

Advanced Network Graphics part A

Nick Lauerman

Contents

Libraries and data used	1
Libraries	1
Data	1
specialized network diagrams	1
arch diagrams	1
cord diagrams	3

Libraries and data used

Libraries

Package archdiagram isntall from github

```
library(UserNetR)
library(arcdiagram)
library(igraph)
```

```
##
## Attaching package: 'igraph'

## The following objects are masked from 'package:stats':
##
##   decompose, spectrum

## The following object is masked from 'package:base':
##
##   union
```

```
library(intergraph)
```

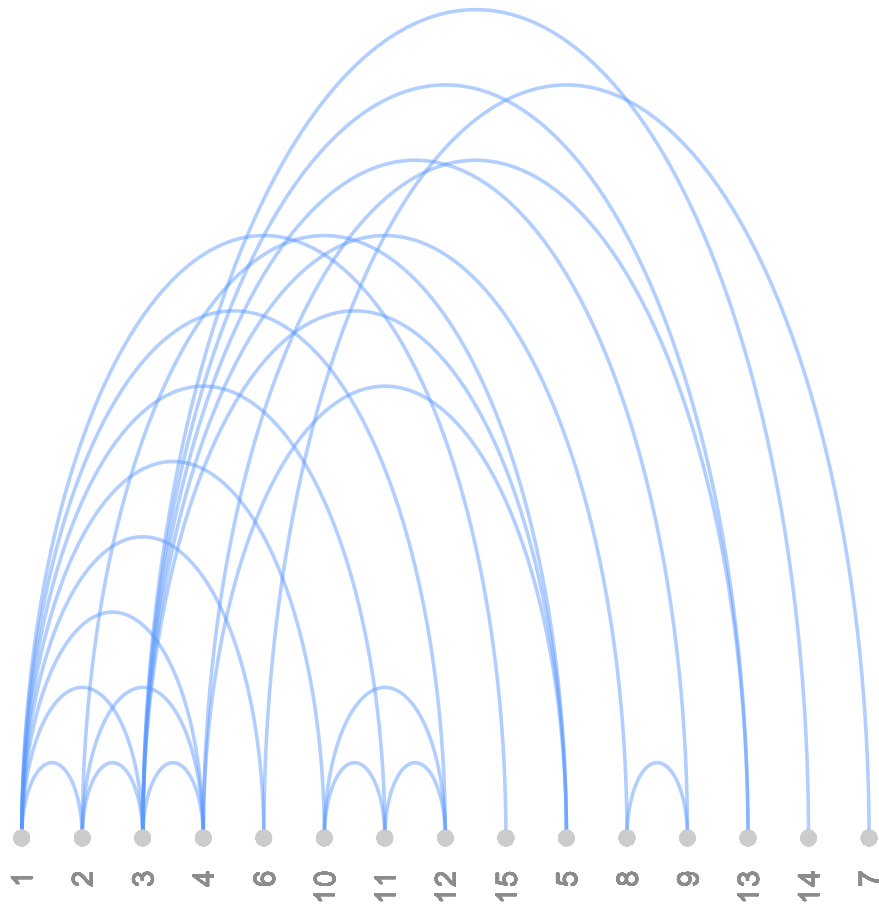
Data

```
data(Simpsons) # from UserNetR
```

specialized network diagrams

arch diagrams

```
iSimp <- asIgraph(Simpsons)
simp_edge <- get.edgelist(iSimp)
arcplot(simp_edge)
```



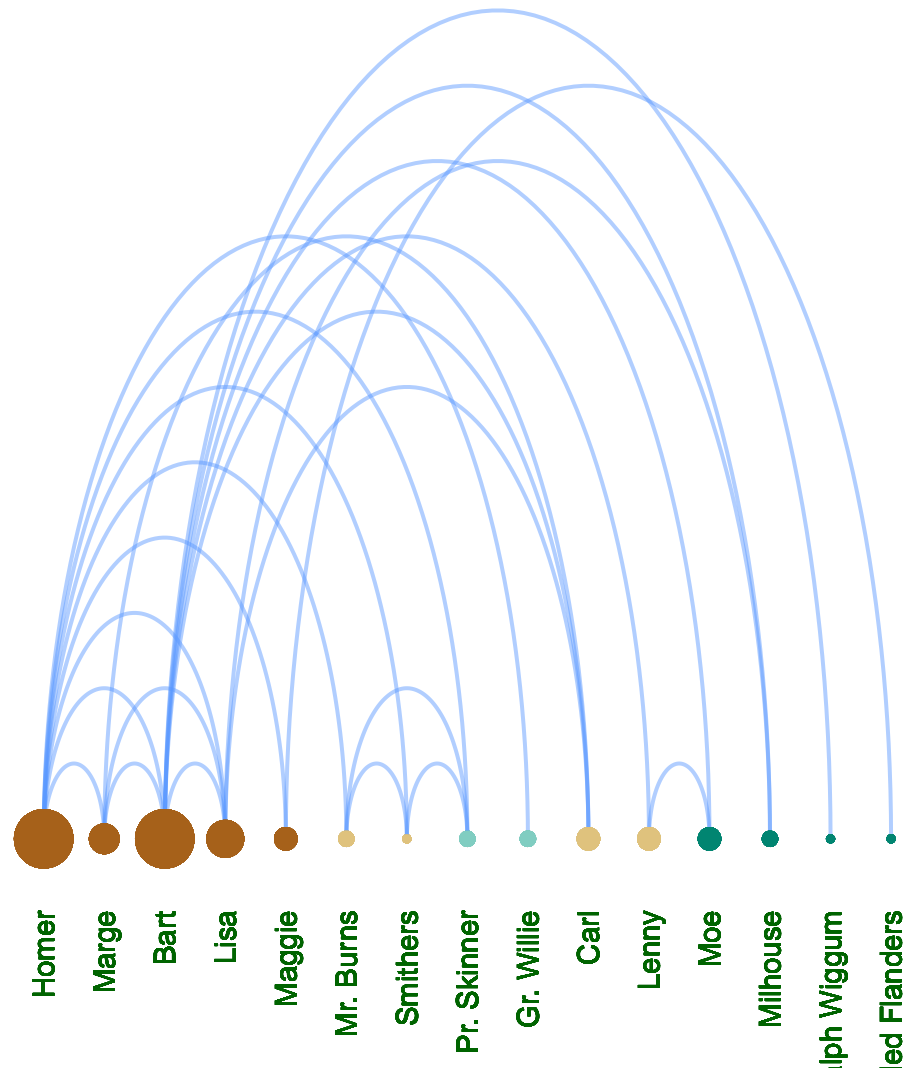
```
s_grp <- V(iSimp)$group
s_col <- c("#a6611a",
          "#dfc27d",
          "#80cdc1",
          "#018571")
cols <- s_col[s_grp]
node_deg <- degree(iSimp)

arcplot(simp_edge,
        lwd.arcs = 2,
        cex.nodes = node_deg/2,
        labels = V(iSimp)$vertex.names,
        col.labels = "darkgreen",
        font = 1,
```

```

pch.nodes = 21,
line = 1,
col.nodes = cols,
bg.nodes = cols,
show.nodes = TRUE)

```



cord diagrams

Continued in port B to clear out library conflicts.