

**Dag van de Trainer**

**Footwork related to game  
situation and to space to cover  
in tennis**

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Gent**

## Inhoudstafel

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### 1. General logic of court coverage (positioning)

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- B. Up/back positioning at the net
- C. Lateral positioning at the baseline
- D. Lateral positioning at the net
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## TECHNIQUE FOOTWORK AND TIMING

### INTRODUCTION

The following document will provide the Coach with various information on Court Coverage, Footwork and timing. It is broken down into 3 parts:

1. General Logic of Court Coverage (Positioning)
2. Recommendations and considerations for Training Footwork and Court Coverage
3. Timing

#### ***What is the relationship with Court Coverage, Footwork and Timing?***

The logic for proper court coverage and related footwork is to provide the optimal movement and positioning in order to be set-up (timing) for each shot that is being intended.

### 1. GENERAL LOGIC OF COURT COVERAGE (POSITIONING)

#### A) Up/Back Positioning at the Backcourt

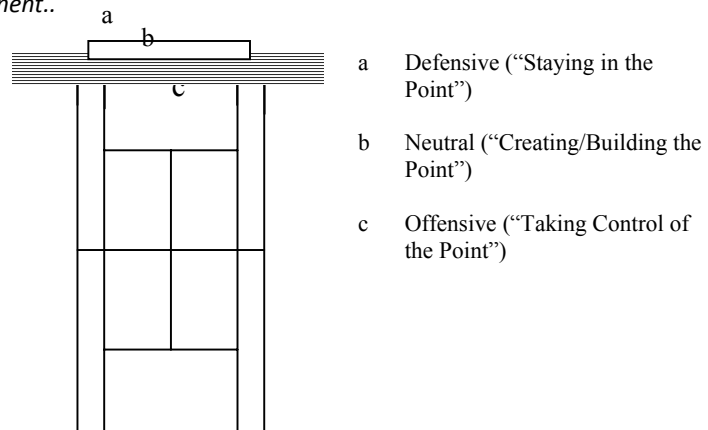
Beginning at the competitive under-14 level, the speed at which the players hit usually requires for a player to hit the ball on the rise or at the peak of the bounce in exchanging situations. Players are beginning to develop more aggressive tactics at this point, hence players will want to increase their ability to hit angles and to reduce the inter-strokes interval in order to implement more aggressive tactics. The challenge is to find an optimal position which takes into consideration the following:

- The player is not too close to the baseline where he/she is forced to hit half-volleys
- The player is not too far behind the baseline where he/she loses opportunities of having a high tempo or to attack easier balls

**NOTE:** *It would not be advisable to back-up all the time to let the ball drop at this level.*

The following diagram shows three zones of positioning which explains the logic of starting position for each shot as it relates to up/back positioning. Note, that this starting position is the recovery position from the last shot.

**NOTE:** *The lateral starting position is more related to the geometry of the court and overall ability to bisect the possibilities by the opponent..*



**If you hit an offensive shot, then recover to offensive zone:** For example, if you hit a strong first serve or a powerful forehand drive, then you will recover in the offensive zone to look to take control of the point through an offensive shot.

**If you hit a neutral shot, then recover in neutral zone:** For example, if after a return of a second serve from the  $\frac{3}{4}$  court, you find yourself in a neutral situation, recover to the neutral zone in order to initiate the rally. From this neutral zone, look to create an opportunity. Note: at any time you receive an easier ball, move into the offensive zone to take control of the point

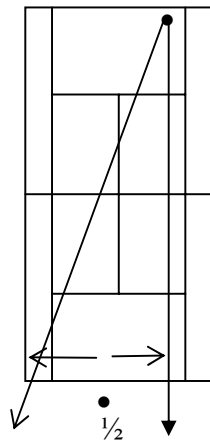
**If you hit a defensive or weak shot, then recover to defensive zone:** For example, if after a weak rallying backhand which lands in the middle of your opponents court, recover to the defensive zone.... If your opponent does not take advantage of the situation and gives you a neutral type of ball... move back into the neutral zone in order to hit the shot.

### B) Up/Back Positioning at the Net

At the net, the up/back position is dependent on the possibilities of the opponent. The net player will find a position which takes into consideration the likelihood of both the lob and crosscourt angle.

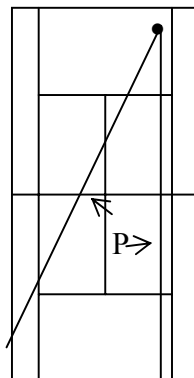
### C) Lateral Positioning at the Baseline

From a tactical perspective the selection of a players positioning is based on the best location to cover the court. From a lateral perspective... it means being in the middle of the possible shots by the opponent.

