

Momentum and Elevation on the Bar

(or the car for that matter)



COACH MIKE BURGNER

Enduring the “Welcome to the Pacific Northwest” driving rain, Coach B. made his way south to north on his Harley for a series of lifting clinics, a visit to Leavenworth and Glacier National Park and eventually Colorado before going back to the Sunshine State. One of his stops was at CrossFit North on Saturday, July 9th and this document will serve as an outline of our battle with the deceptively heavy PVC pipe during the clinic.

JUMP AND LAND

Jump and Land. It’s all about jumping and landing in order to create momentum and elevation on the barbell. That’s it folks, that’s the Olympic lifting story in a nutshell, a small nutshell. Now there are more details of course and for that detail we will need more nuts, for indeed you need nuts to do Olympic lifting. Well, that’s not entirely accurate considering how many women out-lift me, but for sure you need junk yard dog aggression commensurate with your desire to succeed at the lift.

ARMS BEND – POWER ENDS

Coach B. began the seminar with his signature statement about Olympic lifting being nothing more than jumping and landing in order to create momentum and elevation on the barbell. He made a point to introduce that idea early and repeat it often throughout the day. Often enough that someone started keeping track. He demonstrated the idea by looping a rope through a 5 pound plate and then pulling upward on the rope. The plate would accelerate upward, float momentarily and then fall back down. He pointed out that your arms should be like the rope and attach you to the bar but not attempt to lift the bar.

EXPLODE

Explosiveness is a key element to Olympic lifting. You need to explosiveness to lift well and Olympic lifting will create explosiveness. Neat little self-sustaining event there. Coach B. told us his 5’ 9” son Beau was at the volleyball net across from a 6’ 6” player and both went up to deal with the ball and though Beau’s hands were at the same height as his opponent, his feet were up at Stretch Armstrong’s knees. Beau’s lifting gave him tremendous explosive strength and allowed him not to simply jump but to explode upward which is an enormously functional athletic skill.

FULL EXTENSION

Of course there is a particular range of motion for the bar, a fairly specific bar path that remains very close to the body and within the area of the base. This requires that you not lean forward or backward but only upward so that you can extend your body upward, get as tall as possible and create a path for the bar that moves it in a straight line from the floor to either overhead for the snatch or to the shoulders for the clean. Check out the car lift on the first page...now that’s full extension.

AREA OF THE BASE

Coach B. made the point that he can look at the feet of a lifter during the lift and generally predict whether or not the lift would be successful. That's how important your base is...it will allow your lift to be successful or it will cause your lift to fail. We began our day with our base learning that we will be using two stances to jump and land cleverly named the jumping stance and the landing stance.

JUMPING STANCE

The jumping stance is your starting point and the stance that will allow you to provide the maximum leverage to your jump. You need to have your feet directly under your hips so that your upward energy connects with your hips in a perpendicular line with the platform. If your feet are too wide the angle makes for a watered down connection and you will lose power. Go stand in front of a box, a tall box, for a box jump. Step back from the box so you have to take one step up to the box to set up for your launch. Make two or three jumps onto the box. Step up fully intending to make the jump and stop without jumping. Look down at your feet...that's your jump stance. You will find that your feet are side by side with your toes out slightly wider apart than your heels. Feel where that stance is as you will pull and jump from this stance.

LANDING STANCE

The landing stance is wider than your jumping stance but only slightly so. Your feet will move outward about two inches on each side in order to provide room for your hips when you drop down into the bottom position when you receive the weight. You may have a tendency to step out into a wider athletic stance but that is too wide and will provide you with significantly less leverage than you will need to stand up with the weight. Stand up on a 12" or 16" box and step off a few times. Nothing fancy, just step off the box and land. The stance you wind up in will be your landing stance and will be just outside the width of your jumping stance.

