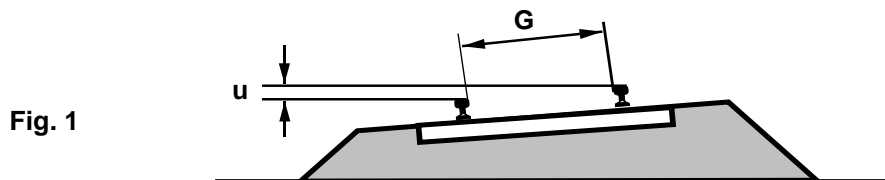


## 1. Purpose and Definition

The elevation serves as a model for the driving safety of the vehicles in the track curve. The lateral acceleration in the vehicle or in the track level caused by the curve is fully or partially compensated by the increased position of the outer rail (dimension  $u$ ) compared to the inner rail (Fig.1).



In model railroad operation, an elevation for reasons of driving dynamics is not necessary. It even increases the risk of vehicles tipping inwards. Therefore an elevation used for optical reasons should not exceed the value  $G/15$ . Recommended is:

G	6.5	9	12	16.5	22.5	32	45	64
$u_{max}$	0.4	0.6	0.8	1	1.5	2	3	4

In the case of cog railroads, one usually finds no or only a very small elevation in the original.

## 2. Representation

In the curve of the track, the plane or inclination of the straight track is maintained for the inner rail, while the outer rail is increased by the dimension  $u$  compared to the level of the inner rail. Track curves with elevation are to be created with transition curves (see NEM 113); the length of the elevation ramp shall correspond to the length of the transition curve. The rise to the elevation is evenly distributed over the length of the transition curve (Fig. 2).

