



# ADVANCED ROCK CLIMBING

## Expert Skills and Techniques

**Topher Donahue**

**Foreword by Tommy Caldwell**



MOUNTAINEERS BOOKS

## Face Climbing

*"Think of your entire body like a hand. Learn to climb in a really three-dimensional style. Use your head, shoulders, knees, everything."*

*Tommy Caldwell*

To explain advanced face climbing skills in a book is similar to explaining how to perform a complicated dance like the tango; printed words and still photographs are clumsy ways to convey motion. The philosophy of motion, however, can be mentally learned through reading. It's then up to the reader to go out and put the philosophy into physical practice. The unlimited variety of possible moves dictated by the rock, in combination with the flowing energy of a climber moving powerfully with just a few points of contact, make face climbing the most dance-like of all types of climbing.

As beginners most of us viewed climbing as a mechanical series of correct body positions held in place by correct hand and footholds. We progress as climbers to learn that the act of climbing is much more like a monkey swinging through the trees in a succession of continuous motion than it is a robotic series of stilted positions. It is in this movement where the magic of hard climbing happens.

Yet the motion can be hard to see. To those watching, climbing seems an

almost static sport. Despite moments of all-points-off dynos and other dramatic moves, much of the movement of the sport is subtle and self-contained. When a skilled climber moves, the shift of hips and spine, followed by shoulders, arms, and finally fingertips can be almost invisible from a spectator's view. But inside the climber, muscles and momentum are flowing like water. That meditative movement is partly why we love to climb. It also explains why climbing has never really caught on as a spectator sport—most of the game happens on the *inside*.

Watching a great climber dance their way up a face of water-, ice-, or wind-sculpted stone is a thing of beauty: the power, grace, and discipline, the smooth motion of the muscles shifting under the skin, the aesthetics of the cliff. And it's while climbing faces that most of us fall in love with climbing. (Of course, crack climbs can be inspiring too, but it takes a bit more of a connoisseur to find the beauty in wedging yourself between sharp edges of unforgiving rock.) Face climbing is also

a mandatory skill for hard crack climbing, and quite often the crux of a crack climb is a few moves of difficult face climbing where the crack becomes almost entirely unusable.

Any climber who wants to advance in the sport will do well by paying their dues at a world-class face climbing area. Kentucky's Red River Gorge, Colorado's Rifle, California's Tuolumne Meadows, and Nevada's Red Rocks all are great places to hone face climbing skills. And anyone who wants to master face climbing should visit its epicenter, the incomparable limestone crags of southern Europe. However, "face climbing" is incredibly diverse, and the skills needed to ascend faces are as remarkably varied as the rock comprising those faces. A test piece face in Tuolumne is as different from a face climb in the Red River Gorge as an off-width in Indian Creek is from a boulder problem in Hueco Tanks. Yet, while most climbers prefer one style of rock and route over another, it is hugely beneficial to practice both steep and slabby face climbs.

No matter the angle of the rock, bouldering—ideally with climbers who are better than you—is the best way to learn face climbing skills. The close-to-the-ground action makes it much easier for you to play with movement and to study how other climbers move, use holds, and apply power to get through difficult sections. Trying the same moves multiple times and learning to execute difficult sequences is also easier when you're near the ground than when you're fiddling with gear and distracted by exposure on a high, roped climb. These are

the reasons why, for forty years, climbers have considered bouldering the ideal training for climbing. However, bouldering doesn't teach you everything you need to know to be a skilled face climber. It's also important to learn pace, resting, efficiency on easier terrain, mental endurance, and how to quickly read rock sequences. These are skills best learned by climbing many hundreds of long pitches right near your oversight limit.

Face climbing is how most of us are introduced to climbing, and due to the enormous number and variety of climbable faces around the world, face climbing is the most popular style of climbing. The skills needed for climbing sheer walls, overhanging caves, and smooth slabs are climbing's foundation: applying solid footwork, using handholds in creative and efficient ways, reading sequences, developing rock awareness, knowing how to channel powerful movement, using the friction potential of the rock, and understanding your own unique body dimensions and power are all best learned by face climbing.

## FOOTWORK

*"Footwork. That's one thing that's hard to get through training. You gotta just go climbing. Spend time on technical terrain."*

*Tommy Caldwell*

When photos and videos of a young Chris Sharma first appeared in climbing media, climbers were skeptical. Commonly overheard comments included: "He doesn't



*Practice looking over a shoulder to see your footholds from a better angle—looking straight down underneath you provides a limited angle of view.*

even use his feet!" "His footwork sucks!" "How does he climb so hard?" Obviously, Chris got better at using his feet, but he never gave up on his signature climbing style, and in the process showed us a better way to move: a way that isn't limited to always needing to keep both hands and feet on the rock. Channeling Chris, we use a leg or arm more like the tail of a monkey,

swinging, carrying momentum, and finding balance in the wildest of motions.

Coaching for basic climbing footwork includes trusting each foothold, placing each foot precisely and then not moving that foot as you weight it, and trying to get as much weight as possible on the feet at all times with as much of the body's weight oriented over the feet as you can. For hard climbing, these fundamentals become even more important because small holds become increasingly difficult to trust and handholds get too small to always use with arm and finger power alone. Fortunately, there are a few footwork techniques that are unique to advanced climbing.



