

INDUCTIVE PROBABILITY PAUL GREGG

Inductive Probability is a survey of work by Paul Gregg.

Gregg's work has occurred fleetingly, and been installed permanently in cities and towns throughout Ireland, Europe and the United States. This survey cannot retrieve the artist's original installations. So instead, it represents his practice through tests, documentation, and technically unsparing assemblies.

Inductive Probability presents a selection of projects including a decommissioned rocket, photographs lit with explosions from magnesium mortar charges, and a model for a glass planet Earth. It covers twenty years' worth of perennially sited machines.

Inductive Probability opens at Triskel Christchurch, Cork on 16 June, and continues until 29 July 2012.

"Paul Gregg is always an exciting presence and having known his work for many years it will be very exciting to see it all together. It will make for a very dynamic exhibition. He is an artist whose quiet demeanour defies a creative energy that at times is literally explosive. From his earliest work there is an element of surprise that can, at first, confuse but always ends up exciting and even humorous. In addition to being an artist, he is a scientist, inventor, maker and creator. This is truly an exhibition to look forward to." - Oliver Dowling

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FROM THE ARTISTIC DIRECTOR

I first knew Paul when he was resident at the Fire Station Artists Studios in Dublin in the 1990s. I was Director there at that time, and I remember that Paul's arrival brought with it new challenges for our Sculpture Workshop. Here was someone working with - among other things - rockets, high explosives and various types of gas.

Paul is not, it seems to me, a gallery artist, though if given the challenges to make a gallery show, he would I am sure create something extraordinary. For Triskel Christchurch, which shows sculpture because sculpture is not seen enough, I decided therefore that perhaps the best way to represent Paul Gregg to the world would be to bring his studio and his practice here instead, and that is what we have done.

The timing is particularly apposite, and I am grateful to everyone involved in 'Curious City' for their support with this "Manual" of Paul's work and Practice. The Creativity of Paul Gregg and the world of Science have a natural if unorthodox affinity to each other.

I am also grateful to everyone at Cork City Council for helping with the installation of the outdoor work, to the Arts Council for the loan of Amorphous, and to the Cork Midsummer Festival who have enthusiastically promoted the exhibition to a very wide audience.

Tony Sheehan

Artistic Director Triskel Christchurch

NOTE: This publication describes Paul Gregg's art by combining it's presentation with narratives and additional illustrations created by Adrian Duncan and Sean O'Sullivan in response to each project.

For my Father J. Dever Gregg



DRUM ROLL - CARTE BLANCHE

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 1

The most difficult part of mastering a singlestroke drum roll is the release. The stick must lift from the head directly after the impact of its counterpart. Since the drum roll typically occurs for eight seconds, it is entirely possible to overestimate the level of force required for the first snap. Slight acoustic inconsistencies in the performance of a drum roll can result in an uneven and 'musical' sound.

A drummer's feeling of anticipation will manifest in a variety of ways. Many performers can be seen rehearsing their act with invisible tools, smiling uncontrollably or being sick. The brain will speculate about its own performance, adopting a catlike focus that provokes hysterical shaking, or, stage fright.

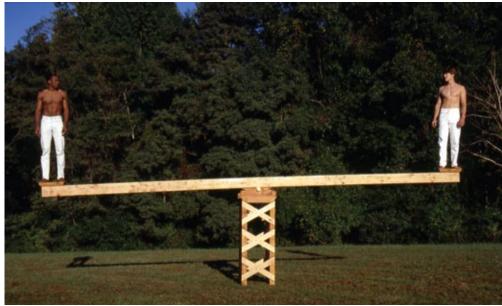
For a machine, some of these problems are mitigated. It plays in its own honour, unselfconsciously.









