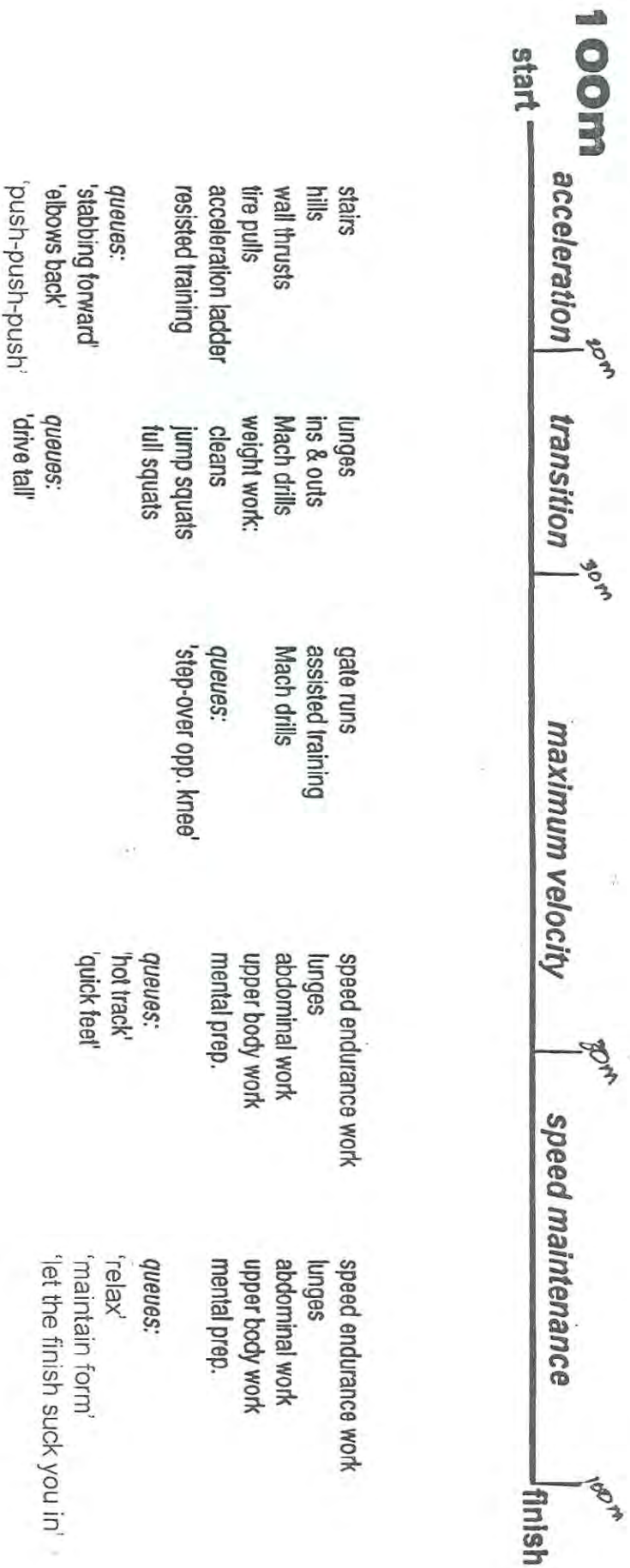


Sprint Race Modeling and Associated Training Methods



The same model can be used for the 200m when adding turn mechanics and queues:

mechanics considerations:

- toes moderately pointing inward
- arm action remains unchanged
- depending on stature inside shoulder slightly biased inward if a large, taller athlete

coaching queues:

- 'tuck into the turn'
- 'swing off the turn and relax'

The First Three Steps of Sprinting



Head, Neck, Shoulders in alignment. Front Leg positioned at around 90 degrees, back leg around 135 degrees. Both legs are loading against both blocks - note the heel



Drive the hips and body out at 45 degree angle, Eyes and head down maintaining power line out of the blocks



Full extension out of the blocks at 45 degrees. Opposite arm blocks at the head. Eyes and Head down to so hips can be fully extended. Like pushing a car down the track.



Toe pulled up as the foot steps over the heel. Eyes straight ahead keeping head in alignment. Opposite arm driven back through the pocket.



Knee Up Toe - Foot Moving Back prior to ground contact



Note the angle of the knee and hip. These are important angles to consider when designing a strength and plyometric training routine.



Full Extension off the back leg - head in alignment with shoulders and hips to maintain the power (or pushing) phase at the start. Knee Up and Toe Up prior to ground contact.



Valeriy Borzov - Soviet Union
1972 Olympic Gold Medalist