

# Network analysis

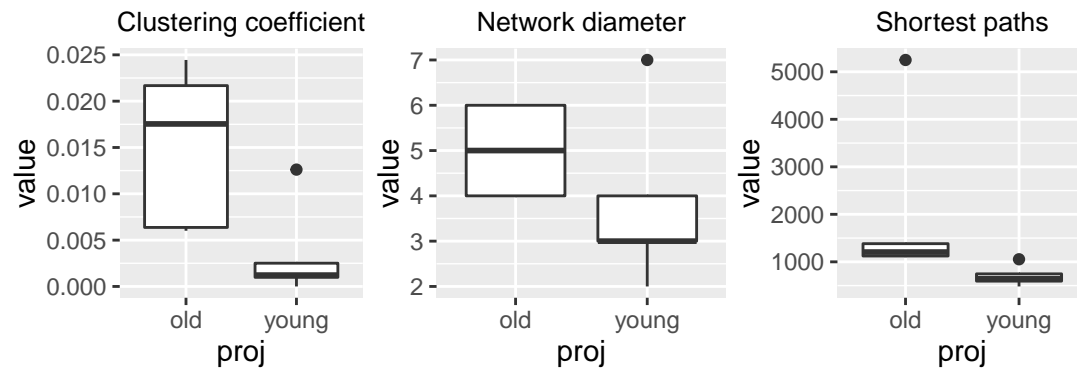
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```
library(reshape2)
library(ggplot2)
library(dplyr)
```

```
df <- read.table('data/graph_stats/graph_summary.txt', head=TRUE)
df.2 <- melt(df, id.vars = c('proj', 'sample'))
```

```
ggplot(filter(df.2, variable=='clustering.coeff'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Clustering coefficient')
ggplot(filter(df.2, variable=='net.diam'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Network diameter')
ggplot(filter(df.2, variable=='shortest.paths'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Shortest paths')
```



```
ggplot(filter(df.2, variable=='char.path.len'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Characteristic path length')
ggplot(filter(df.2, variable=='avg.num.neighb'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Average number of neighbors')
ggplot(filter(df.2, variable=='n'), aes(x=proj, group=proj, y=value)) + geom_boxplot() + ggtitle('Number of nodes')
```

