James Turrell, Architect (of Light)

When we encounter artists like James Turrell working outside the traditional mediums and institutional entities, we struggle to define them in words. We try to resort to the proven labels, but none really apply in Turrell's case. It is surprising how critics and scholars usually refer to him simply as a light and space artist. But does that give justice to the person and his accomplishments? Yes, his work is about light and seeing, relating to perception and space, but how about architecture, science, psychology, astronomy, sculpture, expanded filmmaking, mythology?

Aristotle described the educated person as being knowledgeable in the arts, languages, philosophy, mathematics, history and science. In more recent times, Leonardo da Vinci fits that Aristotelian ideal and is often considered the archetype of the Renaissance Man.

Can we, for lack of a better word, ascribe this label to James Turrell, a person that is unknown outside the art world? The more we discover about his art and his search for answers, the more complex it becomes to define this remarkable artist. As it would be impossible within the scope of this paper to explore all the different attributes of Turrell's work, I will try to shed some light on the architectural side of his art.

"I like to say that my work is architecture of light into space. But on the other hand, I had to move a lot of material. Even Roden Crater, just to get this celestial vaulting to happen above you, we moved 1.2 million cubic yards of earth. So I get involved in material. You have to make the space, you enclose it. I sort of make these enclosures to capture or to apprehend light for our perception. So they're kind of these vessels or places that allow it to gather for you. I think that these enclosures that we inhabit have to do with the reality we form".(1)

Traditionally, artists have relied on institutionalized entities to show their art. In more recent history, the need to go outside the customary unit has become an accepted norm. But whereas earthwork artist**s** like Smithson, Heizer and De Maria

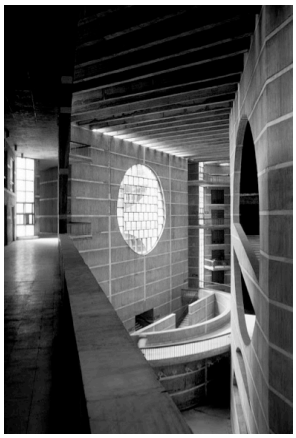
rejected the museum and the gallery as a vehicle for their art, and understood their undertaking as a protest of the traditional art market, Turrell has built many of the physical spaces that house his permanent light installations. But these enclosures that he mentions in the above interview become more than a vessel for his art: they are art.

I cannot think of another artist to whom architecture is such an integral part of the work. But reference to this medium is barely if ever mentioned, or then only as a necessity to hold his light sculptures and installations. Maybe it has to do with the fact that architects are not considered fine artists. Although Postmodernism has allowed all types of art to be "expanded" into others, there is still an entrenched medium specificity that defines artists. Rosalind Krauss mentioned in her seminal essay *Sculpture in the Expanded Field: "this suspicion of a career that moves continually and erratically beyond the domain of sculpture obviously derives from the modernist demand for purity and separateness's of the various mediums (and thus the necessary specialization of a practitioner within a given medium…"(2)* In the spirit of this observation, Turrell's architectural accomplishments have been overlooked by academia.

What defines Turrell's approach in his design? In the tradition of modern architecture, the simplicity and clarity of his forms enable his light installation to be unencumbered from any distractions. Another modernist mantra is the truth to materials. In that regard his buildings clearly reveal their concrete, unornamented constructions. A feature often found in modernist architecture is the play and use of natural light. Prime examples of some iconic masterpieces are the church designed by Le Corbusier in Ronchamp (*Figure* 1, 2) or Louis Kahn's government building in Dakha, Bangladesh (*Figure* 3, 4). Their luminosity and radiance change over the course of the day, comparable to the temporal quality of Turrell's *Skyspaces*. Although there is a consistency in his approach, cultural, environmental and historical influences of the particular locations seem to lead to various visual aesthetics, a fact that will be explored in depth in this essay.

In art historical terms, Turrell's architecture has been informed by a strong relationship to Minimalism, a movement that defined the sixties, and an aesthetic he is often identified by with his light and space installations. As in the work of many artists of that movement where "*the cubic solid no longer functions as a pedestal, it*

