A ROBOT named Mojo will beam a spotlight on strollers in San Pedro later this month, whether they like it or not. What originated as a drawing titled "Curious Lightpost," sketched by the artist Christian Moeller on a scrap of tracing paper in 2004, has evolved into an interactive sculpture that will soon go live in this harbor area 20 miles south of downtown Los Angeles.

Clicking open an animation program on one of the three computers in his sparsely furnished Hollywood Hills home, Mr. Moeller, in sandals, bellbottoms and T-shirt, described his game plan between puffs on a cigar: "The robot stands on this pedestal with a light in his hand and shines it around for no reason, like a lonely fellow, lost in the corner, all day, all night. The computer recognizes when somebody is passing by and then tells the guy, 'Shine a light on them.'" The system is programmed by data from two surveillance cameras, mounted on the roof of the new Centre Street Lofts building. At the base of the building is Mojo. The robot, whose arm is manufactured by a company that also makes industrial welding automatons, is expected to perform its duties with machine-precision vigilance.

"Surveillance since 2001 has become a huge issue," said Mr. Moeller, 47, a native of Germany. "Actually it always was, but the awareness has changed dramatically. Before we were scared of these things. Now to some extent people are embracing surveillance because it makes them feel safer."

Mr. Moeller borrowed his beacon motif from San Pedro's historic Point Fermin lighthouse, but he realizes that a spotlight's unsolicited glare could evoke unsettling associations.

"Before the wall came down between East and West Germany, if you walked in the forest near the border, you might find yourself in the middle of such a light," he said. "Would that be fun? Probably not. But the way Mojo looks takes us out of this context of evil-looking tools of repression. Think about a clown in the circus or the follow spot in a Broadway musical. Is the sculpture intended to communicate that other layer or not? I leave that up to the people who experience it."

Curbside "surveillance" could generate buzz for San Pedro's downtown district. At least that's the hope of the arts consultant, Marc Pally, who organized the public art selection process for the building's developers.

"I hope people will be dumbstruck," Mr. Pally said. "I would prefer that people pull their cars over and faint in the driver's seat. I think younger people in particular will move, they'll dart, they'll be very engaged. Some people might be annoyed: 'What's this light on me for? I just want to be anonymous.' I anticipate lots of animated conversation."

Mojo is the latest twist in Mr. Moeller's nearly two-decade exploration of human-machine interactivity, but he didn't begin his professional life intending to become a public art provocateur. He studied architecture at the College of Applied Sciences in Frankfurt; worked as a surveyor, technical draftsman and structural engineer; then joined the architect Günther Behnisch's design firm, responsible for Olympic Stadium in Munich and other large-scale projects.

By the late 1980s Mr. Moeller was bored. He wanted to design events instead of buildings. "Architects have a tendency to isolate themselves," he said. "I wanted to work with musicians, computer science engineers, people in creative fields who were making really cool things." Encouraged by his mentor, Peter Weibel, the conceptual artist who staged outrageous happenings in the '60s and '70s as part of the Vienna Actionism movement, Mr. Moeller started his own company. In 1992 he collaborated with Rüdiger Kramm and Axel Strigl.
on "Kinetic Light Sculpture," embedding a Frankfurt office building's perforated aluminum facade with floodlights that shifted colors from yellow to blue in response to temperature and wind conditions.

"Having a weather station on top of a building is just part of the default technology for an architect," he explained. "Connecting it with cables to something that takes advantage of these sensors and turns them into this abstract light painting -- for somebody who comes straight out of architecture, this is total logic."

His subsequent pieces have prompted interplay between willing participants and reactive installations. In "Virtual Cage" (1993) visitors stood in a dark booth on a seasickness-inducing tilting platform surrounded with swarms of audio insect noises. "Light Blaster" (1993) used oxygen and pulse monitors to synchronize a participant's heartbeat with strobe lights, which sometimes resulted in trancelike states. "Audio Grove" (1997) featured a thicket of 64 iron poles that produced lush soundscapes each time one was touched. And for his exercise in high-voltage forbidden fruit, "Do Not Touch" (2004), Mr. Moeller planted a stainless steel column in the middle of a can't-miss-it warning painted on the floor of the Science Museum in London. Many visitors of course disobeyed the sign and touched the pole, receiving a jolt.

Six years ago Mr. Moeller began teaching at the University of California, Los Angeles. His first California-inspired piece was titled "Cheese."

"When I came from Germany to Los Angeles," he recalled, "the first couple of months I was a little overwhelmed with this omnipresence of all these happy people. And then you become aware that all this smiling is part of labor."

After Mr. Moeller heard about "emotion recognition" software being developed at the Machine Perception Laboratories at the University of California, San Diego, he collaborated with Pietro Perona, director of Caltech's Center for Neuromorphic Systems Engineering, to put his own sardonic twist on the research. Six actresses were placed in front of a camera and instructed to hold a smile continuously for an hour and a half. Every time the subject's facial expression wavered outside the computer program's designated "happiness" parameters, an alarm went off. The resulting video installation, shown in 2003 in Pasadena, dissected the limits of strained conviviality while dramatizing Mr. Moeller's observation that "these forms of sincerity are hard work."

Among the first generation of artists to exploit digital wizardry in a public art context, Mr. Moeller said that the times have finally caught up with him: "When I did these things back in 1992, museums and curators and public art people were not interested in it whatsoever. They thought it was just nerds playing with the gears and showing what they could do with technology. This has changed. There's public awareness, public art, private developer money, mayors -- all these people are suddenly out there."

The surveillance-theme robots that Mr. Moeller refers to as Mojo's "brothers and nephews" have traveled especially well. He just finished "Nosy" in a Tokyo office tower. A camera there, resembling a large nose, framed by two light fixture "eyes" and crowned by a "helmet," videotapes pedestrians and projects the footage on three 43-foot-tall panels. For Sunderland, England, known for its recreational boating, Mr. Moeller is working on a pedestal-mounted robot, refined at Caltech with the motion-capture animation techniques used in films like "The Polar Express." When completed, it will paddle furiously every time someone approaches. Changi International Airport in Singapore is considering Mr. Moeller's proposal for a propeller-equipped motion sensor sculpture named "Daisy," which would spin like an oversized pinwheel whenever it detects a traveler entering its domain. Harlan Lee, one of the developers of Centre Street Lofts, wanted a sculpture that would draw a crowd. "We didn't want a statue that just sat there," he said. "We wanted something unique enough that people would come there to look at it, see our lofts and rediscover downtown San Pedro."

He takes a more philosophical stance: "We will see if this piece does something to the pedestrian situation. Because, in a way, is that important? If a public work excites three people passing by per evening, or 300, does that make it a more important work or not? I don't know. I'm not triggered by quantities so much in that sense."

"If Mojo is not playing with people," he added, "it will do its own thing. It will not miss the person. It can very
well live without.”
Right, the artist Christian Moeller with Mojo, an interactive sculpture for downtown San Pedro. Above, a rendering of the project with Mojo installed on its post.