UNRAVELLING THE EURYTHMIC CAGE

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PhD

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‘When I reflect on the image, two things from which it cannot be separated come: the rhythm and the vision. The vision, that still and private world which each of us possesses and which we cannot see, is brought to life in rhythm – rhythm being little more than the instinctive movements of the vision as it comes into life’. (McGahern 2009: 7)

John McGahern

‘I do not have to go for a walk on the surface. The inner gray is indeterminate, mysterious: I can follow one path or combine two, three or more paths … so I can steer to and fro through the sphere in qualitative contrasts’. (Fiedler and Feierabend 1999: 232)

Johannes Itten
The architecture presented here is limited to domestic design as the PhD’s contents mirror closely our design practice, Boyd Cody Architects, in space and time. I remain committed to building real space whatever scale. It is when architecture takes on its concrete (or physical) form that it can be truly experienced, tested, and measured intellectually.

This book, and the seven chapters in it, also follow chronologically the process that I set out and engaged with in the preparation and delivery of each Practice Research Symposia (PRS), organised by the Royal Melbourne Institute of Technology University (RMIT) as part of their Doctor of Philosophy (PhD) by Project Programme. I undertook these undergraduate studies as an invited candidate between April 2014 and November 2018.

This innovative academic course (1) developed by Prof. Leon van Schaik AO and others at RMIT shaped my thinking and was critical in realising my ideas about architecture.

I have included commentary, criticism and direction given by the review panels at the PRS or by my supervisors at our meetings together. I make direct reference to this feedback either in the main body of the text or through the footnotes that accompany each chapter. The full transcripts are available on the USB stick attached to the back of the book.

(1) "The RMIT creative practice research is a long standing program of research into what designers actually do when they design. It is probably the most enduring and sustained body of research of its kind: empirical, evidence-based and surfacing evidence about design practice. The research question for everyone involved in this reflective practice research is the same: what is the tacit knowledge that enables a creative practitioner to practice? The methodology comprises of the following: forensic examination by candidate of own existing creative products and comparison with some works from a defined community of practice; close observation of own works in progress using diaries, mappings of the mental space drawn on during a project and of the processes used; documentation and analysis." (van Schaik 2011: 15-35)
The book is deliberately *visual* in its content and format. Its design relies heavily on aesthetic intelligence to piece my thinking together and make sense of it all. This is a thesis written for the eyes and a book that can be read without been read.

I present the work of Boyd Cody Architects through stereoscopic vision in order to explain my understanding of architecture as a visual dialectic, combining the abstraction of imagination and creation of real or concrete objects in space and time.

Stereoscopy (1) works upon the principle that two images presented side by side are the same visual picture looked at from a slightly different viewpoint. This allows for binocular disparity to occur, out of which the brain constructs illusionary spatial depth.

(1) Charles Wheatstone demonstrated his research on binocular vision to the Royal Society in 1838 and called it Stereoscope, Greek for *solid vision*; (Weaver, Thomas 2017: 88)

In recent experiments with stereoscopic devices and stereograms, I have noted that there is a natural inclination to think too much about what you are *looking* at and not upon what you can see and the third perceptual space is lost.

This can be taken as an direct analogy for what I am trying to achieve within this study, the creation of a deeper understanding of architectural space through perceptual understanding.

I also invite you the reader or viewer to perceive your own intellectual space through and beyond the stereoscopic images that are placed before you on pages of this book.

**Dermot Boyd**, Harolds Cross, Dublin, September 2018

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(1) Charles Wheatstone demonstrated his research on binocular vision to the Royal Society in 1838 and called it Stereoscope, Greek for *solid vision*; (Weaver, Thomas 2017: 88)
Left and Right eye:

Figure a5: Stereographic Card for "The Saturnscope"
James M Davis
Washington Place
New York 1893
purchased Dublin 2016
‘Do you not see that the eye embraces the beauty of the world ... And it triumphs over nature, in that the constituent parts of nature are finite, but the works that the eye commands of hands are infinite’. (Kemp 2007: 96)

Leonardo Da Vinci

‘To know means to have seen, in the widest sense of seeing, which means to apprehend what is present’. (Heidegger 1971: 59)

Martin Heidegger  The Origin of the Work of Art
In this book, I see from within my design practice. The study lies in the primordial. It is an exploration of instinct and intuition and how they are exercised in the making of space. I use the device of the *eurhythmic cage* to explain my direct relationship with architecture, which is primarily visual and wholly immersive.
This book explores my architectural design process through spatial consciousness. In it, I lose myself and re-find myself in architecture in order to search out an essential spatial harmony through that intellectual journey. I have activated my research through image and drawing to move beyond passive contemplation or the gathering of static knowledge. I wish to create a dynamic intellectual space which evolves from a close examination of my own spatial ontology. The ideas in this book evolve directly out of the architecture we produce as a practice, they are not applied to it. This PhD describes ‘my spatial interaction with the world’. (van Schaik 2014)

I have been mindful to keep the sequence of this book in line with the academic studies I undertook to inform it. In its chapters I reveal the different ideas that emerged and surfaced over a four-year period of my doctoral studies at the Royal Melbourne Institute of Technology University (RMIT).

There has always been a challenge for me in understanding how I think and practice as an architect, to recognize what intellectual tools I use or rely upon when I make space. The architect, Berthold Lubetkin (1901-1990) wrote in his unpublished Credo of 1955, ‘that architecture can be seen as a three dimensional philosophy’. (Reading and Coe 1992: 140) so I too would now like to examine and analyse the set of embedded ideas that shape our work at Boyd Cody Architects and to contextualise them within the inter-relationship between universal understanding and specific use.

Philosophy is too often lost in abstract language or logic. Architecture is not. It is a practice that bridges the ideological gap between the physical and metaphysical worlds created in western thought over millennia. As architects, we make things. We do not simply contemplate or reflect upon them because we seek ultimately to use them. To this end, it is the artifact or building that captures and ultimately holds the sensory and intellectual space that architecture creates.

I have little interest in ideas in architecture that are not spatial. In this book, I seek to explore the practice of eurythmy and bring it to the forefront of architectural design once again. It is a sensibility and technique that has been effectively lost in the modern age. Eurythmy can be seen as the true art of architecture as Vitruvius called it in 1BC (Vitruvius 1960). It is individual proportional judgement, a heightened sensibility, that when applied, is neither defined by style nor age, for it is ubiquitous and transcendent in all three dimensional space. I describe my eurythmy as an abstracted cage.

What I show you in these pages are my hidden spatial rules I have reasoned out in my mind over the years and implemented in built form. They are the ones I repeat or adhere to time after time in my interaction with space.

I also make a close examination of my intuitive and instinctive understanding of architecture. There is an application of unconscious thinking in architecture as there is in all the arts. It is a creative side of architecture that can at times be treated with suspicion in academia for it is deemed unscientific or impossible to prove. Even today, it is portrayed in some quarters as irrelevant in a parametric and digital age. Instinct and intuition are essential to life and my practice as an architect.

This research involves both looking and seeing. It is on the one hand visual perception and on the other, the subsequent conception of abstracted imagery. Both these cognitive acts are informed by real experiences and reveal themselves in architectural practice. This is not a dream world, for I want to reveal to you is what I unconsciously see as distinct from what I am consciously looking at.
Immanuel Kant (1724-1804), in The Critique of Pure Reason (1781) seeks to prove that if metaphysics is possible, it is only through vision. It is through higher intellectual intuition, or the perception of metaphysical reality he argues that metaphysics be constituted. This is a critical stance and I too would argue that it is in the visual dialectic between looking and seeing, in the combination of these two perceptual and intellectual acts that a field of vision can be truly understood. Adrian Forty writes in his book Words and Buildings, ‘the substance of Kant’s aesthetics lay in the space between the impression upon the eye and the indefinable multiplicity of partial representations it induced.’ (Forty 2000: 21).

I too seek to affirm Ludwig Wittgenstein’s (1889 -1951) concluding proposition from Tractatus Logico-Philosophicus (1922), Number 7: ‘Where of one cannot speak, we must pass over in silence’. (Wittgenstein 2001: 89) by not writing at times anything, I want to simply show you things and not explain them, to enable you can complete your own hermeneutic circle of thought. In these seven chapters, I philosophically unravel my Eurythmic Cage. While in parallel, with design I quite literally weave it all together again.

Intuition and instinct are immediate and reactive cognitive processes. They are powerful, innate and are drawn from a wellspring of experiences. Some of these experiences are forgotten and some are clearly remembered, but this primordial space comes together to form the foundations of my intellectual intuition, rising deep within my mind to constantly surface onto the page or computer screen.

If intuition is described by Prof. Leon van Schaik in his book Spatial Intelligence as ‘the sum of your experience’ (van Schaik 2008: 44), and quoting Sue Halpern it ‘is the product of analytic processes being condensed to such a degree that its internal structure may elude even the person benefiting from it’. (Halpern cited van Schaik 2008: 135) then in this study I want to unmask my intuitive responses in the design process. I call these moments of vision. These moments are epiphanic and we as architects too rarely and reluctantly acknowledge their power. It is that moment when everything falls into place and the design comes together in the mind which should be properly recognized. It is when conception stops and production begins. Martin Heidegger (1889 -1976) too called this phenomenon of temporality, the fleeting present in German ‘augenblick’ (Heidegger 1996: 311) or the glance of the eye when authentic Da-sein really appears in understanding.

It is these conceptual and perceptual moments too that most commonly characterize or formalize the architecture I design, giving the neutrality of space its proportion and shape.

There has always been a disjoint between the expansive needs of my intellect and my sensual needs as a person. My formal architectural education at the Dublin Institute of Technology (DIT) Bolton Street was instinctive, reactive and artistic in many ways. It was certainly not philosophical, I relied primarily on my wits. College was devoid of all meaningful engagement with theory. This was not, I believe, a deliberate critical standpoint on behalf of the staff but a genuine ignorance of philosophy’s worth in the creation and making of architecture. My third-level education sought simply to serve mans direct needs for shelter with readily available materials and technology. There was a requirement to have a strong knowledge of building practice and science, but too often this was overly prescriptive in application.
What was really important in the five year architectural degree programme at DIT was how you created this thing called space, how you reacted to it and how you constructed it. If space was the only idea about architecture that was offered to you at this formative time, you inevitably began to look harder at it and for it. This study was through precedent, experience and design. It has made the concept of space the crux of my praxis ever since.

I negotiate the world through space and I manipulate this space through drawing. Gaston Bachelard in The Poetics of Space, encourages us, ‘to cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalised on the mode of our inner space. But what a book would have to be written to decide all these problems! Space calls for action and before action the imagination is at work it mows and it ploughs. We should have to speak of the benefits of all these imaginary actions’.

(Bachelard 1994: 12).

When I draw, it is a physical act of thinking. The hand and subsequently the body are vital instruments in this process. The hand can determine both artistic freedom and scientific precision as it moves eurythmically across a sheet of paper. The hand starts and stops, it adjusts and sweeps, it calibrates space.

My drawings are as real, deliberate and as carefully crafted as I can make them so as to describe my design intentions or here the inner processes of my design practice. I use sketching and constant overlays as a means of speeding up this process of drawing. I capture the right configuration as a tracing on esquisse paper, while at other times quickly abandoning the accompanying fragmented sketches if they do not wholly fulfill the vision I have in my minds eye.

The drawings I make in the office are generative and communicative. They transform by the most direct means possible my ‘immeasurable’ thoughts into ‘measurable’ space to quote Louis I Kahn (Synder and Catanese 1979:213). These hand drawn lines are the true measure of my imagination. It is also in their inconsistencies, their weight or lightness that the true rhythm and humanity of my architectural expression lies.

The Eurythmic Cage is an intelligible and sensible construct. It is hidden from view in reality but it’s presence is always seen on the drawing board. There is an importance of lining things in, the adjustment of the three dimensional parts to make a holistic whole. The bars of the cage control everything, hold the space and in many ways set the limits of my instinct and intuition in design.

The drawing on the page also becomes a creative space in itself and as such a concrete or real abstraction. It takes on its own reality, formal solutions emerge and are solved within its representational limits.

The act of drawing too, like writing has its own eurythmy. The Irish author Colm Toibin so accurately states, ‘thinking is often the enemy of rhythm. You start something because an image, a character, a moment, a scene moves almost of its own accord into rhythm. It seems to want to become a sentence. Most writers know to trust this, not to question it, just to go with it and see where it leads’. (Toibin 2010) I too, constantly step in and out of the rhythm of drawing in my design process so as to unearth my innate responses.

The eurythmic cage is the unconscious and instinctive space I work with and within. It is primordial and the unseen measure by which my unconscious spatial thinking is judged. This book unravels my eurythmic cage to enable you to perceive the architectural reality of your own instinctual space.
Figure a1: Tierney, Paul 2007. Palmerston Road, Dublin 6. Boyd Cody Architects 2007, digital photo
Figure a2: Boyd, Dermot 1998, Stable Lane, Dublin 6. Boyd Cody Architects (with Paul Kelly), 1999 slide negative
Figure a3: Boyd, Dermot 2016, "The Saturnscope" James M Davis Washington Place New York, 1893
Figure a4: Boyd, Dermot 2018, Google card board, digital photo
Figure a5: Boyd, Dermot 2016, Stereograph Card purchased Dublin 2016

Figure b1: Boyd Cody Architects 2017, Unravelling Freedom of Movement, digital drawing
‘Art is not the expression of abstract elements; it must also embrace the expression of more concrete elements and the most private demands of the individual. To sustain it, alongside inspiration, genuine scientific experimentation is needed’ (Constant 1996: 69).

Eileen Gray

‘Every architectural design must be able to question abstract specifications, because one can determine whether abstract preliminary thoughts will work only when they acquire concrete, physical shape. I have to work that way. I design my buildings from the inside out and from the outside in and then once again from inside out until everything is right’. (Zumthor 2014:12)

Peter Zumthor
My interest lies in the relationship of our work to notions of abstraction. This is the abstraction of architectural form as a means of altering and heightening the perception and experience of space. Drawing upon Roland Barthes’s seminal terminology ‘concrete abstraction’ (Leach 1997:176). In this first chapter, I examine the inspirational structures, which inform Boyd Cody Architects, as a body of intellectual forms or ideas. Firstly, to see this work as it is, but also to see through it, and beyond it, in order to find a shared spatial ontology and intelligible meaning within the world of modern art and architecture. All the images used here can be read individually but are more meaningful if read together. There is no psychological or emotional detachment here, I am heavily invested in these concrete abstractions for they define my spatial thinking and approach to architecture.
As an architect, I am attracted to particular things, I use a particular working methodology and I produce a particular type of architecture. CONCRETE ABSTRACTIONS describes what these fascinations are. Firstly, it is as a design methodology, the constant iteration or reification of reality into experiential refinement. Secondly, I use this terminology to describe what I seek out formally in art and architecture. It is the deliberate distillation of space, material and surface; an attempt to capture the essence of life and nature in abstracted or plastic built form. Thirdly, concrete abstraction is, as Roland Barthes (1915-1980) defines it in his 1957 essay ‘The Eiffel Tower’ ‘structure: a corpus of intelligible forms’ (Leach 1997: 176). It is this underlying structure, which I draw upon and add to in my creative process.

