Tiasou Method Introduction

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1 The Drum

The *tsukeshime-daiko* of Japan is a magnificent instrument, both in construction and sound. It is one member of the larger family of Japanese rope-tightened drums known as *shime-daiko*. The sizes, pitches, and uses of the different drums within the shime-daiko family vary dramatically, similar only in their most basic construction: two flat, round heads sandwiching a hollow body.

The tsukeshime-daiko in particular is a small, high-pitched drum, with its roots in the festival musics of Japan. It has a one-piece body, slightly bowed, and approximately 25 centimeters in diameter. The skin of its heads is relatively thick and is pulled to great tension by ropes or bolts that encircle the drum. Its clear, high tone has made the drum a successful addition to the more recent phenomenon of ensemble Japanese drumming, or *kumidaiko*. The tsukeshime-daiko can be easily distinguished among the cacophony of other drums.

The tsukeshime can now be found among the booming nagado-daiko (often called *chuu-daiko*) of nearly every kumidaiko ensemble in the United States, Japan, and elsewhere. Classic taiko compositions like Kodo's *Monochrome* and Kenny Endo's *Symmetrical Soundscapes* feature the tsukeshime. If the nagado is kumidaiko's main instrument, the tsukeshime is its energetic sidekick.

2 How the Drum Works

There are generally five sizes of tsukeshime in increasing skin thickness and body height: *namizuke*, *icchou-gake*, *nichou-gake*, *sanchou-gake*, *yonchou-gake*, and *gochou-gake*. All sizes of tsukeshime are tightened similarly and the dynamics of this tightening follow the same basic principles.

The thick skins that form the heads of the tsukeshime are stretched and sewn over stiff, iron rings. The diameter of these rings is approximately 35 centimeters, 10 or more centimeters larger than the diameter of the drum body. This larger diameter is the key to the tsukeshime's system of tightening.

When assembled, the drum body, or *dō*, is sandwiched between the two heads. It rests in the center of the heads, touching only the skins. Rope is laced around the perimeter of the drum, going between the rings of the two heads. The rope is tightened, and the rings of the heads are pulled toward one another. With the dō resting between the heads, this tension around the perimeter pulls the skin at the center of the heads to great tension. With the diameter of the heads' rings larger than that of the dō, tension in the rope around the drum exerts great leverage over the skin above and below the dō. (See figure 1.)

The skins of tsukeshime heads have a limited life-span. With each tightening, the skins stretch slightly and eventually wear out. There is a finite

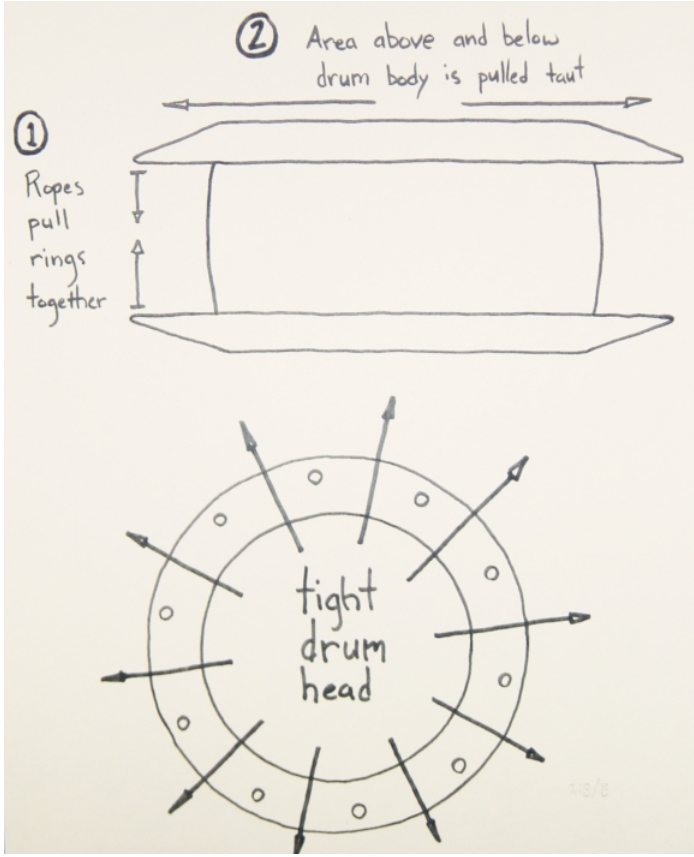

Figure 1: Tsukeshime system of leverage

number of hours that tsukeshime heads can remain tight. For this reason, the drum is traditionally tightened and loosened with every use. It is kept tight only as long as necessary for practice or performance.

3 Basic Rope-Tsukeshime Tightening

In order to generate tension in the skins of the tsukeshime, the rope laced around the perimeter of the heads is tightened. The tightening generally occurs in two phases. First, the laces running between the two heads are made taut. Using one's hands, agebatchi, and/or a tightening hammer, tension is gradually increased over multiple slack-removing passes around the drum. The heads reach a moderate level of tension in this first stage of tightening.

