### 555 GOLF ACADEMY

#### 'WHERE PASSION MEETS PERFORMANCE'

## THE THREE PART GOLFING MACHINE A Major Concept

We know that Golf is 'COMPONENTS & PROCEDURES', that are 'Pre-Selected or Spontaneous' (but organized), so we had better always keep looking at Golf as 'Parts And What To Do With Them'. Breaking down what appears at first glance to be and has the reputation of being 'Highly Complex and Complicated' is our most direct path to the 'Golf Swing's being tamed. Golf certainly needs to be brought about to heel or at least lassoed so we might get the beast into the corral. Once we get a grip on its nature, 'What A Ride!'

Now we had better figure out which end holds the bit; where the saddle goes and how and which ends kick and bite! We can do that!

- A) Our 'GOLFING MACHINE' has only 'Three Parts' ('From The Ground Up' and 'From The Inside Out')
  - 1) the 'LOWER BODY MACHINE' ('LBM')

This aspect is comprised of 'Body Parts or Components' located in the 'Lower Body Machine' ('LBM') structurally supported by the 'AXIAL SKELETON' which is the central or spinal bones; the long and short body bones. The 'LBM' contains the 'Feet, Ankles, Lower Legs, Knees, Thighs, Hips, Trunk & Abdomen, Spine, Shoulders, Neck and Head' ... perhaps the 'Biggest and Hardest Bone of the Lot'! "It's what's inside that counts!" Were they talking about the head or the heart?

#### **IMPORTANT:**

In the 'AXIAL SKELETON', the 'Musculature' attached to the 'Skeletal Framework' in the 'LBM' stays 'CLOSE' to the 'Spinal Crankshaft'. We want to be 'Compact and Centred'. We want the 'Spinal Axis' to be 'Stable' because, if it is not, controlling the 'Speeding Clubhead', keeping it 'In ORBIT and On PLANE', getting it back to the

Ball, +-3/16<sup>th</sup> of an inch, will be next to impossible unless we 'Get Lucky' in our 'Manipulations'. 'Crap Shoot Golf' won't cut it!

The 'Two Key Elements' (factors) in creating and maintaining this 'Stability' is keeping your 'Tallish CHIN' in its proper 'Impact Fix' position and your 'Properly Set Brace Knee' ('Base of PIVOT') in its respective functional position as well. The 'Top and the Base of the PIVOT' must be as stable as the 'Rock Of Gibraltar' or your 'Ball Flight' will look like a kite in the breeze; floating and leaking from 'A' to who knows where!

#### 2) the 'UPPER BODY MACHINE' ('UBM')

This aspect is likewise comprised of 'Body Parts or Components' structurally supported by the 'RADIAL SKELETON' which contains the 'Shoulder Sockets, Upper Arms, Elbows, Forearms, Wrists and Hands'. The 'Upper Body Machine' ('UBM') is also referred to as the 'Primary ('Target') Lever Assembly and the Brace Lever Assembly'. The Golf Club ('Secondary Lever') is included in this array but right now it is not flesh and blood so we are aware but not overly concerned.

#### **IMPORTANT:**

As in the 'LBM' above, in this 'RADIAL SKELETON', 'Stability or Repeatability of Motions' is forever a key element. We want to, as well, keep especially the 'Brace Lever Elbow' relatively 'Close & Connected' to our 'LBM and the Axial Skeleton' so the parts do not get 'Flying Around' and 'Flailing About'. It is a 'Secondary Absolute' that we establish and maintain very effective 'Brace Lever Extension' ... in other words that effective 'Bend & Straighten Drill FEELING and Function' through the 'IMPACT & Separation Zone' with every 'Stroke Procedure' from Putting to Driving. During the swing we need to 'Feel' that our Hands are 'Pushed Out', away from our Body by the dominant 'Brace Hand'. This is the 'Extended, Deep, Flat and Wide' discipline to which your '555 Team' so often refers.

The only 'Soft Exception' to this rule might be found in the 'Stage One Stroke Procedure' ... that is the 'Putting and Chipping Procedure' where we might 'Set The Wrist Triangles' and the 'Elbow/Forearm Segment of the Levers' in other than the relatively 'Extended Condition'.