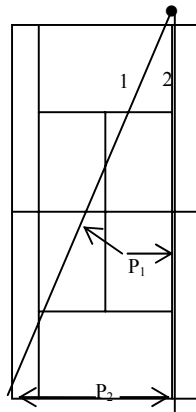


### D) Lateral Positioning at the Net

From a tactical perspective the selection of a players positioning is based on the best location to cover the court. From a lateral perspective... it means being in the middle of the possible shots by the opponent.



**E) Lateral Positioning: A Comparison of Positioning at the Net vs the Baseline**



1 = angle to open the court or angle passing shot

2 = down-the-line

$P_1$  = position at net

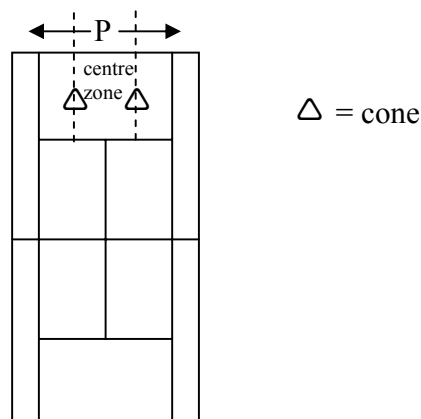
$P_2$  = position at baseline

## 2. RECOMMENDATIONS/CONSIDERATIONS FOR TRAINING FOOTWORK AND COURT COVERAGE

### Acquiring the Fundamentals: Under 11

1. **Attitude:** Most importantly, at this stage players must develop the proper attitude for footwork. Specifically, the desire to move; the desire to run after every ball; the desire to be set-up to hit the ball. This important desire is a necessity and must be a major focus by coaches.
2. **Understanding the logic of setting-up and footwork:** Players must learn what a proper “set-up” means. In other words, to be balanced with the correct stance (individualized for their technique and/or dependent on situation) and very clear on the proper impact point (correct timing). Once the proper set-up is clear, Coaches should help players understand that the entire purpose of court positioning and footwork is to insure that proper set-up can take place on every ball.
3. **Court positioning - lateral:** Players at this stage should learn lateral court positioning in relation to the geometry of the court. In other words, how to bisect the possibilities of the opponent at the baseline, the midcourt and the net. Backcourt positioning is especially important that this stage as most of the play takes place in the backcourt. Hence, players should understand the logic for the differences in recovery between when hitting down the line vs. crosscourt.
4. **Court positioning - up/back:** As it relates to up/back positioning... this will be dependent on level of players and includes such considerations as the tempo they hit with and whether they hit on rise or on the decline, etc. Some general rules.... With entry-level competitive players and lower... they often hit short and in the middle of the court and although they hit usually on the decline, their initial position or usually be on or close to the baseline as this is an easy neutral position to move from. As the players get better they will tend to hit higher and deeper, hence their initial court position will usually be three to four feet behind baseline. (See court positioning and footwork document for further information)
5. **Ready position:** Assuming the court positioning is correct, the players should be ready to anticipate or react for the ball with “lively feet” and should have the habit of initiating the split stepping prior to each impact of the opponent.
6. **The movement (displacement) to the ball in order to be set-up:** Since this age stage of development spends most of it's time in baseline exchanges at this point, all the basic movements related to backcourt footwork should be learned and trained which include: shuffle steps (for easy balls which require up/back or lateral movement), step out and run (for lateral balls which require more movement), crossover step (for balls which require quick movement back or quick lateral recovery) and drop step (for balls which require very fast movement) should all be trained. The concept of moving with the head facing forward and being set-up before impact are very to at this point. As well, to concept of getting out of the center zone is also very important in order to be set-up before the ball bounces when the balls are hit outside the center.

**NOTE:** *Ball judgment is imperative for the initial quick movement, hence the use of command words can be very helpful ensuring this important focus.*



7. **Positioning to hit the shot, when set-up is possible:** The development of the small adjustment steps for perfect impact is very important. This will help ensure that Players are able to set-up with a wide base (including bent knees) in order to initiate a stroke from the ground. The different stances should also be experienced at this stage.... Open stance when moving into corners, neutral stance for moving forward or backward; pushing off back leg and rotating to land on the previous front leg for moving back quickly.
8. **Positioning to hit the shot, when set-up is not possible:** Players will need to learn to hit on the run for situations where the set-up is not possible. Dynamic balance is very important. As well, different movement steps required for hitting on the run should be experience including: hitting off the front pivot foot; hitting while running through shot (front leg will land after impact) and hitting while using the double hop step.
9. **Recovering for the next shot:** This should be taught in function of the logic for court positioning discussed above. It is important to stress the time/space element as the players need to learn to be recovered at a certain position before the opponent hits the next shot. This requires different footwork skills. All the basic, lateral recovery steps should be taught at this stage, including: shuffle steps (for recovering at a short distance), crossover and shuffle steps (for recovering from a longer distance), running steps, crossover and shuffle steps (for balls that you are totally out of the play).

For the up-back recovery many different skills need to be develop when coming to the net or backing up after a return of serve including back-peddalling and the cross behind step.

