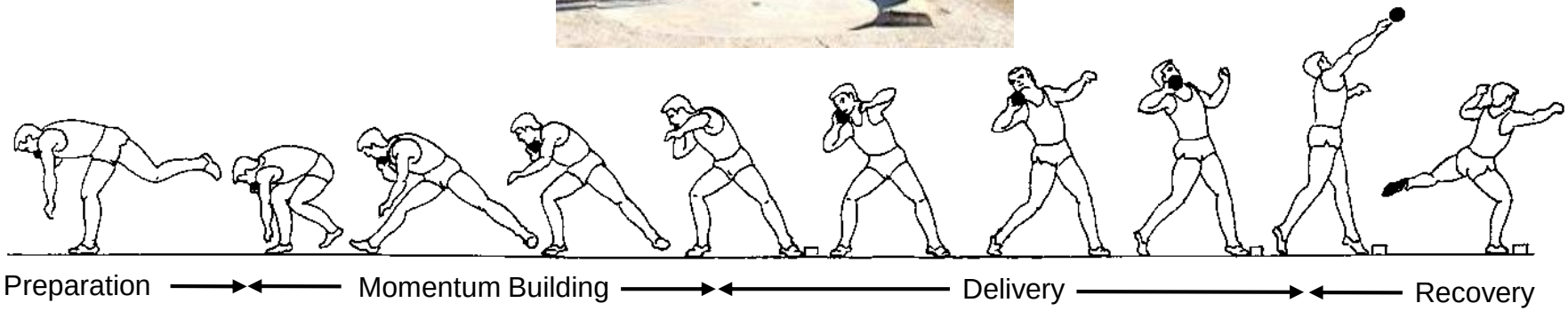
Shot Technical Model

Progression related to Multi-Events Development (aged 8/9-12 years) can be referenced to Athletics 365. Further technical information can be found HERE

Linear Shot - Whole Sequence



The Linear Shot Put Technique is divided into the following phases:

- Preparation
- Momentum Building
- Delivery
- Recovery.

The Grip

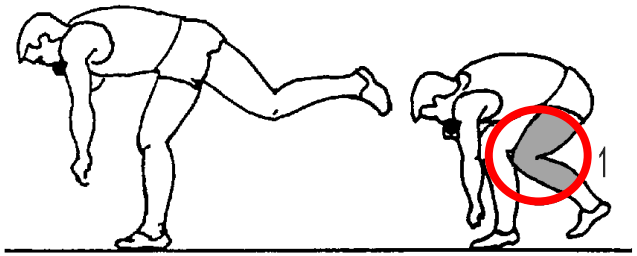
Objectives

To hold the shot firmly

Technical Characteristics

- Shot rests on the fingers and the base of the fingers
- Fingers are parallel and slightly spread
- Shot is placed at the front part of the neck, the thumb on the collarbone – “clean palm, dirty neck”
- Elbow is out at a 45° angle to the body.

Preparation Phase



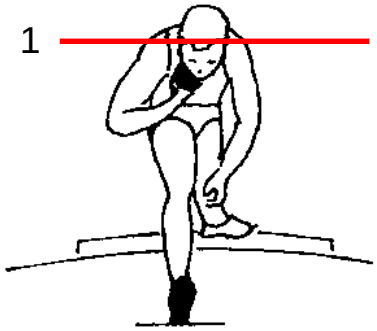
Objectives

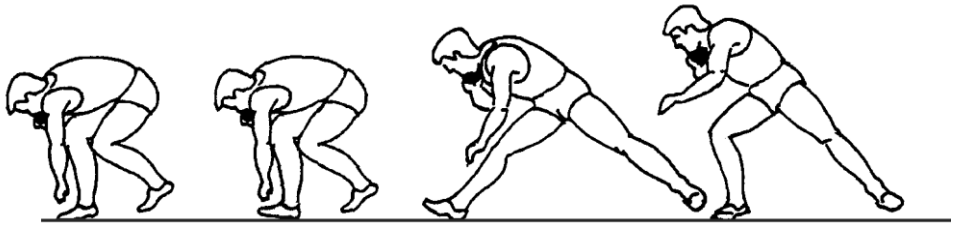
To prepare for the glide

Technical Characteristics

- Thrower starts upright at the rear of the circle - back to the stopboard
- Trunk is bent forward parallel to the ground
- Body is balanced in the single support
- Support leg is bent while the free leg is drawn towards the back of the circle (1).

