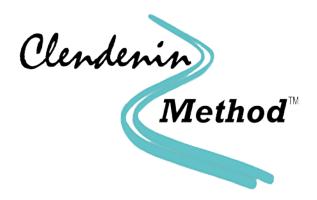


# FOUR WORDS FOR GREAT SKIING



by John Clendenin with Peter Keelty

Learn the Secrets to Speed Management and Unlock the Door to Skiing Anywhere on the Mountain



## Four Words® for Great Skiing

Vol. II

by John Clendenin with Peter Keelty

For on-snow lessons and camps and for simulator lessons, contact the Clendenin Method:

http://clendeninmethod.com (970) 544-0300

Third Edition, November 2014 Second Edition, August 2010 First Edition, March 2007

Copyright © John Clendenin 2007, 2010, 2014 All Rights Reserved

Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form, by any means (electronic, mechanical, photocopying, recording, or otherwise), without prior written permission of the copyright owner and the publisher of this book.

Cover Photo: Diego Munita Chavez

Cover Photo Editor: Bosse Landberger & Crystal Newton

Design Layout: Bonnie Mineo, Howard Freeman, & Crystal Newton

### **Dedication**



Jane

**Dedication:** This book is dedicated to the memories of my Mom and Cal Cantrell.

Both give me a sense of direction and still let me know,

in no uncertain terms, when I get off course.

John and Cal

Cal's thoughts and opinions still ring loud. He will always be considered a god in the world of ski instruction. Cal taught feet first.



### Contents







Dedication
Introduction5
How Great Skiers Ski
How the Clendenin Method™ Works for You



John and Eva, Portillo, Chile

The Skier's Flu
Four Words <sup>©</sup> in Depth
A Note on Words Drift: Softly, Softly on the Epiphany Pad®
The Epiphany Pad® (EP) Center: Beyond Balance
One Principal Technical Problem: Ab-stem Case Study
Touch: The Light Touch
Tip: The Most Important Moment® in Skiing 41  Tipping and Edge Angles  The Most Important Moment®  Active with the Bottom Ski – Passive with the
Top Ski Case Study: The Air-Stem Hop Tip – Release – Engage
Balance Migration The Love Spot <sup>©</sup> Brief History of Tipping
Visual Summary of the Four Words
Anatomy of a Turn49

### Contents







Keys to the Kingdom <sup>©</sup> 53
Stance and Balance Keys54
1) Stand Up Right - Upright, That Is
2) Center-of-Mass - Waking up your Feet
3) Range of Balance - Barrel of Balance
4) Slide Beneath Center - Push/Pull for
Forward and Back
<ol> <li>Slip Beneath Center - Slip It In from Side to Side</li> </ol>
Drift and Center Keys58
1) Killy, Angulation and the Kinetic Chain
2) Easy Slider
3) Braking on the Epiphany Pad <sup>©</sup>
4) Epiphany Pad <sup>©</sup> – Where Have You Been?
5) Whip the Stem - Wake Up Your Inside
6) "Ski with Your Feet" - Cal Cantrell
7) Traverse vs. Drift
8) A Fine Feathered Edge
9) Drifting Through Bumps
10) Paint a Ribbon
11) Ultimate Drifter
12) Center to Re-Center
13) Once More with Angulation
14) Squeegee Move <sup>©</sup> – The Most
Important Move
Touch and Tip Keys63
1) Four-Point Core
2) The Target
3) Isolate the Forearm Swing
4) A Flick of the Wrist
5) All Together Now: Drift - Center -
Touch – Tip
6) The Most Important Moment – Touch
to Flatten the Ski
7) The "Love Spot®"
8) Passive Entry – Let it Happen
9) Core on the Horse
Favorite All-Inclusive Key
1) Balance Migration from a "Stop"
2) Balance Migration in Slow Motion
3) Advanced Perspective – Migration with .
Momentum

Variations of Major Keys75  1) Touch to Squeegee	5
<ul><li>2) Tip and Tuck</li><li>3) Lift to the Love Spot<sup>®</sup>: Skiing with Intention</li><li>4) Look Ahead and Commit</li></ul>	
Black Level 2: Explained	3 4
Skills Inventory Revealed103	3
Mogul Myths109 Mogul Myths Debunked	)
Skier Confessions	7
Testimonials	9 ) 1

John Clendenin has a great ability to teach people how to ski.

I've known John for many years. John has intelligence that matches his skiing abilities, a true love of the sport, the right personality and his skiing accomplishments speak for themselves.

Especially important, John can communicate with skiers. With his accommodating openness, he attracts people to him and helps them get over any hesitation or fear they may have. John has a way of explaining complex things in simple terms anyone can understand.

John helps skiers overcome hesitation and fear, both in his indoor studio and on the snow. I am impressed by John's ability to encourage people to take lessons on the ski deck simulator; a tool I've always thought to be good for any skier at any stage.

John has taken time to perfect his methods. John's method is simple. He has an ability to give easy-to-understand explanations in simple words that help ideas sink in automatically, so that they become part of the skier.

John Clendenin has the product to help any skier of any skill level. I endorse John and recommend the Clendenin Method  $^{\text{TM}}$ .

- Stein Eriksen, Deer Valley UT, April 2005



Stein and John - Deer Valley, UT

### Introduction

The Clendenin Method™ Camps and this book are for people who enjoy skiing and learning. The fact that you have this book indicates you want to ski at the next level, now. Maybe you are reading the Clendenin Method™ (CM) because:

- You hope the CM will make skiing simpler and safer;
- You heard how the CM helps you ski more of the mountain:
- You ski bumps but want to look better.

This book helps with these goals and much more. No matter what your level as a skier, you should start by learning the Four Words® and our simple step-by-step progressions. Some skiers, especially those tuned into their feet, advance through the progressions quickly. Others need to take it slow and re-learn the magic role feet play in great skiing.

You'll discover my obsession with two facets of skiing. The first is what I call the *Kingdom*, ungroomed terrain, moguls, powder, steeps, and off-piste glades. Here, on natural slopes, skiers find rapture, connect with the mountain, and experience the joy of "dancing with gravity."

My second obsession is one basic flaw, pervasive in most skiers, that keeps them from skiing in the Kingdom. I call it the "Skier's Flu" because, like the flu, it spreads unknowingly to so many!

Here's how I see it.

Most skiers spend their days on groomers, machinegroomed runs, while the rest of the mountain is comparatively empty. Skiers travel thousands of miles and spend a lot of time and money, but miss out on the most fun.

Granted, groomed runs are enjoyable if they're not crowded; they are hands-down the best place to learn. But as the ski day goes on, groomed runs can resemble freeways, with mass traffic going as fast as it can in a mindless repetition. Speed, on groomed runs, is a false and dangerous measure of ability.

The few freeway skiers that do venture onto the *rest* of the mountain wonder why they feel like experts on the groomed, but feel like they're riding a wild pony in bumps.

My question: Do skiers cling to groomed runs by choice, or are they stuck on these freeways for lack of skill or



confidence? If you ski groomed corduroy exclusively by choice—then this book is not for you. But, most skiers get banged around in the bumps or cling to groomed runs because of one simple instinctive flaw that causes the *Skier's Flu*.

Foremost, the Clendenin Method™ cures the flu and frees you to ski the whole mountain.

In creating this method, I studied how the best skiers have always skied. I reduced what great skiers do into four simple moves. Each move has been given a name—a word. The Clendenin Method™, based on these Four Words®, is an integrated system that allows you to use the same technique regardless of the terrain—groomers, bumps, steeps, off-piste, or powder. The method never changes based on where you find yourself on the mountain. One size, one method, fits all skiers under all conditions.

The Four Words simplify the learning process. You will discover the ease of the simple step-by-step progressions for each word. I call the progressions the Keys to the Kingdom. The one-step at-a-time keys open the door to mastery and the joy of skiing the whole mountain.

"More fun" is the mission of both the Clendenin Ski Method™ Camps and this book. Soon, you will find the great skier within, contemplate a trail map with no fear, and ski in the Kingdom.

- John Clendenin





### How Great Skiers Ski

### **Dancing with Gravity**

Great skiers of every persuasion, like Jean-Claude Killy, Stein Eriksen, Jonny Moseley, Andy Mill, Stefan Kaelin, Glen Plake, Kim Reichhelm, Scott Brooksbank, and Bode Miller, have much in common.







v Bo

Their efficient technique frees them to flow like water down the mountain. Each turn cascades into the next. Graceful management of speed is so natural that their skis seem to be part of their being. The effortless style of great skiers seems beyond technique. They have mastered the mountain and dance with gravity.

"The best and fastest way to learn a sport is to watch, imitate, and learn from a champion."

— Scott Brooksbank,
World Freestyle Champion



### Style vs. Technique

When imitating great skiers, the challenge is to understand the difference between *style* and *technique*. Certainly great skiers have great style, but their style emanates from functional technique. Problems arise when a skier envisions how he or she should look and attempts to mold technique to fit this external vision.

One of the most common adaptations of technique to "style" is the skier who presses boots together in an attempt to

emulate the naturally narrow stance of elegant skiers. What this skier must learn is that master skiers like Andy Mill are not pressing boots together, but maintain independent foot action that makes high-level skiing possible. The great skier's functionally narrow stance gives the illusion of co-joined boots, but this is only illusion.



Put simply, great style follows from execution of great technique. Style with a strong functional foundation is far from the stiff and uncomfortable poses adapted by skiers trying to look good. Great style reflects unmistakable confidence, with comfort and flow. Great skiers using great technique make skiing look easy. Skiers trying to look good with manufactured style independent of function succeed only in making skiing look impractical.

As I tell my students at the Clendenin Method™ Camps: "Technique ain't heavy—once you digest it; you're free of it!"

The Clenden in Method ™ concentrates on shared technical basics of great skiers that, with accurate practice, lead to your own efficient, comfortable — and, yes — elegant style.

"Beauty is truth, truth beauty, -- that is all ye know on earth, and all ye need to know."

— **Ode on a Grecian Urn**. John Keats

### The Simple Moves of All Great Skiers

Let's take a closer look at the four basic moves of all great skiers and the Four Words<sup>©</sup> that form the foundation of the Clendenin Method<sup>™</sup>.

#### Word One: DRIFT

Great skiers like Kim Reichelm shape their turns. She creates turn shape by regulating how she moves over her skis as she finesses her edges. Great skiers finesse their edges—progressive release or engagement—as needed for various tasks, either to maxi-



mize speed, as in a race-course, or to control speed, as in moguls and powder. We call this ability to shape turns: **Drifting**.

#### **Word Two: CENTER**

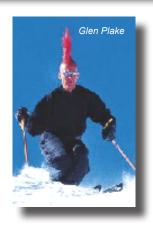
In order to direct the drift, great skiers like Jonny Mosley can balance on either ski. This management of balance allows him to pressure either ski at will, especially in moguls. We call the skill of balance management: *Centering*.



Great skiers **drift** (shaping their turn) and **center** (balancing in their turn) all the time. When they change direction, they simply **touch** and **tip**.

#### **Word Three: TOUCH**

The pole touch is the cue that signals the body to commit to a new turn. The touch always precedes the turn. The touch of a great skier like Glen Plake is a seamless component of the turn. It never appears as a separate move, but rather as an integral part of his turn. This seamless use of the poles is called: *Touching*.



#### **Word Four: TIP**

The skis of great skiers like Bode Miller always tip on edge when entering a turn, and remain parallel like they're on rails. His skis appear to be extensions of his feet, allowing him to respond freely in any terrain.



Moving the skis on or off edge is called: *Tipping*.

Together, these Four Words®—*Drifting* and *Centering*, *Touching*, and *Tipping*—embody the mechanics needed to link one great turn after another. Great skiers are always *drifting* to shape their turns and always *centered* on their skis. To change direction, a pole *touch* cues their feet to *tip* their skis. Their turns look seamless, balanced, and controlled. Their moves are not forced, heavy, contrived, or abrupt. Like a falling leaf, great skiers move simply and effortlessly. *All* skiers can acquire efficient technique through the Four Words® and the progressions called *Keys to the Kingdom*®.

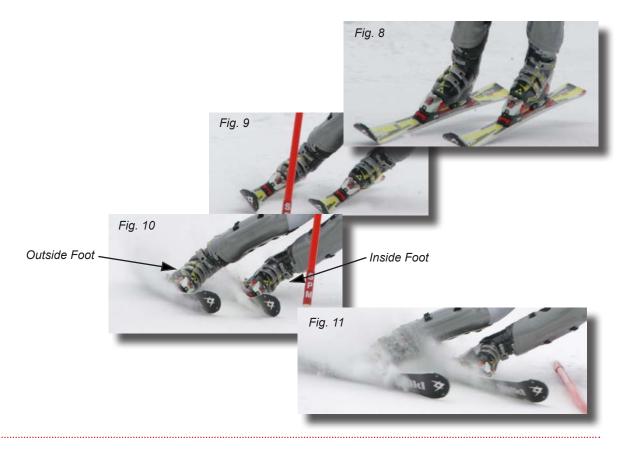
"Since gravity holds us here, we might as well learn to dance in it. The better we get, the more it's like flying."

— Johnny C.

### **Focus on Great Feet**

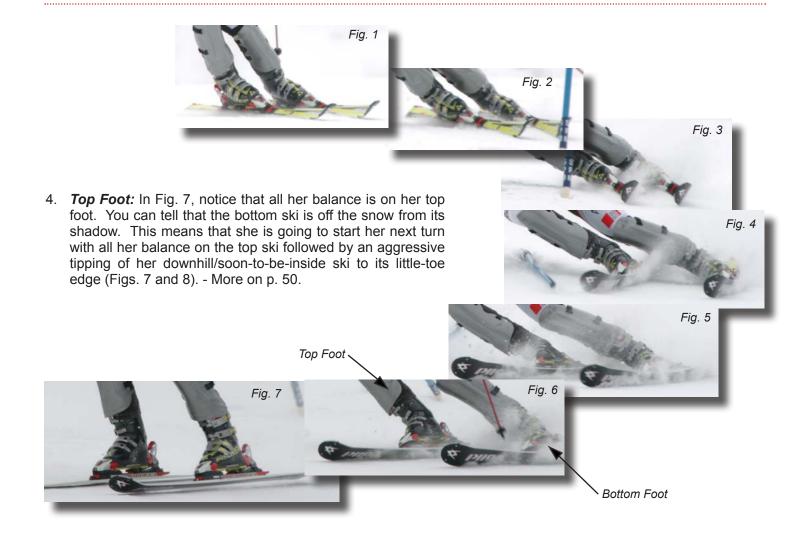
These pictures show the racer's feet during a winning run on the World Cup ski racing tour. Her turns have all of the technical elements of great feet and embody the basic fundamentals of the Clendenin Method. You will be enlightened about each of these fundamentals as you go through the book. For now, take some time to look at great feet in action.

- 1. **Balance Migration:** Notice how her balance migrates across her feet, from her outside ski to her inside ski, from the big-toe edge of the outside ski to the little-toe edge of the inside ski, from the outside/soon-to-be-downhill ski to the inside/soon-to-be-uphill ski. (Figs. 3-7 on following page) More on p. 44.
- 2. **Feet Together:** Notice that her feet are as close as functionally possible, especially in Figs. 1, 2, and 3. The angle of her body into the hill, or what we call inclination (pg. 81), would not allow her to engage her edges if her feet were any closer together. More on p. 46.
- 3. **Diverging Skis:** The diverging (separating or moving apart to follow different paths) ski tips show that she is active with the inside ski—she is using the inside ski to shape a tighter turn, probably to get a higher angle on the next gate (Figs. 4-6). More on p. 45.



10

### How Great Skiers Ski



- 5. *Flat Spot:* Notice that, in Figs. 7 and 8, there is no spray coming off either ski. This is an edgeless, drifting moment between turns. If she was not drifting intentionally, the pole in Fig. 9 would go right between her skis. Instead she times her drift (adjusting her turn shape) perfectly to begin her strongest edge engagement just as her skis pass the pole. More on p. 45.
- 6. *Inside Ski:* One of the goals of the Clendenin Method<sup>™</sup> is to highlight and develop the role of the inside ski, especially for all-mountain skiing and specifically in bumps. In these pictures, you can see, by the spray coming off the little-toe edge of the inside ski, how active our racer is with this all-important inside/soon-to-be-uphill little-toe edge (Figs. 4 and 11). As you become more familiar with the Clendenin Method ™, you'll learn how we use this little-toe edge to both shape your turns and to manage speed in bumps and in all-mountain skiing. More on p. 30.

### The Ball and the Box

The Ball and the Box provide images that help us understand a primary fundamental of great skiing.



### The Ball

The Ball is intended to give you an image of how a tipping ski creates a tight parallel turn. You can try this at home, but not on the slopes. If you tip and tuck for a parallel turn entry (see Tip and Tuck, p. 66), you keep the ball. If your initial move for a turn comes from a stem (movement of a ski away from center), you lose the ball.







Stem Entry – You lose the ball. Anyone who loses their ball when they initiate a turn has what we call the "Skier's Flu." **No!** 







Parallel Entry - You keep the ball. (See Squeegee Move® p.62) Yes!

### The Dance and the Stage of Great Skiing

I first saw it in 1968. I was at the premiere of Dick Barrymore's "The Last of the Ski Bums." I walked out of the Santa Monica Civic Auditorium dazed. I had just seen arguably the best skier in the world on the hardest run in America, Sun Valley's Exhibition. Willy Bogner danced down giant Volkswagen moguls, leaping two at a time, disappearing, then flying in the air again like a swan out of a cloud, all in a natural rhythm—a man-bird from another world. What made his run so phenomenal? His feet. His feet danced on a small stage; in reality, his dance floor was tiny. His feet worked as a unit—independent but inseparable. Did Willy just open the door to a new understanding of beautiful, efficient free-skiing?

Years later, working on the Book, I still remember Willy in Barrymore's film. How did he do it? Can it be learned? Can it be taught? If all his foot movements occurred on a tiny dance floor, the learning and teaching couldn't be that hard.

- Johnny C

### The Box

The stage or the dance floor for great all-mountain skiing is no larger than this boxtop. The box represents Willy's dance floor Notice the size. It's not big. If you pay attention to a great skier's feet on a great mogul run, you'll notice neither foot would fall off the boxtop.

Of course if you stem (move a foot out from center), you fall off.

The good news is the technique of great skiing is not a "tango" and it's not hard to learn.

Johnny C



Johnny C with the box

### How Great Skiers Ski



Stem Entry – One foot falls off the "stage." Anyone who stems off the stage has the Skier's Flu. **No!** 



Parallel Entry – Both feet stay on the "stage." When the feet stay under center and fulfill their independent tasks, they work as a unit and stay on the dance floor of great skiing. **Yes!** 

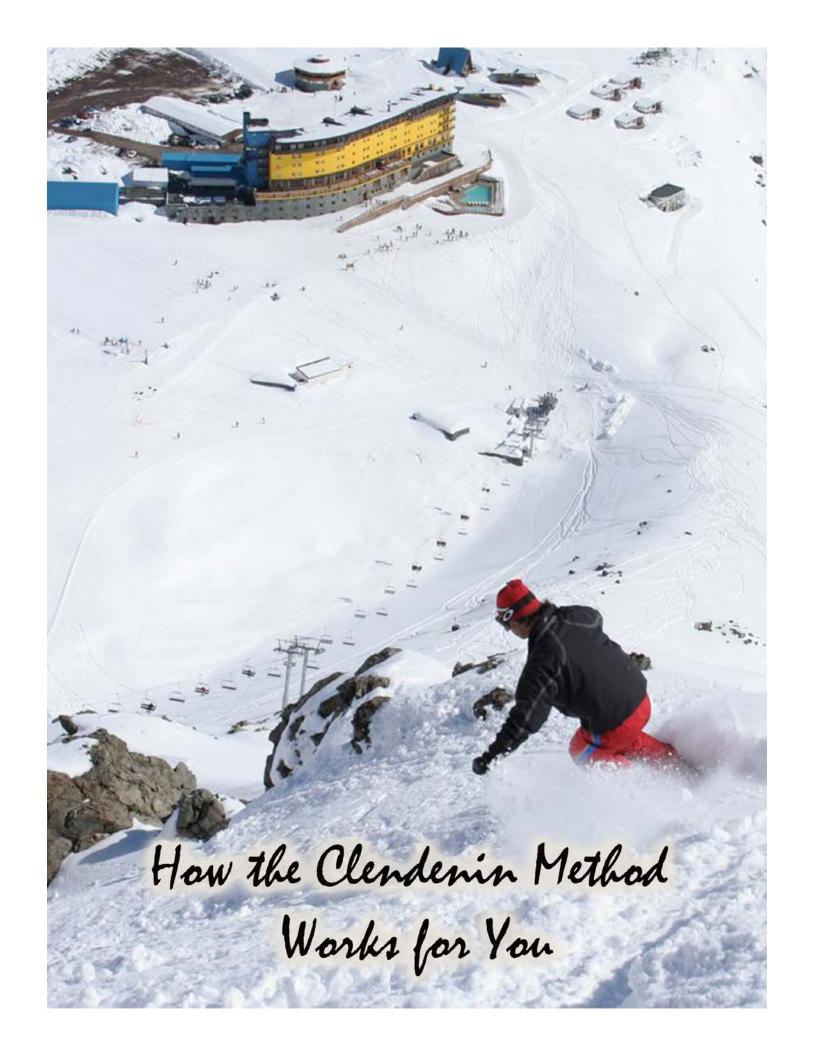


Eva Enriquez, CM coach and trainer

Eva from España came up with "The Unit" Theory. In her best English she said, "John, we got ta tell da students about da unit - dey got ta learn to keep dair freeken unit tagedder. Both da feet got ta work as a unit. If dey separate da unit, dey stem. Dey keep dair unit tagedder, dey looka beyoo-taful."

- Eva Enriquez

14



### Skills Inventory - A Self Assessment

To get the most out of any lesson, including this book, one must examine their own skiing, identify technical challenges—and then follow a specific plan to make changes. Your Skills Inventory provides the starting point; the rest of the book helps you identify your challenges and provides you with a plan.

Relax, close your eyes and visualize skiing a groomed blue run, or a high-speed run, or a mogul run... and then mark the Inventory.

Check all statements that apply to your skiing:

I would like to become a better skier so I . . .

- ... feel safer.
- ☐ ... look better.
- ☐ ... understand what I am doing.
- ... can ski bumps, steeps, deeps, more of the mountain.
- ☐ ... enjoy skiing more.



Gerry and John in Portillo, Chile

- I like to warm up with a fast run.
   I can ski fast on blue runs and OK on blacks, but get thrown around as soon as I enter bumps.
   When skiing bumps, I can make a few turns OK, but then gain too much speed and often have to "bail out."
- ☐ I use a firm pole plant to start a turn.
- ☐ The way I ski bumps is not the way I ski groomed runs.
- ☐ Sometimes I get caught in a traverse across the bumps and feel like I'm out of control.
- ☐ I don't know if I make stem turns in bumps.
- ☐ I know the difference between a stem turn and a parallel turn, but have trouble with parallel turns in bumps.
- ☐ I feel OK in moderate bumps, but become uncomfortable when it gets steeper.
- ☐ I hop to get over a bump and into the next turn.
- I use hard edges to control speed.
- ☐ I enjoy watching good skiers ski.
- ☐ I eat bumps for breakfast!

Keep your Skills Inventory in mind as you read the book. You might be surprised by the Skills Inventory Revealed near the end of the book.

### Explanation of Levels – Blue, Black 1, and Black 2

In our Clendenin Method™ Camps we separate clients into three groups: Blue Level, Black Level I, and Black Level 2. The vast majority of our readers fall into one of these three groups.

#### Blue Level...

Skiers are comfortable on groomed terrain, but want to learn how to enjoy more of the mountain. Their survival technique has not hardened into habit because they have not gone into the bumps.

Blue Level skiers typically limit themselves to groomers, either out of choice or because they lack the skills to venture into more challenging terrain. Blue Level skiers usually experience immediate gratification in our camps.

#### Black Level 1...

Skiers are the most challenged campers and represent our largest population. Most skiers and most of our readers fall into this category. Sorry if you're one of these folks, because generally they pride themselves on skiing the whole mountain, but don't realize how habitually they resort to a stem entry. They "ski" bumps and crud, without grace or elegance and at a high cost in energy and bodily strain. These skiers often describe themselves as being able to "get down anything," even though their technique is forced and appears reckless. Black Level 1 skiers *think* their way through technique when in demanding terrain. Stem-turn entry is one hallmark of the Black Level 1 skier.

For Black Level 1 skiers to advance, they must rid themselves of the technical flaws and defensive moves that comprise survival technique. This can be a challenge both physically—new movements must replace ingrained habits—and psychologically, because Black Level 1 skiers typically are invested in imagined expert status and experience high levels of denial. Progress is dependent on returning to non-threatening, groomed terrain where they can master the Keys to the Kingdom®.

Blue Level campers, who also have stem entries, have not developed defensive survival habits conditioned from hacking through moguls. Nor do they cherish visions of themselves as experts. Blue Level skiers are more open, less in denial, and actually find the Keys easier to acquire than most Black Level 1 skiers.

#### Black Level 2...

Our top-level skiers, those at Black Level 2 are Clendenin Method  $^{\text{TM}}$  Moguls Masters who comfortably ski the entire mountain. They have learned the Four Words graduated through the Keys, and eliminated the stem. Graduates enjoy developing their own style and comfort level while exploring more of the mountain. Our Mogul Masters (Black Level 2) skiers can focus on tactics: not on how to ski or how to turn, but on *where* to ski and *when* to turn. In short, Mogul Masters own the basic movement concepts of the Clendenin Method  $^{\text{TM}}$ .

### Red Light, Yellow Light, Green Light

All skiers look at terrain differently. What appears daunting to one may look like a delight to another.

A traffic stoplight is a superb metaphor for describing personal terrain comfort level. Red Light, Yellow Light or Green Light designation relates to the intersection of a skier's skill level with terrain.

Green Light terrain is non-threatening and requires little attention on the part of the skier. There is no personal challenge on Green Light terrain. All groomed slopes, for example, are Green Light terrain for Clendenin Method  $^{\text{TM}}$  campers. Green Light terrain is where we introduce the Keys to the Kingdom $^{\text{©}}$ .

Yellow Light terrain requires more attention from the skier, but is ideal for implementing new fundamentals learned on Green Light terrain. Yellow Light terrain for most campers involves navigating small bumps or lightly wooded areas.

Red Light terrain activates all defense mechanisms and hijacks total attention. Skiers can recognize personal Red Light terrain when hair rises on their necks.

It is an axiom of the Clendenin Method  $^{\text{TM}}$  that learning takes place only on Green Light terrain and that Red Light terrain causes skiers to revert to old defensive habits, especially stemming.

In a sense, the evidence of one becoming a better skier is when Red Light terrain turns Yellow and then Yellow turns Green. Clendenin Method  $^{\text{TM}}$  graduates enjoy more of the mountain, feel safer, and look better doing it!

### Black Level 1 – Backlash: Edie's Story

Edie arrived at a Clendenin Method™ Camp fit, fearless and focused on double-black diamond mogul skiing.

Her Skills Inventory revealed an extreme enthusiasm for skiing, coupled with near-total lack of understanding of the principles of efficient technique. She possessed the most common affliction among Black Level 1 skiers who habitually ski over their heads: the Skier's Flu—an ingrained stem turn entry.

Wedge-based skiers—stemmers—who have "conquered" black-diamond terrain with grit, determination, recovery skills and an ability to absorb punishment, must accept that to move from pseudo-expert to true expert requires a willingness to revamp basic movements. The only punishment they need to absorb is the temporary risk to self-esteem, as they must revert back to blue slopes. The only way to effect this profound change is to rebuild technique from the snow up and this can only be accomplished at slow speed, on flat, gentle terrain using the Keys to the Kingdom®.

Edie was an especially hard case. She wanted to plunge into monster bumps immediately and was not at all happy as we headed for light-blue groomed terrain at what she felt to be a glacial, "baby" rate of speed.

Simply put, it is nearly impossible to change technique in challenging terrain. We perform well on demanding terrain only after building new technique on easy slopes, through repetitive and perfect practice of the Keys.

