## Statistical Entropy Analysis of Network Data

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## analysing multivariate (social) networks



framework to assess the interdependence between composition and structure include

- finding informative dyads and triads (and also higher order configurations)
- Explore the data to inspire further investigations
- identify social phenomena and processes
- specify various multivariate models (multiplex, multi-level, etc.)

measures of spread, flatness, association and dependence that are based on entropy and developed in information theory

multivariate statistical entropies are used to find

- **Tredundancies**
- (conditional) dependencies
- If functional dependencies

among a multi-dimensional set of variables measured on different scales