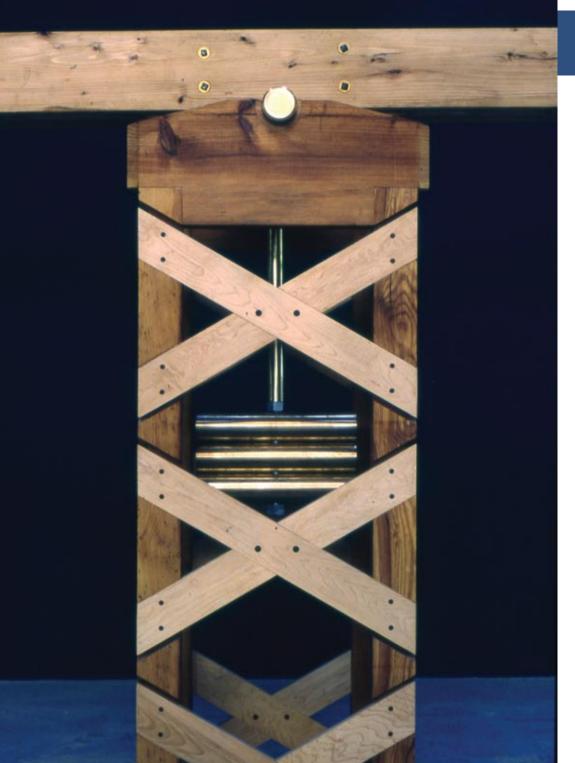


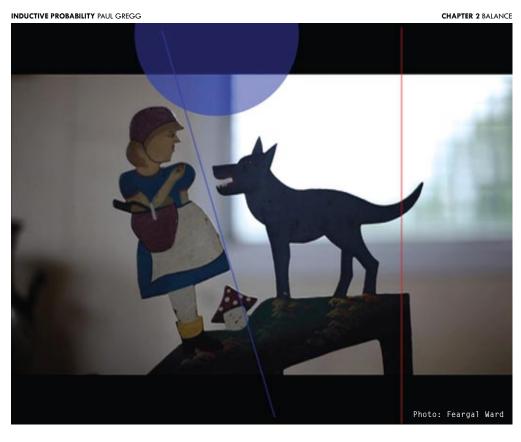
Balance manned



Balance unmanned





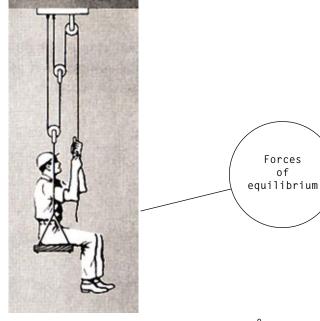


I was down in a local historian's house last August. He lives near my home in Co. Longford. Out the back of his farm house he has three prefabs, a sort of informal museum, full of old farming and bog implements, lamps, churns, shovels, toys, etc.

I was talking to him for almost three hours. At the end of our conversation he showed me a toy he had bought at an auction, which, apparently had been made by a prisoner of war during the 'Fourteen Eighteen War' (WW1). It was constructed with a sheet of metal, cut into a shape and painted upon, depicting Little Red Riding Hood and The Wolf.

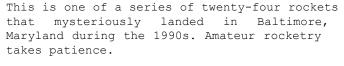
This piece of metal is then balanced on a plinth, which is made from six inch nails and a thin top plate of metal. The counter weight is a spent bullet. With the smallest touch it swings on its tiny fulcrum and is, according to the local historian, "a masterpiece of engineering."







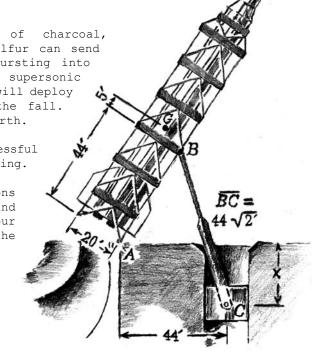




The right combination of charcoal, potassium nitrate and sulfur can send a small metallic tube bursting into Earth's stratosphere at supersonic speed. Often, the rocket will deploy its own chute to make the fall. Most rockets return to Earth.

The mathematics of a successful landing are simply staggering.

But then, those calculations do stand for mankind's grand universal achievement: our flagrant dispute with the laws of gravity.













RECONNAISSANCE AND DELIVERY

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 4

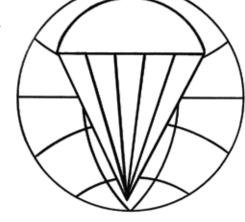
PARACHUTE MYSTERY

All satellites return to the Earth, their place in the planet's orbit is not certain. And although they're heavy, and they come down very fast, no-one has been harmed by their return. On the day of 'Parachute Mystery', at around 7:15am, a local member of the Gardaí reported seeing a parachute descending towards Waterford. That observation was followed by reports from local residents, claiming to have seen six flying discs gliding into the town.

