

52-2017-09-27-i-have-wrong-definition-for-A

/Volumes/lacie/aaa/packages/gatars/gails-stuff/01-examples-for-help-files

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```
alpha = alpha_uni[jjj, ]
a4 = (1 - sum(as.vector(alpha)))
A_1 = alpha[, 1] * JJJ + alpha[,2] * III
A_2 = alpha[, 3] * JJJ + a4 * III
AAA = rbind(cbind(A_1 + A_2, -A_1),
             cbind(-A_1, A_1 - A_2))
```

$$A_1 = \alpha_1 J + \alpha_2 I$$

$$A_2 = \alpha_3 J + \alpha_4 I$$

$$A = \begin{pmatrix} A_1 + A_2 & -A_1 \\ -A_1 & A_1 - A_2 \end{pmatrix}$$

When $\alpha_1 = 1$, I get $A_1 = J$, $A_2 = 0$ and $A = \begin{pmatrix} J & -J \\ -J & J \end{pmatrix}$

When $\alpha_2 = 1$ I get $A_1 = I$, $A_2 = 0$ and $A = \begin{pmatrix} I & -I \\ -I & I \end{pmatrix}$

When $\alpha_4 = 1$ I get $A_1 = 0$, $A_2 = I$ and $A = \begin{pmatrix} I & 0 \\ 0 & -I \end{pmatrix}$

However, this is a possibility

$\alpha_3 = 1$, so $A_1 = 0$, $A_2 = J$ and $A = \begin{pmatrix} J & 0 \\ 0 & -J \end{pmatrix}$

I believe B, S, T, BS, BT, and ST are correct, but BST is optimized over many more points than described in Equation (7)