

Oh the Beauty of Circles and Triangles!

We are going to use the concept of triangulation extensively throughout this week. In order to our arms around the concept, let's start with an illustration.

If you were tasked with building a chair that is a chair that most were meant to sit on, how many legs would you use in its construction?

Your design would more than likely include three or more legs to provide the necessary stability to ensure the safety of all those that would trust your design. Using three legs means that you have used the inherent stability of a triangle to prevent a disaster.

Civilian light aircraft are designed stable. That is they generally fly in the attitude and direction you last left them in. The trade off is loss of performance. They are a flying compromise.

On the other hand, thanks to computers assisting pilots, modern fighter aircraft can now be designed "unstable" and human beings can "sit" on them without falling. Unstable meaning, without constant and immediate input to the controls (in this case a sophisticated computer doing the job) the plane would immediately careen out of control, ultimately to crash and burn. Human feedback and input to the controls would not be sufficiently fast enough to prevent this from happening. The intrinsic instability gives the fighter the much needed and powerful benefit of maneuverability and quickness in transition. Unlike modern battlefield armor, fighter aircraft cannot take hit after hit. In order to prevail in combat, they depend on leveraging the power of maneuver warfare.

From a balance point of view:

Stable Aircraft = 4 wheels on the ground - A Go-Cart

Unstable Aircraft = 1 Wheel on the ground - Unicycle

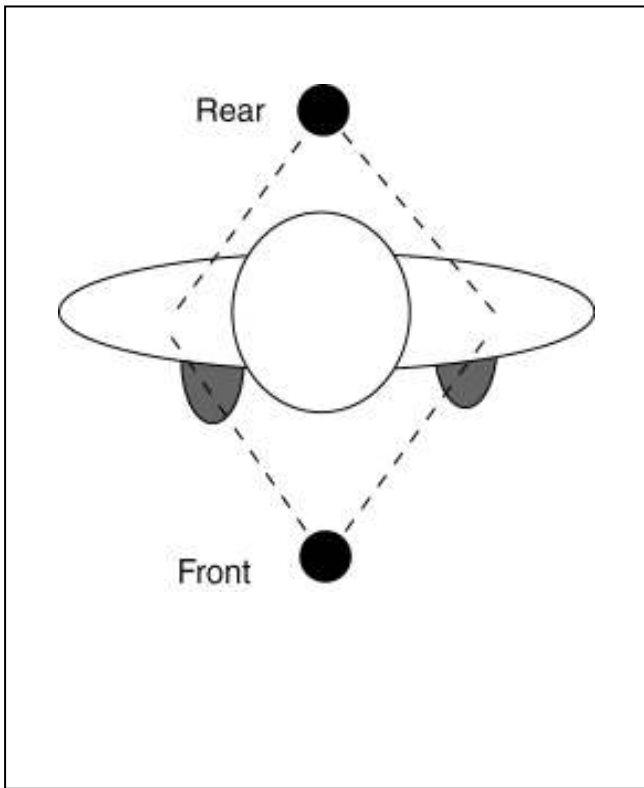
The human body is really designed unstable. Much like a fighter aircraft, we have a sophisticated computer system that constantly performs the necessary calculations in the background so that we can enjoy mobility and maneuverability for our tasking. Like the fighter aircraft, you cannot take hit after hit (projectiles, knives, sticks, strikes to vital areas). You must rely on a maneuver warfare mentality.

Generally speaking human beings tread the earth with just two points on the ground, and therefore are inherently unstable. The third point we really need for true stability is known as the "triangulation point". Finding and utilizing these constantly available points to your advantage is fantastic skill to have.

It is our job to take advantage of both sides of the equation.

1. We will use the inherent instability of our opponents against them.
2. We will use our inherent mobility as an advantage against opponents who like to adopt a "strong position".

We will also study the power of circular motion and centripetal energy.



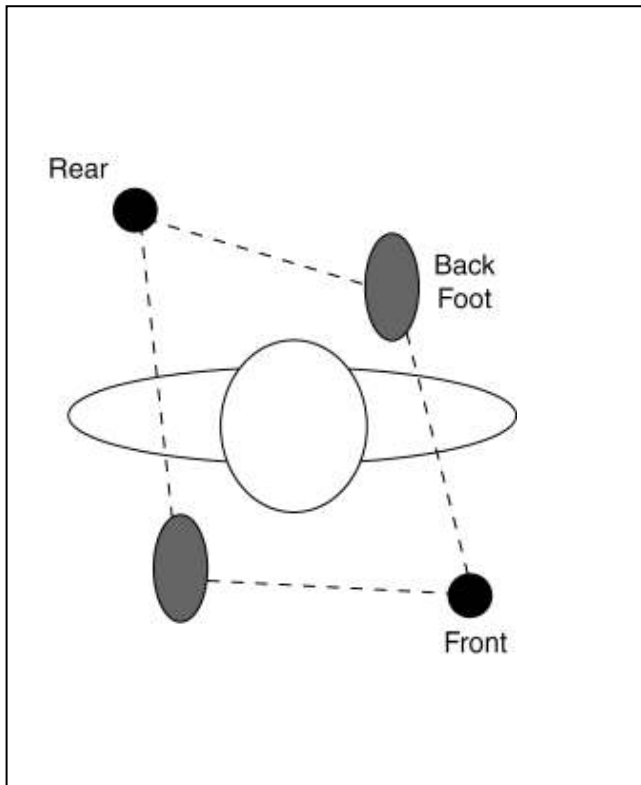
Front & Rear

Triangulation Points (FTP/RTP)

Take the length of your tibia bone (the bone between your ankle and knee) and lay it down and back at an angle that would form an isosceles triangle.

The starting point is the bottom of your foot directly beneath the tibia bone. This is the Rear Triangulation Point (RTP).