The objects bore all the hallmarks of a scientific experiment. They contained test tubes, and were fabricated to a high standard. The flying disc was identifiable as an orange and white parachute, splayed out over the concrete like some massive collapsed lung.

This kind of object is not commonly seen in Waterford town. The Gardaí called in Met Éireann and the Army. They weren't able to shed much light on the things - except to note that the parachutes were decorated with Cyrillic text and an identifying serial number. They were clearly Russian.

2400



Logo discovered on Parachute C-5К серии 2 9019117



THE IRISH TIMES

DUBLIN, TUESDAY, OCTOBER 6, 1998



Gardai baffled as eight mysterious objects drop in out of the blue

trish Independent, Tuesday, October 6, 1998

Out of the sky . . . a mystery



Stir over mystery objects continues

Parachute Mystery





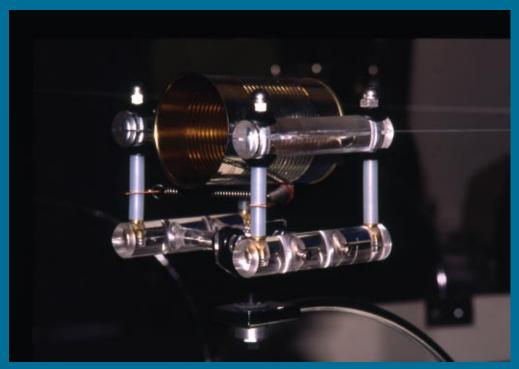
"Originally selected based on a project that he successfully realised in Baltimore, MD, USA, artist Paul Gregg created the Reconnaissance and Delivery project.

In terms of public opinion it was one of the most noted and controversial art works of the Garter Lane Public Art Project, Reconnaissance and Delivery successfully challenged every single aspect of Public Art making/ administration/curation and presentation to its very core, a project well worth noting by commissioners and Public Art Theory analysts."

Garrett Phelan

Russian lettering may hold clue to RUSSIAN invertigation any contains a vital clase to working and several mysterly reduced with the top to the forms attached which the several mysterly parachute puzzle





TIN CAN COMMUNICATION

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 5

Tin Can Communication was first shown in the Triskel Arts Centre in 1997, in an exhibition called "Intermedia." The work comprised eight mounted tin cans. Each tin can was connected to another using a piece of thread thus creating four two-ended networks, criss-crossing a table with eight sides.

These everyday tin cans sat within a series of beautifully machined holders reminiscent of the types of microphones one might have seen during the 1940s and 50s on television, in radio stations, or at live performances.

Bringing together outward performance and inward attention, the Tin Can Communicants are bound by an understanding that both cannot talk at once.

The thread between the cans is excited, it vibrates and relays with a translation of energy and concepts something of the Other that is, however, both distant and incomplete.

Manus: 'What sort of translation is that, Owen?'

Owen: 'Did I make a mess of it?'

Manus: 'You weren't saying what Lancey was saying!'

Owen: "Uncertainty in meaning is incipient poetry" - who

said that?'

Manus: 'There was nothing uncertain about what Lancey said: It's a bloody military operation! ... what's "incorrect" about

the place-names we have here?'

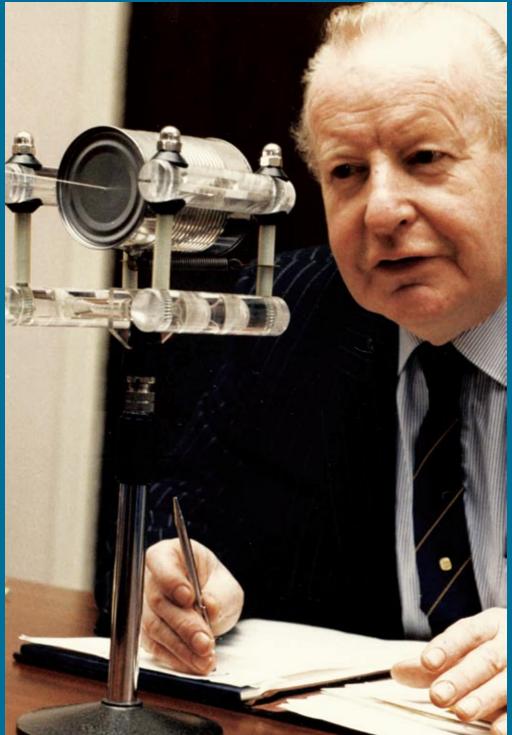
Owen: 'Nothing at all. They're just going to be stan-

