A Fuller Answer to Hilbert's Second Problem

In reply to the question in your email, I thought your talk went quite well, but I thought the dialog in the question-answer section got a little inadvertently confused.

A problem inadvertently arose when someone raised the point that John Von Neumann constructed a version of the G2 result after he learned of Gödel's G1 result. Unlike Gödel, Von Neumann never viewed the G2 result as owning some partial exceptions.

In my view, it is at this juncture that my "Tripod" response to Hilbert's Second Question becomes useful. I didn't speak out during the Question-Answer period during your talk because I knew my answer would confuse the audience, if it was informally given in a verbal form. BUT I CAN convey my opinions about the "Tripod" theory within a few short paragraphs in this email.

Let us first examine a camera that resides upon a Tripod structure positioned on an Earth-like planet or a Moon-like structure. Contrary to one's initial impression, this camera is not balanced *exclusively* by a 3-legged structure. There is also a fourth *invisible force* corresponding to gravity. This gravitational force pulls the camera in an invisilbe downward direction. It is counter-balanced by the upwards directing forces of the three legs.

The point is that the three upwards pointing legs balance against the downward pointing gravitational force and prevent the camera-tripod from tipping over (assuming the absence of either a wind-force or an intense vibration from either an earth-quake or a moon-quake). This is because the three balancing legs will prevent a camera resting on a "Tripod" platform from tipping over unless it

first moves in an upward diretion (in defiance of the invisible gravitational force).

Due to a lack of page space, I never touched upon this topic in my 15-page LFCS-2022 submission. It is, however, the reason that I used the word "Tripod" in both the title of my paper and its very first abstract passage.

My impression is that the G2 theorem is one third of the answer to Hilbert's Second Question. Also your axiomatic approach is a second third of the answer, My *"I am consistent"* axioms are a third part of the answer. *The counterpart of the downward gravitational force that balances* "the Tripod" *is the human's instinctive need to hold a belief about the consistency and orderly nature of his logic platform.*

The three visible legs and the invisible downard pointing gravitational force of *"self-belief"* balance against each other naturally as a reply to Hilbert's Second Problem within my logical framework. This balancing is analogous to a camera's "Tripod" style platform.

I was reluctant to put a passage of this type into my LFCS 2022 submission because I had no page space. I was also afraid it would confuse the reader. My plan was to add a chapter about this topic into the the final LFCS Oxford document (where more page space would be avaialble for a short philsophical discusssion).

In my opinion, the reason that there was some confusion during the Question-Answer period at the end of your talk was because someone was approaching this topic when the audience member mentioned John Von Neumann had a different philosphy than did Kurt Gödel.

Perhaps if there is additional available page space, I should insert a short

2-page passage about this topic into the Janaury 2022 Springer version of my paper? I avoided it in the current draft partially due to a lack of page space and also because it is a confusing topic..... The point is that if you think of the human's desire to think in an orderly manner as a counterpart to gravity's downward force...., then the three parts of my proposed 3-way theory are counterparts of the three legs of a Tripod platform of camera's standing appratus.