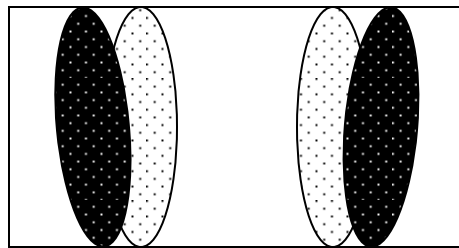
THE BURGNER WAY

Mike Burgener is a former Marine turned school teacher/coach of Olympic champions. He has a very low tolerance for any manifestation of slow, weak, unmotivated...pretty much anything other than what he is telling you to do. After a very brief introduction Coach Burgener gave a thumbnail of what we would be doing through the day and told us that the proper response to the question "Do you understand?" was, "YES COACH!" in our big boy and girl outside voices. Our first response was unacceptable because the windows didn't rattle, number two however swelled the walls and was met with approval. He also mentioned the "Hooahh" sound we would be required to make when he signaled his own need to excite an hormonal response. He would sound off and we would follow on with our own and that one may have caused foundation damage. Next he looked at his watch and told us we had 60 seconds to get a PVC pipe and get ourselves ready to receive training. We were done in less than 50 seconds. He liked that.

JUMPING STANCE TO LANDING STANCE

We began our day moving from the jumping stance to the landing stance first by stepping and then by jumping. The jump is only high enough to allow you to move your feet outward...don't get air. The jumping movement is upward and is accomplished with a push through the heels. You go onto your toes when you want to maximize the height of your jump but you push through the heels if you want to maximize the height of an externally lifted object. For this jump, push through your heels.

When you land - stomp your feet. You should hear the slapping, stomping sound of your feet hitting the ground and the movement is very fast. Lift your toes as you jump so that you land on the flats of your feet. We jumped and landed again and again so it sounded like one giant stomp rather than a typewriter. Land with bent knees...you must not come down on straight legs or you invite injury to your knees, hips and back. Upon landing on bent knees be sure your knees track over your toes, your back is arched (not rounded) and your butt is sticking out backwards as if your were about to sit back onto a chair. Remember to not go too wide, just barely outside the width of your jump stance, toes slightly out.

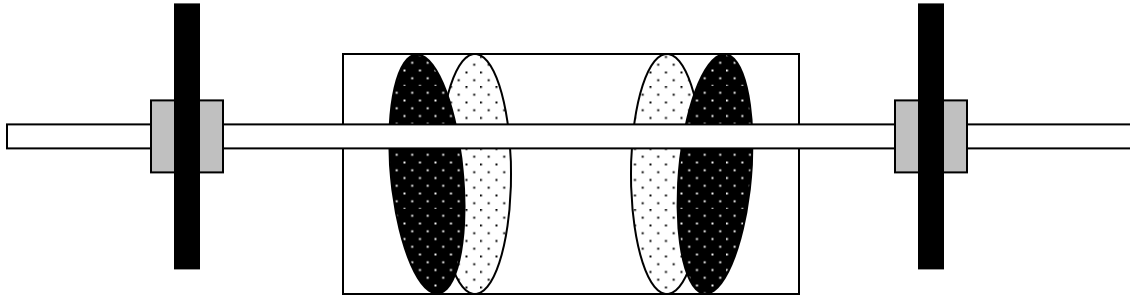


GRIP YOUR PIPE

At 0940 we grabbed our pipe off the ground and impressed Coach B. in that we did not hit each other with them as his HS kids do. The grip width is established by finding a grip that puts the bar 8" to 12" above your head. What is above your head? Above your head is not simply higher than your head and certainly not in front of it or behind it. The bar should bisect your body front to rear and reside at a point directly above your ears. Do not go too wide with your grip or you threaten damage to your wrists when you catch the weight overhead. If you trend toward a wider grip your shoulders are too tight and you need to work on your flexibility.

The snatch grip is with the above established width, and the grip itself utilizes the hook grip. The hook grip is one where you wrap your fingers over your thumb to lock the bar into your grip. This grip is maintained only through pull and is released when the lifter flips his wrists upward to get under the bar. The arms are straight and are like ropes in that the weight simply hangs from the arms. Remember if the arms bend, power ends. You do not lift the weight with your arms. The momentum and elevation is given to the bar by your legs through the jump – not by your arms.

