



THE SHOT CYCLE: Key Building Block for Situation Training

It is common for coaches use **strokes** (e.g. the forehand, the backhand, the serve, the volley, etc.) for their training and planning however, in a Game-based approach (GBA), it is 'situations' rather than strokes that need to be trained. It is not as effective to organize planning and training around strokes as it is to use situations.

For example, if a player hits a rally topspin forehand crosscourt from the baseline, which is more similar tactically and technically: a rally topspin backhand crosscourt from the baseline or, a leveled off attacking forehand from $\frac{3}{4}$ court? Obviously the FH and BH are more similar than the two forehands. How effective is it then to teach (and learn) 'the forehand' when one doesn't know *which* forehand?

Rather than only a process of learning *strokes*, *learning tennis is really a process of expanding the library of situations you can handle during play (which includes different strokes)*. Even players who are not taught this way go through this process in spite of their coaching. For example, players typically learn how to handle the tactics of different opponents by experiencing them in match play.

The goal of Situation Training (ST) is to identify these situations and shortcut the learning process by exposing players to the problems and solutions encountered during play. It provides coaches with a framework and terminology that encompasses the key tactical possibilities that would occur during play.

A main building block of the Situation Training framework is the, "**Shot Cycle**" which describes the cycle of events that happen during a shot from the player's impact to the opponent's, and back again.

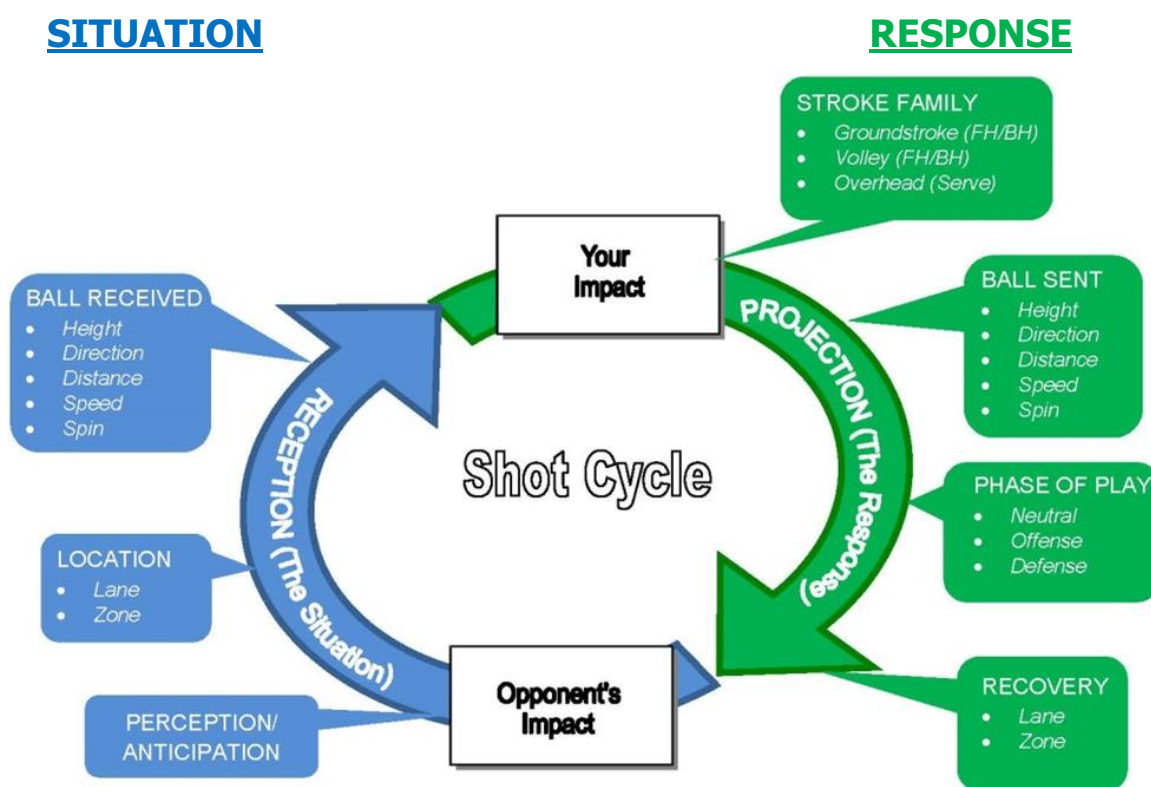
This framework gives coaches a critical tool to systematically organize training tactically. It allows lesson construction ("*Coach, I would like to work on this situation that happened to me at the tournament*"), unit planning ("*This month we will cover these situations*"), and the creation of drills ("*Today's drill will be about maintaining a neutral crosscourt exchange*").

