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Parkour Basics

Part 5: Turn Vault & Cat Leap

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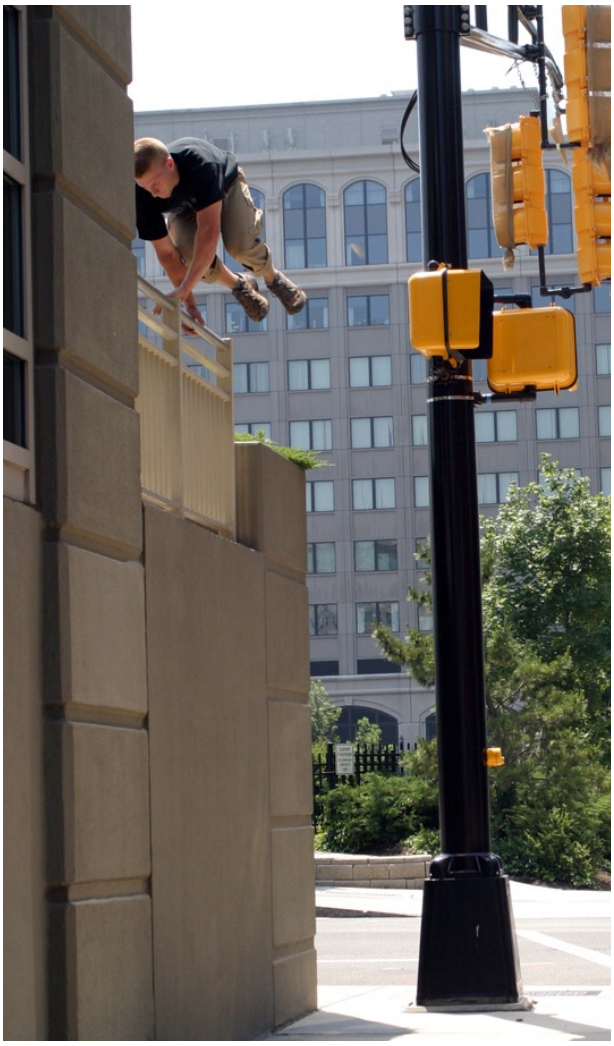

My last article described some of the techniques you can use to move up and over vertical objects you might encounter during a run. Now it's time to learn ways to make the most of these obstacles by incorporating objects at height into your run. The turn vault and cat leap are two climbing-based movements that use (and thus develop) the absorptive strength and explosive power of your upper body.

There are two very distinct situations where the ability to smoothly incorporate the turn vault is absolutely essential: when you are approaching a vault without knowing what might lie on the opposite side and you require a transition before the drop, and a situation where you know what lies on the other side but the drop is larger than you wish to take all at once. In the latter example, you can break up the total momentum and put your center of mass closer to the ground before dropping to decrease the total impact, a skill that is useful if you wish to extend your Parkour experience beyond the first few months of motivated, if not totally misdirected, training.

Turn Vault

The turn vault essentially starts as a regular two-handed vault (see *CrossFit Journal,* issue 45). Jump while elevating your hips and legs with the power of your arms and core, tucking your knees toward your chest to minimize leverage at the point of contact with the surface. Where the turn vault departs from the regular two-handed vault is the point where your hips pass the plane of the obstacle. Rather than release the wall or railing with your inside hand to remain square in relation to your path

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of travel, as you would for a two-handed vault, for the turn vault, release this hand and place it on the opposite side of your outside hand. Facilitate this by pulling the wall or rail toward your hips with this inside hand as you jump, which will set you up for the rotational movement required to put you in a ready position.

From here, focus on the point of contact where you will place your feet on the opposite side of the object. The concept of landing in control, with only your arms to steady you, is a common source of trouble for a lot of new trainees as they learn this movement. As they begin the jump, they will attempt to propel themselves only halfway, thinking that this will make the landing with their feet somehow easier. It is quickly learned that not clearing the obstacle and landing on your shins is definitely not easier than just working up the required commitment to put yourself over the wall or railing with full confidence in your ability.

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As you spot the point of contact for your feet, you will follow all the steps of a good landing, unwinding from your tucked position to extend your feet toward this point on the object. Absolute focus is essential, as you will have to trust your grip and hone in on the point where you intend to land. As you do so, you will sink your hips down and back, bending at the knees and allowing your slightly bent arms to absorb the shock. The balance of this position will occur between the grip that you have on the top with your hands, and the point of friction at your feet. If you are holding a railing and have your feet on a small ledge, you won't have to think about it all that much. However, if you have your hands on the edge of a thick brick wall and your feet smeared on the vertical surface, you'll have to strike a precise balance before you will be able to confidently avoid falling backward onto whatever—probably hard—surface waits below.

