Symbols and Glossary

Primary Symbols

Symbol	Name	Description
$\langle\ \rangle$	Mark / Cross	The primary distinction; represents TRUE
$\emptyset$	Void	Empty space; represents FALSE
$\langle a \rangle$	Enclosure	Boundary containing form a; represents NOT a
ab	Juxtaposition	Forms side-by-side; represents a AND b
j	Imaginary value	Self-referential form: $j = \langle j \rangle$

Derived Symbols

Symbol	Definition	Boolean Equivalent
$\langle\langle a\rangle\langle b\rangle\rangle$	De Morgan disjunction	a OR b
$\langle a\langle b\rangle\rangle$	Material implication	$a \rightarrow b$
$\langle ab\rangle$	Sheffer stroke	a NAND b
$\langle\langle\langle a\rangle\langle b\rangle\rangle\rangle$	Peirce arrow	a NOR b

Meta-Symbols

Symbol	Meaning
f	Truth value of form f
$\equiv$	Semantic equivalence
$=$	Syntactic equality after reduction
$\rightarrow$	Reduces to (single step)
$\rightarrow^*$	Reduces to (multiple steps)

Axiom Labels

Label	Name	Statement
J1	Calling / Involution	$\langle\langle a \rangle\rangle = a$
J2	Crossing / Condensation	$\langle\ \rangle\langle\ \rangle = \langle\ \rangle$

Consequence Labels (C1-C9)

Label	Name	Statement
C1	Position	$\langle\langle a\rangle b\rangle a = a$
C2	Transposition	$\langle\langle a\rangle\langle b\rangle\rangle c = \langle ac\rangle\langle bc\rangle$
C3	Generation	$\langle\langle a\rangle a\rangle = \langle\ \rangle$
C4	Integration	$\langle\ \rangle a = \langle\ \rangle$ (in enclosure)
C5	Occultation	$\langle\langle a\rangle\rangle a = a$
C6	Iteration	$aa = a$
C7	Extension	$\langle\langle a\rangle\langle b\rangle\rangle\langle\langle a\rangle b\rangle = a$
C8	Echelon	$\langle\langle ab\rangle c\rangle = \langle ac\rangle\langle bc\rangle$
C9	Cross-Transposition	$\langle\langle ac\rangle\langle bc\rangle\rangle = \langle\langle a\rangle\langle b\rangle\rangle c$

Glossary

Agential Cut

(Barad) An enacted boundary that constitutes the entities it separates; parallels the Spencer-Brown mark as constitutive rather than representational.

Boundary

A line of demarcation creating inside and outside; the fundamental operation in the calculus of indications.

Calling

Axiom J1: Double enclosure returns to the original form. Also known as involution or double negation elimination.

Canonical Form

The irreducible form of an expression after all reduction rules have been applied. Only void and mark are canonical.

Condensation

See Crossing.

Containment Theory