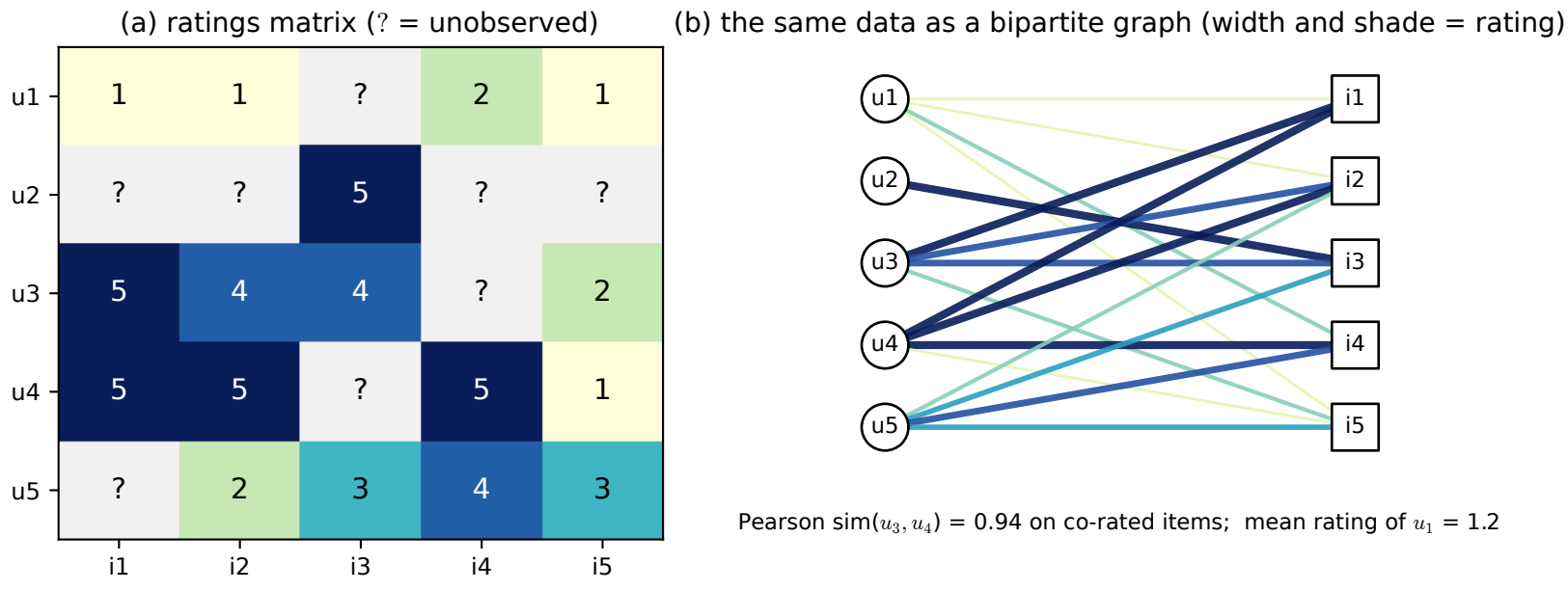

(a) ratings matrix (? = unobserved)
u1
u2
u3
u4
u5
1 1 ? 2 1
? ? 5 ? ?
5 4 4 ? 2
5 5 ? 5 1
? 2 3 4 3
i1
i2
i3
i4
i5
(b) the same data as a bipartite graph (width and shade = rating)
u1
u2
u3
u4
u5
i1
i2
i3
i4
i5
Pearson sim(u_3, u_4) = 0.94 on co-rated items; mean rating of u_1 = 1.2