

# Das Lattice Paket

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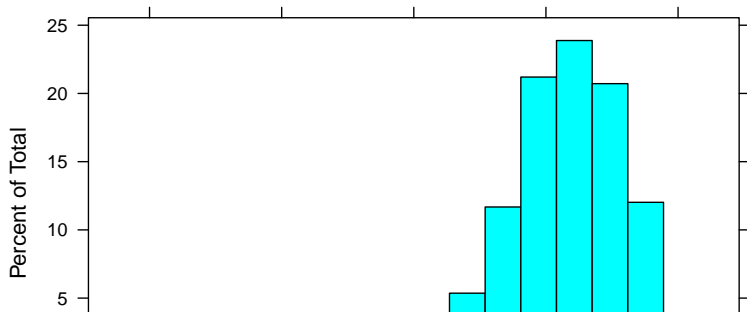
# Das lattice-Paket

*It is designed to meet most typical graphics needs with minimal tuning, but can also be easily extended to handle most nonstandard requirements.*

<http://stat.ethz.ch/R-manual/R-devel/library/lattice/html/Lattice.html>

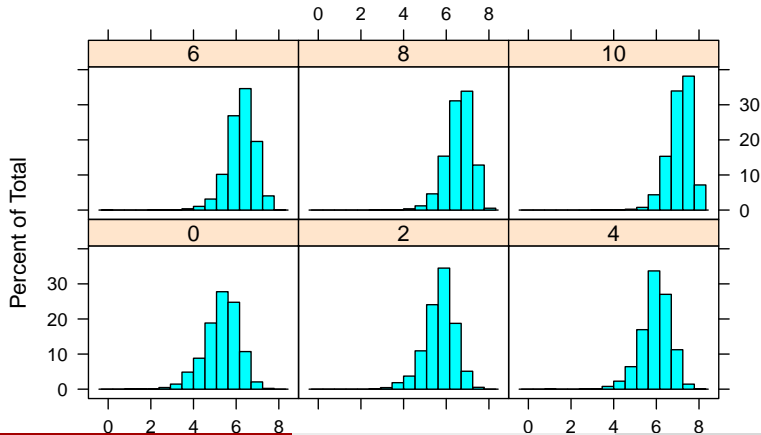
# Histogramm mit Lattice

```
library("lattice")  
  
library("mlmRev")  
data(Chem97)  
histogram(~ gcsescore, data = Chem97)
```



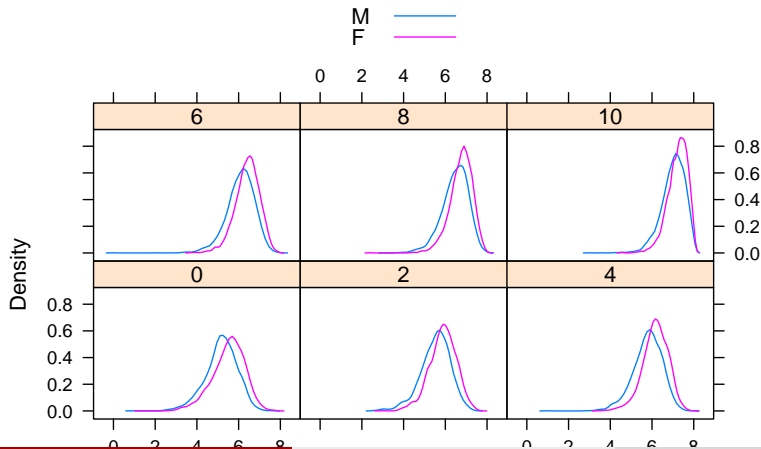
# Histogramm mit Lattice

```
histogram(~ gcsescore | factor(score),  
          data = Chem97)
```



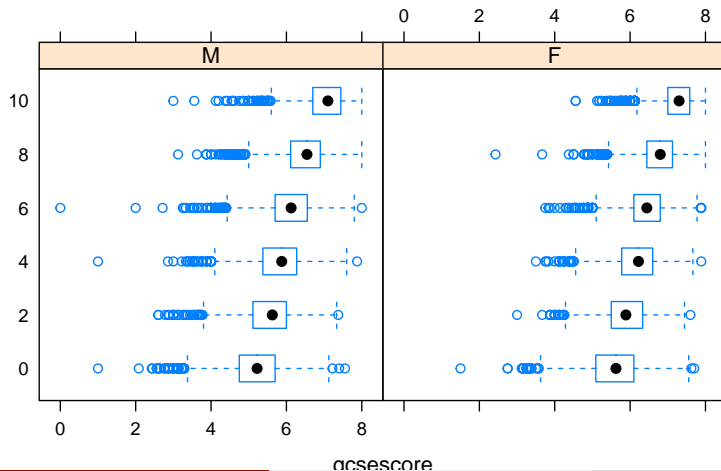
# Die Dichte mit Lattice zeichnen

```
densityplot(~ gcsescore | factor(score), Chem97,  
  groups=gender, plot.points=FALSE, auto.key=TRUE)
```



