

Opening and Closing The Thoracic Hinge

By J. Justin Meehan

The Taiji Classics state that “the root is in the foot, the energy springs up in the legs, is directed by the waist and expressed in the hands and fingers.” But what more happens between the waist and hands? While movement begins from the ground upward first, it then must continue up the torso and back to reach the arms and hands. As the Classics say, “when one part moves, every part moves and all the parts must be (sequentially) connected.”

In my other article I discussed “Pumping the Kua” on opening and closing the crease between our upper thigh and lower torso, more accurately termed the “inguinal crease or canal.” In this article, I would like to discuss what happens above the dantian/mingmen/kua area.

Dantien/Mingmen

It is important to be clear that medically or scientifically speaking there is no such thing as a “dantian” or “mingmen”. Neither dissection or microscopic examination or magnetic resonance imaging is going to show you a “dantian” or a “mingmen.” It is a term of Art or convenience, just as the term “core” is to pilates and yoga. However, that does not mean that we cannot discuss the body, movement or energy using these terms. In many ways, these terms are very helpful in assisting us to marshal, generate and direct our so called “internal strength.”

We can think of the dantian/mingmen area as a big ball inside the body. It rests on top of the legs and hips and is connected to the ground through the legs. It supports the upper torso area, chest, ribs, and arms and transfers energy and power from the lower body to the upper body. In the front it goes from the pubic bone to the sternum and contains all the major muscle groupings of the stomach area. Its center is located somewhat in the middle between the pubic bone and sternum and between the front of the stomach and the low back.

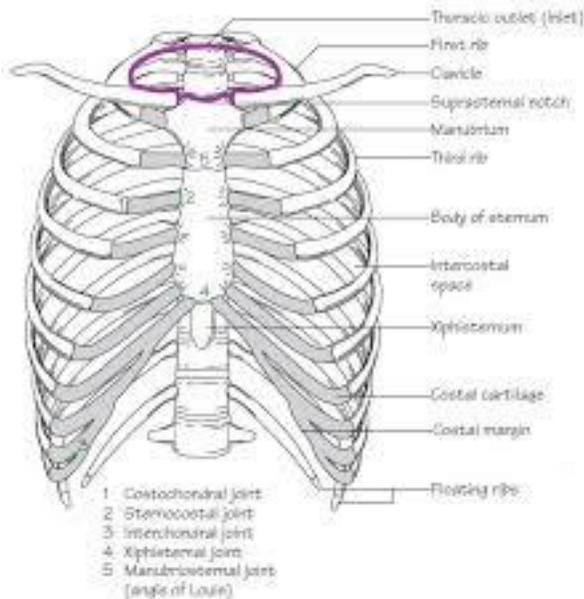
This “ball” we are discussing has a top and bottom, front and back. If the front is centered in the “dantian” area, the rear center is the “mingmen” or the lower back hinge that bends when we bow, or gets injured when we lift heavy objects improperly. More precisely it is the intra-vertebral space between the lower lumbar vertebrae, L3 and L4. The Chinese see a strong relation between the kidney area and the mingmen and some have attempted to locate the mingmen between the kidneys. But for our discussion, it will be enough to say that the mingmen area’s center is behind the navel or dantian, and when moving can also consist of the lower back muscles, spine, and waist.

The specific location of the dantien is somewhat subject to various interpretations. The dantian/mingmen ball can be very large, or we can discuss only the specific central pinpoint area as it appears on Chinese body charts. Some say the navel is the center. Some say below the navel. Some say 2/5ths of the way in from front to back and some say exactly in between the front and the back. In the Chen style, the dantian/mingmen ball can be expanded to include the entire stomach and lower back area. As that area expands and begins to move like a big ball it is capable of increasing the lower body’s power and empowering the upper body and arms.

Thorax

The thoax or thoracic area in terms of Anatomy is defined as follows:

"the part of the trunk in humans and higher vertebrates between the neck and the abdomen, containing the cavity, enclosed by the ribs, **sternum**, and certain vertebrae, in which the heart, lungs, etc., are situated; chest."