10. **Movement at net via doubles:** Use doubles situations to develop the basic footwork movements for volleys and overheads. Some considerations include:
  - Use serve and volley with a crosscourt first volley to develop the approach volley
  - Use common doubles situations (i.e. the return of serve, one up and one back, four at the net) to develop the net player's skills. This includes reaction skills, closing the net on easy balls, step out and crossover on fast balls, shuffle back on easy lobs, crossover and athletic "scissor kick" on tougher lobs.
11. **General athleticism and coordination for challenging movement:** It is important to train situations where the players receive very difficult balls, both at the baseline and at the net. This will not only develop the attitude of running after every ball and finding a way to get the ball back into play, but will develop the player's athleticism. Players need to learn to maintain control of their racquet regardless of how their body is positioned (i.e. off balanced, stretched out, etc.).

1. **General:** All the basic movements established above should be perfected.
2. **Court positioning:** At this stage is important that players perfect the up/back positioning in the backcourt in relation to whether they are in offence, neutral or in defence (see document on court coverage and footwork for further information. As well, players should learn the basic court positioning when approaching and when at net.
3. **Specific movement related to starting the point:** Since the serve and return of serve will begin to have a much greater influence on the outcome of the points, it will be important to train be most common footwork and related recovery/positioning for the first serve, 2nd serve, first serve return and 2nd serve return. The logic of the recovery/positioning will always be related to the tactical situation which the player will be in.
4. **Specific movement related to approaching the net:** Since at this stage of players will be encouraged to experiment with different game styles and to begin to move towards the development of a particular game style... the ability to attack and play the net must be developed. This includes both the movement to get to than that and the movement once they are at the net. As it relates to the movement to get to the net, players must learn a variety of footwork, including: the double hop (for drives when moving forward), hitting on the run - open stance (for drives when moving diagonally forward and on low balls when moving forward). As well, players must experience the different slice approach techniques to see which one best fits into their game, including the double hop, the cross behind and the crossover. Finally they will need to learn the footwork associated with approach volleys, including: the split step for the serve and volley, bringing the foot closest to the ball for intercepting volleys, spreading out the legs to get low for the serve and volley, the step out (or drop step) for changing direction when serve and volleying.
5. **Specific movement related to the net:** There are a number of movement skills which should be developed at the net including: the proper direction of movement when at the net (i.e. cutting off the angle on the crosscourt by moving forward); the step-out and crossover step for handling fast balls; being able to bring body close to the ball for slower balls and sitter volleys; the shuffle steps for easy overheads, the crossover step for difficult overheads and the ability to run towards the baseline with a jump and turn to hit overheads on very tough lobs.
6. **Specific movement related to their gamestyle:** For example, a player with a big forehand, will learn the run around and adjustments in positioning to favour their forehand side.
7. **General athleticism and coordination for challenging movement**

## Perfecting a Gamestyle: Under 18

All footwork and court coverage should be mastered at this point. Anticipation should be used more to alter positioning and movement. The Specific Movement relating to the serve and return becomes very important. As well, Specific Movement related to counter-attacking skills is very important.

When perfecting a gamestyle some players will modify their positioning/recovery from the text book positioning to favour their strengths. For example, a player with a big forehand could look to be positioned more to his/her backhand side, a net rusher closer to baseline, a retriever further back, etc.

At this stage, the physical side becomes increasingly more important, as it is imperative that players can move explosively and are able to maintain the quality of footwork during long matches and over a tournament period.

### 3. TIMING

#### INTRODUCTION

When observing the professional game, it is easy to see that players have an individualized technique with unique stroke patterns that vary with gamestyle, grip, stances, type of backswing, etc.

When developing a player, both the International Tennis Federation and Tennis Canada recommend that we accommodate this individualization as long as proper biomechanical fundamentals are maintained. Proper fundamentals include three key elements:

- Technique that allows for future development to higher levels
- Economical movement that does not waste energy
- Technique that allows a player to be injury free.

When training technique, it is also recommended that players be exposed to game situations commonly encountered at their level of play. Their technique must allow them to perform the tasks required in those situations successfully.

What becomes obvious in this approach of stroke individuality and biomechanical correctness, is that **timing** is the key element for efficiency and effectiveness of any stroke. Timing expresses the necessary coordination to play the game. Even top players can be heard saying, “*my timing is off today*” to explain a poor performance. Developing great timing is a critical key for coaches to prioritize.

In order to better understand timing and all the elements that make it up, a working definition is helpful:

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*Timing is the ability to coordinate the body and racquet work to centre the ball at the optimal impact point in relation to the player’s body in order to succeed an intended shot.*

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The following section will provide coaches with information about timing and how to develop it. Specifically, it will provide details on the 5 Impact Point Characteristics and how to observe and evaluate them.

