Plant Cyborgs

On first seeing a YouTube of *Plant Cyborgs*, I thought of giant spiders and science fiction robots. The cyborg's four jointed, prosthetic legs jerked to attention, and then it inched across the floor. I wondered if it could bite.

Only on second viewing did I notice the plant. Mounted on top of the apparatus was a baby rubber plant, *Peperomia obtusifolia.* What could be more benign? This little houseplant inhabits florist shops and window sills - at least in Europe and North America. In the tropics and subtropics, where *Peperomia* grows wild, it doesn't need cozy interiors and is unlikely to bring tameness to mind.

On four of the plant's leaves are small white discs. I could not tell what they were, so I emailed Daniel Slattnes. He explained that the discs are conductive patches. They pick up signals the plant generates in response to environmental stimuli such as light and water. When signals are strong, the cyborg moves. When not, which in the YouTubes is much of the time, the cyborg remains still.

Occasionally a person (Slattnes, I learned later) repositioned the cyborg. Without his intervention *Plant Cyborgs* would have wandered outside the camera's view. Not that the cyborg was trying to escape. Its movements seemed to be aimless. I found its blind, halting dance reassuring: this arachnoid wouldn't bite.

Slattnes has a light touch. *Plant Cyborgs* includes Raspberry Pi computer components and is technologically fairly complex for a work of art, yet this does not take us down a high-tech art rabbit hole. Although I had to email Slattnes to understand what the white discs did, even without knowing, I could appreciate *Plant Cyborgs'* science fiction surreality.

When we look at paintings, we do not ask if paint is suffering or if paper is being exploited. It's another matter with works of art that include living things. Live materials raise moral and philosophical questions. Is the relationship between the artist and live materials biologically informed or ignorant, benign or exploitative? Does nonhuman life have value in itself, or is value something only humans can confer? What, if any, obligations do we have to forms of life that are not sentient? *Plant Cyborgs* does not directly engage these questions, but they hover in the wings, as with other works of live art.

By marrying a plant and a machine, Slattnes conducts an experiment in which he humanizes the plant - or anthropomorphizes it. The cyborg moves in something that resembles human time, computer components provide the plant with what functions as an artificial nervous system, and the plant gains an appearance of sentient agency. These are illusions. Plants do not have nervous systems or sentience that involves consciousness. Yet the illusion Slattnes creates reminds us that plants, in their profoundly nonhuman, astonishing ways, are not only alive, but may be fully as

alive as we are. Life is far bigger and more strange than we think. *Plant Cyborgs* leaves us wondering how to connect across the kingdoms.