Unlike Barthes however, I reference little literature in the pages of this chapter. My work to this point in my career has no applied narrative. It is primarily a perceptual endeavour. I involve myself in the direct practicalities and expansive possibilities of my own discipline to make these concrete or real abstractions, like Peter Zumthor or Eileen Gray before me, my quest is the application of a practical aesthetics in architecture. Or as Gaston Bachelard (1884 -1962) states in the introduction to Poetics of Space, my ‘themes are no doubt very abstractedly stated. But with examples, it is not hard to recognize their psychologically concrete nature’. (Bachelard 1994: 17)
Architecture is always the combination of the idea and the real or as Barthes also states in The Eiffel Tower, ‘dream and function, expression of a utopia and instrument of a convenience’ (Leach 1997: 174). I continue to be immersed in this discipline both as a practitioner and a teacher.

For Barthes too, the Eiffel Tower’s ‘simple primary shape confers upon it the vocation of an infinite cipher’ (Leach 1997: 172-3), transformed in space by a glance. The tower and the view ones gets from it, of it and in it allows one to get a panorama, an intellectual overview which allows one to connect, decipher and re-constitute the world.

When I was growing up in Belfast, this concrete chimney dominated my skyline and imagination as a child. It is the service chimney (in the foreground) designed by my father, W. Brian Boyd (1) for the multi storey Belfast city hospital in 1966. The chimney was monumental, a three-sided monolith, easily identifiable and recognizable as something I could call architecture at that young age and it symbolized clearly for me, what my late father did. He was an architect.

(1) My father was employed by Munce and Kennedy Architects to specifically work on the design of the new Belfast City Hospital in the mid 1960s. He worked closely alongside Louis Adair Roche who was the chief designer of the hospital complex.
Today, I still admire the singularity and audacity of its design, the
elegance of its truncated triangular tapering form, its scale and its
sharpness, the proportion used to determine the depth of its black
painted bituminous top in relation to the main body of the chimney
and the fact it is built as a poured concrete structure. The chimney is
a brutalist artifact and a real concrete abstraction (1).

When looking at this chimney once again as part of this study, within
the broader context of the city of Belfast, I began to realize too
that a process of concrete abstraction is applied to this object at a
contextual level by Louis Adair Roche and my father.

The chimney and the fifteen storey hospital that sits alongside are in
fact a real abstraction of an already existing urban typology, the large
19th century Linen Mills which are located throughout the industrial
heartlands of Belfast that surround the hospital site. These large
multi storey structures sit in stark contrast to the domestic scale of
the workers houses that surround them.

(1) Abstraction is an activity pertaining to the psychological functions in general. There is an ab-
stract thinking, just as there is abstract feeling, sensation, and intuition. Abstract thinking singles out
the rational, logical qualities of a given content from its intellectually irrelevant components. Ab-
stract feeling does the same with a content characterized by its feeling values. Abstract sensation
would be aesthetic as opposed to sensuous sensation, and abstract intuition would be symbolic as
opposed to fantastic intuition. (Jung 1953: Definitions par 678)
The validity of this conscious or unconscious contextual move is further advanced in my mind when I discovered this particular image in my father’s slide collection of the time.

Like all good architecture, the hospital chimney can be now read historically, symbolically and contextually. These cultural interpretations further reinforce its physical presence and form.
If architecture is described as *concrete abstraction*, how do we read our work at Boyd Cody Architects within this intellectual context in order to draw out the underlying structures that inform my practice.

Peter Cody and I design, on the most part, single-family dwellings and we too adapt consciously and unconsciously typologies in the urban and rural context of Ireland. The TRADITIONAL house or settlement is an inspiration for us in the design of domestic work.

Vernacular architecture in Ireland over the centuries is defined by its simplicity in form and construction, combined with a practicality and sensitivity to site and climatic conditions. It is within this *tradition* that we choose to work. The construction techniques we adopt are on the most part generic and commonplace, what we seek to do is to abstract them, distill them and exaggerate them, so as to subsume them in a contemporary modernist aesthetic.
These real abstractions continually surface unconsciously in our work, at times transcending both scale and use.

A wall stile on the island of Inish Oirr is transmogrified into an entrance sequence for the house at Summerhill.
This abstracted play on traditional architecture has a strong lineage in Irish practice. It is played out skillfully and magically in Bothar Bui, a holiday house designed by Robin Walker between 1970-72 high on the north shore of the Beara Peninsula in County Cork.

This small residential complex consists of the conversion of a traditional cottage, two stone outbuildings and the construction of three new structures which are built out of a proprietary concrete agricultural building system used commonly in this area of Ireland at the time.

We too play with the arrangement of simple forms in our architecture.
I stayed in Bothar Bui with a group of friends for the first time in May 2010 and noted how each building is exquisitely designed for living and entertaining by Robin Walker at every scale.

I was particularly drawn to the spatial simplicity of the existing cottage, re-designed by Walker as the central resting and eating place for the family. In fact, we too spent most of our time in this house on our holiday.
The cottage at Bothar Bui is simple and orthogonal in form. The furniture is arranged as needed. There are two half doors, opened depending on the direction of the wind. There is a fireplace to sit around at one end, with a vertical slit window that gives you a direct view to the sea. The kitchen is at the other end of the room. There is maximum flexibility. The cottage is a neutral container for living, a concrete abstraction of the domestic rituals in modern life.

The same arrangement is put in place in Summerhill, a tall window is located at the south end of the plan lighting up the adjacent television room (hidden from view). Two large doors and sliding glazed screens are located on both sides of the room. The living space is given extra volume by following the roof line. The kitchen floats in the space, tied back at the northern end of the plan to a serviced wall of appliances.
If the simple elongated plan of the stone cottage defines the singularity of the traditional rural dwelling house in Ireland. The urban residential condition in the city of Dublin, where we are based, is at its best, defined by the 18th Century Georgian terraced house.

We have adapted and worked with this CLASSICAL IDEAL over the years. These houses also have simply configured plans. Their construction is also straightforward, economic and logical, employing techniques that have not changed fundamentally for centuries. It is a simple but elegant tectonic expression in brick, plaster, surface and light.

In our refurbishment work, we concentrate on the design of the upper ground floor or piano nobile in these Georgian houses. We abstract this classical ideal for living, retain the elegant proportions of the main reception rooms and add the functional necessities of contemporary domestic life, like a new kitchen for instance.
In the construction of new houses, the provision of a single workable living space articulates itself primarily in the design of the plan. This imaginary surface of points and lines is ‘a plane of immanence’ (Deleuze and Guattari 1994) or as Le Corbusier refers to it in the pages of Towards A New Architecture of 1923, ‘an austere abstraction’ (Le Corbusier 1970: 46-47).

The plan is an ABSTRACTED PLANE which brings the organization, composition, structure and arrangement of space in our work. The plan is the most immediate way by which I can imagine and design the workings of a house or the life within it, as ‘the plan holds in itself the essence of sensation’ (Le Corbusier 1970: 9). It is my main design tool and I delight in its inherent logic. Here in my first house (the middle plan) at Stable Lane, the first floor living room is divided into two parts. The free plan, which is four metres wide, is directly served by a linear sequence of kitchen presses, stairs and storage units, one metre wide.

Left eye: Figure c21: Three Houses, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly) 1999.

Right eye: Figure c22: Three Houses, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly) 1999, Front Facade
The main living spaces in Alma Lane form a piano nobile at first floor. The plan is an enfilade of interconnected rooms which function in the round, allowing the occupant to follow the movement of the sunlight throughout the day.
In Richmond Place, the abstracted plane is embedded. The living room at ground floor level is carved out of the site. The plan is manipulated in section while stretched taut to the curved boundary line of the site in plan. This move deliberately distorts the orthogonal geometry of the house.
In Bohermore, the formal arrangement of indoor and outdoor space is achieved through displacement. The plan of the house is a long single rectilinear form, which is slid apart to form five interconnected rooms on a sloping south facing slope in Co Kilkenny.
In Chestnut Lane, as the site again slopes, the main living space is set level but folds around a large deep central light well. This void distributes natural light, reflection and ventilation throughout the three floors of the house.
I create houses for the ART OF LIVING, their built fabric could be described as minimal but their space cannot. Our designs are to be used, enjoyed and configured as the occupants wish. As you can see from my own house, circumstances constantly change in life. Here my ‘bachelor pad’ completed in 1999, serene, calm and ordered, is a true abstraction of domesticity.

This is my son Aran, drawing in the foreground on the coffee table, my wife Miriam, son Oisin and daughter Kathleen, all in our home in 2013. The house has through its flexibility in plan adapted to a radical change in domestic circumstances, while at the same time retaining its abstract qualities, even our Persian rug is rolled up under the sofa to facilitate potty training. This is not an aesthetic problem. It is family life.
The first floor at Stable Lane is like a 'loft' space. This typology is well considered by the American Artist Donald Judd (1928-1994) in 101 Spring Street in Soho, New York, which I visited in 2001.

The staging of life in my house is neither a work of art nor a permanent installation as Judd would demand of it, the space remains an instrument of convenience.

I do aspire however to how Judd places objects in space. He subtly and simply manipulates the buildings fabric through detail and material to give in his case each of the five floors in Spring Street their own spatial identity. Here is my homage to New York and Judd at Stable Lane, it is a white volume where each domestic object floats freely in abstracted space.
I was introduced to the art of Donald Judd when I worked for John Pawson in 1990. Pawson completed the van Royen (1) Apartment in 1991 and this image with Judd’s wall piece in the background introduced me to an architecture that came to be known as Minimalism.

For it, Pawson drew heavily on the 1960’s American art movement and design of New York galleries that he visited at that time with Van Royen. These spaces which were fitted out as neutral containers to compliment and display reductive art work.

In Pawson’s early domestic spaces, there is a limited palette of materials and the use of a distilled architectural language. There is a MASTERFUL ABSTRACTION, a refinement of space to the essential qualities of proportion, space and light. In this minimalism, a sophisticated series of spatial hierarchies is at play which combines feelings of compression and release.

Pawson is deliberate in his spatial approach, intensifying or reducing sensory perception, to transcend the physiological experience of the occupier. The plan of the Von Royen Apartment describes well this high art of surface, depth and domestic monumentality. In this abstraction of form, space shaping dominates object making.

(1) Hester van Royen, John Pawson's first wife was Donald Judd's agent in Europe.
Another strong influence on my work is the architecture of Alberto Campo Baeza with whom I worked in 1988. He has been my mentor and a guiding light ever since. This image of a competition entry published in Young Spanish Architecture in 1982, (Frampton 1982: 49) first attracted me to the radical rationality and mastery of his work.

It is Campo Baeza’s love of order and reason, combined with an Andalusian flourish that defines his skillful handling of space and form. The Granada bank is a beautiful work, a container or an ‘impluvium of light’ as Alberto calls it. (Campo Baeza 2014: 310) This is a monumental work of pure concrete abstraction.
There is therefore an obvious and strong correlation between the work of these two architects and our work in Boyd Cody Architects. Peter Cody too served a long apprenticeship with Alvaro Siza, working in his office in Porto between 1992 and 1995. The direct influences of each of these masters are evident in our early projects.

It is through an abstracted process of design and our need to define and evolve new spatial definition that we in turn give these inherited forms a new architectural reality through our practice. Changes too are made due to the contingencies of function, budget or site. These factors continually transform our work so it becomes a further abstraction in itself.
In the domestic work of Alberto Campo Baeza, there is a geometric simplicity that holds space taut within pure stereotomy. The surface of these platonic solids are broken with large flush openings or smaller recessed windows or doors.

In Alma Lane, this compositional game is rationalised. The number of openings are minimised and enlarged. They are then lined out in silver satin anodized aluminium like a Donald Judd wall piece.

This detail can be also read in turn as an abstraction of the plastered reveals that line the openings of many large Georgian windows throughout Dublin.
An appreciation of the spatial and material qualities of ABSTRACT ART also plays a vital role in the making of my architecture. Alberto Campo Baeza introduced me to the work of the Spanish artist Eduardo Chillida (1924-2002). Chillida’s interest lies in ‘interior space’ but we could call it emptiness, god, spirit logos or proportion’ (Chillida 2004: 208).

‘A lucid artist’ writes Octavio Paz (1914-80) the Mexican Poet ‘Chillida has called a series of iron sculptures, murmur of limits. Murmur is rhythm, limit is measurement, and the two together are like the pre-figuration of a language. Chillida’s sculptural forms are not mute, they are matter transfigured by rhythm: they speak.’ (Chillida 2004: 208)

In Chillida’s work, space is deep, and a strong connection is made to the physical or metaphysical world beyond. There is also spatial flow through our buildings that again Chillida’s friend Paz calls ‘space, Murmur of Limits, vigorous song; the wind – the old name of the spirit- blows and returns tirelessly to the place of space. (Chillida 2004:208).

Architecture demands an engagement with the real or concrete, with abstraction in itself, as a three dimensional spatial object. The intuitive shapes and forms in Donald Judd’s and Eduardo Chillida’s sculptural work capture this abstracted space beautifully. It is interesting to note that both these artists moved from working on canvas and paper on to floor of the studio to make sculpture in the pursuit of space and form. It was in their final years, they both made architecture, so they could experience space as an embodied or true reality.
Architecture like sculpture is pure materiality so it is a representation of nothing but itself. It is a real or concrete abstraction and this where its immanence and power lies. The Swiss architect and artist Max Bill (1908-84) writes ‘We call concrete art those artworks that emerged on the basis of their own means and rules without extrinsic reference to natural appearances or their transformation…. Concrete art in its final consequence is the pure expression of harmonious measurement and law’ (Spalding 2015).

I have drawn heavily on abstracted bodily experiences explored in the installations of the American artist Dan Graham (1942-). He creates spatial illusion through multiple reflections in glass and mirror. Graham’s work allows you to lose yourself for a moment in space.
The work of artist James Turrell (1943- ) in the Count di Panza Collection in Varese outside Milan in 2010 is another influence. Turrell magically manipulates light both naturally and artificially, in an attempt to make it visible to the eye. Light becomes truly a spent material as Louis I Kahn poetically puts it. 'I sense Light as the giver of all presences, and material as spent light. What is made of light casts a shadow, and the shadow belongs to Light.' (Kahn 2003: 228-252)

There is perceptual change when you observe the sky unencumbered by detail or frame in Turrell's work. The sky becomes part of the room and the perceptual the boundaries becomes hard to define.

Light is uneven in Ireland and we consistently attempt to capture the quality of this skyscape.
Robert Irwin (1928-) too is a master of light. In his Varese Scrim also (in the Count Panza Collection), a plane of taut coarse cotton makes a division in space but as its weave is semi transparent and absorbs and reflects light, Irwin dematerialises our perception of space.

An effect we too play with, by making strong spatial divisions with materials in our designs so as to change the conditions for reflection of light in a room.
Two dimensional geometric composition in abstract art is something I also look at closely. We draw and re-draw each elevation, each plan and each section over and over again, removing it from reality of the site to make a two-dimensional abstraction on paper in order to bring balance and harmony to the surfaces and spaces that we are creating. The drawing inevitably has its own autonomy. Josef Albers, Robyn Denny, Jo Baer or the Irish Artist, Patrick Scott for instance all demonstrate a perfected visual reality and balance in the two dimensional field, *rosca* (1) in Irish linguistic terms.

(1) *A poetry of vision* from the Gaelic language.

I work on this balance in spatial composition constantly.
There is also an intention in our work to make the ordinary, extraordinary, to change the perception and meaning of domestic space. A HEIGHTENED REALITY is sought. This surreality of architectural experience is brilliantly played out by Le Corbusier in his roof garden for Carlos de Beistegul on the Champs Elysees in 1930.

We also make stark contrasts between abstracted forms of modernism and a natural or historical setting in our work.
There is also a deep interest in attempting to make things not as they are. In our work, we often remove functional meaning so as to trick the eye.