In this 'Stage One Procedure' the 'Primary Lever Assembly' ('Shoulder Socket to Finger Tips') does not have to be 'the Long Dead Rope' or a 'Straight Leg of the Upper Body Triangle'. You have some latitude in this 'Component Selection' but once the Triangles are 'Selected' they does NOT change shape. As I state in the 'Putting' Chapter, "there may be 'Seven Basic GRIP Styles' but in Putting there are 'Seventy Seven'!"

#### 3) the '**HEAD MACHINE**' ('THM')

(This is the part above the Shoulders)
It's the Brain Centre and using it well has a direct influence on the quality of our performance.

This is the 'Boney Box' with the 'Grey Matter' that requires so much attention. We are 'Tilling the Thinking Soil' every minute we spend together in this book. You are the direct benefactor even if you do not learn or retain as much as you would like. The Brain requires exercise, even in the sometimes meaningless form. Like the Body, just running around in circles is not all pointless. Just look at the track events in the Olympics! You can buy good 'Tools' and then must exercise the soft and hard tissue equipment that the Good Lord endowed upon you. Whether you like it or not, it's yours for the duration!

I often visualize myself with the physique of Thomas Bjorn, Appleby, Allenby, Tiger Woods, Paine Stewart, Gary Player, Hale Irwin, Ben Crenshaw, Ernie Els, Bernard Langer, Reteif Goosen, Adam Scott, Greg Norman, and others who take care of their 'Machinery'. We are charged with the responsibility for doing so. We get out what we put in! Don't be lazy! There is but one shepherd of our own bodies and it isn't Mom or Dad or even a trainer!

Once we have the general 'Parts', 'LBM & UBM', properly 'SET-UP', the '5 CONTROLS' in place, we can shift from the 'Training Mentality' to the 'Trusting Mentality' and get on with the version of Golf I call 'REFLEX BALL-PIN GOLF'. This is 'ALIGNMENT GOLF' at its very best'. It is where we strive to follow good 'Procedures and ROUTINES' so that, when the moment arrives, we can just 'Let IT Happen' and not find ourselves forcing the Motions. The 'Make IT Happen' form of Golf is never overly successful short or long term. Avoid it with a passion or like the plague. Your choice!

#### **IMPORTANT:**

Thought I should at least place the word 'Important' here as I did in the two 'Machine Segments' above. I am not going to put one more item in it. If I get started, we'll be here for the balance of the millennium and that's simply too long for this busy 'Country Boy'! I have lesson warmed up and waiting!

#### B) **OPTIMAL TRUSTING SEQUENCE**:

- 3) The 'HEAD MACHINE' must have earned the right to say "I Can Do IT".
- 2) The 'UPPER BODY MACHINE' must understand and have earned the right to say,

"I Won't Do IT" or "I Don't Have To Do IT".

'The UPPER BODY MACHINE LEADS The TRAILING LOWER BODY MACHINE In The BACK SWING' which is the 'COILING, LOADING or WINDING UP' portion of the overall 'Golf Swing'. The 'Brace Hand' winds up the Shoulders which Load the Trunk, Hips, Upper and Lower Legs right down to your Feet; 'Winding From The Top Down'.

Then in the reverse portion, 'Front Swing', where the 'Potential ENERGY' is being converted to 'Kinetic ENERGY' and gets delivered to the Ball, 'The UPPER BODY MACHINE LAGS BEHIND The LEADING LOWER BODY MACHINE In The FRONT SWING'. The 'Wound-Up Golf Torso UN-WINDS 'From The Ground Up' ('AXIAL') (Pressurized Brace Toe, Pre-Loaded Brace Foot and Brace Leg Drive to Clubhead) and from the 'Inside Out' ('RADIAL' - Spinal Column out to the Clubface. It is a bit of Action – Reaction. This I called 'Axially Generated Radial Movements' like Motion travelling or slinging from the 'Hub of a Bicycle Wheel out through the spokes and rim ultimately to the road surface of the tire. You must understand this!

1) The 'LOWER BODY MACHINE' must understand and have earned the right to say,

"I Am Going To Do IT".

The 'Lower Body Machine' 'LEADS the LAGGING Upper Body Machine'. The 'Pre-LOADED BRACE FOOT' 'PUSHES EARLY' and provides the POWER from the 'Resistive Brace Leg' which 'ROTATES or PIVOTS' the Hips which soon take the

'Turned and Coiled Shoulders' along for the ride! The Primary and Secondary Lever Assemblies, those Arms and Hands holding onto the Golf Club, again are simply 'Pulled Along' or are 'Trailing the Trailing Shoulders'! Your Hands 'MONITOR' velocity and 'RPM' and will soon 'CATCH UP' to the 'LEADING LOWER BODY MACHINE' as their speed/acceleration capability is significant and very useful, if properly administered. Relatively 'Passive Hands' do the best Golf Work! Keep them 'Soft'.