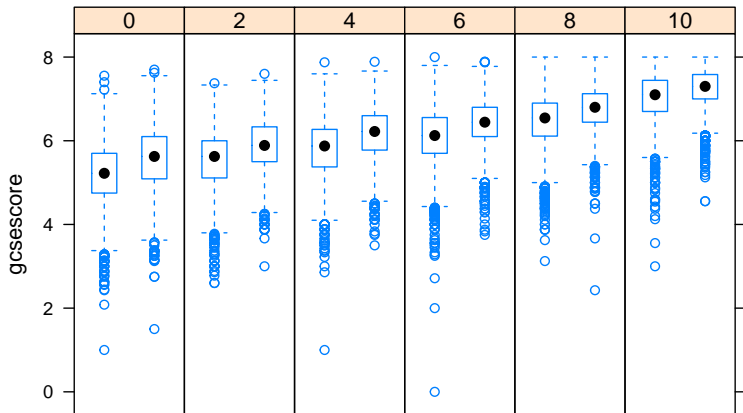
# Boxplot mit Lattice zeichnen

```
bwplot(factor(score) ~ gcsescore | gender, Chem97)
```



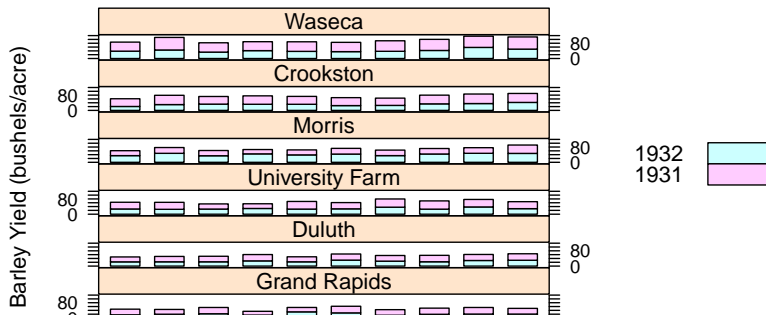
# Boxplot mit Lattice zeichnen

```
bwplot(gcsescore ~ gender | factor(score), Chem97,  
       layout = c(6, 1))
```



# Univariate Plots

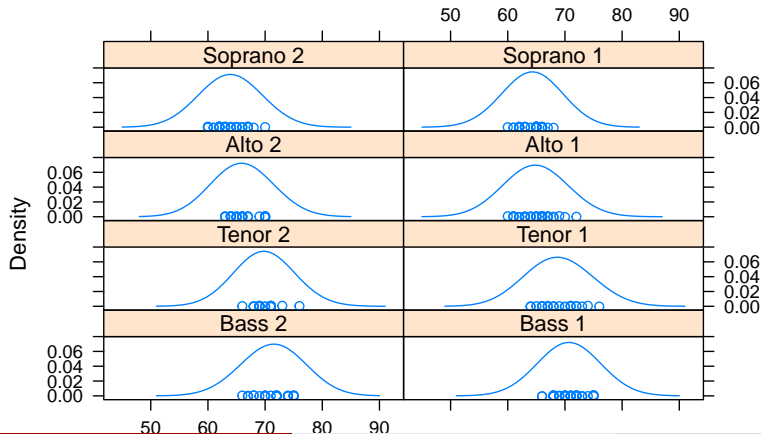
```
barchart(yield ~ variety | site, data = barley,  
  groups = year, layout = c(1,6), stack = TRUE,  
  auto.key = list(space = "right"),  
  ylab = "Barley Yield (bushels/acre)",  
  scales = list(x = list(rot = 45)))
```