The trompe d’oeil, alters or suspends perception and heighten sensory experience. For me it is in the ABSTRACTION OF DETAIL that you can momentarily lose your sense of the world.
If you place the sculptural work of Donald Judd alongside the house in Bohermore, there is an oblique reading of shadow and light in pure geometric form which is revelatory and unexpected.

The surprises which NATURE gifts to a building instill in me the knowledge that however simple form is, the experience of space is never static, it is always dynamic. There is no need to control everything in design; I let nature do that for me.
This surrender to nature is demonstrated in the concept of Peter and I’s first project together, a loft in NOHO New York, which was completed in 1996. When I arrived in New York in December 1995 it began to snow and we noticed how this great metropolis was suddenly quietened and calmed in an all-enveloping whiteness.

The loft, designed for a young photographer, as studio and home became quite literally a snowfield. We designed it with white floors, white walls and ceilings to create a place of serenity for him and his family in New York.
I of course constantly look at architecture and I look at it closely. I draw on PRECEDENT known and unknown in the canon. I absorb it, consciously and unconsciously, I learn from it and eventually abstract references directly or indirectly to form new realities.

I draw upon the visual library of architecture that has been embedded in my imagination through my education, an intense interest and first hand experience of architecture. I cannot pretend otherwise. With time however, this dependence on what can be seen as direct translation falls away and I have evolved my own individual voice in architecture.
In the end, it is primarily the common physiological and sensory needs of man which I experiment with and make into architecture through the concrete abstraction of space. This process forms our own CONTINUUM OF PRACTICE. It is how each project leads into the next and resonates within our practice that interests me. The work continues to be Peter and I’s research and collaboration as architects.

Space remains the most powerful creative tool in architectural design as it forms the language of my imagination. It is what I see when I close my eyes, what I design and what I strive for, when looking at a design on the drawing board. Le Corbusier writes in The Modular ‘Man becomes an abstraction when he shuts his eyes and becomes absorbed in all the possibilities. If he builds he does with his eyes open, he looks with his eyes’ (Le Corbusier 1961: 72).

In Architecture, I see to look and I look to see, my visual memory of a space is always vivid, even when experience of it can be obscured by time. It is the image of space that stays with me, at times providing the subliminal key to a new reality or a concrete abstraction.
This chapter is design taxonomy. It is a spatial catalogue, a body of intelligible forms which defines our work at Boyd Cody Architects. I build my research and practice upon the early influence of my architect father representing it by his design of a large concrete chimney in Belfast. I also set out my fascinations with other concrete abstractions used in our architecture, Tradition, the Classical Ideal, Abstracted Planes, The Art of Living, Masterful Abstractions, Abstract Art, Heightened Reality, Abstraction of Detail, Nature, Precedent and the Continuum of Practice.
Chillida Leku Museum San Sebastian, Spain, digital photo

Figure c43: Boyd Dermot, 2008, Emparantza, Sculpture, Eduardo Chillida, 1990

Figure c42: Tierney, Paul, 2004, Alma Lane, Monkstown Co Dublin, Boyd Cody Architects 2004, digital photo

Figure c41: https://www.campobaeza.com/turegano-house/, Campo Baeza, Alberto Turegano

Figure c40: Hayes, Cillian 2004, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly),1999, digital photo

Figure c39: Tierney, Paul 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c38: Tierney, Paul 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c37: Tierney, Paul 2012, Chestnut Lane, Boyd Cody Architects 2012, digital photo.

Figure c36: Tierney, Paul 2012, Chestnut Lane, Boyd Cody Architects 2012, digital photo.

Figure c35: Boyd, Dermot 2004, Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2010, digital photo.

Figure c34: Boyd, Dermot 2004, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly) 1999, digital photo

Figure c33: Ruben Charlie, 101 Spring Street, Third Floor 1999, photo - http://journal.voca.network/donald-sudd-writings/photo.php

Figure c32: Boyd, Dermot 2013, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly),1999, digital photo

Figure c31: Hayes, Cillian,1999, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly),1999, digital photo

Figure c30: Tierney, Paul 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c29: Boyd Cody Architects 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital drawing

Figure c28: Tierney, Paul 2008, Bohermore, Graiguenamanagh, Co Kilkenny, digital drawing

Figure c27: Boyd Cody Architects 2008, Bohermore, Graiguenamanagh, Co Kilkenny, digital drawing

Figure c26: Boyd Cody Architects 2005, Richmond Place, Dublin 6, digital drawing

Figure c25: Tierney, Paul 2005, Richmond Place, Dublin 6, digital photo

Figure c24: Tierney, Paul 2010 Summerhill Co Meath, Boyd Cody Architects 2010, digital photo.

Figure c23: Boyd, Dermot 2010, Bothar Bui, Robin Walker, Ardgroom, Beara Peninsula Co Cork, digital photo

Figure c22: Hayes, Cillian 1999, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly) 1999, digital photo

Figure c21: Boyd Cody Architects (with Paul Kelly) 1999, Stable Lane, Dublin 6, digital drawing

Figure c20: Tierney, Paul 2007, Palmerston Road, Dublin 6, Boyd Cody Architects 2007, digital photo

Figure c19: Boyd, Dermot 2004, Wellington Road, Dublin 4, digital photo

Figure c18: Bourke, Sinead 2010 Summerhill, Co Meath, Boyd Cody Architects 2010, digital photo.

Figure c17: Boyd, Dermot 2010, Bothar Bui, Robin Walker, Ardgroom, Beara Peninsula, Co. Cork, digital photo

Figure c16: Boyd, Dermot 2010, Bothar Bui, Robin Walker, Ardgroom, Beara Peninsula, Co. Cork, digital drawing

Figure c15: Boyd, Dermot 2010, Bothar Bui, Robin Walker, Ardgroom, Beara Peninsula, Co. Cork, digital photo

Figure c14: Bourke, Sinead 2010 Summerhill, Co. Meath, Boyd Cody Architects 2010, digital photo.

Figure c13: Boyd, Dermot 2010, Bothar Bui Robin Walker, Ardgroom, Beara Peninsula, Co. Cork, digital photo

Figure c12: Boyd, Dermot 2010, Summerhill, Co Meath, Boyd Cody Architects 2010, digital photo.

Figure c11: Boyd, Dermot 2010, Summerhill, Co Meath, Boyd Cody Architects 2010, digital photo.

Figure c10: Bourke, Sinead 2010, Summerhill, Co Meath, Boyd Cody Architects 2010, digital photo.

Figure c9: Boyd, Dermot 2010, Concrete Water Trough, Inish Oirr Galway, digital photo

Figure c8b: Boyd Dermot 2014, Chimney Belfast City Hospital, Belfast, Co Antrim, Sketch Survey, digital scan

Figure c8a: Boyd, W Brian 1963?, Mill chimney, Location unknown, slide negative

Figure c7: Boyd, Dermot 2018, Jennymount Mill, York Road, Belfast, Co Antrim, Neighbourhood view, digital photo.

Figure c6: Boyd, Dermot 2017, The Eiffel Tower, Paris, France, slide negative

Figure c5: Boyd, Dermot 2011, Chimney City Hospital, Belfast, Co Antrim, digital photo

Figure c4: Boyd, Dermot 1987, The Eiffel Tower, Paris, France, slide negative

Figure c3: Boyd, Dermot 2011, Chimney City Hospital, Belfast, Co Antrim, digital photo

Figure c2: Boyd, Dermot 1987, The Eiffel Tower, Paris, France, slide negative

Figure c1: Boyd, Dermot 2010, Concrete Water Trough, Inish Oirr Galway, digital photo

Figure c64: Tierney, Paul 2004, Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2010, digital photo.

Figure c63: Tierney, Paul, 2008, Bohermore, Graiguenamanagh, Co Kilkenny Boyd Cody Architects 2008, digital photo.

Figure c62: Boyd, Dermot, 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c61: Boyd, Dermot 2010, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly),1999, digital photo


Figure c59: Judd, Donald, 15 Untitled Concrete Works Chinati Foundation Marfa Texas, photo. http://www.foanainteriorstexts.com/blog/?p=1770> Copyright: Florian Interiors Viewed 18 February 2018, digital download

Figure c58: Judd, Donald 1973 Untitled Concrete Works Chinati Foundation Marfa Texas, digital photo.

Figure c57: Tierney, Paul, 2008, Bohermore, Graiguenamanagh, Co Kilkenny, Boyd Cody Architects 2008, digital photo.

Figure c56: Boyd, Dermot 2010, Stable Lane, Dublin 6, Boyd Cody Architects (with Paul Kelly),1999, digital photo

Figure c55: Boyd, Dermot 2004, Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2010, digital photo.

Figure c54: Bourke, Sinead 2010 Summerhill, Co. Meath, Boyd Cody Architects 2010, digital photo.

Figure c53: Boyd, Dermot 2014, Traditional Irish Farmhouse, Ulster Folk Museum, Belfast, Co Down, digital photo

Figure c52: Tierney, Paul 2012, Chestnut Lane, Boyd Cody Architects 2012, digital photo.

Figure c51: Denny, Robyn 1971, Tate Gallery Catalogue, London, Kudielka, R. 1973, Screen printed plate, Oil on Canvas, digital scan

Figure c50: Boyd, Dermot, 2009, Ringsend Park, Dublin 4, Boyd Cody Architects 2009, digital photo.

Figure c49: Tierney, Paul 2012, Chestnut Lane, Galway, Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c48: Tierney, Paul 2012, Chestnut Lane, Galway Co Galway, Boyd Cody Architects 2012, digital photo.

Figure c47: Tierney, Paul 2012, Skyscape I, James Turrell 1974, Count di Panza Collection, Varese Italy, digital photo

Figure c46: Tierney, Paul, 2004, Alma Lane, Monkstown, Co Dublin, Boyd Cody Architects 2004, digital photo.

Figure c45: Boyd, Dermot, 1993, Rooftop Urban Park Project, Dan Graham 1991, DIA Foundation, Chelsea, New York, slide negative

Figure c44: Tierney, Paul, 2012, Chestnut Lane, Galway, Co Galway Boyd Cody Architects 2012, digital photo.

Figure c43: Boyd, Dermot, 2008, Empurantis, Sculptor, Eduardo Chillida, 1990, Chillida Leku Museum San Sebastian, Spain, digital photo
‘Experience reveals, beneath the objective space in which the body eventually finds its place, a primordial spatiality of which objective space is but the envelope and which merges with the very being of the body. As we have seen, to be a body is to be tied to a certain world, and our body is not primarily in space, but rather of space’. (Merleau Ponty 2012: 149)

**Maurice Merleau-Ponty**

‘Each one of us then should speak of our spatial intelligence and of our mental space. We should interrogate the role of this capability in the works of those we admire, describing THE DRAWINGS WE HAVE LIVED. This will use our mental space consciously, rendering the deep structure of our intuition accessible to ourselves and potentiality to all’. (van Schaik 2008: 163)

**Leon van Schaik**

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**CHAPTER 02**

**PRIMORDIAL SPACE**

This Chapter is dedicated to my late father and architect, William Brian Boyd

*primordium, primus* first LATIN
*ordo* begin LATIN

**REMEMBERING**
In my life, there have been spaces which have resonated deeply with me and are subsequently ever present consciously or unconsciously in my design process. They can be located in the lost memories of youth; form moments on a personal journey through chosen architectural exemplars or be discovered in a new country or city. I call these spaces *primordial*. They are real and special places. In this chapter, I want to explore them as the means of understanding how architectural instinct is formed and how intuition is continually informed. It is through these intense interactions with particular buildings in space and time that I believe spatial individuation (1) is realised and a more emotional and authentic architecture built.

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(1) Individuation is a process of transformation conceived by Carl Gustave Jung whereby the personal and collective unconscious are brought into consciousness (e.g. by means of dreams, active imagination, or free association) to be assimilated into the whole personality. It is a completely natural process necessary for the integration of the psyche. (Wikipedia 2017)
In 1919, the Swiss psychiatrist and psychoanalyst Carl Gustav Jung (1875 -1961) wrote: ‘The archetype or primordial image might suitably be described as the instinct’s perception of itself, or as the self-portrait of the instinct in exactly the same way as the consciousness is an inward perception of the objective life process’. (Jung 1998: 40). Through a shared imagery of psychic archetypes, Jung worked to find a ‘collective unconscious’ for humankind in his study of analytical psychology. (Jung 1991: 4-5,42-43).

(1) An archetype can be a statement, pattern of behavior, or prototype which other statements, patterns of behavior, and objects copy or emulate; a platonic philosophical idea referring to pure forms which embody the fundamental characteristics of a thing; a collectively-inherited unconscious idea, pattern of thought, image, etc., that is universally present in individual psyches, as in Jungian psychology or a constantly recurring symbol or motif in literature, painting, or mythology (this usage of the term draws from both comparative anthropology and Jungian archetypical theory. (Wikipedia 2018)

This is a modern architectural insertion in a Regency semi-detached house in Belfast and my parent’s first home. It is a small room in Maryville Park.

I was born and raised in Maryville Park, so this house and particularly this room refurbished by my father W. Brian Boyd (1929-2008) in 1962 provided me with my first primordial experience and interaction with architectural space. It was a powerful exchange and my early spatial education.
Lying on my back as a child on the rug that was placed in the centre of the room, it is the warmth of the sunlight I can sense now as it moved across the room in a myriad of rays and shadows occupying every corner of the room in the minutes or the hours that passed. The stretched timber canopy of the ceiling overhead had a visual warmth and richness too, contrasting in tone with the blue of a racing sky, or the green of the swaying trees beyond the glass.

Jung’s identification of an image, or, I would argue here my experience of this particular space, describes my architectural instinct’s perception of itself. This is a primordial space, it is particular to me, and could be said to provide the primal drivers of my unconscious thinking which is continually applied to my work in the design process.
The universality of intention that I share with Jung is an understanding of the collective power of the memories which this small room in Belfast arouses in my imagination and how its presence has transformed itself unconsciously into a real spatial archetype. As Franklin Merrell-Wolf puts it in his book, Transformations in Consciousness: The Metaphysics and Epistemology, when ’Jung is speaking of the idea derived from the primordial image, it means a perceptual matrix that is subjective, but even though this matrix is also concrete, it is nonetheless universal. The Jungian archetype is a concrete universal that stands as the source of the abstract conceptual universal idea’. (Merrell-Wolf 1995:91)

I want to draw out this space, so ‘just as one becomes conscious of external fact by an extroverted movement in consciousness, so one may animate and bring above the threshold of consciousness, the primordial images or archetypes by a process of unusually profound introversion’. (Merrell-Wolf 1995:90) For as Jung states clearly, ‘it is the function of the consciousness not only to recognize and assimilate the external world through the gateway of the senses, but to translate in visible reality the world within us’. (Jung 1991)

In Psychological Types, written in 1921 Jung further defines the primordial image as ’a mnemonic deposit, an engram (…) which has arisen through a condensation of innumerable similar processes. It is a primarily a deposit, and therefore a typical basic form of certain ever-recurring experience of the soul… The primordial image then is the psychic expression of an anatomically and physiologically determined disposition.’ (Shamdasani 2003: 234). Here Jung identifies the importance of the body’s interaction with the primordial image, an engagement with actual space I argue would be more powerful and influential on one’s consciousness.
Gaston Bachelard draws heavily on the thinking of Carl Jung when he explores the phenomenology of the poetic imagination and reverie. In the Poetics of Reverie he writes ‘The archetypes are reserves of enthusiasm which help us believe in the world, Love the world, create the world … Each archetype is an opening on the world and an invitation to the world. From each opening bursts forth a reverie of flight. The reverie towards childhood returns to the virtues of the original reverie’. (Bachelard 1971:124). Bachelard puts particular emphasis on the importance of the emotional reaction to the archetype and the early primordial image from childhood. In his seminal text on domestic space, The Poetics of Space of 1958, he states that his ‘research is devoted to the domain of intimacy, to the domain in which psychic weight is dominant (Bachelard 1994:12), He proposes topoanalysis (culturalstudiesnow.blogspot.ie 2015) as ‘the systematic psychological study of the sites of our intimate lives’ (Bachelard 1994: 8).

