## **Waiting for Citizen Godel**

Howard V. Hendrix

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[Insert Pic godel.jpg Here]

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"I suppose some people will wonder if this is really a science fiction story after all, given that it is about our 'consensus' historical past and not about an alternate timeline. I believe it is sf—not only because it's a fiction in which the science is integral to the story, but also because it's an example of that fine old subgenre of science fiction, the 'cautionary tale.' Although the door into dictatorship Godel anticipated has not come to pass, the extensive subversion of the US constitution which he so feared is, in fact, more real than ever. That's why I wrote 'Waiting for Citizen Godel' at this very time, on this very timeline."

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ON THE DRIVE FROM the Institute for Advanced Study in Princeton to the government offices in Trenton, Einstein and Morgenstern spend the entire time keeping Godel distracted by telling stories and jokes.

"Another of those autograph hunters came after me yesterday," Einstein says, shaking his head. "You know those primitive tribes that won't let you take pictures of them? Out of fear the camera, by making an image of a person, steals the soul of that person, or at least part of it?"

Godel nods.

"I've heard cannibals believe that, particularly," he says.

"That's why they eat the flesh of their defeated enemies," Morgenstern adds from the driver's seat. "The greater the warrior they eat, the greater the soul they incorporate into their own."

"Exactly!" Einstein says. "I think they might not be so far wrong. Autograph hunters are the last of the cannibals! They try to take a little bit of your soul even as they're eating up a lot of your time making small talk and joking!"

Morgenstern and Godel laugh.

"Really though, Albert, you should be flattered," Morgenstern says. "They obviously think you're a great soul."

"Such flattery I can do without. I don't mind the jokes so much, though. Hey, I heard a new one from Veblen the other day."

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Albert Einstein, Oskar Morgenstern, and Kurt Godel don't walk into a bar in New Jersey. Actually they appear before the bar, in the government offices in Trenton, on December 5, 1947, for Godel's citizenship test.

By some fluke, oversight, or loop-hole, Godel has been allowed to apply for American citizenship—despite the fact that US immigration law expressly excludes from citizenship application all persons with histories of hospitalization for mental problems.

## Persons like Kurt Godel.

Einstein and Morgenstern, who are to serve as witnesses for Godel at the hearing, are a bit nervous. They are well aware that Godel is sometimes more than a little bit crazy. That the great wizard of logic should be appearing for this oral citizenship examination at all is an inconsistency in the logic (or at least the application) of the law, but there it is.

Morgenstern and Einstein are less worried by this inconsistency, however, than by another. Godel has taken extreme care in preparing for his citizenship test, going far beyond the simple background in US history and civics that passing the test actually requires.

At first he seems unfazed at the prospect of the citizenship test. During this period of test preparation, however, Godel reads the US Constitution like the critical thinker he is, carefully pondering every phrase and sentence of the document for paradoxes and lapses in logic. As time goes on, he becomes agitated enough for his witnesses to take note of it.

"I think I've found a logical inconsistency in the Constitution," Godel remarks to Einstein in the hallway at IAS, a couple of days before the test. Einstein pretends not to have heard him.

"I've discovered a legal-logical loophole that could allow a fascist dictatorship to establish itself in America in a fashion that has complete constitutional legitimacy!" he tells Morgenstern, in a phone call the night before the test. "Just as Hitler came to power legally in Germany! I must inform the judge of this."

Morgenstern is a strong-featured, bespectacled man with a good head of hair swept back from his prominent forehead. He could almost pass for Godel's bigger, stronger, healthier brother. He is at first much amused by his friend's comments, but becomes less so as Godel continues to insist on the importance of this presumed

flaw in the Constitution.

Fearing that Godel will reveal his findings about the Constitution during his immigration hearing, come off as a crazy crank, and thereby seriously harm his chances of being granted citizenship, Morgenstern and Einstein urge Godel to keep his discovery to himself. He seems disinclined to do this, however.

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Longtime hypochondriac obsessed with presumed flaws in his own physical constitution, Kurt Godel is, in January of 1978, at last prepared to actually step into the grave. He is doing so of his own free will, if the will of those who are mad can also be said to be free.

