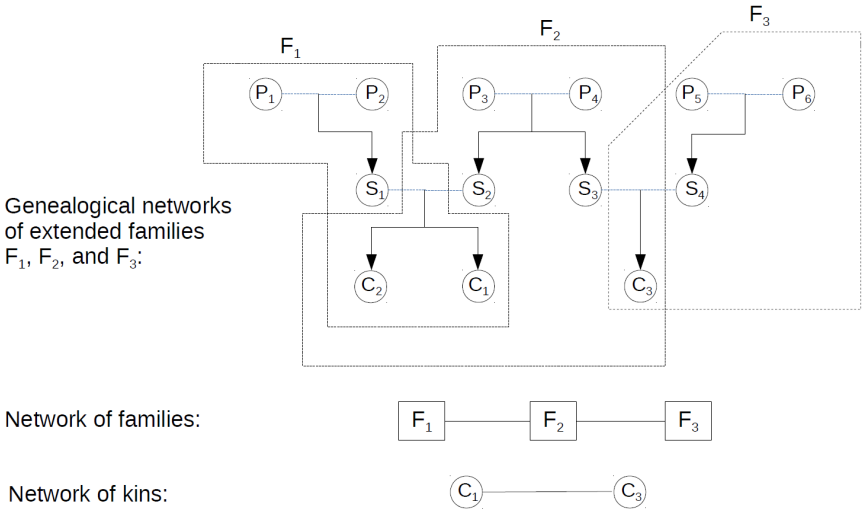

Additional file 1: Network construction. F_1, F_2, and F_3 are families denoted by polygons enclosing the family members, such that, $F_1 = \{P_1,P_2,S_1,C_1,C_2\}$, $F_2 = \{P_3,P_4,S_2,S_3,C_1,C_2,C_3\}$, and $F_3 = \{P_5,P_6,S_4,C_3\}$. Here, P_1, P_2, P_3, P_4, P_5, and P_6 belong to generation zero, S_1, S_2, S_3, and S_4 belong to the first generation, and C_1, C_2, and C_3 belong to the second generation. The dashed links between individuals indicate parental unions. Thus in the network of families the union (S_1,S_2) connects families F_1 and F_2, and the union (S_3,S_4) connects families F_2 and F_3. Assume that between siblings C_1 and C_2, the firstborn is C_1. Then we associate C_1 to the link (F_1,F_2). Similarly, we associate C_3 to the link (F_2,F_3). In the network of families F_2 being the common node, the links (F_1,F_2) and (F_2,F_3) are adjacent. Therefore, in the network of kins we connect the individuals C_1 and C_3 attributed to these links, respectively. In this particular case C_1 and C_3 are first cousins.