DEVELOPING FOOTWORK SITUATIONALLY

In a Game-based approach (GBA), it is ‘situations’ rather than strokes that need to be trained. Tactics are the driver of all technical development. Technique is developed through a series of tactical tasks, problems that need to be solved to play effectively. So what about footwork?

Universally, coaches agree that footwork is critical for success in tennis. In traditional coaching, footwork was all too often tied to stroke models. Coaches would have absurd debates about such things as, “should a player learn to hit open stance or closed”? Observing the athletic play performed in modern tennis, the answer to the above question is obviously “yes”!

Unfortunately, the industry is rife with less than effective footwork coaching. How many players have experienced the popular ‘non-technical’ approach (the coach hits balls out of the player’s reach and yells, “Get to the ball! Run faster!”) The other extreme is the ‘footwork model’ approach where the coach conforms everyone to the same pattern (e.g. Players should always ‘step and lean’ into their groundstrokes). They even have little cutouts of feet to show where to step.

Players must move quickly and efficiently to all parts of the court to perform the myriad of shots required in tennis. In a Game-based Approach, the path to developing footwork needs to take into account all the possibilities. To navigate this landscape, we need to define the principles that can be used to create functional footwork in the various situations encountered by players.

THE FOOTWORK CYCLE

The first tool needed is to define what happens during a shot in regards to footwork. This is called, the Footwork Cycle. It uses the same principles of the Shot cycle framework of Situation Training (see acecoach.com article: “The Shot Situation: Key Building Block for Situation Training”).

Just like the Shot Cycle, the Footwork Cycle includes two main ‘halves’. A tactical Situation (starting just before the opponent’s impact) that presents a challenge to the player and what they do to receive the ball, and a Response (starting from the player’s impact) that deals with the challenge and what is needed to send the ball.
The cycle can start with the player’s impact, like on a serve (read the diagram from the top down), or the opponents, like in a rally (read the diagram from the bottom up):

**SITUATION**

**RESPONSE**

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3. MANEUVRING
- o 2 Axis (Lateral/Up & Back)
- o 3 Steps (Shuffle/Crossover/Run)

2. START-STEP
- o Drop-step
- o Punch-step
- o Step-out

1. NEUTRAL POSITION
- o Split-step (Static/Dynamic)

This framework gives coaches a critical tool to systematically analyze and organize training the components involved in footwork. Let’s look at the components in more detail:

1. **NEUTRAL POSITION:**
   On groundstrokes, returns, and volleys, the cycle starts just before the Opponent impacts the ball. The goal is to have a balanced position to launch into the shot. The main way to accomplish this is with a Split-step. These come in two general categories, static and dynamic.

- **Static Split-steps:** These occur from a stationary position (like on return of serve or, at the net in doubles, etc.). The key is the timing of the step to begin generating ground force reaction. Typically, it occurs just before the opponent impacts the ball.

- **Dynamic Split-steps:** These occur from a moving position. Dynamic Split-steps are connected to the recovery process. The goal is to re-gain a neutral balance (head above centre of gravity) to allow movement in any direction while transitioning from one shot to the next.
2. START STEP:
The ‘Start-Step’ is the first movement a player takes to get to the ball. There are a number of options players use to break inertia and initiate movement:

- **Drop-step:** This movement is to get a quick start for lateral movement. The outside foot pushes in the opposite direction of movement as the inside foot slides (drops) underneath the centre of gravity.

- **Punch-step:** This step is important to get maximum ‘thrust’ in the direction of movement. The physics principle, ‘every action has an equal and opposite reaction’, comes into play as the player must perform a strong push in the opposite direction of where they want to go. The key on the punch-step is to keep the centre of gravity neutral (don’t shift weight towards the push).

- **Step-out:** This move is typically seen when moving laterally for volleys. The foot (on the same side as the direction of movement) turns out. At higher levels, the Step-out is part of the Split-step.
3. MANEUVRING:
This refers to the footwork required to take the player to the appropriate location to perform the stroke. It is their movement to the ball.

- **2 Axis:** Players can move along two basic axes. Lateral movement occurs side to side across the court. Up & Back movement occurs towards or away from the net. Of course, there are multiple combinations and angles in between each axis.

- **3 Steps:** There are three basic ways a player strides across a court.
  - **Shuffle Step:** This is for moving short distances (see Federer below)
  - **Crossover:** For moving medium distances
  - **Run:** For covering maximum ground quickly

4. SET-UP:
This refers to the movements required to launch the shot. The player is already in the appropriate location and only needs to perform the footwork during the shot. Notice the position of the feet in relation to the net on these various Federer backhands.

- **Stances:** These refer to the position of the feet in relation to the net
  - **Open:**
  - **Semi-Open:**
  - **Neutral:**
  - **Semi-closed:**
  - **Closed:**
• **Footing:** This refers to which foot launches the body into the shot and which foot is landed on. There are 4 combinations (these can occur on groundstrokes, volleys, and overheads).
  - Right-Right:
  - Right-Left:
  - Left-Right:
  - Left-Left:

Notice Roger Federer below performing some of the various footings on his forehand groundstroke.

Launch on Right/Land on Right

Launch on Left/Land on Left

Launch on Right/Land on Left

Photos Courtesy of TennisOne.com
5. RECOVERY:
As the name implies, this stage of the Footwork Cycle is to recover the player’s balance and put them in a location that allows them to get to any shot the opponent makes. Recovery has 4 components:

- **Position**: The player must regain their neutral balanced position with a lower posture and wide base (see photo #3 in Federer sequence below).

- **Location**: The player must place themselves in order to respond to any shot the opponent makes. The location of recovery includes side to side (lateral) as well as up & back (offensive vs defensive). The diagram includes groundstroke recovery (black ‘X’) as well as net recovery (grey ‘+’).
• **Time:** To be fully recovered, the player must achieve their position and location before the opponent contacts the ball (before the ball bounces is the preferable timing on groundstrokes).

• **3 Steps:** These are the same as the Maneuvering Stage
  - **Shuffle Step:** This is for moving short distances
  - **Crossover:** For moving medium distances (see Federer crossover sequence below)
  - **Run:** For covering maximum ground quickly

**Example of a recovery using a crossover**

BALANCE
In all the parts of the footwork cycle, balance is the critical element required to ensure everything works optimally. The main key to retain balance is to maintain a straight, “Line of Gravity”. The photo below shows Henin maintaining this line even through she is in dynamic motion. This line ensures all the rotations of the body have a solid axis.

CONCLUSION
By using the Footwork cycle as a reference, all the main ‘situational’ possibilities can be observed, analyzed, and trained.