Momentum Building or Glide Phase





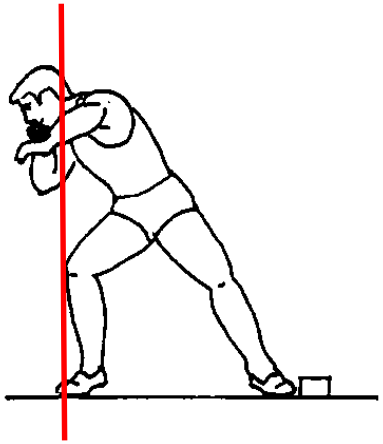
Objectives

To initiate acceleration and position the body for the final putting action

Technical Characteristics

- Body moves from the forefoot on to the heel, unseating the hips
- Free leg is driven low towards the stopboard
- Support leg extends over its heel
- Support leg maintains ground contact through most of the glide
- Shoulders are kept square to the rear of the circle (1).

Delivery Phase - The Power Position



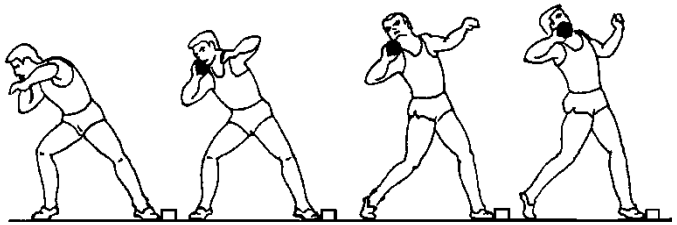
Objectives

To maintain the speed of the shot and begin its main acceleration

Technical Characteristics

- Body weight is carried on the ball of the right foot, right knee is bent
- Heel of the right foot and the toe of the left foot are placed in line
  - 'Heel-Toe Position'
- Hips and shoulders are twisted
- Head and left arm locked back
- Right elbow is at a 90° angle to the trunk.

Delivery Phase - Main Acceleration



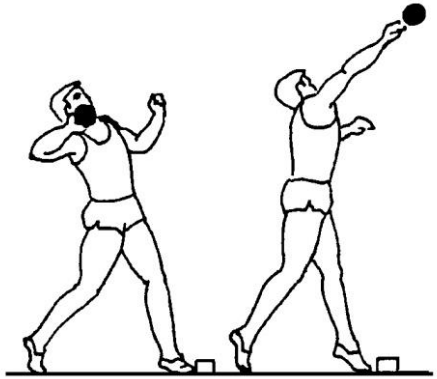
Objectives

To transfer velocity from the thrower to the shot

Technical Characteristics

- Right leg is extended in an explosive twisting movement until the right hip faces the front of circle
- Left leg is almost extended and braced, lifting the body - and influencing the angle of release
- Trunk's twisting movement is blocked by the left arm and shoulder
- Right elbow is turned and raised in the direction of the throw
- Body weight is transferred from the right leg to the left.

Delivery Phase - Final Arm Movement



Objectives

To transfer velocity from the thrower to the shot

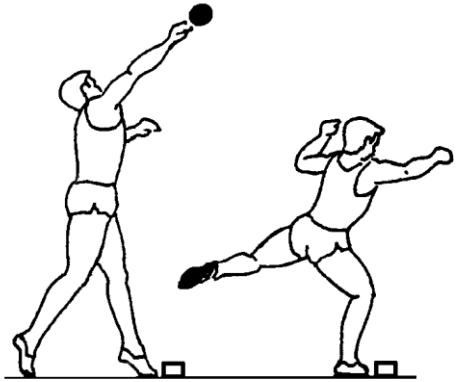
Technical Characteristics

- ‘Strike’ of the putting arm begins after full extension of the legs and trunk
- Left arm is bent and fixed close to the trunk
- Acceleration is continued by the pre-stretched wrist (thumbs down, fingers turning out after the release)
- Feet are in contact with the ground for the release
- Head is behind the left - bracing - foot until the release.

