Beam of attention

Ancient civilisations and careful observations helped James Nizam draw these images with light.

"Lately, I’ve been really interested in the idea of ancient solar observatories and the archaeo-astrology of sites such as the 13 towers of Chankillo, the sun dagger at Chaco Canyon, or the Neolithic passage tomb at Newgrange," says James Nizam, referencing three sites that use built structures to trace the moment of the sun.

"Drawing on the solar architecture of these ancient spaces, I was inspired to build a series of architectural interventions that also channel and record light."

The result is two related projects – a single image entitled Shard of Light, which records a moment of the sun through a slot cut in the side of a house; and a series of shots entitled Thought Forms (above), which records the movement of a single beam of light reflected around a room.

Nizam, who has worked on various projects in abandoned houses, shot the pictures in a vacant property in Delta, Canada, after negotiating access from the local government. For the Shard of Light image, he cut a one-inch wide slit from floor to ceiling through the main room of the house, and diagonally across the ceiling from the corner for several feet; at midday the sun moved into alignment with the cut, concentrating a perfect shard of light that he documented with a large format camera. For Thought Forms (which is on show at Gallery Jones in Vancouver until 26 May, along with other light works), he took a west-facing room and..."
covered up the window with a blind, then cut a small hole in it to let in the light. "In the early months of summer, when the arc of the sun was high, sunlight fell into this room at near vertical angle of incidence," Nizam explains. "By locating an aperture to the far left of the window I focused the sunlight into a beam that landed roughly in the centre of the room. The aperture sits about eight inches from the top of the windowsill, marking the exact point where the sun breaks past the shadow of the roof eaves at approximately 3pm.

The aperture focused the sunlight into a beam giving me a line segment of sorts; using small mirrors mounted to a ball joint, I could redirect this line segment to another point in the room," he continues. "For example, I could bounce this line segment from a mirror on the floor to a mirror on the wall and back to the aperture, closing a two-dimensional triangle in the camera plane. The challenge was building three-dimensional illusions in isometric projection and fitting them into anamorphic perspective from the point of view of the camera."

The light beam was good for about three to five bounces before it became faint so, for more complex light structures, Nizam used multiple exposures, breaking down the end result into fragments then building up the image over time. Calculating the light readings for these multiple exposures was complicated because each shot had a completely different set of variables, he says; working out exactly where the sun would be also took some time. Once he’d started, he had to work quickly to capture the light before it moved off-target, and he also had a limited period over which to work before the light tailed off for winter. He found using roll film rather than sheets helped speed up the process and shot with T-Max 400 on a Mamiya RZ67.

“I was thinking about alternating perspective figures such as Schroder’s reversible staircase as well as the geometric abstractions in Alber’s Structural Constellations,” he says. “I thumbnailed hundreds of forms and chose a few that best pushed the visual illusion of simultaneously receding, projecting and remaining flat in space.”