Godel's weight is down to sixty-five pounds. He is paranoid enough to believe his food is being poisoned. Convinced his belief is correct, he is starving himself to death. When his death certificate is filed in the Mercer County courthouse at Trenton, New Jersey, it will show that Godel died of "malnutrition and inanition" brought on by "personality disturbance."

Before that final step, however, even as he sits in a chair in his room in Princeton Hospital, he is thinking furiously. He knows the stories about "your whole life running like a high-speed flashcut film before your eyes" at the moment of death. So far, though, the main thing flashing before his mind's eye are the events of his citizenship-hearing day, over thirty years earlier.

That day of his next-to-last examination.

Now that he has well and truly arrived at the most final exam of all, he does not fear it. In fact, he finds it even less fraught with drama than that earlier exam.

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"Oswald Veblen!" Morgenstern says. "I haven't seen him in ages. How's he doing?"

"Same as always. I know I'm not the summit of sartorial splendor myself, but that man manages to make all his clothes look like he's been wearing them for years—even if he just put them on himself for the first time that very morning. I wonder how he does it."

"Maybe he hires people to wear his suit-jackets and pants for a couple of years before he wears them," Morgenstern says with a smile.

"No, no! He has a time machine just for his clothing!" says Godel.

They laugh. It's well known at I.A.S. that Godel's been working with Einstein on unified field theory problems. Rumor has it he's succeeded in constructing a rotating universe in which no privileged notion of universal time prevails absolutely throughout the cosmos, without arbitrariness. Plenty of time machine possibilities in that.

"What was Veblen's joke?" Morgenstern asks Einstein.

"It was about you and me, Kurt."

"Oh? Both of us?"

Einstein nods.

"Let me see. How did it go? Ah, I remember. Einstein and Godel are having a joke-telling competition. Einstein says, 'A bar walks into a man—Oops! Wrong frame of reference!' And Godel says, 'I think whether or not that's funny is an undecidable proposition!"

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Einstein and Morgenstern are pulled up to the curb, waiting for Godel to join them on the drive to Trenton. Morgenstern is behind the wheel.

"So, Oskar, you had von Neumann talk to Kurt about this 'constitutional inconsistency'?"

"Earlier today," Morgenstern says, nodding. Morgenstern the economist and John von Neumann the polymath are longtime colleagues. Together, just a few years earlier, they produced *The Theory of Games and Economic Behavior*, the founding document of game theory.

"Any luck?"

"I think so. Johnny understands Kurt's long chain of reasoning—better than I do, to tell the truth. I think he may have convinced Kurt that the 'door into dictatorship' would not only be hard to find, but very, very difficult to open."

"How so?"

"Kurt's concern involves Article V of the Constitution," Morgenstern says, looking about to make sure Godel is nowhere to be seen. "What the lawyers call the Amendment Clause. I've got a copy of the section here—but whatever you do, don't let Kurt see it."

Morgenstern stealthily hands Einstein a folded sheet of paper.

Sitting in the chair in which he will soon die, Godel knows that most people believe death completes life but is inconsistent with life. He believes the opposite. What could be more consistent than that a life which has a beginning in time should also have an ending in time? Death is utterly consistent with life *because* it makes life incomplete.

The whole tradition of life flashing before the mind's eye at the moment of death is reassuring to him, for Godel has long believed that the very incompleteness of mortal existence requires a life *beyond* death.

Godel remembers trying to explain his thoughts on all this in letters to his mother back in the early 1960s. If, as science shows, the world is not random and arbitrary, but rationally ordered and meaningful, then there *must* be another life. Why bring forth an essence—the human being, so well-constructed for the purpose of coming to a better existence and more meaningful life through learning—when one life is not nearly enough life to learn all the things we need to learn? When we present so vast a range of possible individual developments yet are never in this life allowed to realize even a tiny fraction of them?

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"I think I might have a better joke than that, Albert," Godel says sheepishly. "I heard it from one of our graduate students from the deep South, before I kicked him out of my office."

"What?" Morgenstern asks gently. "Do you always kick students out of your office after they tell you a good joke?"