At the upper body sits the chest center, or sternum area, in the front, and the thoracic vertebrae, or upper back area, from between the shoulder blades and up to the most prominent upper thoracic vertebrae, just below the neck. It is as if the left and right sides of the upper torso could open and close along the torso vertical centerline.

Normally, we don't think of this area too much. We tend to assume that power goes directly from the mingmen to the palms of the hands, just like pushing a car up a hill. This will work and is correct in many ways, but there could be more.

The Chen style identifies 9 joints or what they call "balls" in the body which when relaxed and then properly activated can be used to create "spiral" power. These 9 joints are sometimes equated with "9 bends of the pearl" mentioned in the Taiji Classics. Mostly, we are familiar with 8 of them: ankles, knees, kua, shoulders (don't forget the "shoulders nest" or the body's "upper kua"), elbows, wrists, waist and neck. The last joint is the back. Many of us are familiar with the longitude or vertical flexibility of the back, but many may not have considered the latitudinal or horizontal flexibility of the upper thoracic area. Get ready, because you are going to get a new power joint in your body!

Bring your shoulders forward as if trying to get them to touch in front of the chest. The chest will close inward and the back will stretch or expand outward. Now do the opposite, by bringing your shoulders backward as if trying to get your shoulder blades to touch. Your chest will stick out and your sternum or breast plate will feel stretched and expanded. There it is! Not having a better term for this opening and closing ability of the chest/upper back, I call it the “thoracic hinge.”

The thoracic hinge is one more joint added to your body which you can use to create additional power or to create chest space for neutralization. This “thoracic hinge” is very evident in the Chen style and perhaps even more so in the Hun Yuan Taiji of Master Feng Zhiqian. There are chan szu chin exercises specifically designed to open and close this chest and back area. In fact, the chest and back are, as are all other major body joints, to open and close in almost all Chen style movements. The classics say, “In every movement, there is (i.e., should be) opening and closing.”

B) Double shoulder revolving: From the wuji stance, step the right leg to the right a half step. The knees should bend slightly and the fists are placed alongside of the thighs. The chest is sunk and the shoulders are rounded. The qi is lowered downward (Figure 15). Gradually expand the chest while the shoulders turn in a circular fashion from the front, upward and then to the rear. The arms are bent at the elbow and the fists are lifted up to the waist (Figure 16). After practicing this movement a number of times, the shoulders turn in a circular fashion from the front, downward, to the rear and then up. When performing this exercise, the body must be relaxed. The shoulder and elbow joints rotate naturally. Breathe naturally, and upon completion perform the closing exercise.



