Laws of Form Reference

Naip Moro

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Axioms

$\overline{\overline{p|}\,p|} =$ (Position J1)

$\overline{\overline{p\,r|}\;\overline{q\,r|}|} = \overline{\overline{p|}\;\overline{q|}|}\,r$ (Transposition J2)

Consequences

$\overline{\overline{a|}|} = a$ (Reflexion C1)

$\overline{a\,b|}\,b = \overline{a|}\,b$ (Generation C2)

$\overline{|}\,a = \overline{|}$ (Integration C3)

$\overline{\overline{a|}\,b|}\,a = a$ (Occultation C4)

$a\,a = a$ (Iteration C5)

$\overline{\overline{a|}\;\overline{b|}|}\;\overline{\overline{a|}\,b|} = a$ (Extension C6)

$\overline{\overline{\overline{a|}\,b|}\,c|} = \overline{a\,c|}\;\overline{\overline{b|}\,c|}$ (Echelon C7)

$\overline{\overline{a|}\;\overline{b\,r|}\;\overline{c\,r|}|} = \overline{\overline{a|}\;\overline{b|}\;\overline{c|}|}\;\overline{\overline{a|}\;\overline{r|}|}$ (Modified transposition C8)

$\overline{\overline{\overline{a|}\;\overline{r|}|}\;\overline{\overline{b|}\;\overline{r|}|}\;\overline{\overline{x|}\,r|}\;\overline{\overline{y|}\,r|}|} = \overline{\overline{r|}\,a\,b|}\;\overline{r\,x\,y|}$ (Crosstransposition C9)

Corollaries

$\overline{a|}\,a = \overline{|}$ (J1.1)

$\overline{\overline{a|}\,a\,b|} =$ (J1.2)

$\overline{p\,r|}\;\overline{q\,r|} = \overline{\overline{\overline{p|}\;\overline{q|}|}\,r|}$ (J2.1)

$\overline{\overline{|}|}\,a = a$ (B2)

$\overline{\overline{|}\,a|} =$ (C3.1)

$\overline{a\,b|}\;\overline{a|} = \overline{a|}$ (C4.1)

$\overline{\overline{a|}\,b|}\;\overline{a\,b|} = \overline{b|}$ (C6.1)

$\overline{\overline{\overline{a|}\,b|}\;\overline{a\,b|}|} = b$ (Robbins C6.2)

$\overline{\overline{a|}\;\overline{b\,r|}|} = \overline{\overline{a|}\;\overline{b|}|}\;\overline{\overline{a|}\;\overline{r|}|}$ (C8.1)

$\overline{\overline{\overline{a|}\;\overline{r|}|}\;\overline{\overline{x|}\;\overline{r|}|}|} = \overline{\overline{r|}\,a|}\;\overline{r\,x|}$ (C9.1)

Metatheorems

$$\overline{\overline{a_1 r}|\ \overline{a_2 r}|\ \dots\ \overline{a_n r}|}| = \overline{\overline{a_1}|\ \overline{a_2}|\ \dots\ \overline{a_n}|}|\, r \tag{J2*}$$

$$\overline{a_1 r}|\ \overline{a_2 r}|\ \dots\ \overline{a_n r}| = \overline{\overline{\overline{a_1}|\ \overline{a_2}|\ \dots\ \overline{a_n}|}|\, r}| \tag{J2.1*}$$

$$\overline{\overline{\overline{\overline{a_n b}|\ \dots}|\ a_2}|\ a_1}|\ b = \overline{\overline{\overline{\overline{a_n}|\ \dots}|\ a_2}|\ a_1}|\ b \tag{C2*}$$

$$\overline{\overline{a}|\ \overline{b_1 r}|\ \overline{b_2 r}|\ \dots\ \overline{b_n r}|}| = \overline{\overline{a}|\ \overline{b_1}|\ \overline{b_2}|\ \dots\ \overline{b_n}|}|\ \overline{\overline{a}|\ \overline{r}|}| \tag{C8*}$$

$$\overline{\overline{\overline{a_1}|\ \overline{r}|}|\ \overline{\overline{a_2}|\ \overline{r}|}|\ \dots\ \overline{\overline{a_n}|\ \overline{r}|}|\ \ \overline{\overline{x_1}|\, r}|\ \overline{\overline{x_2}|\, r}|\ \dots\ \overline{\overline{x_m}|\, r}|}|$$

$$= \overline{\overline{r}|\, a_1 a_2 \dots\ a_n}|\ \overline{r\, x_1 x_2 \dots x_m}| \tag{C9*}$$

For all even $n \geq 2$:

$$\overline{\overline{\overline{\overline{a_n}|\ \dots}|\ a_2}|\ a_1}| = \overline{\overline{a_n}|\, a_{n-1} \dots\ a_3 a_1}|\ \dots\ \overline{\overline{a_4}|\ a_3 a_1}|\ \overline{\overline{a_2}|\ a_1}| \tag{C7.1*}$$

and

$$\overline{\overline{\overline{\overline{\overline{a_{n+1}}|\ a_n}|\ \dots}|\ a_2}|\ a_1}|$$

$$= \overline{a_{n+1} a_{n-1} \dots\ a_3 a_1}|\ \overline{\overline{a_n}|\, a_{n-1} \dots\ a_3 a_1}|\ \dots\ \overline{\overline{a_4}|\ a_3 a_1}|\ \overline{\overline{a_2}|\ a_1}| \tag{C7.2*}$$