On the Firing Line (Fiftieth in a series) Statics & Dynamics – Part 3 ©2010 JP O'Connor

"Dynamically Static."

Having explored the true nature of natural point of aim (NPA) and a natural progression that takes place over the course of an athlete's development, we complete our discussion of hold and the stopped the gun.

We have previously touched on the topics of "everything affects everything" and the dynamic nature of the human body and mind. When we understand and apply true NPA, commit to our shot process, are decisive in action without "trying to decide" whether to continue the hold or shoot or reject, we set the stage for the natural progression from "drive by" snap shooting to calm, steady – and confident – shooting. Often this culminates in an exceedingly tight hold and a high level of confidence in the shot process.

Passing The Test

Several years ago, Dr. Dan Durben (former world record holder, Olympian, Olympic coach, and certainly among the best coaches in this country) accompanied a coach to the range to observe and assist with a junior club practice session. While watching one particular athlete shooting outdoor 50 meter standing smallbore rifle, the coach explained that the athlete had been trained to fully focus on and commit to her shot process and delivery, while at the same time having an awareness to allow ruthless rejection of any shot that was not unfolding properly. She was using her awareness to sense what was actually going on, without breaking focus, and then rejecting if warranted.

Dr. Durben was skeptical, and rightfully so. After all, the majority of athletes, especially young and inexperienced athletes – and even some national team members – struggle to master these concepts. This athlete in particular was only 15 years old and had less than a year of experience in shooting. Based on these facts, and despite her excellent hold steadiness, Dr. Durben's skepticism was well founded.

While the athletes were downrange for a target change, Dr. Durben asked the coach if the athlete was actually sensing things and doing what the coach had described, or if the athlete was merely rejecting shots based on nothing more than a short, self-imposed time limit. (Many coaches work with their long-holding athletes by giving them a time limit as a training aid.)

The coach thought "What a great question!" and instantly formulated a way to test the athlete. Once the range was again clear and made ready for firing, the athletes went back to shooting. After the athlete in question had settled in with a number of shots, the test began.

Just as the athlete lifted the rifle from her offhand stand, the coach got in position behind and to the side so that she could not see him. Then, while watching her front sight, when he saw the gun arrive and settle, he very, very subtly applied a slight tension for only a moment to the prone strap on the back of her jacket. She could not feel this slight pull through the jacket, and it was small enough to only slightly affect her otherwise excellent hold. As she continued to allow the hold phase of her shot process to unfold, the coach would again apply a slight pull as he saw the gun about to settle again. Very quickly, after only about three steady states or less (all of which the coach had disrupted), she sensed that the process was not unfolding properly, rejected the shot, set the gun down, and prepared for a completely new shot process. Notice: same cartridge... a whole new shot process! The coach varied the amount of disruption and both coaches noticed that the more the disruption, the sooner the rejection and even with very little disruption rejections still came fairly quickly. There was no set timing for rejection on the athlete's part.

After she had rejected the shot 3 times and started over each time, the coach finally allowed her to shoot without interference on the fourth attempt. Despite her mounting frustration, she stuck to her plan, did not allow the frustration to affect her work, and a deep ten was the result. Several shots later the experiment was repeated with identical results. The coach was not surprised, knowing his athlete well, while the other athletes and Dr. Durben were pleasantly surprised.

Afterwards, the two coaches confessed to the athlete and congratulated her on her technique and determination to only allow a good shot process. She was very happy to learn that the difficult parts of the session were not due to errors on her part!

As an important aside, it was very important to tell the athlete what had transpired since the difficulties on some of the shots, and the unknown source of those challenges, could have had a negative impact on the athlete's confidence. We could not give any indication to the athlete in advance without affecting the activity. The coach and athlete already had a deep understanding of each other; the athlete trusted the coach, was used to unusual and "hard" training exercises, and had long before granted blanket permission for such training exercises to help in the athlete's development as a tough and confident competitor. The result of this exercise and session debrief was an athlete who was happy to have "passed the test" and whose confidence increased based on the validation of her perceptions that the exercise afforded her.

The athlete had learned robust techniques from her coach, trained and trusted the approach, and thrived. While many athletes bemoan having to shoot finals, she relished them! Where did the coach learn the techniques he taught this athlete? Most of them came from his studies of applied sports psychology and coaching resources from overseas. Most of the coach's early studies were guided primarily by Dr. Durben, with assistance from a number of other excellent coaches. A few months later, the athlete found herself in her first big final. She started back in the sixth position, grit her teeth so to speak, and took the gold. The "Believe In Me" section of article 25 tells that story.

The Gun Does Stop Moving!

When an athlete fully understands the underlying concept of NPA (where does the gun want to point – without regard to the target), truly applies the concept, optimizes position, balance, and NPA together as a dynamic and cohesive whole, treats "hold" as a noun (something that is) instead of a verb ("trying" to hold the gun still), utilizes solid trigger technique (including appropriate preloading of the final stage), and quiets their mind and even their eye – then their hold becomes so steady that at some points in the steadier states, the gun appears to the athlete to have actually stopped moving with respect to the target.

Remember, it is the athlete's point of view that is important here. We all know there is some movement going on at all times, however slight. However, the perception of stillness from the athlete's perspective is the critical element. One does not have to be anywhere near making an Olympic or even a national team to experience the kind of shooting described in these last three articles.

Article 40, "On Stepping Up," provided another example where the athlete's perspective is the critical element. The concept discussed in that article of "challenge cycles" illustrates the importance of an appropriate frame of reference – and of ignoring certain irrelevant external concepts that are often mistakenly thought to be important.

Having just mentioned quieting even the eye, it is critical to note that merely looking around the sight picture to "check" things, instead of quietly allowing the eye to rest in one place, will increase the size of the hold. If the eye is moving around, so is the gun. Yes, it is that subtle. Fear not, solid training and belief will take an athlete to that level.

Numerous athletes have observed and reported the phenomenon of the gun seeming to stop, while coaches who are carefully watching their athlete's front sights (instead of being glued to the spotting scope) have observed the same thing. During "The Test" discussed above, the coach was looking for the front sight to steady in anticipation of the "stop" state in order to know when to gently apply a slight pull to the athlete's jacket strap.

To experience the gun "stopping" an athlete must combine numerous aspects of the game. Certainly all of the physical and technical aspects that are so often studied and discussed are required. Similarly, one must explore the psychological: mental and emotional. Don't worry guys, "emotions" in this context aren't what you might think! Emotions in this context are about sensing and mastering such things as fear, anger, patience, and having "heart" and "guts" to dig deep to "just do" and to relish competition.

When an athlete reaches a high level of understanding they may already start to experience the stopped gun, even as they are still growing as an intermediate shooter. Even a middle-aged coach, who has the understanding, but not the physical stamina nor training time to compete at the top level, can experience several shots in a row where the free pistol at 50 meters comes down on the area of aim, stops, and goes off just as it arrives and stops. The group is so tight that a click is applied without thought or hesitation to move the group, already inside the X ring, closer to the center. Total Zone! Highly trained athletes who apply the same understanding take it even further.

The athletes described in this and the previous article all experience and trust this type of shooting. Built on solid foundations, the technique is robust and sets the stage for greater things.

The "On The Firing Line" series is published by the national governing bodies for Olympic shooting in Japan and the USA, and has been adapted for archery as "On the Shooting Line" published by USA Archery. Olympic Coach Magazine, the National Association of Soccer Coaches, and others have referenced selected articles. The entire series is available online at www.pilkguns.com.

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(Biographical information as of August 2014)



The Test – Note the coach's fingers on the jacket strap.