An Infinite Sequence of Trite but True Sentences

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"...but trite is not the opposite of true, Hanna, 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

Prop. 1. S is trite implies that 'S is trite' is trite. $\square$ We also have

Prop. 2. S is true implies that 'S is true' is true. $\square$ Hence

Corollary. S is trite but true implies that 'S is trite but true' is trite but true.

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

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