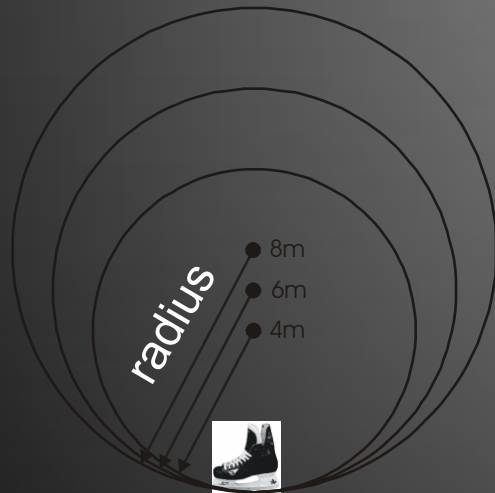
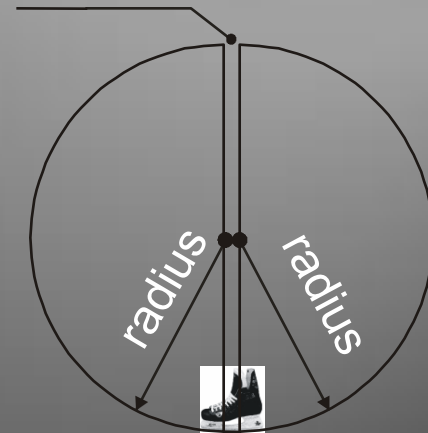


# Radius rockering VS. Flat Glidesurface

(by Janne Hänninen)



Flat Glidesurface



# Ice contact

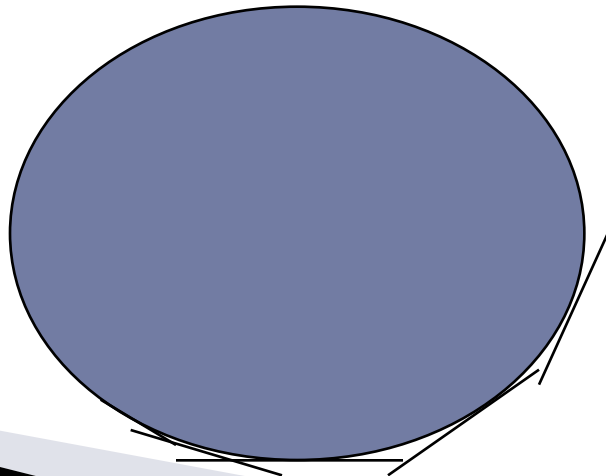
- ▶ In skating the center of gravity is shifting forward during the push
- ▶ With constant radius the blade consists of many short flat parts (tangents) following each other. The skate feels the same no matter where the center of the gravity happens to be.
- ▶ With flat glidesurface the blade consists a flat part in the middle of the blade and round parts in front and at the back. The blade glides fairly well, but it is difficult to skate fast with them. The problem is that when the center of gravity shifts during the push it also reaches the point where the flat part ends and the round part begins. A lot of pressure develops at that point because of the rapid change in the blades form. While skating fast the pressure in that point is so big that the ice breaks and it is impossible to handle the skate properly. You can see it easily in the trail left to the ice by the skates. See the Slide 5 . The same effect happens in turns. See the Slide 6 .

(typical Flat Glidesurface in Finland is 5–6 cm)

# Radius rocker

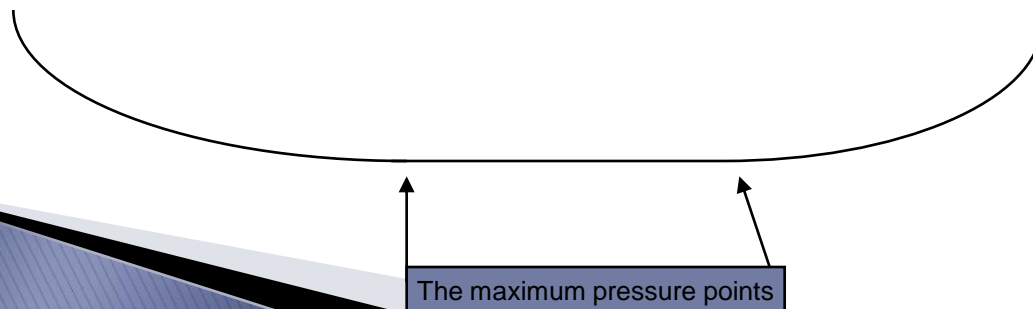
**PROSHARP**  
LEADING PERFORMANCE

- ▶ A leaning blade turns to the direction of the lean
  - In a turn the blade is turning with the tangent.
  - In the straights the pressure between the blade and the ice is always constant or almost constant so that it is possible to handle the blade at all times.