Recovery Phase

Objectives

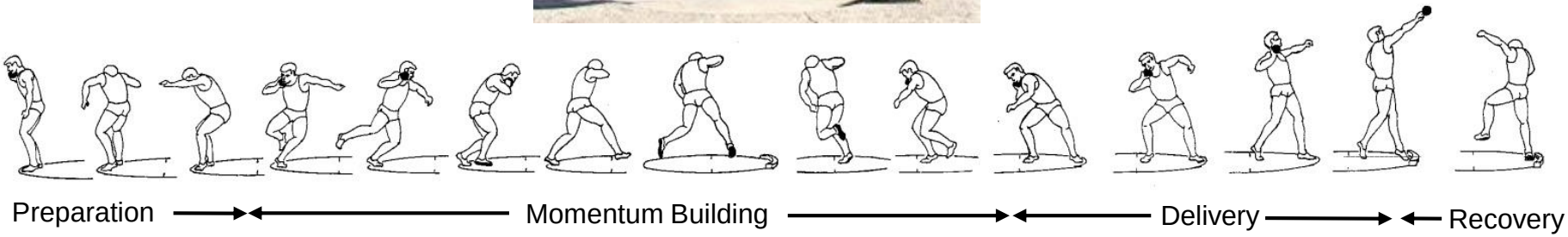
To stabilise the thrower and avoid fouling



Technical Characteristics

- Legs ‘reverse’ - change quickly after the release
- Right leg is bent
- Upper body is lowered
- Left leg naturally swings backwards.

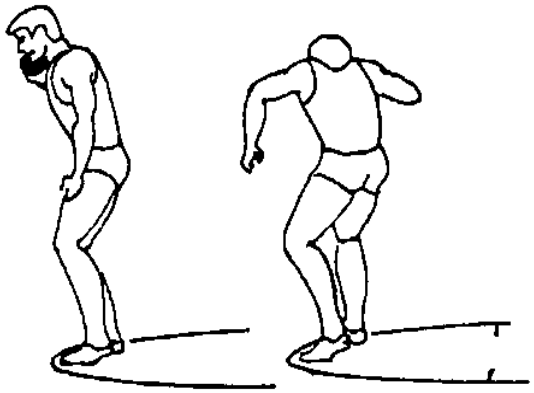
Rotational Shot - Whole Sequence



The Rotational Shot Put Technique is divided into four phases:

- Preparation
- Momentum Building
- Delivery
- Recovery.

Preparation Phase



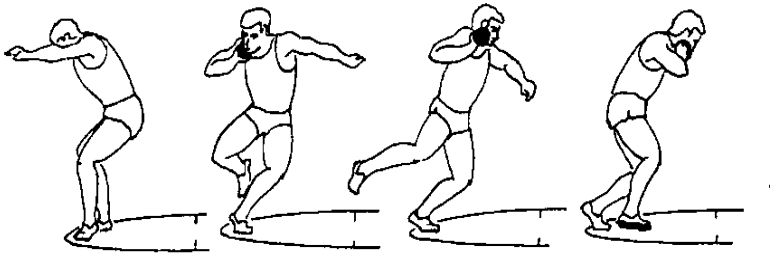
Objectives

To assume an optimum position and grip - pre-tensing the trunk in preparation for the turn

Technical Characteristics

- Shot is placed further back on the neck then in the Linear Technique
- Upper body is bent slightly forward with the back to the stopboard
- Legs are spread a little more than shoulder-width
- Weight is on the balls of the feet
- Upper body twists against the direction of the turn
- Turn starts when right shoulder points in the direction of the throw
- Turn starts to the left.

Momentum Building Phase – Part 1



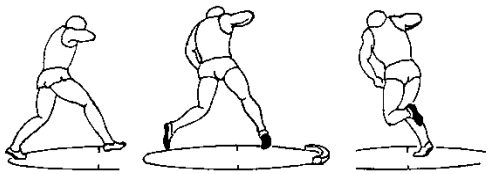
Objectives

To accelerate the thrower and shot

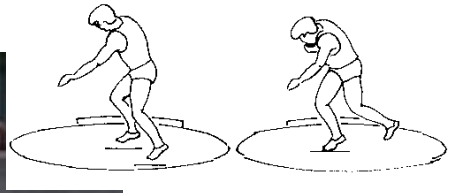
Technical Characteristics

- Body weight is transferred on to the ball of the left foot, knees are bent
- Left foot, left knee and straight left arm turn to the left simultaneously
- Right leg swings wide
- Shoulders must remain level
- Initial movement is slow and controlled in the direction of the throw.

