

TIMING IS EVERYTHING

INTRODUCTION

Tennis is defined in motor learning as an ‘impact sport.’ What this means is that the impact of the ball is the most critical moment of any shot. Everything a player does, footwork, preparation, etc., is in function of making this impact. If the impact is functional, you are playing tennis. If all the rest is great, but the impact is off, you are losing. This makes timing the impact the pre-eminent technical principle in all of tennis.

TACTICAL CONNECTIONS

Although we are talking about timing, which is considered a ‘technical’ element, it cannot be divorced from its tactical connection. In tennis, **technique only exists to respond to a tactical situation and is how to execute the tactic.** Technique does not live in isolation, and players do not gain points by having ‘nice strokes.’ **In other words, technique is second (but never secondary).** In Canada, coaching with this tactical-technical link is called the ‘Tactics-first approach,’ which is labelled internationally as the Game-based approach.

Tennis tactics rest on the fact that tennis is an impact sport (therefore requires skilled timing) and, much of technique is in function of ensuring good timing. Therefore, timing is a core technical element that brings both tactics and technique together. This is captured in what I believe is the **mission** of all tactics:



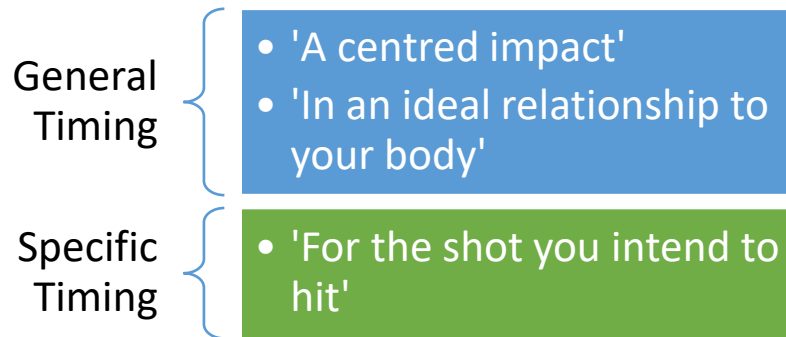
“Timing is a core technical element that brings both tactics and technique together.”

TIMING DEFINITION & COMPONENTS

'Timing' is the term used that describes all the facets directly related to the impact. My working definition of timing is:

“A centred impact, in an ideal relationship to your body, for the shot you intend to hit.”

The definition splits into three parts. Two are connected to **'General Timing'** (Required for all shots); one is about **'Specific Timing'** (the distinctive timing required for a particular shot).



This distinction is helpful as sometimes a coach may choose to work on timing in an overall general sense (e.g. when players are doing a live-ball cooperative drill). Coaches may also work on a specific shot where the timing elements must be precisely learned (e.g. a backhand crosscourt angled underspin drop shot). Let's look at the elements in each part:

GENERAL TIMING

Centring: 'A centred impact.'

This includes centering the ball on the responsive area of the strings. Hitting off-centre directly affects the quality of the ball sent. This is why one of the most repeated and ancient pieces of tennis advice is; *'watch the ball.'* Or, more accurately, track the ball to the impact and keep the head still to maximize all the advantages of our visual systems.

Impact Point: 'In an ideal relationship to your body.'

General timing also includes creating a functional relationship to the ball. Again, the quality of the shot suffers when the ball is impacted too close, too far, too high, too low, too late or, too early. Based on the mechanics of the human body, anything other than an ideal relationship means the ability to control the ball's height, distance, direction, speed or spin will be adversely affected ([for an article on the 5 Ball Characteristics, click here](#)).

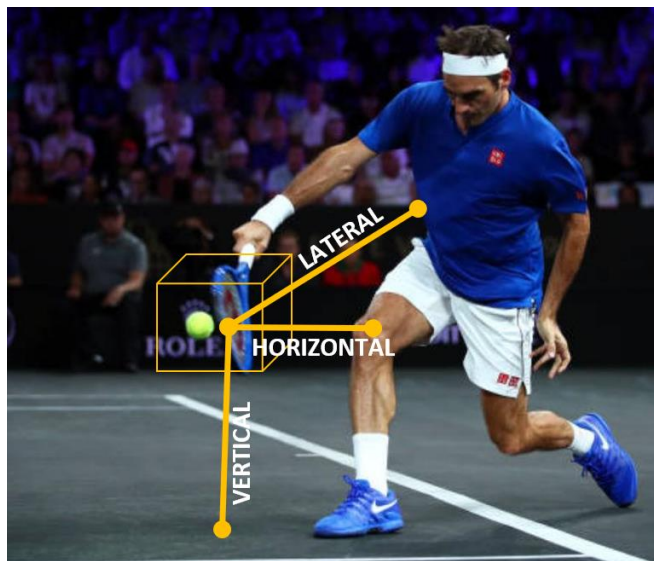
If one imagines a 3-dimensional box around the impact point, There are three key relationships a player must make with the ball. We can define these relationships on three 'axis' (or 'planes'):

Vertical: How high the ball is contacted in relation to the body (e.g. shoulder height, waist level, knee level, etc.)

Horizontal: Where the ball is impacted back to front in relation to the player's body and the net (e.g. late, early)

Lateral: How far or close to the body the ball is impacted (e.g. 'jammed,' stretched)

Understanding this allows coaches to observe, analyze and improve the quality of the Impact point.



SPECIFIC TIMING: 'For the shot you intend to hit.'