#### 1. IMPACT POINT

##### A) 5 CHARACTERISTICS OF THE IMPACT POINT

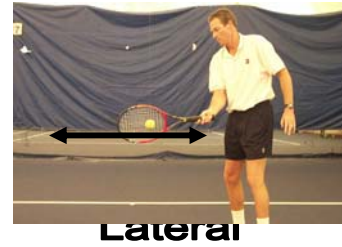
There are 5 key characteristics that make up an ‘optimal’ impact point. The first 3 help us determine the **Spatial relationship** of the impact point to the player’s body:

1. Lateral
2. Vertical
3. Back to front

The next two impact point characteristics help us to set-up the proper **tactical relationship** with the ball:

4. Rise/Peak/Fall
5. Disguise

**(1) Lateral:** The proximity of the ball to the player's body (imagine the player's body is a cylinder). Common errors include being too close or too far from the ball. A proper lateral impact allows the player to either hit the inside or outside of the ball to control the direction, while



**Lateral**



**Vertical**

**(2) Vertical:** The height of the ball in relation to the player's body (e.g. impact at shoulder level, waist level, knee level, etc.) Common errors would include hitting the ball below the knee, higher than the shoulder, or letting the ball drop too low on a serve or overhead.

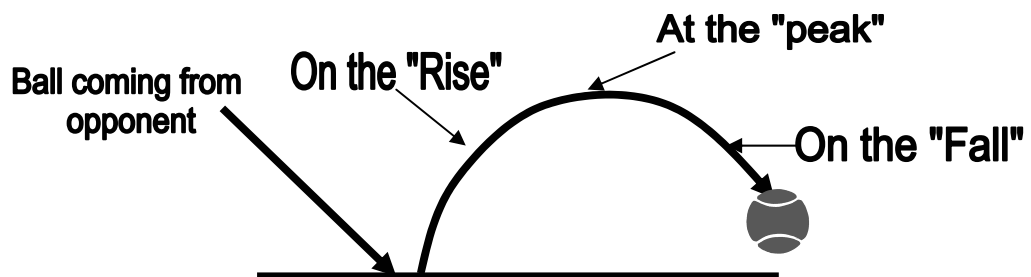
**(3) Back to Front:** The ball's position in relation to the player's body and the net. (e.g. impact behind the body, beside the body, in front of the body). Common errors would include hitting the ball too early (too much towards the net) or too late (behind the body). This impact point characteristic may vary in function of the stroke to be done and/or the grip / stance used.



**Back to Front**

A good impact point positions the ball so power can be **efficiently** transferred from the ground, through the player's body, into the ball. It also helps a player to control the ball for a more **effective** shot by putting it in a position where controlling the racquet path and angle is more comfortable.

**(4) Rise/Peak/Fall** (only for groundstrokes): By impacting the ball at different points in relation to the bounce, a player can vary the time of the shot. The higher the level of the player, the more frequently the ball is impacted between the "rise" and the "peak".



The advantages are:

- Taking the ball on the rise increases the tempo of the rally by taking time away from the opponent.
- Taking the ball at the peak increases the possibility of hitting a deep, penetrating shot. The net clearance compared to impacting the ball lower is increased.

It is easier to take balls on the rise by positioning relatively closer to the baseline and being ready to move forward. Taking the ball on the rise does not mean sacrificing a good vertical impact point. The ball should still be impacted between the knees and shoulders.

- To hit higher than the knee on very deep shots, players need to back-up and let the ball rise above the knee in order to hit the ball effectively.
- To hit lower than the shoulder requires either a quick forward movement to take the ball before it bounces higher than the shoulder, or to position in the court closer to the bounce of the ball (like on the return of 2<sup>nd</sup> serves with topspin).

**(5) Disguise:** By creating an impact point that allows a player to send more than one option, the player camouflages their shot (e.g. the player positions the impact point so the ball can be hit to the right or left equally well).

Poor impact point selection helps opponents anticipate by giving clues as to what shot you will hit (Total Anticipation) or by removing a possibility (Partial Anticipation).

On Groundstrokes:

- An impact point that is far in front makes it difficult to perform an inside-out or higher arcing topspin shots.
- An Impact Point far away from the body makes it difficult to send the ball crosscourt.
- An Impact point that is very low makes it difficult to lob with topspin or send the ball with power.
- Impacts that are low and in front have a tendency to send topspin shots crosscourt.

On serves:

- An Impact point that is far in front makes it difficult to perform topspin serves.
- If the toss varies too much to the right or left, it is easier to anticipate a slice or topspin serve.

Therefore, it is important to train a proper set-up to disguise intentions as well as providing as many options as possible.

## B. TIMING DEVELOPMENT

To develop advanced timing, it is recommended to develop these characteristics in two stages:

- The first 3 characteristics are developed in the U-11 (Adult 1.0-3.0) program. For example, on groundstrokes the player learns to hit at waist height (**Vertical**), slightly in front, and with a "Laid back wrist" (**Back to front**), at a comfortable distance from their body (**Lateral**).
- The next stage is for more competitive players (U14 or adults 3.5-4.5). Here the player is encouraged to make contact with the ball **On the rise**. This puts pressure on the opponent by taking time away.

