```
> ###########################################################################
> # Analyze Assn 3 data using R's "classical MDS" package, cmdscale
> D_cmds<-cmdscale(D, eig=TRUE, add = FALSE, x.ret = TRUE)
> plot(D_cmds$points)
> text(D_cmds$points,rownames(D))
>
> # use regression to aid in interpreting dimensions
> # E   .
> # H   ....
> # N   -.
> # S   ...
> # W   .--
>
> # plot results of regression for # signal components
> ncomponents=c(1,4,2,3,3)
> ncompsol<-lm(ncomponents ~ D_cmds$points[,1:2])
> nxy<-ncompsol$coefficients[2:3]*300
> arrows(0,0,nxy[1],nxy[2])
> text(nxy[1],nxy[2],"#comp")
>
> #plot results of regression for proportion of dots in signal
> propdot=c(100,100,50,100,33)
> propdotsol<-lm(propdot ~ D_cmds$points[,1:2])
> pxy<-propdotsol$coefficients[2:3]*10
> arrows(0,0,pxy[1],pxy[2])
> text(pxy[1],pxy[2],"propdot")
```