*Use your feet like a ballerina en pointe—on the tip of the toe for maximum versatility, reach, and power.*



*Feet supporting center: Use core tension to adjust the hips away from the rock on slabs, directly over the feet on vertical, or tucked in over the feet on overhanging rock. In each case, keep body weight over the feet as much as possible.*

## FOOT POWER

It is easy to equate climbing power with the upper body. Get very far into a sustained section of footwork-intensive climbing, however, and the power of the lower body becomes critical. One of the physical aspects that differentiates experienced climbers from greenhorns is the strength of the feet. As beginners, we are using holds that are big enough that we can often simply stand on them as if we're on a small ledge. As the holds get smaller, however, it becomes necessary to press our feet onto much smaller holds, using toe, foot, and leg power combined with body angle to maintain pressure on a really small patch of rock.

To best channel foot power, you want to move beyond the concept of simply

standing on your feet to use them far more dynamically and powerfully. Some mental visuals to consider in developing powerful footwork include:

- Use positive edges as if you are trying to pull the holds off the rock with your toes.
- On different angles of rock, adjust your hips to put more weight over your feet as shown in the illustration above.
- Use pockets and depressions aggressively, almost as if you are digging or screwing your toes into the hold.
- Press with power and precision comparable to an *en pointe* ballet move where the dancer stands with full body weight on the very tips of the toes.
- Use core strength to keep your weight centered over your feet, even if your

body is off to one side or you are faced not directly into, but to one side or the other of, the rock.

### THE SWEET SPOT

*"You should be able to determine where you want your feet without even looking at them. After you've decided where you want your feet, then look for a foothold at that spot."*

*Justen Sjong*

On the terrain we learn to climb on and in climbing gyms there are usually footholds of some sort. On harder terrain on natural rock, there are many passages without any significant footholds at all, or footholds in places where they are difficult to use. A section of rock requiring a lieback is an obvious example: Every climber just leans back and walks their feet up the wall, using sweet spots—rather than any specific footholds—that best fit them and their body dimensions. The less obvious occasions when placing the foot in the sweet spot helps immensely include:

- High steps, where smearing one foot on a poor or nonexistent hold allows you to get your other foot onto a better, higher hold.
- Sections with poor handholds, where you can still smear a foot against a blank section of rock in just the right spot to make the handholds usable.
- On dynamic moves, where you're jumping off one foothold like a sprinter starting a race, and the other foot just goes in the sweet spot rather than on any particular hold.

- In opposition to other holds as in a stem: When there is a good hold facing left, many times all you need is something to push against to the right, even if it is just a smooth face.

One of the biggest differences between 5.9 footwork and 5.12 footwork is this: *It's more important for a foot to be in the right place relative to your body than it is for your foot to be on the biggest hold!*



*Setting up, with your feet in the right spot for the next move (rather than the current move), is a key to unlocking harder moves.*



Foot switch sequence: A. Original foot position. B. Position new foot directly above original foot. C. Hop slightly, pulling the original foot off the hold while dropping the new foot into position. D. Stand fully on the hold.

## EXPERIMENT

*“Watch climbers who have better footwork than you do. Watch how they move. Then try to move like they do.”*

*Sonnie Trotter*

When watching someone with excellent footwork their first time on a climb, it

often appears as if they know exactly what they are going to do next—as if they’ve been there before. In reality, they are often experimenting with foot positions as they go, adjusting their feet to better reach handholds, switching feet frequently to adjust balance, and trying one foothold before moving to another. They move with

conviction from one foothold to the next, but experimentation is part of the dance.

In fact, experienced climbers are very good at experimenting as they go. Don't get caught in the trap of thinking that solving a difficult sequence is set in stone.

*Like Tommy says at the beginning of this chapter, use your whole body like a hand.*

On our first day on the rock, most of us quickly learn to experiment with hand position to most effectively grasp holds, but it is much less intuitive to experiment with body position when moving to and through those holds. The direction your body faces, the parts of your body touching the rock, the order in which you move your limbs, and how you use core strength

to move are often more important than which specific holds are used.

Long-ingrained muscle memories often prevent us from moving differently. This is why so many climbers are stuck in a square-to-the-wall approach, toes pointing to either side, reaching only for straight-up holds, and struggling with holds off to one side or the other. It's also why climbers end up stuck in the same grade. To break out of this habit, climb with both feet pointing the same direction and hips turned slightly away from the wall, switching directions when it seems appropriate. Whenever possible, try to avoid the old standby of standing with both feet splayed outward. Experimenting with radical positions

## FOOT SWITCH

Anyone who has been climbing, even once, has found themselves with the wrong foot on the right hold. Quite often it's easy to switch feet, but a foot switch can appear difficult at first. Sometimes, a tricky section of climbing requires switching feet twice on the same hold to execute the move. There are several different approaches to executing a quick and efficient foot switch.

