

Revolutionary Tennis

Tennis Instruction That Makes Sense



Step 8

The Forehand Groundstroke Part II

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THE LOOP

There no longer is a debate on whether you take the racket straight back or do a loop. There are two movements, or beats, to the loop. Keeping these two beats separate and using each in its own time frame speaks to rhythm and acceleration. Players run into trouble when they blend both beats, that is when you get the racket down too soon and it waits before swinging up.



You start the loop and move at the same time, photo of Amanda Coetzer far left, first one. Move forward into the ball (Step 1), with the right footwork (Step 2), for the forward stance, if not an open forward stance (Step 3). Keeping your racket up in the first beat of the loop until just before the ball bounces does tax your ability to drop the racket and swing forward on time, but it's the only way to go. The next three photos of

Amanda compile the second beat. Sure, it makes it a little harder in the beginning, but this is how it's done. In a short amount of time you'll get the roller coaster effect and it'll feel neat.

RACKET FACE DOWN?

The racket face can, and often does, face down when you lower the racket before bringing it up and into the ball. However, it is not absolutely necessary for the racket to face down on the backswing.

Let me repeat that. It is not absolutely necessary for the racket face to face down on the backswing. This is a (good) device to help your racket do the really important thing for contact, stay vertical. But what's responsible for the vertical contact is pronation, which follows, not keeping the racket face down.

BACKSWING DEPTH AND DROP THE RACKET FACE BEFORE LIFTING



The accompanying photos relate to backswing depth, dropping the racket face before lifting, and dropping the racket face below the hand (witnessed in all the pros and the stick figure in Step 8 previous). Backswing depth relates to getting the racket back deep enough in the backswing, not keeping the elbow "in" close to your body (center photo above). Of course if you get it back literally you run the risk of straightening your arm in the backswing position, which is a bad thing (photo left above). The elbow is off the body and the arm is bent (photo right above).

Nicholas Kiefer below shows this backswing depth and the bent arm in the photo on the left. It's common not to get the racket back deep enough, sort of not like not taking a ball all the way back before you throw it for distance. You need to give the racket a ride during the forward swing.

Next, the ball rises, levels, arcs down, and your racket face needs to drop below the contact height in order to lift and brush the ball for topspin (Kiefer center photo). Make sure you drop that racket as the second beat of the loop. How to? Relax your wrist to lower the racket face (Kiefer center photo). There is no need to keep the racket face and the hand at the same height above the court surface either throughout the swing or during contact.



THE ARM, THE LATERAL FLEX AROUND THE BODY

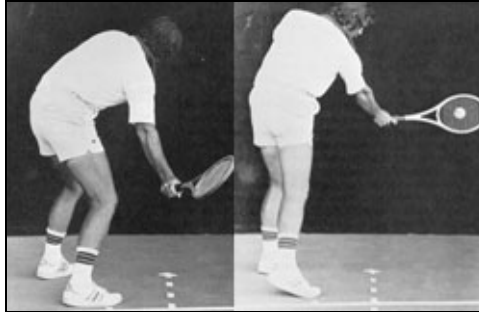
Break up the arm in half during your swing and allow the forearm to swing around your body. The biceps stays real close to you at this point, and your elbow, too. Of course if you literally swing around your body you'll hit the ball to the side fence opposite your forehand side. At some point prior to contact, and throughout the contact, the swing is no longer an arc but straightens out, as in the stroke's pattern straightens out and directs itself with the ball toward your intended ball placement area, not over to your side. The follow through tails off



to your side, yes, after you've (hopefully) hit straight.

If you see only the last frame in the sequence above, you might misconstrue the arm is swinging like a pendulum because you haven't seen the arm's entire sequence. If you drop the arm (and racket) down like a pendulum as in bowling or golfing your swing, well, you're not being a tennis player.

These pictures illustrate the pendulum motion. You start this motion with the racket face facing



down, and it's offered a pendulum swing places the racket face vertical against the ball, the black and white photo above (photo by Vic Braden from his 1977 book, Vic Braden's Tennis for The Future). If a true pendulum motion is used, as in the color photos on the right, the angle of the racket face will not change because the hand's angle does not change. The only way the angle of the racket face can change to a vertical position is if the hand supinates, which it does in the b&w photo.



