

## Refutation of Fredkin paradox in one variable

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We assume the method and apparatus of Meth8/VL4 with  $\top$  as the designated *proof* value,  $\bot$  as contradiction,  $\top$  as truthity (non-contingency), and  $\bot$  as falsity (contingency). The 16-valued truth table fragment ) is row-major and horizontal.

From: [en.wikipedia.org/wiki/Fredkin%27s\\_paradox](http://en.wikipedia.org/wiki/Fredkin%27s_paradox)

LET  $\sim$  Not;  $\&$  And;  $+$  Or;  $-$  Not Or;  $>$  Imply, greater than;  $<$  Not Imply, less than;  
 $@$  Not Equivalent;  
 $p, \sim p$  : chosen state, alternative to chosen state.

"The more equally attractive two alternatives seem, the harder it can be to choose between them—no matter that, to the same degree, the choice can only matter less." (1.1)

$((p > \sim p) \& ((p \sim p) > (p @ p))) > ((p + \sim p) < ((p > \sim p) \& ((p \sim p) > (p @ p))))$  ;  
FTFT FTFT FTFT FTFT (1.2)

Eq. 1.2 as rendered is *not* contradictory, and hence refutes the Fredkin paradox in *one* variable.