



Seeing Skiing

Developing a
Good Eye

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Overview

- How to look at skiers and see what's going on
 - Movement analysis and evaluation
- Preliminary topics
- A framework for looking at turns
- Examples

Preliminary Topics



There's More Than One Way



- What are your goals?
- Everyone doesn't have to ski the same way to achieve the same goals
- Don't confuse style or aesthetics with functional performance



Communicate Clearly

- Define your terms
- The clearer, the better

What to Watch

- Basic stance
- Action of the skis on the snow
- Motion of the skier's mid-body
- Asymetries



Understand Why the Skier is Doing the Wrong Thing

- Skiers make the movements they do for a reason
- Identify weak movements
- Figure out what the positive effect is that the skier is getting from them
- Identify better movements to replace it that accomplishes the same positive effect, without the liabilities

Causes and Effects

- What you see is often a symptom, not a root cause
- Many visible problems are the result of errors made earlier in this or the previous turn

Causes to Consider


- Equipment
- Morphological factors
- Psychological factors
- Tactics
- Technique

Equipment

- Skis
- Boots
- Poles



Skis

- 
- Skis*
- Length
 - Type
 - Condition



Skis

- Too long or too stiff
 - Demand excessive tip pressure
 - Require big initial steering angles
- Too short or too soft
 - Encourage skiing from the heel
 - Make balance precarious



Boots

Boots



- Fit
- Stiffness
- Canting
- Forward lean

Boots



- Undercanted
 - Encourage excessive knee angulation
 - Skis slip
- Overcanted
 - Ski chops and chisels
- Too little forward lean
 - Skier bends at waist excessively
- Too much forward lean
 - Skier's hip are chronically low



Poles



Poles



- Too long
- Too short



Psychological Factors

- Is the skier apprehensive?
- Is the skier too aggressive?
- Is the skier overly concerned with style?

Individual Morphology





Tactics







Technique



The Framework



- Divide the turn into phases
- List the things that must happen in each phase
- Discuss the sorts of things you can do to make those things happen
- Determine what the skier is doing to accomplish each of the things that must happen

Phases

- Initiation
- Control
- Completion



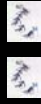
Initiation Phase



Initiation

- What has to happen
 - Establish initial steering angle
 - Establish inclination
 - Establish edge angle





*What is the Problem,
& What Happens?*



Control Phase



Control



- What has to happen
 - Balance against centrifugal force
 - Lateral balance
 - Alignment (counter)
 - Control radius
 - Fore-aft balance
 - Edge angle



Compare & Contrast



Completion Phase

Completion

- What has to happen
 - Stop turning
 - Get feet to swap sides with your center of gravity



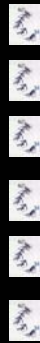
Phases

- Transition
 - Completion
 - Initiation
- Turning



Transition

- What has to happen
 - Complete old turn
 - Get center of gravity from one side of the skis to the other
 - Initiate new turn



Compare & Contrast









Summary

- Choose your words carefully
- When you see something interesting, look for the root cause
 - Look early in the turn

Summary (cont.)



- Consider things in this order
 - Equipment
 - Morphology
 - Psychology
 - Tactics
 - Technique