



the organ farm

an interactive bioethics
thriller by
David Perlman, Ph.D.

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A PVS, Inc. Interactive Science Fiction Novel

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Introduction

This is a work of interactive science fiction. Unlike traditional novels, in this one, you make the choices along the way. These are called Crucial Choices™. That is, there is an opening section to the story, after which you will be presented with a variety of choices, which will then determine the trajectory and ultimately the ending for the story. It's that easy. Click [here](#) to begin the story.

Sample

“The Organ Farm”

Pablo looked down at the crumpled remains of his hands – strong, leathery, tanned hands that had picked acres of cotton up until a few months ago. Señor Jamison, his *hefe* or boss, was kind to let him stay in the dormitory after the accident and attempt to repair his injuries. The cotton engine hadn’t been so kind. It had shredded and mangled the only means of livelihood for an illiterate migrant worker from Cuba like Pablo. While surgeons salvaged nerves and mended bones, Pablo lacked the dexterity to do anything with his hands except shovel rice and beans into his mouth and clean and wipe himself. Pablo spent his days drinking cheap beer his *amigos* purchased for him while they went off to work. In return for this kindness, he kept watch over the dormitory that the workers shared – at least when he didn’t pass out.

Pablo gulped his third liter of beer, cursing his bad luck. He felt the welcome beginnings of unconsciousness swirling in his head. This blackout came with such intensity that Pablo’s beer fell from his awkward, two-handed clutches. His eyes rolled back into his head, his body convulsed with a seizure, and his heart pounded in his chest with electrical arrhythmias.

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Pablo had been in the hospital for several weeks without a change in his mental status, and brain scans indicated the same thing – PVS or persistent vegetative state. The chart note from the consulting neurologist made it even more clinically definitive: “Irreversible and permanent vegetative state caused by severe anoxic brain injury secondary to an electrolyte imbalance due to alcohol poisoning.”

“His electrolytes are back to normal and his blood chemistries have improved,” a nurse related to the rounding physician.

“Good. Now that we’ve placed a percutaneous feeding tube, his feedings and medications can be given through the tube,” the physician noted, scrolling through Pablo’s electronic chart.

“So should we begin procedures for discharge?”

“Yes. I believe the social workers and chaplains have made arrangements for medical transportation back to Cuba. His wife will need to take over his care now.”

“Good thing Cuba has national health care coverage,” the nurse commented. “A home health aide will assist his wife, show her how to suction him and give him his feedings.”

“Yes, and according to the social worker, it’s actually cheaper for us to fly him back to Cuba than to keep him here and pay for his continued treatment.¹ Plus, Medicare will only keep him on supportive care for 6 months.”

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It was what the Americans called a “perfect storm,” Diego Castillo thought to himself as his helicopter approached the village where his next *zonbi*² was. Diego’s mother, who immigrated to Cuba from Guyana, had told Diego all about such superstitious voodoo and folklore as a child. Diego still wore the crucifix his mother had given him to protect him from such *jumbies*.³ More out of habit than belief, Diego kissed the cross and replaced it under his shirt.

That perfect storm consisted of many facts. First, the political climate in Cuba was conducive for a handful of well-placed bribes to secure space for a surgical and post-surgical suite in the now abandoned Guantanamo Bay Camp Delta.⁴ Second, a well-trained medical workforce, working in Cuba’s national healthcare system, but even more woefully underfunded than the United States, made the medical climate perfect to recruit a few select nurses and technicians. Third, Catholic religious and moral values about the sanctity of life still held sway among the people of Latin America and the Caribbean.

This religious and moral environment offered a type of salvation that families of patients in PVS found heaven sent, so to speak. And lastly, Guantanamo Bay was now host to a new group of terrorists – those who harvested kidneys from PVS patients in exchange for their continued maintenance. All these so-called patients

who came to Camp Delta bore the same surgical scar from this kind of terror when they returned to their local hospitals or homes.

Diego rehearsed his well-worn sales pitch. He imagined the *zonbi's* wife, weeping at Pablo's bedside. "Pablo only needs one kidney. The money would help replace his lost wages, and the kidney would help someone else. It's a way to salvage some good from this tragedy." Of course, he wouldn't tell Pablo's wife that the kidney would be sold for a premium to an illegal transplantation tourist. One sale paid enough to supply the surgical facilities at Camp Delta, keep the politicians in bribes, and give Diego the lifestyle he found very attractive, but only for a brief time. More *zonbis* were always needed. In such situations, Diego always wondered whether there were other ways of expanding business.