The arm should never lock or be kept fixed, rigid; the forearm should never swing as one with the biceps. Ouch.

THE FORWARD FLEX TOWARDS THE BALL

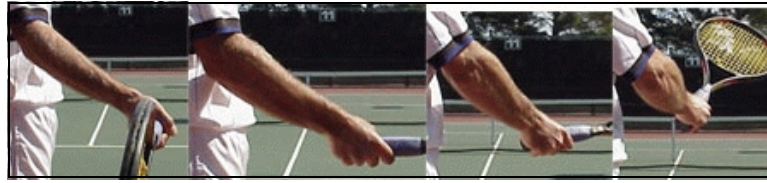
Okay, you're understanding how not to straighten the arm when swinging forward. But is the arm as a whole flexing backward and then forward?

The arm as a whole moves back (backswing) only to move forth as in a wave. It undulates, or flexes, during the forward swing besides the forearm flexing around the elbow and biceps laterally.

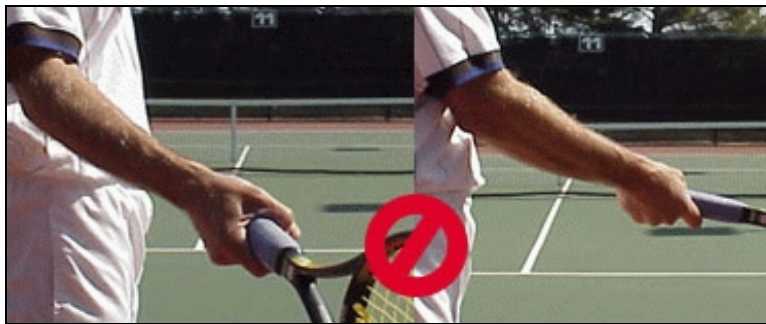
If I were teaching you I'd ask you to throw sidearm during your forward swing, or ask you to flex the arm forward, or break the wrist, or... These are merely words, and I use them cautiously. Everyone interprets words differently, and it's my job to find the right one that helps you. You might break you wrist and it'll be way too much, someone else might "break" it just the right amount. This is a teacher's challenge.

PRONATION

Pronation isn't difficult to do or to control. Roll into the ball during the swing. Not flop into it, not roll the wrist over, just roll into the ball in a counter clockwise direction to counter its force against you. For those teachers and organizations who decry this idea, time to let go.



The above photo tries to show how the hand, wrist, and forearm move if you want to flex your wrist and pronate. First photo left shows the hand/wrist, laying back, or cocked, about to swing up and forward. Second photo left tries its best to reflect the amount of lateral forward movement of the wrist, very little, and that's it, that movement stops right there. Simultaneous with the mild lateral wrist movement is the forward rotational element of pronation, shown separately in the third photo from the left in order to see it better. The last photo shows the post-contact signature pronation before the follow through tails off to the left.



The photo on the left shows a fixed wrist in the backswing, it remains straight, it does not lay back. And while even less-than-slight pronation is still present using a fixed wrist and produces topspin, though fixed wrist advocates are also non-pronation believers, there won't be the characteristic pop on

the ball or on its bounce. The hand needs to be used, not abused.

Critics argue pronation adds a layer of work, and that a fixed wrist is just one less thing to do. Not true, keeping the wrist in a fixed position is something to do as well, it's work. And I think it's less work to swing naturally, that is to pronate, than to swing using a stilted form, a fixed wrist.

Critics argue it's easier to keep the ball in with a fixed wrist. True, but then you're poking at the ball, you're not getting the big forehand. Riding a tricycle is easier than a bicycle, and bowling with two hands just may avoid the gutter, but undoubtedly you've grown and left the tricycle behind. Same is needed here, your forehand needs to grow up. And it can, no problem.

Interesting how critics never argue you can hit the ball harder by keeping your wrist fixed. Hmm.

Try pronation, you'll like it. But please, keep the arm flexible while doing this, and don't roll the arm over literally.

