AN INTRODUCTION TO 4-MALLET TENOR PAN TECHNIQUE: MALLET AND GRIP OPTIONS

By Dr. Joseph Galvin

Just as a timpanist must carefully select appropriate mallets, or a trumpet player must find the best mouthpiece for their horn and unique physiology, a pan player must scrutinize their selection of mallets and how to hold them to best suit their personal needs. As 4-mallet tenor pan is still a relatively new phenomenon, no codified technique or methodology has emerged. Each artist who decides to include 4-mallet playing in their repertoire must make personal decisions regarding mallet choices, different options of grips, and how to integrate 4-mallet playing into their overall performance. Pannists may come to different conclusions based on their previous experiences and musical needs. This article explores how these players have created unique methods for 4-mallet technique, specifically regarding mallet choices and grip. The final section of this article introduces the author's own developments for 4-mallet technique as a precursor to the technical exercises in an upcoming method book that will be publish for commercial release in the near future. Although this article focuses on the 4ths/5ths tenor pan, the mallet and grip choices described here are applicable to all pan voices.

Mallet Options

A steelpan player who wants to begin working with four mallets must make an initial decision of what type of mallets to use for the additional outside pair. Not surprisingly, pan players have experimented with different options to find the most efficient and ergonomic mallets. The first choice many pannists make is to simply double the inside mallet pair and often pan players are content with a matched set of four equal mallets. The author was able to interview several prominent pan players during the course of his research for my 4-mallet method book. Of the 4-mallet pannists interviewed, the majority tended to opt for these matched sets. For example, educators Liam Teague at Northern Illinois

University and Dr. Jeannine Remy at the University of the West Indies both used matched sets. Following Teague's and Remy's methodology, their protégés Natasha Joseph, Marcus Ash, and Aaron Marsala all use matched sets as well. Andy Akiho, another prominent pannist and contemporary 4-mallet composer, also opts for a matched set of mallets.[1]

However, some pannists have found that using a matched set of mallets can cause technique problems, such as limiting reach, motion, and speed. To alleviate these issues some pan players have innovated different customized mallets for the outside pair. A common problem in 4-mallet playing is a limitation in reach between the inside and outside mallets held by one hand. Pan players have lengthened either the outside mallets or all four mallets to rectify this problem. For example, Natasha Joseph has customized her mallets by extending all four in length to accommodate a wider span, allowing for more interval options on a tenor pan.[2] Alternatively, pan builder Alan Coyle experimented with lengthening the outside mallets only, leaving the inside mallets at the standard length. Coyle also thinned the diameter of the outside mallet for reasons explained later in this article.

For a beginning 4-mallet player, the author recommends starting with a matched set of standard length mallets. If you have problems reaching intervals spaced farther apart you may want to try customized lengths. Start by extending only the outside mallets slightly; if this does not solve the issue, then try a full set of longer mallets. There is a trade-off that is important to keep in mind: the longer the mallet the less control a 4-mallet player will have. For this reason, use as close to your standard mallet length as possible.

Another common problem that arises with 4-mallet technique is discomfort after prolonged playing. This issue will vary greatly depending on what grip the player uses (discussed in detail in the following section), but discomfort can still occur regardless of grip choice. I personally experienced some of this discomfort and hand fatigue when first developing my own 4-mallet pan technique, particularly after playing for more than an hour at a time. I found that this discomfort is unique to 4-mallet pan

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[1] Andy Akiho, internet questionnaire by author, July 12, 2017.
[2] Natasha Joseph, interview by author, St. Augustine, Trinidad and Tobago, January 27, 2016.

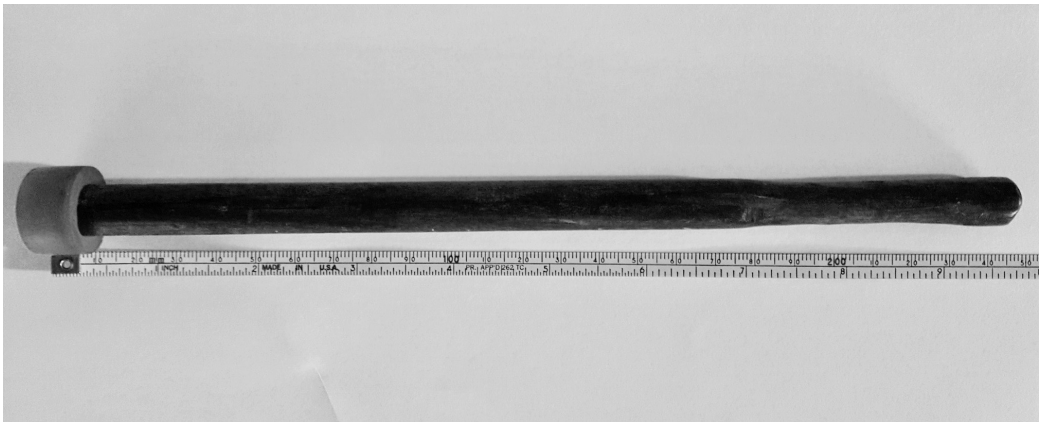
playing rather than other 4-mallet percussion instruments due to the wider diameter of a pan mallet shaft. Some discomfort is normal when acclimating to a new grip and when using muscles in novel ways regardless of instrument, but steelpan mallets are typically much wider, thus forcing the fingers to expand beyond a normal marimba or vibraphone mallet grip and frequently causing discomfort. If you develop any discomfort or pain you may wish to experiment with the other options discussed here.

