An Infinite Sequence of Trite but True Sentences

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“...but trite is not the opposite of true, Harma, also the sentence two times two is four is trite, and nevertheless...”, — from ‘My Michael’ by Amos Oz, p. 179.

“Although it was well understood that linguistic processes are in some sense “creative”, the technical devices for expressing a system of recursive processes were simply not available until much more recently. In fact, a real understanding of how a language can (in Humboldt’s words) “make infinite use of finite means” has developed only within the last thirty years, in the course of studies in the foundation of mathematics” — Noam Chomsky, ‘Aspects of the Theory of Syntax’, 1965, p. 8.

The worst cliché is ‘that’s a cliché’. Hence

\textbf{Prop. 1.} \( S \) is trite implies that ‘\( S \) is trite’ is trite. \( \Box \) We also have

\textbf{Prop. 2.} \( S \) is true implies that ‘\( S \) is true’ is true. \( \Box \) Hence

\textbf{Corollary.} \( S \) is trite but true implies that ‘\( S \) is trite but true’ is trite but true.

Define \( S_0 := \text{two times two is four}, \) and for \( i > 0, \) \( S_i := ‘S_{i-1} \text{ is trite but true}’ \). Then \( \{S_i\} \) is the desired infinite sequence. Of course the present construction is trite, but it is, \textit{bekhol zot} (nevertheless) true!

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