Momentum Building Phase – Non-Support



Side View



Rear View

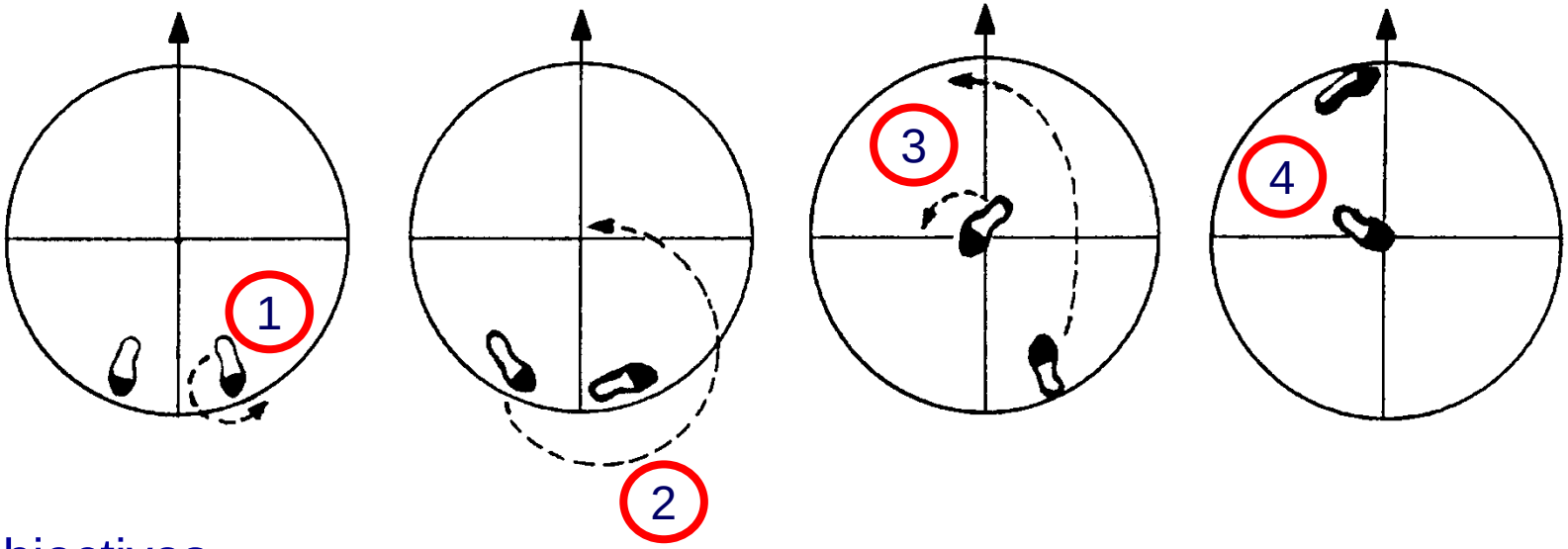
Objectives

To accelerate the shot and thrower and to prepare for the delivery

Technical Characteristics

- Left knee and toe must have turned completely to the front before drive off of left foot
- Driving leg is not completely extended
- Flat jump, lead by a high right knee (leads forwards not upwards)
- Landing is on the ball of the right foot at the centre of the circle
- Trunk is bent for landing, the left arm folds across the chest.

Momentum Building Phase - Foot Placement



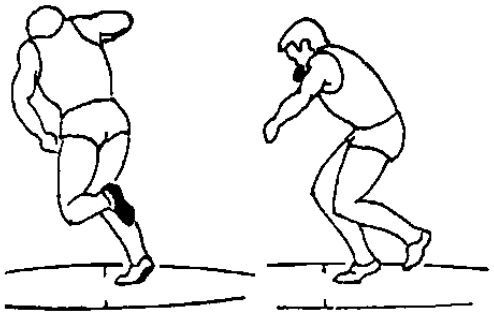
Objectives

To provide support for the correct body positions

Technical Characteristics

- Feet are more than shoulder-width apart, turn is to the left on the ball of the left foot (1)
- Right leg swings over the outside to the centre of the circle (2)
- Right foot lands on the ball of the foot in the centre of the circle, the left foot lands quickly after the right foot (3)
- Power position is ‘shorter’ than linear technique (4).