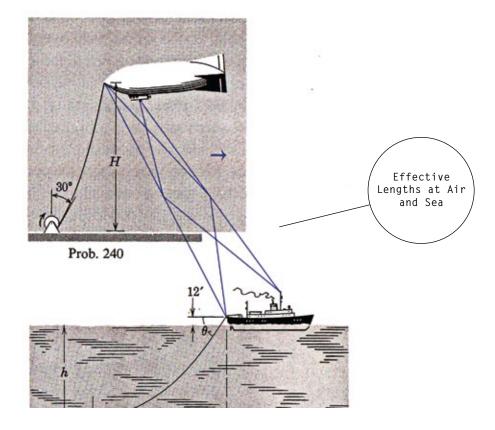
dardised'.

Manus: 'You mean changed into English?'

Owen: 'Where there's ambiguity, they'll be Anglicised.'

Brian Friel (from Translations)
Selected Plays. 1984, Faber & Faber, pp32





[Details from "Statics" J.L.Meriam, 1966 publisher - W.J.Wiley and Sons, NYC These images have been electronically drawn over by Adrian Duncan]

PAGEANTRY & RHETORIC

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 6





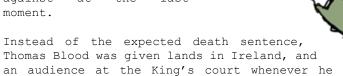
In 1671, a Clareman named Thomas Blood visited the Tower of London disguised as a parson. In the week following, he endeared himself to the Tower Master, Thomas Edwards, with conversation, compliments, and a series of gifts. Blood openly speculated that his nephew could marry Edward's niece, sweetening the offer with a promise of a significant inheritance for the young couple.

The parson's nephew was non-existent. By the end of the week, Blood managed to cajole the Tower Master into showing the Crown Jewels to himself and some friends. With their prize in sight, the men hammered, walloped and stabbed Edwards, before binding his hands and gagging him. Blood flattened St. Edwards Crown, cut the Sceptre with the Cross in half, and stuffed the Sovereign's Orb down his trousers, before making his escape.

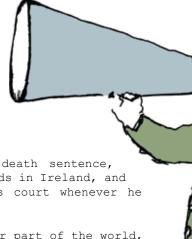
He was quickly captured, and demanded to speak with

King Charles II - an impudent manoeuvre for a man facing the gallows. Blood charmed the King by characterising himself as an audacious rascal. He also spun a tale about his previous attempt at regicide, which the Clareman had decided against at the last moment.

felt like it.



That same month, in another part of the world, Samuel Morland worked on a prototype for his 'mega-phone'; a device which would allow the speaker to raise the persuasive qualities of his voice, and fork his own tongue.





Quarry, Paul Gregg, 2005

The large-scale photographic images in this work were created by setting off a magnesium explosive, one thousand feet in the air. The explosives emitted a short burst of white light which laid bare, in a startling moment of violent chance, a dark and forgettable world.

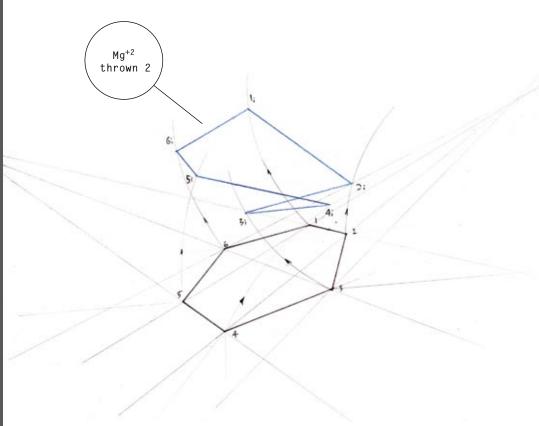
A.

Joan of Arc is thought to have been a left-temporal lobe epilectic...

(and) in a terrible flash of brain lightning was able to pierce the murky veil of illusion which is spread over all things.