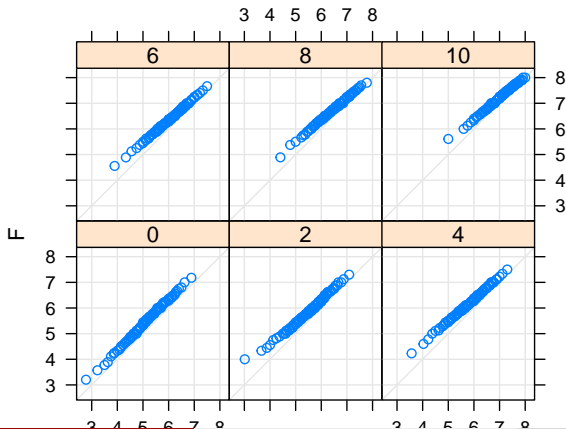
# Densityplot

```
densityplot( ~ height | voice.part, data = singer, layout = c  
             xlab = "Height (inches)", bw = 5)
```



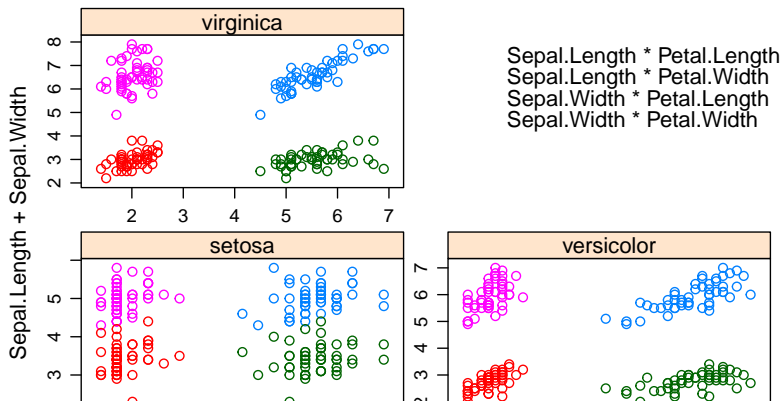
# Bivariate Plots

```
qq(gender ~ gcsescore | factor(score), Chem97,  
  f.value = ppoints(100), type = c("p", "g"), aspect = 1)
```



# xyplot

```
xyplot(Sepal.Length + Sepal.Width ~ Petal.Length + Petal.Width  
       data = iris, scales = "free", layout = c(2, 2),  
       auto.key = list(x = .6, y = .7, corner = c(0, 0)))
```

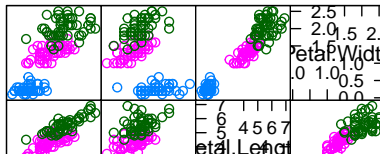


# Multivariate Plots

```
super.sym <- trellis.par.get("superpose.symbol")
splom(~iris[1:4], groups = Species, data = iris,
      panel = panel.superpose,
      key = list(title = "Three Varieties of Iris",
                 columns = 3,
                 points = list(pch = super.sym$pch[1:3],
                              col = super.sym$col[1:3]),
                 text = list(c("Setosa", "Versicolor", "Virginica"))
```

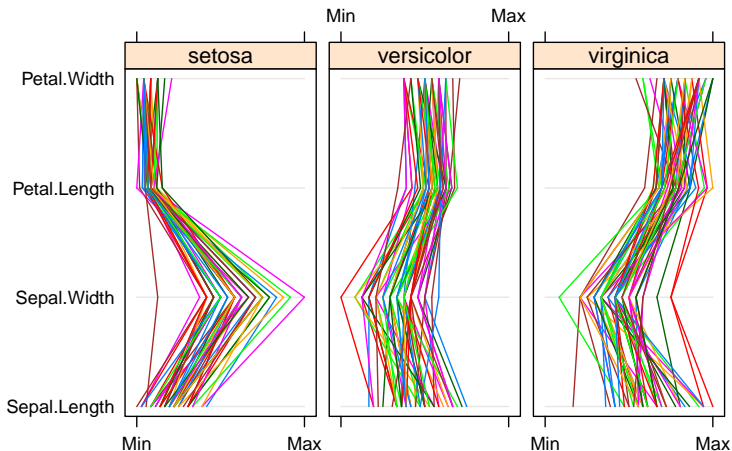
## Three Varieties of Iris

○ Setosa      ○ Versicolor      ○ Virginica



# parallelplot

```
parallelplot(~iris[1:4] | Species, iris)
```



# Lattice Befehle

- Übersicht aller Lattice Befehle