BARBELL PATH/AREA OF THE BASE



The shortest distance between two fixed points is a straight line. This physical law is violated if you do not move the barbell along a straight path from the ground to either the clean or the snatch position. What tends to happen with the PVC pipe because of the lack of weight is that the lifter will move the bar in an arc forward and upward with straight arms which would not, could not happen with any substantial weight on the bar. The barbell must remain close to the body and this happens by bending the elbows up and to the outside not in an upward pull of the bar but rather a downward pull of the body. This straight line path for the barbell keeps it in the area of the base which is illustrated above with the white jumping stance feet and the black landing stance feet.

As bipeds we are in a constant state of interaction with the ground when we are standing. You will note a substantial lack of two legged chairs and tables leading one to believe that two legs are not particularly stable. It would be a substantial hit on the fashion industry if we evolved that third or fourth leg but it would be much better for our stability. Until then we are stuck with a support system that requires constant adjustment as we change our position or elevation or otherwise adjust our alignment. When you bend forward at the waist your body is pulled forward and you need to stick your butt back to even the score. When you dangle a heavy barbell from your arms you complicate matters and the only way to compensate is to keep the center of gravity of the barbell as close your own center of gravity as you possibly can. The area of the base is described by a box that contains your feet. If you allow the barbell to drift forward of that box it will pull you forward and you will have to step that way to recover or lose the weight forward. The opposite will happen if the weight moves outside the box to the rear. So, keep the barbell inside the area of the base by keeping it as close as possible to your body during the pull and once it is overhead keep it above your ears.

BOTTOM POSITON

Your arms must be locked and your head in a neutral position eyes forward...not up, forward. When overhead you will have released your hook grip and will have your palms facing upward. Engage your shoulders and press them upward. Pull the bar apart sideways and stay tight. This is not a relaxed, comfortable position but rather a condition of very significant tension. Your butt is between your ankles, you back slightly arched.

THREE PULLS

In between the jump stance and the landing position as described above are three distinct pulls that are essentially the position, power and finishing pulls of the lift.

1st Pull. The first pull moves the bar off the ground to the crease of your hips moving past the knees NOT around them but past them by moving the knees back out of the way in preparation for the...

2nd Pull. The second pull is the most powerful movement in sport. It is the place where your body has the most powerful leverage position and where you Release Your Inner Dawg (hope you don't mind if I borrow that Laura) and explode UPWARD. The bar must move upward so throwing any energy in any direction other than straight up is a waste. Once past the straightened knees in the first pull you bend them back under the bar in what is called the double knee bend or the scoop as you viciously, aggressively, and violently extend your body upward. As Dan John says, "GET UP!" Coach B. said that you want to imagine yourself getting as tall as possible here as you shrug your shoulders to your ears. Full extension of your body is what you want so that you impart as much upward movement to the bar as you possibly can before you move to the...

3rd Pull. The bar is now weightlessly floating in space but much like good weather in Washington, it is only for a brief moment in time. During this interlude between ascension of the bar and its pause in space you pull yourself downward against the weight not attempting to lift it with your arms but rather to rocket your body underneath the bar so you can catch it in the above described bottom position.

THE BURGNER WARM UP

At 10:00 we were introduced to the Burgener warm-up which Coach B. has his athletes do no matter the type of workout he has in mind. Down and up. Say it with me now... down and up. If presented with that thought perhaps you will go straight down and up or maybe you will want to bend forward a bit or stick your butt back a bit...or both. Don't do that, just go down and up. To get the feel for what that means, jump. No prep or thought, just jump. You don't stick your butt back you just go down and up. As we progressed through the various movements "Down and up" was the constant refrain from Coach B. as he reminded us of the completely vertical nature of the movement.



