JewishStandard

‘Torah and Technology’

Rabbi Daniel Nevins considers who that autonomous car should hit, if genetically altered pig organs are kosher for transplant, and other brand-new questions

By JOANNE PALMER

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Rabbi Daniel Nevins works with students at the Golda Och Academy. (All photos courtesy Golda Och Academy)

Rabbi Daniel Nevins is interested in a wide range of subjects, and it shows.

Rabbi Nevins, who grew up in River Vale, spent 13 years as a congregational rabbi in Detroit, another 13 years as the dean of the Jewish Theological Seminary’s rabbinical school, and now he’s head of school at the Golda Och Academy in West Orange.

He’s also (in his spare time?) a scholar, with academic interests again, yes, ranging widely from history to science to technology to Talmud.

Those interests have come together in his new book, “Torah and Technology: Circuits, Cells, and the Sacred Path,” which has just been published and he will launch at a talk at GOA on May 9. (See below.)

“I’ve always been interested in how contemporary society intersects with ancient values and norms,” Rabbi Nevins said. As a Harvard undergraduate, he was an intern at the Hastings Institute for Bioethics, where he wrote a paper called “Knocking on Heaven’s Door.” It was about the ethics of withholding life support from the terminally ill; he looked at Protestant, Catholic, and Jewish views on that emotionally laden subject.

“I started to interview different rabbis on their points of view, and I started to realize that in Judaism, ethics and law typically overlap. When ethics gets real, it goes into practice, and when it goes into practice, it intersects with our normative literature, which is where the bulk of Jewish scholarly creativity has been.”

He wrote a piece on that formidable subject that was published in the Mosaic, an undergraduate publication. The famous and beloved Protestant theologian Harvey Cox, who taught at Harvard, put that piece in the sourcebook for his always hot-ticket class, “Jesus and the Moral Life.” That was a major coup.

“Back then, I was trying to figure out what to do with my life,” Rabbi Nevins said. His concentration was in history — specifically Middle Eastern history — and his undergraduate thesis was about binationalism in mandatory Palestine. “I got a grant to spend the summer of 1987 at the Central Zionist Archives in Jerusalem, and I was going to do a doctorate in Middle Eastern history. But it was during the first intifada, and everything was politicized, so I decided that being a rabbi instead of an academic would allow me to have an intellectually stimulating but also communally focused career. That’s what led me to rabbinical school” at JTS.

Rabbi Nevins and parents are delighted by what they see at the science fair.

As a rabbinical student in 1992, Rabbi Nevins was the secretary of the Committee on Law and Standards, the body that the Rabbinical Assembly — the organization made up of Conservative rabbis — created to rule on questions of, well, Jewish law and standards.

“Back then, it was pretty common for a rabbinical student to be secretary,” he said. “I was nominated by one of my Talmud teachers. I took notes and minutes, handled correspondence with the public.”

He held that position until 1994, when he was ordained; five years later, he joined the committee as a member, a position he still holds. Much of his new book is based on work he’s done on the committee.

As he talks about his book, Rabbi Nevins explains why he doesn’t like to translate the word halacha as “Jewish law,” although that’s the standard translation. “Law is a fairly narrow part of life, and halacha is expansive,” he said. “It has to do with interpersonal relationships, kindness, honesty, piety, and the things we do to try to be righteous. Law is about not hurting people and having order. They overlap — but law doesn’t encompass everything that halacha concerns.”

Now, Rabbi Nevins said, “when I look at halacha today, I also look at it from a historical perspective. For example, there is a chapter in the book about virtual minyans. That’s something I started thinking about during covid, when I was asked if we could have an online minyan at JTS.

“I found a historical incident with an 18th-century rabbi, Rabbi Chaim Yosef David Azulai — the Chida — who spoke about the case of a lazaretto — a maritime quarantine facility maintained in Italy. The Chida had arrived in Italy on a ship from Alexandria, and had been placed in the lazaretto for 40 days of quarantine. He was asked what to do if there is a building with a room with four men in it, and another room in another building that holds six men. A guard prevents them from leaving their building, and a road separates them. But they can vaguely see each other.”

