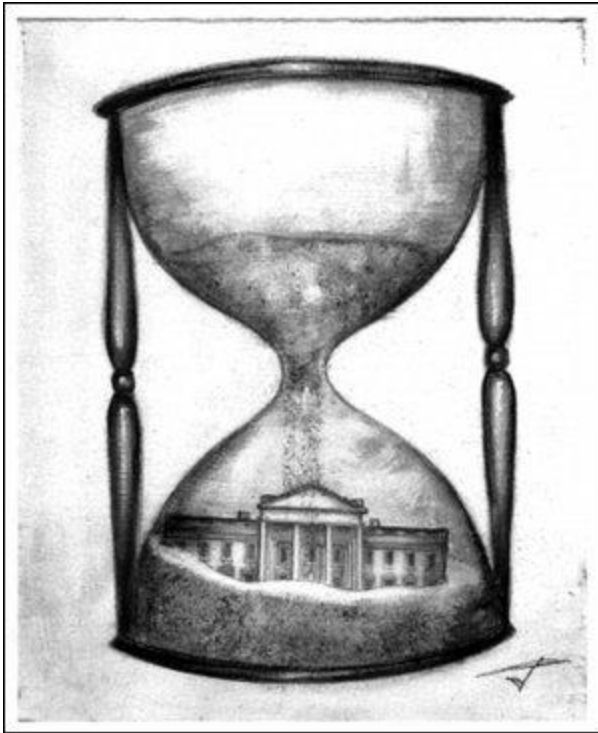


Only time will tell if Constitution holds up

Sunday Gazette, March 9, 2008

Edwin D. Reilly Jr.



Jon Krause/Newscom

*There was a young lady of Wight,
Who traveled much faster than light.
She departed one day, in a relative way,
And arrived on the previous night.*

– Arthur Henry Reginald Buller, Punch, Dec.
19, 1923

The author of the opening quote was a British-Canadian mycologist, mainly known for his research into fungi and wheat rust. He composed it four years after Albert Einstein became world famous for using his general theory of relativity to compute the exact amount by which light is bent as it passes by the sun, a prediction verified during the solar eclipse of 1919. I doubt that Buller really thought that time travel was possible; he probably just enjoyed composing limericks.

Einstein didn't believe that time travel was possible either, but in his later years he had a close friend at the Institute for Advanced Study in Princeton, the Austrian logician Kurt Godel, who did. Just as Einstein had revolutionized physics with his theory of relativity, Godel was best known for throwing mathematics into a tizzy by showing that, contrary to what had been thought, there are mathematical statements that are true but cannot be proven from the axioms on which they are based.

Curious theorem

The discovery, reminiscent of Heisenberg's Uncertainty Principle in physics, is called the "Godel incompleteness theorem." One day Godel came running up to Einstein and said that when he applied the equations of general relativity to a rotating universe, he could show that either time travel was possible or else "time does not exist." By the latter, he seemed to mean that there is no past or future, only "now."

I think that Christ anticipated this "result" 1900 years earlier, witness John 8:57-58:

So the Jews said to him, "You are not yet fifty years old and you have seen Abraham?" Jesus said to them, "Amen, amen, I say to you, before Abraham came to be, I am."

I have long considered this passage to be the most profound in all of the New Testament. It has returned to my mind time and time again (if there is any) since I first discovered it at age 10 or so.

But Einstein would have none of this. He thought that rotating universes were physically inadmissible solutions to his equations. For one thing, unless there are multiple universes rotating in opposite directions within some larger space-time matrix, conservation of angular momentum would be violated. But I digress.

The third most famous thing for which Godel is noted is quite humorous, or at least I and most writers who relate the anecdote think it so. There came a day in 1947 when Einstein and the economist Oskar Morgenstern drove to the courthouse where Godel was to be administered the test he needed to pass to earn U.S. citizenship. His friends had coached him for the exam, but they were very concerned that their friend's famously unpredictable behavior might jeopardize his chances.

A fatal flaw?

Sure enough, early in the exam Godel launched into a prepared spiel in which he tried to tell the judge that there was a fatal logical flaw in the U.S. Constitution whereby a dictatorship could evolve. Einstein and Morgenstern were flabbergasted, thinking he was toast, but the judge kindly cut him off and declared him a citizen.

Now, what in heaven's name could this world-famous logician have been thinking? Could it have been something to do with the lack of presidential term limits? If so, that was taken care of four years later, with the ratification of the 22nd amendment in 1951. Scholars who have pondered Godel's fear of dictatorship speculate that he was bothered by something else entirely.

Strange things can happen when a class of people is described that includes the person writing the description. The most famous example is that of a small town that has only one barber, one who asserts: "I shave everyone in town who doesn't shave himself." Now, according to this boast, if the barber doesn't shave himself, then, it must be that he does, and if he does shave himself, then he doesn't — a clear contradiction.

Now, the Constitution contains within it an Article 5 that specifies how it may be amended. So, however improbable, a sufficiently large group of conspiratorial congressmen and state legislators could pass, and then ratify, an amendment specifying that henceforth the president shall be chosen by the Supreme Court to serve a life term. Then they cap that off by repealing Article 5, rendering the amended Constitution irreversibly unamendable.

Scalia would love it.

Edwin D. Reilly, Jr. Lives in Niskayuna and is a regular contributor to the Sunday Opinion Pages.