Next, the player is made aware of how to **disguise** the shot to avoid being anticipated. Players are trained to set-up an impact point for the highest percentage shot in any given situation. They must also be able to perform one variation from that same impact point. At the higher levels (U18 or adults 4.5 and

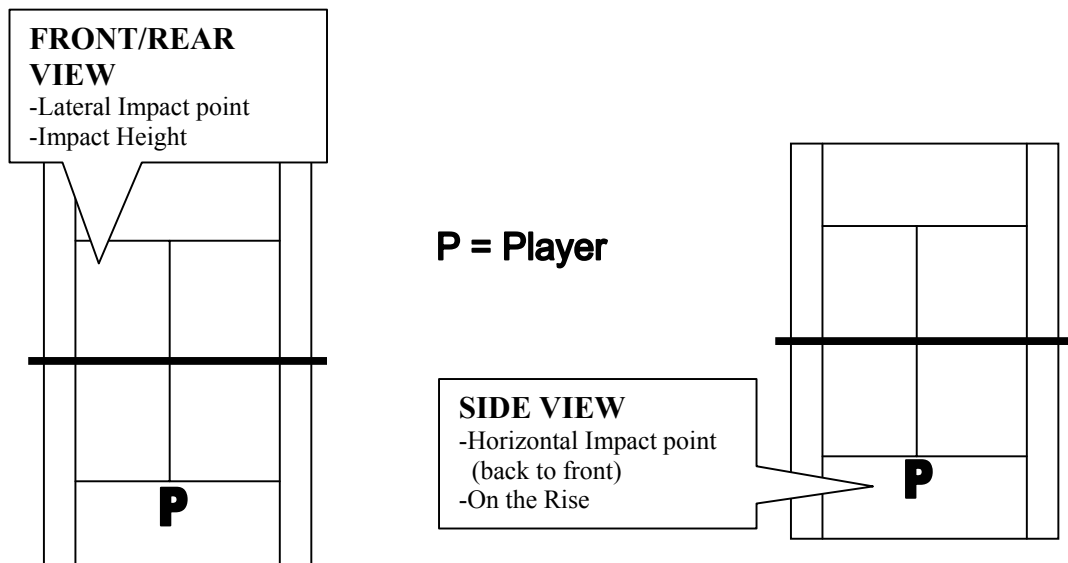
above), hitting on the rise becomes a necessity otherwise the pace of groundstrokes would require the player to be too far back. Players at this level must master all the 5 characteristics.

### C. IMPACT POINT EVALUATION

An initial evaluation of the student's timing is required to set-up the appropriate S.M.A.R.T. drill. This initial evaluation allows both player and student to be aware of the status of their skill, gauge progress, and provide reasons for any correction or progression that needs to be done.

To observe timing, the coach has two general options and a variety of observation positions to best view each impact point characteristic.

- 1) During a drill:** The coach can set up drills that challenge particular aspects of a student's timing. The advantage of this type of observation is that it provides more repetitions to evaluate. Drills can be basket feeding, live ball, or open point play.
- 2) During match play:** The advantage of match play observation is the coach can see the student's timing skills under real competitive conditions. In order to have focussed observation and be able to remember what occurred, it is highly recommended for the coach to chart. Charting helps keep a record of the performance for future reference. (See Chart)
- 3) Observation position:** Some views are better than others when observing timing.



**NOTE:** For the element of Disguise, the coach should attempt to anticipate the student's shots. 'Reading' their shots shows there is a lack of disguise.

- 4) Psychological Challenges:** It is important to note that timing challenges can be related to psychological state (e.g. player gets too anxious and impacts too far in front). This is why it is important to compare the timing that the players have in practice versus in match play. If the problem is psychological, that is what the coach must correct (e.g breathing out, staying calm and relaxing while impacting). The following sections will look at only the tactical/technical reasons the Impact point may break down.

## D. SPECIFIC IMPACT POINT OBSERVATION AND INTERVENTIONS

### 1) LATERAL IMPACT POINT

#### (a) General Skills:

To create the proper lateral distance, the student must be trained to consistently perform:

- **Head Control:** Keeping the head in front on groundstrokes and volleys will promote an impact point in front, especially when moving to the side.



**Coaching Tip** . . . have the student wear a baseball cap and keep the visor pointed forward. On serves and overheads, keeping the head up (rather than dropping the head to look at the target) will help promote a good impact.

- **Body Rotation:** Keep the impact positioned so rotating the body is comfortable on groundstrokes. A poor distance from the ball (too far or close) will hinder proper rotation.