"If you can't do it down here," I told her, "you can't do it up there."

"Don't let it bring you down...
It's only castles burning...
Find someone who's turning...
And you will come around!"

Neil Young, "Don't Let It Bring You Down"
 After the Gold Rush



### How the Clendenin Method<sup>TM</sup> Works for You



### Success: A Parallel Clendenin Method Turn

Edie learned the Four Words® and practiced the Keys to the Kingdom®, and soon discovered her feet, and the "Epiphany Pad®". She began to feel the improvements that accompany clean parallel turns on the flats.

Edie now understands that when technique deteriorates, it's time for practice on blue groomed runs. This is a powerful realization! She is becoming a solid technical skier, willing to return to fundamentals when things get ragged. She is ready to master the mountain.

"Like soccer, skiing is a sport you play with your feet... The look of a great skier is one of a quiet upper body and active legs...More subtle, but just as important, great skiers use their feet independently."

Ron LeMaster author, instructor, photographer



Drift

### **Our Secret Weapon: The Simulator**

Our Secret Weapon is a wide, inclined, motorized treadmill with a carpeted running surface. All essential ski sensations in our feet, are created by interaction between the running surface and the edges of skis. Students are secured to the support structure in such a way that they cannot fall, yet are free to glide side-to-side as they turn. It is called the Ski and Board Simulator.

The Simulator is an instructor's dream. We stand in front of our client so we can observe, demonstrate and coach within arm's length. We cannot do that on the mountain. There is more direct communication between the student and instructor in a 45-minute simulator session than in an all-day on-mountain private lesson. The Four Words® are introduced, explained and practiced indoors in a safe, warm, comfortable, focused environment.

Momentum is an odd thing; it's not always your friend. Forward momentum allows some skiers to get by with horrid technique. We all see them flying down the mountain, not knowing what they're doing, but not falling, either. Momentum holds them up, as when riding a bike with no hands.

There is no forward momentum on the Simulator. The carpet rolls up beneath the skier; actual forward speed is zero mph. Without forward momentum, the skier must find their center in order to balance. People often come off the Simulator with the first real awareness of what it means to ski centered, the basis of all good technical skiing. Students tell me they've learned more in one lesson on the Simulator than in all the lessons they've ever taken on snow. Some call it "the Ski Stimulator."



"I teach Skiing, Snowboarding, and Telemarking (and have even kayaked) on the Ski Simulator. The Simulator is an invaluable tool that everyone, on every level, should experience."

 Charlie MacArthur – PSIA Demo Team member, Examiner and Coach



Ski Simulator History

Phil Gerard, Stein, John, and friends on the Simulator at the first ski show in San Francisco, 1968.

"The Ski Simulator is a tool I have always thought to be good for any skier at any stage."

- Stein Eriksen



Dancing on the Simulator! The first Freestyle Ballet -Andy Williams' 1966 Christmas Special



Phil Gerard, Toni Sailer, Andrei Molterer, Roger Staub, Art Furrer, Johnny C, and the Gerard Ski Deck Dancing Divas. San Francisco Cow Palace Ski Show, 1968.

### **Skiing with Franz Klammer**

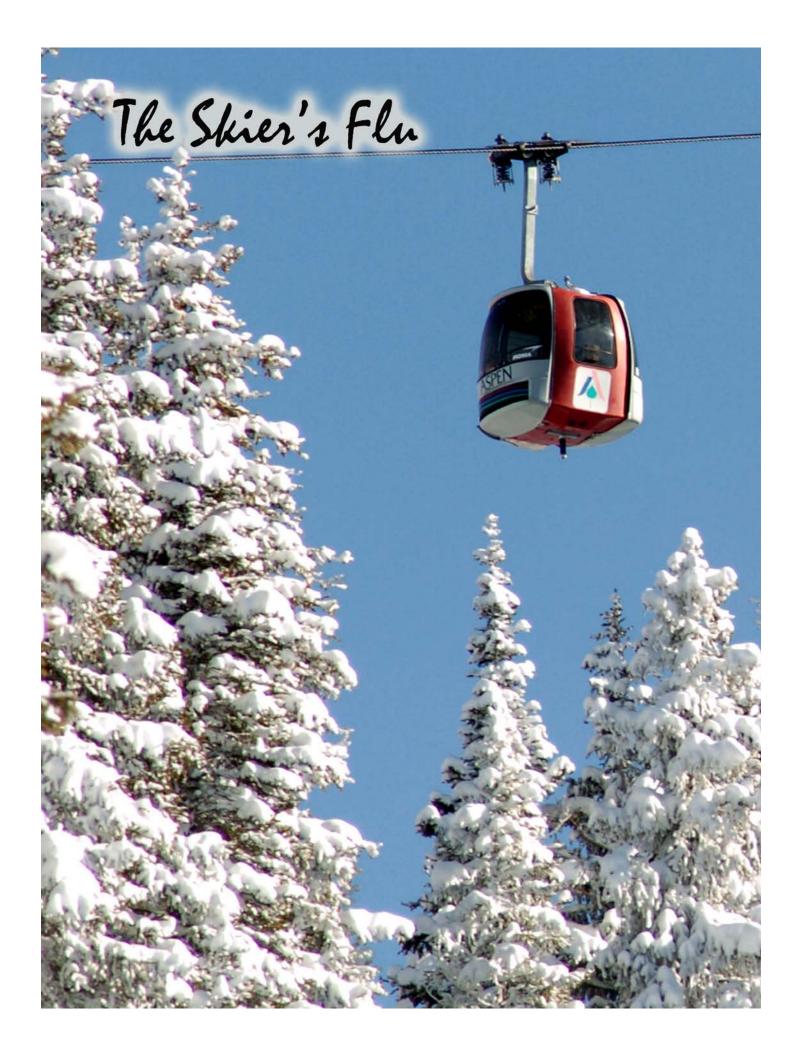
A few years back I had the opportunity to ski with Franz Klammer, the all-time winner of the most World Cup downhill races. Franz and I were introduced at the World Cup Birds of Prey competition held at Beaver Creek CO. Head Ski Company had invited us there for a promotion. To my delight, he was cordial in recognition of my Freestyle Championships. We were asked to ski with a small corporate group. I demonstrated some freestyle ballet moves, which Franz copied with surprising dexterity. We moved on and I followed. Franz led our small group down the mountain. He proceeded to up the speed. I followed as he took the volume up again. The corporate group behind was forgotten. Together we went faster down the groomed runs at Beaver Creek. Skiers became blurs as we passed over

swells and humps. Nearing the edge of confidence, I stayed on his tail. The speed went up another notch as Franz moved to the side away from possible contact with humans. Faster still - then he made the move. A hard left-hand carve into the shadows of un-groomed terrain. Branches and swells came out of the crud as he gathered even more speed. In awe, I slowed and stopped to watch a real bird of prey, a great, great skier pursue speed with effortless power, turn after turn. He finally pulled out and stopped a few hundred vards below, crossed his arms on his poles, looked up and waited. I skied down and he nodded and smiled without an ounce of condescension. He accepted my acknowledgement of his greatness and we skied on. This time not fast, just clean and smooth. What a treat! I skied with FRANZ KLAMMER.

"Boys in Aspen" - Franz Weber, Wayne Wong, John Clendenin, Franz Klammer, Bil Bostick, and Bill O'Leary, 2008.



22 The Clendenin Method™



### Why You Have the Flu and Why It's Not Your Fault

Many skiers blame themselves for what they feel is an inability to use proper technique or to improve after hours and hours of lessons. They feel somehow flawed, like sub-standard athletes. They blame themselves because no one has ever explained the nature of the flaw. There is a flaw at work, but it has nothing to do with innate ability. To master skiing, each of us must overcome the basic protective instincts we bring from living on earth.

What do I mean by that?

### Instinct Is Not Always Our Friend

Humans have never felt comfortable when their feet are sliding or slipping across the surface of the earth. The instinctual reaction is to pull back, stop the slide, and hope to regain balance. Remember how you reacted without thinking the last time you slipped on an icy sidewalk or a wet grassy slope? It was not pretty. The protective reaction is to brace against the slip. Unfortunately, this same natural protective response is at work when we first ski. It is only human.

We also have a deeply ingrained fear of falling—not necessarily a fear of heights, but of falling. When we first look down the hill we don't have to tell our body what to do—it knows we are safer leaning up the hill. This instinct helps keep us alive on terra firma, but works against us when skiing.

This fear of falling, coupled with the natural discomfort of slipping, presents unique challenges to all skiers. When learning to ski, our protective instincts react by:

- 1) Grabbing the surface with our claws, our big-toe edges, -and-
- 2) Leaning up the hill it's closer.

Someone's success in skiing can be measured by the degree to which they have overcome these protective instincts. Most skiers never learn to let go. Fear of sliding or falling may diminish with ski mileage, but the influence of protective instincts has wormed its way into technique, tainting us with Skier's Flu.

### The Pervasive Flaw

Skier's Flu is born of natural causes. That's the bad news. The good news is that the Clendenin Method™ is the cure.

Golfers and skiers have something in common. Ninety percent of amateur golfers suffer from a single, identifiable affliction that separates them from the greats. In golf, the flaw is called coming over the top—an inefficient, out-of-plane, wood-chopping swing.

For skiers, this fatal flaw, the germ that starts the flu, is the **stem**.

The stem is a turn configuration in which ski tips converge (point towards each other) and edge pressure is relegated to the big-toe edge of each ski. The stem is an instinctive survival technique for turning. The stem may give a sense of stability, but limits the ability to flow down the mountain. Think about that sentence. and the section about our instincts and gravity. Undue pressure on the bigtoe edge of the downhill ski, and fatigue caused by leaning back, start some-



thing terrible in skiing technique. These protective reactions cause the skier's flu.

Unlike golfers who check reality with a score on every hole, skiers have no easy way to detect this ingrained flaw. They know they don't look good and lack confidence in challenging situations. They experience loss of control just when they need it most—when the going gets bumpy, deep, or steep. They wonder why they can ski fast with aplomb on groomed terrain, yet deteriorate dramatically in off-piste terrain, especially in moguls.

Why is the stem the root of all evil?

### The Skier's Flu

### **Anatomy of the Stem**

Historically, beginners have been taught the snowplow to provide a way to stop, to slow down, and to turn. Kids call it the pizza. Feet are spread wide apart, ski tips together. Both skis dig in on big-toe edges and the skier feels stable and safe. By digging in the big-toe edges of their skis, beginners can resist the intimidating effect of gravity.

In truth, the snowplow or, as it is now known, the wedge, is a valuable safety tool for all skiers. We use the wedge for panic stops, on cat tracks behind slower skiers, in lift lines and in dozens of other situations. Without the wedge, ski patrollers would not be able to handle toboggans. It has valid uses but when the wedge becomes the *primary technique for turning and controlling speed, it germinates the Skier's Flu.* 



### The Birth of the Skier's Flu

Wedging offers security but reliance on big-toe edges stresses the knees and fatigues a skier much too soon. Shifting weight from one big-toe edge to the other is like riding an emergency brake all the time. The wedge learned on day one for survival soon becomes the soul of a skier's technique. As skiers advance with this sense of security, they **soon learn to modify their wedge with a stem**. The heart of a stem turn—skier's flu—remains the bracing on big-toe edges.

A stem may be small and quick, but however fleeting, it always prevents a flowing parallel turn because it **never allows** the downhill ski—the big-toe claw—to release first. In any form and at every level, the stem is a crutch that becomes evident when the skier steps a ski out



of center (Fig. 2) to start a new turn. The out-of-center step that initiates a stem becomes an unconscious and habitual security move. The foundation of the stem always goes back to our initial protective, instinctive response to sliding and falling. Skiers who routinely stem always revert back to this habit when the going gets tough.



### The Skier's Flu

### Four Strains of Flu

There are four classes of stems: the classic stem, the ab-stem (down stem), the compound stem (a combination of the first two), and finally the most advanced stem of them all, the hop or air stem.

Stems share several characteristics, beyond the tendency to ruin great turns.

Shared features of all four stems:

- · Converging ski tips at turn initiation.
- Excessive weight on the big-toe edge of the downhill ski in the final moment of the turn.
- A weight shift—how I hate those two words—to an out-ofcenter ski.
- · Looking at feet when turning.
- An out-of-balance skid that often results in a traverse.
- · Interruption of the magical dance with gravity.

### Differences among the Four Strains of Stem

- The CLASSIC STEM (above) is generated at turn initiation by moving the un-weighted uphill ski to its big-toe edge by lifting or shoving the tail up and away from the securely engaged downhill ski (Fig. 1).
- The AB-STEM (down-stem with bottom ski) happens when the skier pushes the tail of the downhill ski out of center, in order to engage the big-toe edge. His big-toe engagement of the downhill ski creates a platform for weight shift to the uphill ski when initiating a new turn.
- The COMPOUND STEM is a push from an ab-stemmed downhill ski to a stemmed uphill ski.



Ab-stem

 The HOP or AIR STEM happens when advanced stemmers spring off one downhill ski and land on the other.



Fig. 1

### Stem Intervention

No stem is any worse—or better—than any other stem. As stemmers advance in their skiing without intervention, they often integrate all four bad habits in an effort to get down the hill.

Stem habits must be broken for progress to occur. Most skiers arrive unaware of their stems and remain in denial until video analysis pulls their head out of the



snow. Before they can fly, afflicted skiers must recognize their condition, learn the Four Words<sup>©</sup>, and practice the step-by-step Keys to the Kingdom<sup>©</sup>.

### The Skier's Flu

### Cure the Stem, Free your Potential

First the Clendenin Method<sup>™</sup> banishes the stem with skills based on four simple words that are easy to learn. These skills provide maximum control with minimum effort. The Clendenin Method<sup>™</sup> magic begins when we learn to enter a turn with matching parallel skis, which stacks (aligns) our bones. With our skeleton aligned, our muscles can relax and perform optimally. All conditions and all terrain become safer, more rewarding and fun, from velvet-groomed runs to mounds of moguls—and everything in between. As a bonus, you look better.





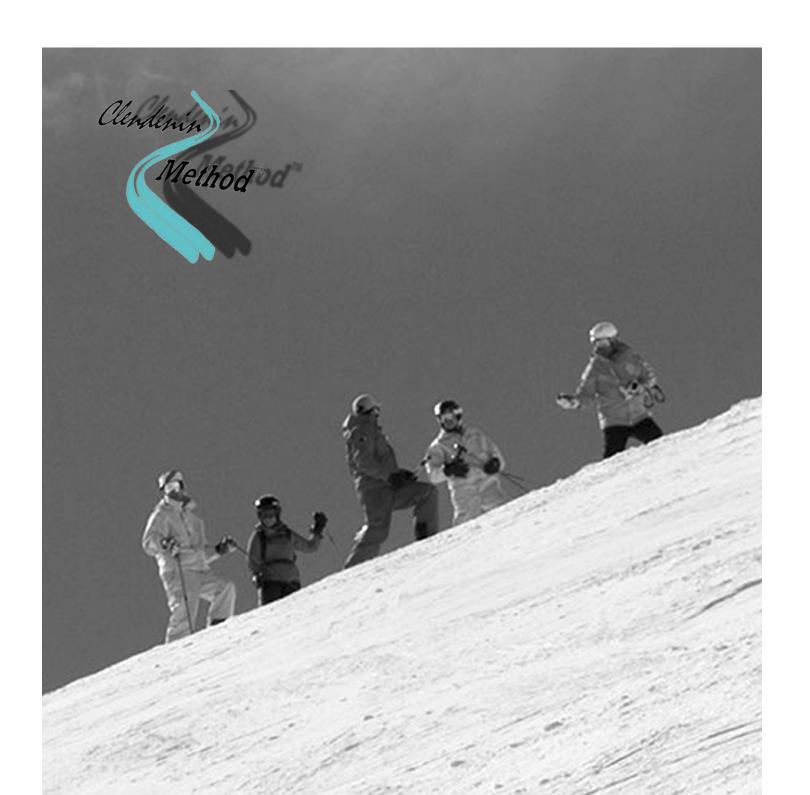




Most of our skiers are not interested in chute shooting or cliff jumping; they simply want to ski well with the least physical strain and risk. Those few skiers who do seek the wild side appreciate their CM background, especially for centering and balance. Although carving turns will always be popular our students soon discover that **speed management**—as opposed to speed maximization—is the key to skiing in any terrain without sacrificing knees, backs, and control.

Before being introduced to the Keys to the Kingdom®, keep your Skills Inventory in mind as you explore the Four Words® in depth.





The FOUR WORDS in Depth

### The Four Words in Depth

### Why Four Words<sup>©</sup>?

Students often arrive at our camps confused. Most come with a collection of confusing and contradictory ideas garnered from articles, lessons, and well-meaning friends. They have failed to synthesize the tangle of information in a way that creates lasting value. They need a way to organize and structure what they learn. The Clendenin Method™ is based on four simple words: Drift and Center, then Touch and Tip, and on and on down the mountain. In a basic sense, we are drifting and centering all the time. When we want to turn, we touch and tip. These words describe the fundamental movements of all great skiers and provide an efficient framework for campers, clients, and you the reader... to understand and assimilate information.

### A Note on Words

A word can have different meanings, and the different meanings of the same word can be contradictory. For example: criticism is often understood as negative, while criticism can be positive and reinforcing. The same can be true of words that are more directly related to skiing, such as manage. To manage speed often connotes the idea of limiting how fast you're skiing; when in fact, speed management can also be what you do to go faster.

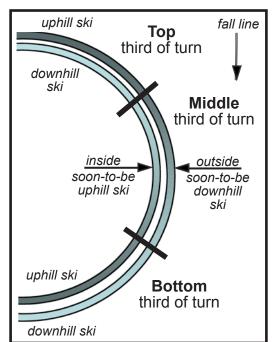
In ski teaching, the word skid is often used to describe movement of the ski that combines sliding in the forward direction with sideways motion. Most ski turns have a sideways displacement. displacement is controlled (intended) or uncontrolled (unintended). Drift - v, to move in a slow, smooth, gentle, and In order to differentiate between controlled and uncontrolled actions. CM uses drift vs. skid. Skid is an uncontrolled reaction to excessive force, like a car skidding out of control. **Drift** relates to an intended controlled action that gives a turn shape without excessive force.

The question is whether this sideways

unforced way; n, a controlled slide used by racing drivers as a method of cornering at high speed.

Encarta® World English Dictionary, 1999

You will see several new concepts given unique names, such as the Love Spot®, the Teeter-Totter Moment®, and the Squeegee Move® —phrases that you have not associated with skiing. CM gave these concepts unique names 1) to help you remember them, and 2) so that you rethink some of your ideas about skiing.



"But it must be remembered that anv specifically new use of a word or phrase is really a metaphor, since it attempts to arouse cognition of the unknown by suggestion from the known."

- Poetic Diction, Owen Barfield, 1973

Our challenge as coaches is using words to describe dynamic movement when so much is in transition. For example, when you're standing or skiing with your skis facing across the hill, one ski can be identifed as uphill and the other as downhill. As soon as you start turning, the uphill ski becomes first the outside ski and then eventually the downhill ski. Similarly, the downhill ski becomes the inside ski and then the uphill ski. To give clarity to the dynamic aspects of a ski turn, we use phrases like the inside/soon-to-be-uphill ski. This seemingly redundant use of words to describe dynamic phases of the turn is necessary to eliminate ambiguity (see diagram).

The words inside ski and outside ski are only effective when describing the middle third of a turn. For the top third of the turn and the bottom third of the turn, uphill or top ski and downhill or bottom ski are clearer. (See p. 50.) The darker shadow on the tracks shows the weight progression during the turn.

### The Four Words in Depth

### DRIFT: Drifting is the art of shaping the turn.

Like a snowflake, each turn has a unique shape. When we control and create our intended turn shape, we *drift*. Each drift is created through skilled use of edge angles combined with movement of the body mass over the skis. When carving, edges are used aggressively to maximize speed. For all-mountain skiing, focus is on softening or *feathering* edges to shape turns and control speed. The flatter the edge angle to the snow, the softer the edge. The more one practices using soft edges on groomed terrain, the more one becomes responsive to subtle sensations of balance in their feet.

### CENTER:

### Centering is the continuous process of maintaining equilibrium.

Great skiers continuously realign their center of mass to their feet to maintain optimum equilibrium. Realignment can be either a cross-over move (mass over feet) or cross-under move (feet under mass). Centering is commonly thought of as a front-to-back action, but we are addressing equally, if not more, side-to-side or foot-to-foot centering. Centering also provides invaluable sensory feedback that affects the turn. The more sensitive the skier is to feedback provided by pressure sensations in the bottom of the feet, the more centering becomes instinctual. When centered, our bones are stacked. Stacked bones allow our relaxed muscles to function at optimum performance levels. A centered skier can flex or extend freely to maintain ski-snow contact.

Centering is a flowing, dynamic *process* rather than a static position. Centering allows us to balance at will on either foot. When we change our primary balance from one foot to the other we are *re-centering*. Identifying these sensations in the bottom of the feet is an axiom of the Clendenin Method<sup>TM</sup>.

### TOUCH:

# Touching is managing our poles, especially how and when they contact the snow.

Most skiers do not realize the importance of their ski poles. How one carries and uses their poles is crucial and, fortunately, easy to learn.

In bumps, skiers who stem use a firmly *planted* pole as a brace to transfer weight onto a stemmed ski.

The Clendenin Method<sup>™</sup> pole *touch* functions to cue the feet to tip and release edge grip, not as a crutch to transfer weight. Understanding the proper function of the poles changes the way we carry our poles and immediately improves the way we ski.

# TIP: Tipping is changing the ski edge angle to the snow.

When finishing a turn, great skiers are on uphill edges. To enter a new turn, they *tip* their feet downslope releasing their edges. Releasing uphill edges (tipping feet downslope) automatically initiates the turns of all great skiers.

During the edge change, skis go through a phase, however fleeting, in which they are flat on the snow. When flat and edgeless, skis are *gliding* or *floating*. We call this edgelessness the "Love Spot®" as our clients *love* the bumps when they discover the skill of gliding. As the tipping movement continues, we change direction and new uphill edges are engaged. The skier controls speed and direction by regulating the amount of edge being released or engaged.

Remember we are **drifting** (shaping turns) and **centering** (balancing in a turn) all the time. When we change the direction of our momentum or when we want to turn, we **touch** and **tip**. In most ski books and articles, the importance of the transition when we change direction is not examined; the all-important edge change is ignored. Often pictures and text show or describe skis going one direction, then the next picture has them going another. They skip what we call the Most Important Moment<sup>®</sup>, the transition where we release edges to change direction.

### The Four Words in Depth

### ◆ <u>Drift</u>: Softly, Softly on the Epiphany Pad<sup>©</sup>

### Hard Edge vs. Soft Edge

Shaped skis have changed how people ski. Not long ago, most skiers were content to skid unwieldy pencil skis around the hill. Nowadays the craze is to "carve" arcs with shaped skis tipped on high edge-angles. There is nothing wrong with hard-arc turns—under appropriate conditions. But limiting one's technical tool box to a single, aggressive, railed turn makes little sense in moguls, deep snow or any other off-piste ungroomed conditions.

Great skiers posses the ability to regulate edges when drifting—finessing or feathering the edges—as needed for various tasks, including shedding excess speed in moguls. They manage a spectrum of turn shapes from hard-edge, hard-snow carving turns, to long, lazy, megaradius, soft-edge turns. This skill of feathering the edges to shape the drift is essential not only for efficient mogul skiing, but for all high-level skiing. Drifting turns for varying shapes allows the skier either to maximize speed, as in a race-course, or to control speed, as in moguls.

### **Drifting vs. Skidding**

Lateral movement of drifting skis can range from virtually none—for example, a hard-arc carved GS turn—to side-slipping (sliding sideways down the fall-line) on feathered soft edges. Picture a spectrum on which a railed carve is at one end and side-slipping at the other. What all movements on this spectrum have in common in the CM, is that the center-of-mass flows and is connected with the **intended** path of momentum, the "drift."

A skidded turn is **unintended** and occurs when the tails displace at a faster rate than the tip. Unintended skidding, like a car losing control, causes a break in the flow of momentum. Drifting on the other hand, is balanced, intended and controlled.

### **Drifting vs. Traversing**

Drifting begins with learning the skill of slipping down the fall-line using uphill edges to control speed. Drifting is not traversing. Traversing skis scribe a hard static edge track, straight across the hill. The ability to distinguish between drifting and traversing is a basic tool for all-mountain skiing. How to make this distinction is one of the most powerful

"secrets" in skiing. It is also one of the easiest skills to learn.

### The Epiphany Pad<sup>©</sup> (EP)

The secret starts in the feet. Next time you get out of the shower, look down at your feet. Lean to the outside over your right foot. Feel the fleshy pad on the sole just underneath the little toes. (Fig. A) This is the part of the foot most capable of discerning minute variations in pressure and vibration on the uphill edge of the uphill ski.

Lean inward on your right foot. Feel the knob of flesh called the ball-of-the-foot, under the big toe. Similarly, the ball-of-the-foot (Fig. B) is the primary region of the foot through which the skier can sense the amount of pressure and the degree of angle on the uphill edge of the *downhill ski*. The longitudinal area around the arch and the heel also provide pressure sensations. Note that the little-toe pad (Fig. A) is larger than the big-toe pad (Fig. B).





Fig. A Epiphany Pad<sup>©</sup> (EP)

Fig. B Big-Toe Pad® (B-TP)

The large little-toe pad area (Fig. A – outside foot) is more capable of perceiving sensation than is the smaller ball-of-the-foot (Fig. B – inside). We call this fleshy pad behind the little toes the little-toe pad or the *Epiphany Pad® (EP)*. We call it the EP because when people discover its many functions, they have an epiphany in their skiing.

"Epiphany--a sudden intuitive leap of understanding, especially through an ordinary but striking occurrence"

Encarta<sup>®</sup> World English Dictionary, 1999.

The EP is the key instrument to monitor what happens between snow and the inside/soon-to-be uphill ski. Think of the Epiphany Pad® as your skiing governor for speed management and your rudder for controlling turn shape.

The Epiphany Pad® (EP) is the fleshy proprioceptive (of stimuli arising within the body) region of the uphill foot through which one can manage pressure on the inside/soon-to-be-uphill edge of the *uphill ski*. You will discover how the EP monitors and controls edge angles that manage the rate and shape of the drift.

"The foot is the critical tactile connection to the snow. Be sensitive to the snow through your feet, as if your eyes were closed and you needed to feel your way along the surface. Foot sensitivity is one of the primary differences between life-long skiers and new skiers. Wake up your feet. Notice every nuance of the snow."

- Brilliant Skiing, Every Day Weems Westfeldt Here is an exercise to explore these EP sensations more thoroughly at home:

Using a chair for balance, stand on one foot. Lean to the outside. Feel the sensations in the pad on the bottom of the foot behind the four little toes and the heel. These sensations identify the region of the foot we call the *Epiphany Pad*® (EP).

Nowlean to the inside. Feel the sensations on the bigtoe side of the foot. This sensation identifies the region of the foot called the ball-of-the-foot (B-TP).

If you let go of the chair and hold your balance on each pad of each foot for a few seconds—one at a time—you will feel a myriad of little muscles firing or wiggling. The nerve endings in the feet and ankle are cueing these little muscles to find balance automatically. You can tone down the twitching by simply *tuning in* and becoming aware of pressure sensations in your feet.

The EP is your connection to the inside/soon-to-be-uphill ski in every turn. As you become more sensitive to the EP, you will discover its amazing functions for Great Skiing. This discovery and the related function of the EP mark a paradigm shift both in technical focus and in understanding the Clendenin Method™.



Clendenin Method Camp – Portillo Chile



Fig. 2

## ◆ <u>Center</u>: Beyond Balance

### Four-Edge Skiing - From the Center

"Balance" may be the least precisely defined word in ski instruction.

Certainly this World Cup racer is in near-perfect balance, but something else is going on, something arguably more important than merely being "in balance."

A skier who is centered is always in balance.

