HOW TO BUILD A SHARPER SHORT GAME

Hugh Marr concludes his three part-series designed to get you closer to the hole by explaining how to gain control over part-swing shots.

PHOTOGRAPHY BY TOM CRITCHELL

The objective for any short game technique is to gain control of the golf ball. If your action can harness the ball's speed, spin and trajectory – the three ingredients of successful golf from 70 yards and in – you will be able to convert t hree shots into two on a regular basis.

Control of the golf ball can only come from control of the strike. This is why the hallmark of a great short game action is one that strikes the ground in the same place time and again. **If you do not know how and where the club is going to strike the ground, you can never be sure of the contact you are going to make; and that means loss of control.**

In this article, we will get to grips with the techniques that permit this consistency of contact.

Later my colleague, biomechanist Mark Bull, will reveal where the game's best short games are forged. But for now, use these concepts to help you understand and execute the standard part-swing shot.

HUGH MARR
Works with a host of Challenge and European Tour players. He is Lead Coach for England Boys Performance Squad.

SETTING UP THE STRIKE

First, you need to get the right ball position for the shot.

A consistently excellent contact starts with an understanding of ball position – and its relationship to the low point of the club's movement.

The optimal contact for the chip shot comes from a gently descending angle of attack. A slight ball-then-turf contact not only promotes clean contact, but allows impact with the clubface in its most stable position.

LOW POINT

To create this slight downward strike, we must position the ball just before low point of the clubhead's arc, as it swings down and through. The low point falls pretty much opposite the left breast for the right-handed golfer. As a guide, position the ball so its front, target end is under this low point.

ADDRESS IT

Now address the ball normally. In setting up this relationship, you have created a situation where the club hits the ball just before the low point. Check the clubshaft and your lead arm form a straight line. This pre-sets a slight forward lean in the shaft, and therefore a slight downward angle of attack – ideal for the perfect ball-turf contact.

WHY 'OPEN' IS SQUARE

With this set-up, you have created a slight forward lean in the shaft. It's important to realise that because of clubface loft, forward shaft lean affects face aim; as lean increases, the face starts to close. Allow for this by ensuring you open the face to match the shaft lean. While the leading edge may look open the face itself is square.

Pay attention to the lie angle of your wedges. The sole should sit flush to the floor. This correct lie angle doesn't just stabilise the clubface through impact; it also materially affects face aim because of the severe clubface loft. The face of a toe-high wedge is closed; the face of a heel-high wedge is open.

ANCHORING THE MOTION

Why your left knee is crucial in determining consistency.

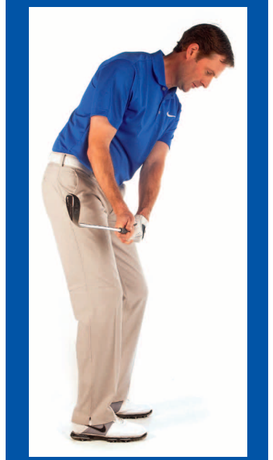
When we covered ball position, I described the low point of the swing as being opposite the left breast for a right-hander. I used this as a reference – rather than, say, the feet – because the low point is dictated by your upper body position. If your torso moves forwards (towards the target), the swing's low point moves forward with it.

It stands to reason, then, that if we are to create a consistent strike pattern, the upper body must not drift. For this, I want you to focus on your lead knee – or more precisely, the tibia and fibula running from it to your ankle.

In reality the knee will move a little on the way back – there has to be a degree of rotation because of the way the body is built – but if you can feel it holding firm in its position, it will keep your whole lead side stable. And that will ensure your action's low point will be in the same place... shot after shot.

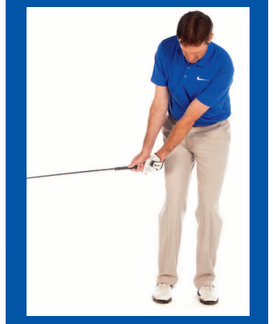
THE VITAL ROLE OF THE TRAIL ELBOW

It's important your trail elbow folds as the backswing progresses. It plays two key consistency roles:



1. IT MAINTAINS A CONSISTENT FACE LOFT

A folding trail elbow during the backswing encourages the forearms to rotate – which in turn helps keep the clubface balanced and neutral, its set-up loft retained. See here how the leading edge of the face is vertical, a touch open to the plane of movement. From here, no manipulation is needed to apply a square face to the ball.