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"The pitch to Pablo's wife was easy," Diego radioed over the headset, as the helicopter headed south towards Camp Delta, where Pablo would have his nephrectomy then be flown back to his wife. The nutritional supplements to support his continued nutrition were expensive, and without his salary from farm work, Pablo's wife couldn't afford to keep Pablo "alive."

She couldn't just blend up food and put into his feeding tube. He needed special nutrition to maintain his vital body functions. The trade seemed fair enough to Diego – for one less kidney, Pablo's wife had one less worry. This comforted Diego immensely on the swift ride back to Camp Delta, where his *gringo* surgical co-conspirator, Dr. Wallace Jefferson, waited.

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While scrubbing for surgery, maverick surgeon Wallace Jefferson recalled the amazingly fortunate chain of events that had provided him with his lucrative, albeit clandestine, surgical practice. It was 2022, and kidney dialysis continued to be paid for by the United States government. But it was only a bridge to transplantation, and viable kidneys for transplantation had become rare. Stem cell research and tissue

bioengineering, while promising, were still in their infancy. And health reform in the United States had made kidney transplantation even less available. These policies focused on primary, preventive health care, vaccination, and protection from new and recent epidemiological threats, like the hybrid influenza pandemic of 2015, the resurgence of SARS in 2016, and potential biological threats from terrorists, foreign and domestic. But it was the evacuation of Guantanamo Bay or Gitmo, as the soldiers called it, which had made Jefferson's operation possible, however unwittingly.

When American forces had been pulled back to the mainland after the presidential mandate to give Gitmo back to Cuba in 2021, one older Apache helicopter had been left behind in the demobilization, almost as a gift. Painted to resemble a trauma helicopter that United States citizens were used to seeing in large metropolitan areas and its engines rebuilt, now it was possible to medically transport patients desperately in need of a kidney transplant from the United States mainland to Camp Delta in Gitmo.

Jefferson looked up from the scrub sink to see his assistants preparing Pablo for his nephrectomy in one surgical suite and his other team preparing the recipient, a relatively young Latina woman from California, in the adjacent suite. After Diego had transported Pablo to Camp Delta and the team had run their initial tissue type matching and other tests, Jefferson had phoned Maria Vasquez to book the next flight to Miami International and his car would take her to the helipad.

Jefferson had always been a sort of medical outcast; ironically enough he did all of his training on islands. Unable to get into a mainland United States medical school, Jefferson attended St. George's in Grenada. For his surgical residency, he decided to "Go Army." He ended up at Gitmo, doing "meatball surgery" on soldiers evacuated from Puerto Rico's brief but bloody uprising after it was denied Statehood in 2019. So Jefferson knew Gitmo, had even done flight surgery on the Apache helicopters used for evac; rebuilding the engine of the old bird left over from the demobilization of Gitmo had been an easy engineering retrofit. Just like surgery, only with metal parts, not flesh ones.

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So practiced was Jefferson that his thoughts frequently turned to other things during such routine procedures. Maria Vasquez was indeed healthy, except for fulminate kidney failure caused by an unexpected antibiotic reaction to treat an infection. Jefferson couldn't help admiring Maria's tawny, silky skin and well-toned abdominal oblique muscles, as he sliced into them with his scalpel. She had been on dialysis only a few weeks, but her jet-set lifestyle as a high-profile pharmaceutical medical science liaison wouldn't allow her to be tethered to a dialysis machine.

And she had the money for such quick service, Jefferson reminded himself. Pharma was one industry that still paid its people well – enough to keep his practice funded for several months. Jefferson shared Diego's outlook that they needed to broaden their market. What he didn't tell Diego is that he had recently partnered with a colleague stateside, and their combined efforts would provide new business for their “services.”