The 'Coiling-Uncoiling Golf Swing' 'WINDS UP from the Brace Hand, Brace Elbow and Brace Shoulder Down to the FEET and UNWINDS from the Ground Up'. Just as you might suspect?

The 'Coiled Golf Body Machine', 'Brace Knee to Brace Shoulder', 'Un-WINDS or Un-COILS from the Brace Toe, Brace Foot and Brace Leg Drive; GROUND UP'. The Shoulders, and everything connected to them, moves after, 'Trailing the Brace Side Lower Body Machine'.

It, 'the Golfing Machine', DOES NOT 'Fire from the Shoulders Down'; that is unless you want to 'CAST' a Golf Club like a fisherman! (although I need to tell you that the long-distance underhanded serf bait caster very much resembles the best golfer)

There is a rather unique analogy that I think applies here. What one might 'FEEL' is that one is trying, during the 'Front Swing', to 'PUSH and move the World (the Resistive Big Green Ball on which we stand) backwards or away from the 'Target PIN'. In doing so, or trying to do so, the Body is Propelled forward by the Brace TOE, FOOT and LEG. In this 'Pushing MOTION or FORCE' (Connected) something has to give. The 'Big Green Ball' is to big to yield, so the Clubhead moves forward THROUGH the 'Little White Ball' taking it for a ride 'Down the Target Line' into the Hole or to the PIN.

# 'DO NOT HIT AT THE BALL but SWING the Clubhead Down And THROUGH the BALL.'

## PROPER COORDINATION Of The 'LBM & UBM' PRODUCES PROPER 'ON PLANE MOTION'

A couple of quick points that you may find worthwhile in conjunction with the above advice; 'Hitting At The Ball' Increases TENSION while 'Swinging Through The Ball' Decreases TENSION. Tight muscles are 'Slow Muscles'. Relaxed muscles are 'Faster Muscles'. 'Hitting At The Ball' Decreases Clubhead Speed while 'Swinging Through The Ball' Increases Clubhead Speed. This is a fundamental difference between 'AT Action' and 'THROUGH Action'. Remember we should best 'Swing the Clubhead' all the way to and through the Target and simply let the Ball get in the way.

#### 'IMPACT IS INCIDENTAL TO THE SWINGING MOTION'.

This attitude of just creating the 'Swing Arc' and not trying to 'Hit The Ball' will enable you to make your 'Real Swings' 'Soft Away and Smooth Through' just like your 'Practice Swings' which takes care of the old conundrum of wasting all your great swings during the practice sessions and in your actual, 'Just before Stepping Up to the Plate Warm-Up Swings'. They all come from within the same bloke, you know!

Remember, if you are 'Tight In Your Lungs' (High Pulmonary Pressure) you will not be able toe accomplish either 'PIVOT Release or Clubhead Release'. The disadvantage will show up in your 'Ball Flight and on your Score Card'.

How simple is this picture? Please keep it simple.

By the way, talking about 'COMPONENTS & PROCEDURES', you may find it of interest to know there are 206 bones in the human body (some better put together than others I might add) which support or carry a considerable number of muscles, paired or single. I spent a few moments trying to research 'How Many Muscles' but cannot readily do so. I know of some 65 pairs and singles but there are more! Perhaps you might let me know.

Some 'Machine' this 'Golfing Body'! And you own one too!

Likely 'Clear Title' although you might "Owe Your Soul To The Company Store" (Ernie Ford) or those '**Privately-Owned**' institutions we know as the 'Federal Reserve' and the 'Internal Revenue Service'.

Can't resist the opportunity!

#### CLUBHEAD PATH AND SWING PLANE

The Two Axis Graph

#### UP & DOWN and ROUND & ROUND

Upper Body Machine & Lower Body Machine

We now all know that the 'Human Golfing Machine' is comprised of three distinct 'Parts or Aspects'. 1) 'The Lower Body Machine' ('LBM'), 2) 'The Upper Body Machine' ('UBM') and 3) 'The Head Machine' ('THM'). When properly combined, these three join in making 'Golf Music' that gives us endless pleasure. Or can beat us to near death! It all depends on how much we work at understanding and earning the right to make successful 'Golf Shots'.

