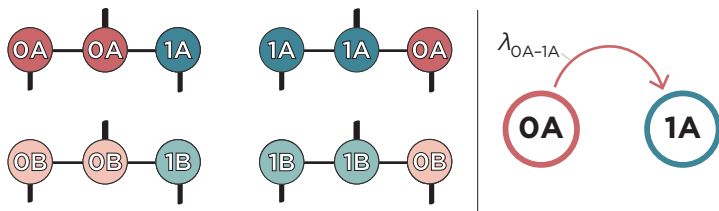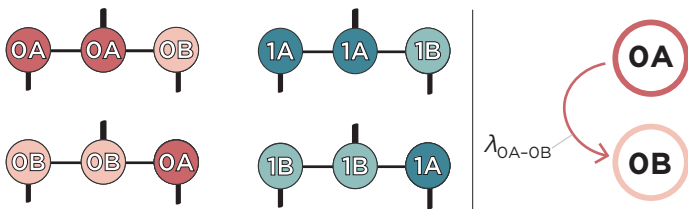Cladogenesis with **no** trait change (HiSSE)

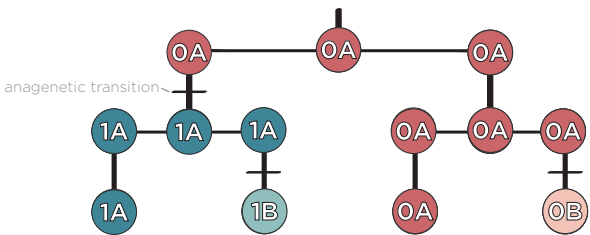λ_{0A}
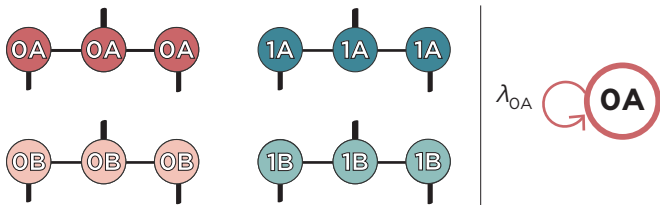
Cladogenesis with trait change but **not** between A & B states (ClaHiSSE)

λ_{0A-1A}
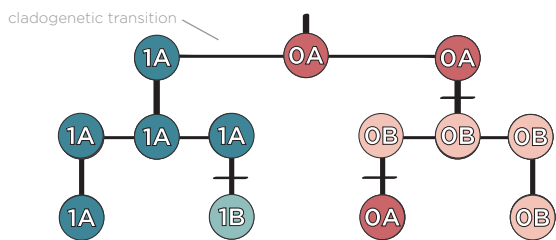
Cladogenesis between states and traits (HiClass)

λ_{0A-0B}

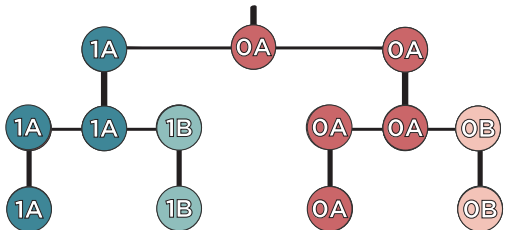How it would have to happen in HiSSE

Transitions between states are **only** anagenetic

ClaHiSSE would allow for this option as well:

Trait changes between 0's and 1's **can** be cladogenetic but A's and B's are **only** anagenetic

HiClass does not restrict anagenetic or cladogenetic transitions between A & B states and would allow for this as well:

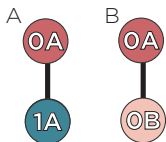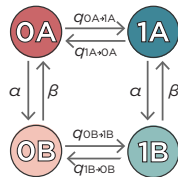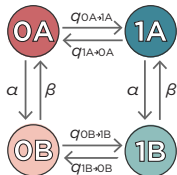Trait changes between 0's and 1's and A's and B's can be cladogenetic or anagenetic.
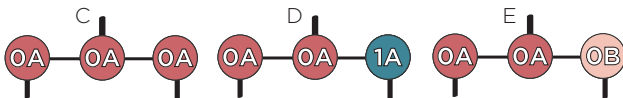
Anagenetic transitions

between states (q)

between hidden states (α/β)

A   B

Anagenetic

C   D   E

Cladogenetic