Read Me File for simulated data for Lerch et al., “Better baboon breakups: Collective decision theory of complex social network fissions”

Each stochastic algorithm is applied to each social network 100 times and output is stored for each trial.

There are 28 simulated data text files named “(group name)_(algorithm)”. Group name denotes the social network (dotty, hook, linda, lodge, nyayo, viola, or vogue) and algorithm is shorthand for the algorithm applied to the network:
democ = Democracy algorithm
comm = Community algorithm
despot = Despotism algorithm
rand = Random algorithm

Within each file data are stored in format standard for Wolfram Mathematica to facilitate use in code for replication. Data are formatted in a nested structure as follows:

```
{
        {data from trial 1},
        {data from trial 2},
        {data from trial 3},
        …,
        {data from trial 100}
}
```

Data from each trial are themselves broken into two further lists. The first stores measures of network connectivity and the second stores measures of network edges. That is

Data from a single trial = {{measures of connectivity},{measures of edges}}

The measures of connectivity, in order, are (DG = daughter group):

1. # individuals in DG1
2. # individuals in DG2
3. # bonds in DG1
4. # bonds in DG2
5. # bonds/individual in DG1
6. # bonds/individual in DG2
7. global clustering coefficient of DG1
8. global clustering coefficient of DG2
9. diameter of DG1
10. diameter of DG2
11. density of DG1
12. density of DG2
13. proportion dyads correctly assigned

The measures of edges, in order are:

1. # broken bonds

2. # maintained bonds
3. % broken
4. sum of broken bond weight
5. average broken bond weight
6. sum of maintained bond weight
7. average maintained bond weight
8. sparsity
9. mean b/w centrality of broken bonds
10. mean b/w centrality of maintained bonds
11. % broken bonds correctly identified
12. % maintained bond correctly identified
13. % total bonds correctly identified