There is no magic! We must just logically manage the challenge the old fashioned way ... "We Must Earn 'IT'!"

We all know as well about 'Clubhead PATH' and its ability to be one of three conditions. These are 1) Inside Out, 2) Square To Square To Square ('Parallel') and 3) Outside In.

We also know about 'Clubhead PLANE' or 'Swing PLANE'. There are also three conditions in this aspect. When 'Swinging The Clubhead On Its Inclined Plane', one can be either 1) Below Plane, 2) On Plane or 3) Above Plane.

#### **SWING PLANE**:

Let us deal with this 'Swing Plane' for a moment and see if we can make any sense of this, sometimes rather nebulous term.

'The Tether Ball Swings Around The Pole'. When the 'Axis or Pole' is plumb, the 'Ball and Rope' will naturally and uniformly swing around the 'Pole' at almost right angles to the 'Axis' if the 'Rotational Velocity' is high enough to produce adequate 'Centrifugal Force' to get the 'Ball & Rope' on a 'Swing Plane' that is 'Perpendicular To The Pole'.

This simple 'Physics' should make at least reasonable sense.

Keeping this in mind, remember that the 'LBM' produces all the 'Horizontal Motion' or all the 'Round & Round'. The 'UBM' produces all the 'Vertical Motion' or all the 'UP & Down'. When we have these two distinct 'Planar Motions' operational and mixed, we

will end up an 'Average Motion' somewhere between 'Round & Round' and 'Up & Down'. This is appropriately called the 'Resultant Plane'.

This is about 'Swinging The Golf Club Around A Forward Inclined Axis With Some Aft-Tilt' which sets up the average of this 'Round & Round' and 'Up & Down' enabling us to get the 'Squarely AIMED Clubhead Away From And Speedily Back To The Butt Of The Ball' in a predictable manner.

#### THE TWO AXIS GRAPH:

We all know and understand the basic 'Two Axis Graph', right. If you consider the 'Motion Formula' 'Distance Equals Rate/Speed Times Time' or 'D = RT', you can portray this information graphically. Let us place the 'Speed Information' on the 'X or Vertical Axis' and the 'Time Information' on the 'Y or Horizontal Axis'. Now we can show on a piece of paper what happens if we drive at 30 miles per hour for 4 hours. Take a look at the 'D = RT' graph below.

(see Illustration)
D = RT Graph

#### **LIFT vs. ROTATION**:

Now, let us shift gears to the topic of the 'Golf Swing Plane'. Interestingly, the 'Clubhead' (along with other related and connected parts) is what swings on 'Plane', which produces the 'PATH'. Let us just stick to the consideration of 'Plane' for now.

Picture yourself or even 'SET-UP' at 'Address Ready or IMPACT FIX' with your 'Clubhead Soled' on the ground or floor. Place your 'Target Foot & Shoulder' against the wall. Your 'Hips & Shoulders' are 'Perpendicular To The Wall'.

Consider the 'Two Axis Graph' again for a moment. You are now standing in a real life size version of the graph! The 'X Axis' is the floor. The 'Y Axis' is the wall.

If you 'Swing The Clubhead' dead flat or horizontal, ('Zeroing Out All Lift'), the 'Round & Round' will keep the 'Clubhead Soled' or in contact with the floor. This is the 'Horizontal Plane'.

If you 'Swing The Clubhead' straight up vertically, in front of your chest, (Zeroing Out All 'Rotation') your 'Hands & Arms And The Clubhead' will swing nominally 'Up The Wall'. The 'Clubhead PATH' will follow 'Up & Down The Wall'. This is the 'Vertical Plane'.

When we smoothly 'MIX' these two 'Planar Motions', we produce what again is called the 'Resultant Planar Motion'. This is the actual 'Golf Swing Plane'.

You can now visualize and understand that, if there are any 'Conditional Changes in the Spinal Axis' ('Tether Ball Pole') during the 'Planar Swinging Motion', the 'Orbit Of The Clubhead' or 'Tether Ball' will be directly affected. Just out of interest, there is a slight 'Lead & Lag Factor' in the affect. The 'Orbital Oscillation' occurs just a moment after the axis change.

This is a very good example of the skill your '555 TEAM' calls 'Isolating The Parts'. If we can 'Feel and Understand The Parts', we can understand the 'Whole' as well!