Momentum Building Phase – Final Part



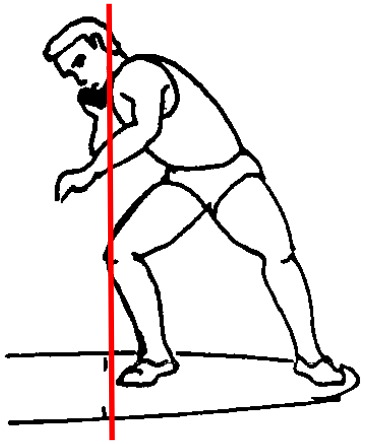
Objectives

To prepare for the Power Position

Technical Characteristics

- Landing is on the ball of the right foot
- Body weight is over the right foot
- Left knee moves close to the right knee and forwards
- Body is kept closed - left arm is in front of the trunk, head faces the rear of the circle.

Delivery Phase - The Power Position



Rotational Technique

Linear Technique

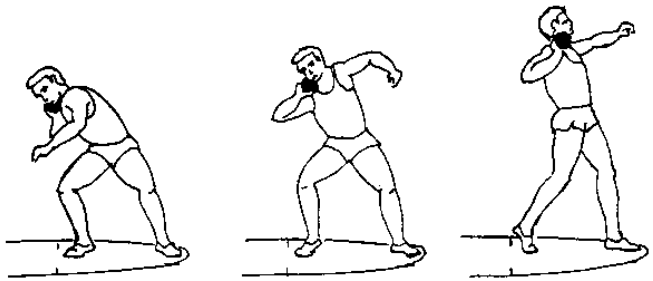
Objectives

To maintain the speed of the shot and begin its main acceleration

Technical Characteristics

- Body weight carried mostly on ball of the right foot, the right knee is bent
- Ball of right foot and heel of left foot are placed on a line - ‘Heel-Toe Position’
- Hips and shoulders are twisted
- Head and shoulders are back
- Right elbow is at a 90° angle to the trunk.

Delivery Phase - Main acceleration



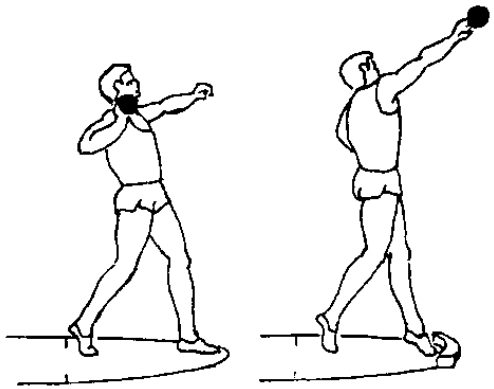
Objectives

To transfer velocity from the thrower to the shot

Technical Characteristics

- Right leg is extended and twisted explosively until the right hip faces the front of the circle
- Left leg is fixed then lifts creating a ‘jump’ delivery - influencing the angle of release
- Trunks twisting movement is blocked by the left arm and shoulder
- Right elbow is turned and raised in the direction of throw.

Delivery Phase - Final Arm Movement



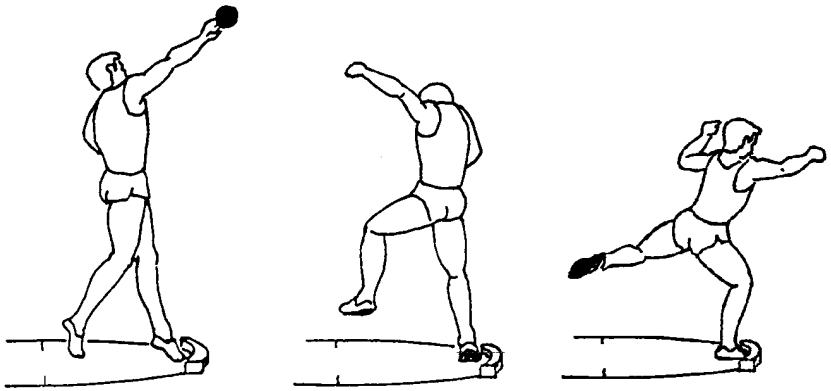
Objectives

To transfer velocity from the thrower to the shot

Technical Characteristics

- Strike of the putting arm begins after full extension of the legs and trunk.
- Left arm is bent and fixed close to the trunk
- Acceleration is continued by pre-stretched wrist (fingers turning out after the release)
- Release is made immediately after loss of ground contact.

Recovery Phase



Objectives

To stabilise the thrower and avoid fouling

Technical Characteristics

- Legs ‘reverse’ - change quickly after the release
- Right leg is bent
- Upper body is lowered
- Left leg naturally swings backwards.