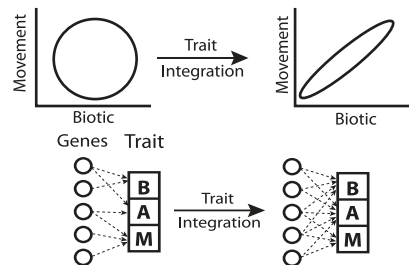
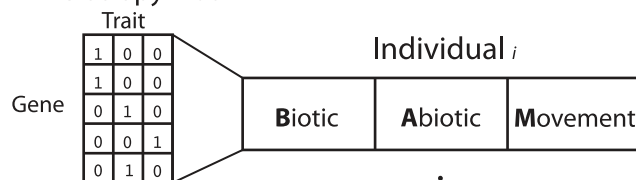


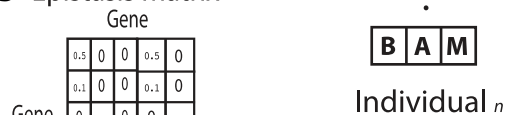
### A.1 Trait architecture [Integration; Modularity]



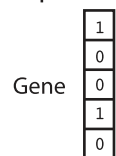
### A.2 Pleiotropy matrix



### A.3 Epistasis matrix

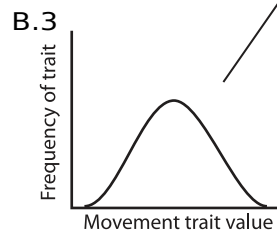
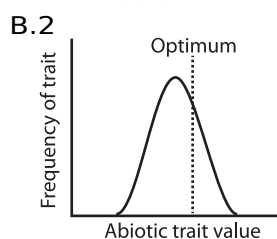
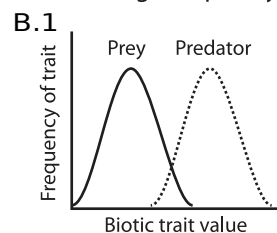


### A.4 Expression vector

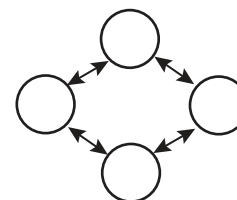


### Selection

[Trait matching; Frequency dependent]

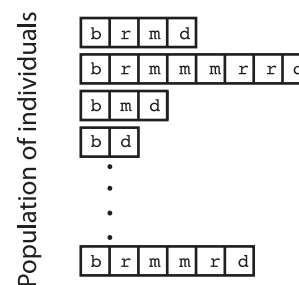


### C.1 Compute fitness at each site



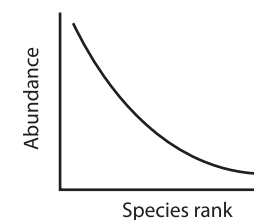
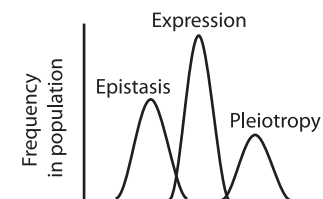
### C.2 Simulate individual lifespans

Birth (b); Move (m); Reproduce (r); Death (d)



### C.3 Calculate population size at each site

### C.4 Track biodiversity dynamics



### C.5 Species interactions network

