

## Practical Examples

Clay Pigeon Concept

Bow & Arrow Concept

## General Concepts

Right Side = Motor

Left Side = Steering

Lower Body = Leader

Upper Body = Follower

-creates "separation" and stretch

# The Discus Throw

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## Ensuring Continuity of Motion

It's very common for throwers to rush through certain phases of the throw. It must be emphasised that each segment of the throw must be completely executed and allowed to develop before the next phase. Teaching patience and using multi-part drills can help facilitate this.

## Coaching Cues

Work the ground first, not the air

Cue the eyes and the feet

Establish where your axis should be

Focus on balance and rhythm

Establish the implement path or "orbit"

## General Concepts

From slow(ish) to fast

From back to front

From low to high

From right to left

## Delivery >>> "Sling"

**The purpose of the delivery is to provide the majority of implement energy and optimize the implement path. Proper weight distribution and appropriate chest and spine orientation must be maintained to ensure that the chest opens around and up into release.**

## How To Teach

Begin by teaching all segments of the throw at the same time, with a strong emphasis on the entry. Start athletes throwing from the front of the circle and work back to the rear of the circle. Once the foundation is established, I usually spend 60-70% of our time perfecting the entry.

## Troubleshooting

"They always catch the second guy"  
Recognize that the perceived problem is generally a result of a previous phase of the throw. For example, low release angle isn't usually fixed by simply "throwing higher".

Watch your "B.U.T.T.S."

## Delivery Posture

Shoulders level and in line with the orbit throughout, back continues to stay relatively straight and actively arches at release

## How To Teach

Focus on stringing actions together

Don't become a great driller but a bad thrower

Recognize that the throw is ONE MOTION taught as a series of movements

## My 4 P's of Coaching The Throws

Posture  
Position  
Push/Pull (action)  
Patience

## Delivery Patience

Wait for the implement to work completely through its orbit; stay back on the right until the chase>>>

"wait for the finish"  
"stay back and swing away"

## Delivery Push/Pull (Action)

Reach OUT with the plate while pulling it LONG around you>>>>

"draw the biggest circle you can with the plate"  
"pull the plate AROUND you"

Pull the plate slightly DOWN towards 12 o'clock>>>

"clean the ground"  
"low to high"

Sweep the left arm long around and through the high point, then aggressively pull left arm in to STOP the left side>>>>

"swing and STOP"  
"stop the handle to crack the whip"

## Delivery Position

Start: Heel-toe alignment (right foot in center, left @ ~5 o'clock), arms extended, straight line between head and left heel, majority of weight over right side

End: Toes, knees, hips, torso towards sector, right knee bent, left knee straight, chest and eyes up, long right arm, "blocked" left arm, majority of weight over the extended left leg

## Delivery Teaching Progression

Grip  
Bowling  
Shoulder Position  
Rack Steps  
Kneeling Throws  
Heel Toe Alignment  
Down-Up  
Down-Up Strike  
Heel Drop  
Heel Drop Strike

Other Drills:

Down-Up-Back-Throw, Heel Drop + Throw, Left Foot Pops, Step Out Throws, Clean The Ground

## Delivery Pull/Push (Action)

Long right arm extension into the throw, snap the finish>>>>

"chase the plate out"  
"hit a homerun"  
"around and out"  
"sling and snap"

A note on grip:

I have heard all of the arguments against a middle finger release, and I have yet to be convinced that it is the cardinal sin that many claim it to be. I have had many outstanding throwers who utilized a middle finger or "claw" release. I have found that as long as the release finger is roughly bisecting the implement and that the index finger stays relatively "passive", the middle finger can be effectively used. Many throwers with small hands or very long middle fingers may actually find a middle finger release more comfortable and effective.

