Corpse farms, death row, radioactive sites - the photographer Taryn Simon goes where others fear to tread, as Morgan Falconer discovers

A few years ago, the American photographer Taryn Simon began to suspect that her native land might be hiding a few things. "It was a time when it felt like information wasn't being accurately distributed," she says. "There was also a public sense of paralysis, a feeling that you couldn't actively participate, or see, or get to information on your own." She wondered how much in America might just be within reach of the curious private citizen and, in 2003, decided to seek out and photograph what she could.

Four years later Simon collected the resulting 62 photographs into a volume called An American Index of the Hidden and Unfamiliar; that book has become one of four projects nominated for this year's Deutsche Börse Photography Prize, an exhibition of which has just opened at the Photographers' Gallery in London. At 34, Simon is the youngest of this year's entrants; she is also one of the most recklessly inspired.

Over the years, she has followed up wildly diverse leads. She found out, for example, that a mammoth quantity of radioactive waste is sunk in a shallow pool of water in a storage facility in Washington state. So she went to have a look. "I had to sit in that room with those capsules for hours and hours," she says. "I was wearing a radiometer; six months later the Government sent me a letter saying that my exposure rates had been acceptable."

And what about the transatlantic submarine communication cables that can carry up to 60 million simultaneous voice conversations? What do they look like when they reach ground? "I'd wanted to scuba dive and find the place where they come out of the water," she says. "But it doesn't exist like that. They come up through manholes. I climbed into the manholes, but they didn't offer a good photo, so eventually I found this simple room in New Jersey. When I took the photo I thought it was a failure, but in time I was able to see the humour in the simplicity of it." It looks no more significant than an electrical supply.

This was often the case. She would be teased by mystery: what does a cryopreservation unit look like? In particular, the icy sarcophagus that contains the wife and mother of the founder of cryonics, Robert Ettinger. Then she'd meet the reality: a misty white contraption like a strange sauna facility. "I had
imagined it as pure science, but when I saw the actual space where it exists I started thinking about how they pay the rent, what happens when there's a blackout."

Simon, who dates Jake Paltrow, younger brother of Gwyneth (the actress is a long-standing supporter and collector of Simon's work), first came to prominence in 2003 when she produced The Innocents, a series of portraits of former death-row inmates who had been exonerated with the help of new DNA evidence.

In person she's willowy, even a trifle nervous. We met in her Greenwich Village stomping ground. Once home to “Reds” such as John Reed and Emma Goldman, it seemed an appropriate location for a photographer with her gonzo spirit.

Although Simon was born and raised in New York, at one time her father, an amateur photographer, worked abroad for the State Department and used to entertain his children with slide shows of foreign parts. Was this an inspiration? Maybe a little, "you could say that I'm addicted to the invisible challenges that are absent in the actual photograph," she says. “I never really take on a project that's easy.”

An American Index had its genesis in a chance visit to the Palace of the Revolution in Cuba, a site not normally accessible to the public. It led Simon to wonder how many such closed doors could be opened by one such as herself, and the question chimed with the mood back home.

Returning to New York, Simon recruited the help of her sister and a close friend. They would research an idea then make preliminary calls. “First just to gauge who that voice was on the other side," she says, “to gauge how thick the barrier was. There was never a formula for accessing all the sites, and sometimes I felt I just slipped through the cracks; maybe I was asking for something that had never been asked for before.”

Sometimes she would pick the brains of experts. A lawyer led her to the jury-simulation room of a litigation consulting firm that helps lawyers in high-stakes trials to study the responses of possible jurors. A pathologist directed her to the Forensic Anthropology Research Facility in Tennessee, the world's foremost centre for the study of corpse decomposition. She had notionally divided the project into different chapters - entertainment, government, science, etc - and it was religion and the afterlife that drew her to this, as it did to the cryonics facility.

Known to forensic wits as “The Body Farm”, the research facility comprises a six-acre plot usually containing about 75 cadavers in various stages of rot (apparently they are striving to establish a control rate for decomposition by identifying a substance that decays at a stable rate: they call the stuff “the half-life of death”). At many sites Simon found herself being managed to the nth degree. Surely there was
extra management here? “Yeah right!” she says, with irony. “When I went in there I was left completely alone, I was told I could make adjustments if need be.” She simply donned gloves and went forth. There she found dead bodies, arranged to simulate crime scenes, littering the small plot of wooded land.

“Some were covered in a mass grave, one was emaciated, lying on some sort of weight-measuring rig, a woman was in a position of extreme violence simulating a rape and murder, others lay in a stack awaiting their placement. It was overwhelming - the abundance, the smell, the consideration of mortality and science. I was challenged to confront the preciousness with which we typically treat the dead. There was a lasting shudder.”

She returned with a picture in the undergrowth of the torso and legs of what was once a young boy.

Often Simon had to fight for access (she says that 80 per cent of the labour was taken up by research and negotiation), and inevitably, her equipment, a lighting kit that ran to seven cases weighing up to 50lb each, caused problems. Authorities at government sites were particularly uncomfortable about such quantities of mechanics. And sometimes her subjects objected. She heard about Kenny, a white tiger who, because of the inbreeding designed to create the white fur, ice-blue eyes and pink nose that collectors prize, is mentally retarded and physically handicapped.

“I had to cut a hole in its cage for the camera lens, and spent the whole day waiting for the photograph. I didn't want to get the obvious portrayal of him as mentally retarded. I wanted viewers to see a powerful animal, and then to realise that something is not quite right only when they look more closely. I waited all day, and the tiger rushed the camera several times and we'd have to reset, and wait and wait.”

Some institutions simply refused to take part. “The White House didn't work with me at all,” she says. “I pursued Camp David and was denied. Then I tried something benign to measure their willingness, to see past presidents' furniture, which is kept in a storage facility that new presidents can cull from. I was denied access to that as well.” She was also turned away by the Judge Rotenberg Centre, a controversial special needs school in Massachusetts that uses electric shocks, among other methods of control.

On a few occasions, when she did win access, she then decided not to include the shot in the book: “I pushed very hard to get into the Harvey Milk High School, a New York school for lesbian, gay and transgender children. They were very nervous about the exposure and in the end I didn't want to include it, I thought it was better left alone.”

Maybe those who wouldn't get involved were scared less of letting their secrets out, than scared lest the world discover how mundane their secrets really are, and how little protects them. This, Simon says, is the lesson she draws from the whole experience. “I was surprised to find how vulnerable some of these
sites are. You imagine them in a much more fortified form, but a lot of them felt locked in the Cold War era, as if they hadn't really evolved since. You see the mould and the cracks.”

This seems to have been the particular dread of some who turned her away. “I wasn't even convinced that I wanted Disney in the project,” she says, “but I also felt that they were foundational to a lot of American mythology. I wanted to photograph the underground facilities at Disneyland; where the traffic and the garbage goes, where they have a holding cell, and the characters take off their costumes. They have literally the entire innards, the entire workings of a city, all beneath ground.

“Anyway, I went back and forth and finally they faxed me a refusal, which was better than any kind of photograph I could have taken.”

Disney had a “tremendous responsibility” to safeguard the characters that have become so beloved of young and old alike, some Disney drone explained. Should they lapse in their vigilance, who knows what would happen?

“Especially during these violent times, I personally believe,” the refusal went on, “that the magic spell cast on guests who visit our theme parks is particularly important to protect.”

And when fantasy is at stake, Disney simply can't have women with cameras showing people how things really are.

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