CHAPTER 3: PSYCHOMOTOR SKILLS

It has been said that golf is a muscle memory sport. At my age of 76 years, it occurred to me that I am losing both; muscle and memory. 

Motor Memory Sport: Golf also requires motor memory. The repetition of drills plus playing the game builds into the body the ability to repeat what we have experienced. The age old analogy about any motor skill is the problem rests with the Indian and not the arrow. In orthopedics when teaching surgical motor skills I would say to the student surgeon, "Golf clubs do not play golf." It was a way of explaining that although they were handling a motorized instrument, there was a requirement to know the subtleties of manipulation that affected its efficiency. The analogy was helpful during surgical instruction, but it need not be an analogy limited to surgery. Now that I have my golf hat on, I find it actually applies to golf. It is a true statement, "Golf clubs do not play golf."

A major obstacle to mastering the psychomotor skills related to putting is to deal with the concept of "Perception is Reality". This statement is true in many endeavors especially in psychology or political science but it is deleterious for golfers. I like to explain it this way. *"Perception is reality, but it is not necessarily real or true."* The best golfer has his perception of aim, stance, posture, alignment, putter path, and tempo with reality

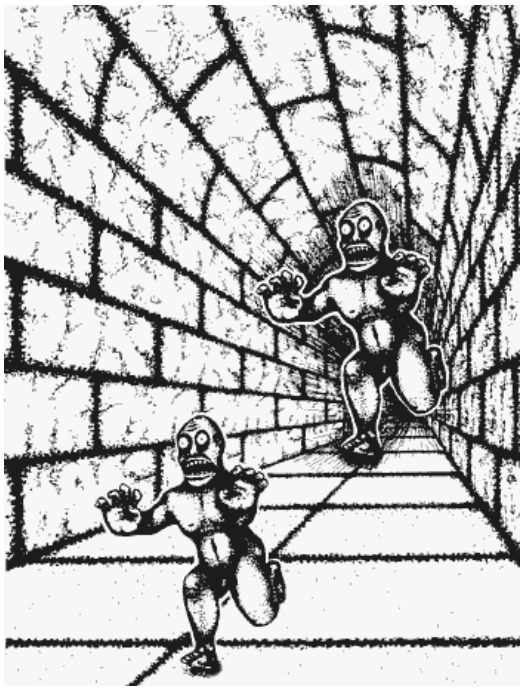
The feel player: In golf the player confronted with SAMPuttLab information concerning the many dynamics of the putting stroke may argue that they are a "feel" player. They continue by saying they do not need all this information. This argument in golf reminds me of a similar debate in medicine; intuitive versus evidence based decision making. There is the proposition that intuitive decisions or "feel" are better than those based upon evidence. It is famed as though these two concepts are in opposition to each other. Both are necessary in the practice of medicine. In that dialogue it becomes obvious that intuition requires some evidence as the basis for decision making. It is also true that the requirement for quick decision making requires allowance for intuition since there is no time to carefully weigh all the facts. Therefore they are not mutually exclusive in practice. However, those with the best intuition are those with the broader base of evidence. Acting intuitively absent any prior experience or information may not be in the patient's best interest..

In golf we have a similar situation. The players that play by feel are correct, they do. However the feel is based upon many years of experience recognizing the evidence of all the many variables presented prior to and during a golf shot. The error of holding rigidly to the "play by feel" group is the failure to include all the information possible upon which to base the feel. When the PGA player argue that they "play by feel" I just listen. Rather than argue with the player, I ask, "Do you use yardage markers?" They answer, "Yes". I respond by saying, "Having this information must make you feel better?" They smile. It therefore is logical that the more information one has the better they "feel". In golf the "feel" is based upon hearing as well as palpation, the sensation transmitted to the hands. The impact of the ball is heard before the vibrations of the physical impact travel up the shaft to the golfer's hands.

Eye Hand Coordination: We commonly think of golf as a sport of eye/hand coordination. That is a very limiting perspective and may lead to error when one solely depends upon vision for weighing various factors in golf. The following is a good example of such.

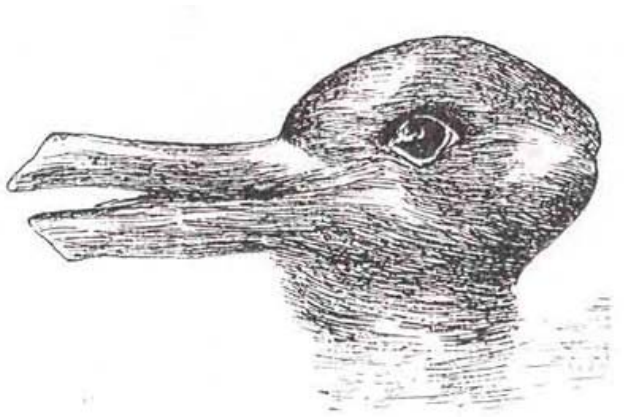
Reading the Greens: This lack of evidence is especially so for players reading of putts based solely upon vision. This is the explanation for the question raised by the Tour's television announcers who comment, "Everyone is missing this putt to the right". They ponder, why? It seems unreasonable that so many players this good would all misread a putt of 5-10 feet. The reason is that they have relied primarily upon vision to read the putt. The visual collection of data is important. However it is possible to have an optical illusion. This is the reason the PGA players all miss a certain putt to the right as reported in television.

The traditional haunted house at the carnival can make one believe many strange things since they use mirrors and other devices to create an optical illusion. The following are examples of optical illusions. Which man is taller?



They are both the same height. Measure them for confirmation.

Is this a rabbit or a duck? It depends on your perception. When it comes to visualization of a putt, could it be right or left, a rabbit or a duck?



It all depends. Optical illusion potential challenges the "Perception is reality" concept. Therefore the player should not limit their input to visualization alone, but include all the senses in making these determinations. For instance, one's body has ability to pick up information in addition to seeing.

Tournament Example: An example of the influence of the body was observed at the 2009 PGA Championship on the 11th hole at Oakland Hills. A poor putt was hit when the player primarily relying on vision without the awareness of the influence of his body was feeling. This particular player was in fourth place at this time in the 3rd round. The eleventh green is saucer shaped side to side and has upward incline front to back. The player in question, one I have worked with in the past walked all around the putt, looking at it from every angle. The last thing he did was walk up the sharp incline above the path of the putt for a final look. He quickly descended the incline and positioned himself to hit the 20 foot putt. He hit the putt 10 feet short, much to his amazement. How could this happen after surveying the putt from every angle? The explanation is obvious. Th player knew well the putt was up hill. However the last experience his body had was quickly descending down hill from the place of visualization. The evidence his body collected immediately coming down the incline took priority over what he had visualized, causing the putt to go half way to the hole. I spoke to him the following year about this and he recalled readily the event. In fact he countered with the fact he made the next putt of 10 feet. Yes, but I went on with the following explanation that he appreciated learning.

The Body's Psychomotor Apparatus: The point here is that although a visual inspection is preliminary and foundational, the evidence collected by the body is very important. I have come to say, ***"The body is smarter than the brain"***. By this I mean that the information collected by our body will not trick us. It is possible to be fooled by an optical illusion. One example of proof is to find a hill along the side of a green and walk the hill with your eyes closed. You can tell if you are going up or down or are on a side hill. Your inner ear will give you that information. It is unlikely you will be mislead by your body's position in space. This is not to discount the importance of reading a putt visually, but it is best not to entirely rely upon that means of data collection.

There are many neurological, musculoskeletal, and intellectual factors to be considered. In simpler terms, we have within our body the five senses; sight, hearing, touch, smell