2. IT MAINTAINS A CONSISTENT SWING RADIUS

Think of the radius of your swing as the distance between your sternum and the clubface. Your most efficient action sees this distance remain constant. The key is in letting your trail elbow fold. If it remained locked, the clubhead would move away from your chest and the radius would lengthen – creating problems with path and angle of attack.

IMPACT: RETURN TO SET-UP

xxxxdage of 'put the weight on the balls of your feet' is flawed.

Your set-up dictates impact – angle of attack, loft applied to the ball, swing path and point of impact. The work you've already done with ball position and setting up your lead knee as an anchor, has all been to set those impact conditions correctly for the shot you want to play. Your theme for the downswing, then, is to find an impact position as close to your set-up as possible.

In reality there will be a slight difference between impact and set-up. This a short-shot swing, but the ball still needs to be hit. There still needs to be some forward momentum to pull the club back to the ball; a pulling force is more stable than a pushing one, and for consistent part shots we want the club to be as stable as possible. So allow a hint of weight shift and lateral movement towards the target, and a slight increasing of the shaft's forward lean as club strikes ball. But as a rule, the concept of returning to impact is a good one.

LET TORSO CONTROL TEMPO

The world's best pitchers control the pace of their action through body rotation, think Steve Stricker. These bigger muscles promote a much more controllable action than a hands-and-arms-dominated strike.

Essentially you are making a shorter version of same rotation you would make on the full swing – but with one key difference. In the full swing the hips work ahead of the shoulders on the way down, creating powerful torque. On this part-swing, which prioritises speed control over power, hips and shoulders should rotate back and through together, as a unit.

Practise this motion with a shaft across your shoulders – but focus on your belt buckle. Feel it turn with the shoulders, back and through. When you feel the two rotations are connected and coordinated, go ahead and hit a few balls.

THE BUILDING BLOCKS OF SHORT GAME CONSISTENCY

Golf Biomechanist Mark Bull reveals just how consistent the best short game players are – and explains why the quality of your practice is so important.

Just over a year ago, I was involved in a project that analysed the movement patterns of some of the best short game players in golf.

We took a group of Australian-based European Tour players – each one recognised for being an exceptionally good chipper and pitcher. They were asked to a hit a series of shots to three different target distances – 50m, 70m and 100m – as part shots are primarily about distance control. Each player hit 10 shots to each – a total of 30 balls – though the target was constantly changed to stop the player getting "comfortable" with a distance. The results were revealing. Time after time, the players demonstrated an extraordinary degree of consistency in three aspects of their technique:

– Short Game

Average (Range)	Hip Rot	UT Rot	X-Factor	Hand Lift	Hip Speed	UT Speed	Hand Speed	Hip Rot (Impact)	UT Rot (Impact)	BS Duration	DS Duration	Swing Duration
50m	23 (21 – 26)	71 (71 – 76)	52 (52 – 52)	55 (52 – 57)	238 (230 – 253)	435 (425 – 452)	494 (470 – 511)	16 (15 – 17)	10 (8 – 12)	735 (723 – 757)	296 (283 – 308)	1031 (1006 – 1056)
70m	20 (19 – 21)	78 (71 – 77)	54 (51 – 54)	62 (60 – 65)	280 (275 – 287)	478 (473 – 488)	520 (509 – 530)	25 (23 – 26)	16 (13 – 18)	757 (740 – 775)	296 (283 – 308)	1053 (1048 – 1064)
100m	37 (36 – 38)	91 (90 – 92)	54 (52 – 56)	75 (74 – 77)	356 (351 – 359)	522 (513 – 526)	635 (629 – 637)	39 (38 – 39)	20 (19 – 21)	758	280	1038

A study of European Tour players with great short games revealed incredible consistency shot by shot.