My memories of Maryville Park are intertwined with the present as part of an ongoing current spatial experience. ‘On whatever theoretical horizon we examine it, the house image would appear to have become the topography of our intimate being’. (Bachelard 1994: introduction xxxvi) Bachelard argues that space invokes memories and not time. He researches phenomenological experience, not the process of memory. The ever-present spatial essence, and not passing circumstance, fascinates Bachelard.(1)

(1) In the text, drawings and images that form part of this chapter I have attempted to render primordial space accurately, as I truly experienced it. I analyse it now and marry it to the present by projecting it into new spatial realities through a similar phenomenological process.
The French philosopher Maurice Merleau-Ponty (1908-1961) in his combination of phenomenological and structuralist thinking set out in The Phenomenology of Perception in 1945, his concept of the Primordial (or ‘primary spatiality’ as he sometimes calls it). He too underpins the fundamental importance of the idea of space, drawing on Henri Bergson’s earlier thinking, Merleau Ponty postulates that our mind-body consciousness is not in space but is of space. ‘Experience reveals, beneath the objective space in which the body eventually finds it place, a primordial spatiality of which objective space is but the envelope and which merges with the very being of the body. As we have seen, to be a body is to be tied to a certain world, and our body is not primarily in space, but rather of space’. (Merleau-Ponty 2012: 149)

The architectural theorist, Jonathan Hale states that Merleau-Ponty tries to establish an alternative to the dualistic division of subject and object by exploring the fundamental interdependence between these two phenomena. By seeing these two terms as equally abstract and post-rationalised constructions, he offers a way to understand embodied experience as our enduring ‘primordial condition’. (Hale 2017: 115) For Merleau Ponty too, ‘all perception, all action which presupposes it, and in short every human use of the body is already primordial expression. He also wrote in the later Signs. By focusing on the central role of the moving body in the perception of architectural space, the sensory qualities of light, sound, temperature and materiality can be thought of in Merleau Ponty’s terms as a kind of ‘primordial language’. (Hale 2017: 4)
Jung claims the greatest and best thoughts are founded in primordial images and importantly he states 'it is a great mistake in practice to treat an archetype as if it were a mere name, word or concept. It is far more than that, it is a piece of life, an image connected with the living individual by the bridge of emotion'. (Jung 1998: 43). 'The primordial image expresses the intrinsic and unconditioned creative power of the psyche. The primordial image is thus a condensation of the living process'. (Jung 1998: 43). I would argue that this primordial space at Maryville Park remains the instinctive genesis for my design process.

(1) The two figures of Primordial Space illustrated on these pages together form a stereoscopic slide, refer back to the Preface. It is a transparent overlay of Harcourt Terrace over Maryville Park. If you view these two images together through a stereoscope they form a single three-dimensional image. This is achieved by shifting the horizontal position of view.

If we embed our thinking further in the psychology of the creative process and use Sigmund Freud’s (1856-1939) topographical model of the mind as an iceberg. Then our architectural thoughts and perceptions (the conscious) which float on the surface of reality, must surely at times sink into the larger mass of the sub-conscious (or pre-conscious as Freud called it) and then further still into the unconscious depths of our minds.

It was Freud’s view (as it was Jung’s) that these strata of the unconscious and subconscious consist of too much of the minds capacity to reason and conceive to be ignored. I would argue too that the most important images of our architectural mind are maybe the parts that we cannot immediately see. It is these pre-conscious spaces which ‘succeed in attracting the eye of the conscious’ (Freud, 1935: 306) I make visible in this research.
Over these four years of study, I have had the enormous privilege to watch my young children, twin sons, Oisin (6), Aran (6) and daughter Kathleen (5) grow up, to see and try to understand how they negotiate the world for the first time. How they explore it and come to terms with the space that surrounds them at a primal or instinctive level. It has been highly informative at a base human level and a pleasure to watch.

From the helplessness of the baby on its back or front, immobile, aware of changes in light and shade; to the immediacy of closeness. I watched how different objects, particular faces come into focus, how small children handle things bringing them to the mouth, to be smelled or tasted. From crawling for the first time and the freedom of movement, it is an ever developing sensory sequence of sight, movement and touch driven by an innate desire and curiosity for the unknown. The child simply sees what he/she wants, propels itself towards it and gets there. He/she holds and touches it, to know it for the first time or recognize it for the next time or to simply know that it is there. Walking, is an easier and more efficient way of getting around, quickly adopted and applied to daily life at this early age.

At this formative age too, the physical world is a natural extension of the embodied self until this is unlearned. It is this spatial reality that I believe is as keenly absorbed into the unconscious mind as other important psychological stimuli, surfacing as a deep primordial sub-text for spatial thinking in time.

Here, unprompted at the age of four Kathleen discovers the joy of Eurythmy on the living room floor. This is recorded in the short film, EURYTHMICS Kathleen (1)

I can only but project myself onto my childrens’ behaviour with the realization that I was moving through these developmental stages in my primordial space at Maryville Park. That room is embedded in imagination and is etched into my body and flesh. This is the physiological dimension that Gaston Bachelard and Carl Jung makes reference to in their writings.

(1) The film EURYTHMICS Kathleen is available to download from the USB Memory Stick, attached to this book.
The room in Maryville Park is lined in one material, Teak. Tongue and grooved boards form the ceiling and the grain ran away from the natural light. There are two recessed tungsten down-lighters placed into it. The floor is a waxed checkerboard parquet floor also in teak as are the floor to ceiling cupboards on the east side of the space providing storage and hiding various utilities which when open transform the room. This continuity in material is articulated on the west side of the room by the use of adjustable teak shelving filled with bound editions of the Architectural Review and reference books. Matching cabinetry is placed below against a white painted wall.

The room can be read as a series of hardwood frames. The dimension of the painted timber of the large glazed picture window is minimized. It is placed against a reveal that is lined with a teak facing piece, which matches the material on the next frame. Both these frames form the recess for the hidden curtain casing that is placed on both sides of the room, a similar curtain box that in turn demarcates this room from the main living room. Functionality disappears in this room. Elements are hidden so that the true spatial definition of this simple orthogonal space can be experienced.

The door within the glazed screen is placed to the side and through it you pass on to a flag stoned terrace with its low walled enclosure, remnants of the old out-buildings which are used for sitting on. This door’s thicker framing here defines its use, but if one looks closely one can see that the aesthetic intention of framing runs through as its glazing beads are left in unpainted teak.
The position of the glazed door also provides for an unobstructed view of the garden through the large expanse of glass of the picture window. This is the main focus of the room. Central to this composition is the planting of a Cherry tree.

This tree's colourful spring blossom during the day or its floodlit snow laden leaves on a winters night defined in many ways for us as a family the passing of time and the seasons at Maryville Park.
The teak panelled east wall is divided into four vertical storage presses. Its doors lift up and swing out to reveal a Hitachi Stereo Player behind one panel, a illuminated green felt-lined drinks cabinet with glass shelves behind another. The middle section drops entirely down to form a drafting desk, with T square and green vinyl cover at the ready. An Anglepoise lamp swings out to fulfill all the requirements of the jobbing architect in this elegant assemblage of hidden functionality.

From the Persian rug which lay in the middle of the room where I learn’t to crawl and play, I obviously looked around me and took in the room’s spatial qualities and atmosphere.

Here I stand, at a later age, alongside my older brother Shane, with my hands placed upon the cold glass and my eye line, about 950mm off the ground, enjoying the silence of the snow falling down outside in the garden.
I also occupied an idealised Arabian garden in Maryville Park. Under my young hands and feet I felt the rough woollen and colourful weave of the Persian carpet brought back at the end of the First World War by my paternal grandfather, Lieutenant William Boyd from Mesopotamia (modern day Iraq). In it, I saw intricate geometric patterns and spaces that were abstracted further by its threaded structure. Michel Foucault (1926-1984) states in *Of Other spaces: Utopias and Heterotopias* (1967) ‘As for carpets, they were originally reproductions of gardens (the garden is a rug onto which the whole world comes to enact its symbolic perfection, and the rug is a sort of garden that can move across space’ (Leach 1997:354).

Indeed John Ruskin once confessed that during his lonely Victorian upbringing it was ‘the carpet and what patterns I could find in bed covers dresses or wallpapers to be examined, [that] were my chief resources’ (Krauss 1998:1). It was these experiences he believed which formed his unique analytic mind in later life.
Within a close family circle, there were similar architectural insertions that my father designed for both his brother and sister's homes in south Belfast. The skill of his hand is identifiable in both these houses. A front door, bathroom, breakfast room, study and a fireplace were designed for Rugby Road.

While in Shrewsbury Park, built-in shelves were designed by him in the front room. The earlier rear kitchen extension shown here undertaken by his friend and architectural colleague Charlie Moore.
I was always intrigued by the corner window in the kitchen at Shrewsbury Park. There was a glass-to-glass connection here so the wall disappeared at this point, releasing the space and providing a view across the garden. I continue to erode corners in our work.

There too was a refined palette of materials, a cabinetry of floating abstract forms in timber and white Formcia set against a deep green rubber floor.
Its colour matched the dark green geometric patterned carpet in the hall which in turn toned in with the floral richness of the William Morris Wallpaper (1)

The wall of coloured recessed shelves in Shrewsbury Park designed by my father had rounded corners; alongside it there was an invisible door with a hidden frame and reveals that was covered in the same ochre muslin cloth as the walls in this room.

Wallcoverings also played a role in my evolving perception of pattern and space at Rugby Road where I was also confronted by them at close quarters as a child.

(1) Blackthorn (green) designed by JH Dearle for Morris & Co in 1892 and it is still in manufacture.
Left eye:
Figures 30:
Rugby Road,
Belfast, Ground
Floor Cloakroom
Wallpaper, W
Brian Boyd 1965

Right eye:
Figures 31:
Rugby Road,
Belfast, First
Floor, Bathroom
Wallpaper, W
Brian Boyd 1965
A stronger resonance is made with the geometrical patterning than the abstracted floral wallpaper chosen by my father for the first floor bathroom of the house.

The hardwood post and panel configuration of the storage presses in Maryville Park is used once more by my father in the breakfast room at Rugby Road.

I have a very strong emotional attachment to these spaces of my childhood. They are etched into mind and when I returned to them as part of this study they remained virtually unchanged if in various stages of dilapidation. (1)

These primordial spaces are remembered clearly as they were and are by me.

(1) Shrewsbury Park was demolished in 2016 and my Uncle Ken pictured here in 2015 at Rugby Road is recently deceased.
The fireplace in Rugby Road is another true concrete abstraction. It was designed by my father at the same time as the chimney in Belfast City Hospital. It was cast in seven large pieces in the monumental stonemasons yard run by my Uncle Ken’s family.

It has a horizontal dominance that re-defines this Victorian living room as a modernist set piece.
My early domestic experiences were defined by this constructed world. It was different for me even then, for these spaces were not quite the same as other spaces I found myself in the houses of other neighbours and friends of my parents. Houses, where you were as a young child allowed to explore unattended at the most intimate scale.

I could appreciate the direct physiological benefits of light, view, and a direct connection to nature in these homes. There may have been a heightened interest or pride in the fact that these domestic worlds were designed by my father. But I think not, for I remember clearly particularly liking his friend Colin Deane's house in Dunmurray, built outside Belfast.
I felt at home and at ease in my primordial space at Maryville Park. It was an extension of my psyche. Martin Heidegger (1889-1976) uses the term primordial or ursprunglich in phenomenological treatise Being and Time and states that we need to retrieve ‘primordial experiences in which we achieved our ways of determining being – the ways which have guided us ever since’ (Heidegger 1962: 44) to become authentic.

I realise now that I have taken on subconsciously many of the contemporaneous architectural traits that Maryville Park and these other spaces use as my own spatial grammar.

The designs of my father are all recognizable as they share the language of modern architecture in the 50s and 60s, something that he was obviously looking at, especially when you review the books and periodicals that occupied the shelves of the west wall of this small living room.
This is the architectural language which I am drawn to in my practice, an authenticity that may be forged from my strong spatial familiarity with the inherent warmth and humanity of this geometric cage at such a young age.
By studying this phenomenon and looking harder for the resemblances between my current domestic designs and these primordial spaces, this phenomenological intertwining has become even more explicit for me and evermore applied in my work through this research.
When I design a domestic project, search for something or I am contemplating many things, I often step behind these immediate thoughts into a moment of vision. It is in the instinctive or intuitive move or flash of inspiration that this primordial architectural language surfaces from my consciousness and guides my spatial intentions and ultimately the final design judgment.

To go against this deep-rooted aesthetic sensibility seems to be a falsehood, a contrivance and a denial of my innate architectural vision. My primordial space has become my eurythmic cage.
I have spent my life designing architecture instinctively, I work with Primordial Space. It is in a small room in Maryville Park where I began to appreciate an experiential difference in domestic space at a young age. This is a primal understanding of architecture. It is a physiological and psychological engagement with space. It is a phenomenological appreciation of material, view, and light. It is only now that I also realise, it is this primordial space which also heavily delineates my personal approach to architectural design.
Look and you will see’ (Mies van der Rohe 1986:25)

Ludwig Mies van der Rohe

‘There is only a perspective, seeing; only a perspective, knowing and the more affects we allow to speak, the more eyes, different eyes we can use to observe one thing, the more complete will be our concept of this thing and our objectivity will be’. (Nietzsche 2006 :87)

Friedrich Nietzsche
In this chapter, I seek to find spatial archetypes embedded in my work; the primordial sources I instinctively draw upon and constantly re-visit as an architect, so I can gain a deeper understanding of our work and how I work. This brought me back to a memory of the last radio interview I heard with John O’Donohue (1956-2008), the Irish poet and philosopher. During it, he spoke of the *inner landscape of beauty* and told a story of his neighbour, an elderly farmer, in the west of Ireland who once informed him that to truly know the land, you must look at it seven times, not once, twice, three... four, five, six but seven times, and it would be in that depth of vision that the true meaning of its beauty would be revealed to you. So in this chapter I have chosen to look again at our architecture seven times to reveal each time a methodology of practice in order to unearth an inner landscape of beauty.
Firstly I CONDITION SPACE; I am looking to see. There is a careful visual reading where thought and perception is connected and linked, an experiential sensitivity to the site; I am there metaphysically and physically, I see it, I feel it and I sense it, I also see through it and beyond, I perambulate in order to appreciate and celebrate view and aspect, I seek out the wonder and meditative necessity of nature. There is an inherent contextualism, an understanding of place in its dimension and scale, articulated through spatial reaction and the conditioning of a new transformative context.
As an architect, I deal with the making and conditioning of space; I use the term space very deliberately as I believe too that space is the ‘charged void’ of architecture as Peter Smithson described it (Smithson A+P 2001:11). Space is the room that encloses you or it is the immediate boundaries of your physical reality but it is also the imagined space beyond that liminality.

My conjecture like Immanuel Kant’s is that there is one universal space, and it is in this continuum that we place ourselves. So everything is connected and attenuated in a real and imagined spatial reality. This expansive abstracted idea of space does not deny the particularity of the site in this continuum, and there is always a need in my view to examine that specific place very carefully, to understand its condition in the universality of space.