"Only when they go on to ask about the deeper connections between my incompleteness theorem and Heisenberg's uncertainty principle," Godel says. "The boy riled me so much I whipped the blanket off my legs, got up from beside my electric heater, and physically pushed him from my office!"

The thought of frail little Kurt pushing some burly kid from Texas or Alabama out of his office is rather amusing. They know how often Kurt is pestered with that connection question, and how much he hates it. Einstein and Morgenstern are sympathetic.

"I must admit I regret doing it now—a bit, anyway. He seemed a bright enough boy, other than asking that question. I don't think I can quite do the accent the way he did, but I'll try."

"Is it about us?" Einstein asks.

"No, no. It's about Goldilocks and the three bears—or three 'bars,' as they say in the south."

Morgenstern and Einstein nod. They know how much Godel loves fantastic things—be they fairy tales or Franz Kafka's stories, or animated fairy-tale films, most of all. They particularly remember how much he enjoys Disney's *Snow White*, and the rumors of all the many times he has seen it.

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Opening the folded sheet, Einstein finds the following words typed, with a few errors he ignores.

Article V. The Congress, whenever two thirds of both houses shall deem it necessary, shall propose amendments to this Constitution, or, on the application of the legislatures of two thirds of the several states, shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this Constitution, when ratified by the legislatures of three fourths of the several states, or by conventions in three fourths thereof, as the one or the other mode of ratification may be proposed by the Congress; provided that no amendment which may be made prior to the year one thousand eight hundred and eight shall in any manner affect the first and fourth clauses in the ninth section of the first article; and that no state, without its consent, shall be deprived of its equal suffrage in the Senate.

"Sounds like lawyers, all right," Einstein says with a wry grin, refolding the slip of paper and handing it back to Morgenstern.

"Right. So Johnny called his lawyer before he talked to Kurt. What Kurt's afraid of, as near as I can tell, is that Article V establishes procedural limitations but no *substantive* limitations, so it could be used to overturn the democratic institutions described in the rest of the Constitution."

"I see," says Einstein. "Johnny calling his lawyer helped, then?"

"I think so. I was there when Johnny ambushed Kurt with a lot of legal jargon, mostly something called the 'lex posterior principle'. I gather it means the priority of new rules over old rules of the same type."

Einstein nods but says nothing. He can tell that Morgenstern is not only remembering all this but also thinking it through as he remembers.

"In a conflict between rules of different types, though," Morgenstern continues, "the superior rule in the legal hierarchy takes priority, even if it is older. Constitutional provisions always take priority over statutes, for instance. This I think Johnny called the 'lex superior principle.'"

Einstein nods.

"Conflicts between rules. That's Kurt's meat."

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In his death chair at Princeton Hospital, Godel believes our mistakes and experiences from this world are simply raw material. In the next world, by carefully recalling and truly understanding for the first time our experiences from our mortal life, we will at last be able to really learn. For Godel the sometimes fanatical film buff, the idea of his life passing before his eyes is not a review of past events so much as a preview of coming attractions—of that intellectual paradise in which both memory and understanding, so important to learning, will at last be made perfect.

Not perfect from the start, he thinks. Humans as perfect machines would have nothing to contribute and no reason to exist in time. Eternity is in love with the productions of time, as William Blake once put it. Imperfection allows mistakes, mistakes are integral to learning, and learning is the most important part of human efforts to overcome the separation of fact and wish—in order to get at truth, which is itself the meaning of our mortal existence in the world.

From everything Godel has seen, human understanding of truth is always incomplete at best. An afterlife with an infinitude to learn, but an eternity in which to learn it—maybe that's what getting at the truth of it all, and of oneself, finally requires.

Reliving in perfect detail every instant of one's life—every bitter defeat as well as every triumph, every wrong turn as well as every right one in that quest to overcome the separation of fact and wish—would such a next life be heaven, or hell?

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"Three bars walk into Goldilock's Place," Godel begins. "They are Yankee bars and not familiar with the ways of the locals. From behind the counter, Goldi asks Papa Bar, 'What'll ya have, honey?'

"No honey, thanks,' says Papa Bar. 'I just had supper. I'll have a gin and tonic.'