图 15



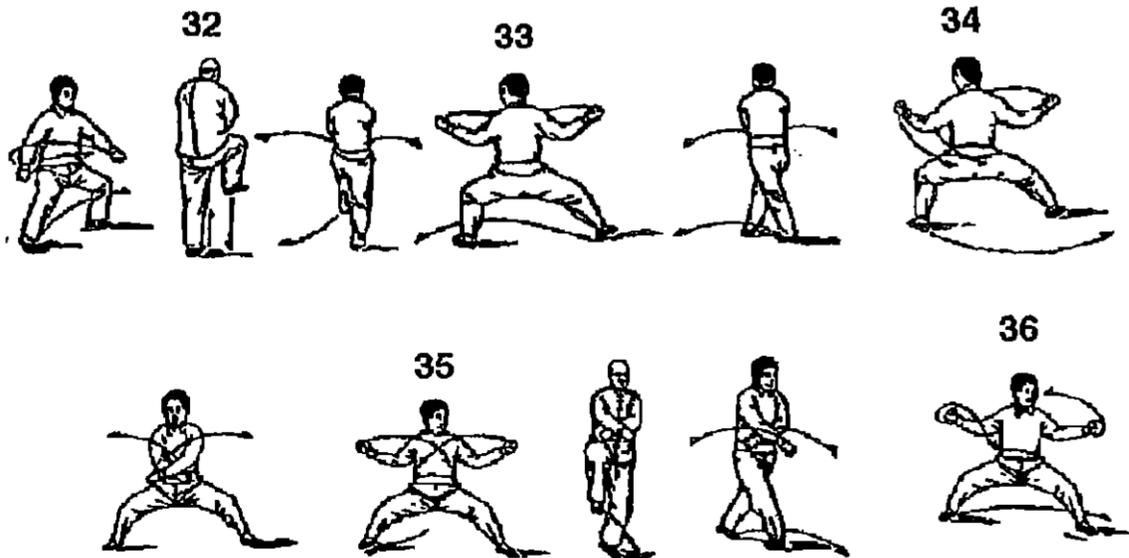
图 16

This opening and closing can be seen in Chen Style form and chan szu chin exercises. It is especially important for good push hands ability. Without it, there is no independent source of Yin and Yang in all parts of the upper body. However, it is not just for martial purposes alone.

We all know that abdominal breathing gently but surely massages the internal organs of the lower torso which are the stomach, spleen, liver, intestines, kidneys, etc. Now we have a movement which will massage and/or invigorate the lungs and heart as well. It will also activate muscles, tendons and ligaments associated with the upper back, shoulders and chest area.

We see the “upper thoracic chest and back hinge” opened and closed very clearly in a movement form of the Chen Style “Pao tui” “Cannon Fist.” The movement numbers 33, 34, 35 and 36. The movements are called Left and Right “Fire Crackers” by Jou Tsung Hua in his book

“The Tao of Taijiquan translated as Left and Right “Wrap Crackers” in the Chen Style Taijiquan book featuring masters Feng Zhi Qiang and Chen Xiao Wang. Brian Guan translates as “Wrap/Whip Cannons” on Master Zhang Xue Xin’s www.Silkreeler.com website.



This movement consists turning the arms inward and crossing them in front of the body, thereby closing chest and opening the back, and then stepping outward and twisting the arm outward and backward, thereby opening the chest and closing the back.

This movement is so important that Feng Zhiqiang inserted it in his Chen form of 48 Movements. It is found inserted in between Movement #26 (Small Catching and Hitting) and Movement #27 (Cover the Head and Push the Mountain). This movement, as do all Taijiquan movements, has many marital applications. It is also clearly exhibited in his Chan Szu Chin Exercise 3B “Double Shoulder Revolving” and Hun Yuan QiGong Exercise 4(2) “Middle Dantien Open and Close” which gives the appearance of someone playing an accordion, but opening and closing along the midline of the chest, rather than the two arms moving at the shoulders only.

The major application has a twisting into chin na and a twisting out of chin na. In flexing this chest and back, one also empowers the chest or back to become a close-in fighting striking surface itself. It also forms the deepest inner border of body surface “peng” power on the front and back upper body.

Opening and closing the “Thoracic Hinge” also connects the arms of the body directly to the spine and sternum instead of only at the shoulder. This allows greater body power into the arms, elbows and hands. Connect our arms, wrists and hands twisting force with our body greatly increases our power to apply or resist chin na with whole body power. Imagine the extra force we can add to a backhand strike by including the “Thoracic Hinge” instead of just using the hips

and shoulders. The same is true with “Jo,” or elbow strike. Certainly, the power of “Kou” using shouldering becomes a much more destructive technique. Try it against a heavy bag or striking pad and decide for yourself

So far, I have related most of what I have had to say using the Chen Style as an illustration. But Yang Style also has close and open as well. Think of closing the chest to obtain greater closing power in “Raise Hands.” Think of expanding the chest in order to achieve full opening in “Single Whip.” Opening and Closing the chest can create more concentrated and explosive power in the forward Push “An.”

Opening and closing the thoracic hinge can also be seen in the Wu/Hao and Sun Styles. In fact, it is a major requirement of these styles. I cannot see any style which would not benefit from the active employment of the Thoracic Hinge, both for health and martial benefits.