Clients seek us to address directly their essential needs for life and living in the designs that we create for them. They often share our physiological per-occupations or appreciate our ingenuity in solving their spatial needs. These clients do not pose a theoretical or philosophical question. They simply ask us to serve a need and provide them with a well designed and comfortable home.
But there is always an understanding that we are not answering solely our clients’ particular need; we are attempting to condition a space for all, for the next occupant, and the one after that. We answer through design the essential need for shelter or inhabitation in the continuum of space and time.

I have taken a small unbuilt project on Carrick Terrace in Dublin to illustrate the process of Conditioning of Space. Working primarily with the ground floor I would like to explain how I begin a design, what I see, when I look and how I condition space.

There is a close examination of the site, a full perambulation and spatial assessment of the immediate terrain, a coup d’oeil (1) so to speak. A consideration of aspect, of view, of spatial possibilities, an assessment of what is good and what is bad, worth keeping and worth taking away. This is an imagined and projected reality, created in my mind’s eye and spatially expansive. It comes quite quickly. It touches on every space in my field of vision. It is a perspectival framing and its architectural possibilities can be discussed with the client (as they were in this case on site) but they are not made concrete as yet, the design remains an abstracted but real projection.

(1) ‘stroke of the eye’, a military term describing the ability to discern at one glance the tactical advantages or disadvantages of the terrain.
This creative process is further evolved and calibrated as a result of a careful survey of the site on the second visit; I measure fully the house and garden. It is this time spent in the house that allows me to get to know the space the dimensions of it. It is critical in gaining a deeper understanding of the conditions of that specific place.

I track the passage of time through the movement or play of light, the coming and going of traffic and neighbours. If left alone to measure and explore, a spatial intimacy develops and through it a re-working and testing of propositions, the creation of possibilities and eventually the formulation of a new three-dimensional reality.
This new reality is then tested through the plan, initially hand-drawn over the survey plan (as here) then later tested as a measured drawing. The plan is the ordering device, an abstracted plane through which I can see and determine space. Le Corbusier states in Towards a new Architecture, ‘a plan calls for the most active imagination. It calls for the most severe discipline also. The plan is what determines everything. It is the decisive moment’. (Le Corbusier 1970:46)

In Carrick Terrace and in our other domestic projects, the plan is an arrangement for living; it defines here in this room where to dine, where to cook and where to recline. We make a small insertion, an addition of 6sq m to solve the plan. This is ‘domestic-acupuncture,’ (Stevens 1999: 9) Space is released to become more expansive, interconnected, interchangeable and modern.
Secondly, I see an ORTHOGONAL MATRIX (1), a projected spatial condition. It is a three-dimensional framework, which contains horizontal and vertical space, long and short space. It is full of volumetric variation and possibilities and it is where I choose to situate myself within it, which interests me when I design. It extends to the horizon. It has visual depth. There are set datums. Volumes may slip and slide but the underlying geometric forms are pure and simple. There is spatial control; a holistic arrangement, a need for order so as to find in this abstract geometrical world a spatial solution which the body will enjoy and the eye will rest upon. The orthogonal matrix is the spatial construct through which I see my architectural world.

(1) Matrix noun. 1. The cultural, social or political environment in which something develops 4. (Mathematics), a rectangular array of quantities or expressions in rows and columns that is treated as a single entity and manipulated according to particular rules; a grid-like arrangement of elements: a lattice) (QED 2018) <https://en.oxforddictionaries.com/definition/matrix> viewed 19 February 2018
I like orthogonal space and parallel planes. Gravity and physiological occupation determine the floor is horizontal, when the walls are built perpendicular to it. It seems logical that the ceiling would follow this simple geometry volumetrically. Pure form grounds me in the continuum of space.

Spatial confusion disorientates me. I like to visually read and understand my terrain and on the most part predict it, if at times, I am surprised by it. I have little interest in getting lost in a house or a building. Disorientation for me is not a comfortable feeling. The straight line is the rationalisation and ordering of space as it has been for millennia.
Gerrit Rietveld beautifully articulates neo-plastic space in his design of the Red and Blue chair of 1917; here the two planes of the seat are supported on the yellow tipped severed bars of a black orthogonal matrix.

The American religious community the Shakers made simple, orthogonal and carefully ordered space. They constructed them using a doctrine called ‘Right Angle Discipline’ (Holloway 1966). Shaker rules regarding orientation and posture reveals consistent orthogonal ordering. Bread and meat, for instance, were to be cut square; diagonal reaching was discouraged at table, and diagonal short cuts were forbidden in their settlements in favour of right angle pathways between houses.
The orthogonal matrix of solid and void is described through plexiglass models made for the Homework architectural exhibition held at Buffalo University, New York in 2007.

There is a displacement of the space shown in this model of the house at Bohemore.
When I look for the third time, I see EURYTHMY, Eurythmy is a considered three-dimensional proportionality, a well tempered and judged spatial condition. In the case of a room where each dimensional element is dependent on each other, length, breadth, height and thickness are judged against each other to determine appropriate dimension and scale of the space. Eurythmy is an aesthetic judgment and as such in architecture, it involves spatial adjustment and is applicable to all buildings whatever style or from whatever era. My eye judges the eurythmic dimension of space, and the appropriateness or beauty of that judgement is determined by yours.
Anne Egan, a client told me on site in Chestnut Lane, ‘I love the proportions of those downstairs spaces’ (Egan 2011). I took this passing remark as the greatest compliment, firstly because Anne recognised the importance of good proportion, secondly that she praised our spatial skill and finally because she enjoyed our eurythmy as an embodied and real architectural experience.

Eurythmy is one of Vitruvius’s ten fundamental principles of architecture set down in the first and most influential book of architectural theory, The Ten Books of Architecture in 1BC. It is a word that we as a profession have lost and an acknowledged skill we have ignored for too long. I have in someway taken on as a personal crusade to wrestle back this forgotten architectural term from the Austrian philosopher Rudolf Steiner (1861-1925) and his anthroposophical disciples.
For Vitruvius, ‘Eurythmy is beauty and fitness in the adjustments of the members. This is found when the members of a work are of a height suited to their breadth, of a breadth suited to their length and in a word, when they all correspond symmetrically (proportionally)’. (Vitruvius 1960: 14)

It is in these spatial adjustments that aesthetic judgment lies and the eye of the architect is truly utilised.
Eurhythmy is spatially holistic and harmonious. It encompasses the whole building at all scales. Eurhythmy is indeed intrinsically linked to proportion but unlike proportion, no science or mathematical rules have been applied to it by the ancients or over time. As the architect Dom Hans van der Laan (1904-91), a master of eurhythm put it in his 1977 treatise Architectonic Space: “Eurhythmic proportions gives us an insight, not into the quantity of form, but into its qualitative properties”. (van der Laan 1983: 114)

So as eurhythm is not quantifiable, it is not valued academically. It remains an individual creative act. It is instinctive and innate, based on the individual perception of space and the application of personal spatial experience. I do believe good eurhythm determines good architecture.
If I look for the fourth time, I see FREEDOM OF MOVEMENT, Geoffery Scott (1884-1929) says ‘beauty and disposition in architecture, like beauty of line, arises from our physical experience of easy movement in space’ (Scott 1999: 166). He later defines space in the Architecture of Humanism as ‘liberty of movement, that is its value to us and such it enters our physical consciousness. We adapt ourselves instinctively to the spaces in which we stand, project ourselves into them, and fill them ideally with our movements’ (Scott 1999:169). As space is an embodied experience, to design without physical restriction is important. The Brazilian architect Vilanova Artigas (1915-1985) described his expansive free spaces as physical recreation for the mind. (Artigas 1997: 101) In our domestic work, we too attempt to make the smaller, larger and the form simpler and more recessive so the space can become charged with infinite possibilities.
We layer spaces or rooms one behind the other internally and externally shifting volumes and sight-lines to provide a depth of field or spatial flow.

We interconnect space providing a choice of portals, a doorway, window and moveable screen through which both the eye and body can move.
Hermann von Helmholtz (1821-1894) defines this free movement of the eye as ‘indirect vision’.

‘The eye, von Helmholtz writes, represents an optical instrument of a very large field of vision, but only a small very narrowly confined part of that field of vision produces clear images. The whole field corresponds to a drawing in which the most important part of the whole is carefully rendered but the surrounding is merely sketched, and sketched the more roughly the further it is removed from the main object. Thanks to the mobility of the eye, however it is possible to examine carefully every point of the visual field in succession’. (Nesbitt 1996: 505)
As it is the eye that perceives space, we often use mirrors or reflective surfaces to create the illusion of depth and alter perception.

Freedom of movement also relates to how light passes through and across the surfaces of space, tracking of the movement of time in the house.
Our clients also appreciate the freedom to choose how to use the space we design for them in their houses. In addition, they condition our spaces. They move their furniture, they choose where to sit and where to view the outside and inside worlds we create for them.

Our designs allow this social freedom; we try not to particularise spatial activity, even here in my own house, photographed in 2015.
To look again for the fifth time at our work, I see an INVITATION TO LIGHT. This is the light in my living room at Stable Lane. The shadows of the south light are strong and well defined but the light from the rooflight overhead is diffused. By light, I mean both natural and artificial light. A halogen uplighter is placed in the depth of the central rooflight and a tungsten tube is set into the hidden vertical recesses located by the large glazed screens at each end of the room. These fittings cast a warm golden light at night.
Irish light is beautiful, for like our rain it is soft. The cloudscape in Ireland changes all the time. It is blown on the most part by the prevailing Atlantic winds so the shadows move constantly over the landscape and through buildings. I love sunlight, to feel its heat in my bones and its intensity in my eyes gives me great pleasure.

I strive to invite as much light into life as possible through design, so its inherent qualities can be enjoyed for as long as possible everyday.
We use roof-lights to bring natural light deep into the plan. Light from a roof-light in Ireland is constant and it has a particular luminosity. It was Alberto Campo Baeza, who when asked on a visit to Dublin how he would design in Ireland with our climate, replied succinctly, ‘like Sir John Soane’. (Campo Baeza pers con. 2007) Glass in our roof-lights is usually frameless and as such it captures the sky through an uninterrupted view.

Carlo Scarpa (1906-78) describes eloquently the design of a roof-light in his addition to the Gipsoteca Canoviana in Possagno when he says at a lecture at the University of Venice in 1976...’I love a lot of natural light: I want to clip off the blue of the sky. Then what I wanted was an upper glass recess...the glass corner becomes a blue block pushed up and inside [the building], the light illuminates all four walls. My bias for formal solutions made me prefer absolute transparency’. (Nesbitt 1997: 509)
We use construction methods and materials to allow this invitation to light to be as generous and transformative as possible. Natural light is for us a material. It is built into our work here by chance on the stairs of Chestnut Lane. This movement of light can be viewed in the short film STAIRS Chestnut Lane. (1)

Light is celebrated through the spaces we create. Shadow moves uninterrupted across surfaces. It plays in the corner of rooms. It transforms a wall of house into a large projection screen. The film TREES Chestnut Lane records this phenomenon. (1)

(1) The film STAIRS Chestnut Lane is available to download from the USB memory stick attached to this book.

(1) The film TREES Chestnut Lane is available to download from the USB memory stick attached to this book.
When installing artificial light in our houses, I often think of the work of Robert Irwin (1928-), James Turrell (1943-) and Dan Flavin (1933-96). These are artists who have articulated the creative possibilities offered by the manipulation of space, light and surface, using at times, standardised industrial light fittings.

I love reflected light too. Here, in the permanent installation by Walter De Maria (1935-2013) in New York entitled Broken Kilometer (1979) which I visited for the first time in 1993. The artificial light source for this art piece is hidden above your head as you enter the gallery. Reflected light rapidly runs along the five hundred polished brass rods as you move back and forth in the gallery space. It is a sublime experience.
We are also playful and inventive with artificial light in our projects, using it to articulate edges, surfaces and space. Here as a string of light on the staircase in Cranberry Street.

A bar of light is located over the desk in a photographer's studio. A large illuminated wall is used to examine photographic negatives and the perimeter lighting alongside the storage wall all help to articulate the space in the basement of the same house in New York.
My sixth archetype shows a detail that we use continually in our work. A simple junction, it is a recessed cupboard door handle. Each door is made out of 15mm external grade MDF sprayed with painted three coat lacquer finish. The doors are flush; divided by a shadow gap, which forms a handle as the edge of one door is chamfered 70 degrees to take your fingertips. The birch veneered 15mm plywood carcassing behind is hardwood edged. This timber provides the stop and fills the gap; its faceline too is painted. The doors are usually full height held on two pairs of Blum concealed sprung hinges. Through refinement and distillation, the handle is re-configured through spatial subtraction or the ABSTRACTION OF USE. Cupboards read like walls, walls read like cupboards, the purity of the space is paramount, nothing interferes or distracts you from the aesthetic enjoyment of the space, function and meaning can disappear.
The shadow gap may not be as Marco Frascari calls it our “tell-the-tale detail” (Nesbitt 1997: 500) but it does in many ways portray minimal interests in our work. Its design lineage originates from my time at John Pawson’s office. It was he in turn who adapted this detail from Mies’ storage units in the Farnsworth House.

Peter Cody and I use detailing to create a visual consistency in our work. We like to minimise junctions so that materials can meet without the application of a third element. In this kitchen, the joint is the shadow, it is an actual space. The shadow gap is highly adaptable, it can be used horizontally and vertically. It is a handle and it also allows for a building tolerance, a real necessity in the Irish construction industry.
Leon Battista Alberti (1404-72) ‘sees architecture as the art of the selection of appropriate details whose result is beauty, which is a meaningful goal. He defines beauty as the concinnity of all details in the unity of which they belong’. (Nesbitt 1997: 503) Alberti states in Book Nine of On the Art of Building in Ten Books that ‘it is the task and aim of concinnitas to compose parts that are quite separate from each other by their nature, according to a precise rule, so they correspond to one another in appearance’. (Alberti 1988:302)

This is something that we aspire to in our work and like Alberti, ‘let us conclude as follows. Beauty is a form of sympathy and consonance of the parts within a body, according to definite number, outline and position, as dictated by concinnitas, the absolute and fundamental rule in Nature. This is the main object of the art of building, and the source of her dignity, charm, authority and worth’. (Alberti 1988:303). Concinnitas is eurythmy.
And finally when I look again for the last and seventh time at our work, I see a MATERIALITY OF SURFACE, the expression of form and structure is not the major focus in our work, the quality of the proportion and light is paramount in space.
Our built work has a materiality of surface. We use plastic form and as such, surface becomes expansive, and continuous, smooth and taut, a ‘tensile skin’, here combined as observed by Prof Richard Blythe with ‘a deep cave, beautiful buildings made from a tight wrapping as if they have no depth at all, set against spaces that go on forever’. (Blythe 2014) This rendered surface on Chestnut Lane can gives further depth as the dark hue of the 20mm of pigmented cement render absorbs light and draws ones eye deeper into the void beyond.

Materiality can be also provide reflective depth as with the 2mm thick polished bronze cladding used on our addition to Palmerston Road.
Internally too, we use surface linings; a build up of 12.5mm plasterboard with 3mm plaster skim coated finish and three coats of (.6mm in total) vinyl matt emulsion is common place in our projects.

All these materials have a substance, which is defined by their inherent thinness and malleability. Each surface is homogeneous and monochromatic in this house.
Our intention is usually singular and volumetric. We employ materials that are adaptable, consistent and industrially based to achieve this spatial feel.