- **Stutter Step**—Advance the offending foot, the one that's hogging the good hold, slightly higher (often just onto a sweet spot), and bump the lower foot onto the good hold.
- **The Twist**—Rotate one foot off of the hold while the other foot rotates into position. Rotating the entire lower body, just as you would in the 1960s Twist dance move, helps transition the weight fully onto the other foot.
- **The Hop**—It's amazing what you can do with rock shoes! Jump up, move the first foot off the hold, and land on the hold with the second foot.
- **Inside/Outside**—Flipping your foot, moving from the inside to the outside of the foot or vice versa, can also make all the difference in the world. A quick foot switch allows you to about face, helping you to use the handholds far more effectively or even to reach holds that at first seemed too far away.



*A playful, experimental approach to climbing is a common trait among top climbers.*

helps you to adjust your ingrained muscle memory, to calibrate your body dynamics and reach, to look at sequences with a more open mind, to break the habit of climbing in a rigid style—and to climb way harder.

### **FOOTWORK DRIVES REACH**

*“Don’t just put your foot on a hold randomly. Look at the hold clearly, check the angle of the hold, and consider how you need to use it.”*

*Lynn Hill*

“If only I could get my hands on that hold!” We’ve all said it, looking longingly at some

thank-God hold in the distance. Well, the first question to ask is not which hold do I need to grab first to reach that target handhold but instead, *where do my feet need to be to get me to that handhold?*

Once you’ve determined where your feet need to be, the hand sequence often follows intuitively. Try to get there with hands only, and you won’t get very far. This may seem obvious, but I see climbers of all skill levels struggling with moves simply because they are trying to reach higher before first moving their feet higher. Though a big reach can save the day, overextending causes problems on all angles of rock.

## About the Author



Topher Donahue began guide training at age eight, leading his first guided ascents at age fourteen. By his late teens, Donahue was guiding alpine routes in Alaska and establishing 5.12 first ascents on rock. Today, with more than forty years of climbing experience, he continues to push his own limits (when the gear is good). His resume includes world-class climbs on several continents and first ascents ranging from alpine big walls and cutting-edge ice climbs to hard off widths and sport climbs.

He lives in Nederland, Colorado where he balances his time between writing, photography, playing in the mountains with his young family, and getting out on the rock with good friends. For more of Donahue's work, visit [www.alpinecreative.com](http://www.alpinecreative.com). This is his fourth book.

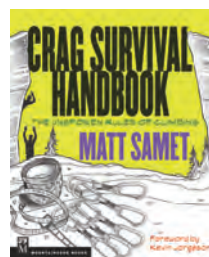
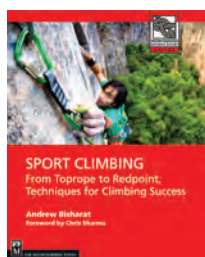
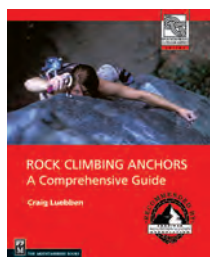
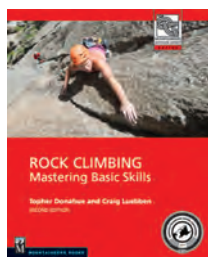


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*"This book needed to be written, and there is no better person to write it than Topher Donahue."*

—Tommy Caldwell

## TAKE IT TO A NEW LEVEL

Climber and former guide Topher Donahue not only knows a thing or two about serious climbing; he also knows how to achieve an even higher level. In *Advanced Rock Climbing*, Donahue draws efficiency tips from alpine and big wall climbers and training tips from gym climbers, while getting some of the biggest names in climbing to share the secrets of their success. Whether it's how to save time on multipitch climbs by paring down the gear you carry and leading in blocks, the advantages of an active belayer, or why it matters whether you approach a new route with an onsight or redpoint mentality, Donahue has you covered.

*"Advanced rock climbing is an independent, self-ruling, intuitive, flexible, creative, anything-goes-as-long-as-it's-done-safely kind of climbing."*

—Topher Donahue



Where other climbing guidebooks focus on *how* to tie particular knots and make specific moves, Donahue digs deeper to get to the *why* behind such basics. You'll progress beyond applying textbook lessons to, instead, choosing for yourself the best options for your particular situation. You'll learn when to break the rules, when it's best to "just fall," when you can really trust a piece you've just placed—and when to not trust an anchor you've just found.

Whether you aspire to improve your game on sport climbs, solve more difficult bouldering problems, speed up your trad-climbing time, or take on big wall ascents, you'll find the instruction Donahue has to offer will take your climbing to a new level.

**Includes a range of climbing tips from:** Tommy Caldwell • Steph Davis • Emily Harrington • Angela Hawse • Lynn Hill • Alex Honnold • Craig Luebben • Angie Payne • Marc Piché • Lisa Rands • Chris Schulte • John Sherman • Justen Sjong • Abbey Smith • Sonnie Trotter • Chris Wall

**Topher Donahue** has more than forty years of climbing experience, including world-class climbs on seven continents. He lives in Nederland, Colorado. Learn more at [www.alpinecreative.com](http://www.alpinecreative.com).



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