Note the spray from the uphill ski increases as the racer progressively re-centers from the big-toe edge of the out-side/downhill ski (Fig. 2) to the little-toe edge of the uphill/inside ski (Figs. 3 & 4). At this point (Fig. 5) the skier is centered entirely on the inside/uphill ski in preparation for the edge change—tipping—that will commit her to the next turn. Note the downhill ski – it's off the snow (Fig. 5). What does this indicate? Balance (pressure and weight) is on the uphill ski in anticipation of the next turn. This re-centering pattern (from outside to inside, from downhill to uphill, from big-toe edge to little-toe edge, from big-toe pad to Epiphany Pad®) is typical of most great turns on a World Cup level.

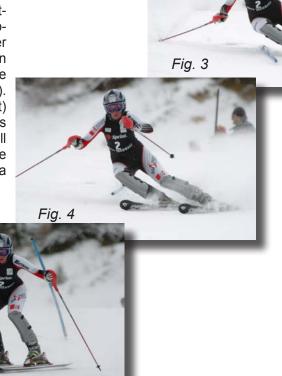


Fig. 5

### Centering vs. Balancing

A skier can be balanced, but not centered. Consider these skiers, both at turn initiation:

Both are balanced, but, and this is the critical point, only the skier on the left (Fig. B) is both balanced and centered.

The skier on the right (Fig. A) is in the classic and all too common stementry position, a stable position, but not centered. His skis essentially form a triangular base, which makes him as stable as a pyramid. Stable though he may be, the stem entry is essentially a defensive position and a position from which it is impossible to manage momentum along an intended path. Elimination of the instinctive defensive response to gravity is the single most important challenge for students.



The skier on the left is both balanced *and* centered. This is the crucial distinction. Because her center-of-mass is balanced precisely over her outside/soon-to-be-downhill ski as she approaches the fall line, Eva can easily and subtly center over either ski and is centered fore/aft as well. She can lift either ski at any time, something our stemmer cannot do without falling.

A centered skier can move when and where he or she chooses, freely transferring balance from foot to foot while tipping skis as much or as little as desired. The centered skier can anticipate the next move without fighting through the defensive, reactive position that stem skiers assume.

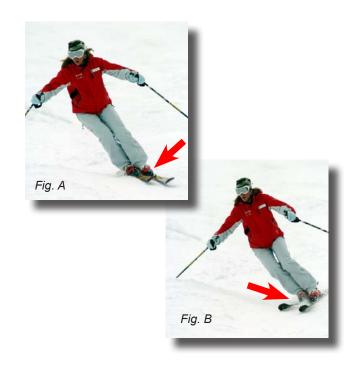
Which brings us to the Most Important Move<sup>®</sup> in skiing - Re-Centering.

## Center to Re-Center – the Most Important Move<sup>©</sup>

The second of our Four Words®, Center, describes the orientation of the skier's center-of-mass, both fore/aft and from ski to ski. When centered we can balance on either ski. When balanced on one ski, all our weight is pressuring that ski. When we shift our balance from the downhill ski to the uphill ski, from a big-toe edge to a little-toe edge, from a big toe pad to the EP, we re-center, the Most Important Move® in skiing. Here's how Eva does it.

In Fig. A, note how Eva is drifting, centered primarily on the outside, soon-to-become-downhill ski.

As she enters the final phase of this turn, she **re-centers** to the inside/soon-to-be-uphill ski. In Fig. B, as she crosses the fall line, Eva is beginning to balance (weight) on the little-toe edge of the uphill/inside ski, as she **slips and scrapes** the ski beneath her center of mass. (Squeegee Move<sup>®</sup>, p. 62). Notice the snow building up under her inside/soon-to-be uphill ski.



In Fig. C, re-centering is complete; the little-toe edge of the uphill ski has become the primary (more than 50%)weight-bearing edge. Eva drifts, *feathering (gently and subtly tipping)* this newly weighted/balanced EP edge to control speed. Note how much more snow-spray is now coming from the little-toe edge of the uphill ski, rather than from the big-toe edge of the downhill ski. The snow from her uphill ski covers the downhill boot.

"You cannot stem a ski you're on."

– Johnny C.

Balanced, centered and with her speed under control, Eva is poised to "*touch and tip*" into the next turn. She has made the same commitment to her uphill/inside ski as our World Cup racer (p. 34).

Re-centering on the uphill ski is one of the most subtle moves in all-mountain skiing and defines the moment when the success of the next turn is assured. Re-centering is the key balancing move in mogul skiing. This Most Important Move® establishes our re-centered balance for the next turn.



I was first introduced to the Squeegee Move® on a ski simulator by my mentor and ballet skiing coach, Phil Gerard. He was an innovative choreographer; we won five world titles. When Phil taught me to do 360s on one ski, it was all about working one foot under center. I then took the move into mogul skiing and found that it added a whole new dimension of balance in the bumps.

Johnny C.



# One Principal Technical Problem: Abstem Case Study

Our skier is on a black bump run. Unfortunately, he has yet to learn how to recenter early, as demonstrated by Eva.

The physical convergence—of knees, boot tops, or ski tips—always indicates the skier's flu—the stem. This photo caught our skier shifting his center-of-mass from the downhill ski to the uphill ski. To accomplish this weight shift, he slid his downhill foot away from his center (arrow) in order to engage the big-toe edge. This is an ab-stem (down-stem with the bottom ski). Edge engagement of the downhill ski, along with his firm pole plant, provides the resistance he needs to push off and shift his weight to the uphill ski. Separating his feet with a heel push creates ski convergence.

In this case, had he re-centered on the uphill edge of his uphill ski earlier in the turn, his skis and his boot tops would match—remain parallel to each other—and his feet would remain beneath his center. Early re-centering on his uphill ski eliminates the need to ab-stem the downhill ski.

### ◆ <u>Touch</u>: The Light Touch

When first considering the two words Touch – Tip, we need to give thought to how each of the movements described by The Four Words® interact and affect each other. All four movements take place in seconds in real life on the hill and each reinforces or degrades the effectiveness of the other three. It is difficult, for example, to re-Center from any configuration other than a Drift and re-centering is essential for a stem-less Touch and Tip.

The Touch triggers the Tip, and the Tip, in turn, triggers movement that commits the center-of-mass into the intended path of the new turn. **Commitment** of our center-of-mass into the turn creates an effortless seamless flow down the mountain, like a falling leaf.

Reminder: Great skiers are drifting and centering all the time. They touch and tip to turn, to change direction, and to drift into a new turn shape.

### **Touch for Timing**

The Touch relates both to the skill of appropriately swinging the pole to contact the snow and the sensations in the hand as the pole makes contact. The touch is the most important timing element of a turn.

Timing the touch is crucial. Imagine a conductor leading an orchestra in Beethoven's Symphony No. 5. The conductor raises his baton, then, with a strong triple flourish, leads the orchestra to play the world's most famous symphonic opening.

The actions of the conductor and the response of the orchestra appear to be simultaneous, but are not. We never hear "da-da-da-dum" before the cue, but always a split second after the baton swoosh.

Like the baton wave, the pole touch cues the feet to release their uphill edges, ending the old turn and beginning the new. The sequence may look simultaneous, but the feet always tip **after** the pole touch.

The Touch also commits the center of mass into the "new turn's" path of momentum. Commitment is a proactive move of the body into the new turn—into our new path. This commitment of the center down the hill enables the skier to release edges effortlessly, creating a smooth, expert transition from one turn to the next. This proactive move separates a defensive skier who stems, from one who flows.

Home Position: Note how Kurt holds his hands comfortably in "home position" and that his hands are held wide beside his torso in plane with his hips and shoulders. Nothing about this position is exaggerated, nothing is tiring, and nothing forces the skier out of center or off the path of momentum. (See Killy Stance in the Keys.)



In Fig. 1, note the position of Eva's hands, arms and pole tips. Her hands are even with her arms level, slightly above the waist and comfortably in front of her body. She is not reaching forward with arms in an exaggerated, tiring position. Note how her pole tips project out from and behind her body and are not dragging on the snow.

Fig. 2: Eva gently swings her outside arm and pole tip matching her turn shape and momentum, ending with a flick of the wrist in anticipation of her next turn. It is this wrist flick that places the pole tip ahead of her feet. There is no overextension or straightening of the arm. The flick allows her to keep her torso quiet and her center connected with the path of momentum. She has re-centered on her uphill ski, in preparation for edge release.

This is the moment of Touch (Fig. 3). Eva is centered and balanced on her uphill ski for her edge release. Note how she touches the snow. You can see the subtle difference between using the pole as a crutch for support versus a cue for release, when a skier stems or does not stem. In this case, she is not planting the pole for stability nor is she using the pole as a crutch to shift her weight. She is centered, looking ahead, and ready to release her edge grip.

The sensation of the pole tip engaging the snow (Fig. 4) instinctively cues

the release of her edges into the new turn. The edge release automatically propels her center of mass down the path into her new turn. Advanced skiers sense when their boots pass the touch point as the precise moment to actively commit to their new turn. Notice the space that has opened between her shins as she passes her pole. This space is the result of tipping her downhill foot, causing her downhill leg to move toward her new turn. (See The Most Important Moment<sup>®</sup>.)

Eva's center has begun to move across her skis along the path of momentum into the new turn (Fig. 5). She is able to look down the hill directing the path of her new turn, because she is relaxed, centered and balanced. Flicking her wrist allows her pole to touch with minimal movement of torso or arms. Following an effortless edge release and still re-centered on her outside, soon-to-be-downhill ski, she enters her new turn. Her hands, arms, and poles are returning to home position as she continue into the bottom third of the turn.

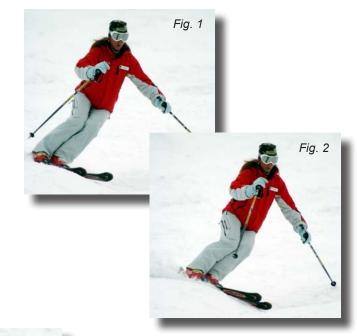




Fig. 3

### Case Study: Plant vs. Touch

A sharp eye will notice several elements in these turns that are ripe for improvement.

Focus on the pole swing and pole plant. Notice how the elements of the turn interact with each other and how inefficiency in one movement causes inefficiency in the other three movements. In Fig. 2, "Home Position" (detailed in next chapter) for his poles is too vertical, requiring excessive arm movements as he reaches to find a spot to plant. This flick-less vertical pole position forces him to reach, which in turn causes his torso to rotate and his tails to skid.

Vertical hand position promotes a chain of inefficient movements. He ab-stems his downhill ski to engage the big-toe edge for support (Fig. 1). As he begins his new turn, he has not released his downhill ski (Fig. 2). Instead he has stemmed his uphill ski when he should have been re-centered on it.

Our skier's pole plant functions to transfer weight from the bigtoe edge of the downhill ski to the big-toe edge of the uphill ski, a typical movement pattern that renders efficient mogul skiing impossible (Fig. 3). He is now in the air, flying from one big-toe edge to the other—note the convergence of lower legs, boots and ski tips.

As he lands on his outside ski he must lift the old downhill ski in order to drag it around, flopping it next to the skidding outside ski (Fig. 3).

Skis and boots continue to converge (point at each other) as weight is shifted from the old downhill ski to the other ski – from one-big toe edge to the other big-toe edge, from an ab-stemmed ski to a stemmed ski.

His lack of both proper pole function and position will compel him to repeat the same problematic movements. He may have found balance on the outside/soon to be downhill ski, but he is not centered (Fig.3). One must be centered to control their drift (turn shape). Because his pole action functions to shift weight, he is doomed to drop farther and farther behind the flow with each new turn (Fig. 4). Soon he will be forced to bail out in a bumpy traverse across the mogul field in the "wild pony ride" that often overtakes big-toe-edge dominant skiers in bumps.



## **◆** <u>Tip</u>: The Most Important Moment<sup>®</sup> in Skiing

"The most beautiful moment in skiing is the moment we commit to gravity the moment the skis change edge angle, giving up their grip on the old to embrace the new. This is the moment we fall with gravity and dance."

– Johnny C



### **Tipping and Edge Angles**

Tipping is the act of *changing the angle* of the skis' contact with the snow. Changing edge angles initiates change of direction. Edge angle changes are referred to as *releasing* and then *engaging*.

Our initial focus is on releasing edges. Releasing engaged edges initiates a turn of skis from across the fall line to down the fall line, eliminating any need to stem or hop. As skills develop, focus shifts to engaging edges.

Engagement occurs as we maintain the tipping edge angle through the fall line. A skilled skier can progressively manage edge angle to achieve the intended drift, either for maximum edges when carving or managed edges for speed control.

Most skiers come to us with preconditioned edging skills dominated by the big-toe edge of the outside/downhill ski. To improve, they must learn to let go of their security hold with this dominant big-toe edge.

"The transition between turns is really the centerpiece of what we all do as skiers."

Preface – Brilliant Skiing, Every Day, Weems Westfeldt

### The Most Important Moment©

The Most Important Moment® in skiing is the moment we end one turn to begin the next. In this moment many skiers—maybe most skiers—habitually rush through turn initiation at the start of each new turn. They step, hop or twist skis as rapidly as possible through this moment, to seek the "safety" of their new edges. Unfortunately, these skiers literally skip the "Most Important Moment®". This is the moment that plays the most important role at the top of the turn. Here, great skiers maintain ski/snow contact. This is when they release and guide their center-of-mass along the path of momentum down the mountain. It is in this moment that fluid, flowing, centered skiing lives or dies.

Think about which ski you use to initiate a turn. Do you initiate a new turn with an active top/uphill ski or with the bottom/downhill ski? Most skiers start a new turn by stemming the top ski. Great skiers initiate the turn by tipping the bottom ski downslope to release its edge grip.

David (Fig. 1) is finishing a turn centered on the top ski as he tips his bottom ski to initiate his new turn. This simple release of the bottom ski commits his mass to his new turn. Notice how smoothly he has moved into his turn. Maintaining contact with the snow in the transition gives him control to manage his new intended turn (Fig. 2).

#### Active with the Bottom Ski - Passive with the Top Ski

Examine the moment David has finished one turn, centered and balanced on the uphill ski (Fig. 1). To start his next turn, his wrist flicks the pole forward with the arm swing to *touch*. The light pole-touch sensation cues the *tipping* of his down-hill ski downslope (arrow Fig. 1) as the foot passes the point of the touch. The *tipping* causes his center-of-mass to move (arrow Fig. 2) downslope along the path of momentum. This slight downslope movement of his center-of-mass releases the uphill edge of the uphill ski *passively*, without any active skier input. The automatic release of the balanced uphill ski allows him to enter the turn effortlessly.

The **Most Important Moment**<sup>®</sup> is most important because the passive edge release caused by the center-of-mass moving

down the hill, brings our feet, knees, legs and core into the turn together (Fig. 2). This stacked alignment of our bones allows us to use both legs as a single piston. With matched parallel skis, our expert can flex or retract his or her legs to absorb pressure at the end of one turn and then extend to maintain resistance with the snow while entering the new turn.

Passive release in the **Most Important Moment**<sup>®</sup> allows mastery of moguls and adds control, efficiency, and grace on groomed terrain as well. With bones stacked and legs parallel, he is now in a position to drift making a powerful, controlled and intended turn.



### Case Study: The Air-Stem Hop

Our skier shows a "set up" for his turn that is typical of many skiers. His weight remains on the big-toe edge of the downhill ski, as opposed to being re-centered on the uphill ski. In this position, which he is conditioned to perceive as "stable," he prepares to plant the pole as a brace to shift his weight to the uphill ski (Fig. 1).

The firm pole plant has little or nothing to do with releasing the downhill ski, but is intended only to facilitate weight shift to the stemmed ski. He is about to hop (air-stem) to the outside/soon-to-be-downhill ski. His body has no functional alignment. Without stacked bones, he uses excessive energy subjecting his joints to undue stress (Fig. 2).

Our skier is actually airborne as he transfers weight to the big-toe edge of the new-stemmed ski, having hopped through the *Most Important Moment*<sup>®</sup> in Skiing. He is not necessarily afraid of the fall line, but lacks the skills to take advantage of the *Most Important Moment*<sup>®</sup> (Fig. 2).

He is typical of the skier who "can get down anything." "Getting down" is not the same as dancing with gravity in effortless, seamless flow.

With no opportunity to drift and re-center on the uphill ski, he is already in trouble for the next turn. With feet "scissored" (Fig. 3) indicating all weight/balance is on the downhill ski, he is doomed to hop and hop and hop. This approach to skiing bumps leads to "shop and hop," a progressively deteriorating descent that often has the skier searching for the next hop-friendly bump. The traverse between hops can easily get out of control and become the Wild Pony Ride.



"You are only as good as your weakest fundamental."

- Kurt Fehrenbach: Member PSIA Demo Team,
Clendenin Method Coach

### Tip - Release - Engage

Skiers who follow the Four Words® and the Keys to the Kingdom® (p. 53), rid themselves of a defensive stem turn entry and learn to embrace gravity with every turn. Rather than stepping or hopping from turn to turn, they have the dynamic ability to initiate turns by releasing the edge grip of the downhill ski first.

When a skier tips the downhill ski first, the other ski, the top ski, tips off edge as well. The top ski rolls off its uphill edge because the center-of-mass is moving downhill with gravity.

Figure 1 shows the Touch Moment that cues the tipping of the down-hill ski. When initiating a turn, think of tipping a champagne glass downhill off your bottom ski. The tipping move is effortless; the release move is just a twitch (see p. 45).

Tipping the downhill foot moves our center-of-mass subtly down the hill causing the top/uphill ski to tip passively off its uphill edge (Fig. 2). This subtle movement of the center, created by tipping the champagne first, causes the top ski to roll off its edge. The chain reaction initiated by rolling off edge moves the center-of-mass across the ski and down the hill (Fig. 3). This is called a *kinetic chain reaction* (actions that start in the feet and cause a natural upper body reaction to maintain balance – See Keys section, p. 58). It is the tipping of the downhill ski downslope (the *Most Important Moment*® in skiing) that moves the center-of-mass downhill.

Passive-release turn entry, learned when we let go and release our bottom-ski big-toe grab, is imperative for mogul mastery. Tipping the downhill foot frees the balanced weight-bearing top foot to do its primary job: to maintain contact and feel with the snow. This passive entry that began with the release of the downhill edge grip (tipping) allows our top leg to enter the new turn powerfully and athletically structured (relaxed muscles supported by stacked aligned bones).

The top leg's job when entering a turn is maintaining contact pressure with the snow by flexing or extending. If our top leg is busy twisting, stemming, or hopping, it is too busy to do its job. It's fired.

# **Balance Migration**©

As sensitivity develops, we feel the migration of our balance in our feet throughout the entire turn. At the completion of one turn, we feel our balance on the top ski, on the top edge. Our sense of balance on this top edge comes from the sensations in our top foot's Epiphany Pad® (EP). When we begin our new turn, we sense our edge grip release from our top ski and we glide



Spilling the champagne



through the Love Spot®, the edgeless moment. As the turn progresses into the bottom third, our sense of balance comes from sensations in the EP of our new top foot on the new inside/top ski. Simply put, from turn to turn, especially in the bumps, we go from one EP to the next EP; repeat again and again.

Passive turn entry is both stable and powerful as it ensures that parallel skis with matched edges move a skier's body with stacked, aligned bones into each new drift (Fig. 5). The slight divergence in Eva's ski tips indicates that she has re-centered on her inside/soon-to-be-uphill ski, resulting in equal balance and edge angles on each foot. (See Squeegee Move®, p. 62.)

Do not mistake "passive" for "weightless." Even though Eva's top ski has entered the new turn passively, it remains weight-bearing until her balance migrates. In this particular turn, her balance is equal on both feet as her turn progresses through the fall line (Fig. 5). Balance migration varies depending on the ability and intention of the skier.

### The Love Spot®

As the uphill ski makes the transition to become the new outside/soon-to-be-downhill ski, both skis go through a moment when they are flat to the surface (Fig. 2 & Fig. 3, previous page). This place in the turn where the feet are flat to the snow creates a sensation of gliding or floating with balance equal on both feet—the Love Spot® (For more information, see p. 69). Stemmers and hoppers never feel this gliding moment because stemmers step from edge to edge and hoppers just don't feel the snow.

As the top balanced/weighted ski from the previous turn passively enters the new turn, it flattens in a glide/Love Spot® and then re-engages on the big-toe edge (Fig. 3 & Fig. 4). Again, if the uphill foot is busy twisting—stepping in a stem—or in the air for a hop, it cannot do its primary job of maintaining contact and resistance with the snow.





Jean-Claude Killy

### **Brief History of Tipping**

At the Olympic Museum in Lausanne, Switzerland, there is an exhibit displaying Killy's equipment from his triple gold medal win in 1968. On display are his original leather LeTrappeur boots. Each boot had an extra layer of thick leather sewn on the inner side. There are dozens of deep razor cuts on these extra inside layers. Those razor cuts were etched by the inside ski edge cutting into the boot. This means he skied with as narrow a stance as functionally possible and that his inside ski was extremely active and tipped on a higher edge angle than his outside ski during the turn transition. Without the pad, his razor-like edges would have cut through the boot.

Ingemar Stenmark dominated World Cup racing in the 1980's. His tipping move during the transition came from the back of his downhill/soon-to-be-inside ski followed by a powerful extension into each new turn. Alberto Tomba dominated the 1990's. He tipped the front of his downhill/soon-to-be-inside ski during the transition by lifting its tail as he pressed forward into his turns. The Clendenin Method™ encourages the tipping ski (always initiated by the bottom ski) to stay matched and parallel to the top ski as the top ski becomes the new outside ski. Therefore, there is no apparent lifting of the ski tip or tail in the turn transition.

### **Visual Summary of the Four Words**



The *Moment* is the instant when the downhill foot twitches, releasing the big-toe edge of the downhill ski. The twitch move by the foot, effortlessly tips the downhill ski downslop (off edge) into the new turn. On the other hand, the *Move* is progressive as the Epiphany Pad shapes the intended turn. Simply, the twitch in the *Moment* is instantaneous, whereas the *Move* takes place throughout the shaping of the turn.

**Twitch** - 1) to move with a slight jerk either once or repeatedly; 2) to give something a sudden light tug or jerk.

Encarta® World English Dictionary, 1999

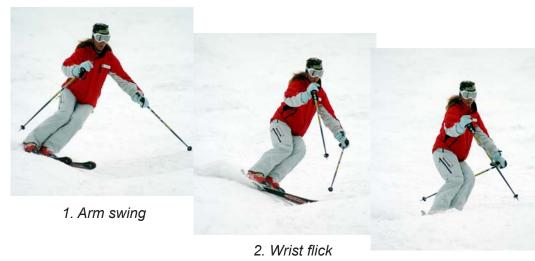
Generally great skiers use the outside/soon-to-be-downhill ski (big-toe edge) like a gas pedal to maximize speed. For great skiers, the inside/soon-to-be-uphill ski (little-toe edge) functions like both an engine governor for managing speed and a boat rudder for shaping turns. Great skiers are active with both skis to manage both speed and turn shape. Unlike great skiers, average skiers brake with their downhill ski and leave the uphill ski limp. The following sections give in-depth descriptions of each of the four words and how they relate to you and great all-mountain skiing.

"There are times in almost every master's journey when it becomes necessary to give up some hard-won competence in order to advance to the next stage. This is especially true when you're stuck at a familiar and comfortable skill level. The parable of the cup and the quart applies here:

There's a quart of milk on the table – within your reach. But you're holding a cup of milk in your hand and you're afraid to let go of the cup in order to get the quart."

Mastery, George Leonard, 1991

# The Four Words $^{\mathbb{C}}$ in Depth



3. Quiet core

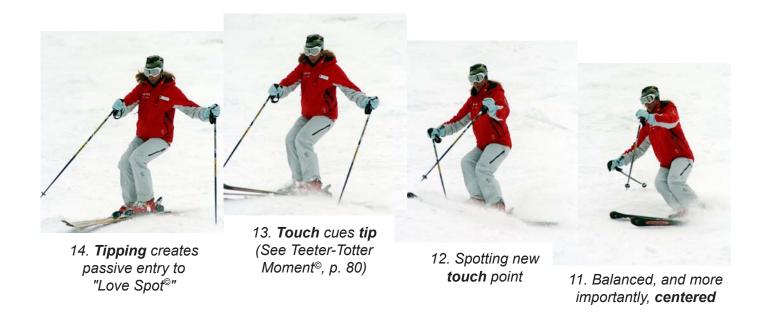
### **Eva's Summary of the Four Words**

**Drift** – Drift in the bumps; it's easier to manage your turn shape.

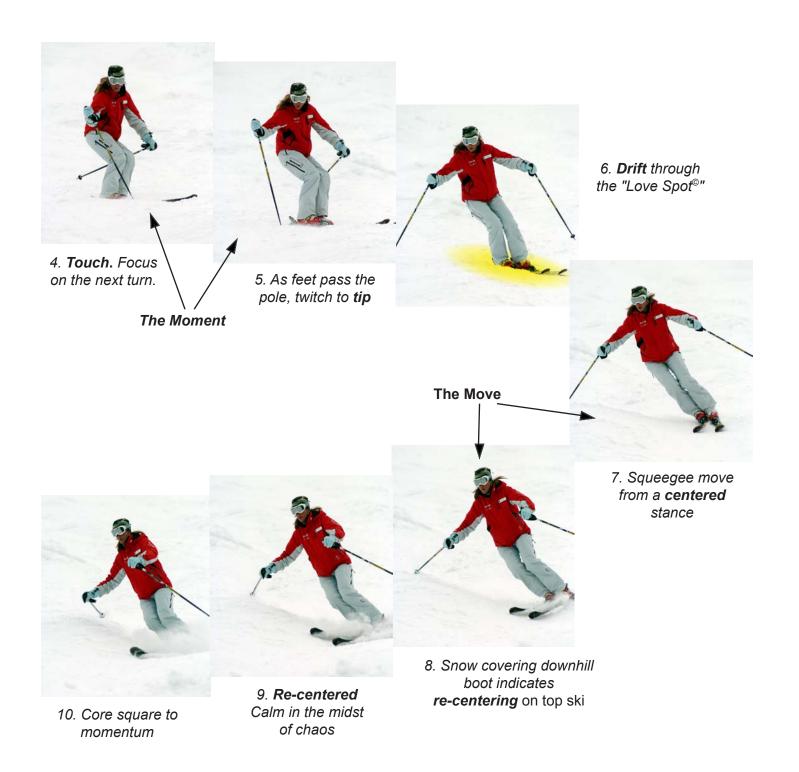
Center – Feel both feet when you ski; don't rely so much on the big-toe edge.