#### (b) Specific problems and solutions:

To observe (or challenge in a drill) the Lateral Characteristics of the Impact point on groundstrokes, the coach should see what happens during 3 general situations:

1. When the ball is right at the player
2. When the player is forced to hit on the run
3. When the ball is just outside the players reach

#### I. Groundstrokes with the ball at the student

Look for the ability to quickly move into position. Many players are slow to move out of the way when a drive or serve is directed at them.

Problem	Cause	Solution
Unable to hit a ball close to them when being "jammed"	Stroking with an extended arm makes players vulnerable to balls close to them	Elbow must be closer to the body. This also helps the rotation of the body for power
Getting jammed too often	Indecision to move to the forehand or to the backhand when a ball is directed at them	Practice decision-making. (If moving to either F.H. or B.H. are equal options, emphasise the one that would be better for recovery.)
Un-stable impact point (lots of variation)	Player is unaware of the distance of the Impact Point from their body	Proper use of body rotation will help the player distance themselves from the ball properly

#### II. Groundstrokes on the Run

Problem	Cause	Solution
Impact too far from body	When on the run, players have a tendency to hit on their side instead of in front	Keeping the head in front will encourage the player to impact in front

Impact too close to body	Players may misjudge the ball and 'overrun' it.	Deceleration steps when getting near the impact allows a player to 'fine-tune' their distance from the ball

**III. Groundstrokes with challenging movement but still being able to set-up**

Problem	Cause	Solution
Impact too far from the body	Chasing the ball instead of getting behind it. Reaching with the racquet rather than positioning the body to the ball.	Train to change zones by placing markers dividing the court in 3 equal zones. Ask the student to change zone before the ball received bounces on their side. This will help to hit in front instead than on the side.

**(c) Volleys:**

On volleys, it is not always possible to have the perfect impact point. It is important for players to be trained to move their bodies quickly rather than reaching with the racquet. Along with that, players need to be trained to prefer impacting too close to the body rather than too far. The 'Zone Drill' (see solution box above) is very helpful for volleys. Zones are smaller at the net and typically it is the feeling of being unable to reach the ball that makes players reach instead of move their body.

**(d) Serve:**

On the serve: after the ball is tossed the server should be able to serve wide or T when the coach calls the location as soon as the ball is released from the hand.

**2) IMPACT POINT HEIGHT**

**(a) General Skills:**

Impact point height can have more "allowable variation" than the other characteristics. The height of the impact can be optimal anywhere between the shoulder and knees, depending on the situation. For example, to drive the ball on a level trajectory, a shoulder height impact gives a better net clearance than a waist level impact height.

- Grip: On groundstrokes, different grips create different optimal heights for the impact point. Generally, the more "Western" the grip, the more the impact point moves forward and upward. On the other end of the grip continuum, a continental grip works better with a lower and further back (in-line with the body) impact point.
- Spin: Spin requires the racquet to 'brush' across the ball. Certain heights allow a better brush across the ball than others.

**(b) Specific problems and solutions:**

To observe (or challenge in a drill) the Height Characteristic of the Impact point on groundstrokes, the coach should see what happens during 3 general situations:

1. Low/deep
2. High/deep
3. Low/short

For more advanced players, the height also includes a spin component (e.g. higher balls with topspin, lower balls with slice, etc.)

***I. Groundstrokes when receiving low/deep shots***

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Player takes the ball as a half-volley with a low impact point	Player does not identify that the ball will be deep and does not back-up accordingly	Quick ball judgement and a quick shuffle step backwards to let the ball rise to a better height.

***II. Groundstrokes when receiving high/deep shots***

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Player takes the ball at an impact above shoulder level	Potential height of the bounce is not identified early (whether receiving groundstrokes or serves)	Quick ball judgement and decision to either move forward and take the ball on the rise (before it gets too high) or move back and let it drop to shoulder height.

***III. Groundstrokes when receiving low/short shots***

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Player reaches forward and impacts the ball below knee level	Potential height of the bounce is not identified early. Player does not get a quick start.	Quick ball judgement and decision to move forward and organize their body around the best impact height possible

**(c) Volleys**

On volleys, it is not always possible to have the perfect impact point height. However, it is important for players to be trained to move their bodies into position for an ideal volley impact height whenever possible. Players also need to be trained to move forward as soon as possible to take the ball at the highest point over the net. This allows for more angles and is less risky when adding speed to the shot.

**(d) Serve**

On the serve the ball should be struck at maximum upward extension.

### 3) BACK TO FRONT IMPACT POINT

#### (a) General Skills:

The Back to front characteristic of the impact point is very much connected to the preparation of the shot. Setting up the proper footing and preparing both body and racquet are critical.

- Grip: On groundstrokes, different grips require different Back to front impact points. Generally, the more “Western” the grip, the more the impact point moves forward. On the other end of the grip continuum, a continental grip works better with a further back (in-line with the body) impact point.
- Spin: It is important to observe this characteristic from a beside-the-player position. Spin is more available with an impact that is not too far in front. An impact too far in front (which may be fine for a flat drive, will not allow the racquet to address the ball with a steep path). Also, on topspin shots, low balls can be hit closer to the body where higher balls can be taken further out front.

