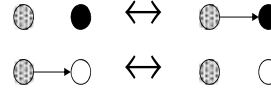


# 1. Model Form

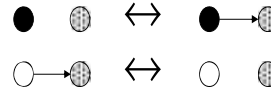
$$f_i(\beta, x) = \sum_k \beta_k s_{ki}(z)$$

10. Covariate alter  $\sum_j x_{ij}(z_j - \bar{z})$



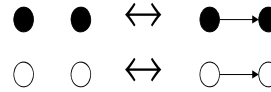
Main effect of alter's behavior (covariate determines popularity in network)

11. Covariate ego  $\sum_j x_{ij}(z_i - \bar{z})$



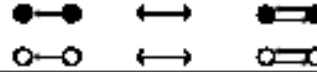
Main effect of ego's behavior on tie preference (covariate determines activity in network)

12. Covariate similarity  $\sum_j x_{ij} \text{sim}_{ij}$



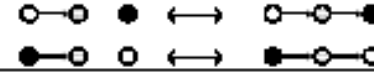
Tendency to have ties to similar others (homophile selection on covariate, linear in score differences)

15. similarity  $\times$  reciprocity  $x_{ij} x_{ji} \text{sim}_{ij}$



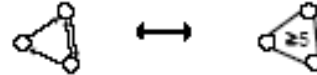
preference for reciprocated ties to similar others

16. between dissimilar alters  $\sum_h (1 - \text{sim}_{jh}) \text{between}(i; jh)$



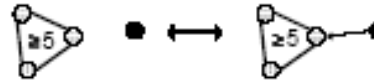
preference for being in an intermediary position between unrelated, dissimilar others (brokerage potential)

17. similarity  $\times$  dense triads  $\sum_h \text{group}(ijh) (\text{sim}_{ij} + \text{sim}_{ih})$



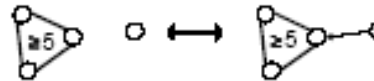
preference for being part of behaviorally similar cohesive subgroups

18. behavior  $\times$  peripheral  $z_i \sum_{hk} \text{peripheral}(i; jh k)$



behavior-specific preference for unilaterally attaching to cohesive subgroups

19. similarity  $\times$  peripheral  $\sum_{hk} (\text{peripheral}(i; jh k) \times (\text{sim}_{ij} + \text{sim}_{ih} + \text{sim}_{hk}))$



preference for unilaterally attaching to behaviorally similar cohesive subgroups

\* In the *effective transitions* illustrations, it is assumed that the behavioral dependent variable is dichotomous and centered at zero; the color coding is  $\bullet$  = low score (negative),  $\bullet$  = high score (positive),  $\circ$  = arbitrary score. The tie  $x_{ij}$  from actor  $i$  to actor  $j$  is the one that changes in the transition indicated by the double arrow. Illustrations are not exhaustive.