SHIFT INTO THE BALL

Sounds like a no-brainer, but don't forget to shift your body weight into the ball (Step 4). Too often you'll forget this little bit of business when trying to improve your swing and just stand there and arm it. Maintain your balance to control your power (Step 5).

ARM CLOSER TO THE BODY, OUTSIDE IN

Your arm reaches out wide to find the ball that's angling away from you, when it's at its widest from you. Then your arm compresses in toward your body instead of swinging away from it to maximize leverage and speed, similar to throwing a ball, known as outside in (Step 6). A card carrying member of the tennis establishment says the swing works inside out, that is your arm keeps moving away from your body laterally toward the same side net post during the swing. Sigh.

THE MIDDLE OF THE BALL, AND BEYOND THE BALL

You make contact with a ball angling away from you, and more often than not your swing's direction follows the (incoming) flight line of the ball to hit through the middle of the ball (Step 6). If you don't have enough zip on the ball, think of hitting beyond the ball or of the acceleration techniques in Step 6. Instead of dropping the racket face well below the ball to brush up on it a lot for lots of topspin, don't drop it so much and reduce (level out) the upward angle of the forward swing for more pop on the ball. Place the ball based on your time and your stroke (Step 7).

JERK THE RACKET UP AND OVER THE BALL

I use the phrase jerk the racket up and over the ball because forehands are beastly. You don't swing the racket nicely on a forehand, the ball won't pop out of there. No style points here. So squeeze the racket handle and jerk the racket over the ball.

EYES AND HEAD STEADY, SWING LOW TO HIGH

This is obvious. Swing low to high and keep your eyes and head steady on the contact point 'cause your swing can easily pull your head out of there.

THE FRONT HAND STEADY

Keep the front hand in front of your body, don't let the fact you're swinging around pull the front hand out of the way to your left. You can say the same thing about the front arm or shoulder, but it's easier to focus on the hand, which then keeps the other parts in line, too. Together with keeping your head still, this is the last part that helps to accelerate the racket. You can see this in the comparison between Wayne Black and the NBTA student in Step 8.

HIT UP OVER THE NET, NOT FOR LENGTH OR DEPTH

Most everyone incorrectly hits the ball on a line drive for depth. In so doing, you'll keep the arm extended away from you towards your opponent. Wrong mind set.

There's an obstacle in the way you first need to consider, not the baseline. The net. You need to hit up over the net first.

Pros hit the ball up and the depth takes care of itself. How? By the low to high lift angle and the angle of the racket face. So think about hitting up first. Spin keeps it in, as well as not e-x-tending the follow through.

Sure, you can hit up too much and the ball goes out. Duh. That's another reason why these l-o-n-g follow throughs don't help. Think topspin and not length of hit.

TIME

Just how much time do you have to hit a ball? A baseball batter stands almost 67 feet away from the pitcher and has .505 seconds in which to time a 90 mph fastball. A tennis player moves, and then times his forward swing by the bounce of the ball. A 90 mph tennis drive is going half as fast after the bounce. If this drive bounces 5 feet from you, you have a whopping .075 seconds in which to time the hit. If there's 8 feet, you have .121 seconds.

And if you're facing a 60 mph drive, which is going 30 mph after the bounce, within five feet you have but .114 seconds, in 8 feet you have .18 seconds. Not much time.

Calculating this way applies more for a serve, where the ball kind of moves straight up as opposed to a groundstroke where it rises and crests, slowing down even more and allowing you more time before you hit it.

The point is clear, you have little time to make things happen right, but a lot of time to screw things up.

YOU HAVE FOUR MILLISECONDS TO SCREW UP

If having less than two tenths of a second in which to be properly positioned and time the forward swing isn't bad enough, it gets worse. The ball's on a pro's racket for 4 to 5 milliseconds. That's .004 seconds. Even if everything's perfect within your first window of time, there's an even smaller window coming up.

Before you reach that 4 millisecond event, bad stuff can happen. It all boils down to this, you get ahead of yourself. It's hard to keep it together between 2 tenths of a second down to the last 4 milliseconds. What happens? You're going to start moving away from the ball before you strike it either through rotation, equal and opposite reaction forces, desire to start repositioning, or by trying to sneak a peek at your result before you've actually hit the ball.

