

Core Notation

- **Locus** ξ (address): $\epsilon, \sigma, \sigma.1, \sigma.1.2$
- **Actions**: $(+, \xi, I)$ open children I ; $(-, \xi.i)$ focus child i
- **Daimon** \blacklozenge ends play (success)

Dynamics

- **Interaction**: run D vs E along shared addresses
- **Orthogonality**: $D \sqcap E \Leftrightarrow$ run normalizes (may hit \blacklozenge)
- **Behaviour**: $B = B \perp \perp$ (meaning by tests)

Additives (local to a base)

- **with**: $B \& C = B \cap C$
- **plus**: $B \oplus C = (B \perp \& C \perp) \perp$
- Disjoint negatives: $|B \& C| \cong |B| \times |C|$

Multiplicatives & Exponentials

- **\otimes, \wp** by delocalised composition across independent loci
- **Copy**: fresh sub-loci $\sigma.0, \sigma.1, \dots$; **Weaken**: \blacklozenge

Arrow / Quantifiers

- **Function space**: $A \vdash B := \{ D \mid \forall a \in A, \langle D \mid a \rangle \in B \}$
- **Uniformity**: quantified tests must be parameter-independent

Tiny ASCII

$(+, \sigma, \{1,2\})$
 $\begin{array}{l} \sigma \\ \vdash \sigma.1 \\ \vdash \sigma.2 \end{array}$

Success:

$E: -\sigma$; $D: +\sigma$; $E: -\sigma.1$; $D: +\sigma.1$; ... ; \blacklozenge

Failure:

D only develops $\sigma.2$; E tests $\sigma.1 \rightarrow$ stuck

