Philosophy of Logic – Reexamining the Formalized Notion of Truth

Tarski "proved" that there cannot possibly be any correct formalization of the notion of truth entirely on the basis of an insufficiently expressive formal system that was incapable of recognizing and rejecting semantically incorrect expressions of language.

Stipulating this definition of Axiom:
An expression of language defined to have the semantic value of Boolean True.

Stipulating this specification of True and False:
Axiom(1) True(F, x) ↔ (F ⊢ x).
Axiom(2) False(F, x) ↔ (F ⊢ ¬x).

Stipulating that formal systems are Boolean:
Axiom(3) ∀F ∈ Formal_System ∀x ∈ Closed_WFF(F) (True(F,x) ∨ False(F,x))

Within the above stipulations formal proofs to theorem consequences now express the sound deductive inference model eliminating incompleteness, undecidability and inconsistency from the notion of formal systems.

The third step of the Tarski Undefinability Theorem proof:
(3) x ∉ Pr if and only if x ∈ Tr
is refuted on the basis of a simplified version of Axiom(1).

Within the above stipulations the following logic sentence:
∃F∃G (G ↔ ((F ⊬ G) ∧ (F ⊬ ¬G)))
(1) Asserts there exists expressions G of formal system F that are neither true nor false.
(2) Is decided to be false on the basis of Axiom(3).

Making the following paragraph false:
The first incompleteness theorem states that in any consistent formal system F within which a certain amount of arithmetic can be carried out, there are statements of the language of F which can neither be proved nor disproved in F. (Raatikainen 2018)

Raatikainen, Panu, "Gödel's Incompleteness Theorems", The Stanford Encyclopedia of Philosophy (Fall 2018 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/fall2018/entries/goedel-incompleteness/.

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