

# **From Jujutsu to Gyrotokinesis – And Back Again**

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## **Introduction**

I began studying jujutsu in the fall of 1971, when I entered the California State University, Chico, as a junior. For much of the next 30 years I suffered from low back pain. Massage, physical therapy, spinal manipulation, acupuncture, saunas, Jacuzzis, medications, rest – nothing really worked or worked for long. Imagine my surprise, then, when I was introduced to a new set of exercises that relieved my pain in a week and that have kept me pain free for more than a year. I can now take falls all weekend long at a jujutsu seminar – and walk off the mat at the end of the day.

The new set of exercises is called Gyrokinesis™. These exercises have been developed over the past 20 years by Juliu Horvath, a world-renowned Romanian ballet dancer. After an injury ended his professional career as a dancer, he looked for ways to rehabilitate himself from the injury. The result is a unique set of exercises that combines movements from yoga, tai chi, classical dance, modern calisthenics, and other movement disciplines. In general, the exercises are easy to do and require only the strength, flexibility, and endurance that one wants to exert.

In this article, I describe the origins and principles of Gyrokinesis and show how these exercises can be incorporated into jujutsu training.

## **The Origin of Gyrokinesis**

Horvath continued to develop his exercises after rehabilitating himself from his injuries. Still active in the professional dance world, he began to teach his exercises to his dancers. As a world-class dancer who trained world-class dancers, Horvath knew that the exercises he developed for his dancers had to keep them challenged for some time. Such dancers must maintain themselves in top condition and get bored easily. Thus, he created what is still called “yoga for dancers,” which is the ultimate form of Gyrokinesis. Designed for double-jointed, gumby-like expert dancers, yoga for dancers is not for the rest of us. (Trust me on this.)

In response to the popularity of yoga for dancers, he eventually created Gyrokinesis, which is accessible to just about anyone. In addition, he created the Gyrotonic Expansion System® in which Gyrokinesis exercises are performed primarily on two pieces of equipment, called the combined tower and bench unit. The equipment provides mild resistance to the movements and assists in doing them correctly. Several other pieces of equipment are also in various stages of development.

Gyrokinesis exercises are be done seated, standing, and on a mat. They address virtually all joints and motions. About the only motion that is not emphasized is the uncontrolled arching of the low back. The back is arched, but only when the abdominals provide a counter tension to help stabilize the low spine.

### **How Gyrokinesis Exercises May Work**

A physical therapist introduced me to Gyrokinesis and told me why she thinks the exercises are effective. A cross-section of the chest reveals three layers of muscle. The outermost layer consists of the large muscles that move the arms and shoulders. These are the muscles we build in the weight room: the latissimus, trapezius, rhomboids, pectorals, and so on. The middle layer consists of the muscles used for breathing. These muscles include the internal and external intercostales, the levator costarum longus and brevis, and the superior and inferior serratus posterior. They help to lift the rib cage during inspiration and to contract it during expiration.

The innermost layer consists of the small muscles that stabilize the spine and help maintain balance. This is the layer that most anatomy classes never get to: the muscles are small, deep, and the last to be encountered during the semester. They include the multifidus, rotator brevis and longus, and semispinalis thoracis and cervicis. These are not the muscles we try to develop in the weight room. However, Gyrokinesis exercises specifically isolate, strengthen, and tone these muscles.

### **Principles of Movement Underlying Gyrokinesis**

At first glance, the Gyrokinesis exercises appear to be self-evident; watch them, then do them. However, they are a lot like yawara techniques, in that there is more than meets the eye. They can still be learned rather quickly, however. For example, in my Gyrokinesis and Gyrotonic instructor training, I

learned how to touch my toes. I thought I already knew how, having done so several thousand times over the years. However, there is a right and a wrong way to do so in Gyro. Try this: stand, then reach down and touch your toes as usual. Now, while bent over, think of stretching your kidneys UP to the ceiling and *bend even lower!* I can get an additional inch of stretch when I do this.

In my estimation, Gyrokinesis consistently illustrates five principles of movement, all of which are applicable to any movement, including those in jujutsu.

**Principle 1. Breath when you move.** Nothing new here. Moving while holding your breath reduces your body's flexibility and resilience. Abdominal breathing (expanding your abdomen when inhaling and compressing it when exhaling) is preferred to thoracic breathing (lifting your chest when inhaling and compressing it when exhaling), just as it is in the martial arts.

**Principle 2. All movement begins at the base of the spine.** In the martial arts, we often hear that movement "begins at the center." I won't speak to the thought that the center is the source of ki or chi, but I will say that movements that begin at the base of the spine and that stay "connected" with the base of the spine, are mechanically stronger and provide a larger range of spinal motion.

**Principle 3. "Lengthen" your spine before arching, curling, twisting, or side bending.** This principle is the "expansion" part of the Gyrotonic Expansion System. You lengthen your spine by rolling your pelvis under to reduce the curve in your low back and by lifting your chest (without arching your back) to reduce the curve in your thoracic spine. Lengthening your spine increases your range of motion when you do move and requires you to relax your body.

**Principle 4. Move *around* the axis of your joints, not *at* the axis.** This principle is also consistent with the "expansion" part of Gyro. If you hold your arm straight out in front of you at shoulder height and then move it as far as you can to the side, your hand will create an arc centered at the axis of your shoulder joint. If, however, you do the same movement while standing with your shoulder touching a vertical pole, when you move your arm, the pole gets in the way of your shoulder, which has to come out and around to complete the same arc as before. The "out and around" movement "distracts" the shoulder, or "opens it up," as they say in Gyro.

In jujutsu, this principle is often seen in joint locking, when we want to move uke with a lock, in addition to causing pain. In contrast, we want to avoid this principle in our own movements. Moving around the axis of the joint

produces a weaker movement and destabilizes the joint, if not one's balance. Moving at the axis of the joint is mechanically stronger and more efficient.

**Principle 5. Keep both sides of your body active at the same time.** This principle means that the body needs to act as a unit. For example, if you side bend to your right while standing, you can think of "bending to the *right*" or of "stretching your *left* ribs." In Gyro, you do both. This is the same principle mentioned above for touching your toes. You still think of reaching down with the front of your body, but you also think of stretching your low back up with the back of your body. It is also related to moving a joint *around* its axis, rather than *at* its axis. In side bending, for example, the axis is your thoracic spine. If you bend to the right without stretching the left ribs, you will compress your right side by bending at the axis. If you stretch your left ribs but do not bend to the right, you won't bend very far.

Frankly, I'm not sure where this principle applies in jujutsu. As I mentioned in Principle 4, bending around the axis is something uke should do, not tori. Keeping the body integrated is an attractive thought, however.

## Conclusions

As luck would have it, I visited my doctor for unrelated medical problems before and shortly after my gyro training. (Age does have consequences.) My height increased by almost an inch. This increase explained the unusual sensation I had been feeling of being taller but not knowing how or why. Try standing on a pile of magazines an inch high. See how your increased height gives you a slightly different perspective? That's what I was feeling. I think it likely that the gyro work improved my posture, which added the inch.

Gyrokinesis exercises complement jujutsu training well. I use them with my massage clients to improve range of motion and to stretch sore muscles. I do them regularly between sets in the weight room, to warm up and to stretch (and, ok, to avoid doing yet another set of repetitions). My posture and balance are better, and my back has not hurt since I started doing the exercises.

You can find more information about Gyrokinesis and Gyrotonic Expansion System at [www.gyrotonic.com](http://www.gyrotonic.com). The web site lists studios across the country (and world) where Gyro is taught.