Example 1. Right hand holding a regular inside mallet and extended outside mallet.

Tom Berich, a pan player and instrument dealer in the United States, experimented with one of these options by tapering the outside mallet to aid in keeping the fingers closer together without losing too much weight of the outside mallet pair. Berich accomplished this by using wooden mallet shafts and lengthening the outside mallet slightly. This helped with keeping the weight distribution equal between the mallets as well as with reaching the larger intervals.

As mentioned above, Alan Coyle experimented with creating a thinner and longer aluminum mallet shaft specifically for the outside mallet of a tenor pan. The thinner aluminum shaft was significantly lighter than their inside mallet counterparts, making playing with equal velocity between the inside and outside mallets difficult. At the time of this article's publication, Coyle had discontinued these

customized mallets. Regardless of their availability, Coyle's innovations are worthy of note in the development of 4-mallet options.

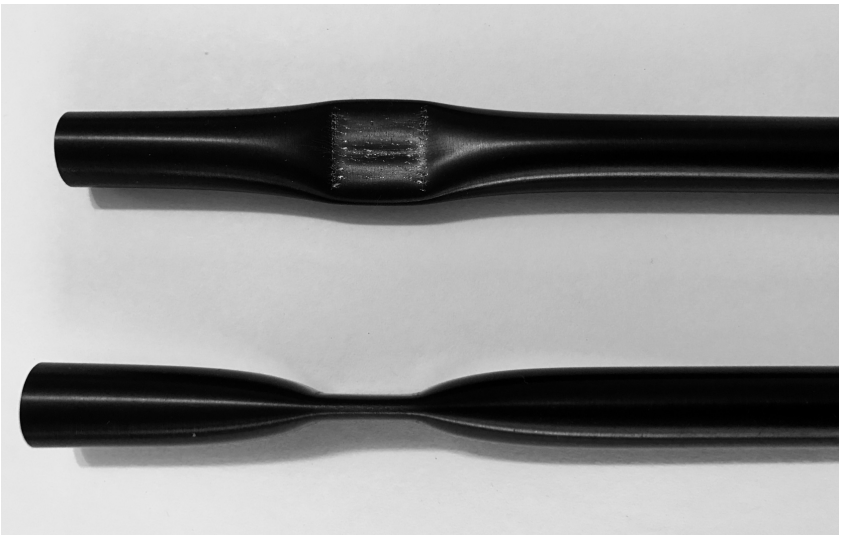


Example 2. Berich's tapered mallet.[3]

I personally have also experimented with minimizing the width of the outside mallet to help relax the hand for prolonged playing. To do this, instead of altering the diameter of the shaft, I took an aluminum mallet and crimped one segment of the shaft where the hand typically grips the outside mallet, as example three demonstrates. This crimp allowed the fingers to rest naturally next to each other and kept the muscles from having to maintain a tense position to hold the mallets. An added benefit of the crimped mallet is that the fingers can easily wrap around the mallet and lock it into place, providing added control and mallet independence.

Just as with mallet length, begin with standard mallets. Over time, if discomfort or pain persists you may want to experiment with these customizations. Remember that new techniques will often feel odd and take time to develop the requisite muscle mechanics. Do not jump into customized mallets right away, but if playing with four mallets causes pain for an extended time, these options may help.

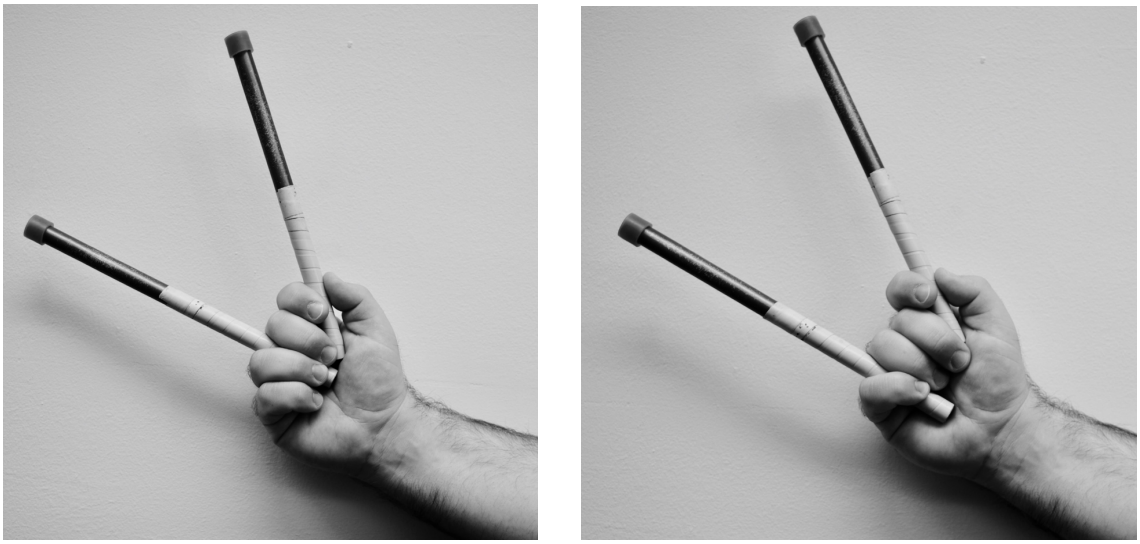
[3] Photo courtesy of Tom Berich, used with permission.