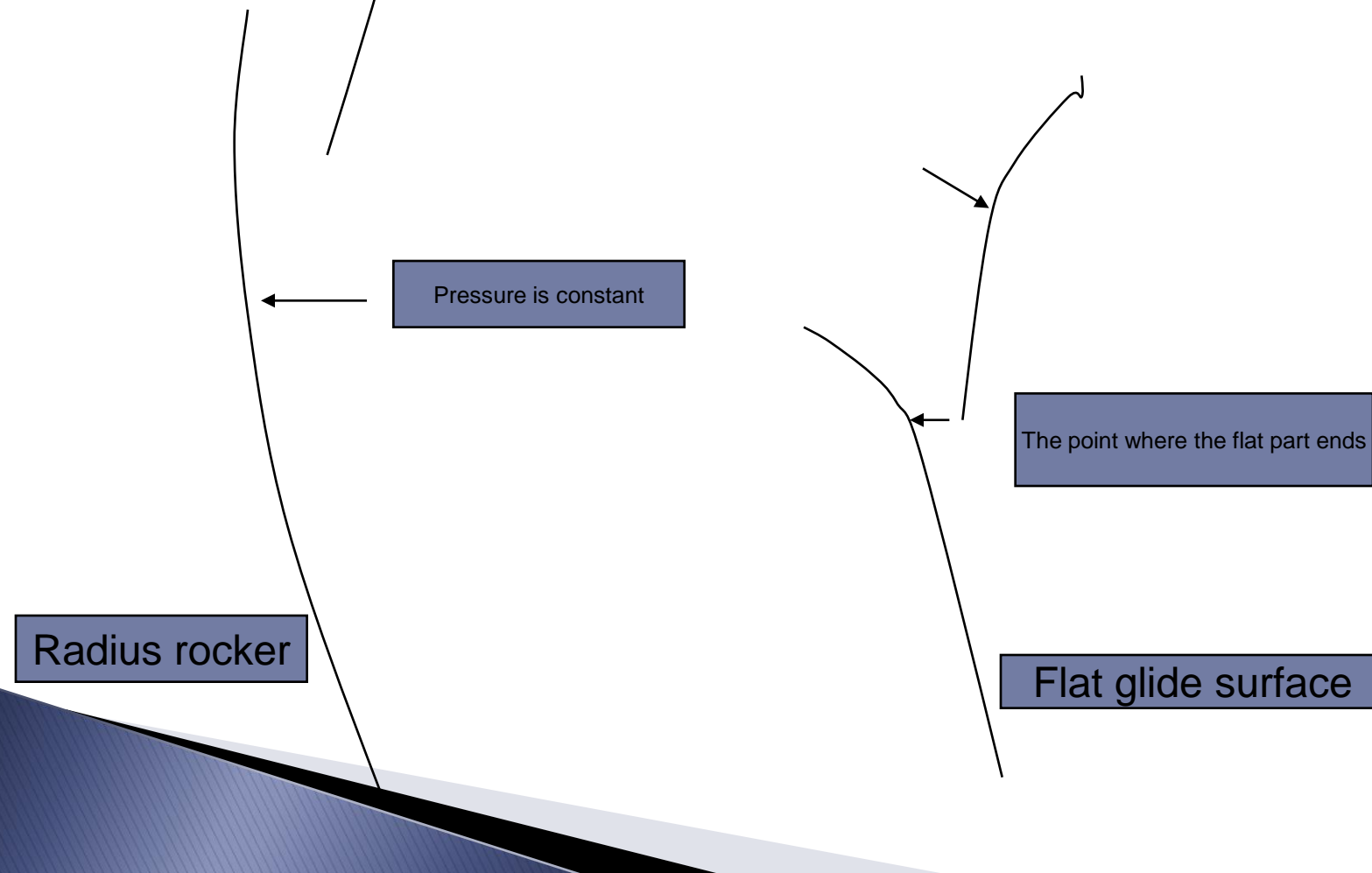
# Flat glide surface

- ▶ The blade glides well if the center of gravity is perfectly on the flat part. If the center of gravity is only partly on the flat part the blade doesn't glide well.
- ▶ In fast speed it is impossible to control the blade well because of the excess local pressure.



# Staightaway skating

## The trail in the ice



# Turn skating

Flat glide surface

Radius rocker

The point where the flat part ends

The blades is following the tangent all the time

**PROSHARP**  
LEADING PERFORMANCE