Jefferson recalled his last meeting with Dr. Zoltan Zaros in Palm Beach, Florida. The name of Zaros' fertility clinic, Pregnancy Viability Services, Inc. was indeed ironic. If you abbreviated it PVS, Inc., the clear and fateful link between the two doctors became ominously clear. Jefferson's transplant tourism business served the same type of clients as Zaros' clinic – the desperate and wealthy. And the combination of these two things, coupled with yet another health policy loophole, frequently bred the type of moral laxity that had made Jefferson and Zaros successful and rich. When the Medicare program was expanded universally in 2014 to cover anyone over age 18, it was necessary to ration care. It was a natural consequence that continued life support for patients diagnosed in permanent vegetative state, a cost of US\$1 billion a year, would be excluded from coverage. In essence, for these patients, there were two tiers – Medicare would cover them up until a diagnosis of permanency could be established – with a maximum of 6 months to do so despite good outcome data that suggested one month at least and three months at most were sufficient to establish the diagnosis. After that, loved ones

would be called on to pay for continued maintenance of PVS patients. The ones without enough funds or whose loved ones understood that the chance of meaningful recovery was nil would be offered palliative sedation to terminate life-sustaining treatment.

This health policy decision created another class of the medically desperate – loved ones with strong religious or moral beliefs or who wanted to extend the lives of their sons, daughters, fathers, and mothers in PVS. The trade-off seemed natural to Jefferson. He was trading one of their healthy kidneys for continued support and maintenance. His outlook never changed, even when he had first been contacted by Dr. Zoltan Zaros, whose own college-age daughter had been hit by a drunk driver and was in PVS. In his own desperation, Zaros used his daughter to gestate his own grandchild, and having accomplished that, he partnered with Jefferson to expand the fertility and transplantation services of PVS, Inc. They started with what could be replenished or wouldn't be missed – blood products, ova donations, bone marrow donations, and so forth. Their successes with these early experiments propelled them forward with more risky and culturally distasteful procedures – IVF, surrogacy, and adoption. The ultimate goal was ectogenesis, the artificial creation of life outside the uterus, but in the meantime, they would perfect the gestation of anencephalics who could be used for spare body parts.

The scheme was ideal. Zaros maintained his mainland-based fertility clinic for the seemingly legitimate Pregnancy Viability Systems, Inc., and with facilities to support as many as 15 PVS patients in Camp Delta, Jefferson and Zaros would have enough patients to supply 15 kidneys, 30 corneas, and an untold number of skin, bone, and tissue grafts. The more women of reproductive age the better. Eventually, Jefferson would produce a cyborg womb – after all, PVS surrogates didn't require arms, legs, eyes, and other unnecessary parts – just a womb, an intact circulatory system, and life support technology. And, unlike Pablo, whose operation was now complete and arrangements in place to transport him back to his wife, anencephalic babies produced by PVS surrogate mothers were a renewable resource – a perfect “organ farm.”

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Maria's surgery and intravenous infusion of genetically engineering blood cells to induce hematopoietic chimerism⁵ had gone perfectly. Jefferson had checked on her more often than his other recovering patients. Her beauty was irresistible. Jefferson had done so many elective nephrectomies, he began to think that everyone had the telltale Cabernet scar across the lower abdomen. The interest he showed in Maria wasn't lost on her. Surrounded by so many sleazy pharmaceutical sales reps at her Pharma job, she had developed a sensitive radar for the attention she garnered.

What Jefferson hadn't anticipated, however, was that Maria's cover was so perfect. She was specifically chosen for this assignment. Trained at the University of California Berkeley program renown for producing undercover researchers,⁶ a cadre of brave, idealistic students received training in anthropology, human psychology, ethical and regulatory issues in science, health, research, and biomedicine. The government recruited the first wave of guerilla bioethicists for a variety of tasks. As undercover agents, they infiltrated illegal organ transplantation tourism programs like Jefferson's. They inspected human research programs to foil academic and pharmaceutical company research efforts to recruit unsuspecting research subjects into risky drug trials. They also were sent to inform families of PVS patients that the government could no longer keep their loved ones alive on the universally expanded Medicare program. Maria thought it was poetic justice that the very loophole that had facilitated Jefferson's illicit practice would now result in his downfall.

After Jefferson had left her bedside for another one of his supposed "checks," she decided to run down the plan she had committed to memory. She visualized her mentor, friend, and fellow agent, Jessica, to recall the plan. She focused on Jessica's chestnut eyes, gazing intently back at her, and watched her lips move as she imparted the plan to Maria in their many training sessions. Rehearsing it now was good practice, and the vision of Jessica helped calm her fears. Such strength and

conviction in Jessica's eyes. Maria would need all of the determination and fierceness that Jessica's intent stare could provide.

It would take at least 3 days to heal enough from the surgery so that she wouldn't pull out her surgical staples or risk injury to her new kidney. It had been 2 days.

"Check," Maria thought to herself.