We like metal sheet, bronze, aluminium, machined hardwoods, terrazzo, vinyl, glass, and tile so as to make architecture that is visually pure, if not wholly ‘truthful’ in its materiality.
This materiality of surface is present in the construction of the 18th century Irish Georgian town house and the vernacular cottage. We use the same palette of finishes time and again. Our ingenuity as architects is to manipulate, refine or exaggerate each material’s spatial possibilities and as such heighten the perception of it but not to change it.

I also find the use of materials is rarely explicit today, a composite of insulation, structure and skin is the reality of today’s construction industry and regulatory needs. The surface or skin of a building is what one looks at. I, as an architect accept this, and try my best to make it beautiful.
I condense further the tectonics of my spatial archetypes in this chapter by looking at, then thinking harder about our work. In this visual dialectic, I identify Seven Ways of Seeing architecture. The Conditioning of Space, The Orthogonal Matrix, Eurythmy, Freedom of Movement, an Invitation to Light, the Abstraction of Use and the Materiality of Surface have all defined my work to date. By explaining this primordial architectural language back to myself, I have begun to understand further its spatial possibilities but also its creative limits.
'Space is not an empirical concept that has been drawn from outer experiences … Space is a necessary representation, a priori, that is the ground of all outer intuitions.' (Kant 1998: 174-175)

Immanuel Kant

'At first, I referred to the field as a space awaiting events; now I refer to it as an event in itself. But this inconsistency parallels exactly the apparently illogical nature of the experience. Suddenly an experience of disinterested observation opens in its centre and gives birth to a happiness, which is instantly recognisable as your own. The field that you are standing before appears to have the same proportions as your own life'. (Berger 1980: 205)

John Berger
In design, intuition and instinct are often referred to by architects but rarely explained. The eurythmic cage is the intellectual device I use to describe my innate architectural thinking and the qualitative value I put on my spatial moves. The cage is the proportioned space that I work within. I do not work with space, I work in space. I am not interested in detached form. I am a space maker. I do not make reality out of something; I make it out of nothing. When I strip form away and I am left with only space, my occupation in it and my movement through it. It is nature that I meet coming in the door.
In Chapter one, Book I of Ten Books of Architecture, Vitruvius sets out his fundamental principles of architecture, Eurythmy is one of these principles. The others are Order, Arrangement, Symmetry (proportion), Propriety (appropriateness) and Economy (Vitruvius 1960: 13). Eurythmy is a term that is now lost to architecture. It is the art that Vitruvius believed revealed the true beauty of architecture and was where the individual skill of the architect could be best applied and demonstrated in building.

For Vitruvius, ‘Eurythmy is beauty and fitness in the adjustments of the members. This is found when the members of a work are of a height suited to their breadth, of a breadth suited to their length and in a word, when they all correspond symmetrically.’ (Vitruvius 1960: 14). When defining this classical term for myself, I sought out an image which encapsulates eurythmy. Key to this understanding is not to look at architecture itself but use a real abstraction. It is a simple display of goods for sale in a market in Zurich photographed on a Sunday morning in 2006.
Eurythmy and all of Vitruvius’ fundamental principles of architecture are present here. It is the way this display is arranged that I love, there is conscious effort by the market trader to order and arrange the goods on the street. Paperbacks with standard dimensions are carefully placed in a line so that their titles can be easily read, and an inherent spatial rhythm is created by their careful disposition as each book is set out one after the other. The hardback book can stand, so it stands, its spine and title facing upwards. The placement of the pair of flippers and an old liquidiser forms a perfect spatial counterpoint to the display of books. It is beautifully judged. The flippers are placed back to back at the rear and a chrome liquidiser is located at the side but foregrounded so it serves as a vertical element and point of focus. Each object forms part of a harmonious rhythmic whole. It is beautiful to look at, it looks right to me, there is a judged proportionality and importantly there is ‘beauty and fitness in the adjustments of the members’ (Vitruvius 1960:14). It is eurythmy.

Eurythmy stands alongside proportion (or symmetry as Vitruvius called it) but it is an aesthetic judgment. Proportion is based on mathematical, geometric, harmonic and physiological ratios, or as more commonly accepted today on the sensibilities of the individual architect. However, eurythmy involves proportion’s spatial adjustment. This is not quantifiable, it is only qualitative in abstract and concrete terms on the drawing or in a building. Eurythmy is conceived and perceived through the eye of the architect.
By definition eurythmy is spatially holistic and harmonious. In architecture, it encompasses the whole building at all scales and its practice can address landscape, city and site through the careful consideration of physical context.

Eurythmy is feeling and effect. It is a creative and embodied experience where man’s measure can determine all things. We know good eurythmy when we see it and its presence transcends time, style and material. Eurythmy is like the understanding of space itself; it is an important continuum in the practice of architecture.

I visited the chapel at St Benedict’s Monastery in 2009. It is designed by the architect Dom Hans Van der Laan (1904-91) at Vaals in The Netherlands. It was a space that was exquisitely judged, utterly restful and transcendent. The chapel contains a secret harmony of proportions and for it was an utterly sublime eurythmic experience.

Completed in 1967, the chapel forms part of an existing monastic complex and sits on a hillside at the edge of a forest. Its plan and section are not unlike a basilica in arrangement. The arcade surrounds the central nave on three sides. The drawn simplicity of the building belies its spatial complexity and its rhythmic order. It is a primordial space.
Van der Laan utilises the materiality of traditional Flemish architecture in the space. The finishes are rough and simple. The walls are lime washed brickwork and the green glass used in the clerestory windows gives the space an ethereal glow.

The sloping polished concrete floor brings your eye consistently in line with the Eucharistic cross at the east end of the chapel as you sit in the stalls.
In ancient Greek, *eurythmias* means to be **beautiful or harmonious in rhythm** and it was the rhythm of the overlapping light and shadow which fascinated me that day, this phenomenon thickened the air, giving the space a palpable viscosity.

As rays of sunlight passed through the chapel in the afternoon, they were held for golden moments on the scriptures placed on the monks stalls. The timelessness of the space resonated deeply within me.
Hans Van der Laan has a fascination with megalithic architecture and especially the trilithonic structures of Stonehenge. He is also one of the few architects who advanced Vitruvius’ theory of eurythmy.

In Architectonic Space (1977) and Instruments of Order (1989) Hans van der Laan states that eurythmy determines both form and size, unlike proportion, which determines only the measure of form. Eurythmy is the therefore the qualitative measure of architecture and for him its essential art. ‘Eurythmy defines the parts of the building as well as the building as the whole by relating height to breadth and breadth to length’ (Ferlenga and Verde 2001:196)
In the chapel at Vaals you can read the strength of the entablature, the strong vertical elements which create a rhythm of positive and negative space. It is the re-carnation of the pre-Christian Stone Henge.

The Chapel becomes for me, a clearing in a primordial forest, a rhythmically ordered hollow place.
Van der Laan’s study of eurythmy evolves out of his careful examination of Vitruvius’ writings. He strongly promotes Vitruvius’ physiological proportional system so exquisitely executed in Leonardo da Vinci’s drawing of the Vitruvian Man of c.1490 and based on Pythagorean philosophy that man is the measure of all things. Leonardo and the Renaissance scholars of the time wished to square the circle, to resolve Euclidian geometries harmoniously, based on man’s bodily proportions.

Leonardo da Vinci defines this spatial universality so beautifully because he adjusts the geometric order of the squared circle so it meets directly man’s physiological needs.

The two dimensional line here becomes instantly spatial. Leonardo draws man in three dimensional space, not as an abstracted figure but as a sensory one who stands touching the edges of the square. Then he lies the figure down, stretches his hands and feet out to the imagined limits of the circle (1). In spatial terms, I too would argue, as Plato did, that the cube is wholly sensible space while the sphere is intelligible space. This is an eurythmic act, there is an adjustment of two idealized spaces by Leonardo da Vinci to meet the immediate physiological needs of man.

(1) Refer to the many anthropomorphic illustrations of the Vitruvian man, best illustrated in Rudolf Wittkower’s book Architectural Principles in the Age of Humanism 1948 (Wittkower 1962: Plates 1-4)
We do not use proportional systems in Boyd Cody Architects. I never have and I was not trained in that way. Van der Laan identifies a three dimensional system, a system which he bases on numerical volumes or a plastic number of 4:3. (van der Laan 1983). I was taught the Golden Section in my History classes at architectural college in Dublin in the 1980s but like so many architects chose not to apply it to my work.

When we tested the proportions of the Golden Section on a series of our projects, it is only the house at Bohermore that meets exactly its set harmonic proportion.
Van der Laan describes his adjusted abstracted eurythmic forms as *Blocks, Bars* and *White Forms* in his writings. The *white forms* for him being the most successful expression of good proportion. (van der Laan 1983: 126). I do recognize an inherent beauty in their eurythmy.

With this in mind, I sought out to define geometrically our own individual proportional system based on shape and volume. With reference to Rudolf Wittkower’s (1901-1971) drawn research in *Architectural Principles in the Age of Humanism* of 1948 (Wittkower 1962 :73) and his pupil Colin Rowe’s (1920-99) drawings in *The Mathematics of the Ideal Villa*, (Rowe 1976: 5) I made drawings of the plans of six of our built houses. When read together, in terms of size, you can readily observe their eurythmic similarities.
To further research the application of eurythmy in our work, I have focused on the design of three houses. The cages (or wire-diagrams) drawn here are three-dimensional and three factors define their eurythmy, in Alma Lane, it is enclosure, in Bohermore, it is the frame and it is ground lines which define space at Allardstown.

I refer directly to the eurythmic studies of Leonardo da Vinci for Lucio Pacioli’s De Divina Proportione of 1498 and Pacolo Ucello’s (1397-1475) masterful perspectival study of a Chalice. It is Gottfried Semper who applies the wire diagram drawing technique to demonstrate true eurythmic beauty in his book Style of 1860-62 (Semper 2004)(1)

(1) Peter Eisenman also applied a similar technique in his formal study of Giuseppe Terragni’s work as part of his own PhD undertaken at Cambridge University in 1963, later published in the book Giuseppe Terragni Transformations Decompositions Critiques in 2003. (Eisenman 2003)
This plexiglass model of Alma Lane demonstrates the spatial x-ray effect of eurythmy in model form, where all the dimensions and lines of the building can be seen at once. This is the eurythmic cage as enclosure. Gottfried Semper writes: ‘Eurythmy is closed symmetry and stands in no direct relation to the observer but only to a centre around which elements of the regular form are arranged and strung peripherally. To establish rapport with the eurythmic figure, the observer has to imagine himself at the centre of relations. Verticality and horizontality are therefore not basic demands of eurythmic figure; its nature is enclosure. It expresses the absolute concept of encirclement symbolically and therefore alludes to the encircled as the actual object, as the centre of the eurythmic order.’ (Semper 2004: 86)
In Alma Lane, there is a simple and necessary architectural strategy, the main living platform is elevated to the first floor, to engage with the south light within a walled garden site. The ground floor shown here holds all the bedrooms, bathrooms and utility spaces. The first floor accommodates the living room, kitchen, hall and a small conservatory, which is open to the sky.

I became obsessed with the making of the openings in the brick walls that enclosed this house. These windows and doors all follow the same design but their proportions change with the needs of each particular room and on the contingency of the surrounding site. The cill height of the long ribbon window at first floor (2) is adjusted to line in with the height of the high garden wall on the south side of the site.

This change or adjustment altered the look of the house. It is the only contradiction in a purist composition but one which can be accommodated in the eurythmic pattern set by its brick envelope. Each subtracted wall piece becomes in turn a terrace in the garden.
By Semper’s definition, the doors and window frames in this house can also be read as eurythmic enclosures, very similar to picture frames, except that the framed content is the person who enters or looks out through them. (Semper 2004:86)

The piano nobile at first floor allows the occupant to stand at the centre of an eurythmic order of frames and openings in the house.
In Bohemore, there is further eurythmy and adjustment of an underlying three-dimensional proportionality. Like Alma Lane, it started with a pure rectilinear form but this time that volume is carefully sliced and each piece or frame is displaced in this composition.

This careful disposition of space is an eurythmic act. Palladio's great patron Daniele Barbaro states in his Commentary to Vitruvius, "Symmetry is the beauty of order, as 'eurythmia' is the beauty of disposition. It is not enough to order the measurements singly one after the other, but is necessary that these measurements be related to each other, that is to say that there must be some proportion between them". (Wittkower 1962:139)
This careful spatial disposition of this sequence of frames determines
the occupation of the house and size of each room at Bohermore. The frame of the porch, the bathroom, the kitchen, the bedroom, the
dining room, the living room all descend down this sloping rural site
in County Kilkenny.

The roof is set as a datum so each interlinked space or frame
becomes higher as well as wider as they descend the hill. Gottfried
Semper states "Eurythmy comes into play only when the frame is
used: a regular concentric articulation and order of formal elements
that form an enclosed figure around the framed object ... Eurythmy
consists of stringing together uniform segments of space to form an
enclosure". (Semper 2004: 86)
The only other reference to Eurythmy that Vitruvius makes in The Ten Books of Architecture is in Chapter Six, "Hence the first thing is to settle is the standard of symmetry, from which we need not hesitate to vary. Then, lay out the ground lines of the length and breadth of the work proposed, and when once we have determined its size, let the construction follow this with due regard to beauty in proportion, so that the beholder may feel no doubt the eurythmy of the effect". (Vitruvius 1960: 175).

Allardstown is an unrealised project designed in 2005, it chronologically follows both the two previous projects. The design too plays with enclosure and frame. Here I sought to thicken the external walls of the house so they could form a strong frame to the landscape. It this landscape which holds the ground lines that define the eurythmy of the house.
The rolling landscape around Allardstown is full of ground lines, roads and hedges.

The ploughed furrows in a barley field.
Other ground lines also per-determined this project.

The drawing above is from the previously granted outline planning permission on the site. It sets out dimensionally the position of the proposed house on site but not its design. A large number of sites in the Irish countryside are bought with Outline Planning Permission in place. So this spatial template was given to us. We had to work eurythmically within these regulatory parameters to design the house.

When I visited the site with the client, I saw other wonderful ground lines in that field, those determined by banks of trees and leafy hedgerows and the beauty of the space that flowed between them. I loved this particular spot on the site where the figure stands in the photograph.

It was this location which became the focal point of my spatial composition for the house, the view point for my perspective and the centre of all spatial relations for the house.
I want to show you the eurythmic design process to explain how I see space. I choose Allardstown because it is one of the few projects that I have drawn in its totality in my sketchbook over ten spreads of A5 pages. This is essentially it: a house design in the making from its inception to completion.

It is my intuitive and instinctive response to a given situation and it is a design taken to a point which it is complete in my mind. I need to see space eurythmically to fully realise it.

I undertake this process through the drawing and re-drawing of the house in pencil and pen. I was away on holiday at the time so this also explains why this small archive of sketches exists. On the next pages the eurythmic process is illustrated chronologically.
I always begin the design in my imagination, even from the first moment I talk to the client on the phone, I contemplate possibilities for a project. But it is only when I see the site, walk it and sense it boundaries, understand its contextual limits and absorb the arc of natural light that surrounds it that I can make my first empathetic spatial decisions. I stand on it and in it, position myself, locate myself, and search out, the best views, immediately marrying them to the best aspect, which is always south-facing in Ireland. In Allardstown, I want to be in the southeast corner of the house in that particular location. This positioning, orientates me, grounds me and allows me to construct an imagined world around that location on site. This space never moves and it usually becomes the future living room.