Each situation requires an adaptation of the impact point. For example, the impact for a heavy topspin angled forehand groundstroke will be quite unlike a shoulder-height, inside-out, level, power forehand. Each of the three axes will have differences even though they are both 'forehands.'

AXIS	Shoulder-height/inside-out, level power forehand.	Heavy topspin/angled Forehand.
Vertical	Shoulder-height	Waist-height
Horizontal	Out 'front'	'Beside' the body
Lateral	Arm extension (away from the body)	A 'medium' comfortable distance from the body

Timing & Adaptation:

The critical capacity for mastering a shot is not the ability to create robotic movements but **adaptation**. The other technical aspects of the stroke need to be in function of timing. Professional players will sacrifice their stroke for their timing. The majority of regular players tend to sacrifice their timing for the stroke. The other technical elements are frequently given precedence over timing making the less significant dominant over the vital.

Timing – all components:

There are two additional tactical elements we can add to the original four, which, all together, make up the entire package of the six components that make up timing:

TIMING COMPONENTS	
TECHNICAL	TACTICAL
1. Centered	5. Bounce relationship
2. Vertical Impact Point relationship	6. Disguise
3. Horizontal Impact Point relationship	
4. Lateral Impact Point relationship	

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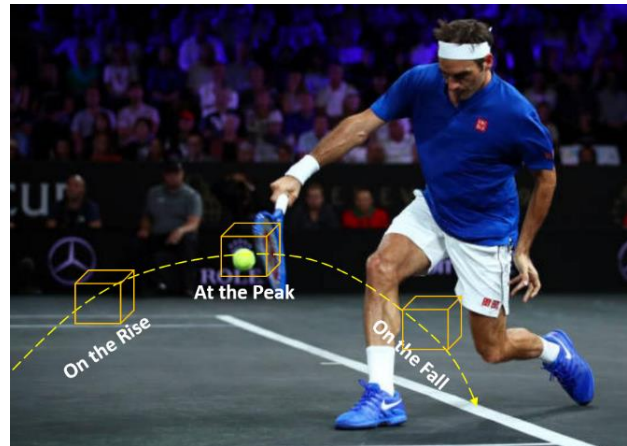
TACTICAL COMPONENTS

Although all of timing is linked to tactics, two components have key tactical implications:

Bounce Relationship: Controlling time is part of the tactical mission. On groundstrokes, *where* the ball is taken in relation to the bounce affects time.

Players can take the ball:

- ‘On the rise.’
- ‘At the peak.’
- ‘On the fall.’



Disguise: This last component is only applicable for very advanced players (e.g. national & international level). Timing can be controlled in such a way as to prevent an opponent from anticipating the shot. One of the ways a shot can be anticipated is by the Impact Point relationship. For example, if a player impacts the ball early, lower, and in front, the ball will likely go crosscourt. To thwart any anticipation, if a player can ‘hold’ their timing and doesn’t commit to an Impact Point on the outer edges of any of the three axes, it makes it far more difficult to ‘read.’

TIMING, RECEPTION & PROJECTION

Aside from the serve, tennis is a game of **reception then projection**. If a player does not receive the ball well, the sending of the ball will be proportionately poor. Timing is the junction between reception and projection.

- **Reception:** Is everything a player does that brings them to the Impact Point. Receiving the ball well is required for consistently good timing. **Reception = Perception + Set-up**. A player needs to ‘read’ the characteristics of the oncoming ball (Perception) then set-up (perform the appropriate footwork, bodywork and racquet preparation) to execute the appropriate timing for the shot.
- **Projection:** Is everything a player does at the Impact Point. Closely related to the fundamental of timing are the P.A.S. Principles which stand for racquet **path**, **angle** and **speed** at Impact. ([For a more detailed article on the P.A.S. Principles click here](#)).

The goal of timing is to biomechanically maximize the potential to control the racquet P.A.S., which controls the ball, to accomplish a tactic. For example, if the impact on a serve is too low and back, this prevents the racquet from being at the appropriate speed and hinders direction control.

“Timing is the junction between reception and projection.”

DEVELOPMENT IMPLICATIONS

Timing is so essential that, in my opinion, it is also one of the main determining factors of a player's level. If success in tennis is determined by how well a player accomplished the tactical mission mentioned at the beginning of this article, then beginners are beginners precisely because they cannot time the ball well. They cannot solve the problem of how to establish their timing. They consistently relate themselves to the ball in inefficient ways, and their shot quality suffers proportionately.

An intermediate player has better timing and is capable of higher levels of tennis. They can establish their timing most of the time and even send shots that break their opponent's timing.

An advanced player can not only establish their timing consistently but can solve more challenging timing problems. It takes a higher quality of shot from an opponent to break their timing.

Therefore, improving timing is a crucial goal in a player's development process. However, this priority often gets lost among the myriad of other technical principles. Many technical principles are important, but all are subject to the overarching principle of timing.

CONCLUSION

Timing is the pre-eminent technical fundamental, given tennis is an impact sport. Timing is the nucleus where projection and reception and tactics and technique all intersect. It is even part of the essence of tactics. By understanding the definition and components of timing, a coach has essential tools that get to the heart of successfully developing and improving a player.

Two acecoach.com timing videos cover these concepts and provide practice ideas:

Timing is Everything part 1: <https://youtu.be/wqlqPVyAAMs>

Timing is Everything Part 2: <https://youtu.be/zYAql8EIF-g>



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