## Delivery Push/Pull (Action)

LOWER BODY MUST STAY AHEAD OF THE UPPER BODY UNTIL DELIVERY  
Push through left leg to create a stable axis and block>>>>

"solid door frame"  
"stiff left side"

Drive the lower body towards the sector while keeping the right knee bent>>>

"turn the heel"  
"drive the right knee AROUND and DOWN"  
"pocket to pocket"  
"slam the door"

## Pivot Pull/Push (Action)

AGGRESSIVELY drive or pull the left foot to the front of the circle (~5 o'clock); keeping the plate back, let it work through the high point (~6 o'clock, at least head height)>>>

"SNAP the left foot down"  
"punch a hole in the ground"

## Pivot Posture

Keep a relatively straight spine, body angle will change but alignment shouldn't change much

## Video



## Pivot Patience

Wait for the left foot to make contact before initiating the delivery phase>>>

"don't rush to the front"  
"left foot down, AND THEN around"  
"wait for the left foot"

Don't shift onto the left foot prematurely, stay over the right side as long as possible>>>

"keep the chest over the right foot"

## Pivot Position

Start: Land on ball of right foot and keep weight over the right throughout the pivot, knees should be together and chest should be toward sector, left arm should wrap the body, plate should be back

End: Majority of the weight still over the right foot, left leg extended to the front (~5 o'clock), straight line between left heel and the head, right knee bent, heels off the ground, plate should be back and high with chest facing ~12 o'clock

## Pivot >>> "Squeeze/Snap"

**The primary purpose of the pivot is to place the thrower in an optimal delivery position. To do this the thrower must keep weight over the right side while establishing a solid left side axis for the final rotation. An early shift onto the left side must be avoided or the thrower will rip the implement out of its orbit, effectively shortening the implement path and lowering the speed potential.**

## Drive Phase Position

Start: Knees still apart until right leg passes left, left foot pointing toward sector, left arm and left knee/foot still connected, discus back and slightly down, weight on top of left foot

End: Land with weight on the ball of the right foot, knees together, chest facing sector OR stretched behind hips, left arm passive toward the sector or wrapping the body, discus still back and slightly down

## Drive Phase >>> “Push/Drive”

**The primary purpose of the drive phase is to drive the right leg toward the sector and establish the axis for the second rotation. Separation is increased as the right side is driven ahead of the left side, and implement energy is slightly increased as well.**

## Pivot Teaching Progression

Mirror Pivot  
Mirror Pivot-Heel Drop  
Mirror Pivot-Heel Drop-Strike

Other Drills:

**Walking Line Turns**, Float-Float-Sting, Mirror Pivot Variations (on command, with throw, etc), Knee Up Jump Turn

## Drive Phase Pull/Push (Action)

Hips push toward sector, right leg swings past the corner and drives toward the center of the circle with the inside of the leg/foot leading (soccer pass), right knee bends and drives high as left foot pushes off (flying knee), left hand and right knee pull the thrower to ~6 o'clock, left hand holds and folds until touchdown, pull left knee to right >>>

"swing, drive, squeeze"

## Drive Phase Posture

Spine stays relatively vertical, shoulders stay relatively level, chest stays up toward sector (~6 o'clock)

## Video



## Video



## Video



## Drive Phase Patience

Wait for the ground to come to you, try to land with the chest behind the hips still facing the sector >>>

"don't work the air, work the ground"  
"hit the ground BEFORE around"

Keep plate long and behind, hold the left side and wait for the body drive to forward and meet the left hand>>>

"hold the left side"  
"grab the sector"  
"chest to the front"

## Entry >>> "Turn/Sweep"

**The primary purpose of the entry is to put the body in a position to begin the linear drive toward the sector. Separation and momentum also begin to develop during this phase.**

## Video



## Drive Phase Teaching Progression

Step Down  
Step Down-Mirror Pivot  
Step Down-Mirror Pivot-Heel Drop  
Step Down-Mirror Pivot-Heel Drop-Strike

Other Drills:

Wall Kicks, Around the Cone, Cone Pushovers, Through the Alley, Flying Knees, Nose Breakers

## Entry Patience

Keep plate back, wait for left side to find the sector and right side to hit ~11 o'clock before driving to the middle>>>