The question was whether those 10 men could form a minyan. “The Chida said that it wouldn’t be right for 40 days to pass without their being able to say kaddish.” So he permitted those 10 distanced men to be considered a minyan.

Rabbi Nevins decided that the pandemic created a situation similar to the one imposed by the quarantine, and that new technology helped the would-be daveners but did not change the basic facts. "As long as there were 10 people — it's not gender-specific for me — who would show their faces and respond to prayers by not being muted, then we could form a minyan, at least on weekdays."

Rabbi Nevins looks at an exhibit in the lower school's science fair.

In another chapter, Rabbi Nevins delves into the rules about Shabbat and electricity, concluding, after a lot of opinion-citing and metaphor-exploring, that "using electricity in itself is not inherently a form of forbidden labor, but many forms of electrical appliances include other kinds of labor." A microwave oven cooks. That's forbidden. A computer composes messages. That's writing — and that too is forbidden.

Also, he added, "Jewish law has a lot to say about intention, especially with the laws of Shabbat. What were you intending to accomplish with your action?"

Rabbi Nevins includes a chapter about artificial intelligence and autonomous machines. In it, he said, he asks three big sets of questions.

First, "are we responsible for the acts that machines take on our behalf? If I ask an autonomous vehicle to drive me to the grocery store and it causes an accident, is that my responsibility? If I ask it to drive me on Shabbat, am I responsible for violating Shabbat?"

Second, "does Jewish law have anything to say about how these machines are designed? Do we integrate halachic concerns into the technology's data and algorithms? Most autonomous machines are given algorithms that if these parameters are met, then take this action. So if there is going to be an accident, and the machine has to decide to veer to the right or to the left" — one direction would harm you, the other would hurt someone else — "should it be your life that takes priority?

"Should it follow the guidance of Rabbi Akiba, who says that your life takes priority? Or should it follow the advice of Rabba, who says, in the Talmud, 'Why do you think your blood is redder?'"

Third, "there is the question of personhood. How do we understand what a person is? Is there any circumstance in which we can consider that a machine to have achieved personhood? There are the golem stories, starting in the Talmud and going into the Middle Ages. There is a sense in rabbinic literature that humanity is differentiated by our ability to speak. Only God can create a creature that can speak. In the stories about golems, they always are mute. But today, with large language models, machines are gaining the power of speech — not only repetitive speech, but also generative."

This is of course a subject of interest not only to Jews, but to the wider world. "I have become interested in joining the broader conversation about intelligence, AI, and ethics," Rabbi Nevins said.

Rabbi Nevins talks with rabbinical students in Jerusalem.

He's also written a chapter about genetic engineering, another subject that is important both inside and outside the Jewish world. "I'm active right now at a general ethics panel at NYU Langone on xeno-transplantation ethics," he said. "That involves transplanting organs between different species.

"Pigs have been genetically modified, using CRISPR technology, to remove certain proteins that incite an immune reactions in humans, and also to add several others. Those modifications make pigs' organs more compatible with humans." That means that they can be used in human bodies. "That was first done with heart transplants last year, and more successfully with a kidney transplant this year.

"There is a significant amount of animal suffering that happens when you use animals for scientific research." That's an issue whose halachic implications Rabbi Nevins explores; he looks as well at the question of "whether we should be putting human DNA into other species."

In the chapter on genetic engineering, Rabbi Nevins also discusses "the traditional ban on kilayim, blending different species together. This raises the question of whether transgenic organisms that include DNA from different species violate that rule."

