Laws of Form Reference

Axioms

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

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

Consequences

$\overline{\overline{p}} = p$ (Reflexion C1)

$\overline{p\,q}\,q = \overline{p}\,q$ (Generation C2)

$\overline{}\,p = \overline{}$ (Integration C3)

$\overline{\overline{p}\,q}\,p = p$ (Occultation C4)

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

$\overline{\overline{p}\;\overline{q}}\;\overline{\overline{p}\,q} = p$ (Extension C6)

$\overline{\overline{p\,q}\,r} = \overline{p\,r}\;\overline{q\,r}$ (Echelon C7)

$\overline{p\;\overline{q\,x}\;\overline{r\,x}} = \overline{\overline{p}\;\overline{q}\;\overline{r}}\;\overline{\overline{p}\;\overline{x}}$ (Modified transposition C8)

$\overline{\overline{p}\;\overline{r}}\;\overline{\overline{q}\;\overline{r}}\;\overline{\overline{x}\,r}\;\overline{\overline{y}\,r} = \overline{\overline{r}\,p\,q}\;\overline{r\,x\,y}$ (Crosstransposition C9)

Corollaries

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

$\overline{\overline{p}\,p\,q} =$ (J1.2)

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

$\overline{\overline{}}\,p = p$ (B2)

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

$\overline{p\,q}\;\overline{p} = \overline{p}$ (C4.1)

$\overline{\overline{p}\,q}\;\overline{p\,q} = \overline{q}$ (C6.1)

$\overline{\overline{\overline{p}\,q}\;\overline{p\,q}} = q$ (Robbins C6.2)

$\overline{p\;\overline{q\,r}} = \overline{p}\;\overline{q}\;\overline{\overline{p}\;\overline{r}}$ (C8.1)

$\overline{\overline{p}\;\overline{r}}\;\overline{\overline{q}\;r} = \overline{\overline{r}\,p}\;\overline{r\,q}$ (C9.1)

General theorems

$$\overline{\overline{p_1 r}\,\overline{p_2 r}\,\ldots\,\overline{p_n r}} = \overline{\overline{p_1}\,\overline{p_2}\,\ldots\,\overline{p_n}}\,r \tag{J2*}$$

$$\overline{p_1 r}\,\overline{p_2 r}\,\ldots\,\overline{p_n r} = \overline{\overline{\overline{p_1}\,\overline{p_2}\,\ldots\,\overline{p_n}}\,r} \tag{J2.1*}$$

$$\overline{\overline{\overline{p_n q}\,\ldots\,p_2}\,p_1}\,q = \overline{\overline{\overline{p_n}\,\ldots\,p_2}\,p_1}\,q \tag{C2*}$$

$$\overline{p}\,\overline{q_1 x}\,\overline{q_2 x}\,\ldots\,\overline{q_n x} = \overline{p}\,\overline{q_1}\,\overline{q_2}\,\ldots\,\overline{q_n}\,\overline{p}\,\overline{x} \tag{C8*}$$

$$\begin{aligned}&\overline{\overline{p_1}\,\overline{r}\,\overline{p_2}\,\overline{r}\,\ldots\,\overline{p_n}\,\overline{r}\;\;\overline{x_1 r}\,\overline{x_2 r}\,\ldots\,\overline{x_m r}}\\ &= \overline{\overline{r}\,p_1 p_2\ldots p_n}\,\overline{r\,x_1 x_2\ldots x_m}\end{aligned} \tag{C9*}$$

For all even $n \geq 2$:

$$\overline{\overline{\overline{p_n}\,\ldots\,p_2}\,p_1} = \overline{\overline{p_n}\,p_{n-1}\ldots p_3 p_1}\,\ldots\,\overline{\overline{p_4}\,p_3 p_1}\,\overline{\overline{p_2}\,p_1} \tag{C7.1*}$$

and

$$\begin{aligned}&\overline{\overline{\overline{\overline{p_{n+1}}\,p_n}\,\ldots\,p_2}\,p_1}\\ &= \overline{p_{n+1}p_{n-1}\ldots p_3 p_1}\,\overline{\overline{p_n}\,p_{n-1}\ldots p_3 p_1}\,\ldots\,\overline{\overline{p_4}\,p_3 p_1}\,\overline{\overline{p_2}\,p_1}\end{aligned} \tag{C7.2*}$$