Figure 1, 2 Le Corbusier, Ronchamp Chapel, France



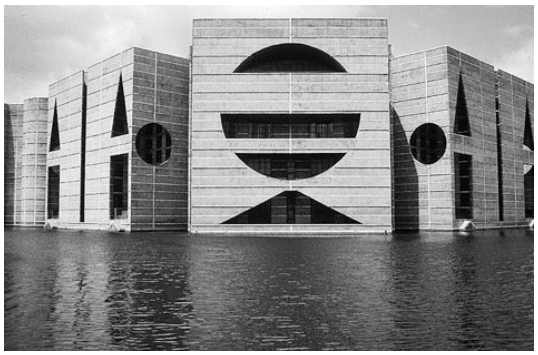


Figure 3, 4 Louis Kahn, Dakha, Bangladesh

has itself become sculpture",*(3)* his constructions should not be looked at just in terms of its functionality of housing his light art, but as an integral part of the whole experience of perception. But the shared aesthetic similarity of *"simple design, clean, unmodulated surfaces and bright colours"* and its *"reduction… to its essential formal components" (3)* does not transpire in how we experience Turrell's work. Whereas in Minimalism the *"work removes any trace of emotion…"* and *"does not allude to anything beyond its literal presence, or its existence in the physical world"(3),* Turrell's spaces and art can occupy the viewer with strong emotional, spiritual and physical

experiences that can go beyond the physicality of the art object. His admitted interest in Zen Buddhism, his practice of the Quaker religion and the admiration of many ritual spaces and dwellings of native cultures might be one way of understanding his thinking and his approach.

As Minimalism revisited many aspects of the Bauhaus, it might be more appropriate to look at some features of Turrell's art from that angle. The Bauhaus *"was founded with the idea of creating a 'total' work of art in which all arts, including architecture would eventually be brought together. The Bauhaus style became one of the most influential currents in Modernist architecture and modern design."(4)* It was the intention of Walter Gropius, founder of the Bauhaus, to unite art and craft, creating functional architecture and design products with high-end artistry. It is no accident that the group of Bauhaus teachers included artists such as Wassily Kandisky and Lászlo Moholy-Nagy, but also architects such as Ludwig Mies van der Rohe who became the head of the school in 1930 and a leading proponent of Modernist architecture. In that regard, Turrell's installations encompass many of the features of the Bauhaus by mixing different mediums for a functional, minimalistic form with grand artistic aspirations.

The primary need for his constructions is to house his signature *Skyspaces.* His Piz Uter piece is built on a slope of a steep valley in Zuoz, Switzerland (*Figure* 5-7). It is reminiscent of many watchtowers that are sprinkled throughout Europe and had been utilized in the past for strategic and defense purposes. As we visit this place to experience the temporal perception of light, we can imagine many of the warriors in the middle ages who were on duty in similar structures, who perhaps could not help but gaze at the sky, spellbound by the cosmos in all its beauty, before returning to the reality of the impending danger surrounding them. It is interesting to consider that Turrell might have also been influenced by the famous architect, Mario Botta, a native of Switzerland who is best know for his design of the San Francisco MOMA. With his architectural studio just a few hours away from Piz Uter, he built two spectacular churches in the mountains in the Canton of Tessin, part of the same area of the Swiss Alps as Turrell's edifice. All three constructions are similarly shaped.

Botta's church in Mogno (*Figure* 8-9) is windowless and the only illumination emanates from the natural light streaming through the roof, while the sanctuary on Mount Tamaro (*Figure* 10-13) possesses many aspects of a fortress with a walkway leading towards the church that has eerie similarities to a watchtower**.** Strategically

Figure 5, 6, 7 Piz Uter, Zuoz, Switzerland

overlooking the valley beneath, it is reminiscent of the past when the church was the preeminent entity that protected its citizens in order to control their lives. But once inside, the contrast between the spiritual places of the past, filled with icons, and the Botta churches couldn't be starker. Botta's design emphasizes quite meditation, similar to Turell's *Skyspaces*. In this context, it is worth mentioning his upbringing in a Quaker family, a religion he abandoned only to return to later in his life. Very early on, his grandmother embedded in his consciousness one of the tenets of this religion: "Go inside and greet the light". Is it then any coincidence that many of his installations require time and a meditative approach to perceive the full effect of his light spaces?

Figure 8, 9 Mario Botta, Mogno, Switzerland

Figure 10, 11, 12, 13 Mario Botta, Mount Tamaro, Switzerland

Third Breath in Unna, Germany (*Figure* 14-16) has a striking resemblance to a tiny castle. Its four walls are shaped as a square with rectangular openings that evoke the defensive nature of the structure. A tower positioned in the middle recalls its medieval past. Inside, the building has two floors. The upper consists of his signature *Skyspace* with its opening exposing the bare sky. A round aperture with an optical system connects the two floors. This aperture projects pure light from the sky onto the ground floor that is otherwise engulfed in darkness. This two-tier construction is unique to Turrell's many different applications of the *Skyspace* theme, and brings to mind the camera obscura, shifting the appearance of a castle towards the motif of a camera. This part of Germany is closely tied to photography and is home to two of the iconic manufacturers of the medium, Leica and Agfa, both just a short ride away. In addition, we can compare the Unna Project with its interior/exterior relationship to the light traveling through our eyes, creating images and consciousness in the brain, establishing sensory sensations that might transcend basic scientific explanations. *"I make these spaces that apprehend light for*

your perception. In a way, it's like Plato's cave, where we are sitting in the cave looking at the reflection of reality with our backs to reality. I make these spaces where the spaces themselves are perceivers or in some way pre-form perception."(5)

