## Global vMVA Relations

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From Jana Archibald's thesis, <u>http://www.math.toronto.edu/jfa/jana\_thesis.pdf</u>, page 55:

	Relations on Virtual Knots a		<u></u> , page
Welded Knots Our proof p. 70			The MVA is a welded knot invari- ant.
	$\begin{array}{c} \end{array} + \end{array} = (\sqrt{x_1} + \frac{1}{\sqrt{x_1}}) \\ \\ \end{array} + \\ \end{array} = (\sqrt{x_1} + \frac{1}{\sqrt{x_1}}) \end{array}$		These two relations are virtual versions of Conway's two second identities. Whit's $\Sigma_1$ here $\frac{2}{9}$
Our proof p. 70	$\begin{array}{c c} & & & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ $	+	A virtual version of Conway's third identity. Not group ~ like", Satisfied by linking nambers.
Our proof p. 71	$\left( \bigcup_{1}^{\bullet} \right)_{2} = \left( \sqrt{x_{2}} + \frac{1}{\sqrt{x_{2}}} \right)  \left  \begin{array}{c} \bullet \\ 1 \end{array} \right _{1} \text{ and } \left( \left( \sqrt{x_{2}} + \frac{1}{\sqrt{x_{2}}} \right) \right) \right _{1} \left( \sqrt{x_{2}} + \frac{1}{\sqrt{x_{2}}} \right) \right _{1} \left( \sqrt{x_{2}} + \frac{1}{\sqrt{x_{2}}} \right) \left( \sqrt{x_{2}} + $	= 0	Versions of J. Murakami's Fifth Axiom for virtual knots.
Virtual N- S Doubled Deltas			Parallel strands must have the same label. Two versions of the N-S doubled delta move for vir- tual knots.
or bette		+ -	$\begin{bmatrix} \frac{1}{2} \\ \frac{1}{2} \end{bmatrix} - \begin{bmatrix} \frac{1}{2} \\ \frac{1}{2} \end{bmatrix}$
ć			at arrow diagram livel. (deg 2) (Is Reve anything more higher Jugres?
In Logree	3:		( higher I yords ?