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The Shot Cycle includes two main 'halves'. A tactical **Situation** (starting just before the opponent's impact) that presents a challenge to the player, and a **Response** (starting from the player's impact) that deals with the challenge.

- The **Situation** incorporates the elements that happen in the situation when the player receives the ball (where they are in relation to the opponent and the characteristics of the ball received).
- The **Response** includes the elements required to answer the challenge (the Phase of Play and the characteristics of the ball sent).

This can be represented in a cycle that starts and ends with the impact of the ball:



The Shot Situation can be also represented in chart form:

SITUATION		RESPONSE			
Location	Ball Received	Stroke	Phase	Ball Sent	Recovery

SHOT CYCLE “SITUATION” COMPONENTS (RECEPTION)

PERCEPTION/ANTICIPATION

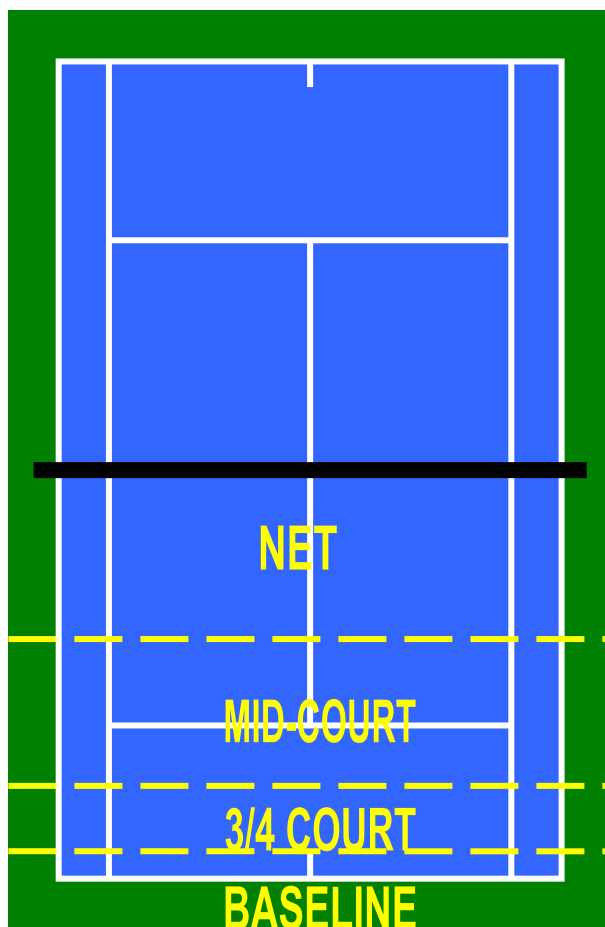
Every shot in tennis starts with a player ‘reading’ what is happening. They need to identify what are the characteristics of the ball coming at them and how challenging it will be in order to make an appropriate decision on how to respond. More advanced players can even take this a step further and anticipate what shot an opponent may (or may not) hit.

LOCATION

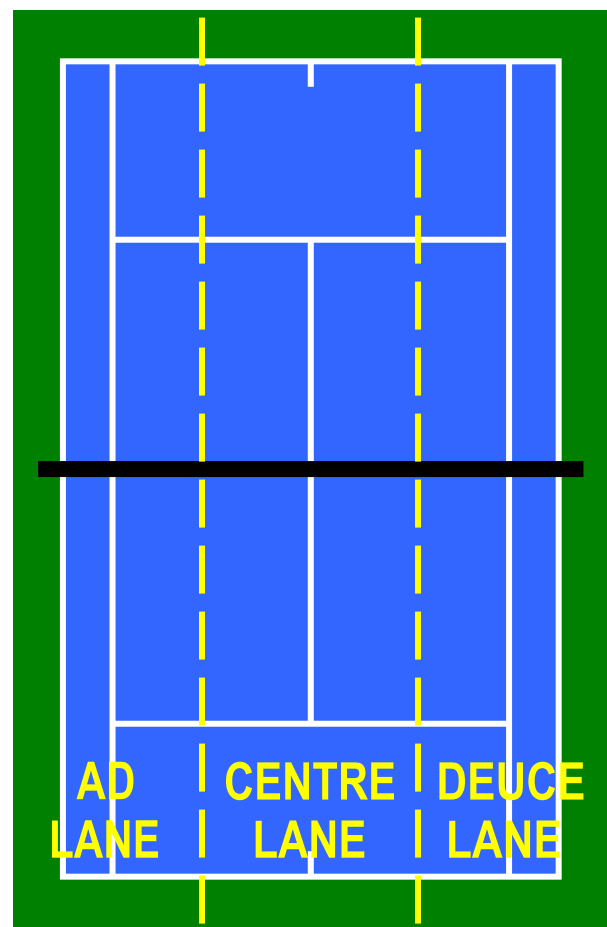
Tennis is a game of territory and geometry. The space a player uses and covers is critical to a successful game. To identify both players’ and opponent’s location (which affects tactics and technique) the court is split into horizontal “Zones” and lateral “Lanes”. For example: *“The opponent was at the baseline in his Ad Lane. They hit a Down-the-line shot to the player who received it in their Deuce Lane at the baseline”.*