Jones, Thom - The Pugilist at Rest

B.
 Chemical notation: Mg+2 - hexagonal crystal structure

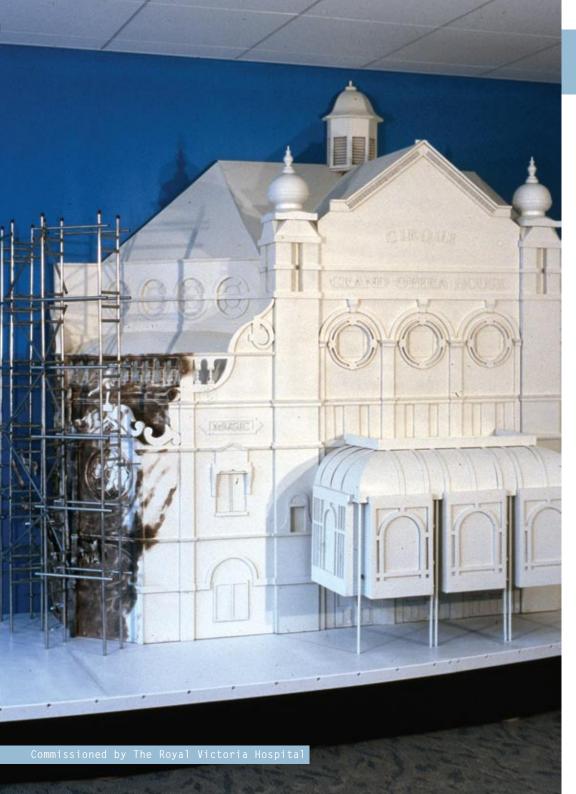




Duckett's Grove







BELFAST BUILDINGS

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 8

PLASTIC FAILURE

In structural engineering, when an element in a structure deforms plastically, it bends to an irretrievable point, and breaks and $\!\!/$ or severs.

When a building is subjected to a force or series of forces there is a moment within this period of stress and strain where the structure of the building moves, ever so slightly. How the building moves depends on the type of force being exerted. Does the force stem from wind loads? Thermal changes? The filling of the building with bodies or things? Etc.

There is a moment during this movement when the building wants to remember itself. All of the materials which are placed in ordered shapes within it conspire to return itself to itself - to realign. The structure strains (mightily) to do nothing.

The building deforms elastically.



A spectrum of stress/strain colours from MASTER SERIES - structural engineering modelling package.



Belfast Building, Object and x-ray print, Paul Gregg, 2004

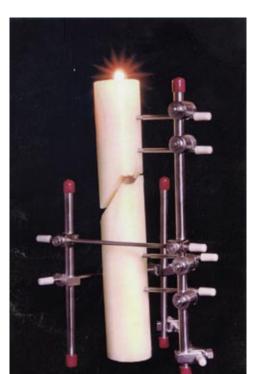






Slightly compressed palmar basal-ridge fracture of the middle phalanx of the left ring finger







...stabilized by a mini external fixator bridging the joint consisting of two short carbon-fibre rods, connecting clamp and two holding clamps.



"The Scientific Association for Operative Fracture Treatment (the AO Foundation) was fascinated when Paul Gregg asked for support to realize his project "Belfast Buildings" at the Royal Hospital in Belfast at the entrance of the Fracture Department with the Original AO Tubular external fixation devices used for patients. We learned from his other projects like the "Parachute Mystery" that this artist is extraordinary in many ways.

We remained in close contact and were proud to unveil his sculpture "ONE REVOLUTION PER DAY" in 2008 to mark the 50th anniversary of the AO Foundation in Davos, Switzerland. We congratulate Paul Gregg on this exhibition of his artwork over the past 20 years and wish him many more great ideas and success in the future."

Prof. Peter Matter
Former President
AO Foundation









SUBAQUATIC DUBLIN

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 9

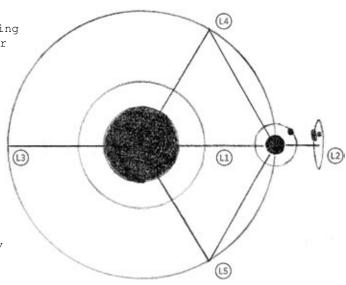
In the hall of Our Lady's hospital for sick children, there is a tall aquarium that houses at least thirty of the brightest tropical fish you're likely to see. The fish swim back and forth through a stainless steel model of Dublin city's buildings. Liberty Hall takes on an angular sheen from its overhead lighting. Its architecture remade into a cross section of hundreds of beams and sixteen floors deposited in clear blue water. Small pink fish wait outside its front entrance; the scene seems like a hallucination from a mammoth flood.

