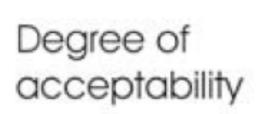
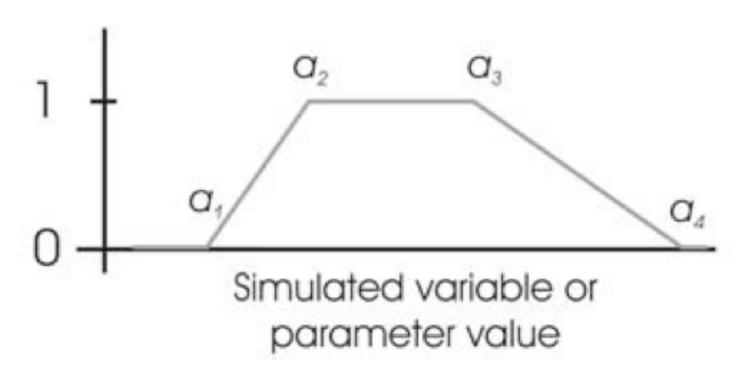


## Soft metrics - Fuzzy-Evaluation





$$\mu(x) = \begin{cases} 0 & \text{if } x \le a_1 \\ \frac{x - a_1}{a_2 - a_1} & \text{if } a_1 \le x < a_2 \\ 1 & \text{if } a_2 \le x < a_3 \\ \frac{a_4 - x}{a_4 - a_3} & \text{if } a_3 \le x < a_4 \\ 0 & \text{if } x > a_4 \end{cases}$$

For data where there is a lot of uncertainty in observed values (imprecise measurements)

Seibert, J., and J. J. McDonnell, On the dialog between experimentalist and modeler in catchment hydrology: Use of soft data for multicriteria model calibration, Water Resour. Res., 38(11), 1241, doi:10.1029/2001WR000978, 2002.

## Performance: Metrics

R also has built in functions that can be helpful

- cor(x,y) correlation coefficient
- help(cor)