**Touch** – Use the pole touch as a cueing tool, not a crutch.

**Tip** – Releasing edges is as important as holding on with edges.

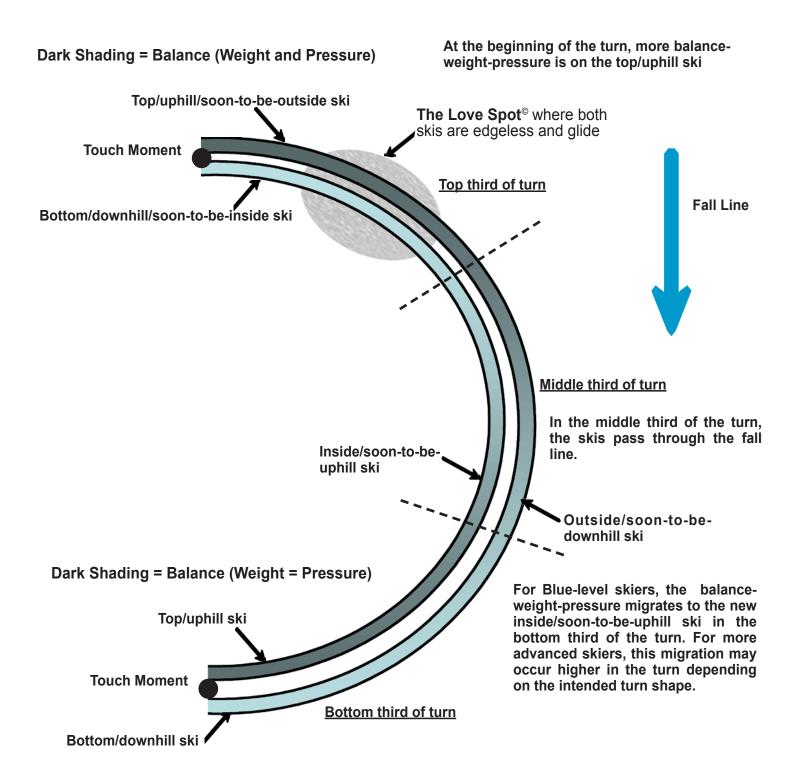


# The Four Words $^{\mathbb{C}}$ in Depth

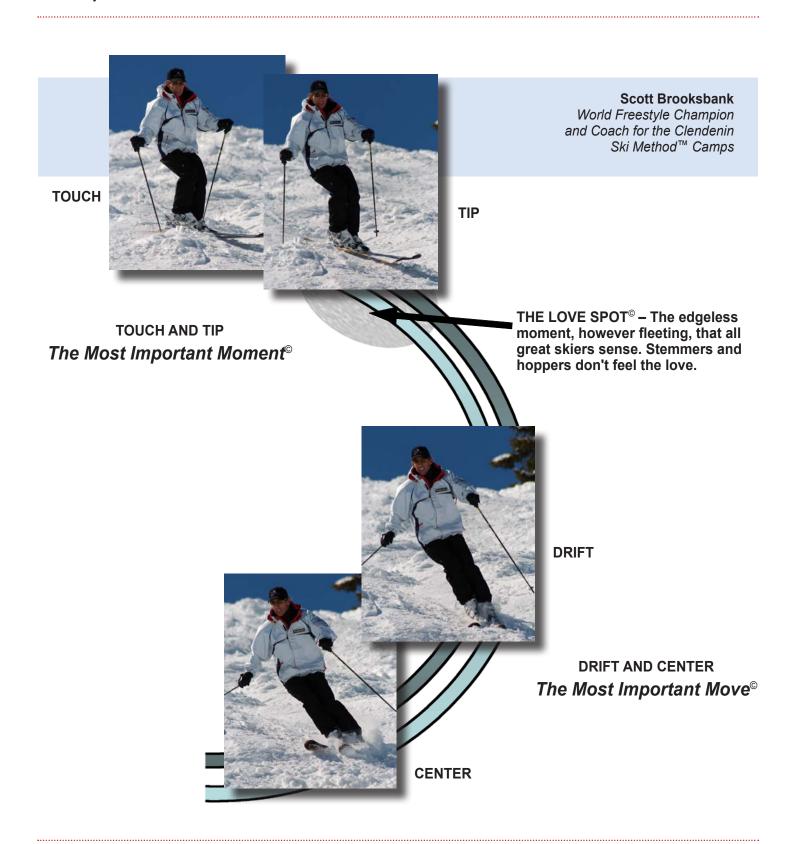




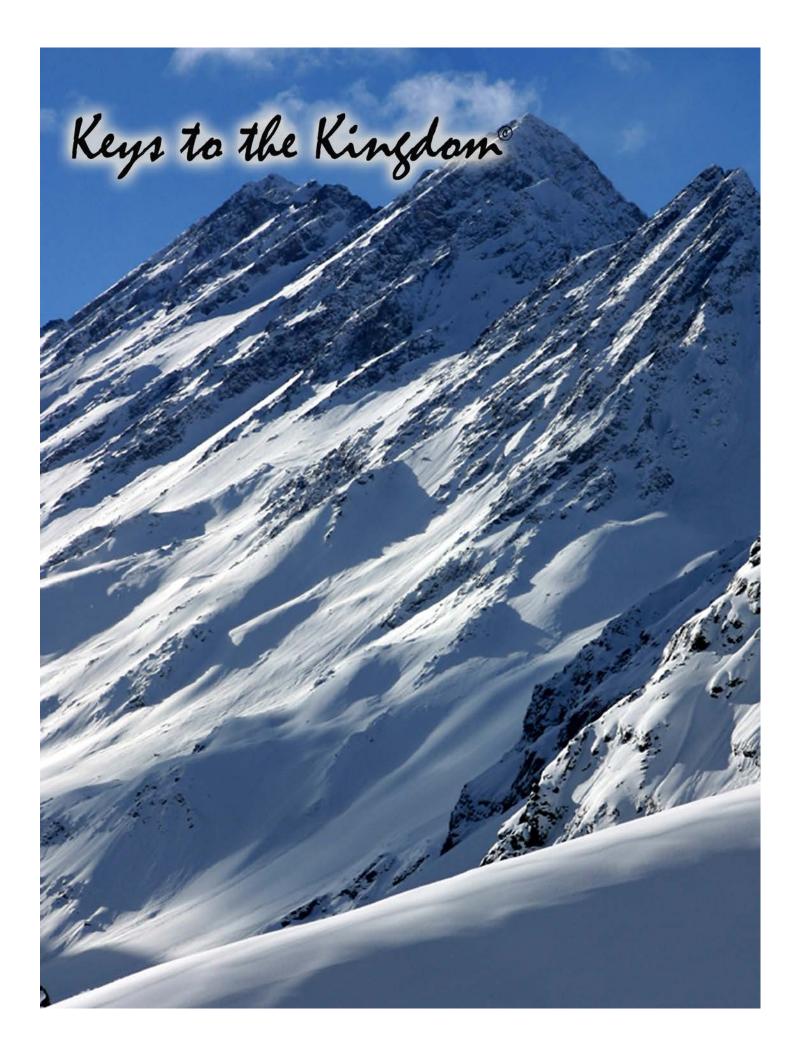


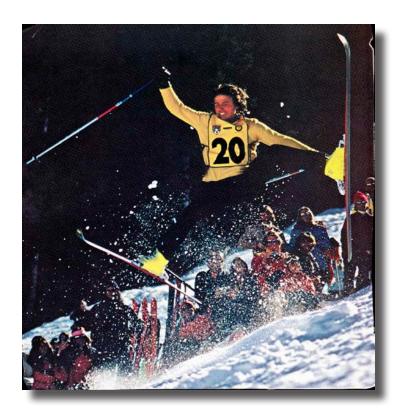


## Anatomy of a Turn









"When skiers get the key progressions, they enter another world; the mountain changes. Red Light terrain turns yellow and yellow to green. Old challenges become easy. They can ski places they've never been —they enter the kingdom."

- Johnny C

Sun Valley - 1973 "Exhibition--the Run" John's first World Freestyle Championship

Back in my competitive freestyle days, I skied with my personal hero, Jean Claude Killy, in Val D'Isere. Jean Claude won three gold medals in the 1968 Winter Olympics. What struck me most about the King's technique was his relaxed, tall, utterly natural stance. Whether standing in a lift line, skiing cat tracks at 5 MPH or flowing at high speed down a 45-degree pitch, he maintained the same stance. His image has remained an inspiration. His natural stance is the foundation of an efficient, unique skiing style, instantly recognizable from far away. The simple beauty of Killy's skiing has served as an inspiration for the Clendenin Method<sup>™</sup>.

The following exercises (keys) develop sensations and skills that, with focused repetition, transform Clendenin Method™ campers into Black Level 2 Mogul Masters (see Explanation of Levels, p. 17). The keys are presented in a step-by-step progression. All—except Drift and Center Key, Number 9—should be done either standing in place, or on groomed green or blue slopes. In time, the exercises will place new skills in your quiver.

These exercises are the **Keys to the Kingdom**<sup>©</sup>.

"Practice only makes permanent; perfect practice makes perfect."

- Jerry Warren, Sundance Utah

### Stance and Balance Keys

# 1) Stand Up Right – Upright, That Is (Terrain – flat)

The Killy Stance is the first technical element we introduce at our Camps.

Stand relaxed and naturally on your skis with arms and hands hanging at your sides, pole tips back facing outside the tails of your skis. Move each hand about a foot laterally away from each hip. You are in the Killy stance, the CM *home position*. Note that there is no gorilla look to the Killy stance. It is much simpler and more elegant than the fad of standing hunched over with feet apart and knees pressed into the tongue of the boots.



# 2) Center-of-Mass – Waking up your Feet (Terrain – flat)

The center-of-mass is neither bone nor muscle, but a location, near the navel. It is the point in the body, above, below and around which there is equal mass. This is your central balance point. You can move all you appendages around your center point and stay balanced but if the center point moves, balance shifts.

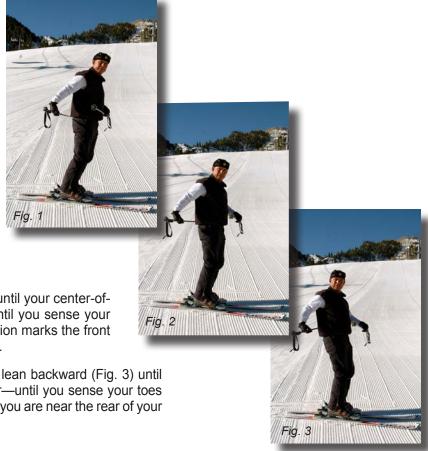
Being able to sense the location of your central balance point through your feet opens the door to great skiing.

# 3) Range of Balance – Barrel of Balance (Terrain – flat)

Most skiers have a broader range of balance than they think they do. Imagine that you are standing in a barrel—you want to explore the sensations in your feet within the barrel of balance. I am holding my poles to represent the back and front edges of the barrel of balance. Once you tune into your feet, you will feel the fore and aft range of balance for mogul mastery.

Assume the Killy Stance and lean forward (Fig. 1) until your center-ofmass crosses the toes of your bindings; that is, until you sense your heels lifting in the boots. This forward-leaning position marks the front of your balance range (the front edge of the barrel).

Return to the neutral Killy stance (Fig. 2) and then lean backward (Fig. 3) until you feel pressure on your calf from the boot spoiler—until you sense your toes lifting from the boot soles. In this aft-leaning position you are near the rear of your balance range (the back of the barrel).



Move forward again into the Killy Stance (Fig. 2 & Fig. 4).

You have just experienced one essential ingredient of great skiing: how your feet give immediate and objective feedback for balance. The sensations you felt—first heel lift and then toe lift—alert you as you approach the edge of your range of balance. Imagine that you are standing in a barrel. The rim of the barrel represents how far your center can go and still be in balance. Once outside the *barrel of balance*, down you go. The barrel of balance is larger than most skiers realize. As a skier develops the skills and sensations of centering, the rim of the barrel becomes even larger.

Practice this a number of times, rocking back and forth, concentrating on the changing sensations on the soles of your feet. These subtle pressure changes are the keys with which all great skiers balance.

Campers at first discover that their feet are most sensitive to movement of the center as it moves *out* of balance. With repetition they, like great skiers, develop heightened feel for subtle fore and aft pressure changes. These objective sensations in the heels and toes become intuitive cues for balance management in skiing.



# 4) Slide Beneath Center – Push/Pull for Forward and Back (Terrain – flat)

Repeat the Range of Balance Key, but this time sliding (pushing and pulling) your feet back and forth under center rather than moving your center back and forth over your feet.

This pushing and pulling back to center is a *cross-under* move. If you start skiing across a gentle slope, and play with this push/pull cross-under move, you'll experience how efficient it is for balance recovery. Becoming familiar with how to get back to your center—both fore and aft—with this efficient sliding cross-under Key becomes an essential tool for great bump skiing.

"When you start to learn a new skill, you do have to think about it, and you have to make an effort to replace old patterns of sensing, movement, and cognition with new."

Mastery, George Leonard, 1991



# 5) Slip Beneath Center - Slip It In from Side to Side (Terrain – groomed blue)

Just as sliding the feet back and forth beneath the center of mass is more efficient than moving the center fore and aft over the feet, so is lateral slipping more efficient than moving center from one ski to the other.

Stand across the slope with feet about a foot apart. Balance with all your weight on the downhill ski (Fig. 1). Maintain balance—use poles to steady yourself if necessary—transfer your weight onto the uphill ski (Fig. 2). Notice how much your torso moves as you center over the uphill ski. Go back and forth with your feet apart, centering on the downhill ski (Fig. 1), then transfer balance to the uphill ski (Fig. 2), and back again.



Fig. 1 Centered on downhill ski



Fig. 2 Slip - centered on both skis



Fig. 3 Slip until centered on uphill ski

Repeat, but instead of moving your body up and over the uphill ski, slide the uphill ski down toward the bottom ski (Fig. 3). As the top ski slides down, balance on it, on your Epiphany Pad® (EP). After a few attempts, notice that your upper body barely moves. This is another example of how efficient a cross-under move is for re-centering, whether fore/aft or laterally from ski to ski. This is the Key for the *Most Important Move*® in all-mountain skiing.

"The people we know as masters don't devote themselves to their particular skill just to get better. The truth is, they love to practice—and because of this, they do get better! And then, to complete the circle, the better they get, the more they enjoy performing the basic moves over and over again."

Mastery, George Leonard, 1991

### **Drift and Center Keys**

The Skill of Drifting (creating intended turn shape) is related directly to the most underrated maneuver in skiing—sideslipping. Though neglected, the sideslip is one of the easiest moves to learn. Mastery of the sideslip is mandatory for expert all-mountain skiing. Sideslipping develops balance, centering and edge control.

The Killy Stance drills show us how easy we can focus attention on sensations detected by the broad soles of the feet—the heels and the toes. During sideslipping, sensitivity develops on the sides of the feet—the Big Toe Pad® (B-TP) and the Epiphany Pad® (EP). (See p. 33.)

The Skill of Centering derives from the two activities humans do the most, standing and walking.

When stopping on a street to greet a friend and chat for a few minutes, we often stand with our feet pointed slightly out, balancing intuitively on the outside of one foot, then switching to the outside of the other. We are always on one foot or the other, or both, with either foot available beneath center for balance adjustment at any time. We do this without conscious thought.

The same is true of walking. Take a few steps. Notice that you land on the fatty tissue under the little toes and then roll to the big toe side pushing off into the next step.

Little-toe side (EP) landing and big-toe side (B-TP) push-off is most obvious in the movements of expert skaters. This is also exactly how great skiers make great turns.

Important: perform each of the following in both directions.

# 1) Killy, Angulation and the Kinetic Chain (Terrain – groomed blue)

(Terrain groomed blac)

Assume the Killy Stance with skis across the hill, perpendicular to the fall line. Notice that you've engaged the uphill edges of both skis, more specifically the little-toe edge of the uphill ski and the big-toe edge of the downhill ski. Stand on the edges so that both skis are level and each would balance a full martini glass.

Now quickly empty both imaginary martini glasses up the hill by tipping both feet to the uphill side. Tipping the skis uphill increases the strength of the edge-set. Notice that you did not have to consciously adjust your upper body for balance. Your hips moved automatically into the hill and your head moved out over your skis.

Tipping skis up the hill created a naturally *angulated* posture. This is the body's response to movement initiated in the feet. This angulated shape in the body is the effect caused by the *Kinetic Chain*. Any action in the feet creates action in the ankles. Action then moves to the knees, then to thighs, hips, torso, shoulders and head. The *Kinetic Chain* proceeds naturally from the feet up (See Inclination with Angulation, p. 85).



### 2) Easy Slider

(Terrain – groomed blue)

Stand with skis across the hill, in your Killy stance.

Now empty the martini glasses down the hill. Gently release your edges by extending, which releases some body angulation and flattens the skis to the slope. This tipping of both feet down the hill is called "softening" the edges. Softening the edges will cause you to slip straight down the fall line. Sense where you feel balance in your feet while sideslipping.

Most campers begin slipping with most of their weight on the downhill foot, which creates dominant sensations on the big-toe side of the downhill foot (B-TP). Uncorrected, the habit of feeling only the big-toe edge of the downhill ski leads inevitably to stemming.

Sideslip a few yards, balancing equally on both feet. Avoid leaning up the hill. When sideslipping centered over both feet, you will feel balanced on both the little-toe side of the uphill foot (EP) and the big-toe side of the downhill foot (B-TP).



Repeat but focus on the **sensations** in **the uphill foot**. As you become more advanced and comfortable with this movement, repeat, but with the downhill ski lifted slightly from the snow. This begins your heightened awareness of the Epiphany Pad<sup>®</sup>, the key to speed management and drifting (intended turn shape).

# 3) Braking on the Epiphany Pad<sup>©</sup>

(Terrain – groomed blue)

Repeat the *Easy Slider*, slipping down the hill but now coming to a stop on your uphill ski. You do this by subtly and progressively adding weight while engaging—strengthening—the uphill little-toe edge of the uphill ski. This will reinforce sensations developed through the Epiphany Pad®, the fatty tissue on the bottom of the foot just below the little toes on the uphill ski. The EP is easiest to feel when slipping or drifting on soft edges and with practice will become the primary governor for speed management. The EP is most prominently felt when drifting on the inside/soon-to-be-uphill foot. You will find that a larger area of the EP is utilized when drifting at lower edge angles than when carving on higher edge angles.

### 4) Epiphany Pad<sup>©</sup> – Where Have You Been? (Terrain – groomed blue)

Now we'll add turn shape to braking to a stop, one turn at a time.

Start slowly down the slope and make a turn, slipping down more than across the hill. Come to a stop using gently progressive edge engagement applied through the Epiphany Pad<sup>®</sup>. Repeat in the opposite direction.

When centered, you can apply increasing pressure on the inside/uphill foot. Managing speed and turn shape with the Epiphany  $Pad^{\odot}$  is a linchpin skill of the Clendenin Method  $^{\text{TM}}$ . Remember, the EP exists only on the uphill foot and is felt when drifting.



Repeat, adding turn shape, drifting down and across the hill before coming to a stop, balanced on the EP. The key is to manage the stop with the EP. As you become more proficient you can check your commitment by lifting the downhill ski.

With perfect practice, this maneuver becomes increasingly natural and, like most Clendenin Method™ campers, you'll probably soon exclaim, "Ah Ha! Where has the Epiphany Pad® been all my life?"



### 5) Whip the Stem - Wake Up Your Inside

(Terrain – groomed blue)

This time we link several turns together, slowing "almost" to a stop between each turn. Manage the "almost stop" by feathering the engagement of the EP edge. It is important to develop a strong sense of balance on the uphill foot. As you repeat this Key, notice that:

- This is the exact opposite of the way most skiers stop. Most use the big-toe (B-TP) edge of the downhill ski to stop.
- You are balanced on the uphill ski from the end of one turn until the beginning of the next.
- If you do this properly, you cannot stem.
- If you stem, you cannot do this properly.
- With practice, this becomes easier and more natural.

### 6) "Ski with Your Feet" - Cal Cantrell

(Terrain – groomed blue)

Free ski for a run or two and focus on your feet and on where you feel balance. Liven up the inside ski by sensing the Epiphany Pad<sup>®</sup> (EP).

#### 7) Traverse vs. Drift

(Terrain – groomed blue)

Traverse across the slope. Leave tracks that are straight lines etched by edges in the snow. Notice sensations in the feet. With feet locked on edge for traversing, you will feel the big-toe (B-TP) edge of the downhill ski and the little-toe side of the uphill foot against the side of your boot.

The side of the foot felt on a traversing uphill ski is not the Epiphany Pad<sup>®</sup>. It's only possible to sense the EP while slipping or drifting, not during a traverse. Why? The edges have to be moving laterally down the hill to activate the proprioceptors in the fatty tissue of the EP. More simply put, you don't feel squat in a traverse—it's more like a robot moving across the hill. In bumps, traversing will have your knees begging for mercy and screaming "Please learn to drift while we're young!" Controlling lateral displacement of the drift with the EP creates a breakthrough for skiers learning the Clendenin Method<sup>™</sup>.

Most skiers traverse with weight primarily on the big-toe (B-TP) edge of the downhill ski. This static-edge traverse is the opposite of a managed, intended drift. In a drift, we feather edges to manage speed primarily weighted and balanced on the uphill ski—the Epiphany Pad®.

When carving at higher speeds on groomed terrain, the big-toe edge is actively engaged and great for shaping the turn using the side-cut design of the ski. Carving does not work in the bumps. Technique employing the EP allows us to control the arc of our turns without skidding. Controlling turn shape is essential for having fun in the bumps on shaped skis.

Proprioceptor - sensory nerve ending in muscles, tendons, and joints that provides a sense of the body's position by responding to stimuli from within the body.

Encarta<sup>®</sup> World English Dictionary, 1999

### 8) A Fine Feathered Edge

(Terrain – groomed blue)

Start across and down the hill, this time drifting on soft edges. When drifting, your skis do not leave etched tracks. Instead your skis create a blended soft path in the snow, as though brushing a feather across the snow.

#### 9) Drifting Through Bumps

(Terrain – intermediate bump run)

Repeat 6 and 7 above in bumps. Notice how the ride becomes smooth on drifting skis.

### 10) Paint a Ribbon

(Terrain – blue groomed)

Sideslip straight down the fall line. Gently move your center forward over your toes. As your ski tips begin to slide downhill, move your center back over your heels.

Moving your center over your heels will cause your ski tails to begin sliding downhill and you go backwards for a second. As soon as you begin drifting backwards, move your center forward again over your toes. Moving your center over your toes will bring your tips back down the slope. Stop and look up at the path your skis made in the snow. If your path is ribbon-shaped, you got it right.

Many skiers—indeed, many teachers—underestimate the value of this skill. To reduce speed when skiing bumps, it is easy to drift up the face of a bump—if you are comfortable with an aft position on your skis. This is not to suggest you should 'hang out' on your heels in an aft position. The aft position is part of the speed management tool-kit and is always complemented by a forward commitment at turn initiation.





### 11) Ultimate Drifter

(Terrain – groomed blue)

Repeat Paint a Ribbon, above, this time managing fore/aft pressure exclusively (or as much as possible) through the Epiphany Pad<sup>©</sup>. If you can paint a ribbon, in both directions on a groomed blue run, with your bottom foot one inch off the snow, you're on the way to owning the Clendenin Method.

#### 12) Center to Re-Center

(Terrain – green or groomed blue)

Drifting with balance centered on both feet feels as stable as riding in a Hummer. Drift across the slope while stepping from foot to foot several times. With each step, identify the sensations of balance in each foot. Focus on the difference between sensations delivered through the big-toe pad (downhill ski) and the EP (uphill ski). These sensations will become internal, bulletproof balance cues that will enable you to react instantly, without thought, to any impending imbalance.

### 13) Once More with Angulation

(Terrain – green or groomed blue)

We can balance on either foot during a controlled drift. Allowing the uphill ski to move beneath center creates re-centering without affecting the natural Killy stance. Repeat 7 and 8, above, with focus on re-centering. Be certain to maintain body angulation with knees and hips inside the feet and head (Inclination with Angulation, p. 85).

# **14) Squeegee Move**© – The Most Important Move (Terrain – green, then groomed blue)

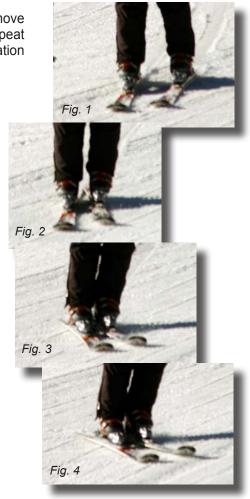
When this key is practiced and creates ownership, it becomes the most important key for guaranteeing parallel entry in the bumps. This key automatically re-centers us on the uphill ski eliminating the possibility of the dreaded stem.

Hold yourself in position facing straight down a gentle green slope by bracing against your poles. Start with feet separated about six inches. Release the poles. You will slowly begin to move down the hill (Fig. 1).

Once moving at a slow pace, tip one ski softly on its little-toe edge (Fig. 2) and scrape it in toward the other (Fig. 3). Scrape it in but don't allow the feet to touch. If the scrape has the consistency of a squeegee cleaning a car windshield, a couple of things will happen:

- 1. Your skis will turn across the slope, effortlessly and by themselves (Fig. 4).
- 2. You automatically re-center, sensing your balance on the scraping ski—the EP—as it becomes the uphill ski. This is a Key that teaches your feet the **Most Important Move**® in skiing: re-centering.

Repeat the above starting with the feet separated only a fist-width. Then link medium-radius turns with a pole-touch initiating each new scrape. When conditioned as a turn mechanic, this move helps us create turn shape and scrape speed for control in the bumps.



### **Touch and Tip Keys**

The pole touch cues release of engaged edges. Every great ski turn, except for rare turns in World Cup racing, requires skis to pass from uphill edges—to flat—to new uphill edges. Tipping the feet from edged to flat, causes the uphill edges to release. The sensation in the hand of the pole *touch* cues the tipping.

The following Keys develop the relationship between the pole touch cue and the tipping of the feet. The objective is to develop a passive turn entry wherein the uphill ski enters the new turn effortlessly. This effortless entry allows legs to do their real job in bumps—to flex or extend maintaining contact and resistance with the snow.

### 1) Four-Point Core

(Terrain – green or groomed blue)

Four points, the outside points of the shoulders and the hips, outline the central body unit.

From the Killy stance, rotate a quarter-turn to face downhill. As you do this, hips and shoulders should move together with the torso as a unit, bringing the hands along for the ride. The torso, shoulders and hips (four points) always move as a unit as we drift and face our *path of momentum*—the direction our center-of-mass is flowing down the mountain.

Now, for comparison, do this again, but move only the shoulders. You will immediately feel the discomfort and inefficiency inherent in moving one part of the central core without moving all four points as a unit. I hate to hear coaches tell students to face the fall line in the bumps. The only time this advice is applicable is to high-level competitive mogul skiers going straight down the zipper line. For the rest of us, this advice can only contort and hurt.



Eva's hands, shoulders, and hips are square to her momentum



### 2) The Target Touch Point

(Terrain – flat)

This diagram represents the approximate location for the all-important Touch. When great skiers' feet pass the touch point, they tip (release) into the new turn. It is the place where the most important moment in skiing happens. The target point is where we give up the old to embrace the new.

Imagine a square drawn next to the front part of the ski. The sides are equal in length to the distance from the binding toe-piece to the front of the ski. The pole should touch near the point where lines drawn diagonally across the box from corner to corner cross. You make a touch in this location by flicking your wrist, while forearm and torso remain in home position. The flick brings the pole tip in front of the ski tip and then drops it into the target area (see Eva on p. 39). Flicking the wrist allows the pole to touch without the need to reach. Reaching or stretching distorts your core unit which forces your center-of-mass out of the intended path.

#### 3) Isolate the Forearm Swing

(Terrain – standing on a groomed blue run)

Assume the Killy stance standing across the fall line. Swing the downhill forearm up and out (about 6 inches) as you flick your wrist. This forearm swing should be independent of hips and shoulders, which remain quiet. The swing and flick bring the pole tip up and ready to drop into the target. Practice until this is natural and automatic. Practice in both directions, using the downhill pole only. We always use the downhill pole to initiate turns so there is no need to practice with the uphill pole.

### 4) A Flick of the Wrist

(Terrain – standing on a groomed blue run)

Now let's take a closer look at the wrist flick.

As you swing your forearm up and out, flex the wrist up and open your hand slightly to allow the pole tip to swing out at a 30° angle (Fig.1) just in front of your ski tip. The shoulder does not move when the forearm swing and the wrist flick are done properly. The pole tip simply drops into the target point (p. 63). As the feet pass the pole touch, they release down slope to initiate the turn. Practice in both directions until forearm swing and wrist flick meld into one seamless event.

### 5) All Together Now: Drift – Center – Touch – Tip (Terrain – groomed blue)

Fig. 3

Assume the Killy stance with your core facing the direction of momentum. Drift down diagonally and across the slope, centered on both uphill edges. Visualize where you

want to touch and turn. Swing the downhill pole into touch position and let it drop into the center of the target. *As your feet pass the point of touch,* release edges by tipping the skis flat to the slope and glide around into a complete Clendenin Method™ turn (Fig. 2).

Do this in both directions until you fine-tune timing and integration of all four elements. The better the timing, the more effortless and stable the turn.

The sensation in the hand of the pole touching is the cue for many things in great skiing. The first and most fundamental is to cue the feet to release their edge grip. Skiers often move to the next level immediately when they get this CM linchpin key.



6) The Most Important Moment – Touch to Flatten the Bottom Ski

(Terrain – groomed blue)

This key, for the *Most Important Moment*<sup>®</sup> in skiing, teaches us to coordinate the sensation of the touch with the tipping of the feet.

Repeat Key 5, All Together Now, concentrating on the touch-tip.

