**The stacked format has 2 advantages:**

1. Read data from tab-delimited text as a spreadsheet.
2. Easy to draw the stratified graphs as

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   boxplot(values~ind, data=x)
   stripchart(values~ind, data=x, vert=T, method="jitter")
   Mx <- tapply(x$values, x$ind, mean)
   Sx <- tapply(x$values, x$ind, sd)
   Ix <- 1:2+0.1
   points(Ix, Mx, pch=18, cex=2)
   arrows(Ix, Mx-Sx, Ix, Mx+Sx, angle=90, code=3)
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   ```

---

```
x <- stack(list(X=X, Y=Y))
* result becomes data.frame
```

```
unstack(x)
* result becomes list (or data.frame only if the lengths of vectors are same)
```

```
t.test(X,Y)
or
wilcox.test(X,Y)
t.test(values~ind, data=x)
or
wilcox.test(values~ind, data=x)
```