

## Sculpting with Light - Light and Embodied Space

Collaboration between  
Light artist Peter Freeman and Shallal Dance

Presentation by Peter Freeman given at Back Lane West,  
Redruth to go with the first public performance.

### Introduction



*Radiance, neon sculpture*

Hello! My name is Peter Freeman. I am an artist who makes sculptures and installations using light.

The reason I am here to talk about my work today is because over the last few weeks I have been working in collaboration with the wonderful Shallal Dance. In this presentation I hope to shed light on some of the ideas that inspire and inform my approach to light and working in collaboration with Shallal dance.

I am going to talk about how I got into lighting and what the language of lighting means to me. I'm going to show examples of my previous projects and talk about how they

developed my ideas in relationship to this current project with Shallal.

### Two quotes to start

*Light is material life. The mountains, the streams, the atmosphere is spent light. At the threshold, the crossing of silence and light, lies the sanctuary of Art, the only language of man. It is the treasury of the shadows. Whatever is made of light casts a shadow. Our work is of shadow. It belongs to light.*

– Louis I Kahn

If you want what visible reality  
can give, you're an employee.  
If you want the unseen world,  
you're not living your truth.  
Both wishes are foolish,  
but you'll be forgiven for forgetting  
that what you really want is  
love's confusing joy.

*From Essential Rumi  
by Coleman Barks*



*Light Escape, Gallery Oldham*

### About me

My aim as an artist is to make light sculptures that bring beauty and pleasure to the senses and luminosity to their surroundings. For me realising light sculpture is about finding poetic solutions that add colour and spaciousness

in the built environment. I am interested in exploring qualities of light, meaning and emotion, using electric light and digital technologies to realise luminous forms that celebrate light, transforming their locations, to create a positive, peaceful ambience.



*Steps, neon sculpture in the Belgrave Gallery St Ives*

Sometimes the forms are independent objects with luminous surfaces radiating light into the surrounding space.



*Reflex, Cambridge*

Others are light installations that are integrated into the architectural envelope transforming existing structures with dynamic colour. Light sculptures are often realised as site specific public art and I work closely with clients, local people, architects, and urban planners. It's a creative transaction with the sculptural process being orientated towards a synthesis of ideas, transferring what is exciting and valued in the surrounding culture into three dimensions and giving resonant luminous form to a contemporary moment.

### Biography.



*Glamrocks, Blackpool*

I was born in Manchester to missionary parents and spent the first five years of my life in Nigeria. Then returning to the Manchester where I spent the rest of my childhood and teenage years. My first experience of artificial light was the church candles and annual trips to Blackpool illuminations.



*Exchange Gallery, Penzance*

I attended Art College in Bristol, studying fine art sculpture in the nineteen seventies.

While I was a college there was a lot of interest in expanding the material possibilities of sculpture.

At the time there was a lot of discussion about the nature of sculpture and its materiality and its relationship to the space of the gallery.

All sculpture and probably all visual art is about the manipulation of light. In traditional art this is reflected light, to create a visual language of form and space. Particularly for sculpture it is also about how this form relates to its surrounding environment usually the gallery.

What started out as an interest in looking at space and sculpture led me to be interested in using light as an expressive medium. Because instead of relying on reflected light to create form I found by using electric light my sculptures generated the light and filled the gallery spaces with their presence.



*Savage, Goldsmiths College*

The first light sculptures I made while studying for my degree used discarded fluorescent lights which I bought from an army surplus shop and I used the main frame college computer to work out how to position them at random in my studio space. Bristol was a traditional art college with traditional sculpture values and my experiments with light were not well received.

After college I spent time travelling in Turkey, Germany and America. In all these places I started noticing the potential for neon. In Turkey there was a huge profile of Attaturk in blue neon on the top of a hill. I loved the thin blue line that defined his contours floating in space. In Germany I saw some fantastic window displays that used different coloured tubes to create clouds.



*ToyBoy, Manchester*

Then in America I visited Las Vegas and was completely blown away by the incredible neon architecture. I loved the way that it was possible to build a city out of light. During the day the buildings revealed themselves as shabby ordinary sheds but as darkness fell they became palaces with glittering facades.



*Poole Art Centre*

When I returned to the UK I decided to learn the craft of neon for myself and enrolled on a scientific glass blowing course followed by two years working for commercial neon companies before setting up my own studio in London's East end. At first I made neon lights that I sold in shops like Liberties in London.

I also received recognition from the Crafts Council and was awarded a setting up grant as well as getting on their list of selected makers.

The lamps had been aimed at a domestic market but when I started putting the lights into architectural settings and being commissioned for architectural installations I realised that this was their natural home. And it is in this area that I have continued to work in and develop my ideas.

## What is light?



*Seascape, Penwith Peninsula*

I've titled this section what is light? I think it is sort of obvious at some levels because most of us have eyes and it's the stuff that informs our primary sense of vision so everybody is a natural expert in their own way. But I thought I would like to share some of the ways I look at light and then you might see the world through my eyes and hopefully it might help explain what we are going to be trying out here in the workshop.