Each of the following 4 elements of the Burgener warmup begins with the down and up movement. This is Sage in the down position of the down and up movement and each of the next four positions would begin from here.



Shrug - 1-2-3 - Down and up to this position where you shrug the shoulders as high as you can keeping your arms straight and your body tall. Your feet remain in the jump position and your legs are straight.

Elbows high and outside – 4-5-6 – Down and up with the shrug followed by a high lifting of the elbows. Do not let the weight drift forward, keep it close to your body within the area of the base.



Muscle snatch – 7-8-9 – A vicious external rotation of the shoulders to straight arms overhead. No rebend of the knees, this is an upper body strengthening exercise. Be sure to let your thumbs pop out of the hook grip and receive the bar with your palms facing upward.

Land – 10-11-12 – Same as the muscle snatch but this time rebend the knees to catch the bar overhead as before and then stand with the bar. Develop the depth of your squat here by going a few inches deeper each time as your flexibility, balance and strength develop.

We worked the Burgener warm up in the above pictured sequence until 10:25 spending a fair amount of time getting lower and lower with the overhead squat position staying there until Coach B., Carrie Klumpar, Michael Street or Dave Werner was satisfied with our position and released us. We were all in pursuit of that beautiful Veronica Carpenter bottom position you see in her avatar or something similar to this:



The bar must be over your head in a position above your ears so that the bar is balanced fore and aft over your body. The elbows must lock out at the completion of the lift and not be extended after you receive the bar overhead. Be sure to flip the thumbs out as you rotate your hands to the palm up position as you receive the barbell. The head is held neutral with the eyes facing forward and tension is kept in the torso to not allow the body to fold under the floor seeking pressure of the weight. Keep the arch in your back and your shoulders as upright as possible. As you begin to stand from this position you cannot let your but stick out backwards, which will allow your shoulders to fall forward, or you will lose the weight to the front. Keep your pelvis tucked under so you can power the weight straight up.

So, how do you go from this gorgeous full squat position with the weight overhead? Well with overhead squats of course.

SKILL TRANSFER EXERCISES

Position. A lift can be successful if you position the bar properly, but it will not be if you don't. Proper travel of the barbell within the area of the base and proper alignment of the bar with your skeletal structure is imperative for a successful lift. In order to practice these bar path and bar position skills, Coach B had us practice a series of skill transfer exercises in order to allow us to get a feel for proper execution of individual segments of the lift.

1. Overhead Squat
2. Pressing Snatch Balance
3. Heaving Snatch Balance
4. Snatch Balance
5. Snatch
 - a. High Hang
 - b. Mid Thigh
 - c. Knees (right at knee caps)
 - d. Below Knees
 - e. Floor

OHS

At 1035 Coach B. had Michael Street come to the front of the room and with his feet side by side and his hands gripping his PVC pipe overhead with the thumbs touching Michael went to a full squat exhibiting tremendous shoulder and hip flexibility. Though buttery smooth for Michael moving me through that range of motion would require pulleys and a restraining harness worthy of the Inquisition. For me and others unlucky enough to be like me, this movement is a great identifier of shoulder tightness as well as a great exercise to improve that range of motion.

With the bar overhead with a snatch grip we slowly worked our way down to the full squat position for some OHS practice. Once again we loitered in the bottom position for quite some time and even worked on some behind the neck presses from there. When done in front this is called the Sotts press and must have been dreamed up by someone with a particular hatred for humanity.

PRESSING SNATCH BALANCE

The Pressing Snatch Balance begins with the bar on the shoulders behind the neck in a standing position with the feet in the landing position, hands in a snatch grip. Keeping the bar stationary, press yourself downward away from the bar, very slowly, going all the way down to the full squat position with the bar held overhead. Stand with the bar and then lower it to your shoulders and repeat.

HEAVING SNATCH BALANCE

The Heaving Snatch Balance is much the same as the PSB only it is done at a faster pace. Once again move yourself down under the bar, don't press the bar upward. Your feet remain in the landing position and you begin with a small down and up movement quickly dropping yourself under the bar to the overhead support position. Once again, stand with the bar then lower it to your shoulders and repeat.