The rest of the plan follows, each room’s hierarchy is determined by aspect view and use. The ground floor is loose and faint at first, but in this case, the stereotomy of the project is defined early, and the future look of the house is known to me, a priori. It is at first explored in a tentative arrangement of forms in elevation.

It is a design decision that sets limits for me, makes the three-dimensional puzzle all the more challenging to solve but gives me and the house a invisible frame or an orthogonal matrix to work within and ultimately the eurythmy to determine. The stairs follows, it is located in the plan, an adjacent double height hall is introduced, then the first floor can be determined, bedrooms are positioned too in a similar manner, not with the same empathetic determination but the master bedroom again being larger takes prominence in terms of light and view on this level.
The manipulation of site and access is drawn here, the arrows represent views, and the clients’ two cars are placed within in the perimeter of the square or cube. The ‘C’ indicates, the plan is working and therefore can be recorded as a success. I can relax a bit, try different things. The lines of the matrix become walls that take on a turned or right-angled configuration of varying thicknesses and lengths, as they capture space. The walls are open or closed where appropriate. There is an inherent logic in the form or spatial patterning that I can follow and now apply holistically to the design.

On this page I move into the three-dimensional projection to see what it looks like, I am unsure here, there is too much erosion of the volume, clarity of form is lost and I return to the plan to consolidate the square of the house on both floors.
I shift up a scale and into the site plan itself or as much of it I can describe within the dimensions of the page, a terrace and a lawn is cut into the landscape. The fireplace, dining table, kitchen counter define occupation and a freedom of space and movement. The ancillary spaces are unimportant at this stage but there are no rooms provided in the plan. The stairs is still in flux, I have not quite decided on its configuration.

The arrangement of the walls is worth exploring. Can they be like Mies van der Rohe’s Brick House and stretch into the landscape, to form garden walls or determine changes in levels of future terraces? How can I control the gaps between them? How can I attenuate these apertures? Align them and move the ends apart. What happens when I make those adjustments? What happens when I have as few walls as possible? Can I make the boundary between house and garden disappear?
I return to the consolidation and resolution of the plan and I concentrate this time on the ancillary spaces. The car-port, the hall, the cloakroom and utility room are at the centre of the house, straight lines or vectors move across the plan to organize these spaces and elements, to define their limits. Things begin to fall into place. This plan is named ‘B’. The process of drawing continues...

I begin to use three-dimensional projection to check the volumetrics of the house. The hedges, lawn and terrace cut into the sloping site on this page. At first floor with the bedrooms in plan, there is a natural migration of these rooms to the perimeter. Room after room is placed around a double height hallway. I then return to the elevation and the carved out solid, a part section and part elevation. There is an overlap here within my drawings to determine window openings. A grid of hidden vectors move up the elevation and the building’s profile is determined by a transverse cut into the site. I am unsure of this corner overhang but it remains a continuing spatial motif in this design.
The first floor is given firm definition here. The drawn line is now thicker more robust. Line is applied on top of line, its position establishes proportion. The bedrooms and bathrooms are placed around the central void. A terrace is placed adjacent to the master bedroom and the second bedroom. The main bathroom, master en suite and guest en suite are closed rooms on the north elevation. Views (arrows again) are opened up, down the field. At first floor, views to the north open up over the hedge. The guest bedroom takes advantage of this. Dimension is applied for the first time to this floor. There is a faint perspective behind the living room. The fireplace and the steps down into the living are set out here. There is a large picture window to the lawn beyond and other steps give access to the adjacent dining room. The plan is named once again, it works, again I can now try something different, is there a more symmetrical solution? A pin-wheel plan that could work…

The elevations, house is read in the round, one side drawn after the other, each a matrix of solid and void, window and wall. The south elevation of the rear garden is the busiest and requires the most attention. Are there frames or none at all? Is the house an extrusion of a series of spaces, each placed on top of each other?
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I test different opening types to determine the elevations. Are there corner windows, full width and height or just punches? Each time I adjust the proportions of these openings pushing them back and forth pulling them up and down, stepping them in and out. Openings take on more definition here.

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I ground these free studies with closer proportional accuracy. I still play with the extruded openings but I begin to identify a eurythmic resolution.
This two-dimensional drawing now moves into three-dimensional rendering. The house takes shape through pencil shading. Each drawing brings more clarity. Shadow and depth are portrayed to give more definition. Each opening relates directly to the room behind it and the intensity of the light on offer or the view presented beyond the glass. It is a balancing act, in many ways I minimise the number of openings but maximise their size. There could be one large ‘window’ on each floor, so they can meet corner to corner on the elevation. This can be a motif, a two dimensional graphic translated into concrete three-dimensional form. Two are circled on the page, these facades are to be brought forward.

Each elevation is drawn again and again, the variation is decreasing however, I am now honing the object refining its proportionality, it must satisfy my eye, the visual balance must be right, yes a tick too indicates a end point at this stage of my design process.
All elevations are drawn and can now be labeled, again the transference to a three-dimensional study is a method of testing the design, checking its validity.

The south east corner is included or is it to be removed and eroded away? The form seems to float precariously, the section surfaces and the cutting of the hollow for the living room is explored. This south façade requires attention. The walls of the house now wrap around each opening. The glass of windows is pushed back promoting the play of deep reveal and shadow. Can this exaggerated wall thickness be drawn out of the house to form the paths that will surround the terrace and lawn? The house has to be woven together, it has become spatially whole, and that solid is now cut into the ground.
Two-dimensional representation is now set aside, the final visual dialectic between the eroded corner and solid corner is explored in three-dimensions. These are drawn in a comparative, realistic manner. Perspective views are taken from the top north-west corner (the carport) and from the north east corner (the utility room).

And here again from the north-east corner and south-west corner of the house with the client’s cars driven into the confines of the house.
Finally, I draw the main view from the south-east corner once again. That's it. There is no need to draw house another time. Allardstown is now complete in my mind.

Creative life continues on the pages of my sketchbook.
I return to Ireland and the office. On the drawing board, still freehand I now bring the project up a scale so I can understand it more clearly, line after line, their graphic weight determining my eurythmic choices.

I apply dimension for the first time, the house’s perimeter thickness is more closely explored and takes shape. This is a storage zone in most locations in the house at first floor.
A more formal drawing is made, things are really taking shape now, I am pleased.

An underlying matrix begins to organize the house's structure on both floors.
The plan is drawn again, just to get it absolutely right. I add some colour so the plan reads more clearly.

It is more emphatic this time, less lines are used, less adjustments required.
The house is drafted up so as to make the final adjustments on the computer.

The stairs changes and the bedrooms to the right on the first floor become wider in plan.
In section, the living room sinks into a hollow, giving a greater ceiling height in this space.

In elevation the final proportions are determined hardline as a simple graphic.
A physical model is made, and we now see the house in the round.

Unfortunately this cardboard artifact is the closest we get to realising the house. Allardstown is never built although its eurythmy is fully determined.
As with Maryville Park in Chapter Two and Carrick Terrace in Chapter Three, I draw Allardstown as an eurythmic cage. This is my inner vision. This is what I really see as an architect as against what I am or you are looking at on these previous pages.

What do I see? What I have always seen, I am at the centre of things, squaring the circle of the site within an eurythmic cage.
The Eurythmic Cage is the primordial construct I work within. It defines the limits of my spatial consciousness. The nature of this space is shaped instinctually and intuitively in my imagination and on the page primarily through free-hand drawing. Eurythmy is a fundamental principle of architecture and an ancient art. In this chapter, I look closer at my eurythmic process at the initial stages of a project in order to explain how I draw and think through the constant adjustment of my spatial liminality.
Figure f2: Boyd, Dermot 2015, Allardstown, Co Louth, Eurythmic Cage, Allardstown, rough sketch, digital scan
Figure f3: Boyd, Dermot 2015, Allardstown: Eurythmic Diagram, Pencil Drawing, digital scan
Figure f4: Boyd, Dermot 2006, Flea Market, Zurich, Colour, digital photo
Figure f5: Boyd, Dermot 2006, Flea Market, Zurich, Black and White, digital photo
Figure f6: Boyd Cody Architects 2004, Wellington Road, Dublin 4, digital drawing
Figure f7: Boyd, Dermot 2009, St Benedicts Chapel, Vaals, The Netherlands, Dom Hans van der Laan 1961, digital photo
Figure f8: van der Laan, Dom Hans 1961, St Benedicts Chapel, Vaals, The Netherlands, Dom Hans van der Laan 1961, pencil drawing, van der Laan, Dom Hans 2005, Abdielkerk te Vaals: Uitgave van de van der Laanstichting P29, P31
Figure f9: Boyd, Dermot, 2009 St Benedicts Chapel, Vaals, The Netherlands Dom Hans van der Laan 1961, digital drawing
Figure f10: Boyd, Dermot, 2009 St Benedicts Chapel, Vaals, The Netherlands Dom Hans van der Laan 1961, digital photo
Figure f11: Boyd, Dermot, 2009 St Benedicts Chapel, Vaals, The Netherlands Dom Hans van der Laan 1961, digital photo
Figure f12: Boyd, Dermot 1987, Stonehenge, slide negative
Figure f13: Dom Hans van der Laan Stonehenge, Hypothetical Reconstruction of the Monoliths Feleno Alberto and Verde Paola 2001, Dom Hans van der Laan, Amsterdam: Architecture and Natura Press P28, digital scan
Figure f14: Dom Hans van der Laan Stonehenge, The Disposition of the Cella, Van der Laan, Dom Hans 1983 Architectonic Space Leiden: E J Brill P192, digital scan
Figure f15: Boyd, Dermot, St Benedicts Chapel, Vaals, The Netherlands Dom Hans van der Laan 1961, digital drawing
Figure f16: Leonardo da Vinci, Vitruvian Man, c.1490, Kemp Martijn, 2007, Leonardo da Vinci, Experience, Experiment and Design, London V&A Publications P86, digital scan
Figure f17: Boyd Dermot 2015, Leonardo Da Vinci Squaring the Circle Sketch Overlay, Pencil Drawing digital scan
Figure f18: van der Laan, Dom Hans 1960, Eurythmy Box, van der Laan, Dom Hans 2005, Abdielkerk te Vaals: Uitgave van de van der Laanstichting, P6 photo
Figure f19: Boyd Cody Architects 2006, Bohermore, Graigunanangan Co Kilkenny 2008, card model Figure f20: Boyd, Dermot, 2009, St Benedicts Chapel, Vaals, The Netherlands Dom Hans van der Laan 1961, digital drawing
Figure f21: Boyd, Dermot 2015, Six Eurythmic Plans, pencil drawing, digital scan
Figure f22: Perspective of Chalice, Paolo Uccello c.1430 pen on paper https://commons.wikimedia.org/wiki/File:Uccello_Paolo_-_Perspective_Sudy_of_a_chaice.JPG Viewed 19 February 2018, digital download
Figure f23: Boyd Dermot 2015, Three Wire Frame Diagrams, Alma Lane, Bohermore, Allardstown, pencil on paper, digital scan
Figure f24: Tierney Paul 2006, Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2004, plexiglas model, 2006
Figure f25: Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2004, Plans Sections and Elevations (1), digital drawing
Figure f26: Boyd Cody Architects 2006, Alma Lane, Monkstown Co Dublin 2004, Plans Sections and Elevations (1), digital drawing
Figure f27: Boyd Cody Architects 2006, Alma Lane, Monkstown Co Dublin 2004, Plans Sections and Elevations (1), digital drawing
Figure f28: Tierney, Paul 2004, Alma Lane, Monkstown Co Dublin, Boyd Cody Architects 2004, pencil, digital scan
Figure f29: Tierney, Paul 2004, Alma Lane, Monkstown Co Dublin, Boyd Cody Architects 2004, pencil, digital scan
Figure f30: Boyd Cody Architects 2006, Bohermore, Graigunanangan Co Kilkenny 2008, digital drawing
Figure f31: Boyd Cody Architects 2009, Bohermore, Graigunanangan Co Kilkenny 2008, digital drawing
Figure f32: Boyd Cody Architects 2009, Bohermore, Graigunanangan Co Kilkenny 2008, digital drawing
Figure f33: Boyd Cody Architects 2006, Bohermore, Graigunanangan Co Kilkenny, 2008, digital photo
Figure f34: Boyd Dermot, 2015, Allardstown, Co Louth, Boyd Cody Architects 2005, Eurythmic Ground Floor Plan, digital scan
Figure f35: Boyd Cody Architects 2005, Allardstown, Co Louth, Developed First Floor Plan, digital scan
Figure f36: Boyd, Dermot 2003, Roadway, Allardstown, Co Louth, digital photo
Figure f37: Boyd, Dermot 2003, Barley Field, Allardstown, Co Louth, digital photo
Figure f38: Boyd Cody Architects 2005, Allardstown, Co Louth, digital scan from archive
Figure f39: Boyd, Dermot 2005, Site, Allardstown, Co Louth, digital photo
Figure f40: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f41: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
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Figure f43: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f44: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f45: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f46: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f47: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f48: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f49: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f50: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f51: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f52: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
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Figure f54: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f55: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f56: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f57: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f58: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f59: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f60: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f61: Boyd, Dermot 2005, Allardstown, Co Louth, Sketchbook, ink and pencil drawings
Figure f62: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f63: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f64: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f65: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f66: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f67: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
Figure f68: Boyd, Dermot 2005, Allardstown, Co Louth, Esquisse Paper, ink and pencil drawings
'I want to learn more and more to see as beautiful what is necessary in things; then I shall be one of those who make things beautiful'. (Nietzsche 1974 Section 276: 223)

Friedrich Nietzsche

‘Obliged to find forms that conform to systems of requirements over which he has no power, the architect is condemned by the nature of his work to be the only and ultimate humanistic figure of contemporary society’. (Vilanova Artigas 1997: 13)

Umberto Eco

This chapter is dedicated to the memory and plays of Brian Friel

DET AILING
In this chapter, I describe my direct relationship with space and material. I also refer to the contingencies that are ever present in practice which make architecture, the true art of compromise. The project chosen is Rock Abbey, begun in 2014 and completed in 2018, it's design and construction runs parallel to this doctoral study. I could have written about many jobs in our portfolio of domestic work, for I explore my attitude towards detail as an art and craft. The design of the haptic is critical to the success of any piece of architecture in terms of its use, expression and shelter. In Rock Abbey, the eurythmic cage becomes unconsciously then consciously explicit, delineated with real brass lines.
John Bowman (in studio in Dublin)

.... I am going to ask Seamus Deane (poet, novelist, critic and intellectual historian) for his assessment of your role now as a writers of plays. Where do you place Brian Friel in the whole spectrum of Irish playwrights?

Seamus Deane (in studio in Dublin)

....I think certainly in this century, I see him as someone who managed to inherit and at the same time dis-inherit himself from the whole Irish revival and vision-ness of the theatre. He is certainly the most important dramatist since [Sean] O’Casey and he is important in this sense that he has lived in a place and found a way of articulating one of the tragedies of that place, which is the inheritance-ness, that has become inoperative. I think he has shown in his plays, the effects, emotional, psychic (1) and various others of the inoperativeness and he has laid the ground through theatre. He has laid the ground for a new kind of consciousness and I think that is a marvellous achievement.

John Bowman

Brian Friel, would you care to comment of this. Is this how you see yourself?

Brian Friel (in the studio in Derry)

I don’t see myself in those terms at all, but it is not my responsibility or function to make these comments really.

John Bowman

But do you see yourself as trying to forge a new consciousness in that sense

Brian Friel

I don’t really think in those kind of terms, I mean to think the practicing artist is concerned with the particular job in hand and he allows that kind of abstraction to be made by other people.

