We see that cooperation evolved more frequently, and that the strategy against a specific type mirrors the type. Defection works well against defective strategies, and cooperation works well along cooperative agents. !! This method is not a good model b/c types tend to get monopolized pretty early on.

Is there a more efficient way to simulate pairwise interaction?

probability of U\_i being in a state\_k = P\_ik

Since it is a moore machine,

P\_i , initial state gives A\_i0

A\_i(n+1) = f(A\_j0, P\_i)

P needs to repeat x 2

P\_next = ([1 1 1.. xn] x P x [I I] x T) x [I I][A\_0 A\_1] (cascade shift right 1 each row)

P’= (T\_0\*A\_0 + T\_1\*A\_1)P

A\_0 = [sum\_0(s), sum\_1(s)]

resolve TA first

T =

if C, [T\_00, T\_10, T\_20, T\_30] | if D,

[T\_01, T\_11, T\_21, T\_31] |

[T\_02, T\_12, T\_22, T\_32] |

[T\_03, T\_13, T\_23, T\_33] |

P\_i0c

..

P\_i3c

P\_i0d

..

P\_i3d

2nx1 -> nx2

Ideally, R =

if C, [P\_i0, P\_i1, P\_i2, P\_i3]

if D, [P\_i0, P\_i1, P\_i2, P\_i3]

A\_j0 \* R

A\_j(n+1) = f(A\_i0, P\_j)

[P\_i0,

[0.9,…

0.1 ,…

0.3,…

0.7,..]

[0.9,…

0.1 ,…

0.3,…

0.7,..]

P\_i1,

P\_i2,

P\_i3]

Maybe the resultant equilibrium is a ratio of coop/defect? Name this the moore equilibrium