#### (b) Specific problems and solutions:

Evaluating the Back to front characteristic of the Impact Point is challenging. For example, it is difficult to see if the ball was hit late because the player was late in getting to the ball or the timing was in fact late. In this situation it is recommended to send balls at random speeds (some with speed, some without) without moving the player too far.

To observe (or challenge in a drill) the Back to front Characteristic of the Impact point, the coach should see what happens during 2 contrasting situations:

1. Balls coming fast
2. Balls coming slower

There are many specific situations that can challenge this Impact point characteristic including, return of fast / slow serves, passing shots on drives vs half-volley and countering drive vs attacking shots.

#### *1. When receiving faster balls*

Problem	Cause	Solution
Player impacts the ball too late when the ball is faster.	Player does not adapt preparation for the speed of the ball (or they try a speeded up version of their regular preparation)	Simplify the timing by making the preparation more ‘compact’ (keep the racquet closer the intended impact point)
Player takes the ball too early when returning a fast serve or attacking groundstroke	Player ‘rushes’ and is not patient with the impact. The time of the swing is mis-judged	Simplify the timing by making the preparation more ‘compact’ (keep the racquet closer the intended impact point)

## II. When receiving slower balls

Problem	Cause	Solution
Player takes the ball too early when returning a slower serve or groundstroke	Player feels they have time to 'wind-up' and power the ball the sped up version is difficult to coordinate	Maintain a good stroke rhythm (slow-fast).

### (c) Volleys

On volleys, it is not always possible to have the perfect impact point. However, this Impact Point characteristic is the one the player has the most control over. Hitting a volley late makes it difficult to control direction and speed. Hitting the ball too early doesn't allow for a good 'feel' or proper underspin.

### (d) Serve

For flatter serves slightly more out front allows for more racquet speed before impact. For topspin "kick" serves, an impact point further behind the head allows for a steeper low-to-high racquet path across the ball.

## 4) RISE/PEAK/FALL

### (a) General Skills:

This Impact Point characteristic only has application to groundstrokes. Where a player positions in relation to the bounce requires good coordination. Being able to judge the ball quickly, proper footwork and body/racquet preparation are important elements to successfully hit on the rise.

### (b) Specific problems and solutions:

When evaluating hitting on the rise, it is best to view the player from the side. In this way the entire trajectory of the ball after the bounce can be seen along with where the player impacted.

Problem	Cause	Solution
Ball gets too high	Student positioned too far from the bounce of the ball received	(See Coaching Tip for progression)
Ball gets too low (impact is on the rise but below the knee)	Player does not identify that the ball will be deep and does not back-up accordingly	Quick ball judgement and a quick shuffle step backwards to let the ball rise to a better height.



**Coaching Tip:** Have the student go through a progression to sensitize how far they need to be from the bounce:

**Step #1:** Have student run to where the ball received is bouncing and 'cover-over' the ball with their racquet so it does not bounce off the ground more than a few centimeters.

**Step#2:** Have the student hold the racquet at knee level with the strings vertical. They should try to position the racquet so the ball received bounces off the ground and touches the racquet as a half-volley. Students can call "bounce" when the ball received hits the ground and "hit" when it touches the racquet. If performed correctly, the words should come in rapid succession with very little time in between.

**Step #3:** In a regular rally, the student should use the same key words as the previous step. The word "hit" should be called before the ball reaches its peak after the bounce. The student should be impacting the ball between the bounce and the peak.

**NOTE:** The same key words can be used as the student receives balls short, wide, and deep. The goal is to position to take the ball before the peak. As an additional signal, the coach can say "peak" when the ball reaches its peak. The objective is to have the student call out "hit" before the coach calls "peak".

When observing the player, the frequency of on-the-rise can be plotted on the chart provided:

## 5) DISGUISE

### (a) Disguise for a lateral Impact Point:

- An impact too far or close will not allow the student to hit different sides of the ball effectively. Position so either the inside or outside of the ball can be hit from the same impact point. This will allow a player to disguise direction. Too much difference in the proximity of the ball (lateral distance of Impact point) helps the opponent to anticipate the direction of the shot.

### (b) Disguise for impact point height:

- By taking the ball in the zone between the shoulders and knees, the shot has better disguise. Shots taken outside that range are easier to anticipate.
- When a shot is taken low (below knee level) and in front, it is more likely to go crosscourt on topspin shots.
- Topspin shots taken at a low impact point will most likely not be lobbed.
- When a shot is taken with a low Impact point, a placement is more likely than a drive

### (c) Disguise for Back to front impact point:

- Taking the ball earlier (too far in front) will tend to make the ball go crosscourt.
- A later impact reveals a down-the-line or inside-out.
- On serves, impacting further back usually reveals topspin. More out front reveals a harder, flatter serve.