#### **ISOLATING THE PARTS:**

The 'LBM' goes 'Round & Round' (R&R) ... 'Horizontal Exclusivity'

The 'UBM' goes 'Up & Down' (U&D)... 'Vertical Exclusivity'

If we perform these two distinct functions simultaneously and at the same 'Rate Of Movement' ('Pace or Speed'), we will move the 'Clubhead' on a 'Line or Plane' that is 45 degrees to the floor and 45 degrees to the wall. In other words, the 'Resultant Swing Line' is 'Half Way Between the Floor and the Wall'. This is the 'Swing Plane' you produce with perfectly timed and blended or 'Matched Motions'.

(see Illustration) Lift vs. Rotation and Plane

#### ONE MOVE BACK & UP:

The optimal 'Post SET-UP Motion' in the above 'Take-Away Hand Path', which produces the 'Resultant Swing Plane', is 'One Move Back & Up' from the 'Address Ready' or IMPACT FIX Position' right to the 'Top Of Back Swing' ('TOB').

If you were to make the 'Back & Up Swing' as Jim Furyk does, with an 'Outside, Up & Back, Inside Out Loop', you are making two or three independent yet sequential moves. You will 'Feel' these various 'Isolate The Parts' moves as soon as you are aware of them. Awareness is the purpose of the 'Isolate The Parts Exercises'. When we understand the existence of certain reality, we can optimize or even change elements ('Components') at will. You may yet become a 'Golfing Machine'!

#### TARGET LEVER BREAK DOWN:

Remember, the 'Back & Up Swing' is a 'Brace Handed and Brace Sided Motion'. Anyone who prefers to make it the wrong way, with the 'Target Side', can suffer the ills of that 'Mechanical Error'. If the 'Target Lever Break Down' or that 'Reverse Pivot & Reverse C' are known to you and disliked, if you are suffering from a chronic case of the 'FAT THINS' and 'Pushes and Pulls', you might reconsider taking the 'Golf Club' away from your 'SET-UP Position' with your 'Brace Hand' and a very 'Soft Target Hand' and that 'Dead Rope Target Lever'. This will lead you directly to better 'Clubface Control, more reliable Swing Radius and a predictably effective #4 Pressure Point'. These 'Impact, Pivot and Plane or Delivery Components' (see 'ALSDR' and '5 Essential Elements') are central to your 'Linksy Happiness'.

Just knowing about them is the very real 'First Step'!

#### ON, ABOVE AND BELOW PLANE:

Now, further, let us 'Pre-Select' that we shall 'Swing The Clubhead On This 45 Degree Resultant Plane'. It is our task or objective!

If we perfectly 'Blend or Match The Horizontal and Vertical Motions' we shall follow the 45 degree Swing Plane'. This is referred to as 'Being On Plane'.

If we 'Rotate' the 'Clubhead Faster R&R or Horizontally' than it is 'Lifted Vertically', we will 'Swing It Below The Resultant Swing Plane' or closer to the floor. This is called 'Being or Swinging Below Plane'.

The flip side is true as well.

If we 'Lift' the 'Clubhead Faster U&D or Vertically' than it is 'Rotated Horizontally', we will 'Swing It Above The Resultant Swing Plane' or more up the wall. This is called 'Being or Swinging Above Plane'.

You will hear your '555 TEAM' speaking about 'Matching Components & Procedures'. This is an example of its applicability. When we have 'Balanced Lift and Rotation', balanced 'Upper Body Machine' and 'Lower Body Machine' 'MOTIONS', we then move the 'Clubhead' on a 'Pre-Selected PATH & PLANE' that, in turn, naturally produces 'Pre-Selected Results'. This enables us to be predictable and to play 'Reliable and Repeatable Golf'.

We can thus learn 'Remembered Feel' and perhaps, one day, become that very special 'Reflex Golfer' we aspire to become.

We all know how cool that would be!

I hope these few moments spent together on the topic of 'PATH & PLANE' has helped you to better grasp and understand 'The Logic and the Mechanics Of The Golf Swing'.

Remember, the science of this 'Swing' is all about 'The Physics Of Rotation' and 'The Geometry Of The Circle'.

Thanks again you for your time!

## WE BEST SOLVE COMPLEXITY WITH SIMPLICITY!

"Welcome Aboard!"
"Enjoy The Ride!"

#### SATISFACTION GUARANTEED

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