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Title of the lecture:

MODERN SKI TEACHING METHODS
PROPER UTILIZATION OF THE SKIS' GEOMETRY FOR HIGH-QUALITY AND
SAFE SKIING

SKI TEACHING FOR SKIING WITHOUT SCATTERING

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Oral and practical presentation

At the arrival of skis with a pronounced geometry at the beginning of the new millennium, most ski schools faced a great dilemma. The new skis were made with the goal of compensating the necessary ski knowledge and psychophysical skills of recreational skiers for a better performance of turns, generally on easier slopes and with a decreased dynamic and speed of skiing.

The dilemmas of how to bring these new, different skis closer to their users, namely recreational and professional skiers, are still not fully resolved. I assume it is our general consensus that carving skis and various applicable techniques and learning methods that came with them have led to a different way of changing the direction in skiing.

At least at the first glance, they have accelerated the process of learning and mastering the necessary ski technique. However, is that really true? At the beginning, these much-needed new teaching methods took two very different paths.

In the euphoria brought by these newly developed skis (which were generally too short), some ski schools forgot that the essence of safe skiing is still the optimal speed control. Making the full use of the skis' geometry in an overly passive way is **similar to riding down the slide or driving a car without using the breaks. Letting the skis do all the work without the proper “instructions” was above all dangerous, unprofessional and irresponsible.**

The use of a ski helmet was one of the very few positive consequences of this new way of skiing. There is no doubt that the use of helmet is necessary. After all, passive protection is still better than no protection at all. However, it is even more important that skiers receive better and more comprehensive ski knowledge and skills.

On the other hand, other ski schools blindly stuck to the traditional way of teaching skiing for too long. What were the reasons for that? The effect of emphasizing a different and, above all, easier and faster way of acquiring ski knowledge and skills was exactly the opposite.

Why did everything happen the way it did (premature use of the skis' geometry on skis which were generally too short)? What were the reasons for such an approach (Was it easier for teachers-demonstrators?)? Is skiing today safer and more controlled (definitely NOT)?

Two key elements that contribute to the precious goal of a modern and safe use of skis are the appropriately chosen ski length (according to the height of the skier) and the ski radius (r 15+).

This presentation outlines the path of modern ski teaching techniques, including their most recognized characteristics, namely **sliding and rotating** the skis in the first phase of the turn (change of direction) as well as **clean endings of turns using only the skis' geometry**. The emphasized speed control accompanies the skier throughout all his actions and can be recognized in the constant desire to make clean turns at a lower speed. **Thus, the acquired ski knowledge represents a valuable assistance in achieving the highest possible standards in modern ski teaching.**

A visual example of a proper turn divided into a two parts:



Photo 1: Entering the turn

-Sliding and rotating skis

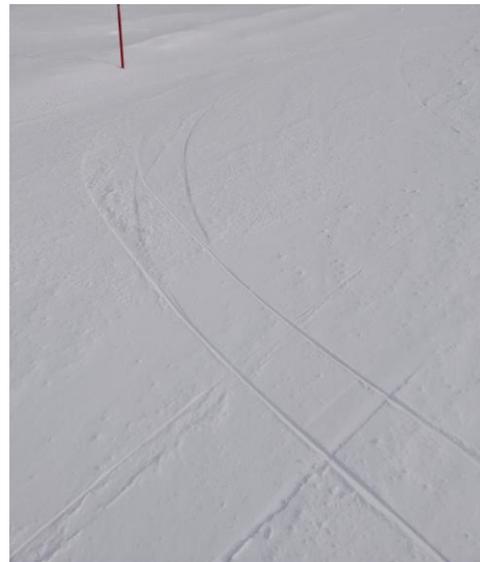


Photo 1: Exiting the turn

-Transition from sliding to using ski geometry

Unfortunately, there are not a lot of skiers who manage to come close to the set goal. What are the reasons behind such uncontrolled and UNPREDICTABLE way of skiing, often described as SCATTERING?