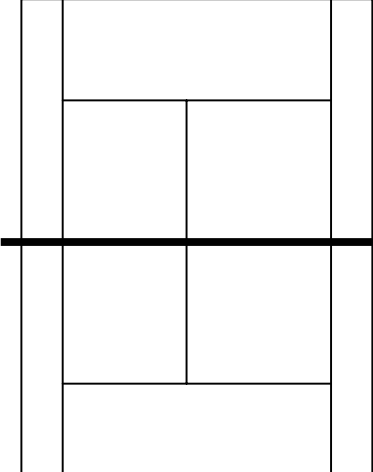
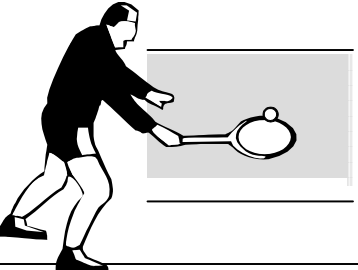
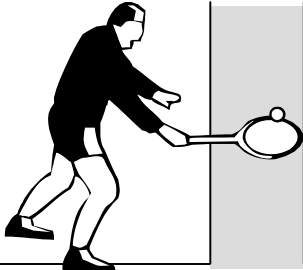
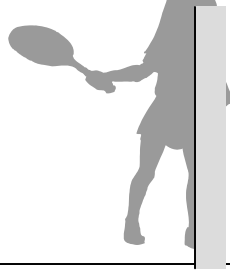
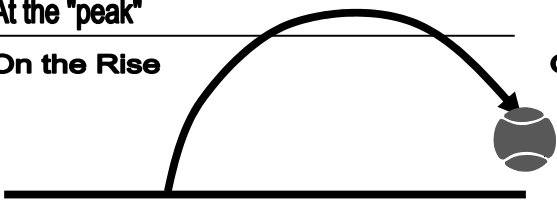
### (d) Training Disguise:

Disguise should be for the most frequent shot according to the situation. For example, for a ball received in the middle of the court where the player runs around their backhand, the most frequent shot would be an inside-out forehand. Therefore, prepare for an inside-out and learn to make a crosscourt from the same preparation and impact point. This principle of disguising the preparation in relation to the most common shot holds true for all disguise training.

- Disguising Direction: When disguising direction for any shot (groundstrokes, approach shots, etc.), the coach asks the student to send the ball in one of two directions (e.g. down-the-line or crosscourt). To help the student learn to position the ball at a neutral impact (one that allows both shots), the coach should delay telling them which one to execute until the ball bounces.
- Disguising Height: For height the most important element to disguise is if the shot will be a lob (high trajectory) or a drive (lower trajectory). In most cases, the most common shot would be a drive. The preparation must be able have the racquet dip below the intended impact to rise through it. The same Cue Word technique can be used where the coach will call out “lob” or “drive” at the bounce of the ball. The student must have a preparation that allows either shot when the coach cues.
- Disguising Distance: For distance, the disguise would be for a deep shot compared to a ‘drop’ shot. The deep shot would be the most common in this case. The same coach cue technique would be used.
- Disguising Serves: For serves, the coach tells the student to direct the ball to a target. The coach delays telling them which target to shoot for until the student tosses. This will help the student groove a toss that allows for different options.

## TIMING EVALUATION

The following is a chart that can help observe timing and the related effectiveness of the shot. Good timing is related to where the ball went (if the ball went long, in the net, wide, too high, too low, etc).

<b>SITUATION OF PLAY:</b>		
<input type="checkbox"/> Serving	<input type="checkbox"/> Returning	<input type="checkbox"/> Both Back <input type="checkbox"/> Approaching & at Net <input type="checkbox"/> Passing
<b>EFFECTIVENESS EVALUATION:</b> Mark where the player is located, the intended target area and where the balls actually landed.		
	<div style="border: 1px solid black; padding: 5px;"> <p>See the court diagram for <b>Direction &amp; Distance:</b></p> <p><b>Height:</b>  <input type="checkbox"/> Too high    <input type="checkbox"/> Too low    <input type="checkbox"/> Fine</p> <p><b>Speed:</b>  <input type="checkbox"/> Too fast    <input type="checkbox"/> Too slow    <input type="checkbox"/> Fine</p> <p><b>Spin:</b>  <input type="checkbox"/> Topspin    <input type="checkbox"/> Flat    <input type="checkbox"/> Underspin</p> </div>	
<b>IMPACT POINT EVALUATION:</b> Mark an "X" where the player impacted the ball compared to the shaded 'Strike Zone'		
<b>Vertical:</b> 	<b>Lateral:</b> 	<b>Back to Front:</b> 
<b>RISE/PEAK/FALL Evaluation</b> Mark an "X" where the player impacts the ball after the bounce. <b>At the "peak"</b> <hr style="width: 50%; margin-left: 0;"/> <b>On the Rise</b>  <b>On the Fall</b>		<b>Notes:</b>   