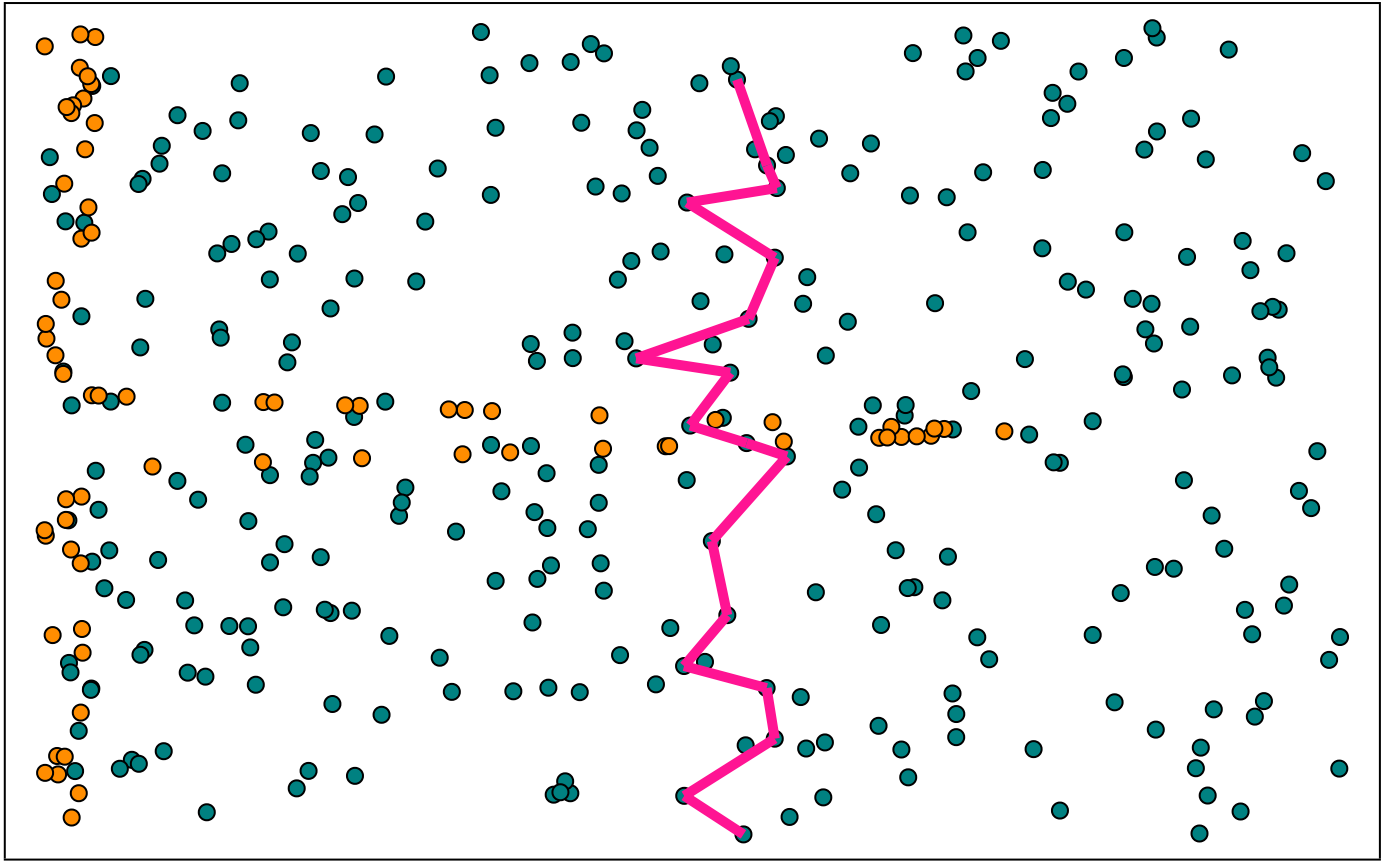cycle in W(Q,P)