All to all $\mathbf{y} \to \mathbf{x}$ transfer of variables

Original Distribution: y sweep

$b_{i,1,1}$	$b_{i,1,2}$	$b_{i,1,3}$	$b_{i,1,4}$	$b_{i,1,5}$	$b_{i,1,6}$
$b_{i,2,1}$	$b_{i,2,2}$	$b_{i,2,3}$	$b_{i,2,4}$	$b_{i,2,5}$	$b_{i,2,6}$
$b_{i,3,1}$	$b_{i,3,2}$	$b_{i,3,3}$	$b_{i,3,4}$	$b_{i,3,5}$	$b_{i,3,6}$
$b_{i,4,1}$	$b_{i,4,2}$	$b_{i,4,3}$	$b_{i,4,4}$	$b_{i,4,5}$	$b_{i,4,6}$
			•		
$b_{i,5,1}$	$b_{i,5,2}$	$b_{i,5,3}$	$b_{i,5,4}$	$b_{i,5,5}$	$b_{i,5,6}$
$b_{i,5,1}$ $b_{i,6,1}$	$b_{i,5,2} \ b_{i,6,2}$	$b_{i,5,3}$ $b_{i,6,3}$	$b_{i,5,4} \ b_{i,6,4}$	$b_{i,5,5}$ $b_{i,6,5}$	$b_{i,5,6}$ $b_{i,6,6}$
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Distribution After All to All

$b_{i,1,1}$	$b_{i,1,2}$	$b_{i,1,3}$	$b_{i,5,1}$	$b_{i,5,2}$	$b_{i,5,3}$
$b_{i,2,1}$	$b_{i,2,2}$	$b_{i,2,3}$	$b_{i,6,1}$	$b_{i,6,2}$	$b_{i,6,3}$
$b_{i,3,1}$	$b_{i,3,2}$	$b_{i,3,3}$	$b_{i,7,1}$	$b_{i,7,2}$	$b_{i,7,3}$
$b_{i,4,1}$	$b_{i,4,2}$	$b_{i,4,3}$	$b_{i,8,1}$	$b_{i,8,2}$	$b_{i,8,3}$
$b_{i,1,4}$	$b_{i,1,5}$	$b_{i,1,6}$	$b_{i,5,4}$	$b_{i,5,5}$	$b_{i,5,6}$
$b_{i,1,4}$ $b_{i,2,4}$	$b_{i,1,5}$ $b_{i,2,5}$	$\begin{array}{ c c } b_{i,1,6} \\ b_{i,2,6} \end{array}$	$b_{i,5,4}$ $b_{i,6,4}$	$b_{i,5,5} \\ b_{i,6,5}$	$b_{i,5,6}$ $b_{i,6,6}$
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REDISTRIBUTION a \rightarrow b

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Distribution After Redistribution: Proceed to x sweep

$a_{i,1,1}$	$a_{i,1,2}$	$a_{i,1,3}$	$a_{i,1,4}$	$a_{i,1,5}$	$a_{i,1,6}$	$a_{i,1,7}$	$a_{i,1,8}$
$a_{i,2,1}$	$a_{i,2,2}$	$a_{i,2,3}$	$a_{i,2,4}$	$a_{i,2,5}$	$a_{i,2,6}$	$a_{i,2,7}$	$a_{i,2,8}$
$a_{i,3,1}$	$a_{i,3,2}$	$a_{i,3,3}$	$a_{i,3,4}$	$a_{i,3,5}$	$a_{i,3,6}$	$a_{i,3,7}$	$a_{i,3,8}$
$a_{i,4,1}$	$a_{i,4,2}$	$a_{i,4,3}$	$a_{i,4,4}$	$a_{i,4,5}$	$a_{i,4,6}$	$a_{i,4,7}$	$a_{i,4,8}$
$a_{i,5,1}$	$a_{i,5,2}$	$a_{i,5,3}$	$a_{i,5,4}$	$a_{i,5,5}$	$a_{i,5,6}$	$a_{i,5,7}$	$a_{i,5,8}$
$a_{i,6,1}$	$a_{i,6,2}$	$a_{i,6,3}$	$a_{i,6,4}$	$a_{i,6,5}$	$a_{i,6,6}$	$a_{i,6,7}$	$a_{i,6,8}$