SNATCH BALANCE

For the Snatch Balance movement begin with your feet in the jumping position, go down and up and then explode upward with your arms as you stomp your feet outward to the landing position. The bar is still behind your neck and held in the snatch grip and you still want to minimize your air time. Only lift your feet high enough to be able to move them outward into the landing position.

SNATCH – High Hang

At 1110 we got to the snatch starting from the high hang and the feet in the jumping position. We did 3 pulls in the Burgener warm up fashion and on the 4th pull we did the snatch. We repeated this 8 times with Coach B. chiding us again and again that the down and up portion of the movement is the most critical part of the lift.

SNATCH – Mid Thigh

From the high hang we bent our knees and back slightly lowering the bar to mid thigh making sure the lats remained engaged and the wrists cocked toward the body to keep the bar up against the thighs. To get a feeling for this position Coach B. had us set our PVC pipes down and stand with our feet in the jumping position and our hands on our knees. Keep your shoulders upright, an arch in the back and your head and eyes forward. Move your hands outward as if gripping the bar with the snatch grip. Now JUMP! You need to extend the hip and move yourself upward as high as you can with the jump. With a barbell you exchange the energy that elevated you into the air and give it to the barbell and elevate it instead. We repeated the mid thigh to high hang movement many times which is what the Romanian Dead Lift is. When in the mid thigh position your knees are still back out of the way which gave a path to the rising barbell. When you move from mid thigh to “the crease” or the high hang you move your hips forward putting the knees back under the bar. This movement is called the double knee bend or the scoop. Coach B. calls it the jump. You will automatically do the down and up and put yourself in the very same position if you simply jump.

We practiced moving very slowly from MT to HH again and again and then Coach B. would suddenly yell SNATCH and we would drive our knees under the bar and explode upward to full extension with shoulders fully shrugged and elbows high and complete the movement with a vicious outward rotation of the shoulders to a support of the barbell with elbows locked and palms facing skyward in a full squat position.

SNATCH – Knees

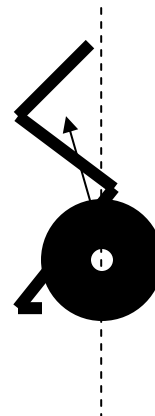
From HH to MT to Knees brings us to a point where we have lowered the barbell to a position directly in front of the knee caps attempting to keep the back at a consistent angle as you squat downward. This angle should closely match the angle of your shins rather than tipping forward by lowering your shoulders. If you do this the barbell will track away from your body, get outside the area of the base and pull you forward out of position for the lift. The drill sequence now was HH to MT to Knees to MT to Knees to MT to HH to MT SNATCH! Over and over again we would slowly move up and down through the positions and out of the blue jump the bar through a range of motion creating momentum and elevation on the barbell land in the landing position while dropping suddenly under the briefly floating barbell into a full squat with the bar held overhead in the snatch grip receiving the bar with our palms up and elbows expended. Coach B. mixed the sequence up so that we would be lulled into complacency with a long series of up and down movements and then suddenly SNATCH!

Think here of getting tall, getting full extension upward as you stand the barbell up through the MT to HH positions and then shrug your shoulders with straight arms to the highest elevation you can impart to the bar. When this extension is at its peak you change your focus from barbell up to you down by bending the elbows high and outside as you drop as quickly as you can into the full squat position.

SNATCH – Below the Knees/Floor

We continued our bar lowering movements down to 2” below the knees and then mid shin which approximates the start position with the barbell on the floor, in the same fashion as the other progressions: HH-MT-HH-MT-Kn-BK-Flr-BK-Kn-MT-SNATCH! The focus of the movement from the floor to below the knees is barbell positioning and is done slowly. Do not try to accelerate the bar from the floor quickly but rather stand with the barbell and position it below the knees in a deliberate and slow movement, then move the knees back out of the path of the bar, move the bar upward past the knees (not around the knees) then move the hips forward to get the knees back under the bar and the CG of your body closer to the bar (double knee bend, scoop, jump) so you can move the bar with a bit more speed and leverage to the high hang position for the 2nd pull that is the most powerful part of the lift. In this Romanian Dead Lift position you have tremendous leverage and power and it is here that you detonate your lifting movement. From the high hang you are fast and explosive first in an upward direction for the bar and then suddenly in a downward direction for you the lifter.

