Figures and figure supplements

Sequential phenotypic constraints on social information use in wild baboons

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Figure 1. A visual representation of proximity methods used to define a connection. The black arrow represents a connection via the 5 m nearest neighbour rule; the white lines, connections via the 5 m chain rule; and the white circle represents the 10 m threshold distance for a connection (measures not to scale).

DOI: 10.7554/eLife.13125.004
Figure 2. Networks diagrams created from the 5 association rules in two troops of baboons. Nodes (J troop: purple nodes, panels a–e; L troop: green nodes, panels f–j) represent individual baboons and edges between them indicate the strength of the measured relationship (see key). Presented are the networks based on the 10 m rule (a, f), 5 m chain rule (b, g), directed nearest neighbour rule (c, h), directed grooming interactions (d, i) and directed dominance interactions (e, j). Adults are represented by darker nodes, juveniles by lighter nodes (though we note that age was analysed as a continuous variable). Node size represents individuals’ ranks, where larger nodes are higher ranks. Node positions are conserved between network diagrams in each troop.

DOI: 10.7554/eLife.13125.005
Figure 2—figure supplement 1. The relationships between social network metrics (strength and betweenness) within and between social networks created with five different rules for defining a connection between individuals. The rules were the 5 m chain rule (5 m), 10 m proximity (10 m), directed nearest neighbour (NN), directed grooming interactions (groom) and directed dominance interactions (dom). Colouration is conserved from Figures 2 and 3, where J troop is represented by purple points and L troops by green points, and point luminance represents the number of times the individual acquired information (darker nodes acquired social information on more occasions).

DOI: 10.7554/eLife.13125.006
Figure 3. The relationships between social network centrality and successive steps of the social information process. The relationships between social information (c, d) acquired, (e) applied and (f) exploited by wild baboons and their degree strengths in the social networks. Presented are the proximity networks from which degree strengths were calculated for (a) J and (b) L troops, where nodes represent individuals, node size represents the rank of the individual, and node luminance represents the number of times the individual acquired information (darker nodes acquired social information on more occasions; this colouration is conserved throughout the figure). Lines connecting nodes represent the strengths of the connections between dyads where thicker lines are stronger connections (see legend). Presented below the networks is the relationship between (c, d) social information acquired in (c) J and (d) L troops, (e) social information applied and (f) social information exploited (both troops plotted together).

Figure 3 continued on next page
Figure 3 continued

DOI: 10.7554/eLife.13125.016