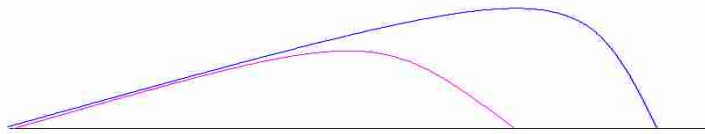


Give Your Ball Impulsion

Part one of a two part article on Hip Sequencing

If you compare the ball flight of a club player and a pro you will see an obvious difference. Both seem to leave the club with the same angle and rate of climb, but as ours runs out of steam and succumbs to gravity, the pro's ball just keeps penetrating the air for longer and simply carries on it's climb. We call this "impulsion", and the great ball strikers have this in abundance. The ball flights are represented below:



We are in pink and the big guns are in blue.

The reason why this happens is all about physics, ball striking "laws" and momentum optimisation, but put in layman's terms they have more weight behind their strike. In tennis they would be called heavy hitters, or if they were footballers they might be described as having a right "ping" on their long balls.

How do you get a heavy weight "ping"?... by putting your body into it.

Us mortals tend to go at the ball with our arms, throw our hips at it and try and give it a bit of right side... if we are lucky this sometimes comes together and we pull it off. Pro's hit the ball with their whole body. At impact they are fully "connected"... all of their body parts are committed to the shot with the correct sequencing and timing. Their whole "weight" is imparted into the ball, nothing is wasted. Where as we splat the ball, they crush it.

One of the crucial components of imparting "weight" into the ball is **sequencing**. Getting the right parts of the body into the right places at the right time. Get this wrong and energy is wasted, get it right and energy can only go the right way... into the sky via the ball.

There is an opportunity for many movements to get out of sequence in a golf swing, but one of the most common faults is poor sequencing at the hips. This is tragic as the hips, pelvis and their huge surrounding muscles are the powerhouse of the golf swing... all the heavy hitters drive their hips into and through the ball.

So if the pro's get it right, how do we get it wrong? Basically there are two main faults.

- The first is a lack of separation between the pelvis and the shoulders. The two become "welded" together as one throughout the swing, where as in an efficient golf swing they separate as the shoulders out rotate the pelvis on the

back swing and then re-connect as we deliver the club behind the ball at impact. Many higher handicappers fail to achieve and appreciate this independent action of the pelvis and shoulders.

- The second fault is seeing the hips race past the ball with too much slide and not enough rotation. In essence the “weight” and energy of the hips doesn’t rotate into the ball, as it has already sped past it at the impact position. Next time you watch Reteif Goosen notice the simplicity of his hip action. He holds them pretty steady on his back swing and then calmly rotates them through the impact zone... no excessive slide, no vaulting up of the left hip, all very quietly done.

The good news is I am going to show you some simple drills to get your hip action into shape. But first, you are going to get nowhere if you try and appreciate hip action with your club in your hands... far too complicated. We need to take away the many swing variables and let you concentrate on your hips. All you need is two garden canes, or plastic rods, or maybe even your driver and an old shaft. Thread one cane through your front two belt loops and place the other across your shoulders “yolk” style. We now have two horizontal markers that will follow your hip action and your shoulder action... in standing they should be parallel on the same plane.



Hips and shoulders on the same plane in normal stance

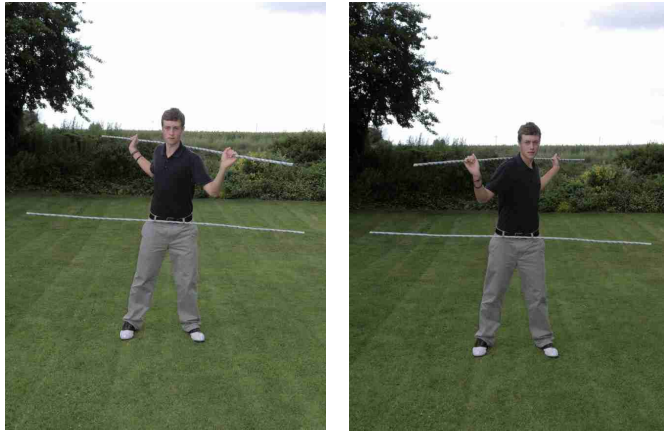
Practising Separation

Firstly rotate your body fully to the right and fully to the left but keep the canes parallel on the same plane. Allow your legs and ankles to assist this movement. e.g.



This is a bad thing. This is complete lack of separation. This is not golf!

Now stand in an athletic stance and rotate your upper spine and shoulders to the left and right but don't rotate your pelvis. Keep the legs strong and "rooted" and use the pelvis cane as your guide... keep it still and parallel. As you gain more control try and develop more shoulder turn, but still keep that pelvis solid.



This is a good thing... this is separation, and you should be looking at having around 45 degrees of it.

The previous exercise showed how the shoulders can move independently of the hips, now we need to practice the hips moving independently of the shoulders. Start in the same stance. This time keep the shoulder cane parallel and still, and try and rotate the hip cane from right to left. This time your legs will have to release and help you with this action.



Another good thing... more separation and more controlled trunk mobility. This is beginning to feel like golf but isn't quite looking like it yet. For that we need to move to the next stage.

Sequencing Hip Turn

We are going to use our new separation skills in this next exercise and teach the hips how to time and sequence their movements in a way that will help us deliver their power at impact.

Stand in an athletic stance, canes parallel (1). Feel that you are making a back swing type rotation (2). Rotate your spine and shoulders as far as you can but keep those hips strong and stable, let them follow the back swing rotation a little, but not too much (3). Now positively unwind just the shoulders and spine until they catch up with the more stable hips beneath them (4). At this point release the hips and continue your turn to the left as if going through the ball. BUT through this mid point (hitting zone) keep both canes parallel and together (5). By doing this, the hips and shoulders are moving together and working together at the right time. The hips are being fired into rotation and not excessive slide, and they are stopped from accelerating too far past the ball at impact. At you finish your shoulders and their cane will out turn the hips, with the hip cane now being at 90 degrees to it's original start position (6)

1



2



3



4



5



6



These are great movement patterns to transfer into your golf swing and you will feel both separation and connection at the right places in your swing. It is from this simple body timing that you can start to build a swing that delivers weight and impulsion to the ball and it's flight.

The next article in this pair looks at a tried and tested technique to develop hip rotation and reduce excessive slide in your swing.

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