It is important to note that these are simply locations. They have no direct connection to Phase of Play (e.g. players are at the net, not in the ‘attacking’ Zone as it is possible to receive shots that require defensive actions from there).

ZONES

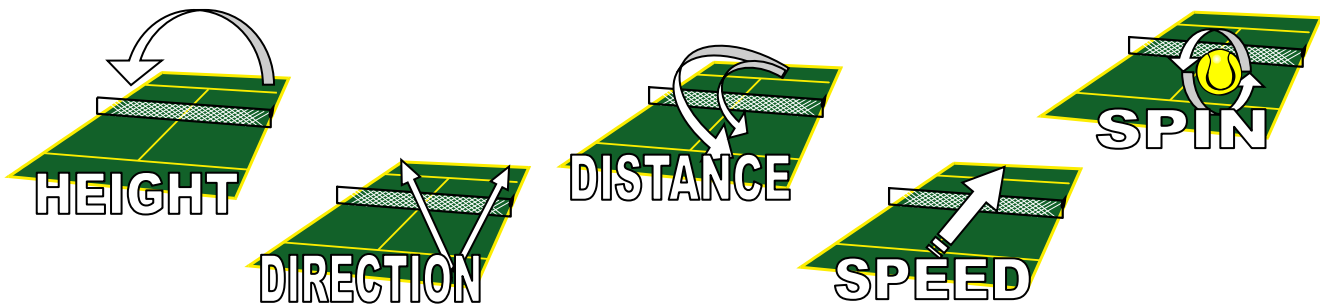


LANES



BALL RECEIVED

There are five ways a ball can be manipulated in tennis. They are dictated by physics and are called, “The 5 Ball Control Characteristics”:



- **Height** (the ball is high, medium or low). Height is typically referenced by the net (e.g. the ball was 3 racquet lengths over the net), and the player (e.g. the ball was hit at shoulder height).
- **Direction** (the ball flies straight or with an angle). Directions in tennis use the terms: crosscourt (hitting various angles) or down-the-lines (hitting straight). Common terms also include inside-out (e.g. using a FH from the BH Lane to hit an angle) or Inside-in (e.g. using a FH from the BH Lane to hit a Down-the-line).
- **Distance** (the ball flies longer or shorter). Distance in relation to the net is typically called ‘depth’. However, when hitting a sharp angle the ball may go out because of how long it flies (but since the player was aiming for a short angle, the ball wasn’t too ‘deep’).
- **Speed** (the ball goes fast, medium, or slow). Speed is typically connected to power in tennis and is a key factor in how aggressive or defensive a person plays.
- **Spin** (the ball rotates with topspin, underspin, or sidespin). Although there is rarely such a thing as a ‘spin-less’ ball, a ball with little spin is typically called ‘flat’.

The Ball controls are critical for describing tactics (e.g. it was a fast, deep, crosscourt ball with topspin). They are how players solve tactical challenges on court (e.g. the opponent was at the net so the player hit a high lob).

Often it is useful to combine the Height, Speed, Spin and Distance to describe the balls, “Trajectory”. The 5 basic trajectories are:

- Drive (Level or downward)
- Arc
- Drop (a slower shorter arc)
- Dip (a short arc)
- Lob/Loop

SHOT CYCLE “RESPONSE” COMPONENTS (PROJECTION)

STROKE FAMILY

A stroke is one component of the Shot Situation. However, rather than meaning a prescribed series of movements (e.g. the forehand groundstroke means to take the racquet back, swing, and follow-through a certain way), we will refer to ‘Stroke Families’. These are not specific strokes but general ways the ball is received:

- **Groundstroke:** Hitting a ball after it bounces
- **Volley:** Taking the ball in the air before it bounces
- **Overhead:** Serve or smash actions impacted above the head

Strokes also can be performed on two sides:

- **Forehand:** A shot right-handed players hit on the right hand side.
- **Backhand:** A shot right-handed players the on the left hand side of their body

Therefore, in a Shot Cycle a ‘Forehand Groundstroke’ **only** means (for a right-hander) *the ball was hit after it bounced and on the right-hand side*. All the other technique required **depends** on the situation.