The touch cues the downhill (bottom) foot to release the ski's edge. As you pass the touch point, you simply tip the foot flat to the slope (Fig. 4). It feels like a twitch, it's so effortless. This tipping (twitch)

move in the foot releases the edge grip of the downhill (bottom) ski causing turn initiation. The turn happens - you can't stop it! The touch-tip cues our commitment to the new turn at this most important moment. The tipping ski (either on the snow or in the air) should always be even and parallel with the other ski. This means there is no need to lift the tail of the ski when tipping.



"Love Spot: *n*-- 1) the moment of rapture in skiing; 2) a fleeting, edgeless moment in a ski turn experienced by all great skiers and the rest of us, who do not stem, step or hop into a turn: 3) the spot where becoming begins."

Clendenin Method: Finding the Love Spot (DVD available at clendeninmethod.com)

## 7) The "Love Spot<sup>©</sup>"

(Terrain – groomed blue)

Repeat Key 6 with a conscious sense of the "Love Spot®," the area where both skis are flat and glide. This is the area where both skis are flat in the transition between one set of uphill edges and the other. However fleeting, this floating, drifting moment confirms that you have released into gravity, rather than stemmed or stepped. Welcome to the beginning of your dance with gravity!

### 8) Passive Entry - Let It Happen

(Terrain – groomed blue)

While drifting centered on the Epiphany Pad<sup>®</sup> of the uphill ski, touch, tip, and flatten the downhill ski... and try not to turn. Only a professional contortionist could keep from turning. This passive turn entry is a primary Key to the Kingdom<sup>®</sup>.

"It is easier to ride a horse in the direction it's going!"

— Johnny C

#### 9) Core on the Horse

(Terrain – groomed blue)

If you are not riding a horse in the direction it's going, you're not on it. Riding or skiing is easier if you are facing the direction you are going. In skiing, your core is framed by the four points of your shoulders and hips. Your arms and hands follow and stay square to the core movement. With your core and hands facing the path of your arc, re-centering is effortless. The direction of travel, the path of your arc, can be represented by the tangent of the turn. For the non-physicists, the tangent is the direction we would fly, if both skis happened to release at the same time. Simply, ski with your core connected to your momentum. (See Eva, pages 46-47.)

- "... the most neglected directional movement in modern ski instruction is that in which the body's core moves in the direction of travel. The direction of travel can be viewed as the path of momentum or flowing in a direction along the path of an arc."
  - Deb Armstrong, Olympic Gold Medalist, member PSIA Alpine Team
     The Professional Skier, Fall 2006

"Til you learn to drive, you can only ride in the car."

- Johnny C

### **Favorite All-Inclusive Key**

1) Balance Migration<sup>©</sup> from a "Stop" (Terrain – groomed green)

The primary purpose of the Balance Migration Key<sup>®</sup> is to develop awareness of the all-important relationship between your center-of-mass and your feet at turn initiation. This relationship is paramount for great skiing and especially for speed management in the bumps.

This key is like an onion with many layers. The descriptions along with the pictures address the most basic aspects of the Key. We also touch on some of the more advanced technical aspects (deeper layers) for CM skiers who have mastered the basics of this wonderful Key.

An axiom of the Clendenin Method is that the downhill/outside/bottom ski is the first ski to release into the new turn. There are three ways to release the downhill/outside/bottom ski -1) pick it up; 2) tip it down slope; and 3) both pick it up AND tip it down slope. (See how Killy releases in our Blog Video at clendeninmethod.com - Johnny C's Blog). In the Balance Migration Key $^{\circ}$ , we pick up the downhill ski a couple inches in order to simulate its release before the Key begins.





#### Stage 1 - The Beginning Stance

- 1) **From a Stop.** On a green slope, stand with your skis across the hill at a S-T-O-P. This exercise begins with no forward movement relative to the snow. When executed properly the skis move downslope with not one inch of forward movement.
- 2) **Poles.** From a standstill, place your downhill pole in the snow about a footand-a-half down the hill from the heel of your bottom foot. It's okay to put your hand on top of this downhill pole and use the pole for support. The up-hill pole is held out of the snow in a Killy Hand position (see page 55).
- 3) **Feet.** Using your pole for support, pick up your bottom/downhill ski about two inches off the snow with your ski level and even with your uphill (stance) ski. Your top stance ski remains engaged on its little-toe edge in the snow.





Stage 2 - Release of the Uphill/Stance Foot

The beginning move of the Key is the most important move in the exercise because you're learning to feel the top stance ski and your center-of-mass move together in conjunction as you enter a new turn. You cannot stem a ski you're on!

With the uphill ski engaged on the little-toe edge, slowly flatten it to the snow. As you flatten the ski, feel your balance move from the Epiphany Pad®/little-toe edge to the whole foot (see page 59).

As your uphill/stance foot flattens, your raised foot may start to diverge, with the tip starting to point downhill. Let this happen.





You'll find this step awkward if your center-of-mass doesn't move down slope and stay balance over the foot as it releases. The good news: You will find this Key easier and easier as you commit by connecting your center-of-mass movement down slope with your skis release from its little-toe edge.





Remember, when the key is done properly, the uphill stance foot does not move forward. The top ski releases down slope to the Love Spot® (see page 44).





When the center of mass and the top ski synchronize in the release, you'll feel the entire stance foot in the Love Spot $^{\circ}$ .





Stage 3 – From the Love Spot<sup>©</sup> to a new Stop

The top ski continues its journey and passes through the Love Spot® into the Fall Line.





As your top ski enters the Fall Line, place your raised ski back on the snow. However fleeting, the goal is to have equal balance and pressure on both feet as they pass through the Fall Line. Your stance should be tall and your core should be square to your skis as they pass through the Fall Line.

## Keys to the Kingdom $^{\bigcirc}$





As the skis pass through the Fall Line into the bottom third of the turn, balance migrates to the new Epiphany Pad $^{\circ}$  (see page 32) of the new uphill ski.





## Keys to the Kingdom $^{\hbox{\scriptsize o}}$





Come to a complete stop. Your balance should be stacked on your top foot over your new uphill ski.





Now you're ready to start a new Balance Migration Key®.

# 2) Balance Migration<sup>©</sup> in Slow Motion (Terrain – groomed green)

When you feel in control of the Balance Migration Key® starting from a complete stop, try linking the Balance Migration Key at slow speeds. You'll be amazed how easy your turns are completed when your feet and center of mass are married! Most turns on the moguls replicate the Balance Migration Key<sup>®</sup>. As a bonus, when the Balance Migration Key<sup>®</sup> is mastered your bump skiing becomes thumpless (see "Thumplessness," in





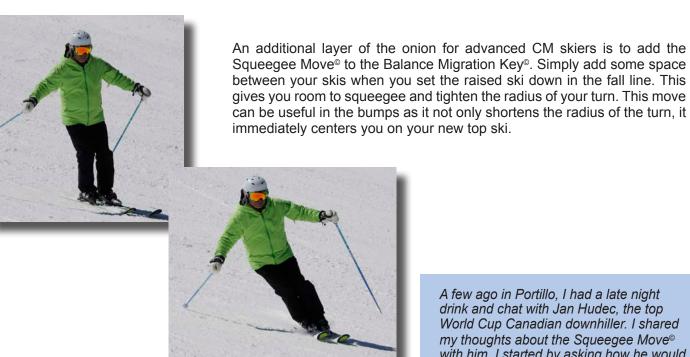
## 3) Advanced Perspective – Migration with Momentum (Terrain – groomed blue)

On an advanced level, your stance on the top foot is stacked on the heel of your Epiphany Pad<sup>®</sup>. As you move down slope to the Love Spot, you feel pressure sensations move forward off the heel toward the entire Epiphany Pad<sup>®</sup> and continue onto the ball of the foot. In the Love Spot<sup>®</sup>, you feel pressure on the whole foot.

As you pass through the Fall Line, you feel pressure develop first on your new Epiphany Pad<sup>®</sup>. As your skies continue across the hill you feel pressure and balance on the heel of your Epiphany Pad<sup>®</sup>. As you come to a stop your balance is entirely on your new high heel with your downslope ski a couple inches in the air. (See "the Power of the High Heel<sup>®</sup>," in Johnny C's Blog, clendeninmethod.com.)

The ultimate experience in this key is when you feel your balance move from heel to heel. Come to a camp to learn more about the Power of the High Heel.





World Cup Canadian downhiller. I shared my thoughts about the Squeegee Move<sup>©</sup> with him. I started by asking how he would like to save 0.05 second on every turn. I got his attention. With tequila in hand, I go up and showed him the Squeegee - explaining that it eliminated the weight shift (a move of the body mass away from momentum and gravity). The Squeegee allows us to pressure the inside ski before the next turn without moving away from our momentum or away from gravity. He liked it. He said he was going to try it in downhill practice the next day. He had a great season. I never heard back how he liked the

Squeegee idea but I'm taking some credit anyway!

Johnny C

## Jan Hudec Top Results

- 1st Downhill FIS World Cup Chamonix, FRA (2012)
- 1st Downhill FIS World Cup Lake Louise, CAN (2007)
- 2nd Downhill World Ski Championships - Are, SWE (2007)
- 3rd Super-G Olympic Winter Games -Sochi, RUS (2014); first Canadian in 20 years to win an alpine medal

## **Variations of Major Keys**

### 1) Touch to Squeegee

(Terrain – groomed green/blue)

Here's another look at the Most Important Move. Practicing this little magical **Squeegee Move**® trains the feet to re-center us on the inside/uphill ski. When the Most Important Move is combined with the Most Important Moment (the touch-tip), it guarantees a parallel entry into our next turn. The parallel entry (no stem) is the linchpin of the Clendenin Method.



Touch to Squeegee

Here's how you practice the Touch to Squeegee Key.

- 1. Find a gentle, groomed green/blue run.
- 2. Ski directly down the fall line at a moderate speed with your feet about six inches apart (Image 1).
- 3. Swing the pole into the pole target beside and halfway between the toes and the tips of your skis (Image 1).
- 4. As you feel the sensation of the touch in your hand and pass the pole (Image 2), tip the foot (next to the touch) and scrape it in. At first, the tip and the scrape are soft and gentle. The Squeegee (scrape-it-in) should have a consistent pressure and should be done so the boots and skis come together evenly and parallel.
- 5. Timing the scrape with the pole touch trains the feet to respond to the touch (not vice versa). This timing should become universal in all your skiing.
- 6. As you scrape and squeeze one foot toward the other, turn shape begins effortlessly (Images 3 and 4).

- 7. As you practice, you will develop an awareness that the inside/soon-to-be-uphill foot is a powerful tool for shaping turns. More tipping and pressure create a quicker, sharper turn shape. Conversely, a soft, gentler scrape create a mellow, longer, turn shape.
- 8. As you complete your turn (Image 4), notice that your balance migrates to the top ski. Balance remains on this ski until your next turn initiation.
- 9. This may seem like a lot of information for such a simple foot exercise. As you incorporate this move into your turn mechanics, you'll soon feel how you only need to scrape one inch to feel the effect of the Squeegee Move on both turn shape and re-centering—plus you'll have a perfectly timed pole touch.

### 2) Tip and Tuck

(Terrain – groomed blue)

This sequence is a great foot-eye exercise that trains the body to feel the effortlessness of turn initiation in the **Most Important Moment**. The Tip and Tuck also makes hard or irregular conditions more manageable, and you look cool doing it.



Tip and Tuck

Here's how you practice the Tip and Tuck Key.

- 1. On a groomed green/blue run, swing your pole to the touch point (see the Target Touch Point, p. 63).
- 2. As your feet pass the touchpoint, lift your downhill/soon-to-be-inside ski about four inches off the snow (Images 3 and 4).
- 3. Lifting the downhill foot automatically moves your core/center to the inside (Images 3, 4, and 5). This unweighting of the downhill/soon-to-be-inside ski creates a passive release of the weighted top ski (from its uphill edge to flat) (Images 3 and 4).
- 4. As your skis approach the fall line, tip and tuck the lifted ski next to the outside/soon-to-be-downhill ski. This tip and tuck creates a sharp, powerful turn shape (Images 5 and 6).
- 5. As you turn through the fall line, you should feel equal balance and edge engagement on both feet (Image 6).
- 6. Notice that John's core (shoulders and hips), arms, and hands are facing the path of momentum (Image 6) shaping his turn.

"Life is filled with opportunities for practicing the inexorable, unhurried rhythm of mastery, which focuses on process rather than product, yet which, paradoxically, often ends up creating more and better products in a short time than does the hurried, excessively goal-oriented rhythm that has become standard in our society. Making this rhythm habitual takes practice....

...The person who can vacuum an entire house without once losing his or her composure, staying balanced, centered, and focused on the process rather than pressing impatiently for completion, is a person who knows something about mastery"

Mastery, George Leonard, 1991

## 3) Lift to the Love Spot: Skiing with Intention

(Terrain – groomed blue)



This sequence is the key to smooth, effortless mogul skiing for all ages. This combines the Tip and Tuck Key and the Squeegee Key with the final important Key to great skiing—Looking Ahead.

Here's how you do it.

- 1. As you drift across the slope, touch the pole to initiate a new turn.
- 2. Gently lift the downhill/soon-to-be-inside ski just a couple inches as you pass the pole. Lifting the bottom ski will move your core downhill (Images 1 and 2), creating a passive effortless turn entry.
- 3. Place the free ski down in the Love Spot (the edgeless moment) (Image 3). Notice the slight space between the feet. This space leaves room for a Squeegee Move (Image 3).
- 4. As you scrape (Squeegee Move, Images 3 and 4), you will feel both skis working effortlessly in shaping your new intended turn (Image 4).
- 5. Stemmers are challenged to ski with intention, because they have to look down at their feet—eventually finding themselves on the Wild Pony.

## **4) Look Ahead and Commit** (Terrain – groomed blue)

Looking ahead and committing are the final important actions cued by the pole touch (Fig 1.). When this key is mastered, you can start to look ahead—down the hill for your next intended turn.





The touch cue commits core release to the new intended path of momentum. At turn initiation, my body is fulled flexed (Fig. 1), absorbing the pressure accumulated at the end of turn. I am in the final moment of engagement on my uphill edges. As I pass the pole (Fig. 2), I release my uphill edges and begin to glide in the Love Spot® (Fig. 3) into my new intended turn. Notice how the angles in my body are releasing (flexed ankles, knees, and hips extending) as my core commits and extends down the hill and into my new intended path of momentum. I have full extension in Figure 5 and I'm poised to absorb the pressures of my next turn.

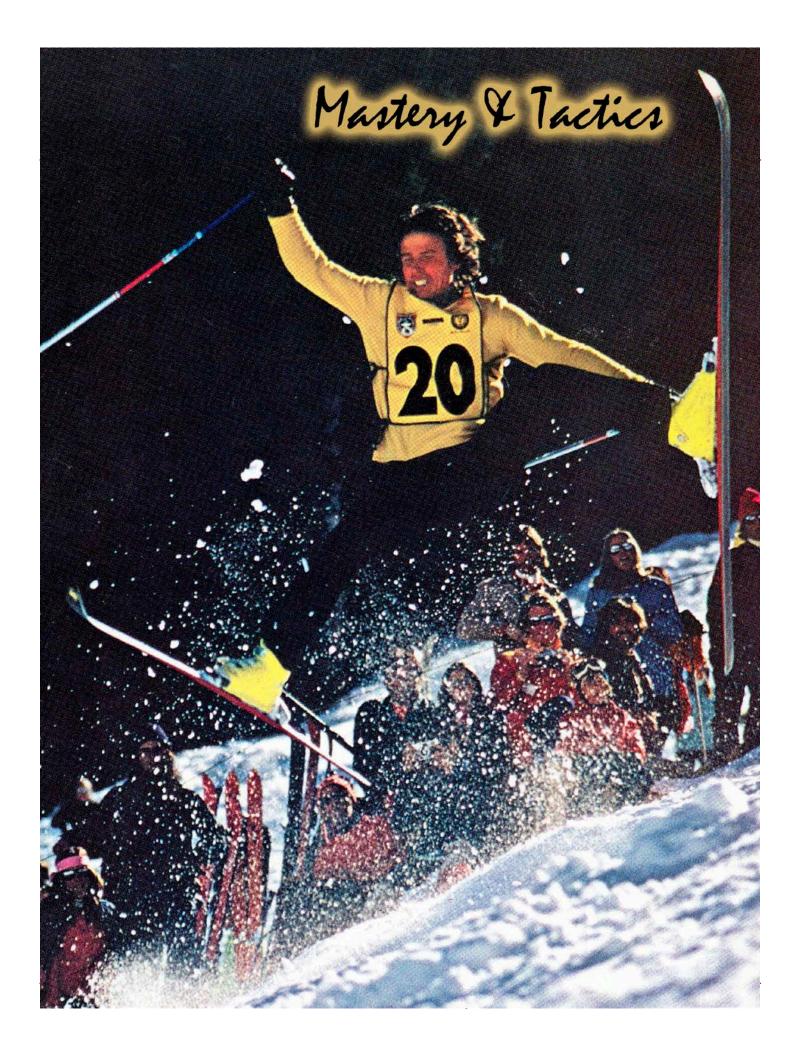
The confidence that comes with this Look Ahead and Commit Key allows you to visualize the future. Your current turn is already completed in your imagination; you're free to look down the hill to locate your next turn. Soon you will be able to see two or three turns ahead. This key enables you to ski with intention rather than reaction. Skiing with intention separates great skiers from average skiers, the masters from those on the Wild Pony Ride.

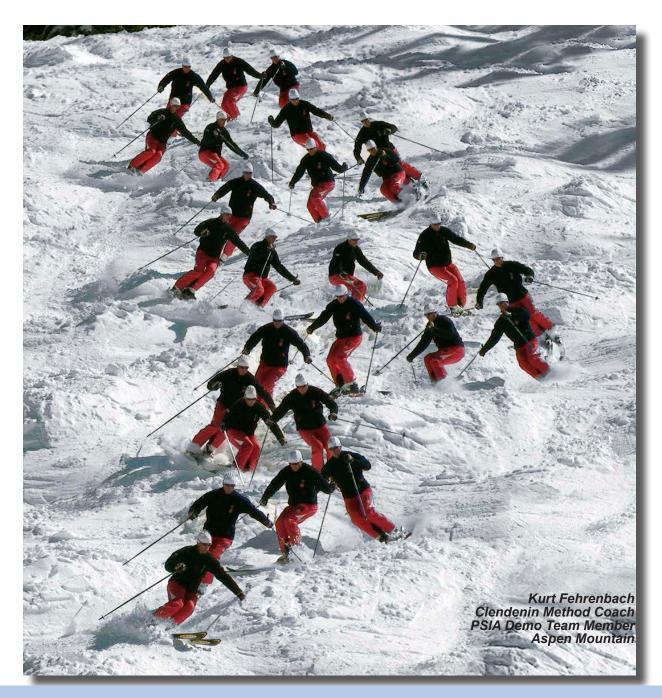


Commitment is essential to the quality of skiing described by Joubert (the great French Technician) in his book **Ski the New French Way**:

"The skis are held on their uphill edges, while the upper body plunges downhill. This causes the skier's center of mass to pass across the skis, effecting a smooth and automatic edge change."







"Watching a great skier absorb massive moguls by swallowing them with the entire body was a beautiful sight. It was a sensuously slithery dance of deep flexion followed by elongation. The skis followed the snow, arcing smoothly with no abrupt jamming of edges, no tips exploding into the air as they hit the bumps, no dramatic linked recoveries."

Stu Campbell's article on Joubert in Ski Heritage, September 2002

## Black Level 2 – Explained

Black Level 2 skiers possess more than mere mastery of balance and four basic skills. Along with these, and confidence to commit, a Black Level 2 skier understands and employs effective tactics.

Think of skills as how to do something and tactics as when and where to do it.

Many skiers envision mogul skiing as wild bouncing and jamming straight down the bumps. The Olympics foster this visual impression. Unfortunately, this jarring "zipper line" image often deters people from learning the magic of dancing down bumps in natural, effortless, fluid rhythm. Look at Kurt on the previous page. See how natural and relaxed he is-how his core is committed to his momentum, how his body flexes and extends with each pole touch. This flexion followed by extension is a masterful picture of pure, smooth skisnow contact.

In the effort to "get down" bumps in the straight fall line, most skiers start by stepping and hopping—in a word, stemming. Stems produce a "monkey-breeds-with-football" look—body hunched over, arms and legs wildly splaying down the hill in an attempt to maintain balance on the Wild Pony.

This is why we hear many baby boomers saying, "I don't ski bumps anymore because of my back and

knees."



Steve, Chino, Mark, and John in the bumps at Portillo.

I tell 'em, "Learn to ski!"

Black Level 1 skiers must internalize the Keys to reach Level 2. Let's consider typical Level 1 tactics.

Stemmers can't ski up the bump or even across the bump. This management tactic does not work when your technique is limited to a step around a bump or a hop over it. Stemmers and hoppers have to ski a more direct line; otherwise it is too far to step or hop. Because these skiers cannot control speed through drifting, speed management is relegated to hard edge sets. Hard edges truncate turn shape, cut off the top of the turn, and actually accelerate speed. Without speed management, tactics are impossible. Soon their monkey will be hanging onto the wild pony.

Black Level 2 skiers manage speed throughout the entire turn—indeed, throughout the entire run. They have the timing, control, confidence, and awareness and "own" the necessary skills to exploit terrain variations.

Mastering the Four Words<sup>®</sup> and the Keys to the Kingdom<sup>®</sup> opens a world of tactics not available to skiers who rely on stem-based technique. Mogul and all-mountain skiing become effortless.



## Black Level 2 - The Words in Action

We asked several Clendenin Method™ coaches to go before the cold eye of the camera to demonstrate Black Level 2 skiing with the Four Words® movement components.

Our Clendenin Method $^{\mathsf{TM}}$  (CM) demo skiers are high-performance mogul skiers.

We asked our cast to show how the Four Words<sup>®</sup> movements operate together in the real world of controlled, that is, managed, mogul skiing.

Each of our demo skiers has mastered drifting, centering, touching and tipping. They perform the moves instinctively, rather than having to think consciously through each move. Their movements are seamless. Our demonstrators focus on speed and balance management and on the tactics of efficient all-mountain skiing—conscious of when and where, while how is ingrained.

Although each sequence highlights specific aspects of the Clendenin Method $^{\text{TM}}$ , all show consistent similarities. For example, as you study this section, notice how each skier makes a commitment to the new turn by releasing flexed body-angles. This release sends the center-of-mass into the new turn. Maintaining ski-snow contact (especially with the top/soon-to-be-outside ski of the next turn) is an integral function of commitment to the new turn.



## Chino Martinez – Core Concepts of the Four Words<sup>©</sup>

Chino is a coaches' coach. He has trained several members of the PSIA Demo team and directs training clinics for new Clendenin Method™ coaches. During our summer camps in Portillo, after instructing all day on the mountain, he serves as "Director of Après Ski."

These pictures show Chino turning, seen from behind and from the front at the same point in the turn (Fig. 1). He is re-centered with edges softly engaged in a cross-slope drift. Notice that his core, bounded by shoulders and hips, is not involved as he swings his arm forward and flicks his wrist to **touch** and trigger the new turn (Fig. 2).





Chino is fully *flexed* as he absorbs the crest of the bump. His core is committed down the hill in anticipation of the new turn. He plants his downhill pole, ready to spring into his new turn. Chino keeps his outside/uphill arm extended in home position, ready to respond as needed. This arm position minimizes the amount of arm swing needed to make the next touch (Figs. 3 & 4).



Chino extends his core with his momentum as he tips his skis into the new turn. The inside ski is slightly airborne and tipped more than the outside, weight-bearing ski. Maintaining ski/snow contact with the top ski through the edge change is a maxim for a great ski turn. Skis and core both flow along the intended path of momentum. Because he is comfortable at this speed, he floats in the Love Spot®, relaxed on edge-less gliding skis with no body angulation—and no physical stress or strain.





We can't see his skis here, but know from his angulated body position that Chino is increasing edge angles to *drift*, shaping his newborn turn. Both skis are on the snow as he begins to re-center. One of Chino's remarkable talents is consistency; his hands, hips and shoulders are always relaxed; yet locked onto and facing his path. He is riding his horse in the direction he wants it to go!





**Centered** on both skis, notice that Chino is in the exact same position (a mirror image) beginning this new turn as in the first turn depicted above! That the sequence of shots is from two separate runs is a credit to Chino's remarkable consistency.



### Craig McNeil - The Breakfast Tray

Craig McNeil is a full-time family portrait photographer, published author, and a syndicated ski columnist for the Rocky Mountain News. He was a freestyle competitor in the post-John-and-Scott era. As a guest coach, Craig's presentation of the Clendenin Method  $^{\text{TM}}$  is both articulate and visually dynamic.

Craig's hands are CM reference-standard. Picture him carrying our wide breakfast tray down these bumps—he wouldn't spill the coffee! Craig's core is locked onto his path of momentum. He is in an edgeless floating drift, attention focused on the next turn.

With his tray balanced and core flowing along the path, Craig re-centers on his uphill ski. Notice the slight divergence in his ski tips as the uphill foot becomes weight-bearing. Re-centering on the uphill ski frees the light downhill foot to release effortlessly into the new turn.

Craig's center moves back over his heels, allowing ski tips to ride up the bump for speed management. The downhill ski is slightly airborne; his weight is centered on the uphill ski. Even though his skis still face across the slope, his core is anticipating and committing to the path of the new turn.

Hands relaxed in home position, Craig's core has now moved forward, allowing his ski tips to drop naturally down the mogul, maintaining all-important ski-snow contact. He manages his drift by progressively increasing edge angles, which create body angulation.





## Steve Henley – Body is the Piston for Flexion and Extension

Steve is without a doubt the best bump skier to come out of America's deep south. Steve's tall stature makes it immediately apparent how the body retracts and extends when maintaining consistent ski/snow pressure in the bumps.

Steve is extended in anticipation of his next turn. Notice he has few body angles in this tall phase of the turn.



As Steve crests the face of a new bump, he has flexed to absorb pressures at the end of the turn. The flex is apparent by the angles that have developed in his posture.



The touch is the key to release our grip on the old turn in anticipation of the new. We also release our flexed body angles in order to maintain resistance with the snow.

As Steve passes his point of touch he commits facing the direction of his new turn and extends into his path of momentum.



As he passes his pole touch, Steve has fully extended in his effortless glide through the edgeless "Love Spot®." This extension allows him to maintain ski-snow contact.



He is skiing effortlessly as he drifts into position for his new turn. Notice how his outside pole is swinging into position for his next turn from a tall relaxed stance. He is ready to flex and absorb the pressures of his new turn with his whole body.

## Lisa Heininger - The Teeter-Totter Moment©

Had we a contest among our coaches to determine who could represent the Clendenin Method  $^{\text{TM}}$  at an international ski instruction conference, Lisa would be a hot contender. Her sense for soft edge management is unmatched.

Notice how Lisa glides up the face of the bump without spraying any snow—a hallmark sign of perfect speed control through soft edges and turn shape. Her stable stance and balanced core allow her to find the place for her perfect pole touch, the apex of the bump.

As her feet pass the touch target, Lisa's balance is on the uphill ski. She has reached the top of bump and is poise at the Teeter-Totter (TT) Moment<sup>©</sup>. The TT moment is when the front of her skis are suspended and free to drop down the back of the bump. The TT Moment allows her to enter the turn effortlessly, as she tips her downhill ski moving her center-of-mass into her new turn.

Lisa's subtle release and core commitment allow her to maintain soft edges on the backside of the bump. Her skis are gliding through the Love Spot<sup>®</sup>!

Lisa begins her glide—edgeless and centered with control of her momentum. She directs her skis into the next turn. Notice the slight divergence in her ski tips. This is a sign that she has tipped her feet perfectly when first initiating her turn with an active tipping (alive inside/soon-to-be-uphill) ski. The effortless turn off the Teeter-Totter Moment® is what makes Lisa's skiing paint such a perfect CM picture—and one worth keeping in mind.





## **Peggy "Piglet" Harris – The Most Important Moment**

Piglet wins the award as the most devoted student of the Clendenin Method<sup>™</sup>. She came to us as a certified snowboard instructor wanting to improve her alpine skiing. In one year of auditing camps, she became an expert CM skier. She is one of our favorite coaches. Piglet exemplifies personality plus!