The next step would involve her escape from Camp Delta. All she needed to do was to transmit the GPS location and photos she had taken thus far to her agency. And all without raising suspicion that she had a mobile phone in the first place. Not an easy task.

Maria assumed that she would only have one chance to upload what her agency needed. Of course, they had tried to use satellite surveillance to monitor Jefferson's operation but the large dish that was observable when Maria had landed on her helicopter trip from Miami told her that Jefferson had some type of jamming or scrambling technology that provided him with additional secrecy. That was the whole reason why Maria had needed to induce kidney failure - remote attempts at surveillance had failed. Maria and Jessica had spent hours pouring over the plans of Camp Delta that were available, but seeing the camp from the air as she arrived told her that those plans were years out of date. In order to ensure a successful operation with minimal loss of life, her agency needed fresh intel.

It's possible that the same technology that dampened satellite signals from space would leave her without a mobile connection...or it might give her away if she turned on her 8G radio in order to test her mobile signal. She needed to get off Camp Delta and out of range of the dampening technology to ensure she could transmit the data to Jessica and order what she hoped would be a surgical strike.

"Now that would be poetic justice," Maria thought to herself, checking the amount of battery that remained in her mobile device under her bed sheets. Shutting off all of the mobile devices' radios did help preserve the battery. Still, the

dwindling percentages told her it needed to be sooner rather than later. The pain that shot through her midsection when she readjusted herself in her bed in order to hide her phone told her that later would be soon enough.

Moreover, the raid needed to happen when Jefferson and Diego and the helicopter were all at Camp Delta in order to prevent either of them from escaping and avoiding the justice that was their due. Therefore, it wouldn't merely be enough to upload the information as she was being airlifted back to Miami in a few days. It had to be before then.

The one thing that spending so much time in bed recuperating did was to allow Maria to observe the comings and goings of both Jefferson and Diego. What she had noticed is that Jefferson did rounds in the morning and afternoon and spoke to the nurses afterwards. In between, on some days he was nowhere to be seen – “likely in surgery,” Maria surmised in thoughts to herself. The OR was located to her left down the hall. However, on other days, she definitely saw Jefferson, followed by Diego, both gowned, masked, and gloved, go past her unit, but where she didn't know. “Probably in some sort of laboratory,” Maria conjectured to herself, because when they both emerged, Diego was pushing a cart with an assortment of laboratory dishes, flasks, vials, and what seemed to be a tank of liquid nitrogen.

And although Maria spoke perfect Spanish and could probably bribe one of the staff to take her phone off base, not only did she not trust anyone else with this crucial task but she wanted to be far away from Camp Delta when the firefight started. She didn't relish becoming so-called collateral damage.

Jessica had spent countless days and weeks preparing Maria for her escape and any contingencies should the plan not work as intended. Maria even had practiced the Cuban accent and lingo so she could pass as a local if she needed to. One of her fellow agents, permanently based in Cuba, had stashed Cuban money, clothes, two MREs, water, a med kit with sterile dressings, gauze, and bandages, a solar powered satphone, and a fake passport near Camp Delta at one of the two

rendezvous points that Jessica had mapped out for her and programmed into her mobile phone.

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"The true mark of the beginning of your recovery was immediately passing lots of urine after your surgery," the nurse said to her in Spanish, smiling. "That means the kidney is working as it should."

"But," Maria began when the nurse interrupted her, sensing her next question.

She pointed to a catheter that was hooked up to a container. "Don't worry, *señorita*. We have taken care of everything. No need for you to get up to go to the bathroom. That's the last step to your recovery – when you can get out of bed. Then, we'll take out that catheter and you can go by yourself."

"OK," Maria nodded. "*Muchas gracias.*"

The nurse patted her shoulder in a comforting manner, smiled, then went back to her charts at the nurses' station.

It was several days after she first passed urine through the Foley catheter that Maria was finally allowed and encouraged to ambulate. Her nurse only allowed her to go back and forth to the hall where the OR was, as she guided Maria and held her at the elbow for support. When she was turned back towards her bed, she could sometimes see Diego or Jefferson, gowned and masked, in what she thought was the laboratory.

One late night, Maria awoke from what must have been a nightmare. In her dream, there was a plaintive moaning. She thought it might have been her, as sometimes her pain medications wore off before the nurse could administer the usual dose. Maria propped herself up, aching with the effort, but the moans continued. They were unmistakable, and she had not imagined them. They were coming from Jefferson's lab.