The barbell must not track around the knees, the knees move back out of the way of the bar and the bar will actually move slightly toward the lifter. You must engage the lats and cock the wrists backward toward the body to keep the bar as close to you as you can throughout your pull.





What you have read so far was spoon fed to us in 3 hours. During the lunch Coach B. put Carrie Klumpar and Michael Street through a snatch progression workout. He told us that the lifter develops through:

1. Movement Patterns
2. Positioning (bar and body)
3. Progressive Overload

Coach B. pulled up a chair and guided Carrie and Michael through a series of snatch lifts where they each pulled once every minute adding 2.5 kg per lift for Michael and 1.25 pounds for Carrie. The beginning weight is about 65% to 70% of max. Here is a list of comments from Coach B.

1. Get tall. You want to go to full extension.
2. Slow the initial liftoff from the floor then accelerate viciously for the 2nd pull.
3. Junkyard dog attitude.
4. Good technique but a soft attitude and you have a failed lift.
5. Bad technique but a ferocious, mean as hell attitude, 3 green lights.
6. Tight, hard, strong at the bottom position. Stick it out and fight that weight.
7. When it's time to go, go hard. Explode viciously upward and JUMP!

The next 5 lifts were singles again but with as much rest as the lifter wanted adding 1.25 lbs or kg with each successful lift. No increase for a failed lift and you are done after 2 failures in a row.

After lunch Coach B. had us break down into groups of 5. One person would do the Burgener warm-up and the other 4 would watch and critique. The specific objective was to develop an eye for the proper lifting movements.

1. Reps 1-2-3 - Down and up with shrug
2. Reps 4-5-6 - Down and up with shrug and elbows high
3. Reps 5-6-7 - Down and up with shrug and elbows high to muscle snatch
4. Reps 8-9-10 - Add jump to landing stance
 - a. Overhead Squat (OHS)
 - b. Pressing Snatch Balance
 - c. Heaving Snatch Balance
 - d. Snatch Balance

The movement key is the Down and Up. This will make or break the lift. The attitude key is an aggressive, never-say-die, can-do mindset. Do not let the weight deny you the lift. You attack the bar like a junkyard dog not some namby pamby, perfumed, tea cup something or other with a hair ribbon. Fire in the belly.

CLEAN AND JERK

Once you understand the snatch lift, the clean and jerk is learned in very short order. When you do the snatch you want to accelerate the bar upward with the down and up movement and then pull yourself under the weight rather than try to push it upward. When you do the clean you want to accelerate the bar upward with the down and up movement and then pull yourself under the weight rather than try to push it upward. When you do the jerk you want to accelerate the bar upward with the down and up movement and then push yourself under the weight rather than try to push it upward. A bit of a pattern there.

GRIP

Your grip on the bar is about a thumbs length from where the knurling ends toward the middle of the bar. This corresponds to about a thumb's length wider than your hips. You grip the bar with the same hook grip as you do with the snatch. After you stand with the bar you release your thumb as with the snatch but the bar will be received on the front part of your shoulders with your hands just outside your shoulders and the bar sitting on your fingertips. You are not holding the bar with your hands upon receipt of the bar because you want to rotate your elbows upward to keep them from crashing into your thighs at the bottom of the clean when you are in the full squat position. You can't rotate your elbows upward to a parallel position with the floor if you are gripping the bar. Let the bar slip from your grip and maintain contact with the bar with just your fingers. Once you stand up with the bar you bump it up and re-grip it so that your elbows are back in position below your hands.