Both skis are on edge, drifting across the hill. Piglet's pole is touching the target to cue a new turn; the first beat of the Most Important Moment® in skiing. A close look at her stance (Figs. A and B) shows how she has committed her core down the hill. This commitment brings her ski tips down to maintain contact with the snow (Fig. B). Her stance is perpendicular to the slope as she enters the Love Spot®.



This picture (Fig. B) is a great demonstration of the Most Important Moment<sup>®</sup>. The slight separation of Piglet's knees indicates that she is actively tipping the downhill ski. The tails of her skis are slightly crossed creating diverging ski tips. This shows that she has been very active (alive) with her downhill ski as she tips it downhill into her new turn. This active initiation with the downhill foot allows her uphill ski to passively enter the turn. Incidentally, this photo illustrates a problem with twin tip skis for anything but "fakey"—backward—skiing. Twin tip tails will not bother a stemmer but can create problems (catching on each other) for an efficient parallel turn initiation from a narrow stance.



Piglet's new drift is centered on both feet – she is in the Killy stance.



#### Mike Farmer - Up the Bump

Mike is our most experienced Clendenin Method $^{\text{TM}}$  coach. He helped develop our programs from the get-go. His attention to detail stems from his ability to take a military helicopter apart and put it back together – in the dark.

Because Mike has drifted up the backside of the bump, he can manage speed without engaging his edges. He uses turn shape up the bump to control speed, one of the most important tactics in mogul skiing.

Mike has moved his torso from aft to forward as he passes the pole. This forward commitment of his core guarantees that his ski tips will maintain contact on the back side of the bump. Note that he is centered on his uphill ski ready to tip the downhill ski as he *passes* the point of his pole touch. The "conductor lets loose the baton flourish ..."

center down the hill.

Notice how the tipping of his light downhill/inside foot (the bow of inside leg) creates an automatic kinetic chain reaction angulating his body and moving his



#### Scott Brooksbank - From the Feet - The Kinetic Chain

Scott Brooksbank: I have been fortunate to know and ski with Scott for many decades. When we competed in the heyday of Freestyle, he was the only true triple-threat competitor; he could—and did—win in ballet, aerials, and moguls.

He is a rare breed for many reasons. One that stands out is the fact that his skiing is as quick and agile now as it was then. His extraordinary skiing along with the depth of his technical understanding has played a major role in developing the Clendenin Method™. Thanks, Scott.

You will find few skiers as quick and as smooth as Scott. In fact, one of the difficulties we have in the Camps is to get Scotty to tone it down. Here he skis at a very high level demonstrating the kinetic chain. His body takes shape from his feet. He checks speed with a silky edge-set, skiing up the crest of a bump. Despite abrupt forces generated by the edge set, Scott remains relaxed, centered, and focused on his next turn.



Notice the early commitment of his core as he faces his new turn (his intended path of momentum). Even though his skis remain directed across the hill, Scott faces down and into his new turn. As his center passes the touch target, he balances on the uphill ski, subtly lifting and tipping the downhill ski. This is a perfect high-end demo of the Teeter-Totter (TT) Moment<sup>®</sup>. We first experience the TT moment as the weighted top foot passes the touch point on top of the bump. When skiers first experience the patience to feel this effortless moment, they only have to whisper "Turn" and their skis pivot down the fall line. It's phenomenal. It works!

As Scott glides between turns, his athletic stance is in a reverse-angulated shape. His knees are not bent anxiously into the new turn but rather patiently poised in neutral over his feet. Gliding in the Love Spot®, he is ready to feather his edges to shape the intended path of his new turn. Floating on edgeless skis allows him to extend effortlessly maintaining resistance with the snow.



He is centered on both skis where equal edge angles on each foot create his naturally angulated stance. His body responds to edge angles created in his feet, giving us a perfect visual of the kinetic chain in action. Scott's effortless, energetic style is awe-inspiring even to the best of skiers.

A final look at Scott shows us perfect balance as he re-centers on his uphill ski. Notice the spray from his uphill ski covering his downhill boot.

#### **Inclination with Angulation**

In all cases, the primary and first source for edging (creating an edge angle) is always the feet. Movement in the feet—either from side to side or edge to edge—creates a kinetic chain reaction up the body. The kinetic chain starting in the feet goes from the feet to the ankles, ankles to the knees, knees to hips, and hips to core. Try this in front of a mirror and watch it happen. From a tall, relaxed stance with feet about hip-width apart, slowly put both feet on edge like you would if you were skiing. Notice how your head naturally remains vertically in line above your feet but your hips are out to the side. Your body is **angulated** and it happened without thought. Wow, the Kinetic Chain—something that happens naturally in skiing—a wonderful thing!



Angulation



Inclination with Angulation

When skiing speeds increase, forces and intensity increase. Great skiers incline or lean against this increased force to maintain the edge resistance needed to shape their turns. You cannot incline at home because you'll fall over. Inclination is dependent on forward momentum and centrifugal force. The key technical point is that angulation (created from the initial foot movement) is always included into a great skier's inclination. Inclination without angulation is called banking. Skiers who bank their turns often find themselves skidding and losing control of their intended turn. As a good skier becomes more confident finding balance from sensations in their feet, inclination will come naturally. Inclination stacks muscle on bones easing flexion moves for a more relaxed, smoother ride, especially when making full round turns in the bumps.



## Johnny C – Stacking Bones

Heaven is skiing moderate bumps fast. The Clendenin Method $^{\text{TM}}$  makes it so easy, I feel like I'm cheating.



Some technicians might call my inward lean "banking." I call it relaxing on edgeless skis as I glide into my turn. The better my Killy stance, the more my muscles "hang" on their stacked bones. The more I can relax, the easier it gets.



As my skis begin to drift, I let my inside/soon-to-be-uphill ski slide beneath center (Most Important Move®). Re-centering early stacks my bones, which is the secret to a long life in the bumps. There is no spray because my skis are softly edged when re-centering. I achieve this high degree of inclination by skiing the "dark side"—the outside of the troughs. More on the "dark side" in Volume III, the next book.



The snow spraying over my outside boot is coming from my uphill inside edge. I am inclined with angulation and free to flex in the next picture. Looking down the slope, I am anticipating my next turn as my core connects with my new intended path of momentum.

Relaxed on stacked bones, I need only a slight flexion to absorb the pressures at the end of the turn.

As I pass the point of touch, I twitch the downhill foot, releasing my big-toe edge. This passive release of my edges allows me to effortlessly commit and glide down the hill. With skis matched and parallel I can easily extend forward and down the hill to maintain ski-snow contact at the top of my new turn.

"If you start tall in the bumps, you have more reserve to flex and absorb."

– Crystal Newton

No spray, no edges, no body angles – just gliding along enjoying my ride in the Love Spot<sup>®</sup>. Bones are stacked, allowing me to gently feather my edges as I shape my new turn. My muscle mass is along for the trip.

Like the Rolling Stones—if you're not tired, why quit? Skiing bumps is a "gas – gas – gas."



Early re-centering (the Most Important Move®) is evident when the snow spray covering the outside boot is coming from the inside ski. The reason my feet are together isn't because I am holding them there. They are together because the outside/soon-to-be-downhill foot is light (non-weight bearing). I let it hang close so I don't have to go fishing for it.

Notice the downhill boot is now covered with snow as I check speed angulated and balanced over my uphill edge. Re-centered, and managing my speed with the uphill edge, I'm solid to touch and tip.

It's all so simple once you get it—Welcome to the Kingdom!



#### Johnny C - Keys for Speed Management in the Bumps

The following speed control techniques render mogul skiing balanced and effortless.

Note: these speed control tactics cannot be executed with a stem entry because the skier cannot stem or hop from this cross-slope angle coming up the bump.

#### 1) Scrape Speed: Practice on Groomers

On a groomed blue run, check speed before each turn with an aggressive engagement of the uphill top ski. Make short radius turns in the fall line, braking with the little-toe edge of the uphill ski until you can maintain constant speed for multiple turns. With each check, you should feel the sensation of balance and repeating pressure on the pad of the little-toe side of the uphill foot

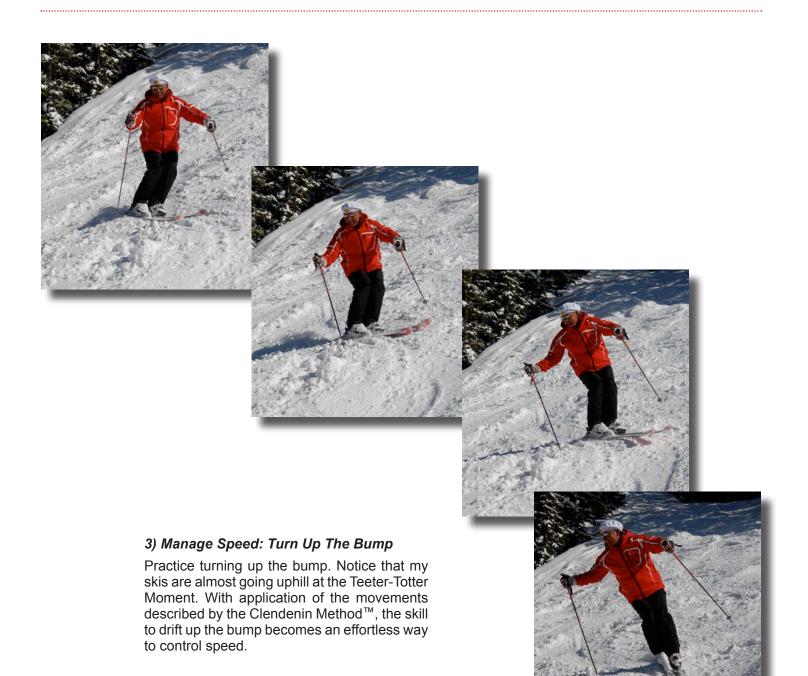
(the Epiphany Pad®). Continue the drill until you can maintain a constant speed for multiple turns on steep groomed terrain.

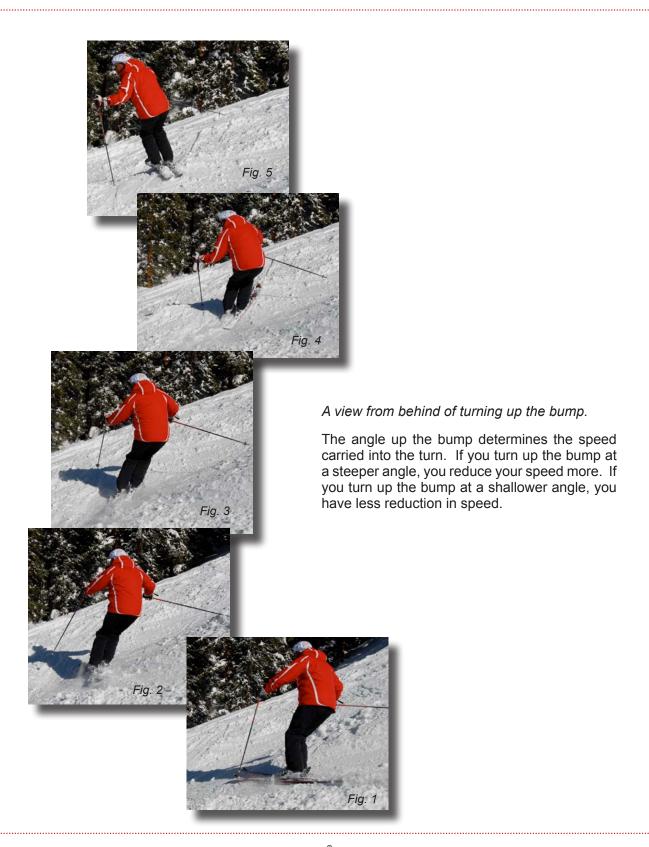


On an easy bump run, use the same technique to scrape speed as you did on the groomers. Slide into position for turn initiation at the top of the bump.

Using the uphill ski as a gentle brake is the most efficient way to control speed in the bumps. As a bonus, this move also puts you in position to initiate the new turn effortlessly from a balanced, top ski. Notice how the snow covers my bottom boot. The spray is coming from my top ski as I balance on it to break my speed on this steep bump run.

When you combine a series of turns by alternating pivot-turns, bump to bump, sliding down the back of each bump, and scraping speed with the uphill ski (like linked hockey stops), we call it **cascading**. These turns typically have minimal shape. Cascading is a skill useful to tame steep plateau bumps.





#### **Black Level 3**

We have yet another performance level, subject of the upcoming Clendenin Method  $^{\text{TM}}$  Volume III .

Black Level 3 skiers have fully mastered tactics and The Four Words® skill-building progression. They have logged enough mileage in moguls to become as confident in difficult terrain as most skiers are on groomed blue slopes. Transformation from Black Level 2 to Black Level 3, put simply, takes place as challenging terrain morphs into Green Light terrain.

The Clendenin Method coaches depicted in the Level 2 photo sequences are all Level 3 skiers but are demonstrating Level 2 skiing. They are not skiing at their upper limits in the sequence, but are capable of turning up the volume any time they wish.

## Up the Bump "...and all ye need to know"





#### **Skills Inventory Revealed**

This analysis will help you understand what your Skills Inventory revealed.

#### 1. I would like to become a better skier so I . . .

- . . . feel safer.
- ... look better.
- . . . understand exactly what I am doing.
- . . . can ski bumps, steeps, deeps and more of the mountain.
- ... enjoy it more.

The desire to improve is a powerful tool, whatever the motivation. Improvement allows one to ski terrain only dreamt about, more safely, and looking good all the while! The result, and a goal of this book, is that skiing becomes more enjoyable.

#### 2. I like to warm up with a fast run.

Speed masks balance and technique problems. Think of a spinning top: as long as rotation speed is high, the top spins stably on its point, but as rotation slows, the top begins to wobble and soon topples over. High-speed skiing generates the same kind of fleeting stability.

On the other hand, skiing slowly is one of the best ways to identify aspects of technique that needs change. Learning how to make slow, precise turns is part of the process through which improvement occurs.

Many World Cup athletes warm up with slow, precise turns, gradually increasing steepness of terrain while maintaining deliberate and, above all, constant speed. In fact, many top skiers warm up with slow, deliberate, technically perfect turns.

A fast "warm-up" to the bottom may be exhilarating, but does little to prepare you for a day on the mountain.

## 3. I can ski fast on blue runs and can negotiate black runs reasonably well, but get thrown around in bumps.

This is another version of the "fast warm-up." You remain unaware of technical flaws while skiing fast on groomed blue runs. All flaws emerge with a vengeance as terrain becomes three-dimensional, like moguls or off-piste (natural) terrain. Deterioration on challenging natural terrain is an indication that a skier lacks a basic technical foundation.



## **Skills Inventory Revealed**



# 4. When I ski bumps, I can make a few OK turns, but then gain too much speed and "bail out."

This suggests reliance on aggressive edging in the effort to control speed. Aggressive, hard edging accelerates the skis, kicking the torso back and forcing weight onto the heels. Hard edging limits ability to control speed with turn shape.

Centered soft finessing edges are key for maintaining balance and controlling speed when shaping an intended turn.

#### 5. I use a firm pole plant to start the turn (Fig. 1).

This translates as: "I use a pole *plant* to shift my weight, which helps me start my turn," as opposed to using the pole *touch* as the cue to release edges. This statement reveals a need to acquire the sound fundamentals of *parallel* turn entry on groomed terrain before attempting to master bumps.



Many skiers, often following bad advice, find themselves struggling to maintain their style as they move from groomed runs to moguls. Their groomed technique begins to falter as they hop, step, or jump, stumbling down the bumps.

On groomed snow, skiers commonly attempt to maximize speed. In bumps, however, focus shifts to speed *management* (*primarily how to slow down, but also how to speed up*). Aside from this change of focus, technical fundamentals for fast groomed skiing and for efficient mogul skiing are identical.





# 7. Sometimes I get caught in a traverse across the bumps and it feels like I'm out of control (Fig. 2).

There is a dramatic difference between *drifting* on soft edges and *traversing* on hard edges. Hard edges can thrust a skier back on his or her heels, which forces a traverse straight across the slope. When static edges are locked into this back-leaning, thigh-jarring traverse, they are difficult to release.

Drifting on soft edges, allows edges to release or engage as needed to avoid deep troughs or the ridges of dinosaur-back moguls. They soften the ride reducing stress on back, knees and thighs. Soft edges are a secret for all-mountain longevity.

## **Skills Inventory Revealed**



#### 8. I don't know if I make stem turns in bumps.

If you experience any of the difficulties described in Items 3 through 7, you are stemming.

The stem that is often hidden on fast groomed runs becomes blatantly apparent in bumps. Most long-time, proficient stemmers have learned to make out-of-balance, inefficient and awkward technique work. They can make it down black diamond runs but they know they don't look good or feel safe.

In its most aggressive and scary form, the stem becomes a hop—what we call an "air stem."

## 9. I know the differences between stem and parallel turns, but sometimes have trouble making parallel turns in the bumps.

Knowing the difference between an out-of-balance stem turn and a centered parallel turn is positive. Such awareness indicates you are on the verge of a breakthrough. Given a sense of direction, you are in position to begin rapid improvement. Focus on the Keys and you'll be free!





#### 10. I feel OK in moderate bumps, but not when it gets steeper.

Fear of steepness indicates a lack of bone-deep trust in technique. Defensive instincts still rule. Psychological considerations aside, bumps make skiing physically easier. The bigger, rounder, and steeper the moguls, the less energy required to let go and flow effortlessly into each turn.

With trust in solid fundamentals of bump skiing, which are the same solid fundamentals as for all skiing, you'll learn to love the big ones, in part because fewer hackers hack 'em up!.

Clendenin Method<sup>™</sup> grads love the big, round, fun ones.

"When riding, letting your horse run feels safer once you know you can slow her down."

– Johnny C

#### **Skills Inventory Revealed**

#### 11. I hop to get over a bump and into the next turn.

This is a habit many self-styled expert skiers use when entering a turn in bumps. It can be functional but as a habit, this air-stem is a flaw and indicates the skier still has the flu.

Hoppers use only one edge of each ski, the big-toe edge. These skiers literally hop from one big toe edge to the other big-toe edge, from one hard edge-set to another hard edge-set.

Air stemmers appear to be respectable skiers to untrained eyes, but they are stuck on their hopping plateau and must learn to use little-toe edges to move on. As top Aspen pro Scott Kane says, "Good skiers use two edges; great skiers use four!"

The most difficult challenge for many hoppers is the psychological setback when returning to gentle, groomed terrain to re-build technique. Accepting the reality of habitual inefficient movement is the first step toward improvement. Once out of denial, re-building comes quickly.



#### 12. I use hard edges to control speed.

Using aggressive edges to control speed is the most common mistake in mogul skiing. Hard, aggressive edges accelerate the skis into the next turn by cutting off the finish of the current turn. Acceleration makes speed control difficult.

By contrast, speed control is effective when managed by drifting on soft uphill edges, scraping (reducing) speed with the uphill ski.

#### 13. I enjoy watching great skiers ski.

All great skiers do! The world's best skiers—World Cup athletes—study videos of winning runs by the world's best skiers. It's a key element of World Cup training for all national teams.

If you make it a habit to study skiers, you are on the path to improvement. Watch from the chairlift. Analyze both good and bad skiing. Identify the bad; imitate the good.

Visualization, like imitation, is one of the learning styles that weaken as age takes its bite. Kids love to watch and follow. Maintaining a childlike curiosity and keeping the doors of perception open is an important learning style.

Clendenin Method™ Camp coaches walk the talk, or in our case, ski the talk. Our best students are attentive not only to descriptions of exercises, but also watch the coaches demonstrate correct movement. Observant skiers learn the most.



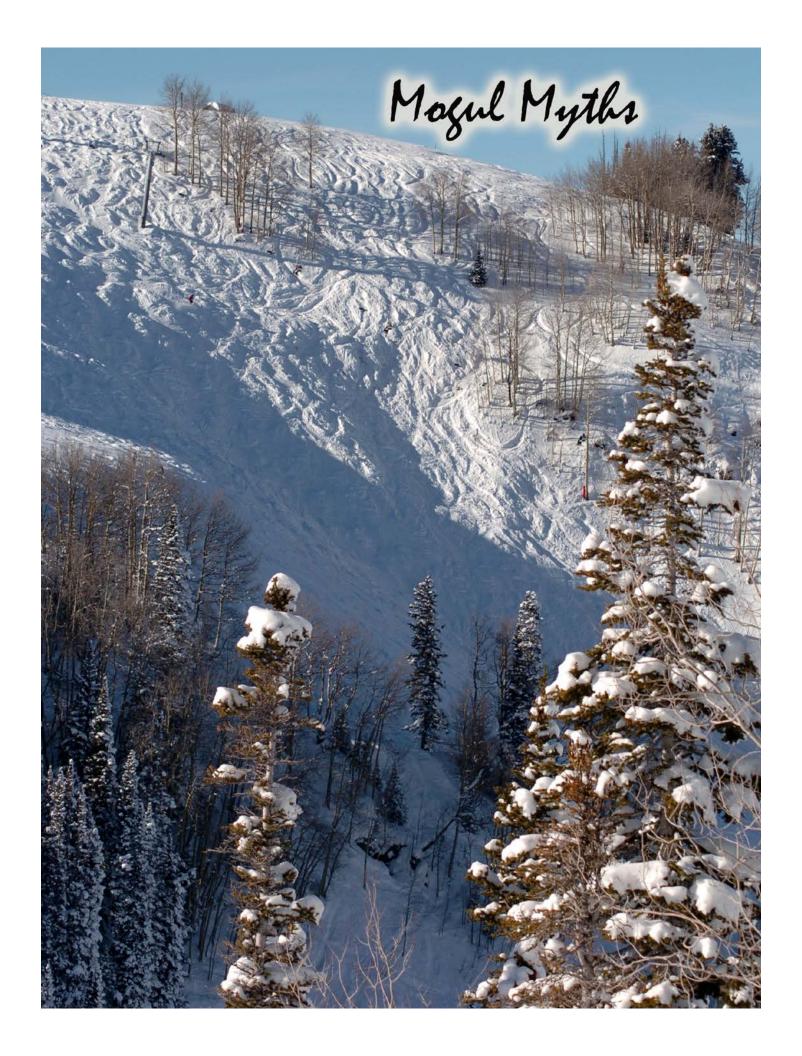
A sight to behold: Franz Klammer carving on his inside ski!

## 14. I eat bumps for breakfast.

I remember watching a major golf tournament on TV several years ago. The player had to make a short putt to win and the announcer said, "No problem, he eats pressure for breakfast."

I liked the phrase so much I use our "bumps" version as the slogan for the Clendenin Method  $^{\text{TM}}$  Camps. This thinking promotes a positive mental attitude, which is half the battle.





## **Mogul Myths Debunked**

Many performance barriers have become enshrined in mogul mythology and hardened into dogma for legions of skiers. Fortunately, the same myths illustrate how hidden habit stifles progress.

Anyone who has taken a bump lesson from a friend or read an old article about mogul skiing has likely heard some of the following pearls of wisdom. Though well-intended—and definitely hardened into lore by repetition—none of this advice creates sound, fundamental technique.

Let's go through the myths as they relate to Black Level 1 skiers, or, more accurately, why they prevent skiers from achieving Black Level 2. Here, we describe the problem, and suggest a remedy.

## Mogul Myth 1

"You have better balance when you ski with a wide stance."

One of the most important skills for all-mountain skiing is the ability to alternate balance from one foot to the other. Good skiers accomplish this from a narrow—not wide—stance. A wide stance creates stability but reduces agility. Skiers might feel safer and more stable in a wide stance like they would if driving in a Hummer but they will never turn like they would in a Porsche.

A wide stance limits options and agility. That Hummer won't roll over, but it also will not corner like a sports car. People are taught a wide stance in skiing because of the carving craze, where a wide stance is needed for high edge angles. We do not use high edge angles or a wide stance for all-mountain skiing because they are not functional for finessing ski edges or alternating balance from foot to foot.

Try this: Stand with your feet about 12 inches apart. Step from foot to foot. Do this several times. Now place your feet about a fist width apart, roughly 4 inches, about where they are when you simply stand in everyday, nonskiing situations. Step from foot to foot in this narrower stance. Notice how easily and quickly you can move from foot to foot when your feet are close.

We encourage a stance that is as narrow as *functionally* possible. As we shall see, a fundamental flaw prevalent in mogul skiing—indeed, in all ski-

ing—is the stem. A narrow stance helps banish the stem and, as a bonus, looks better than an artificially wide stance. Think Kim, Stein, Jonny, Plake, Jean Claude, or Bode.



#### Mogul Myth 2

"Ski with one foot forward of the other."

Worse than the admonition to ski with a wide stance is the added advice that includes an intended lead change, called "scissoring." Scissoring results from making turns with too much forward lean, coupled with the habit of controlling speed with the downhill ski.

As though skiing in a wide-track stance was not bad enough, some "old school gurus" still teach scissoring to maximize edge engagement.

Scissoring delivers no benefits on modern equipment. In the days of leather boots, 220-cm straight skis and long thong bindings, racers scissored to maintain edge hold on hard snow. They had no choice. On shaped skis and plastic boots, however, deep edge engagement for carving is easy.

Skiers who arrive at Clendenin Method™ Camps sporting a pronounced scissor movement are usually long-time skiers who carry the habit over from the Seventies, or even earlier.

Skiers who habitually attempt to control their speed with their downhill ski have never experienced the value of the inside/uphill

ski as a weight-bearing tool. Whenever skis are separated longitudinally—scissored—balance must remain predominantly on the outside, downhill ski. This promotes a stem entry into the next turn, along with a host of timing and balance problems at the "most important moment in skiing." (See Keys to the Kingdom®). Scissoring disappears as our students begin to manage speed centered on the uphill ski.



#### Mogul Myth 3

"Hold your hands way out in front and keep the upper-body facing down the fall line."

This advice is intended to help skiers maintain an aggressive, confident attitude in bumps by assuming a forward stance and countered (always facing down the hill) upper body position.

It is true that many mogul skiers end up "in the back seat" with bodies twisted across the skis and facing uphill, but this seemingly intuitive pointer does nothing to correct the problem and, in fact, can actually cause the problem.

#### Here's why:

 Holding arms excessively in front and down the hill produces an artificial, forward-leaning position. Though appearing stable, this forward-leaning position limits the skier's ability to respond to imbalance (Fig. 1). Constant forward pressure on the boot tongue leaves but one option for balance adjustment—back to the back seat (Fig. 3)!

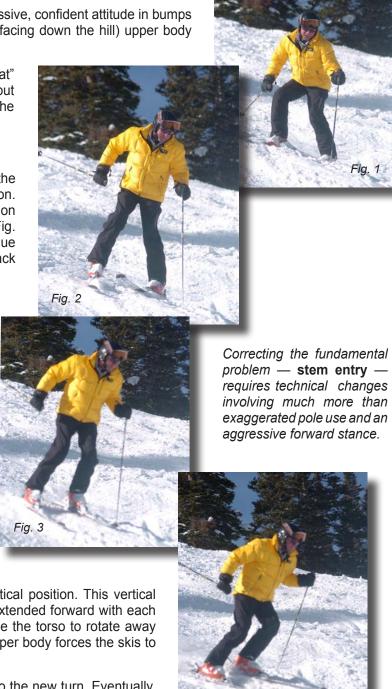
• This quick-fix pointer cannot work when the pole is used to initiate a stem turn. The stem is the major problem (Figs. 1-4), not the hand position. In order to shift weight for a stem turn, the skier must plant the pole hard (Fig. 1), with authority and strength. This results in a rigid plant that inhibits the hand from flowing back to home position in front of the torso (Fig. 3 & Fig. 4).

From pole plant to pole plant, hands fall progressively farther behind, eventually pulling and rotating the upper body into the back seat (Fig. 3 & Fig. 4).

Planting the pole to shift weight onto a stemmed ski (Fig. 1 and Fig. 2), is the heart of the problem. The correct sequence is to touch the pole to cue the tipping of the light downhill ski.

Poles that are "way in front" are usually held in a vertical position. This vertical "home position" requires that arms and shoulders be extended forward with each pole plant. Any time we extend the shoulders we cause the torso to rotate away from our momentum and up the hill. Rotation of the upper body forces the skis to pivot and skid.