Even in the midst of her waking grogginess, Maria was able to piece it all together. There were other patients in the laboratory, she concluded. She had only planned to gather video evidence of the transplantation scheme using her mobile phone then escape.

But this new revelation piqued her curiosity. She had to know what was going on in Jefferson's laboratory, especially if the patients there were to be protected once the raid was ordered. Maria glanced around. It was dark, the other patients sleeping. The nurse was busy at the computer, dictating into a microphone headset, which explained why she didn't seem to notice the moaning.

She tucked her mobile phone in her robe, gingerly got out of bed, then started for the bathroom down the hallway where the moaning emanated. The nurse looked up from her computer screen and nodded with a smile to Maria. Maria pointed down the hall and mouthed the Spanish word for bathroom, *baño*. The nurse nodded again and returned to her dictation.

Maria walked towards the other ward. The door was locked, and she noticed a cardkey access panel on the wall. She peeked through the small window on the door.

She could see two patients occupying the 15 or so bed unit. One was a bloated, barely recognizable woman, with a swollen belly. The other was a young woman, unconscious with decorticate posturing, hands curled back into themselves, her mouth issuing haunting, loud moans. Jefferson was threading a catheter into her beneath the sterile dressings that surrounded her pelvis. He extracted some fluid and transferred it to a sterile dish. Once the dish was covered and sealed, Jefferson removed his surgical mask and immediately put the dish into a container labeled "Pregnancy Viability Systems, Inc." A cloud of gas hissed as Jefferson placed the dish in the liquid nitrogen container. He sealed it and handed it to Diego, who was masked and in surgical garb as well.

"You done with this *choorile*,⁷ *amigo*?" Diego asked.

“Yes,” Jefferson replied, removing the gloves with a snap. “For now, anyways.”

Diego smiled smugly, then started to turn towards Maria.

Maria silently cursed herself. Diego was heading her way, most likely to take the container to the helipad. Maria had been so transfixed that she had missed the opportunity to record the incident. Thinking quickly, she dashed into the bathroom and quickly turned on the light, then flushed the toilet when she heard the seal to the locked laboratory door open. She opened the bathroom door and feigned surprise at almost bumping into Diego. Diego eyed her for a moment then continued down the hall. Maria returned to bed, a sigh of relief escaping her as she slid back under her covers.

If you were Maria, what Crucial Choice™ would you make?

- You've already made a huge sacrifice...and so have the women in the adjoining laboratory. If you decide to further infiltrate Jefferson's operations in an attempt to learn what's happening with the women in the laboratory, click [here](#).
- You've already made a huge sacrifice...although perhaps not as much as the women in the adjoining ward. You feel compelled to put Jefferson and Diego's evil doings to an abrupt end and save more women from the same fate as those next to your ward. Investigating any further is too dangerous. Your job was to have the surgery then escape and transmit the hidden location of Jefferson's operation to your agency. You carry the evidence in your own body. If you think Maria should do as she was originally instructed to do, click [here](#).

Notes and References

1. An interesting episode of the United States television series Law & Order presented a similar and interesting case (Season 19, Episode 18, “Promote This!”).
2. *Zonbi* is the Creole word for zombie (<http://en.wikipedia.org/wiki/Zombie>).
3. A *jumbee* is a generic word for an evil spirit (<http://en.wikipedia.org/wiki/Jumbee>).
4. The medical facilities at Camp Delta at Guantanamo Bay are detailed at the following website:
http://www.globalsecurity.org/military/facility/guantanamo-bay_delta.htm.
5. Hematopoietic chimerism is the ability to change one’s blood chemistry and immunological qualities such that one’s immune system would not attack newly introduced cells and tissues. If successful, induction of this chimerism would have significant benefits for solid organ transplantation – including reduction or elimination of the need for life-long immunosuppression drugs that current recipients require as well as likely increasing the longevity of solid organs and therefore lessening the need for additional retransplantation. I am grateful to Wynne Morrison, MD for mentioning this idea.
6. This idea is based on the work of “undercover” medical anthropologist Nancy Scheper-Hughes. See: http://en.wikipedia.org/wiki/Nancy_Scheper-Hughes.
7. According to Guyanese legend, a *choorile* was the spirit of a woman who died in childbirth who left her child alive. Restless, owing to the separation from her baby, the *choorile* roams at night, crying mournfully, and haunting other pregnant women (<http://www.guyanawiki.org/mediawiki/index.php/Jumbee#Choorile>).

Sample