"Goldilocks notices the long pause but says nothing about it as she turns to

Mama Bar.

"How about you, sugar?"

"No sugar, thanks,' says Mama Bar. 'I'm on a diet. I'll have a martini with no olive.'

"Again Goldi notes the oversized gap in Mama Bar's words, but says nothing as she turns to the bar cub.

"And how about you, little fella?"

"'I'll have a Shirley Temple,' the smallest bar quickly responds. Goldilocks smirks.

"What? No big pause?"

"The little bar looks somewhat dejectedly at his small forelimbs and says 'No, not yet. I'm still only a baby bar. But I will have some of that honey and sugar, kiddo!"

Einstein and Morgenstern laugh, almost as much out of shock at how well Godel has told the joke, as out of any content to the thing itself.

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"There's more," Morgenstern continues. "Any legal system that's a reflexive hierarchy displays many exceptions to the lex superior principle—cases where superiority is measured on a circular scale. There's also a third major rule of priority, the 'lex specialis principle.' It means that the specific ought to be favored over the general in conflicts at the same hierarchical level."

"Three principles, now?" Einstein asks, arching his bushy brows.

"Not only that, but the interactions among them, too. The lex superior principle usually takes priority over both the other two rules, but the relative priority of the lex posterior and lex specialis principles among themselves is very much unsettled. When a new rule and an old rule of the same hierarchical type are irreconcilable, but the new rule is less specific than the older rule, then it is apparently permissible to favor either rule, all else being equal."

Einstein sits back in his seat, contemplating it.

"If the question of the relative priority of these rules of priority comes up," he says, shaking his head, "then boom! We're headed toward an indefinite regress—maybe an infinite one."

"Right—or toward a theory of types. That sent Kurt and Johnny veering off on whether or not the tenth and fourteenth amendments were self-amending. Then it was on to the horrors that'd be generated if you attempted to amend the amendment clause."

Einstein nods. Knowing von Neumann's work on computing and his "halting" or "exit" problems, he can see where this is going.

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His strength ebbing away by the minute, Godel smiles to himself the only way he can—weakly. He remembers discussing with Einstein a tradition out of Kabbalah that describes God as absolute undifferentiated infinite being with neither will, nor intention, nor desire, nor thought, nor speech, nor action, yet outside of which no thing could exist.

To the extent that you participate in the divine, he thinks to himself, you too are the nothing on which hangs everything. You are the only god who can condemn yourself to the hell you yourself have created. You are the only god who can save yourself to the heaven you yourself have made.

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"How about you, Oskar?" Einstein asks.

"How about me what?"

"A joke! Just because you're driving doesn't mean you get off without telling one."

Morgenstern glances through the windshield.

"Okay, I've got one. It's one Johnny von Neumann told me, so blame him. An economic forecaster has a copy of our *Games and Economic Behavior* prominently displayed above the door frame of his office. Asked what it's for, he replies that it's a good luck charm that helps his forecasts. 'Do you really believe in such superstition?' he's asked, and he says, 'Of course not!' 'But then why do you keep it there?' 'Well,'" the economist says, 'I'm told it works whether you believe in it or not.'"

Einstein and Godel laugh.

"I know where von Neumann stole that joke from," says Einstein. "When I heard it before, it was Niels Bohr and a horseshoe!"

"What Johnny finally got Kurt with—I think," Morgenstern continues while they wait for Godel, "was the fact that the relative priority of the rules of priority almost never comes up in the law, and certainly never has done so in cases involving the amendment clause. He argued that the procedural limitations become so intractable—"

"—that they in essence become substantive limitations," Einstein said, finishing his colleague's thought. "Sounds like something of a sophistry to me, actually. Did Kurt accept it?"

Morgenstern shrugs.

"It seems to have quieted him down on the whole issue, but you know Kurt—he may just be thinking about it."

"And with Kurt that can be a dangerous thing," Einstein says, laughing.

"I think that, if we want to keep Kurt from thinking about his 'discovery'—"

"—and prevent him from talking about it to the judge!" Einstein breaks in.

"We should divert his attention from it."

"Right. I agree completely. Jokes, stories. Anything but conversation about consistency and completeness in the Constitution!"

