

THE HOLY GRAIL OF VOLLEYBALL AND HOW TO CONQUER IT

Peter Bristotte – December 20, 2018

The evolution of the anatomy and physiology of the human eye resulted in two types of vision that allow us to look at a real world scene: the first gives us what is most important part (central vision), and what is complementary (peripheral vision). While the central vision is more accurate and detailed (more resolution), the peripheral vision allows us to recognize the whole scene, even though with less resolution. Visual resolution drops off dramatically with distance from the center of vision. This is the point number one: **the center of a scene will always have a better resolution to human eyes.**

Evolution also made symmetry to be more valuable in nature. Symmetry refers to “the quality of being made up of exactly similar parts facing each other or around an axis”. We could describe the importance of symmetry through mathematics, physics and biology, but let’s make it simpler. Symmetry allows balance, a symmetrical human body is naturally more appreciated by other human, a symmetrical room looks better, a ball is only a ball because it is symmetrical. *A “thing” is symmetrical if there is something you can do to it such that it ends up looking exactly as it did at the start.* We could list endless examples of the importance of symmetry in life. **Symmetry is always an obvious choice for nature and thus for humans.**

As the human eye “sees” better the middle/center of any real scene, and also as nature (and thus humans too) values symmetry, it becomes pretty easy to understand that we have a tendency to look at (and also many other “action” verbs) the middle of scenes and objects (especially if they are symmetrical) and turn our attention (and efforts) to the “middle of everything”.

If you are a volleyball player (or were in the past) you will easily remember your coach emphasizing (sometimes in a very remarkable way): “We cannot lose a rally with a ball dropping in the middle of our court”. It looks pretty easy to understand why coaches have this request. The most logical explanations to that is that every player can get to the center of the court, or there is always at least one player that can reach to a ball that goes to the center of the court. My question is: “why then our teams keep losing rallies with balls that drop in the center of the court?” The answer is not that intuitive.

Let’s start with how human memory works. Because we are animals, our base instinct is to survive. Both Biology and Psychology already showed us that our most basic instinct is to survive. We strive to stay alive and everything we do is in order not to die (think on the basic instincts and reflexive acts: everything works so we can stay alive, far from threats). Because survival is in our DNA, the human brain developed an incredible ability of memorize remarkable events, especially the deathly and/or traumatic ones, that could easily threat our lives. However, the human brain did not do a very good job in memorizing the average events, what is routine, what does not threat us. Can you imagine how would life be if you had the ability to remember every single average/routine event? How complicated would life be? We would need at least to have a much bigger brain. Why don’t we do that? Because the average and the routine do not threat us. All events that are common in life usually do not threat one’s capacity of survival. **We**

are very good at remembering and turn our attention to remarkable events, but we don't need to turn our attention and our memory to events that are not remarkable (and in this case remarkable events relate both to incredibly good or incredibly bad ones).

In volleyball terms, everyone will always remember pretty well a crushing attack that they could not dig, but they will have issues remembering all the missed digs from average and “non-threatening” attacks. Everyone will remember when they got aced by an incredible serve all the way to the deep corner of the court, but everyone will most likely not remember that well all the low quality passes from average and “non-threatening” serves (that should have been perfect passes, according to any coach in the world). And what happens the most in volleyball (and I would say in any other sport)? Average events. Serves to the middle of the court and attacks to the middle of the court. You do not need to focus that much your training on the “remarkable events”, because they are rare – that is when someone has a chance to make an incredible play that no one was waiting for (but it will only be one point). If you focus your training on mastering the “average/routine” events you will most likely win the game, because average plays are the biggest chunk of the game – that is when you have a chance to build the victory. The very good situations in your favor, you are most likely to win that rally; the very good situations for your opponent, they most likely to win the rally and there's not much to be done.

The problem, though, is that the nature of the way our brain works drags our attention and efforts to the remarkable (and rare) events. That is why a lot of balls “drop” in the middle of the court. We are focused in a possible remarkable event, but it is more likely that an average event will occur and when it happens, we were not ready. That is when the magic of training takes place. A good start for any volleyball player is to train for average events. Train not just your skills but also your brain to always be ready for the average events. It is not easy! It is against nature! If you train your brain to be ready for the average event you will be ready for the majority of the plays that happen in the game. You may not win, that is true, especially in matches that are even. The game can be decided in a remarkable event (how ironic is that?) but, in that case, it could go either way: to you or to your opponent. What are you going to do? Are you going to prepare for what happens more often (balls going to the middle of your court) or are you still going to focus in the rare events (that is the easy thing to do!). I would suggest you to ***invest the most of your time and efforts to master the average events and a lot less in the rare events at the same time I would train to not act in an average way when sending the ball to the other side of the net.***

To sum up, humans tend to turn their attention and relate to the center of every scene/object, and this explains why many of the balls in a game go to the middle of the court (the middle of the court is the holy grail of volleyball!), why it is easier to send the ball to the middle of the court and why the majority of the errors are done when we try to send the ball away from the middle of the court. Likewise, humans tend to remember remarkable events very well, but those are rare. The human memory does not do a very good job at remembering average events (because they are not threatening). Average events (to the middle of the court) are the big chunk of a volleyball game and good players/teams train a lot their skills and their brains to master average situations (because there is a tendency of focusing on what is rare and remarkable) at the same time they try to avoid to send the ball to the center of the opponent side.