Together, twisting body and skidding skis block flow into the new turn. Eventually, the skier loses control and hops on a Wild Pony Ride.



The Clendenin Method<sup>™</sup> encourages skiers to hold hands comfortably even with the torso and 12 inches or more to the side, as if holding a wide breakfast tray, or better yet a yard-wide 2 x 4, against their waist (see Killy Stance in the Keys). The touch cues the tip. This neutral hand position allows us to use our options as needed to maintain optimum equilibrium.

**Home position** has pole baskets held behind boots pointed away from the body and off the snow. Flicking the pole forward with a supple arm swing and smooth opening of the wrist brings the pole basket in front of the torso. This flowing swing and flick allow the upper body to remain quiet and athletically connected to the path of momentum.

To find home position, my friend and mentor, Cal Cantrell asked his students (including me) to stand with arms relaxed at our sides with pole tips pointing toward the tails of the skis and away from our body. He had us swing our hands and arms out to the side of our body. From this relaxed position, our arms are wide enough to hold a wide tray—each hand about 12 inches to the side. Shoulders, hips and hands form a central core unit. This core unit faces and stays connected to our path of momentum. Hands, hips and shoulders turn together as one unit.

Cal Cantrell—who happened to ski like Killy—said, "This is not just a coffee tray. This tray needs to be wide enough



to hold coffee, toast, jam, eggs, bacon, orange juice, pancakes, and a cinnamon roll. The point: it is thin and wide, like holding a  $2 \times 4!$ "

Cal said, "Except for the arm swing and wrist flick for the touch, do not move hands or torso from this basic home position when you ski."

A flowing pole touch from a relaxed home position effort-lessly cues the feet, and skis, allowing the skier to flow freely down along the path of momentum into each new turn. Acquiring efficient pole technique elevates skiers to a new level.

#### Mogul Myth 4

"Press shins against the front of the boots and pressure the tongue."

This is a variation of Mogul Myth 3 and the effects are much the same, although our focus here is more on boots than on hands and arms. We call pressing or resting against the tongue of the boot the "lazy position." A skier can get away with this lazy position on groomers, but not in moguls or other off-piste terrain.

Not only is the resting position unnatural and poorly balanced from the get-go, the ability to make balance adjustments fore and aft as terrain dictates, is severely compromised. If shins are already pressed hard against the boot tongue, the skier has nowhere to go. If he needs to move forward, the ability to adjust is already spent.

Balance in bumps is best maintained from a neutral position in which joints rest at the mid point of their range of motion, rather than at either extreme—full extension or flexion. With a closed, fully flexed ankle, there is nothing left with which to absorb terrain.

Fully certified Aspen pro Don Lemos puts it this way: "With excessive forward pressure, the shock absorber is used up. Every bump gets sucked up into your stomach or back."

The Clendenin Method™ looks for a tall stance in the boot, with shins neither pressing nor resting against the tongue, with equal pressure on all sides so that pressure applied in any direction generates a response from the ski.

"Control speed with a strong big-toe edge on the downhill ski"

- or -

"Hit the edges hard to maintain consistent speed in moguls"

Hard edges make hard rides. Soft edges allow the skier to drift, using edges at will to manage speed.

Hard edge sets usually occur at the bottom of the turn, when the skis are across the fall line. If a hard edge is set exclusively by the big-toe edge of the downhill ski, the abrupt edge-set usually generates a stem, often an ab-stem that results in skidding.

If aggressive edging is performed by both feet, the result is a hop.

Neither result is good.

In both cases there is convergence of skis in the turn transition. Anytime a "V" is formed with tips together and tails apart, we have a problem. A stem causes loss of ski-to-snow contact at the beginning of the turn, which also removes any snow feel for the top of the turn. There can be no consistent speed control without ski-to-snow contact—laws of physics won't allow it.

All of this leads to what we call the "Wild Pony Ride!" In general, technique based on hard edges in bumps is negative.

The Clendenin Method<sup>™</sup> encourages speed management by drifting with soft, progressively managed—feathered—edges. Consistent speed management is achieved by drifting on the uphill edge of the uphill ski. This skill requires the skier to center early on the uphill ski, rather than hang onto the big-toe edge of the downhill ski.





#### Mogul Myth 6

"Hop over the crest of the bump"

This advice comes from those who try to imitate what they see in competitive mogul events. Anytime skis lose contact with the snow, the skier loses ability to manage speed.

It is a mistake to think that competitive mogul skiers hop. On the contrary, competitive mogul skiing is largely about maintaining contact with the snow.

An athlete entering a deep trough at high speed makes an aggressive proactive flexion move that is somewhat like the way a World Cup downhiller makes a pre-jump to avoid being hurled up and out when cresting a dropoff at 80 mph.

Picture the mogul athlete quickly lifting ski tails up to his or her butt—the retraction—in order to force ski tips down into the trough for ski-snow contact. The competitor then immediately extends the whole body to maintain and maximize snow contact.



Hop = Air Stem

Athletic retraction—extension—retraction is different from a hop. Its specific purpose is to maximize ski-snow contact. The hop, a habitual and inefficient turn entry mechanism, is no more than an air stem.

While we do not advocate that recreational skiers attempt to ski bumps with an aggressive competitive technique, we do encourage maximizing ski-to-snow contact with retraction—extension in order to manage speed.

#### Mogul Myth 7

"Plant the pole early, in front of the bump"

Poles should not be used as braces to lean on or to shift weight, as in a stem. They should be used to cue edge release. Early pole plants do not cure problems related to a stem. Advice like this does nothing but confuse a stemmer, and divert attention from real issues. First the stem needs to be cured on groomed terrain before this advice serves a purpose.



"Look down the hill, at least two bumps ahead."

Actually this is not bad advice, but it is often given prematurely to Black Level I skiers, who still have the Skier's Flu. Before it becomes sound advice, it requires instinctive trust in one's skills and tactical abilities that comes only in Black Level 2 parallel skiers. Our body's survival system will allow us to look ahead only if it trusts the security of the moment. If a skier is hopping or stemming and thus moving out of center, the body becomes tense, not trusting. Asking someone to "look ahead" while his or her alarm systems are blaring is not a good idea.



Stemmer focusing on feet

Once skiers gain full possession of the Four Words® and the Keys to the Kingdom®, we add the fifth and sixth words, commitment and tactics. The new Black Level 2 words describe concepts necessary for off-piste skiing, especially moqul skiing.

For Black Level 2 skiers, the pole Touch cues *commitment* and

Tipping. Commitment is an intentional, pro-active movement of the torso down into the intended path of momentum.

This commitment is possible after the Keys are fully assimilated and automatic. Only when the skier achieves a state of confidence in their technique can they relax enough to "Look down the hill".

Skiers looking to improve their skills often concentrate on how they move, but they'd also be wise to focus on how soon to move. Anticipation can allow for smooth movement and save time...

"Perception: the Commander of Our Movements," George Twardokens, **The Professional Skier**, Spring 2006 Great skiers can see up to five turns ahead when relaxed "in the zone." For example, our Black Level II skier may suddenly spot a blind drop off several turns down the run. He reduces speed to control momentum, but perception and action raises no alarm as he begins automatically, and without conscious thought, to make the required speedmanaging turns. Thus the ability to look ahead increases the security and flow of the zone

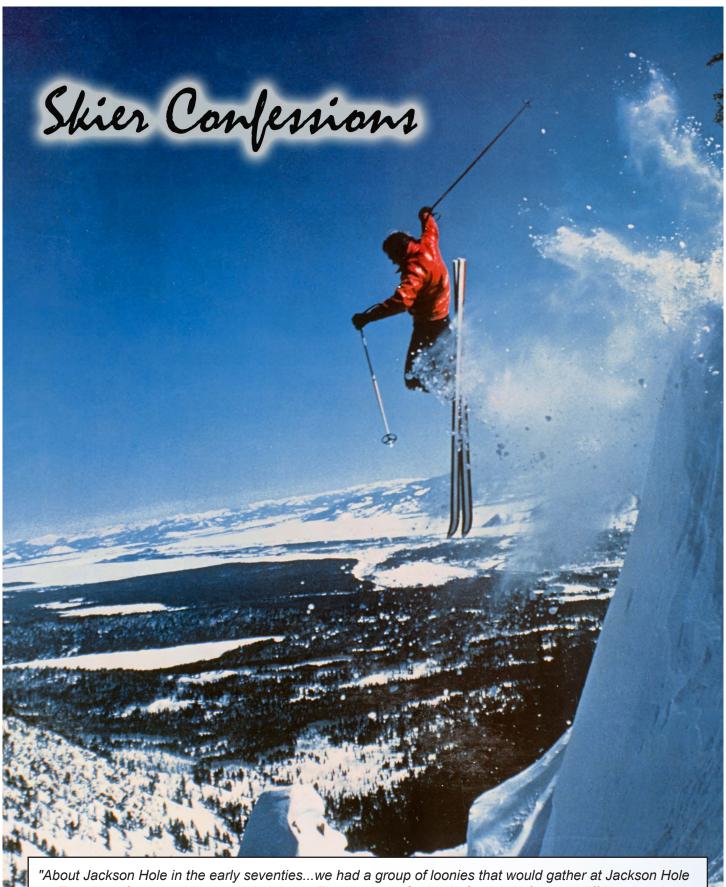
My Northwood Academy ski coach, the legendary Warren Witherall, like Joubert, possesses an uncanny ability to paint word pictures of performance. Here's the best description of "the zone" I've come across:

"Consider running down a dry stream bed—one consisting of variously shaped boulders and rocks. Think for a moment how difficult this activity is. The boulders are unevenly spaced. Some are round, some pointed. A few have flat tops, but most are tilted. Each requires a different angle of attack and departure. This physical activity is extremely complex. How do you progress down the stream? Do you consciously angulate? Do you think about unweighting or leading with the outside arm? Do you employ reverse shoulder because Stein does? Of course not. You just run. Your body balances quite naturally, though each step is a different length and each landing place on a different angle."

- Warren Witherall, *How the Racers Ski*, 1972

Skiers who stem or hop without commitment and confidence often leave their backsides sticking up the hill in a defensive posture. Riding in the back seat across a mogul field is like riding a wild pony over rocky terrain without control. Errors compound and a chain reaction begins that drives the skier out of the line, or worse.

An experienced Black Level 1 skier must understand The Four Words® and practice the Keys to the Kingdom® to reach Level 2, then advice like "look down the hill" becomes appropriate. Until the foundations of great skiing become ingrained, skiers should remain focused on what is directly beneath their skis.



"About Jackson Hole in the early seventies...we had a group of loonies that would gather at Jackson Hole on Tuesdays, for some big mountain leisure. The spot was Corbett's Couloir (a famous cliff-like drop between two giant rocks). We would hike up, then skate down like hell, and bingo, 75 feet of freedom. Today they call it Extreme Skiing...we called it Tuesday."

- Bil Bostick - Renaissance Man and Freestyle Star in the late 70's

#### **Skier Confessions**

## Jonny Moseley

Several years before he won gold, Jonny and I had skied in a film called *The Blizzard of Aahh's* by Greg Stump. I was amazed then at the quality of his skiing. That Jonny became Olympic Champion was no surprise to me.

More recently, Jonny and I, along with some other friends and their children were skiing on Aspen Mountain

We began a relatively easy run down Aspen Mountain—easy, that is, until we reached the Ridge of Bell.

The Ridge was the birthplace of mogul competition and arguably the most famous mogul run in the world. In 1970 Dick Barrymore staged the first "Hot Dog" Mogul event there for his feature film *The Performers*. The Ridge is one of the steepest, most demanding bump runs to be found anywhere.

As our group approached the top of Ridge, the kids spied a crude, hand-made jump. It was not big but the landing was in waist-deep bumps over an edge so steep that the run seemed to disappear. They begged Jonny for a jump.

Natural-born showman, Jonny immediately started climbing back up the mountain. He said, "Sure!"

He could not see beyond the takeoff from where he'd stopped. While climbing, he checked out the lip of the

jump. The kids and I gathered near the takeoff.

I'll never forget what happened next. Jonny zoomed across the lip, jetted up and out, twisting sideways high in the air and spinning around twice performing his signature double donut roll. Like a huge cat, he landed between two waist-deep bumps, neither stopping nor even slowing down.

We could glimpse his figure gracefully disappearing and then exploding into sight, soaring over ridges of moguls and disappearing again, only to shoot in the air as if nothing were there. On the last explosion, he gracefully drifted his skis sideways, creating a cloud of smoke while coming to a stop on the side of the crowded groomed run that intersects the bottom of The Ridge.

I've seen good skiers attempt to ski the Ridge fast, but the Ridge almost always wins. Not this time!

Jonny Moseley is the quintessential image for Black Level 3 skiers.



Jonny and John Olympic Mogul Event - Torino, Italy

## Weekend at Johnny's

By Everett Potter

I've been lucky enough to ski in Aspen every year since 1994. And it seems to me that I've heard the name "John Clendenin" mentioned virtually every time that I've visited. His name is invariably invoked by a local, who speaks as if they're letting me in on a state secret. Sure, they'd admit, there are a lot of great instructors in Aspen, including whomever I was skiing with at the time. But they'd add that a guy like Clendenin was something else again. So when December 2004 rolled around, it seemed like it was high time to see what the big deal was all about.

I must admit I approached the Clendenin Method™ Camp with more than a little skepticism. Unlike many of my peers, I had come to the sport of skiing late, when I was about 38. And I have met and listened and followed a legion of ski instructors across the country as I took group lessons, private lessons and clinics. I had to. Because unlike a lot ski writers, I had a lot more motivation when I signed up for these courses and clinics than simply writing an article about the experience. It was called survival. I couldn't ski, so I needed to throw myself into such situations, for self-preservation, to simply keep up, and, ideally, to get better.

I moved on to ski clinics in places like Aspen and Taos and Jackson Hole. These were intensive multi-day clinics with the so-called masters of the ski world. You know their names. Some of them are *bona fide* masters indeed and remain friends to this day. All of them had something good to offer. But after a decade of being force-fed the latest method and style, I was just a tad jaded. I just wanted to ski better and to feel in control on every turn. Period. And I couldn't imagine that Clendenin's Camp would be substantially different.

What I discovered was a devoted team with a quiet passion who began their class indoors, on a ski simulator. After a couple of hours of low-key chat and a session on the simulator, we moved onto Aspen Mountain the next day. Clendenin himself hovered sagely over the proceedings that first night but came into his own on the mountain, a potent combination of grin and authority.

Now I initially thought that his mantra of drift, center, touch and tip was just another four words that I would learn and quickly forget within a couple of days. But it didn't work out that way. The progression in those words began to make a lot of sense to me. On the mountain, step by step, the words dug in even deeper, with each turn I made, each mogul I slipped over with ease. And as I began to understand each one, I began to loosen my grip on a few bad habits. In fact, unlearning the old stuff was harder than taking in the new. But I had to make room for it.

On the mountain, John may come across as a tough guy with a big smile, and he's a good teacher to boot. But then there is his method and that takes it all to another level. In the parlance of the day, let's call it John's four-step program. It sounds easy, but like all such things, it isn't easy at all. But it does make sense. More sense than anything else I've learned about skiing in the last decade.

And doing it in John's company was ideal. John pushes the drills. He will take you places where you will be repeatedly challenged. And he has a kind of rascal spirit that relaxes most anyone and allows him to gently chide those who hold back.

When I skied with John for a couple of days in December, I found him to be a classic type-A coach, getting me moving in ways that I didn't know I could move. But I felt like he followed me around all winter. I heard his voice in my ear when I traveled to St. Anton and Alta, drilling me on the four words, helping me stay on top of my game.

For a very long time, I've been looking for a way to kick my skiing securely up to a level that deserves to be called "expert." Not just on one or two runs on a good morning, but consistently, every day that I head out on the snow, regardless of the conditions. And I think I've found my answer for that, at long last, in the Clendenin Method  $^{\text{TM}}$ . It's the clearest explanation I've ever had of what I need to do to get down the mountain with confidence, style and safety. And try as I might, I haven't forgotten those four words.

Everett Potter has written a weekly, nationally syndicated column that has been distributed by The New York Times Syndicate since 1988. He is also a weekly columnist for USA Weekend magazine as of February. 2004.

He is a contributing editor for Ski and a monthly columnist for Diversion. Potter is a regular contributor to Endless Vacation, Conde Nast Traveller UK, Outside, Forbes FYI and Bride's.

## Interview with Johnny C

With Everett Potter, Published in "Everett Potter's Travel Report," October 2007

Okay John, let's start with a silly question: "Why take lessons?" So many skiers I speak with tell me that they can only get away for one or two ski vacations a year. These are short getaways, they explain, and taking a day off, let alone two or three, for a class doesn't sound like fun to them.

Look at any sport and you see two group types: one those that are addicted and always want to improve or two: those that have the basics and find enjoyment without a desire to improve. A guick story: I have a friend whose wife took up golf a couple years ago with some friends. For some reason she felt she was above lessons. When their friends started going on golf trips together she asked why she and her husband were never invited. Well the truth brought tears... she is a dingdong on the golf course —no etiquette, no understanding of the rules or the pace of play, and without the desire to improve—a slug. Anyway this is true in most sports. Particularly in skiing the risk factor diminishes as you get better. The risk factor may not be an issue in sports like bowling, badminton or curling, but I still have never been able to relate to the lack of desire to improve in any sport.

Thanks to the first group, those addicted to skiing, I have plenty of business and besides, our lessons are fun.

#### What's the resistance to taking lessons?

Stupidity – If Tiger takes lessons, so can we! The best have always been coached. Besides looking better, good technique makes you a safer skier, the mountain opens up, and it becomes a lot more fun. Of course finding the right coach is always an important issue.

## Tell me how you came up with the Clendenin Method. What was its evolution?

Based on a competitive career and a couple decades of successful instruction, I developed the Clendenin Method™ (CM). My method attracts Baby Boomers because of its versatile approach to skiing, with a focus on control and confidence by managing speed. First-time skiers breeze through the method while advanced skiers develop technique that can be applied anywhere. I am equally concerned with students' understanding of skiing, as well. To bring skiing into a more familiar realm, CM

is based on "Four Words" to describe a skier's actions from one turn to the next. A skier utilizing the Four Words improves quickly and is able to handle a greater variety of terrain. The theory behind CM is that modern technique and equipment should not be limited to high-speed carving, big air, and terrain parks. Less athletic and less courageous skiers can enjoy safe, effortless skiing with speed control anywhere on the mountain, including moguls. Everett, you even commented that the Four Words® stuck in your brain and helped.

## What makes the Clendenin Method<sup>™</sup> different?

The Method is based on the fundamentals of how all great skiers in all disciplines have skied for decades...I simply broke it down to four words. The Clendenin Method  $^{\text{TM}}$ , even though great for beginners, really shines with more advanced skiers or the majority of existing skiers.

In CM we want control first. Clients need to ski bumps slowly without stemming before we give them a hall pass to go play. Understand that speed can be a crutch for bad technical skiing. Speed on the groomed runs masks flaws that get downright dangerous in the bumps. If you're skiing correctly (not stemming), bumps become easier and easier, and speed becomes less of a factor. It's like learning to dance with gravity...you can slow dance or fast dance, tango or waltz.... it's learning the different dances that's fun.

Okay, so let's say I'm a skier who goes between blues and blacks but never feels totally comfortable on the latter. What will it take to make me feel good on the blacks?

Consider the Clendenin Method™ as an anti-stem school. We work on developing the inside/uphill ski — first to eliminate the stem, then for turn and speed management. Purge the stem (I call it skier's flu) and skiing becomes smooth and controlled while reducing the effort required. The exploration of what can be done with the inside/uphill ski in terms of all-mountain skiing has not been touched by any other ski teaching methods. For example, you feel a lot more comfortable riding a horse through the forest when you're sure you can slow her down and turn her left and right. The inside/uphill ski is like the reins on your horse.

#### **Skier Confessions**

## You always talk about how necessary it is to feel comfortable in the bumps? Why?

I personally feel it's a lot safer and more fun to ski the less crowded areas of any mountain. Something like 80% of skiers and snowboarders stick to the groomed runs, including people who are pushing the speed limit. That's a bad combination for everyone's safety. Speed is a false and dangerous measure of ability. I like to take my clients away from these freeways into what I call the Kingdom – moguls, powder, and the natural fun areas of the mountain. In order to do that, we need to establish a comfort level in all terrain. We need to know how to ski bumps.

In your years of skiing and teaching, you've seen a lot of skiers and teaching methods. If you look out on Aspen Mountain from your perch in the gondola on a given morning, how good are the skiers you're watching? Do you see talented skiers or people in survival mode?

It's amazing how many skiers who consider themselves solid intermediates or experts, use a stem entry for their turns. Skiers who think they look great on groomed runs often look like they're riding a wild pony in the bumps. They just can't figure out why their technique does not work in the bumps. It's because they don't have any.

Don't get me wrong. There are plenty of great skiers on Aspen Mountain. It's sad that due to poor technique, the majority of skiers are missing out on the best fun on the Mountain.

# You're also a golf pro. What are the connections, if any, to your ski teaching?

The PSIA (Professional Ski Instructors Association) is underdeveloped compared to the PGA (Professional Golf Association). I belong to both. For example, there isn't a brand identity in ski teaching. In the golf business you have famous teaching brands. You have David Ledbetter, Jim Flick, Hank Haney, and more. Butch Harmon, Tiger's old coach, happens to be the model I use. He doesn't travel much and I don't like to travel. He has his own school in Las Vegas and people come to him for his camps and his coaching. That's the way I've set up the Clendenin Method™ Camps, and the Ski and Board Doctors (indoor simulator school) here in Aspen.

## Okay, tell us about the Clendenin Method™ Camps in Aspen?

The Camps are specifically geared for mature skiers wanting to ski bumps, crud, powder, and any expert-level terrain safely and with as little effort as possible. So much of the ski industry has been focused on carving and cliff jumping with the advent of shaped skis that we have forgotten the majority of skiers just want a safe, enjoyable experience, without being intimidated. The Camp takes intermediate to advanced skiers to all corners of Aspen Mountain allowing them to develop at their own pace with like-minded skiers. With the Clendenin Method™, video analysis and limited group size, the Camp encourages skiers to work closely with their coaches and each other in order to change basic movement patterns. Most campers leave thrilled.

# And in summer, you head down to Portillo. What makes that special?

The CM camp in Portillo provides an opportunity for the whole group to ski with each other during the day and socialize at night... AND to keep doing it for a week. Needless to say, the pace is mellow. Portillo is beautiful—sunny skies above the tree line overlooking Inca Lake. It's a fabulous place to be on the slopes in September.

## Do you have plans to do a DVD of the Clendenin $Method^{TM}$ ?

Absolutely, the book is a great place to start. It's required reading for our Camps. The DVD adds a new dimension to the book making technique assimilation that much easier. It's even better at a lesson or camp where you get lots of feedback and interaction on the snow. Then take the DVD home and review it to really anchor what you've learned.

Our goal with our program and all our teaching aids is to provide each and every student every opportunity for a breakthrough ...period.

Everett Potter has written a weekly, nationally syndicated column that has been distributed by The New York Times Syndicate since 1988. He is also a weekly columnist for USA Weekend magazine as of February, 2004.

He is a contributing editor for Ski and a monthly columnist for Diversion. Potter is a regular contributor to Endless Vacation, Conde Nast Traveller UK, Outside, Forbes FYI and Bride's.

## One More Word: Stubborn

By Peter Keelty

I had no idea it was a test, nor any hint my skiing was to change at the most basic level.

#### A Tough Case

John came to Deer Valley with fire in his eye and an ambitious plan. He meant to transform his Clendinin Ski Method™ Coaches' Manual into a guide for skiers wanting to roam the whole mountain, but who are stuck on the groomed or, maybe worse, who "get down anything," but at risk of bodily stress. Would I like to contribute?

#### Absolutely!

We went on the mountain so that John could show me the basic elements of the CM. I was acquainted with the material, having helped John with multiple revisions of the original Manual, but this was the first time we'd gone to the snow to explore his Words in practice.

He explained and demonstrated the move represented by each of the FOUR WORDS®: Drift, Center, Touch and Tip. My initial impression was that he had a unique way to describe movements I had been making all my life and, to save time, I asked John to watch while I performed a turn that would show him that I had a good understanding of basic turn elements, whatever they were called. He smiled his dangerous little smile and said, "Go ahead."

I launched aggressively down the fall line and laid both skis hard over to the left, driving into the big-toe edge of the right ski, which began to carve a deep trencharc. Balancing for an instant on the little-toe edge of the uphill ski, I released the carving edge of the downhill ski and snapped it hard to the right, into the new turn. The explosive force of the edge release propelled me into the air in rebound and I landed already carving on the big-toe edge of the new downhill ski, deep into the new arc before even reaching the fall line.

In my world, the object of efficient technique was to maximize speed. I was known around Deer Valley as a good skier because of my ability to etch trenches. That, I thought, should prove the obvious point—I could carve with the best. Let's get on with it!

John pulled up and gently burst my bubble, saying, "Peter, that has nothing to do with what I'm teaching."

He showed me each move at slow speed and with great patience helped me begin to understand that at the heart of The Clendenin Method $^{\text{TM}}$  is the way the uphill ski is used to manage speed. I'd never thought about that.

I struggled through that first "born again bumps" session, pounding knees and back into agonizing pain as I slammed down the fall line, jamming tips into mogul walls and crashing down sheer front sides into trench after trench before losing control and careening across the hill in what John calls "The Wild Pony Ride." Perhaps the worst agony came from fear that someone would see my performance from the chair; my self-esteem was as endangered as were my knees. John's succinct comment that it wouldn't hurt if I learned how to ski both angered and inspired me. Thus began my FOUR WORDS® adventure.

We spent some more time practicing softening edges. John recapped the Words—drift up the side of the mogul using a soft edge to manage speed, center progressively on the uphill ski during the drift, touch the pole to cue the new turn and tip the downhill ski to release into the new turn—and demonstrated several perfect turns in hard, irregular, seriously black-diamond bumps.

John patiently talked me through the stressful afternoon, which ended positively with my execution, at last, of a couple or three passable turns.

#### Uh Oh!

I realized that there was something technical that I, a locally recognized hot skier with decades of diverse technique and about 4000 days under my bases, could not do. That old tools had atrophied. That I had more to learn.

The first step of any 12-step recovery program is to admit the problem. The same is true for big-toe edge skiers. I was fortunate to accept the reality that there can be no progress in face of denial. This is a problem facing many "good" skiers and I was no exception. I'm grateful to John for helping me through this crucial first stage, which, he tells me, is one through which many strong skiers must go. He left, promising that I'd soon see skiing in a new light, saying, "You're about to experience a paradigm shift."

I spent the next 10 days drifting about Deer Valley on soft edges, pondering the paradigm comment and preparing for John's return.

#### **Skier Confessions**



#### Ah Ha

On the second trip, we invited my better half and ski student of a dozen years to join us. John would focus this day on Sue Ellen, who promptly informed that there was no chance that she would ever even think about skiing bumps. "Not in this life!"

Undeterred, John spent the next two hours working with Sue Ellen on gentle terrain, concentrating in turn on each of the four moves. The session culminated with several long runs in which Sue Ellen followed John through an all-purpose exercise I later came to know as Tip and Tuck.

What impressed me most as I watched John work with Sue Ellen was how quickly she understood his suggestions and how each exercise was simple, clear, easy to understand and, maybe most important, how non-threatening the process was.

Sue Ellen's skiing improved almost as much in those two hours as in the 1200 or so hours she and I had spent working on her technique over 12 years.

John gave us our homework assignment and departed for Aspen.

Sue Ellen and I spent our next few weekends cementing and expanding her understanding of the FOUR WORDS®. She continued to improve, to internalize more and more the basic moves, to begin to move beyond the point of having to think through every turn.

We ventured into increasingly 3-dimensional terrain, dipping in and out of bumps, one and two turns at a time. We explored linked turns returning when necessary to non-threatening terrain to polish this or that move. Sue Ellen quickly discovered that formerly daunting aspects

of skiing the groomed—like short-radius turns on steep terrain—no longer posed difficulties; that she was rapidly developing new skills, stability, dynamic balance and confidence.

