens' transcriptions (with sticking suggestions) of selected Bach *Two Part Inventions* utilize a similar sticking rationale (see Figure 2.5 and Figure 2.6).[4]

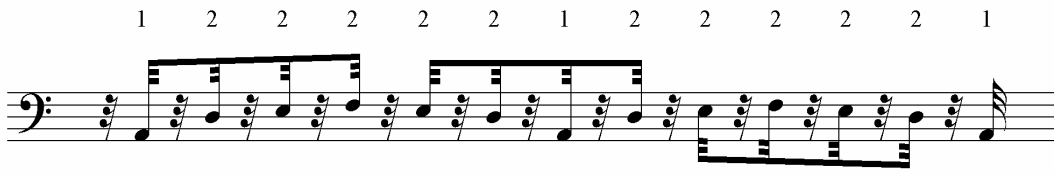

Figure 2.4: A single-hand passage (extracted) showing the use of the second mallet to bridge a leap, then continuing with repetition sticking. Keiko Abe, *Michi for Marimba* p. 4 at the Espressivo marking [Measures, time signatures and stickings are not present in the Abe text.]

As the amount and complexity of marimba literature have increased during the past half-century, linear passages for one hand have become much more prevalent and intricate. Contemporary composers (who often are not marimbists) frequently write in a pianistic style, with a more-than-binary conception of independent lines. Add to this fact the expectation that marimbists must be familiar with a substantial body of Bach transcriptions (which are linear minefields) and the result, when combined with our current approach to playing linear passages,

[4] Both of these figures feature passages from works that will be addressed from an alternation-sticking perspective in Chapter 5 of this study.

creates a difficult environment for the conscientious marimbist who wants to minimize inaccuracy and maximize musicality.

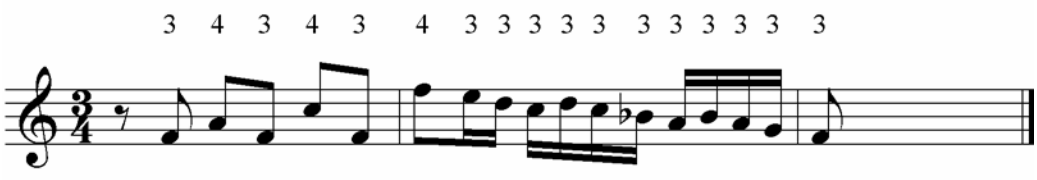

Figure 2.5: Stevens' use of two mallets to bridge leaps, and one mallet to play scalar passages. J. S. Bach, *Two-Part Invention in F Major* trans. Stevens mm. 1-3. [Stickings from the Stevens text.]

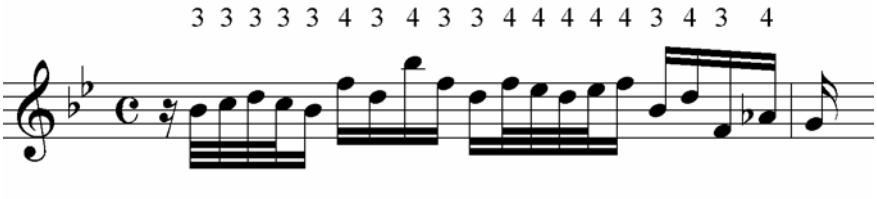

Figure 2.6: Stevens' use of two mallets to bridge leaps, and a single mallet to play scalar passages. J. S. Bach, *Two-Part Invention in Bb Major* trans. Stevens mm. 1-2. [Stickings from the Stevens text.]