Figure 14, 15, 16 James Turrell, *Third Breath,* Unna, Germany

The fascination with light goes back to ancient time. It has been worshipped as a deity and as a primary factor of the origin of life. As far back as Aristotle and Euclid, light has been rationalized and understood in more scientific terms. *"The Enlightenment celebrated light as the radiant power of the mind and the fluid of illumination. Romanticism idealized light as a metaphor for infinite and visionary power"(6)* while in more recent times, capturing light became the primary source of new artistic media (photography and film). With artists like Turrell and Doug Wheeler, the phenomena of perception became a prime interest.

James Turrell will be remembered by the Roden Crater, a project that in its scope and audaciousness is unparalleled in human history (*Figure* 17). Early in his career, he sought the perfect site to establish a naked eye observatory. For over seven month, he flew up and down the Western United States in his small private airplane to locate the 450,000 year old extinct cinder volcanic crater. Situated in the Painted Desert near Flagstaff, Arizona, he has been working at this site for over 30 years.

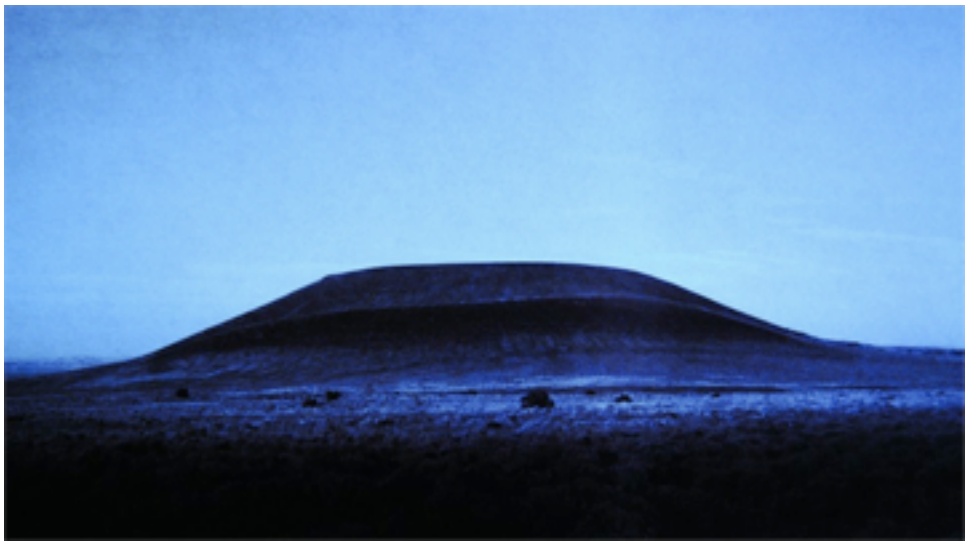


Figure 17 Roden Crater, Arizona

It continues a rich tradition of land art/earth works in the American Southwest that began with Robert Smithson's *Spiral Jetty*, to Michael Heizer *Double Negative* and Walter de Maria's *Lightning Field* as amongst the most important, though only Heizer's *City* will compare remotely in its vastness and monumentality to the Roden Crater. Although Turrell rarely, if ever, speaks about anything other than the perceptual aspect and material appearances of his light sculptures and installations, there is no denying that the history of the location plays a significant factor in the execution of the final design. As in many models and previous constructions of *Skyspaces*, the influence and symbolism of the native culture from the Northern and Latin American continent is apparent and cannot be overlooked. The shapes and forms resemble adobe houses, ceremonial kivas and temples that were created for worshipping deities (*figure* 19-21). Even the Roden Crater appears conspicuously similar and dominates the landscape, as does the Sun Temple of Teotihuacan (*figure* 18). As this monument in Mexico City is believed to have been aligned with certain configurations of the sun, Roden Crater will become an observatory of the cosmos with its many different facets. The fascination with astronomy dates back thousands of years. In close vicinity, a little bit over 200 miles to the East, is Chaco Canyon in New Mexico. As the spiritual and cultural center of the Anasazi Indians. its inhabitants built between 900-1150 AD an amazing array of fifteen major sites