There are two types of light one is the light of science of photons and electromagnetic radiation and the other is the light of human perception.

Although it's possible to separate these conceptually they are deeply entangled. We are made of light and for us light has deep physiological, symbolic, and mythic resonances.

This is the beginning of light as described in the bible but could be illustrated with a quote from many religions.



### Genesis quote.

1 In the beginning God created the heavens and the earth.

2The earth was <sup>[a]</sup> formless and empty, darkness was over the surface of the deep

3 And God said, "Let there be light," and there was light. 4 God saw that the light was good, and He separated the light from the darkness. 5 God called the light "day," and the darkness he called "night."

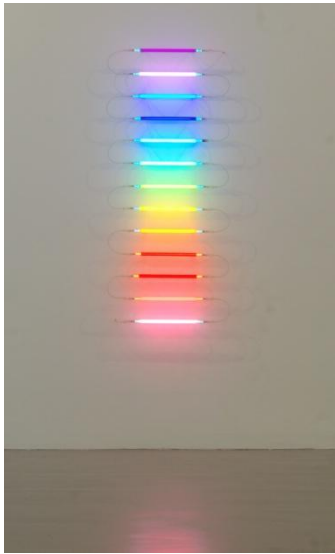
### Scientific Light - The light of reason

On the science side this is visible light, photons of electromagnetic radiation in a very narrow band between 400 and 700 nanometres. The electromagnetic spectrum is much wider but the human visual system is only sensitive to these wavelengths as far as we know. These are seen in the colours of the rainbow. The eye absorbs photons of light through receptors in the retina and turns them into electrical signals. These signals are then transformed in visual cortex of the brain through a complex process into the visible world we perceive. Traditionally this is the light of illumination of truth and purity the light of god. It is also the light of Newton and the enlightenment. It is the light that gives the world its primary distinctions in creation myths as divisions between dark and light.

West Cornwall is surrounded by the Atlantic Ocean. There is a constantly changing spectacle of sunlight reflected between the sky, sea and land. The sunset reflections on swell of the ocean, moon shadows on a night stroll.

This luminous landscape has attracted artists for over a century. It has a wonderful uplifting spirit that is the ground

from which my sculptures emerge and the spirit I try to emulate.



*Spectra, neon installation*

I like the radiant power and intangible fragility of light. The advent of electric light and most recently LED light and computer control gives the possibility of creating totally new and light sculptures and luminous landscapes.

### The light of human perception



*Tate Gallery, St Ives*

West Cornwall has a reputation for a quality of light that has attracted artists dating back to when the Railways made it possible to travel easily to the far West. As

somebody who makes light and has travelled a lot I know all places have a special quality of light I believe that the artists who came to Cornwall, came here also for escapist and romantic reasons and brought the special quality of light inside them that they then projected onto the landscape. It is interesting to watch modern holiday makers and the energy they bring to have a good time whatever the weather. I can see how people still bring their own light with them.

I am not saying Cornwall doesn't have some special qualities of light. Sometimes when the rain has washed the air that comes straight from the Atlantic and sun is reflected between the clear clean sky and sea there is a clarity and brilliance of light and colour that is hard to match.



*Luminous Motion, Winchester Cathedral*

The other light is the inner light of human perception.

The relationship between humans and light is very complex.

Science treats light as external physical phenomena but many religious and artistic people believe that there is also an inner light.

In reality for sight to take place it requires that the external light of the physical environment meets the inner light of human mind.

A big area of interest for me as an artist is this inner subjective nature of light. This is the light that delights the eye and creating beauty and joy and feeds human imagination. This is the poetic part of experiential light that is traditionally in opposition to the scientific view of light and the utilitarian act of illumination.



*Full Moon Rising, neon*

Within the silent waters of the heart  
Dwells the moon, the lonely waves—  
Brightness everywhere.

-Dōgen (1200-1253)

In reality human light is a human phenomenon that requires the human sensory system to turn invisible photons of electromagnetic radiation into electrical signals that the brain turns into perception and vision. Without the eye and the brain there would be no light as we know it only invisible photons of electromagnetic radiation. Human light is created through the senses and the brain. What is seen and understood is dependent on a mixture of biological, cultural and learnt experiences. If any of these elements are missing we simply don't see. I find this idea that light requires both rays of invisible radiation and the interpretation of the eye and brain before vision is attained

a very liberating view of our relationship to light and the universe. It supports my artistic view that light should be a subjective medium and that light exists in the realms of the emotions rather than traditional scientific enlightenment view of the world that sees light in terms of useful levels of illumination for work tasks. This is the light of work, advertising and oppression. I'm passionate about the light of liberation and freedom of expression.