As contemporary composers have demanded more technical acuity in the concert hall, marimbists have developed various hand positions to deal with the difficulties encountered in the more challenging literature. Each method of holding two mallets in one hand (these will simply be called "grips") assists the player in overcoming a particular set of problems, while limiting the player's abilities in some other way. All grips hold the inside mallet between the thumb and index finger similar to way one would hold a single mallet. The primary distinction among the grips is the nature, and location, of the external mallet's insertion into the standard single-mallet hand position. The modern Musser grip also, uniquely, requires the palm to be almost perpendicular to floor. The following paragraphs will briefly discuss the three most common grips that are available to the modern marimbist, but a complete discussion of their respective

benefits and liabilities—which could easily necessitate a dissertation in itself—is outside the scope of this study.[5]

The Burton grip crosses the sticks under the palm, inserting the outside mallet over the inside mallet and between the middle and index fingers—the back of the hand is parallel to the ground. The Burton grip is primarily used for the vibraphone and is most comfortable when both manuals ("white" and "black" bars[6]) are in the same plane, although many players also use this grip on the marimba. Two-mallet playing is usually performed by mallets 2 and 4, with a hinge motion in the right hand and a rotating motion in the left hand (similar to the "Traditional" snare drum grip). Players often use repetition of a single mallet on adjacent bars to limit the inter-manual motion of each hand. Initiation of the stroke, in both the inner and the outer mallet, comes from the wrist—lending power, but (in the minds of some performers) limiting true independence within each single hand by constricting the finer muscle control of the fingers.

The "Cross Stick" grip (also called the "Traditional" or "Scissor" grip) is similar in appearance to the Burton grip, but the outside mallet is inserted under the inside. As in the Burton grip, the back of the hand is kept parallel to the ground in the down position. Many players use this powerful grip on the marimba, and it is especially effective for passages with parallel motion in a single hand. Two-mallet playing is usually performed with mallets 2 and 3.

The Musser grip differs from the other two grips in three ways: First, the outside stick is inserted between the middle and ring fingers and grasped firmly with the 2 smallest fingers. Second, both sticks are held at the very end in such a way that they do not cross under the

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[5] David Eyler, interview by author, longhand, Nashville, TN, 18 November, 2001. Eyler's knowledge of four-mallet grips was the primary source for the descriptions in this chapter.
[6] "White" and "black" will be used to indicate marimba bars respective to the white and black keys of a piano.

palm—this allows the fingers and thumb to play a more active role in motivating both sticks. Third, the back of the hand is rotated to an almost vertical position. The fact that these sticks do not cross within the hand both allows the sticks to operate more independently of each other, and allows the mallets to spread to wider intervals. These advantages do, arguably, come at the expense of some of the power afforded by the, more self-supporting, crossing grips. The alternation-sticking techniques and exercises presented in this paper require the use of the Musser grip;[7] consequently the use of this grip will be examined in much more detail in Chapter 3.

This author believes, as do many marimbists, that there are limitations as well as benefits inherent in each of the grips available today. The choice of grip by a player is a personal matter and there are brilliant players who use each of the grips—with a seemingly endless number of subtle variations. This author advocates a strong experiential understanding of all grips and flexibility in choosing a grip that matches a particular piece (or even a single passage). For example, some types of passages, especially those with fast, parallel, wide-interval demands, favor a crossing of the mallets inside the Musser grip (similar to that of the cross-stick grip) over the more common modern version of the Musser grip as described in Stevens' *Method of Movement*.

Limited examples of alternation sticking are already present in the works of some contemporary marimba composers. As will be discussed in Chapter 3, Michael Burritt's narrow-interval techniques are just one small step away from playing alternation sticking and Eric

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[7] Cursory experimentation with the Burton grip on the Bach inventions of Chapter 5 (with alternation sticking), show promise; however, for the purposes of this paper, the independence of the Musser grip is strongly favored by this author for the sticking techniques described by this study.

Sammut's works contain several examples of a single hand playing a line with alternating mallets. Leigh Howard Stevens' Bach transcriptions occasionally feature short mordents that use alternating sticks of one hand. Students, and sometimes teachers, may be inclined to dismiss these unfamiliar stickings because the reasoning behind them is out of the ordinary. The serious marimba student who has the time to spend on developing a strong technique will benefit greatly from working on the exercises, etudes, and transcriptions found in the later chapters of this text. The application of alternation sticking used in the etudes and the transcriptions is an organic extension of the narrow-interval technique of Burritt and the independent (but cooperative) lines of Sammut. When the independence is isolated and the technique focused, marimbists may discover a new tool in their technical arsenal.