

Implicit Activation

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In this paper I present an implicit activation theorem in found in Path Semantical Logic.

The Implicit Activation Theorem is a proof in Path Semantical Logic^[1]:

$$(c_0, a_0, b_0) (c_1, a_1, b_1): \\ c_1 \Rightarrow (a_1 = b_1), c_0 = c_1, a_0 = a_1, b_0 = b_1 \Rightarrow a_1 = b_1$$

Here, the tuple `(c₀, a₀, b₀)` has level 0 and the tuple `(c₁, a₁, b₁)` has level 1.
Notice that these levels follow the new standard order^[2].

With other words, an implicit equality in level 1 is activated when cloning the state in level 0.

References:

- [1] “Path Semantical Logic”
AdvancedResearch – Reading sequence on Path Semantical Logic
https://github.com/advancedresearch/path_semantics/blob/master/sequences.md#path-semantical-logic

- [2] “New Standard Order for Levels”
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https://github.com/advancedresearch/path_semantics/blob/master/papers-wip2/new-standard-order-for-levels.pdf