

(r)evolution of power

tennisforall.com ponders the Andy Roddick Forehand

Last year at the French Open, I saw Andy Roddick on court for the first time and the guy is as gifted a hitter of a tennis ball as I have ever photographed. It is also worthy of mention that whoever coached him from an *early* age (and I have no idea who did so) has done an exceptional job. Why? Because his individual talent has been nurtured, not cloned to fit some lesser blueprint. In the first stages, the coach's task can be likened to panning for gold, because talent first of all needs to be unearthed. Once recognised, the gifted youngster then needs technique tailoring to personal requirements: a bespoke set of tennis strokes, cut from the cloth of a player's personal strengths, then shaped into weaponry suitable for furthering his or her intentions. Andy Roddick's chief weapon is power and he hits the ball consistently harder than perhaps any player I have seen to date. Before analyzing where those extra mph come from, I'll give a neat but very general history of the forehand drive.

CONTACT POINT

The backbone of any tennis stroke is contact point. You can have the flashiest stroke on earth, but if the ball is in the wrong place by the time you stick your racket strings to it, the stroke is worthless and will only be saved by improvisation (and improvisation is no foundation). Where is the ideal contact for a forehand? As we shall see time and again, it depends on your *grip*, *type of stroke* and *intentions*, but two things apply to everyone.

Firstly, contact with the ball should be made some way forward of the hitting shoulder.

Secondly, contact should be some way away from your body, so you don't end up scraping the ball off knees or spooning it out of your navel fluff.

(R)EVOLUTION

Forgive the *huge* generalization, but in days of old, tennis players were taught to politely swing the racket head at the ball. Those of a suitable age can cast their minds back to Jimmy Connors and Chris Evert. Both players took quite a simple, straight backswing, with the racket head below the height of the ball, and generally *lifted* the ball back over the net. No loop. No excessive topspin. Just a low-to-high swing from below the height of the approaching ball. Then came King Bjorn, who took Vilas-type,

whipped-up topspin to greater heights. The natural dip of topspin allowed players to hit higher over the net in the knowledge that the ball would be forced back down on the other side of it. Heavy topspin gave players greater consistency than flat-hitters and a generation of loopers emerged, not least amongst which was Gabriela Sabatini, who could pin an opponent to the court back-stop with high-and-deep topspin drives. But for every successful on-court action there's an equal and opposite reaction. Aggressive baseliners began using a 'loop' to generate pace as well as topspin, and hitting the ball on the rise was an antidote to the topspin merchants' moonballing tactics.

'FAR-OUT, MAN'

What precedes is a neat generalisation about how the game is constantly evolving and the current manifestation of power-evolution is found in Andy Roddick. Where does his power come from? As I have mentioned previously, a contact point forward of the hitting shoulder encourages it. Take a look at **Frame 4**. Andy's contact isn't so much forward as *totally far-out*. How does this gain him even more power? Read on.

THE UNDERARM THROW

In the old days, if you swung the racket head at the ball too speedily, the ball would fly beyond the opposite baseline. Why? Because topspin wasn't widely used, so there was only gravity to dip the ball. But when heavy topspin became the norm, things changed. Players and coaches realized that, whilst there might be physical limitations to the *getting of topspin*, there was no real limit to how much a player could use: the faster the strings *ripped* up the back of the ball, the more *dip* you got from topspin, which kept the ball in court. Fundamentally, this is where the groundstroke changed forever. No longer was it sufficient to *swing*: to get the required racket head speed (to generate spin) it was now necessary to kind of *throw* the racket head. Logically, my name for this technique is **the underarm throw**. Take a look at the mix-n-match manipulated image to the right, which I've put together from a number of 'Andys' (from the same photo sequence). Imagine Andy has entered a tournament with a difference: instead of hitting a ball, the entrants compete to see who can throw a racket farthest. But competitors **can't** use an

overhead throwing action (a service action). No, they must *throw* the racket *underarm*. What technique would be best? Undoubtedly, the one you see below and to the right. Andy starts with a sizeable loop and is literally *throwing* the racket head at the ball (only he doesn't let go). Look at the sequence below. Andy turns the shoulders and gets his right elbow *above* the height of his shoulder, which allows him to take a BIG loop. **Frames 2 & 3** show Andy dropping the racket *below* the oncoming ball, which is essential to avoid *chopping down*. Now we come to the importance of the far-out contact. The **far-out contact** encourages power by *inviting* Andy's efforts to come *through* into the shot. Run your eyes over the full sequence and concentrate on the hitting shoulder and see how the **far-out contact** *draws* the right shoulder and upper right side of the body. In the final frame you'll see to what degree Andy's *underarm throw* has drawn the whole right side of the body through with it. Look again. In **frames 3 & 4** Andy's racket comes out of the circular back-loop and he accelerates the racket head towards the far-out contact. Now view the elbow in **frames 4 & 5**. Has it travelled far? Not really. But the hand has. At contact the hand was palm-up, but now it's palm-down. Any idea why? To eke out an answer, turn once again to the **manipulation** to the right. Is Andy hitting with topspin? He's certainly powering the racket head *through* from a little way *below* the ball, so the answer is yes. However, the spin is secondary to power: he's using topspin to control his power-forehand. See how he hits both **through** and **up** at the same time. In **frame 5** the elbow couldn't be further forward of the body, which is a good indication of an aggressive drive, but the palm has whipped upwards, which I have highlighted in the fuller picture. I'll scrutinize this 'up and through' dual-function of the hitting arm (**compare Hewitt Forehand on the website**), and the fullness of the role the grip and legs play in directing force, at a later date.

IMPORTANT: All pros have exceptional talent. Always consult a teaching professional before copying or changing strokes.

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A Fuller Picture