These buildings are made entirely from SAE 316 stainless steel, the same material that is used to make surgical tools, orthopaedic implants, and to reinforce emergency services vehicles. Although the steel's surface oxidises quickly, its structure will not corrode when submerged - or implanted as the case may be. This model will survive the actual Liberty Hall.





Radiometric testing carried out after the Apollo program indicates that the Moon was formed by a cataclysmic collision between the early Earth and a planet that is retrospectively named Theia. The two planets melded, ejecting our nascent moon, and electrocuting its remains into a watery set of continents.





When I was young, my mother installed a length of black tape around the circumference of our sitting room, close to the ceiling. She said that this black represented the period of time before there were things. At the end of the tape, over by the door, there were small sections of green, yellow, grey, and finally, a miniscule sliver of white. These variously represented periods in the Mesozoic and Cenozoic eras - the ones that carried heartbeats. She characterised it as a tick of consciousness, which punctuated a very long dark winter







ONE REVOLUTION PER DAY

INDUCTIVE PROBABILITY - PAUL GREGG

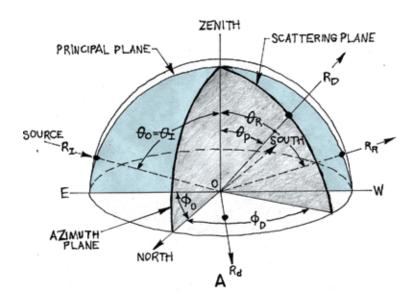
CHAPTER 1

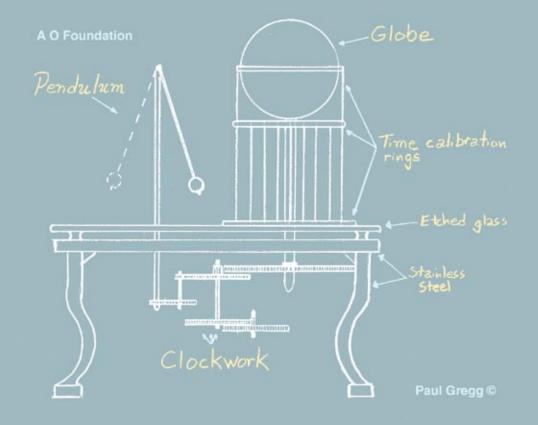
When I was nine, I remember standing on the beach in Killiney on a school trip.

It occurred to me that it was possible to see Earth's curvature across a wide plane of the Atlantic horizon. Using the view, I could understand what the scale of the planet's full shape looks like. How far it goes out, and the way it comes back around.

When I first saw that curvature, I couldn't decide whether Earth did bend into a sphere, as I had previously gathered. Or, whether the curve was inverted, and the surface of the planet was affixed to the inside of a monstrously enormous loop - with Killiney at its lowest point.

The horizon was certainly not straight, but there was no telling which direction it was going. I settled on the notion that Earth was a sphere, and that I was probably standing on the outside of it, rather than the inside.











CHAPTER 11 ONE REVOLUTION PER DAY

"The collaboration with Paul was a great experience for me as an engineer: not only the creation of the technically demanding art work "One Revolution per Day" but also the time management to be finished in time! It was just great!"

Robert Mathys



INDUCTIVE PROBABILITY - PAUL GREGG



My girlfriend, our dog, Gypsy, and I have started going for walks every Sunday. We generally go to the Dublin or Wicklow mountains for a couple of hours. We have only started doing this recently because we have joined a car-share with a woman, and a man who live nearby. Niamh got to know the woman, Kaethe because she is a regular customer at the deli where Niamh works. Kaethe keeps a community garden to the side of a friend's house. She grows herbs and such like in the garden so as people, anyone, can come and take some when they might need them.