And if you don't get ahead of yourself, in less than 4 milliseconds seconds your body can still adversely impact your swing. Not consciously, subconsciously. Every little thing that could go wrong still has ample time to manifest itself. Why, how, you ask? Because the extraordinary human body can move in any direction in less than .004 seconds, the time frame in which it takes you to remove your hand from a hot stove.

In .004 seconds you can move away from the ball too much, the eyes can look away, the head can move prior to the swing, the wrist can weaken the moment you hit the ball. Pros miss hit all the time, but our hands don't collapse when we do and our swing's strength and determination makes up for it. In .004 seconds you can choke, think about repositioning, think about "if I don't hit it well enough the ball's gonna come screaming back at me." All of this happens subconsciously. But the baddest of them all is...

DON'T ROTATE

Body rotation. Here's the big one. Once the forward swing is initiated, don't rotate. Rotation will cause your head to move, your hand to weaken, will alter the contact point, will send your body away from the ball. If you're more than a 5.0 player you'll rotate some 'cause your racket accelerates well, but make sure it's only some. I know you're following through and thinking about the next shot, and there's a better than even chance you'll rotate a-way from your shot in the present moment. But first things first. Hit your shot, try to chill for 4 milliseconds, then start repositioning.

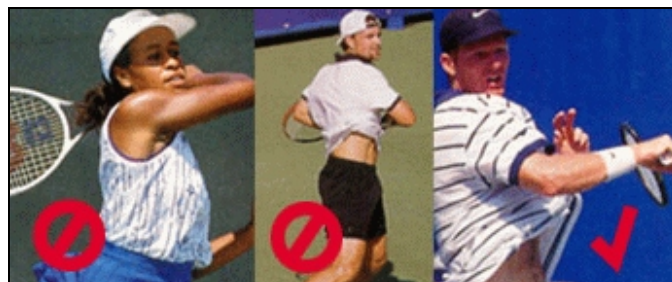
And for advanced players, the slight forward back shoulder rotation that boosts your swing needs to be a subconscious act, not a conscious one. You become terrible inconsistent when you consciously try to rotate part(s) of your body during the swing. If you're having a bad day, try not to rotate as much and it'll help, try watching the ball instead and keeping the head steady during contact. Isn't this why you read about pros hitting millions of balls? Is it timing? Yup, and some days are just better than others.

BRING FOLLOW THROUGH AND RACKET FACE DOWN

To generalize, a follow through finishes with the racket below your chin, facing down either a bit or a lot to your left and above the hand in height above the court surface, and the arm is bent in toward your body. Assuming you want to hit the ball hard and keep it in.



Popular follow through constructs where the forehand's wrist is by your opposite ear to hear the ticking of your wrist watch on that wrist is exaggerated. So, too, is throwing the back shoulder around and finishing with the racket pointed way behind you and down. (Photos from Tennis magazine: Agassi, 11/00, and Haas, 05/00, by Mary Schilpp/clp; Coetzer, 06/98, and Kiefer, 07-08/00, by Ron Angle; Rubin, 08/96, and Courier, 03/97, by Stephen Szurlej.)



The forehand. It's like a shotgun, where you don't have to pinpoint your target (the ball at contact) all that accurately but you can still get it. There's a lot of room for error on the forehand. You can be late and still hit well and you can fight off the effect of going backwards better because you have "more" weight to bear into the shot (the racket arm's behind you and coming forward).

The forehand. A beast. The backhand, by comparison, is beauty. Precision. A bow and arrow. Two handed backhands are more violent than a one hander, they're more defiant, but even they aren't the beasts forehands are.

You're familiar with the pendulum motion, drop your arm by your side and swing it to (down) and

fro (up). Hold a racket in your hand and swing this way and it'll feel very mannered, not natural. That's because it's not natural for the arm to swing a hand-held bat this way. The arm needs to flex.

Step 9 will feature either the backhand or the return of serve, which isn't too involving. I don't know at this time. Until then, good luck, and keep the emails coming 'cause I learn a lot from you, too. Cheers.