PHASE OF PLAY

The Phase of Play is the *relationship* between the difficulty of the ball received and the intention/risk of the ball sent. There are three Phases corresponding to the acronym N.O.D. Each have their own sub-categories (specific intention/risk):

- **Neutral:** The Neutral Phase is when the difficulty of the ball received (medium difficulty) equals the risk of the ball sent (medium risk).
 - **Equalize:** Is when the player ensures their shot keeps them on equal footing with their opponent by not over-risking (thereby making too many errors) or under-risking (giving the opponent an advantage).
 - **Create Advantage:** Is when, in a neutral phase, the player ‘notches up’ the shot slightly by adding some precision (e.g. hitting slightly further away from an opponent to make them move a bit) or manipulates speed (e.g. sending a different spin to break an opponent’s rhythm).
- **Offense:** Receiving a less-difficult shot and choosing to challenge the opponent by risking more. An offensive shot has the intention of pressuring the opponent and maximizing advantage.
 - **Power:** Adding speed to challenge the opponent
 - **Precision:** Using accuracy to challenge the opponent (e.g. make them move more with an angled shot)
 - **Time:** Change the ‘inter-stroke interval’ (the time the shot takes to get to the opponent) in order to challenge their timing. The shot can be sent to them faster (e.g. take the ball on the rise) or slower (e.g. a ‘floating slice’) or, varied to break their rhythm.

- **Defense:** A difficult reception answered by sending the ball with lower risk (e.g. returning an overhead smash with a lob)
 - **Stay-in:** Just keep the ball in play and make the opponent make another shot
 - **Neutralize:** Nullify an opponent's advantage and return to a neutral phase
 - **Turn-around:** 'Counter' the offense (e.g. taking an opponent's hard serve to provide the pace for a strong return)

BALL SENT

The same 5 Ball Control Characteristics used to describe the ball a player receives, are used to explain the ball sent. (Height, Direction, Distance, Speed, Spin)

RECOVERY

Since most points in tennis include multiple shots, every shot goes through a cycle of movement which includes getting ready to receive the next shot. After sending a shot, a player must recover their:

- **Position:** Regain balance to prepare to move in any direction and ready the racquet for any stroke
- **Location:** Place on the court (Lane & Zone) to cover the possible shot options an opponent has
- **Time:** Be prepared before the opponent hits their shot so it can be 'read'

USING THE SHOT CYCLE

The power of the Shot Cycle is that it identifies all the components that occur during a shot. With these pieces, a coach can re-create realistic, practical, game-relevant scenarios.

For example, a lesson or a drill could start with this introduction to a context (try to picture it on the court with players):

*"A Right-handed opponent was on the baseline in their Ad (BH) Lane (**Location**). They hit a higher/shorter/weaker ball crosscourt (**Ball Received**). The Player received the ball at $\frac{3}{4}$ Court in their Ad Lane (**Location**) and attacked with a drive (**Phase of Play**) BH (**Stroke Family**) topspin down-the-line (**Ball Sent**) and followed it to the net (**Recovery**)."*

Using our Shot Cycle Chart, we can break down the above scenario this way:

SITUATION		RESPONSE			
Location	Ball Received	Stroke	Phase	Ball Sent	Recovery
Player: ¾ Court BH Lane Opponent: Baseline in BH Lane	High ball shorter & weaker	Backhand	Offense (power)	Down-the- line Power topspin drive	Followed ball to net.
Challenge: Taking advantage of a weak shot and approaching the net		Effect on Opponent: Send a ball that the opponent will have difficulty returning			

The coach can either set up the **situation** and let the student try to solve it (with guidance) or guide students into selecting a **response** before the drill begins and jump right into training it. For example, the power down-the-line drive is one of a number of options. The player may also choose to hit an angle or, perform a drop shot. If the student has a sense of solving the problem on their own, they will become a smarter player.

This type of training also provides a great opportunity to train decision-making. Situations may have multiple choices. Players learn the game by understanding and practicing these choices. This in turn leads to relevant tactical/technical coaching.

It is worth mentioning again that this process is also the basis for creating hundreds of drills. How many situations do your players need to master? Every competition they play will produce a number of situations they need to work on. This is a far more useful way to practice than going through countless general ‘forehand’ & ‘backhand’ drills.

CONCLUSION

Using Shot Cycles to organize training will allow coaches to fully exploit the benefits of a Game-based Approach. It will enhance the transfer of learning from training to match play by allowing coaches to re-create and manage the components that occur in a tennis shot.

Note: To Plan Situation Training sessions or, to use as notes for a session, use the “Situation Training Session Planner”

<https://acecoach.com/st-session-planner/>

References:

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