Example 3. Crimped outside mallets.

Different 3-Mallet and 4-Mallet Grips

Differences in grip have emerged just as differences in the mallets themselves have occurred as pannists continue to develop their own techniques. Two primary options, based on where the pannist decides to hold outside mallets, have arisen. The first option places the outside mallet between the middle and ring fingers. The second option places the outside mallet between the ring and pinky finger. For both options, the player still holds the inside mallet with a regular grip as if playing solely with two mallets.



Example 4. Different grips with the right hand.

The debate of which grip is the best way to hold 4-mallets continues to grow as more pannists teach newer generations 4-mallet technique. Once again, no single codified method has emerged over the course of 4-mallet technique's development, as each player has their own take on the correct method. Based on the author's research and interviews, it seems that the debate splits evenly down the middle. Approximately half of the 4-mallet players he worked with opt for the first grip option, while the other half opt for the second choice. Along this division, pannists tend to have strong opinions on which grip is better. Often, a pannist's previous musical experiences and musical instruction influence their grip choice.

Instrumentalists who come from a Western percussion background tend to choose to place the outside mallets between the middle and ring fingers, as they are more accustom to that style of playing from using 4-mallet grip on standard keyboard percussion instruments. Pan players who come from a traditional steelpan upbringing could go either direction with their grip choice. Some choose to place the mallet between the ring and pinky finger to keep the mallet out of the way of the inside pair and to increase the range of the added mallets. Others choose the middle and ring finger option for added control and comfort. For example, when Liam Teague uses three mallets he places the extra mallet between the ring and pinky finger.

Example 5. Liam Teague playing with a third mallet in his right hand.[4]

[4] Author's photo of Liam Teague, used with permission.

Alternately, Dr. Remy bases her steelpan grip off of her 4-mallet marimba technique and firmly believes placing the mallet between the middle and ring finger is the correct option. Remy teaches her students at the University of the West Indies with this methodology. Understandably, her students Marcus Ash and Natasha Joseph follow suit.

The Author's Preferred Mallet and Grip Choices

When first starting to work with four mallets, I chose to place the outside mallet between the ring and pinky finger for added reach. I found it more difficult to extend beyond a closed mallet position with the outside mallet between the middle fingers. The trade-off for this was less physical control over the outside mallet, as the pinky and ring finger had to separate enough to hold the wider mallet shaft. This also lead to discomfort after prolonged playing, as this grip split the ring finger and pinky finger muscles in an unnatural way. Through trial and error, I created the crimped mallet to alleviate this problem and to reduce the fatigue caused by holding the outside mallet. By using the crimped mallet, I realized that the fingers could better grip the mallet, regaining the lost control and dexterity while maintaining the extra extension the ring/pinky finger grip provided. This also allowed the ring and pinky finger muscles to function as a single unit, making it possible to engage the outside mallet in isolation without having to utilize wrist motion and inadvertently moving the inside mallet when striking with the outside mallet alone. Today, using this technique, I consistently play multi-hour performances while holding four mallets the whole time without any pain, fatigue, or discomfort.

Using the ring and pinky finger grip made it possible to reach larger intervals without the need of longer mallets, helping maintain higher degrees of control as well. When playing on a standard 55-gallon 21.5" tenor pan, I use standard length aluminum mallets with a crimped outside mallet. With practice, one can reach a wide array of intervals, detailed in depth in the upcoming method book. Alternately when playing oversized pans, such as the 26" tenor pan, extending the mallets makes up for the added interstitial space between the notes.

Potential 4-mallet pannists should use their own judgement to find what works best for themselves after experimenting with these various options. Any of these options are valid, as pannists have yet to reach a consensus of a codified methodology for all who perform and teach 4-mallet technique to the next generation. Upcoming articles and my 4-mallet method book will explore the history of multi-mallet tenor pan playing as well as the musical application of this contemporary and useful technique.

Example 6. Author's grip: crimped mallet between the ring and pinky fingers.

Example 7. Author's set of normal length mallets and longer mallets for 26" diameter pans.