Figure 18 Teotihuacan, Mexico City

Figure 19 Chichen_Itza_Mexico

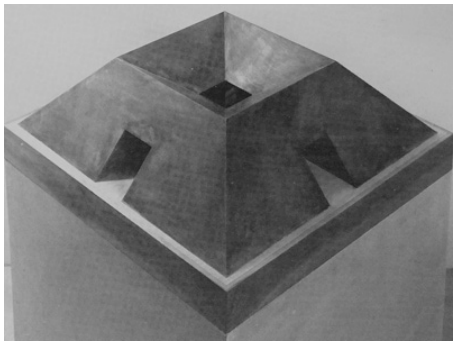


Figure 20 J. Turrell, Outside In (model), 1989 ***Figure 21*** J. Turrell, Blue Blood, Santa Fe, 1988

and structures, some miles away. It is an astonishing place where the native people studied the cosmos and developed an exact calendar. Many of the Chacoan complexes were perfectly aligned along an east-west line that captures the equinox sun. Another configuration of buildings points towards the full mid-winter minimum moon, which occurs every 18.61 years. Perhaps the most extraordinary observatory accomplishment in this indigenous place sits atop of the Fajada Butte (*Figure* 22). On a wall, two petroglyphs with a spiral design that is believed to symbolize the sun, are either pierced or framed by one or two sun daggers created by three huge stone slabs in front of the wall, on the equinoxes and solstices (*Figure* 23). This information is worth mentioning as Turrell is similarly involved in complicated calculations and observations at his Roden Crater project. Incidentally, one of the chambers is dedicated to the identical celestial appearance that occurs every 18.61 years. His ambition to create a naked eye observatory requires highly sophisticated knowledge of astronomy, mathematics and science that defies the

Figure 22 Fajada Butte, Chaco Canyon

Figure 23

occasional practitioner. Each chamber is precisely built to capture certain phenomena of the universe. Some spaces will depict the configuration of planet alignments that will not transpire for another 200 years.

Besides a common interest in astronomical observations, there are striking architectural similarities between the Roden Crater project and Chaco Canyon. Turrell's bird eye view of the plan for his amphitheater resembles Pueblo Bonito, the largest complex in Chaco Canyon (*Figure* 24-25). Additionally, the entrance to the East Portal shares many visual and physical characteristics of a kiva (*Figure* 26-27). These windowless ceremonial chambers were accessible by a ladder through an opening in the roof, noticeably similar to the majestic staircase of the East Portal (*Figure* 28-29). Upon descending these steps into the crater, one walks on a circle symbolizing our planet. As a kiva represents the womb of mother earth, it is no coincidence that all of Turrell's chambers are deep inside the volcano. Furthermore, the futuristic looking tunnel leading to the East Portal chamber with its imposing staircase resembles a keyhole opening up to the outer world (*Figure* 30). He mentions; "*the reason I'm making the tunnel [up into the bowl of the crater] is so that you don't go up a mountain and down into a hole. It has a lot to do with entry…"(7)*

Figure 24 Pueblo Bonito, Chaco Canyon

Figure 25 Plan for amphitheater, Roden Crater

Figure 26 Ceremonial kiva, New Mexico

Figure 27 Entrance to East Portal, Roden Crater

Figure 28 Inside ceremonial kiva

Figure 29 East Portal, Roden Crater

Figure 30 Tunnel leading to East Portal, Roden Crater

The fact that all the chambers are under the crater's floor is a fascinating aspect of this project that I suspect relates to mythology and the indigenous culture. As the Roden Crater is in close proximity of the Navajo Nation, we might think of their creation story, in which creatures that are half human/half insect had to travel through four layers of the earth before they appeared as the Navajo people onto this world.

"*I admire Borobudur, Angkor Wat, Pagan, Machu Picchu, the Mayan pyramids, the Egyptian pyramids, Herodium, Old Sarum, Newgrange and the Maes Howe. These places and structures have certainly influenced my thinking. These thoughts will find concurrence in Roden Crater."(8)* (*Figure* 31-34*)*

Figure 31 Borobudur, Java, Indonesia

Figure 32 Newgrange, Ireland

Figure 33 Maes Howe, Orkney, Scotland

Figure 34 The Intihuatana stone, Machu Picchu

As all these locations have some relation to either religion, burial sites, ritualistic places and ancient dwellings, it is worth considering the purely visual influence they have on Turrell's edifices. It is not surprising to find many of his structures combining modernist design with ancient, monumental aesthetic.