"Ssh! Here he comes."

Godel is a short, slight man with prominent cheekbones and even more prominent eyeglasses. Everything slight seems even slighter and everything prominent seems even more prominent today. Godel's wife Adele has been out of the country and Godel has not been taking particularly good care of himself.

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Godel does not want to die in a hospital bed. He wants to stay in the chair, but he is so weak he can barely hold his head up, even to gaze at Adele.

Odd that he should be remembering that Kabbalah conversation with Einstein now, he thinks. Einstein was neither traditionally nor mystically religious in his beliefs. Godel himself is also only nebulously religious, at least in terms of strict denominational adherence.

Anti-Catholic from having been born and raised in a country whose state

religion was Catholicism, the shy Godel nonetheless married his Adele there, a lively Catholic girl six years his senior who worked as a night club dancer (much to the chagrin of Godel's parents, particularly his mother).

The marriage is successful. Adele protects her frail genius husband—once quite literally, when she beats back an attack on her husband by a pair of Nazi thugs with nothing more than her fury and an umbrella.

Godel smiles, remembering, though he does not have the energy to push the smile all the way to his lips. The Nazis were always mistaking him for a Jew because he was an intellectual who often wore black, and was part of the Schlick Circle in Vienna.

Alas, he has never been all that politically astute, himself. He probably would never have emigrated to America had it not been for Morgenstern, his other great protector, dead now these six months. Godel wonders what might have happened to him had he not emigrated.

He looks at his arms sticking out of the hospital gown. They are knobby, withered and emaciated, like those of a concentration-camp survivor. Or the corpse of someone who didn't survive the camps. Had he not emigrated, odds are he would have come to this condition thirty-five years before now.

He sighs. He wishes he had been more politically aware. Wishes and facts. Wishes and horses.

You can remember the past, and you can physically affect the future, he thinks, but you can't physically affect the past or remember the future. At least not on the scale of classical physics, given the arrow of time.

Yet the quantum physicists find no arrow to time on the quantum scale. There, it is possible to physically affect the past. To remember the future. There, you *can* go home again. Maybe the afterlife will be like that too.

Or maybe it will be unending insight into all the infinite complexity of an endlessly branching tree of universes.

One of those students he threw out of his office all those years ago, for asking about the deep connection between the incompleteness theorem and the uncertainty principle—that student went on to envision just such a physics of innumerable universes.

If he had not kicked that student out of his office that day, Godel wonders, might the boy have been content with a more traditional physics? Might he never have gone on to dream of many worlds?

Godel, too weak to smile, is laughing inside. He has just imagined a world where Snow White has awakened at a kiss to discover she is an enormous insect—but then again, so is Prince Cockroach.

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As Godel gets into the car, Einstein turns to him.

"Well, are you ready for your next-to-last test?"

"What do you mean, 'next-to-last'?"

"Very simple. The last will be when you step into the grave."

Morgenstern frowns as they pull away from the curb, but Einstein's conversational gambit seems to do the trick. They do not speak of the Constitution, consistency, or completeness as they drive toward the courthouse in Trenton. All is jokes and stories, even when they get out of the car.

"A Czech, a Hungarian, and a German appear before an immigration judge," Godel says as they walk up the courthouse steps. "Sounds like the first line of a joke!"

"No," says Einstein. "For a joke, one of the three must be a Jew."

"And it should somehow involve the gates of heaven and Saint Peter," Morgenstern says, "as the final judge."

"I've heard some jokes where I'm in front of the Pearly Gates talking to the saintly gatekeeper," Einstein says. "I find these types of jokes to be in very poor taste."

"Because they put a Jew in a Christian heaven?" Godel asks.

"Not that!" says Einstein. "It's because, in the jokes, I'm already dead!"

They enter the building laughing, but their laughter does not last long when they see the line of other applicants ahead of them. Einstein and Morgenstern glance at each other over Godel's head, wondering how long they will have to keep distracting Kurt.

"Professor Einstein!" a man in judge's robes calls out to them. "It's been a long time since I've seen you in my courthouse."

"Judge Forman!" Einstein says, shaking the man's hand.