Once these laces are taut, they are then bound together in pairs. A loop of rope goes around each lace and its neighbor and is pulled tight, closing the loop and pulling the two laces together. This binding works to generate a final, powerful boost in tension. These two stages together enable extremely high tension to be generated in the tsukeshime.

4 The Rise of Bolt Tightening

This two-stage rope-tightening is an involved process. It has a reputation for being strenuous, difficult, even painful. Images of muscular, young men grimacing, and stories of blisters and rope-burn are common. Information on tsukeshime tightening has generally been unavailable, even to those interested in trying.

For these reasons, bolt-tension tsukeshime have become popular. Instead of lacing the heads together with rope, heavy, iron bolts are threaded to a central ring that encircles the dō. The nut of each of these bolts is

simply twisted with a wrench to tighten the drum. Tsukeshime can be tightened to extremely high tension with very little effort. Many groups in the United States and Japan use these bolt-tension tsukeshime exclusively.

5 Why Rope Tighten?

Despite the rise in popularity of bolts, rope tightening offers certain advantages. The sound of a drum tightened with rope changes somewhat with the added weight and stiffness of bolts. In an informal experiment done recently at Miyamoto Unosuke Shoten in Tokyo, the same tsukeshime body and heads were tightened with bolts and subsequently with ropes, the sound of the drum recorded after each. The sound difference was slight, but noticeable. The bolts deadened the heads' sustain such that the tail end of the tone ended more abruptly.

The heavy-duty bolts, especially on the larger varieties of tsukeshime, add a significant amount of weight to the drum. Bolt-tension tsukeshime generally cannot be used in a performance where the drum is carried for any length of time, and shipping the heavier version can be significantly more expensive.

Though it will never be as simple, with practice, rope tightening can be as fast if not faster than bolts. An experienced player can tighten a rope tsukeshime to moderate tension in 20 minutes and loosen it in less than 5. The bolt-tension tsukeshime often requires about the same to tighten and at least 10 minutes to release tension.

The most compelling reason to tighten the tsukeshime with rope, however, is that the process offers a great intimacy with the drum. The practice of rope tightening reveals the intricacies of the instrument and gives the player a deep understanding of tsukeshime tension. Unlike tightening with bolts, where the question, "when do I stop?" often arises, rope-tightening gives the player constant feedback. The sensations and sounds of rope-tightening provide a wealth of information about the tsukeshime and are the process' greatest value.

6 The Tiasou Method

The Tiasou Method is an attempt to formalize and clarify the process of rope tightening, making the process more effective and more enjoyable. When the taiko is played, great respect and attention to detail are provided the drum. The Tiasou Method intends to prepare the drum similarly, in a way that is good for the drum and good for the player.

The Tiasou Method has the following goals.

1. **Low physical impact on player**

   All the steps, especially the second-stage pulling, are done relaxed, using only the few necessary muscles.

2. **Low impact on instrument**

   Improper tightening of the tsukeshime can permanently damage the drum's heads. The Tiasou Method attempts to lengthen the life of the skins and ropes through proper treatment and care.

3. **Efficiency**

   The Tiasou Method emphasizes using physics to one's advantage. Leverage, friction, and body weight are used to produce higher tension in the drum and maintain low strain on the player's body.

4. **Speed**

   A long-term goal of the Tiasou Method is a possible start-to-finish tightening time (including initial knot and threading of the rope) of 20 minutes. The second stage of tightening, when the vertical

rope sections are pulled together, should eventually take less than 7 minutes.

5. **Aesthetic awareness**

   Like playing taiko, tsukeshime tightening has the potential to be visually appealing. The TIASOU Method emphasizes an awareness of movement and body position which might eventually be suitable for use in a performance setting.

6. **Enjoyable process**

   The TIASOU Method attempts to be an enjoyable process. The movements and concentration required are intended to be physically and mentally rewarding.

The TIASOU Method places emphasis on form over power. People of all body types can tighten the tsukeshime with grace and power, once the techniques are understood and practiced. The TIASOU Method seeks to minimize pulled muscles and strain by emphasizing control at all times. Just as great taiko players can hit the drums with enormous power without ever getting blisters, the TIASOU Method attempts to focus concentration and energy where it is needed, and remove it where it is not.

It is hoped that the availability of the TIASOU Method and general tsukeshime tightening information will also improve the condition of drums currently being utilized in kumidaiko ensembles. At a recent performance of six taiko groups in Los Angeles, California, every group used tsukeshime, and every group's drums sounded dull and lifeless. It is likely these drums are rarely loosened and that the heads have suffered accordingly. But with so little information heretofore available, it is understandable that groups shy from the process of repeatedly tightening and loosening the tsukeshime. The TIASOU Method is intended to provide this information, and to make the process of tightening more enjoyable, with the hope that more drums here and abroad will produce the clear, powerful tone that has made the tsukeshime so popular.

7 More Information, Copyleft

For more information, please visit `tiasou.org` or contact Kristofer Bergstrom by email, phone, or the address below. All questions and comments are welcome.

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