I recall vividly standing with Sue Ellen on the side of a steep groomed slope at Deer Valley. We waited and watched as Stein swooped past. I was able to help her observe exactly how Stein, the Master of masters, managed his edges during one of the most beautiful drifted turns I have yet seen. He placed the apex of the turn about 6 feet directly in front of us and it almost seemed as though he floated by in slow motion, except for the powerful "whooshing" sound his skis made as he came and went. Most remarkable of all, Stein's race GS skis left virtually no track in the snow.

Sue Ellen was ready now for new challenges and trusted more with each session her growing ability to handle terrain that but a few weeks earlier she had vowed never

to enter. We moved offpiste. We went to the bumps.

As a bonus, coaching Sue Ellen during this period accelerated my own transformation.

The Clendenin Method<sup>™</sup> works.



#### **Epiphany**

The power of organizing elements of skiing into four simple concepts, each described by a single Word, became immediately evident. Not only has John understands the mechanics of top-level skiing in ways that allow him to expand a skier's ability in both 3-D and groomed terrain. This skill tends to be overlooked in many coaching systems. John's presentation ensures the skier is never intimidated by terrain, coaching style or difficulty of task. The process is as seamless and progressive as the end result; supple, flowing, effective and powerful.

Despite my short exposure to The Clendenin Ski Method™ under real coaching conditions, I eagerly accosted friends and strangers during the next few days to try passing along my new knowledge. As crude as my efforts were compared to John's masterful presentation.

#### **Skier Confessions**

results were amazing. Several particularly tough cases among our loose group of Deer Valley regulars made breakthroughs.

Not that I was finished with my crash course just yet; soon I was on my way to Aspen to attend a full Clendenin Ski Method  $^{\text{TM}}$  Camp.

#### Off to Camp

I felt reasonably prepared by then to make a success of the Camp, but harbored lingering concerns and fears not only about diving into Aspen Mountain's infamous mogul runs, but also about whether I'd perform credibly in front of a group of fellow students without sacrificing status as a skilled pro. I decided to keep my mouth shut, assume a low profile and comforted myself that I was unlikely to be the worst skier in the group.

That this admittedly somewhat arrogant high-speed groomer addict should reach such a point of humility alone attests to the power of The Clendenin Method $^{\text{TM}}$ . As it turned out, I was to need all the humility I could muster that first morning.

One member of our group was Mary, a 67-year-old grandmother and ski fanatic who has attended several of John's camps. I confess to some intimidation and much amazement as I watched Mary confidently negotiate terrain that many professional instructors would have found challenging. I'm not suggesting that Mary is ready for the World Cup, but she skied difficult moguls with confidence, authority and even dashes of brilliance. Fortunately, the special attention John had devoted to my technical transformation carried me through and I was able to acquit myself with reasonable dignity over the next two days.

We spent several hours each morning practicing basic drills designed to cement automatic moves that would be put to the test each afternoon during bumps runs on progressively more difficult terrain. Two things impressed me during this process. First, and this proved a source of excitement I haven't felt in skiing in years, I was improving exponentially with each run. John explained that I actually had all the skills; what I had needed was to look at technique differently and to refine the skills relating to little-toe edge control that form such a powerful foundation for centered skiing.

Equally impressive was the way John's coaches watched each group member with focused eyes, returning that member—or the whole group, if necessary—back to flat, "green light" terrain at the first sign of back sliding. One of the most difficult aspects of coaching is that, for coach and student alike, there lurks a constant tendency to revert to old ways when terrain or task proves too demanding. This was unlike "press-on-no-matter-what" methods of ski instruction. It was the exact opposite of the "one-size-fits-all" dog-and-pony act that too many teachers employ.

By the end of camp, I was actually enjoying lengthy stretches of bumps that a few weeks before I would have avoided altogether. I used the rest of the season to work on basic skills, terrain and tactics. I spent countless hours skiing exclusively from little-toe edge to little-toe edge, making dozens of linked turns on one ski and skiing bumps, deeps and steeps at Snowbird.

Most surprising of all, my newly centered technique improved even high-speed groomer arcing, to the point where many friends with whom I ski regularly noticed something new in my skiing and positive strokes increased.

What happened? I passed the test . . .

Just as John promised, I had made the paradigm shift from big-toe emphasis on speed maximization to little-toe speed management (which, by the way, can include maximizing speed as well as shedding speed). I've never skied better.

After all this, John confessed that much of the process had in fact been a test to see whether I could effectively work with him on this book. It would have been impossible, he confided, had I not opened my mind and embraced The Clendenin Method™. John honored me by saying that he could think of no other person with the skiing, coaching, writing and 30-year personal relationship background to successfully collaborate on the book he envisioned.

I am honored to be included in this project and grateful for the effect on my own skiing.

Sue Ellen has since skied black bump runs at Alta and skied them well.

This book will change the way you look at skiing.

Peter Keelty, Salt Lake City, April 2005



#### **Jonny Moseley**

Olympic Gold Medalist - Moguls

John has style for days. He is legendary for not just winning Freestyle competitions at the height of the sport but for doing it with style and charisma. Of course he has just gotten better with time. I skied with him in the movie "Fistful of Moguls" among other times and he was ripping. He is so smooth... he has mastered the art of effortless skiing.

His technique through the moguls is buttery smooth and efficient. I have seen him tirelessly develop his Clendenin Method to help everyone else learn to ski effortlessly forever, and he has it down pat. I'm stoked to see him taking it to the next level. Go John! You're the man!

- Jonny

## **Coaches' Testimonials**

Weems Westfelt – It is a well-known principle of motor learning that the shorter time between performance and feedback the better chance of retention of desired performance. With the ski simulator there can be no shorter time, the feedback is instant...the retention is perfect.

**Chino Martinez** – The ski simulator and the Clendenin Method<sup> $\mathsf{TM}$ </sup> has changed my skiing career and life. From day one my skiing has improved dramatically. Now...I use the simulator and the four words with all my clients.

**Kurt Fehrenbach** – Demo Team Member - when I first arrived in Aspen, one of my boyhood heroes John Clendenin invited me to ski on the ski simulator. After the lesson on the machine I didn't really have a feeling as to how it affected my skiing until I went on the hill the next day. From the first turn everything for me had changed for the better...

I was centered, balanced, and feeling the top of the turn. Thanks Coach John, for the brilliant teaching systems and the opportunity to be one of your greatest supporters.

**Tim Bickell** – Of all the specialty programs, clinics, and camps I have coached or participated in over the last twenty years, the Ski Doctors and John's Clendenin Method™ Camps have proven to be the most valuable. The simplicity and clarity of the method has brought my personal skiing to new heights.

Charlie MacArthur – PSIA Demo Team Coach and Dad: I have collaborated and coached with John for years and state unequivocally: The ski deck program in combination with the Clendenin Method™ teaching system (the Four Words) is the best investment any student can make at any level of proficiency; whether they favor Alpine/All Mountain, Snowboarding or Telemarking. What are you waiting for?

#### Same Time Next Year:

February 2009

Dear John, Bil, Steve, Lisa, Mark, & Tory:

John – Thank for the Ballet Show very impressive, very sexy!

Bil – Thanks for the machine [simulator] work, your great sense of humor & instruction!

Steve – Great instructor, lots of fun, thanks for your Southern hospitality & patience!

Lisa – Great enthusiasm – I'll never forget "Pac da ca," lots of great tips

Mark - Great accent - great coach, very patient

Tory – You really helped me with my issues in the bumps – Thanks for the Confidence!

After three straight years of clinics – every year we have improved our skills, learned new tricks, met and made new friends, and last but not least, are amazed and enchanted by Mr. Clendenin's skills, instructions, and endearing personality and a World Class Skier!

See you next year, same time, same place for our next level of improvement.

Sincerely

Lou & Dena McMurray

## Clendenin Method<sup>™</sup> Grads Speak

I was terrified of bumps before this camp and that is no longer true. I can now ski bumps, and will definitely be back. I loved the instructors and the camaraderie of the camp. The ski simulator was great because it allowed you to focus on your feet in a "safe" environment.

Yuki Kanaya

[Thank you] for a welcoming atmosphere, a well-organized program, and an exceptional value in skiing instruction! I couldn't believe the degree of personal attention and hours spent on the hill for the price, as well as a totally new way to "be" on the hill and approach this sport. I was skeptical at first, but I am now convinced and having fun with it.

- Greg Bill

Felt like I "skied" Corkscrew (Aspen Mt. double black diamond) for the first time. The coaching was right on—one thing at a time. I have beat myself to death for 20 years in other PSIA bump clinics. In my wildest dreams I never thought I could achieve and love bumps after only three days. What great coaches! — *Mike Simmons* 

Thanks for two great days of skiing, and for your patience and consistency. People recognize you for your great skiing ability, but I don't think they fully recognize you are as equally skilled (and passionate) when it comes to teaching. Kudos to you!

- Kelley Guest

I made real, tangible progress and your camp met all my hopes and expectations. I don't make those compliments readily.

-Young Amano

I've taken lessons for 20 years. I've learned more in one day with you. In all the years I have lived in Aspen and skied, I have never been so excited and learned so much as I have in John's Clendenin Method Camps. The way John explains the concept of a turn, it's easy, efficient, and it works.

- Lynda Green

[John] is a master at analyzing a skier's technique and then articulating the precise adjustments that he needs to overcome his problems and ski correctly. It is so much fun to be able to ski the Ridge of Bell and Jackpot (double black diamond runs) in control.

- Donald Weiss

It pays to have coaches who love to teach. Best teaching value on the mountain. Beats other camps I've been to.

- Dr. Bill Wesson

This is the best clinic I have ever attended. There was a very good mix of theoretical and practical. John's coaching on the ski simulator brought new awareness of my skiing.

- Marcos Hatada

I liked the friendly, easy-going coaching staff and the way that was combined with innovative and profound ideas.

- Jim Pettegrew

One of the most memorable adventures of my life and I will be forever grateful. I can't tell you how well organized and seamlessly executed your trip was.

- Chris Evans

The Camp did a wonderful job of breaking skiing down to the fundamentals and clearly explaining them. Changing instructors gives fresh, new ideas. – *John Lundin* 

My ambition has always been to become an "all-terrain" vehicle on the slopes. My problem was that I was getting old, my knees were a painful mess, and I felt a like an awkward geek in the bumps. Then I met Clendenin and learned his method. Now I am skiing a hundred days a year, virtually pain free, and my wife is no longer embarrassed to ski with me. John and the Clendenin Method get my vote, why not give it a trv.

- Gerry Goldstein.

After 20 years of skiing, spread over 45 years, I finally have an understandable concept I can work with to improve my skiing on all-terrain.

- Paul Ireland

After getting on the Deck myself and experiencing your techniques, I've become a true believer. I think we could work together to develop revolutionary techniques of rehabilitation.

- Grav Brazina, M.D., F.A.C.S.

Great personal attention! Excellent instructors – amazing skiers, and great people. Ski Simulator training was very helpful and a must for all skiers.

- Celina Belizan

Of everything, I was most impressed by the care you and your staff have put into developing the Clendenin Method. I've run enough programs in my own career to know that a successful result requires a huge amount of work upfront that the client never sees. It's clear to me that you and your staff have put in this effort, and it shows in the Camp experience. You have developed an integrated, teachable, and most importantly, a learnable program that will greatly benefit any skier willing to put in the necessary effort in their own behalf.

- Allen Gutheim

You are not a ski doctor, you are a ski savior!! Worked on some of the turns on Saturday and WOW!!!! I will keep working on the drills daily. It really did change my skiing style but more importantly the ability. Bumps are now my friend. Look forward to doing it again.

- Craig Cormack

I thought that hearing the same basic principles of skiing through four different instructors in two days was wonderful. Each had a different take or approach which acted as reinforcement. The Ski Simulator is a must! The video analysis is a wonderful tool. The family and I will definitely be back next year.

- Marty Fein

Great coaches and teaching system. There was tremendous enthusiasm from all coaches, and fun all around. Willingness of John and other coaches to go one-on-one to straighten out my problems really helped.

- Michael Conniff

Let me simply say that the Portillo trip was an incredible experience. JC truly out did himself. The professional way he ran the camp was impeccable. His concern for each and every individual, skiing and otherwise, was beyond what anyone could have even begun to reasonably expect.

- Tom Pittman

I am now telling my friends not only that I can not wait to go skiing again, but more importantly, for me to feel that desire is more than I would have ever thought possible. And now I have a new goal - I actually want to be good enough to be skiing 'off piste', not just to stay on the groomed slopes!

- Susan Townsend

When you are retired, 65 and ski at least 70 days a year, it's important that you continue to improve. I enjoy all kinds of skiing--on mountain, back country, Masters racing, hele, telemark--and I go to a Clendenin clinic every year because it helps me so much with all of them. And, John's clinics are for skiers of any skill level. There's only one Ski Doctor in the US.

- George Fesus



Just wanted to let you know your ski lesson keeps on giving. Since our day in December I have been skiing the runs I have been skiing for years. I really experience a significant difference in the way I'm skiing those bumps. I know all four elements (touch, tip, drift and center) are essential but since the lesson I have to rank the touch (hands ready and properly planting the pole) as #1. It sets everything else in motion or more specially in RHYTHYM. With the poles, I feel I have a choice..... touch them properly and go with gravity or plant them and fight gravity. Thanks again for a fabulous day. The better I ski, the more fun I have.

-Jeff Price

I wanted to tell you that skiing with you in your mogul academy was one of my best days ever on the slopes. The Clendenin Method is truly a simple, yet highly effective tool that will catapult anyone's skiing to the next level. Anyone, at any level or age looking to gain invaluable skills to master bumps, crud, powder and more should look no further than the Clendenin Method.

- Ron Contarino

## Acknowledgments

**Aspen Skiing Company**: for their continued support of an old freestyle guy.

**William 'Bil' Bostick**: dear friend, great skier and coach, who covers my back personally and professionally...especially on this project.

*Mark Borderick*: for his tireless efforts in capturing great pictures of the Clendenin Method $^{\text{TM}}$ .

**Cal Cantrell:** still skis with more economy of motion than any pro in Aspen. He has been an inspiration and teaching mentor since I first met him in 1963 at Whiteface Mountain, NY.

*Michael Conniff, Crystal Newton and Tom Passavant:* great students and skiers who also happen to be editors. Together they kept me busy when I thought I was done.

**Diana Rodgers:** whose brains and tireless energy have set a high-water mark for all of us in the ski teaching community.

**Phil Gerard:** mentor, dear friend, and madman who is arguably the true Father of Freestyle Skiing and un-arguably the King of the Ski Simulator.

**Ray Graham:** I thought he was just another attorney until he showed me my first thousand grammatical corrections. Ray, with his relentless contemplative mind, continues to force revisions in areas well beyond grammar.

**Howard Freeman:** who put more time and thought into this project than anyone could ever expect from a "computer guy."

**Friends:** To those special people in my life whose support has been unconditional – Gerry & Chris Goldstein, Bruce Hanson, Dick Barrymore, Harry Leonard, Barbra and Jerry Simon, David Denholm, Judy Gray and Jim Foster and Joe and Tara Pinson.

**Stefan Kaelin:** Olympic Skier and friend from the seventies who took me under his wing when I first came to Aspen and helped make the Clendenin Method into one of the Ski School's largest specialty programs.

**Harald Harb:** whose dedication to ski instruction and theories on the inside ski are still as under-rated as his skiing.

**Head USA:** who have supported and sponsored my program since its inception.

**Charlie MacArthur:** great skier, fully certified in 3 PSIA disciplines, for his continued review and kind arguments that have kept me in line with the high standards of the Professional Ski Instructors Association.

**Andy Mill:** whose sparkling personality and sincere friendship makes every golf or ski day brilliant. As the KING OF SKI TIPS, his advice has given supportive guidance since this project's inception.

**Mom and Dad:** whose youngest son was to skiing what a golden retriever is to a tennis ball. They threw the ball endlessly and made sacrifices to send me to Northwood Prep School in Lake Placid where I skied every day.

**My partners and top students:** especially Karen Wing, Ted and Shannon Skokos, Ann and Ari Deshi and Dennis Carey, whose support and belief in my adventure brought the book to fruition.

**Peter Keelty:** my ghostwriter and long-time close friend who also happens to be a great skier. In his writing Peter brings to life Mark Twain's statement: 'a word versus the right word is like the difference between a lightning bug and a bolt of lightning.' I resisted the bolt, he insisted on keeping the thunder.

Staff and Coaches: Scott Brooksbank (the only legend in Freestyle whose skiing can still piss me off), Lisa Heininger, Peggy Foster-Harris, Larry Macintyre, Steve Henley, Crystal Newton, Mark Borderick, Jason Closic, Mike Farmer, Chino Martinez, Susan Saghatoleslami, Andrew Aldercotte, Kurt Fehrenbach, Tim Bickell, Eva Enriquez, Jon Deboer, Jamie Haslund, Chip Shevlin, Bill Stuart, and IJ Fisher who gave their ideas and support even when I was going nuts.

## **Acknowledgments**

**To all our wonderful clients:** who hung in as the process matured.

**Tony:** my parent's only bright son who barely put up with my visits when this book was in progress but finally gave in and lent his brains to the project.

**Bernie Weichsel:** an old friend, first business partner, and perhaps the best-networked person in our industry. Bernie continues to be a shining star guiding this project.

**Warren Witherall:** who introduced me to ski technique and whose two books on skiing are an inspiration. As coach at Northwood Prep School, he introduced independent foot action when he made our team practice downhill by skiing all 3,000 vertical feet of Whiteface Mountain on one ski at a time.

**Weems Westfeldt & Kim Peterson:** whose work has brought a new dimension to coaching. Their theories on lesson presentation between instructor and student go way beyond skiing and are full of life-changing magic.

Bill Jensen, Tom Pettigrew, Henry Purcell, Jeff Gorsuch, Jesse Pomerantz, Jim Kercher, Nelson Weingard, Andy Docken, Steve Smart, Tom Hyde, and Tom Saddlemire: who have contributed to the continued success and expansion of the Clendenin Method.

#### **Photo Credits**

Historic Pictures of John: Dick Barrymore and Earl Rickers

Kurt Fehrenbach: Ron LeMaster

Glen Plake: Glen Plake

Kim Reichelm: Diego Munita Chavez

Portillo: Diego Munita Chavez and Mark Borderick

Jonny Mosley: Head Ski Company

Andy Mill, Scott Brooksbank, racers, clients, and instructors: Mark Borderick

## Biographies



#### John Clendenin

#### Titles:

Elected to the U.S.Ski Hall of Fame, 2013
Two-time World Freestyle Skiing Champion.
Internationally recognized as an innovator in the sport of Freestyle Skiing.
Elite A Junior Racer - Northwood Prep School

#### Pioneering accomplishments:

Cofounder of the certification and safety federation for competitive freestyle competition (IFSA).

Founder of Professional Freestyle Association (PFA).

The Ski & Board Simulator (SBS) Teaching Method<sup>©</sup>.

The Book: Four Words for Great Skiing®

The DVD: Finding the Love Spot®

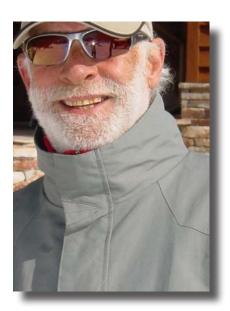
The Clendenin Method™.

## Degrees and Certification:

B.A. University of California.

Full Certification: The Professional Ski Instructors of America (PSIA). Black Level Certification: Primary Movement Teaching System (PMTS).

Member of the Professional Golf Association (PGA).



## **Peter Keelty**

Equipment expert and Technical Editor: Inside Tracks, The Snow Industry Letter, RealSkiers.com, OnTheSnow.com

Contributor: Snow Country, Ski America, SKI Magazine, Park City Lodestar.

Coauthor: "The Insiders' Guide to Skiing"

Product manager, marketing director and consultant for Salomon, Superfeet, Wintersteiger, Hexel, Hansen, ZipFit, PRE Skis and NAVA.

Pioneer shaped-ski coach. Director of Skiing, Park West (The Canyons), consultant to Smuggler's Notch ski school and Brian Head ski school.

## Biographies

### The Doctor's Story

The following are excerpts from an interview (March 2005) between Bil Bostick (Producer/Writer, former Professional Skier) and John Clendenin.

Bostick: Tell me about growing up John. So many people have known about your escapades on and off the hill, but they don't know about little Johnny Clendenin.

Clendenin: I went through what I would call ski puberty in Plattsburgh, NY. That's where I fell in love with skiing. When I was 14, I got a scholarship to go to Northwood prep school in Lake Placid, NY, and that's where I got my



first exposure to a great coach, Warren Witherell. I was an aspiring racer, and that was my introduction to technical skiing. In addition to being a great coach Warren remains an icon for me in terms of instruction and writing. His books, How Ski Racers Ski and The Athletic Skier, remain two of the best and most revolutionary books on skiing and ski racing.

#### What was your transition into Freestyle?

When Dad retired from the Air Force, we ended up in Los Angeles. I was devastated because I couldn't continue racing. I probably would have moved but my folks insisted I start college. One summer night I wandered along Ventura Boulevard on the way to a pool hall. I wanted to become a pool hustler like Paul Newman. As I passed by the Viking Ski Shop, I saw lights, a glow rising up behind the alley. Music was blasting – Herb Albert's "Tijuana Taxi," a hit in 1965. As I walked down the alley, I was stunned by the sight of a revolving carpet the size of a semi-truck. On this giant simulator was a wild-looking guy skiing to the music. That moment was the beginning of freestyle. My life changed forever and so did skiing. The guy dancing on skis was Phil Gerard, arguably the father of Freestyle Skiing.



Years before Freestyle – Andy Williams' 1966 Christmas Special

# Wasn't he a choreographer on Broadway and Television?

Yes he was, and what a character! He had no respect for anyone in skiing...they were all "Günter Heads." He choreographed these wonderful musical routines for the Andy Williams Christmas Special and the Harry Leonard Ski Shows. Our band of gypsies traveled all over the country every fall staging these extravaganzas on this revolving carpet ski deck. That's really where the marriage of skiing and music happened. Freestyle always had to have music. Until then the only medium available for anybody who wanted to go anywhere in skiing was racing...that was it. Suddenly, entertainment, not just the clock, became a part of skiing.

Lets talk about Freestyle Skiing in the early days, the fun, wacky, wild days; sex, drugs, rock and roll... "don't trust anyone over thirty."

Yeah, it was a wild time...people needed a release—a little fun—and many found it in Freestyle. The phenomenal thing is that it came about so naturally. It wasn't something that was manufactured...it just happened. During that time, there were a lot of us living in the mountains for a lot of reasons. After Dick Barrymore put on the first mogul contest on the Ridge of Bell in Aspen, the sport

## **Biographies**

exploded! Freestyle grew faster than any sport in history! Each event was a happening...a mini-Woodstock.

The free spirit in skiing during the 70's disappeared until recently. You can see it now, in SlopeStyle competitions, Big Air, Half Pipe competitions and in the X-Games.

The history of Freestyle is fascinating...how fast it grew and how it backfired. Before we get into the sport backfiring...tell me about the pivotal "classic" ski film "The Performers." If my memory serves me, I think I first saw it in Mt. Clemens, MI in 1970...

Yes, "The Performers" was the beginning...it changed everything. It became the rave in America. The film documented five of us traveling across the country in a Winnebago, painted red, white, and blue by K2. We must have gone to 30 ski areas around the country.

My favorite stop was here in Aspen. We staged the first mogul event on the planet during that stop. Barrymore announced on a Monday that we'd do it on Thursday. 3,000 people showed up on the Ridge of Bell. Music blared and the hills were full of smoke. We (the performers) fore-ran and judged. The crowd went nuts. Aspen didn't have a bigger event until the X-Games.

I still have people who come up to me and say, "Are you Clendenin?" I say, "Yeah." They say, "You ruined my life. I was in Med School... saw 'The Performers'...quit school... moved to the mountains... and I've been a ski bum ever since."



Jackson Hole, 1970 "The Performers"

I feel bad until I find out they bought a piece of property worth millions now. "The Performers" changed a lot of lifestyles along with starting a new sport.

## John, let's get back to the sport backfiring.

Freestyle just took off and the sport went nuts. Then in two of the early contests we had some serious accidents. Ski areas did not know how to make jumps and two of our athletes were paralyzed. While the cases were working through the legal process, the competitors formed an association, mainly to take control of the jumps. We weren't going to compete unless we made the jumps...and the jumps we designed are still used in the Olympics today. No one got seriously hurt after that.

In 1977 the court cases got resolved and the National Ski Area Operators shot themselves in their collective foot when they outlawed inverted aerials in the United States. ABC pulled out. They refused to cover Freestyle without aerials. The sport stayed alive in Canada and Europe, where insurance was not the controlling issue. It all came back with another bang in 1988 at Calgary when Freestyle was introduced as an Olympic demonstration sport. Unfortunately Ballet didn't make the cut.

So back in the beginning we had three events: Ballet, Aerials, and Moguls. The Champion was the one who scored the lowest total place points (first, second, or third) in all three events. After Calgary, Freestyle became an individual event sport in Aerials and Moguls. Both of these disciplines require so much training that you really can't do both of them and win. Freestyle disappeared both in name and spirit.

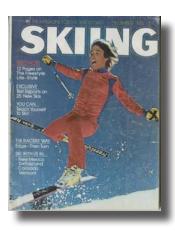
# What was your favorite event when you won your championships?

Due to my training with Phil, I dominated the ballet. We were the first to choreograph a ballet run. Every move I did, down to the hand position, was to the music... "Winter Dreams." I was undefeated for guite a while.

Aerials were different. I never had any trampoline or diving training so I was not excited about getting upside

down. I did go higher, farther, and never fell, so I always placed. What was weird was the bumps were my nemesis.

I considered myself a bump skier, but I always had to hold back in mogul event or risk losing the overall championship (5 cars overall). Now it kills me...I never won a mogul event!



## The Clendenin Method™: Four Words® for Great Skiing

Please register your copy of the book. If you do, we will keep you posted on any updates.

Name:

Email Address:

Please send this information to info@clendeninmethod.com.

We would also appreciate any comments and suggestions as the book continues to evolve.

John Clendenin and the Clendenin Method™ staff



The DVD starts with the One-Day Lesson where a couple boomers go from groomers to black diamond bumps in one enchanting day. You'll see the Clendenin Method (CM) Keys cure the "Skiers Flu." Cured, these two clients start floating through the "Love Spot<sup>TM</sup>" - skiing smooth, confident and controlled in black-diamond bumps.

"One-Day" is followed by six additional segments. Each segment begins with a two-minute *Keys to the Kingdom* sequence aired on national television. Each introduction presents a bit of freestyle history with an educational slant. This educational slant is then enhanced with lesson footage creating ownership for the simple CM Keys to the Kingdom, the wonderful world of all-mountain skiing.

Get Your DVD Now! http://clendeninmethod.com/

John Clendenin's Ski Method helps everyone ski effortlessly. He has it down pat!

– Jonny Moseley, Olympic Gold Medalist

John has a way of explaining complex things in simple terms anyone can understand... I endorse John and recommend his Ski Method.

- Stein Eriksen, Olympic Gold Medalist

#### Feedback from Readers of the First Edition:

We just got back from a week at Whistler where I referenced your book and then practiced some of the corresponding exercises every day... by the end of the week, the cumulative improvements added up to a breakthrough of skiing profound enough that I now have your book placed on my coffee table at the office so I can tell everyone about it!

Tara Prakriya

I have just finished reading 'The Clendenin Method' book for the first time, in preparation for the forthcoming ski season in Australia. Although I have yet to put skis on this year I know I am already a better skier. Your explanations have made explicit so many details (moves, sequences of events, points of balance, use of feet, edging technique, pole technique, summed up by Drift, Centering, Touch, Tip and the Keys of the Kingdom) that are alluded to in other books but never fully explained. Thank you for a highly readable book with wonderful, coherent, complete, and easy to comprehend descriptions of skiing technique.

Myron van der Waerden

Clendenin (Method

> Clendenin Method (877) SKI-DOCS (970) 544-0300

Fax: (970) 544-0324 http://www.clendeninmethod.com