

# Advances in Visualizing Categorical Data

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At CARME 1995 in Cologne, I described my work on graphical methods for visualizing categorical data, with emphasis on mosaic displays and related methods. In this talk I survey some of the advances on this topic by myself and others that have occurred over the intervening 15 years.

I illustrate these new methods and extensions using a variety of R packages. In particular: mosaic-like displays have been generalized to a wide class of graphical methods subsumed under the `strucplot` framework in the `vcd` package (Meyer *et al.*, 2009, 2006); traditional loglinear models and their generalized linear model equivalents have been extended in the `gnm` package (Turner and Firth, 2009) to generalized nonlinear models, providing biplot and SVD views in some cases; the `vcdExtra` package provides extended examples of some of these, as well as a new 3D implementation of mosaic displays.

## References

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Turner, H. and Firth, D. (2009). *Generalized nonlinear models in R: An overview of the gnm package*. URL <http://CRAN.R-project.org/package=gnm>. R package version 0.10-0.