When we go up to the Dublin mountains we visit the walking trail called Three Rock. Halfway up this walk, there is a plateau where a number of telecom masts have been built. Some of these masts are tall and cabletied, others are sturdier and look like squat steel Atlases. All of these masts are festooned with plates and dishes facing in different directions receiving and emitting invisible impressions and information — at once ordering and contributing to the cacophany being howled up from the beautiful, unfurling sprawl of city and sea below.







AMORPHOUS

INDUCTIVE PROBABILITY - PAUL GREGG

When my brother and I were young, around eleven or twelve years of age, my mother would bring us across town to piano lessons every Thursday evening. The lessons took place in the piano teacher's house, which was a lovely old bungalow sitting amid an attractive gathering of trees just off the main Ballymahon to Mullingar road. The teacher was stern and my brother and I did not look forward to or enjoy her classes. I would usually go first, for half an hour, then my brother. My mother would pick us up an hour later and I remember the feeling of elation each Thursday evening as we drove away from those lessons.

On one occasion, in early Summer, while driving home from one of those lessons I remember looking out of the car window and

seeing many many hot air balloons in the sky. In the late 80s and early 90s balloonists from America, England and Europe would gather once a year in the grounds of Newcastle House in Ballymahon, and race. The balloons up in the sky were different shapes and colours and seemed to barely move.

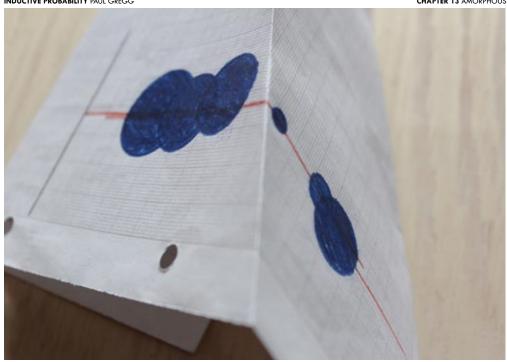
When we got back home, my older and three younger sisters weren't there. They and all of our immediate neighbours were across in Nally's field converged around a balloon that had crash-landed there. The basket was on its side, and the balloonists were blasting hot air into the balloon, like they were trying to resuscitate a vast, floundering animal.

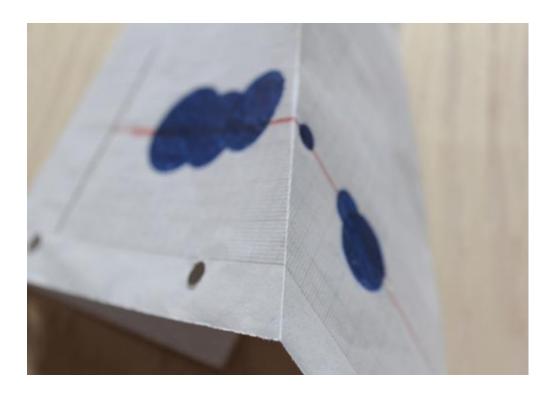
I went up and touched the balloon.

I can't remember if they filled it up and re-joined the race, or if they just packed it away and returned to base, or if my mother brought us home before either of those two eventualities could fully happen.

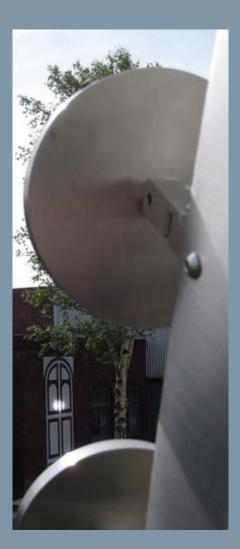












SUN BOUNCE & SOLAR SEATS

INDUCTIVE PROBABILITY - PAUL GREGG

CHAPTER 14

Sun Bounce is a permanent sculpture for St. Kevin's Community College, in Dunlavin, Co. Wicklow. It comprises six circular mirrors - mounted on an upturned stainless steel dial (sextant) - that relfect the sun onto a target that is in the shade. At noon, on the first of each month, the sun's light, whether it likes it or not, is interrupted on its path to the earth where it, reflected from the surface of a mirror, suddenly finds itself illuminating a target fixed to the wall of the school. The target is a graphic based upon the wall design on a church called Santa Maria Novella in Florence, Italy. In the mid-1500s a Fr. Ignazio Danti conducted his own astronomical experiments on this public church wall.