Do the same thing forward and add the length of the foot from the ankle to the toes. This is the Front Triangulation Point (FTP).



Triangulation points shift based on stance and you must be constantly aware of this.

Note when the opponent has taken a more aggressive frontal stance, the triangulation points front and rear shift proportionally.

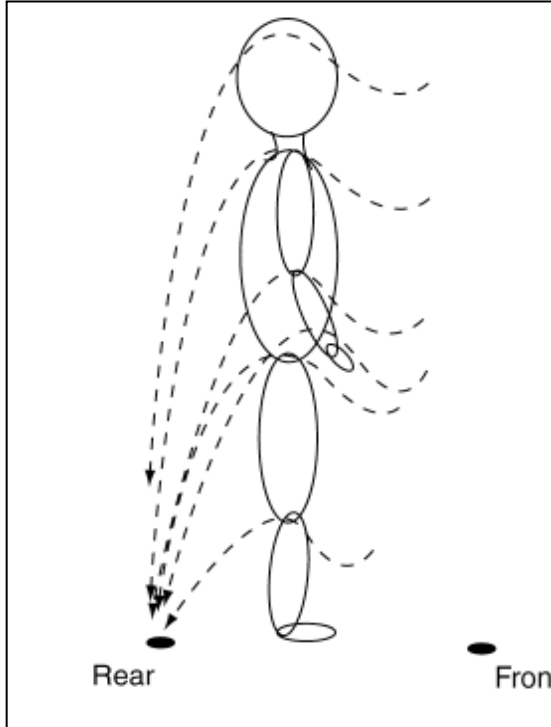
There is no such thing as a 'Strong' stance. No carpenter would build a chair with two small legs and expect to stand. A strong as this particular relationship is from front to back it is equally weak down the lateral vectors.

Rather than develop the bad habit of wide stances and wide steps, learn to constantly move your feet with small steps. This gives you precious mobility and constant adjustment potential.

Since energy travels in waves, you can move opponents around quite easily when you direct energy through your opponent with wave-like motions (either light contact or striking).

You can use your hand, any object (such as your handgun, shoulder-fire weapon, baton), the opponent's body parts or their weapon as a conduit for the wave to travel.

Light contact is sufficient. This is NOT levering and pushing people around or pain compliance.



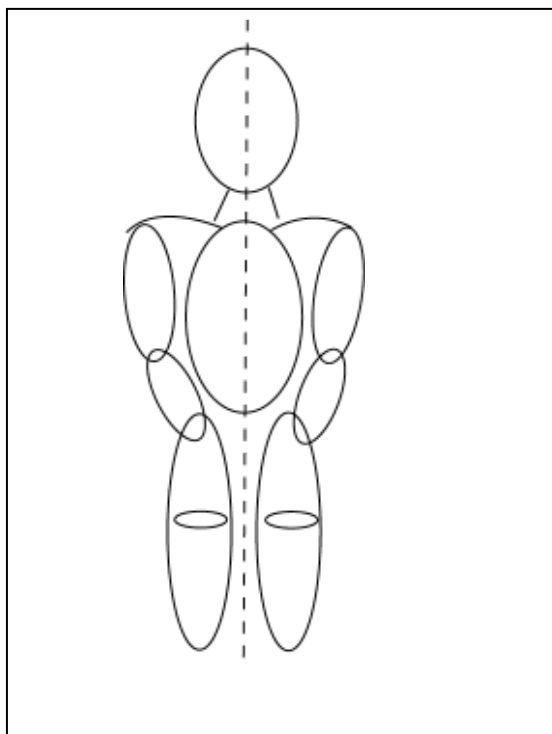
Mimicking a Wave

Start the motion prior to contact. Start big, then learn to shape the frequency of the wave smaller and in a shorter time frame. Waves come in an infinite variety of shapes.

The crest of the wave should be on large targets when as you first learn to move your opponent. You can later learn to bring a wave through any part of the body as long as energy is properly directed.

The wave should "crash" into a triangulation point. In this case the rear point is the easiest to attack as the heels get "planted" or "double weighted".

A common mistake is to stop the motion on contact or push in a linear motion off your back foot. Stay in motion!



Centerline

Bisect the body down the imaginary plumb line. Otherwise the opponent can easily spin or walk.

Even if you are using the elbow, shoulder or hip as the contact point, direct the wave to the centerline and down to the RTP.



Rear Triangulation Point (RTP) Head-tip

This is a foundational technique. Understanding the principles and biomechanical underpinnings of this basic form will unlock a wide variety of possibilities during a physical conflict. Remember energy travels in waves. Learn to use the wave when studying this technique. Learn to bring the wave prior to contact.



Slide in, pulling yourself along the ground in a “shooting platform”. This technique is designed to use when you are armed with a shoulder-fire weapon and you have all your tac-gear on.

Bring your hand in from below the suspect’s waist. Trace a wave pattern.

Make LIGHT contact with the face. Cover the eyes, thumb and pinky finger naturally rest on the depressions of the skull just beyond the eye orbits.

DO NOT PUSH the suspect back or down or drive off your back foot.

You want to “double weight” or plant the suspect’s feet so he/she cannot step back without falling



Stay close to eliminate gaps and potential counters by the suspect.

Continue to move yourself along the ground. Transfer your body’s momentum through your arm and hand, to provide the energy for the execution of the technique.

Reach over the top.

Keep your posture and exhale.

Do not add any more tension/pressure with your hand.



Once the suspect is complete off-balance, Continue to reach into his rear triangulation point (RTP) and do one of two things:

Keep sliding along the follow or sink your entire body by bending your knees.



Follow through.

Either deal with the suspect or move on and let the next element handle and secure the suspect.

There are a wide number of variations of this technique that will be presented throughout the week.