A visual example of proper and improper turn:



Photo 3: Turn A - (Proper)



Photo 4: Turn B - (Improper)

- Turn A
 - **Beginning of the turn:** Made with help of sliding, rotating skis - pivoting
 - **End of the turn:** Always and exclusively with using ski geometry - clean finishing
 - The main goal: "control of the speed" to achieve the highest technical level of skiing!

- Turn B
 - **Beginning of the turn:** Assuming that skier was using too much of ski's geometry
 - **End of the turn:** Uncontrolled speed is resulted in scattering of skies!
 - Skier lost control over his skies and represents a danger for himself and others on the slopes.

First of all, we have to point out three negative characteristics of such uncontrolled turns: **excessive speed, overly difficult slopes and insufficient ski knowledge.**

For a better understanding, we can imagine driving a car through a curve. Unfortunately, when skiing, we are not equipped with the required support (e.g. brakes, power of the engine) which would help us to create a predictable and safe environment before turning. It is true, when skiing, consequences are usually not as fatal as on the road if we do not manage to complete a turn and therefore end in a nearby ditch.

However, this does not lessen the responsibility of skiers who, by skiing in such uncontrolled and dangerous way, are a threat to themselves and others! The presence of this problem in modern skiing is best illustrated by looking over the answers of numerous skiers on the following question: Why are you wearing a helmet? Guess what? Almost everybody's reason for wearing a helmet is to be protected from "others", themselves, madmen, wild skiers!

Modern ski teaching methods strictly and carefully underline speed control, skiing dynamics and making of clean ends of the turns in all phases of ski teaching. The goal is to create an environment, which enables changing directions and making "clean end of the turns". In such an environment, all the skiers, with different level of skiing knowledge would be able to control their turns by using the ski's geometry in the second part of the turn in all phases of teaching process - WITHOUT SCATTERING!

Here is an explanation of scattering. A lot of skiers like to use skis geometry from the beginning to the end of the turn. Such a way of skiing is very useful and enjoyable on the flatter slopes. However, on the steeper slopes, those skiers start accelerating and increasing the radius of their turns. The forces pushing them out of the turn and their lack of knowledge do not allow them to finish the turn by using just ski geometry. As a result, they SCAT. Scattering present a big problem on today's ski slopes, because skiers cannot control their path and speed of skiing.

The solution, however, is simple. It can be described with three positive characteristics:

- **It is necessary to ski slower**
- **Choosing suitable slopes based on the skiing knowledge**
- **Skiing with the skills required to finish turns by always using the skis' geometry – WITHOUT SCATTERING!**

Skis were designed as a valuable support for responsible and competent recreational skiers and not for irresponsible, incompetent "wild" skiers who use the slope like a slide.

Do you know what is the hardest thing to do on the skies nowadays? For beginners and professional skiers? There is a simple answer: **It is transition from sliding to actively using ski's geometry.** For correct, safe and controlled teaching of skiing on one side and superbly executed turns for a professional skier on the other. A consequence of teaching skiing in this specific way is **safe and controllable speed** in all elements of ski school. For professional competitors, this results in a **desire for harmony and reaching excellent execution of the fastest turns** to achieve the best results at the competitions.

After reading all of this, many might think that this describes nothing new! As a matter of fact, it describes a simple, understandable and logical way of teaching skiing.

Key words: new skis, speed control, sliding and rotating, clean turns, proper use of the skis' geometry, transition, scattering

References:

- Co-author of the book SMUČANJE 2000+ (English: SKIING 2000+)
- Long-time member of SLO, CRO, MASI demonstration teams (from 1986)
- Expert collaborator in various teams of the best Slovenian and Croatian Alpine skiers (Tina Maze, Ivica Kostelič, Ilka štuhec,...), in Ski cross (Filip Flisar), Telemark skiing (David Primožič), and Snowboarding (Rok Marguč).