There are six mirrors on the Sun Bounce sculpture, one for each monthly gradation of the sun and earth's relational movements — ebb and flow.

Around this arrangement are benches for the students to sit on, with seat materials that heat up and cool down at differing rates, glass, timber, copper, steel, etc. - like embers flung out in lonely orbit around the enormous yolk of an indifferent fire.





These astronomical instruments were added to the facade of Santa Mari Novella by Ignazio Danti in 1574 I have observed the situation: A + B + C gives D

(However, such is the problem with induction, and no matter how often this may occur, I can never claim.)

If: A + B + C then D

A - The appearance of the sun

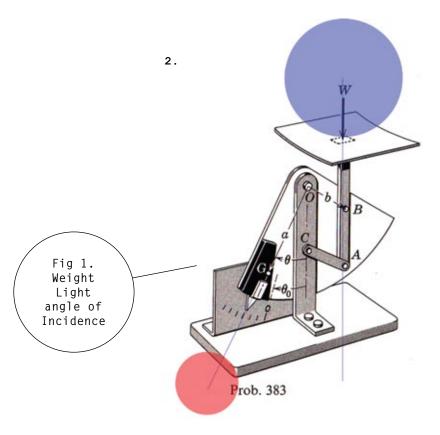
INDUCTIVE PROBABILITY PAUL GREGG

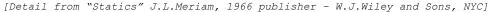
B - Direct sunlight at noon on the first day of any month on the sculpture in the grounds of St. Kevin's Community College

C - Mirror in correct position

 ${f D}$ - Small reflected version of the sun glowing on a target fixed to a shaded wall in St. Kevin's Community College

 $(\mathbf{E}$ - Some kid reflecting the face of his watch on the same target, unbeknownst to me!)











PAUL GREGG

An American artist living in Dublin since 1995, Paul Gregg has exhibited in Europe and the United States. In recent years, the primary focus of his practice has been the creation of large scale commissioned projects. Gregg earned a Bachelors of Arts degree, summa cum laude, from University of California, Los Angeles (U.C.L.A.) and a Masters of Fine Arts from the Rinehart School of Sculpture, Maryland Institute, College of Art, Baltimore Maryland U.S.A. He was awarded membership to the Phi Beta Kappa honour society for his work at U.C.L.A. and received a Fulbright Scholarship to Ireland upon completion of his MFA. He is a Lecturer at the Dun Laoghaire Institute of Art, Design, and Technology.

"Paul Gregg doesn't only communicate by way of his work. He is also an engaging speaker. For many years he has been an occasional visitor to UCD, where, relaxed in style, he has engaged Art History students with discussion of his sculpture practice. Informing them of the importance of attention to detail in the making of sculpture, Paul has recounted the extensive research undertaken before he begins making a work. Subsequently, for the process of creating, he has spoken of the necessity for meticulous consideration with regard to materials and craft. Paul Gregg's contribution to the final year programme for the UCD sculpture students, enhancing greatly their ability to understand the process as much as the completed work, was one of the highlights of the module."

Paula Murphy

University College Dublin

CONTRIBUTORS

Adrian Duncan (b. 1978) is a Dublin based artist, writer and engineer. He studied and worked as a structural engineer in the UK and Ireland for over a decade before returning to study fine art and contemporary art theory at IADT and NCAD. He has exhibited in Ireland, Europe, South Africa, and the U.S. He is a guest lecturer at UCD School of Architecture, and tutor at the Some Blind Alleys writing classes. He is co-editor of Paper Visual Art Journal to which he also contributes.

www.adrianduncan.eu

Adrian contributed to Chapters 2, 5, 7, 8, 11, 12,13 & 14

Seán O Sullivan (b. 1986) is a Dublin based visual arts writer and curator. His research focuses on the preservation of locality and on geopolitics. He is currently developing a book project as part of Dig where you stand in South Tipperary, and has recently written for Enclave Review, and Exit Limerick as part of EVA International. He is a board member of the Black Church Print Studio, a frequent contributor to Paper Visual Art Journal, and recently graduated with an MA in Curation from IADT, Dún Laoghaire. www.seanosullivan.ie

www.paulgreggstudio.com



www.triskelartscentre.ie

