FRONT SQUAT

Clean the barbell to your shoulders or take it from a rack. Keep your elbows high and use the landing position for your feet. Take a deep breath, pressurize your core and stay tight, then squat butt to ankles and stand back up. Be sure to stay as erect as possible and not dip forward so that you are lifting with your back. This will hurt your back and cause you to lose the weight forward. Push through the heels and maintain a consistent back angle that matches the angle of your shins. As you stand be very careful to not start up with your hips. Your hips must not move faster than your shoulders or you will create a damaging lever that will endanger your lower back. If you find that the outer edges of your heels lift at the bottom of the squat - rather than trying to force your heels down, press outward with your knees and feel around for the most stable platform and most solid groove for your knees.



At 1345 we divided ourselves amongst 5 racks each sporting an unloaded bar. We took turns critiquing each other in the front squat being careful to maintain perfect...near perfect or at least doesn't suck too bad form. We each practiced sticking our arms out to the front allowing the bar to balance on our shoulders. The grip on the bar is really just a fingertip touch to keep the bar in place. This allows for maximum elbow height to keep them away from the thighs while in the full squat.

Next we jumped the bar through its range of motion. It is important during the clean to make sure you meet the bar where it is otherwise it will come crashing down on your shoulders. The squat clean is a failed power clean. If your pull is so powerful it goes higher than your normal squat depth, you will want to meet the bar higher so you don't get driven into the ground like a tent stake. If you receive the bar above parallel it is a power clean.

Just as with the snatch the first pull is a positioning pull and is done slowly to get the bar to where you can exert the 2nd pull that truly accelerates the bar. The 2nd pull is the powerful, explosive upward extension of the body that gives the bar its momentum and elevation. The 3rd pull finds your elbows high and outside as you outrun gravity to get yourself under the bar.



At 1420 we grabbed our trusty PVC pipes and got to work. As we did with the snatch we went through bar positioning movements moving from the high hang to mid thigh to knees to below the knees to the floor and back up. We moved in small increments and Coach B. had Michael, Carrie and Dave Werner walk around and check our form. At various intervals Coach B. would yell CLEAN! and we would go to full extension and clean the bar. Up and down and up and down we went with the positioning movements sometimes moving just inches at a time and now and then CLEAN!

At 1440 coach be showed us some group exercises that he has his HS kids do in their gym classes. These are great for groups of people and use little or no equipment.

1. One person sits on the floor with legs extended and side by side with the arms extended out to the sides. The person doing the drill begins behind the seated person and jumps over one of the arms, turns to jump over the legs and turns again to jump over the other arm winding up behind the seated person again. The jumper turns around and repeats the exercise in the opposite direction.
2. One person on all fours, the other jumps over from one side to the other. The down person then straightens the legs to put their butt high into the air and the jumper crawls under and stands up. As soon as the jumper crawls under the down person gets back on all fours and the exercise is repeated.

3. Make a row of people each on their hands and knees. Jump over each in turn and then return to the start. You can do the same exercise with every other person in the up position. The jumper jumps over one then under the next.
4. Have a row of people in line again all standing. Two people hold a stick at knee height or so (height is dependent upon jumping skill of the group) and run toward the row of people. When the stick gets to them each person must jump up high enough to clear the bar.
5. With a large enough group of people consider more sticks and the requirement is to alternate jumping over one and under the next for however many sticks come your way.

JERK

Because you just can't say it enough, remember that the snatch is a jump and land receiving the bar at arms length overhead with a wide grip, the clean is a jump and land receiving the bar at the shoulders with a shoulder width grip and the jerk is a jump and land receiving the bar at arms length overhead with the same shoulder width grip. The down and up creates the jump and stomping your feet apart after an explosive upward extension and catching the barbell overhead creates the land. An easy formula that you can spend a lifetime perfecting. Start now, practice often.