There is a wonderful book that I read by Arthur Zajonc (Zionce), who is or was a professor of physics at Amherst College in America, called *Catching the Light – The entwined history of light and mind* –

His book starts with studies of people who were born blind and have recovered their sight through operations but still found impossible obstacles to seeing. He then goes through a history of light in different cultures and religions through the ages and ends up with the dilemmas facing him as a quantum physicist trying to pin down what really light is. He suggests that we are still not close to seeing light because of the limitations of our imagination or as he would say we haven't developed our inner eye. He talks a lot about the subjective relationship between humans and light and how to understand light you must understand their interdependence. This is a quote from the beginning of his book.

Quote.. Two lights brighten our world. One is provided by the sun, but another Answers to it – the light of the eye. Only through their entwining do we see; lacking either, we are blind.... He goes on to say .... Besides an outer light and eye, sight requires an 'inner light' one whose luminance complements the familiar outer light and transforms raw sensation into meaningful perception. The light of the mind must flow into and marry with the light of nature to bring forth a world.

## Our perceptual system and coloured light



*Pink Lift, Gallery Oldham*



*Green Lift, Gallery Oldham*

## Colour pigment and interaction with coloured light.



*Redruth green and blue*

One of the really big advances in lighting since I started using it as a medium has been the development of LEDs and the possibility of computer control.

## Embodied space



*Rainbow Bridge, Deptford London*

As an artist I'm interested in using electric light to engage this inner emotional light. To light space requires all the senses both visual and tactile. It has been a revelation for me the way Shallal dancers are able to make visible through movement the strong sense of the interaction of an inner and outer reality. It's been inspiring working with Shallal and experiencing how they explore space and embody space.

As a light artist I create light sculptures that articulate space and light installations that give form to space. My aim is to give pleasure and create beauty, to transform space in positive ways. I want my sculptures and installations to be a gift to a space and people using it.



*Boundary, neon sculpture*

Usually I make light forms and leave it open to the audience. The works often become the background for people to behave in predictable and very normal ways.

Working with Shallal has been fantastic in showing the way that light can be truly transformative. Shallal's experience with dance is amazing in revealing how a reaction to colour and space can be expressed emotionally, physically and poetically through movement creating a totally embodied space.

### Two poems to finish

The monkey is reaching  
For the moon in the water.  
Until death overtakes him  
He'll never give up.  
If he'd let go the branch and  
Disappear in the deep pool,  
The whole world would shine  
With dazzling pureness.

*Hakuin*

Inside this new love, die.  
Your way begins on the other side.  
Become the sky.  
Take an axe to the prison wall.  
Escape.  
Walk out like someone suddenly born into colour  
Do it now

*Rumi.*

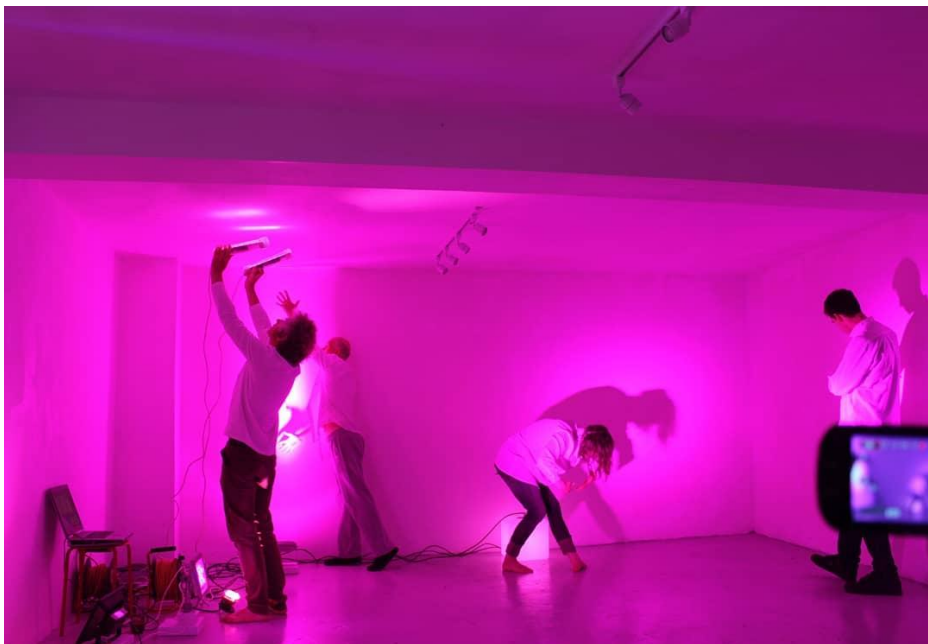


*Thank you for listening*



## Collaboration and Performance

The collaboration and this performance is a meeting of light, space, dance and music. We have made a number of attempts over the past weeks, this is the most recent. Each time throws up new complexities and revelations. It's provisional and unfinished but that's the place it wants to be, in a zone of experiment, mistake and sudden luminous beauty.



*Kerry, Colin, Sam, George on music and Peter*



*Kerry and Sam  
Embodied Space at Back Lane West, Redruth*