"don't rush the entry, let yourself uncoil"  
"grind the left foot around"  
"left knee steers"

## Entry Pull/Push (Action)

Beginners - start with weight on left side (set the axis)  
Advanced - can experiment with right-to-left shift>>>

"move left" or "out to the corner"

Wind the plate keeping the orbit in line with the shoulder axis>>>

"armpit to armpit"

Open the left side: Always keep left side acting as a UNIT, left elbow inside left knee>>>

"open the left"  
"push the knee around the corner"  
-use bungees/bands, etc. to correct if necessary

## Entry Posture

Relatively vertical as beginner, as athletes progress they can experiment with shoulders slightly forward over toes. Starting more in a more upright position can make it easier to teach where the axis should be.

## Entry Teaching Progression

Windup Drills  
¼ Sweep (to 12)  
Sweep (to 11)  
Sweep-Step Down  
Sweep-Step Down-Mirror Pivot  
Sweep-Step Down-Mirror Pivot-Heel Drop  
Sweep-Step Down-Mirror Pivot-Heel Drop-Strike  
\*All of the above can be done with or without an implement in hand, bar on the shoulders, etc.

Other Drills:

Tunnels, 180's, 270's, 360's, Wall Kicks, Enter-Under A Bar

## Entry Pull/Push (Action)

When left foot reaches ~9 o'clock, the knee bends/drops to further load the left side>>

"drive the knee down"  
"9 o'clock drop"

Push off the right foot and sweep/swing the right leg low and wide to ~11 o'clock >>>

"skateboard and swing"  
"open, push, sweep"  
"draw a circle on the ground"

Relax the right arm and let the plate trail behind the active lower body>>>

"Cut a smooth slice around the corner"

## Entry Position

Start: Knees (and maybe toes) apart, weight over the left (left side axis), shoulders level, eyes on the horizon

End: Knees and toes still apart; left foot toward sector; right leg sweeping low, wide and behind

## Segment Combination Drills

It is important to use drills and partial throws that combine the various segments of the full throw. One of the most important skills a thrower can have is the ability to transition between positions and segments effectively. Without working on this ability, the thrower runs the risk of becoming a better driller than thrower.

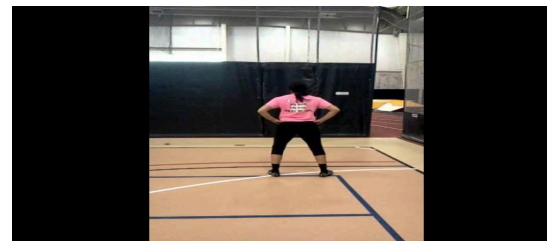
Sweep + Flying Knee, Enter-Under-Over, Obstacle Course, South Africans, Broken Throws, Multi-Pivot Throws, Multi-Turn Throws, Partial Throws, etc

**Sweep, Drive, Squeeze, Snap, SLING!**

## Recovery

The primary purpose of the recovery is to prevent the thrower from fouling. While it may result in additional energy or release height, the recovery or reverse is more a product of forces generated during the throw rather than a true component of the throw itself. However, there are distinct techniques that can be utilized.

## Video



## Video



## Recovery Techniques

Non-reverse, step-through reverse, active reverse

Start with non-reverse, progress to step-through and experiment with active ONLY as release power increases>>>

"chase the plate"  
"follow through with the right side"  
"pull through the throw"

Drills:

Hold The Left, Step Through, Step Through & Spin, Lift & Spin, Hip Drops, Find The Circle

## Wind Variations

There are many different styles of winding the discus. In general, beginners should start with a simple wind keeping the orbit slightly flatter, and the wind slightly shallower (not as far behind). Throwers should gradually experiment with slightly more angled orbits and slightly deeper winds as their understanding of the throw becomes better, and their entry becomes more proficient. Drop in winds or other variations can also be experimented with.



## Final Word

### **Where do I start?**

Balance, Patience, Entry, Orbit

**The complete presentation will be available at  
[coachgroves.com](http://coachgroves.com)**

**Thanks!**