"Ah, you remember. I'm honored, sir, honored. How long has it been? Six years?"

"Seven, since you administered the oath of citizenship to me."

"What brings you to court today? Nothing troubling, I hope?"

Einstein explains to Judge Philip Forman that he and Oskar Morgenstern are to serve as witnesses for their fellow professor, Kurt Godel here, during his citizenship hearing.

Forman ushers the three into his chambers at once, leaving the long line of other applicants behind. Forman clearly enjoys chatting with the famous Einstein. It turns out that he knows of Morgenstern's work on game theory with von Neumann too—mainly from von Neumann's statements in the press lately about the value of that theory in the growing conflict with erstwhile ally Soviet Russia.

Von Neumann has stirred up a bit of controversy with his calls for a preventive war against Russia, before the communists develop an atomic arsenal to match that of the United States. Einstein shakes his head, unhappy with any talk of "preventive war"—no matter how much game theory predicts such a conflict might benefit America.

Godel feels supernumerary for a time, a tag-along, but soon enough the judge gathers up Godel's paper work and turns his attention to the logician. Although the interview is supposed to be private, the judge allows Einstein and Morgenstern to remain for the entire proceeding.

"Now, you came here from Germany, is that right?" the judge asks over his reading glasses.

"From Austria, sir," Godel says, politely correcting Forman.

"Well, they were both under the control of an evil dictatorship at the time, isn't that right?"

"Yes, sir."

"And would you say one of the reasons you came here was because a dictatorship like that which arose in Germany could never arise here?"

Einstein and Morgenstern flash each other a look.

"I did use to believe that, yes," Godel says, "but no longer. On the contrary, I think I know how such a thing might also happen here!"

Morgenstern is jabbing Godel with his elbow, and Einstein is squeezing his arm, but Kurt is plowing ahead.

"Hitler, as you may recall, was initially elected to the chancellorship of Germany. Legally. Article V of the Constitution of the United States, the Amendment Clause, if interpreted to be omnipotent, places no substantive limitations on the amending of the Constitution. Conventions called to consider amendments proposed by Congress or the state legislatures could be used to nullify the democratic institutions described in the rest of the document. Everything in the Constitution could be overturned. Even the Amendment Clause itself could well be amended irreversibly—"

"You needn't go into all that," Judge Forman says, interrupting, realizing the avalanche his question has triggered in Godel. "Tell me, Mister Godel: what was the importance of *Marbury v. Madison*?

Forman's ploy works. The rest of the examination is concerned with more and more basic questions about US history and civics. Einstein and Morgenstern begin to breathe a little easier. In the end, Kurt Godel passes his citizenship examination with flying colors. Two weeks later, Adele does the same.

Forman again presides on April 2, 1948, when Kurt and Adele take their oaths of citizenship. The judge speaks for over an hour on the past and present circumstances of the United States, so effectively that (as Godel confides later, in a letter to his mother) "one went home with the impression that American citizenship, in contrast to most others, really means something."

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In his chair in the hospital, Godel finds enough last strength to stretch luxuriously. In a moment of aching clarity, he has just realized he was right to try to explain his discovery to the judge.

True, the door through which a dictator might yet enter American history has not opened. At least not in this universe. The current occupant of the White House is a gentleman peanut farmer—hardly the stuff of which tyrants are made.

Still, isn't it the duty of citizens to speak the truth as they see it, even to the powerful? Even when, in doing so, they might well cause harm to their own prospects?

"Do you swear to tell the truth, the whole truth, and nothing but the truth, so help you God?" God would certainly need to help with that, because only a divine being could possibly know the whole truth.

Or perhaps even infinite truths, in infinite worlds.

Like Judge Forman, would such a god also say "No need to go into all that"—because everything Godel could say would already be known to such a being? He wonders. Might he too, someday, understand his own life so simply and naturally that he might also be able to say to himself the judge's words, and need no judge thereafter?

The movie of his life, passing before his eyes, becomes a film melting in the projector. The bright light of a truer reality shines through as the movie stops. Our truth is full of holes, he realizes, but the holes are also full of truth.

Kurt Godel finishes stretching, the houselights come up, and he is gone.