■ **Swing time** For the 50-metre pitch, measured from the club's first movement back to impact, the average range was 1006 milliseconds to 1056ms, fastest to slowest. That's just five hundredths of a second difference. On the 70m distance the average was even tighter – 1048-1064ms. Clearly these guys can control swing speed exceptionally well.

■ **Amount of rotation** For the 70m shot, the average backswing hip rotation ranged between 19-21°, while the upper torso ranged between 73-75°. That's the same backswing turn to within two degrees over 10 shots – astonishing consistency.

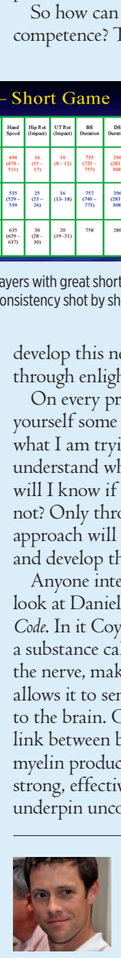
■ **Hand lift** This was measured on tghe backswing, in inches from the ground. On the 50m shot the range was 52-57 inches; for the 70m shot 60-65; and for the 100m shot 74-75, within an inch, every time. I think you'll agree these are fairly tight ranges.

This research clarifies the areas of the part-swing action where consistency is most important – and the tuition Hugh offers on these pages will help you achieve those. But the sheer levels of accuracy these players exhibit reveals one other thing. These levels of consistency can only be achieved through what has come to be termed "unconscious competence". These players have developed skill acquisition to hardwire the body to make that movement in an unconscious manner. You could never find these levels of precision on a conscious plane.

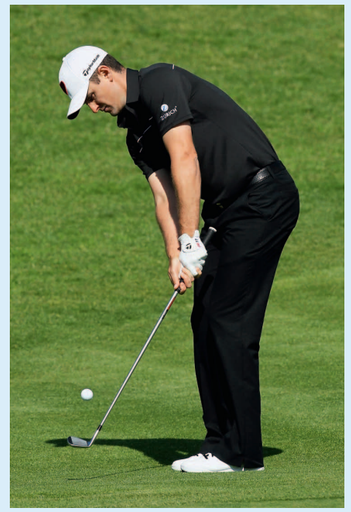
So how can you develop unconscious competence? The answer lies not in what you practise, but in how you practise. Skill acquisition is about creating well-developed neural pathways. These allow the brain and muscles to work together, enabling you to repeat complex movement patterns. You will only develop this neuro-muscular control through enlightened practice.

On every practice session you take, ask yourself some questions. Do I understand what I am trying to achieve? Do I really understand what I am trying to feel? How will I know if this session is a success or not? Only through this clarity of approach will you practise the right way, and develop those neural pathways.

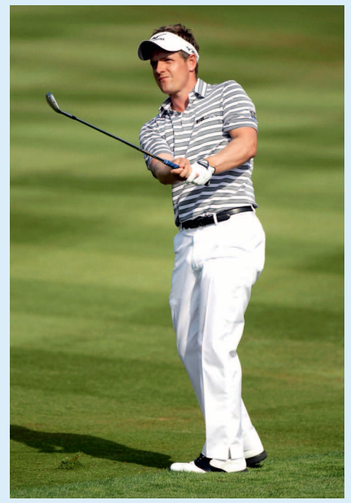
Anyone interested in this should take a look at Daniel Coyle's book *The Talent Code*. In it Coyle outlines the discovery of a substance called myelin, which insulates the nerve, makes it more robust, and allows it to send a better, clearer message to the brain. Coyle goes on to describe the link between better practice and enhanced myelin production – so helping you create strong, effective neural pathways that underpin unconscious competence.



MARK BULL
Works with 50 tour professionals, plus a range of national and county squads. Find out more at www.markbullgolf.co.uk



JUSTIN ROSE During Rose's WGC victory at Doral the Englishman had 26 chip/pitch shots and found the green with 25, 20 of which finished within five feet of the hole.



LUKE DONALD The World No.1's superb short game not only helped him regain his place at the summit but also put him in position to top the PGA Tour's putting stats.