Looking at the blueprints of the Cheops pyramid in Cairo (*Figure* 35) and the Roden Crater (*Figure* 36-37), the similarities are quite striking; both structures are accessed from their sides, elevated from the ground, and lead to different chambers through tunnels deep inside the edifices. The Egyptian pyramids were a place to guide the Pharaohs in their journey through the afterlife. Although the Roden Crater is purely an observatory of the cosmos, its interior has a futuristic aesthetic with ritualistic overtones.

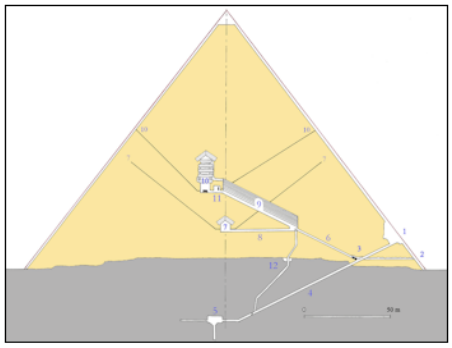


Figure 35 Cheops Pyramid, Cairo, Egypt

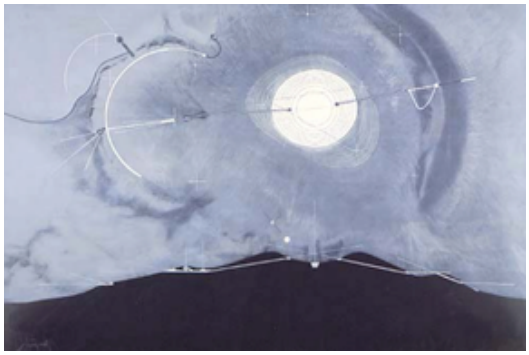


Figure 36 Interior design of Roden Crater

Figure 37 Interior design of Roden Crater

While Turrell has been interested in cultures that observed the cosmos, he is intrinsically fascinated with the aspect of dwellings that house the phenomena of light. In an interview he elaborates *"why the Pyramids are much more interesting to me than Stonehenge. A pyramid is a structure with an opening to an event outside. The light enters down the shaft only once a year and lights a figure of one of the pharaohs full on. Stonehenge is like sitting stones: that is, you stand in it and you site the external events. In Egyptian structures, phenomena enter the space and actually make a lighting event inside. That space is sensitive to events from places outside itself and when an event occurs outside that you want inside, it enters the space and does something. It's the camera obscura. In a way, the camera is the room and that's really a sensitive space."(9)*

Mankind's primal instinct is to create shelters for living and security. As we enter Turrell's structures, we enter a mysterious space not unlike the camera osbcura. There is nothing useful in mere practical terms. No shelter and security, just magic. As Robert Shapley stated and could be applied to Turrell:

"I believe that science and art are the modern intellectual descendants of magic. All these three human activities are intellectual ways of dealing with and understanding the mysterious world outside our heads. Magic is the most ancient method of controlling nature. Science and art are the magic of modern man."(10)

Architecture becomes an important and necessary transmitter of Turrell's magic. It is my hope that in the future he will be understood beyond the mere simplistic terms of the preeminent light artist. In this essay, I have tried to explore one facet of

many that distinguishes James Turrell as one of the most important artists of our time, one that might be compared in his accomplishments with the quintessential Renaissance Man, Leonardo da Vinci.

Andreas Rentsch, Fall 2012

Index:

1) Michael Govan, "Interview Magazine", July 1, 2011

2) Rosalind Krauss, "Scuplture in the Expanded Field", October, Vol. 8, Spring, 1979, pp. 30-44

3) James Meyer, "Minimalism", Phaidon Press, 2005, pp. 15-17

4) Nikolaus Pevsner, *"A Dictionary of Architecture and Landscape Architecture"*. Penguin Books. pp. 880

5) Interview with EGG, Art21, the Arts Show, PBS

6) Ursula Sinnreich, "*James Turrell, Geometry of Light*, *Between Heaven and Earth"*, 2009, pp. 21

7) Interview with Kathy Halbreich, William Porer and Lois Craig representing Places, The Design Observer Group, January 23, 1983

8) James Turrell at Edizione Charta, Fundacion NMAC, 2009

9) Interview with Kathy Halbreich, William Porer and Lois Craig representing Places, The Design Observer Group, January 23, 1983

10) Robert Shapley, "The Importance of Contrast in the Perception of Brightness and Form, in the Visual Arts and Sciences: A Symposium Held at the American Philosophical Society", Transactions of the American Philosophical Society, Vol. 75, Part 6, 1985, pp. 20