Once you reach the hang position, the end of the movement is as simple as looking over the shoulder you wish to move toward, spotting your landing and taking into account any features of the landing surface that might be pertinent. Once you assure the safety of the area, you will push against the wall and turn toward your lead shoulder to rotate 180 degrees relative to the wall.

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As you push away from your position, you will create horizontal momentum that can be carried on into a roll if appropriate.

One great way to create a progression with this technique is to find a rail or small wall at ground level with a soft and forgiving surface, such as grass or mulch. From here you can tweak the movement pattern required for the vault—rotate, extend, and absorb—with little risk of injury. After drilling this pattern repeatedly and from various angles, you can slowly move upward until you are comfortable on a variety of different obstacles and heights.

A movement that incorporates many of the essentials of the turn vault is the cat leap. In this technique, you will leap up toward a wall or other appropriate obstacle, and land in the hang-position, absorbing shock with your arms and legs, pull yourself up and then press up and over the top to continue on your way. This movement is essential in situations where you face a gap that you can't expect to clear and land on your feet, such as when the landing surface is taller than the takeoff. It works absorptive capacity in your arms, back, and forearms as well as enhancing coordination and concentration through a relatively complicated movement pattern.

Both of these movements will develop strength and power throughout your entire upper body in proportion to your ability to commit to them.

Cat Leap

The cat leap is essentially a technique performed at height, but it can easily be trained from ground level on a wall that's about body height. Stand a comfortable distance from the base of the wall, assuming the jumping position. Follow the steps for a good jump (see *CFJ* issue 47), swinging your arms behind you as you bend into a partial squat, then projecting your arms toward the wall as you perform a broad jump. You will tuck your knees, then extend them toward a point on the wall, all while focusing on the surface that will receive your hands at landing. Your feet will contact a split second before your hands, and you will land with slightly bent knees and slightly bent arms. Once both your feet and hands are in contact with the wall, your arms will absorb the momentum by straightening while you sink your hips back and down and bend your knees. This will put you in essentially the same hang position as the turn vault. Once you are comfortable with the coordination involved in this portion of the movement, it will be time to work the top-out, which, as you might assume, is the most difficult part to master. The technique will be similar to a muscle-up, where you will pull your elbows down and back, then press from a low support into a straightarmed support on top of the wall.

There are two aspects of the move that will greatly aid this transition: the balance between leaning back to gain some semblance of footing on the wall and yet retaining your grip with your hands, and the "reverse kip" with your free foot that I discussed

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in the wall-run article (*CFJ* issue 48). In this instance, a combination of the ballistic loading of the shoulder girdle in the landing, a quick transition into your pull, the reverse kip, and just enough strength for the transition will all come together to get you up on top of the wall smoothly and with relatively little effort. The trick is to time the boost with your supporting foot against the wall with the initial pull out of the bottom, then coordinate the kipping motion of your free leg with the beginning of the transition. At this point, think of shooting your elbows back behind you while pulling the wall or railing toward your chest, and you will find yourself in a low dip position. From there, press up to support, perhaps kipping your free leg once more, and vault to the other side to continue on your way.

The transition is a technique that takes practice to perfect, and every new obstacle and surface will require continued diligence to master the movement. Once you reach a semblance of comfort with it, you can perform the cat leap on a variety of objects at different heights and distances. From the starting point of having the landing surface at a higher level, you can eventually progress to having both the take-off and landing surfaces be at the same level (essentially forcing you to jump down into the technique and absorb exponentially more force). Always, though, it is important to be aware of your grasp of the technique and to attempt to keep the overall impact on your body to a minimum. If you start to get sore elbow tendons or banged-up knees, it might be time to rest a bit and rethink your training plan.

Both of these movements will develop strength and power throughout your entire upper body in proportion to your ability to commit to them. Without this connection between ability and action, the physical skills that you might otherwise attain are of little use in everyday life. To apply them effectively, you need both the physical ability and the mental focus, commitment, and discipline.

Jesse Woody, age 26, father of two, has about eight years experience in fitness and nutrition. He works in various capacities for the Woodberry Forest School in Virginia, including working with the outdoor education department and, currently, transitioning to head strength and conditioning coach. He's been practicing parkour for three years, though he's acted like a monkey his entire life. He is an administrator and frequent content contributor for the American Parkour website.