In order to do the jerk you have to figure out if you are a right or a left leg forward jerker. One way to do that is to lean out against someone's outstretched arms as if in mid-flight during a ski jump. Without warning the holder will let you go and you will stick out a leg to stop yourself. Whichever leg you stick out to stop your fall will be the leg you stick forward when you jerk. Another way is to have someone walk up behind you and give you a push without warning. This is not only a good dominant leg check but Coach B. says it's a great deal of fun...for the pusher. After you figure out which leg you are going to stick forward you need to establish the length and width of your stance...we do this with the:

LUNGE

A great way to start is to do walking lunges. Take a great big step with the belly button pointed to 12 o'clock and if you step with the left leg step to 11 o'clock and if you step with the right leg step to 1 o'clock. Now walk around like that for awhile and get used to that position. The knee of the front leg must be over your ankle so that the lower leg is horizontal with the ground. Your rear leg is slightly bent at the knee and your weight is on the ball of your foot. You are pressing forward with rear leg and backward with your front leg wedging your hips in between giving the weight you are holding overhead a strong platform upon which to sit. When in this position keep your core tight and your back erect.

The lunges make for a great developer of the jerk position but of course are a terrific workout on their own. Step ups on a box are another great developer of the strength needed for the jerk position.

RECOVERY

When you have finished the jerk and are going to recover to a standing position always step backward with the front foot and then forward with the back foot. If you find yourself stepping forward with the back foot you have put too much weight on your front foot. Once you have recovered to a standing position, try taking a step forward, one to the right, one back and one forward. Great core developer.



Here's Beau Burgener as a HS junior. Note the straight line that runs from the weight through his arms and torso and through his hips down to the platform. He has jumped down under the weight pressing himself under it rather than trying to press it upward from an upright position. His head is neutral and his eyes face forward.

At 1510 we picked up our PVC pipes and tried to simulate the position Beau is in above working specifically on wedging ourselves between our forward pushing rear foot and our rearward pushing front foot. We also jumped the pipe through the push press, the push jerk and the jerk, each from behind the neck. These skill transfer exercises teach the proper bar path and the timing of the down and up. After 4 or 5 reps of each repeated several times we moved the bar to the front and went through the progression again.

At 1525 we went to the high hang did the clean from there and then the jerk. Of course you do the clean from the jumping stance and after recovering your feet properly you do the jerk from the jumping stance as well. The foot movement is very dynamic and explosive and both feet stomp very aggressively into position. Keep your body in the same place and launch your feet fore and aft and get under that bar!



Here's Josh Everett with his 155 kg clean and jerk at CFHQ. Note Coach Burgener in the background willing the weight up. The junkyard dog attitude was evident in this lift as Josh didn't get it all the way up on his jerk and the 341 pounds over his head started to drive down through him. Because of the fire in his belly, the energy of the crowd watching in awe, and Josh's rock solid position (not to mention Herculean strength) he was able to press his arms and legs into position and then stand with the weight to complete the lift.

Note how his hips, shoulders, arms, hands and barbell are all in a line that bisects his stance and are perpendicular to the ground and that his head is neutral with his eyes forward.

Keep your pelvis tucked under and maintain proper spinal alignment. If your pelvis tilts you will begin to create a lever arm that will place tremendous stress on your back and you will lose the weight forward. Tension and skeletal alignment are key and will make or break the lift.

Though there is some variance in the landing stance from lifter to lifter, there is an optimum stance for the individual that must be pursued and perfected. Coach B. told us he can watch the feet of the lifter tell not only whether or not the lift will be successful but whether it will fail to the front or rear. Mark the ground with your optimum landing position and find it every time.

Remember that the lifter is developed through practice of:

1. Movement Patterns
2. Positioning (bar and body)
3. Progressive Overload

Practice technique over strength and weight. Bar travel, body position, foot placement, timing, mechanical advantage, skeletal alignment and proper muscular tension for your support base must become automatic not require your conscious thought. How do you get better at the snatch? SNATCH! How do you get better at the clean and jerk? Do I really have to tell you?