

Re: Can returning a value change the value itself (in the Halting Problem)

Source: <http://sci.tech-archive.net/Archive/sci.logic/2004-08/3036.html>

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Date: 08/24/04

Date: Tue, 24 Aug 2004 17:35:54 GMT

"Marc Goodman" <marc.goodman@comcast.net> wrote in message
news:UEKWc.36354\$9d6.14638@attbi_s54...

- > *The context is a TM with access to its own state transition*
- > *table that can calculate the check sum of its own state*
- > *transition table. Do you finally see that even making*
- > *a "trivial" change to such a TM can cause the result produced*
- > *by such a TM to change? Or do we have to go through this*
- > *line of argument three more times?*

Could you explain what you mean by a TM with access to its
own state transition table? What does access mean?

A TM as defined by Turing makes state transitions based upon
its current state and the value read by the "head". Does this
new machine make transitions based upon somehow "reading"
the transition table? It would seem that if so, it would need
a "bigger" transition table that takes as inputs what is read
by the "head" and what is read by whatever reads the state
transition table. Or perhaps the transition table is present
on a tape to begin with, and there is some magical property
that guarantees that what is on the tape matches the
transition table that is actually used. Please explain.

What I would like is a formalization this machine with access
to its own state transition table. (It shouldn't be called a
TM, because it is not, and no TM as defined by Turing
behaves that way")

—PeterD