He has decided that despite very real issues of animal suffering and DNA blending, "in general I would permit this." On the issue of animal suffering — the issue that also applies to the non-Jewish world — Rabbi Nevins said that he told a non-Jewish committee member that "no one needs to eat pig to survive, but someone might need a pig kidney to survive. So why would it be illegal to raise pigs for their organs when raising pigs and other animals for consumption is permitted?"

Next, Rabbi Nevins considers cultured meat. Starting in 2013, he said, a scientist "who had been working on regenerating damaged cardiac tissue realized that he could use the same method to culture muscle tissue from other species to be used for food. This involved taking a biopsy of cells from a live animal and using a bioreactor to expose these cells to certain nutrients and guiding them to become stem cells, and then using those stem cells to create muscle and fat tissue, which then could be structured in a way that would create strands of muscle fiber that could then be layered and turned into meat." (Take deep breath here…)

Eventually, Rabbi Nevins continued, this idea was turned into what was called the "$350,000 burger — and several rabbis started looking into the kashrut implications. The ethical appeal was apparent — it's a way to have meat without animal suffering, and also with a great environmental benefit. It would avoid the creation of methane and

other greenhouse gases. It would reduce pollution and the need to dedicate so much land mass to pasturing meat. It would have moral and environmental and health benefits."

Halachic questions include whether it is possible to use the method considering the ban on taking a limb from a living animal, whether it would be possible to use meat derived from an unkosher animal — say, a pig — and if the meat were considered to be kosher, whether it would be pareve.

A student points out part of his science fair project about acid rain.

Rabbi Nevins believes that cultured meat is permissible because the cells that are its origin are microscopic, and in no way resemble a limb, and that the food would be very many generations removed from those cells anyway. He believes that the source does matter — no pig! — and that the meat would be pareve.

He's writing for a few audiences, Rabbi Nevins said. One is observant Jews who want to know what halacha says about new technologies. The second is educational — he includes source sheets on his website, rabbinevins.com, for that purpose. And the third is "people of different faiths, or no faith, who are interested in the emerging ethical issues.

"The courts frequently drift into this lane, so it is important that we Jews have a say," he said. He was at a conference when someone asked him, "'With all due respect, rabbi, why should I care what Judaism says about genetic engineering?'

"I said that it was a fair question, and that it's already a stretch to get Jews to care what Judaism says about genetic engineering, but there are two reasons. One is that we are custodians of a wisdom tradition that stretches back three millennia, with many deep ideas that might be relevant as we navigate these novel questions.

"The second is that I and other faith leaders who are present are deeply connected to large communities that may be be skeptical about the advisability of these radical innovations. The more we have to share with them, the more likely it is that these exchanges will be acceptable to our communities.

"People often have a revulsion reaction to something new, if they think that it is violating their core beliefs. It's a way of gaining their trust and benefiting from their insight."

He talks about ethical theory in his book, Rabbi Nevins said. "It is important to ask what your ethical system is based on. In Judaism it's usually rule- or duty-based. Yet even the rabbis were sensitive to what the impact of their decisions would be. It is never responsible for a jurist to look only at precedent and never at impact.

"So I explore ways in which the rabbis might have been closet consequentialists.

"In other words, you always want to justify your ruling on precedents from the tradition, but your eyes have to be focused equally on what impact it will have on the society as a whole, and on how it will be tolerated.

"The rabbis say this explicitly in some places. They say not to place a decree on the community that most of the community won't abide by. Don't act from principle and ignore the damage you may cause. Because ultimately you have to do what is right or what will lead to the best result. To justice.

"The Torah says, 'Justice, justice, shall you pursue.' We are not relieved of that responsibility."

Who: Rabbi Daniel Nevins

What: Will launch his new book, "Torah and Technology"

Where: At the Golda Och Academy's Wilf Lower School campus in West OIrange

When: On Thursday, May 9, at 7:30 p.m.

How much: It's free but

Reservations: Are required by May 6, at goldaochacademy.org/torahtech

And also: Learn more about Rabbi Nevins' book at his website, rabbinevins.com