John Bowman

What sort of job in hand do you have at the moment?

Brian Friel

The job in hand is getting prices for the pamphlets, which we are bringing out next month, as mundane as that.

(Bowman 2015)

(1) Brian Friel never had the Yeatsian belief that theatre could somehow alter the entire consciousness of his place and time, but he held on to the hope that it might ‘make some tiny thumbscrew adjustment to our psyche’ (O’Toole 2015)
This chapter explores the pragmatics of my particular job in hand. It is the design of a house called Rock Abbey in Cashel in Co Tipperary, in it we are using brass. This chapter can also be read in counterpoint or in parallel to the theoretical underpinning of our work explored in other chapters.

The door handle fixed to its front door could also be described as the particular job in hand and one of my inspirations for the use of brass in this project.
I want to describe the art and craft of detailing, and how I communicate and realise my architectural intention at the small scale. This envisioned reality is conceived in my mind then crafted through hand drawing and worked into reality. For as you draw at the large scales of 1:1, 1:2, 1:5, 1:10 and 1:20, conceiving space at the small scale, you enviably bring architecture ever closer to physical reality, its contingencies fully emerge on the page.

We have chosen to use brass at Rock Abbey for its singularity, beauty and adaptability as a material.
Rock Abbey is a classical period house dating from c1780. It has two main stories with a basement and attic floor. Its distinguishing features are its breakfront and porch which is a later 19th century addition. The house has been altered subsequently but, as you will see in later images, it holds on to a large number of its original features. It is a Protected Structure under Irish planning legislation.

Here, a sample of square hollow section (SHS) 25x25mm brass is placed on the Pitch Pine tannin stained floors that run throughout the house. This image defines our conceptual approach to this project. Brass is introduced as a pure and simple modern fabricated material into a historic context. Each element, old and new, holds on to its own integrity and perceptual clarity in the design.
The house is located on the Golden Road on the outskirts of Cashel town in County Tipperary.

It is surrounded by smaller outbuildings and is placed in a mature setting of gardens, trees, paddocks and fields.
The house takes its name from its unique location. It is beside the magnificent complex of medieval ecclesiastical buildings on the Rock of Cashel.

The ruins of Hore Abbey, established by the Benedictine monks in 1266, are located on lowlands to the northwest of site.
Our clients bought rock Abbey in 2013. Their intention was to refurbish the house to make it their family home. It has a floor area of approx 500sqm. The house is constructed in coursed limestone; its walls are 750mm thick in places.

A toilet block and a sun-room were added to the rear in 1950s. This structure was removed so the formal integrity of the house could be re-established.
Our clients are Cian O’Carroll and Madeline Meyler. They live locally; they are well educated, well travelled and well informed about architecture. They sought us out especially for the project because they liked what we do. They are good and patient clients.

They both have an intense interest in what we design and I bring them through our decision making, rationalising my perception of space in a dialectic process.
They have an engagement with the project that is facilitated by Pinterest at an instant accessible global level. When you type in BRASS and DETAIL into the search engine on this popular website, it is this aesthetic expectation, well curated, that we are now so often asked to deliver by our clients.

Cian and Madeline have a strong local connection with the architectural heritage of this house and its importance in their home town. It is the cultural balance between old and new which we sought to address when realizing the design for their house.
At one of our initial meetings, I asked Cian and Madeline what was the most interesting piece of architecture they had seen recently, after some thought, they agreed on the Standard Grill in the meatpacking district of New York which they had visited on a recent holiday.

Its floor is made of one-cent coins embedded in resin. They really liked the metallic look of the floor. This architectural experience became a conceptual hook, and a visual reference point for the project. I experimented in Dublin with twenty cent coins.

I had not been in New York since 2001, but I again (refer also to Chapter 03) recalled vividly my visits to Walter de Maria’s art piece Broken Kilometer, commissioned by DIA as a permanent installation in 1979. It comprises of five hundred highly polished solid brass rods. The memory of its materiality and effect also became an important architectural driver for the Rock Abbey project.
We also have explored the use of metal cladding in a number of our past projects. Laburnum Road is finished in a warm bronzed Satin Anodised Aluminium.

The Reihill Studio in rusting Corten Steel.
Bronze was used on the main Palmerston Road addition.

Silver satin anodized aluminium facing is used on the doors and vents of Chestnut Lane.

It is the fact that brass ages and weathers which led to its eventual choice for Rock Abbey. The process of patination and natural variation in finish seemed the most appropriate choice for a historical context. We also had not used brass before in a project.
During its patination, brass adopts many colours and hues, being both dull and instantly reflective if polished. We discussed this variation in finish with the client on a number of occasions. A brass finish if left to weather becomes visually recessive as illustrated by our letterbox at the College Green office.

The brass handrail on the marble and terrazzo steps leading to the nearby Edwardian O’Neills Bar on Suffolk Street is highly polished and pronounced.
The material's versatility interests me, how brass can be used, as sheet, angle, bar and tube to provide a variety of design solutions. Here the hinges, glazing bars, floorplates, kickplates and handles on the entrance doors of O’Neill’s Bar are all brass.

In contemporary design too, brass is being used once again. Here it is articulated as an angle bead on the window of the Café in St Patrick Park in Dublin by TAKA Architects.
The kitchen is the only room we sought to extend so as to re-invent the house for the family’s use. In fact in our final proposal to the client, we removed 27sqm of ancillary serviced space from the house to replace it with 27sqm additional space at Rock Abbey.

Our spatial approach is modest. The rooms that define contemporary domestic inhabitation are all set out within the footprint of the house, maintaining the proportions and layout of the existing rooms.
Across the four floors, two bathrooms, a study, a cloakroom, a utility room, a wine cellar, library and kitchen are introduced.

These insertions are all delineated in brass; In order to achieve a visual order and a rhythmical expectation for this material as it moves through the house.
The kitchen extension went through various design changes while remaining a brass clad structure. The client does not like railings.

Cian wanted to make a stronger connection between the kitchen and the terrace. We considered this critique and adapted the design accordingly.
A solution is found through the use of a stepped bench and terrace. This sectional move retains the visual and spatial connection between inside and outside we sought and it downplayed the need for an array of steps and a direct physical connection. This sketch was drawn to explain the consequences of the new design to the client, supporting multiple scenarios of family life, meals on the terrace sitting at a polished concrete bench or at the kitchen table, with views to the garden and to the Rock of Cashel on the skyline beyond.

The design of this small extension was eventually decided upon and drawn in three dimensions, externally, the stepped terrace has brass inlaid into it creating a compositional matrix of seams, running through the soffit ceiling and walls of the new kitchen; the large sliding glazed screen; the handrail, balustrade and the kitchen work bench are either made or clad in brass.

A large glazed sliding screen invites direct sunlight from the east and south. The kitchen has simple proportions. Its ceiling is deliberately lowered by 600mm so as to achieve a more comfortable sized volume in a relatively small room. There is a tautness of surface, so the extent of the space is always maximized perceptually.
The design of the extension is fully resolved here for the planning stage of the project. There is an uncanny resemblance to the existing 19th century porch that so characterises the front of Rock Abbey.

Although not a deliberate design approach, we used this perceptual juxtaposition as a means of supporting our contemporary solution to the design of the new addition to this Protected Structure.
When we move to the main body of the house, the use of brass becomes more restrained and deliberate. We have worked with Georgian domestic architecture over the years in Ireland and we find that the proportions of the main rooms in these neo-classical houses is well judged, defined both by volume, size and the spacing of applied elements like dado rails, friezes and architraves, the adjustments that we make in this given context are usually minimum. We use these datums and often introduce new ones.

In Rock Abbey, we utilised the versatility of the brass, as the means of repairing or transforming the existing space, highlighting lines, moments or junctions, altering the perception of the space by changing your visual focus in order to articulate a more heightened sensible and intelligible differentiation between the old and new architecture.

There is a visual assurance here, that at all times we seek to compliment the old and new proportions of the house. In Rock Abbey, this intention is worked right down to the last detail.

I drew each room as a perspectival sketch, to explain to the client more clearly how the brass would be used in the house. This is something I rarely do, preferring to remain on the two-dimensional abstracted plane of plan and section as the most efficient means of placing measurement and annotation onto each design or detail. Three-dimensional space remains firmly at this stage, an inner vision.

A new large brass lantern is designed for the entrance hall and brass flats are placed between its long floorboards to announce one’s arrival on to a floating brass lined surface or ‘rug’.
The brass dado rail is made up of three extrusions of brass, one equal angle, an unequal angle and one flat. They mimic the original dado rail in profile, so they catch the light and shadow in an intimate articulation of surface. Our new brass dado is an abstraction of this original decorative and proportional element. We have followed closely John Ruskin’s advice in The Seven Lamps of Architecture on two counts, ‘The whole style of the abstraction shows that the architect could, if he had chosen, have carried the imitation much farther, but stayed at this point of his own free will’, (Ruskin 1909: 187) and the later ‘It is a safe manner, as I think to design all things in first severe abstraction, and to be prepared, if need were, to carry them out in that form’ (Ruskin 1909: 192).

I also wanted to light the staircase, so internal surfaces of the new rail are polished and the angles are placed opposite each other to facilitate a diffused 25W LED strip light which runs up and around the stairs to form in this case a continuous line or datum in illuminated brass.
We use construction methods and materials to invite light into the house by the most generous and transformative means possible. Natural light is a material for us. It is built into our work.

We sought to match the profile of the rail in the Dining Room, which is still in place so as to re-instate it in the living room. This time, we are working with a northern and western light at this side of the house, so the brass is more pronounced in profile.
To become more useful and accessible to O’Carroll family life, the dining room is linked with the new kitchen through two new doorways that are inserted in the rear dividing wall. Alongside these openings, a new large glazed door is punched out of the south façade of the house.

This is the means by which the walled garden outside can be directly accessed, and strong south light is invited into the room to illuminate it. By making these deliberate openings, this room comes alive, through bodily movement and the tracking of light. The brass details highlight these changes in the historical fabric and brass clad deep reveals delineate the new insertions.
On site, we drew the outline of the new large glazed door on the actual south wall of the house.

There is an offset in the evaluational composition determined by the external and internal configuration of the house. Externally, the opening matches the position and width of the window on the second floor above. Internally, the door is centred on the room.
The new study has a long smoked oak desk which is integrated with the floor, a brass electrical trunking box, separating the desk from the wall, a long hanging light made up of brass flats and angles and a floating door and screen Clad in brass sheeting 3mm thick.

These different brass items form a three-dimensional elemental composition. The eye registers each metal piece in relation to the other, here in this sketch, coloured yellow so the elements float in a drawn wire frame.
The study leads you into a cloakroom where a new circular brass window is introduced. The opening is lined in 3mm brass, which is rolled and polished, the window is conceived as an antique telescope and provides a view up to the Rock of Cashel beyond.

3mm brass panels and mirror are installed behind the toilet pan and wash hand basin to hide storage and sanitary services, the entrance door disappears also and the artificial light comes from a hidden source. There is a suppression of detail, an abstraction of use as I have called it. A projecting line of brass is introduced to form pull handles to the concealed cupboards.
The client required a library. It is the smallest room in the house but it has a prominent position behind the tall arched window in the breakfront. We made this a double height space on the first floor landing. The space is conceived as a tower of books.

We seek to make the extraordinary out of the ordinary. I detail to make things in Rock Abbey perceptually precious. The main body of the library is built with smoked oak and the brass is inserted into the edge of the main matrix of fixed shelves as projecting flat lengths.
A smoked oak ladder and brass rail is designed for the space to access the books. A recess for a heavy tweed curtain deadens the sound and provides privacy from the adjacent landing and stairs.

The underside of the ladder rail is illuminated with a LED providing a wash of light over the books around the entire length of the library shelves.
In the new re-configured master bedroom, there are three wardrobes; originally to be brass clad, these are now constructed in smoked oak with projecting brass handles.

Simple in form, the tops of these cupboards are illuminated so as to form the main light source for the room. The cupboards can be re-positioned as they are on hidden rollers. This bedroom can re-arranged, maximising the freedom and comfort of the client.
The present arrangement addresses the existing offset fireplace located in the room, centring it on the new main bed space.

This is architecture as arranged furniture.
In the master bedroom ensuite, a brass framework is introduced on the walls and across the room, to re-proportion this long thin room.

Two brass framed glass panels are located at each end of the room. One mirrored concealing wardrobes and the other clear glass enclosing the shower cubicle providing a double ended reflection in the room like a Dan Graham art piece.
This visual symmetry is achieved through detail, here 30x30x1.5mm Brass Square hollow sections are used to form matching frames with channels and flats fixed behind each frame, to support the tempered glass of the shower screen.

The drawings I use to get to the final resolution of the drawn detail are not beautiful. There are a series of overlaid fragments, each one used to get closer to a drawn reality. These are particular points of concentration, problems to be drawn and re-drawn until solved. The context surrounding the design of this small detail on a shower screen has been drawn once and constantly passes under each overlay. So it is not seen here.
In the main family bathroom, the mirror and glass framed screens are located side by side at one end of the room, one a mirrored cupboard door and the other, a mirrored glass door that gives access to the shower enclosure.

A brass radiator is drawn here but we could not source brass radiators for the project. In both bathrooms, the heating is placed under the floor. The radiators in the remainder of the house are painted in the dark grey of the external window frames. The brass is now used on the valves and pipework only.
On the top floor in the attic, we raised the low ceilings (1900mm) to a height of 2400mm in two dark rooms by lifting up the collar tie in the roof structure. Profiled brass shades are introduced to form light tracks or brass lines in the ceiling along the point where the two angles meet. Again this line is accentuated with light; warm LED strip lamps are placed in these polished brass shades in order to illuminate the room artificially.
The two shades demarcate the pitch and soffit of the ceiling. They are fabricated using folded brass sheet and an unequal angle, deep enough to hide the indirect LED light source.

The brass handrail at the lowered sash window is introduced to provide protective restraint and is complimented by a brass window board which takes up the depth of the adjoining wall. The rooms shadow gap runs through below this internal cill. Each piece of brass forms part of the room’s eurythmic composition.
In the cellar, the existing flagstone floor is raised to accommodate, tanking, insulation and under floor heating. The existing door separating this floor from the main house is removed in the new heated environment.

A cranked brass handrail runs from the hall down to the basement floor, a new framed glazed door is designed for the wine cellar.
At the level of detail, this small area of basement is my context and site and I draw it as such, here at the scale of 1:10. This is how I work and how I work it out, focusing on the importance of lining things up and through. The first step of the existing stone stairs that leads to the hall above is now flush with the basement floor.

The second step is cut back and rounded and third supports the brass handrail, which is cranked as one, reaches the bottom of the stairs to accommodate access to the doorway to the pantry, which we have re-opened in the new design of the house. The stone is carefully cut and reused. The 40x40mm brass angle handrail is fixed via a shaped angled plate, threaded brass circular rods and flush fixing plates.
In the kitchen, the old external wall has disappeared and the room is extended out, the new external wall is now a glazed sliding screen, framed in brass, and pulled back to form an open verandah. Brass seams in the polished concrete floor continue up the plastered walls and across the ceiling. They run over the island unit and workbench so that full spatial reticulation is achieved, the eurythmic cage is actualized in this new room for the first time. Prof Leon van Schaik noted ‘this is an eurthymic analysis of the house. The approach is marked out within the project, the cage of eurythmic proportion, Dermot’s eurythmy is there, it recedes in other projects, but it is here’. (van Schaik 2015)

The brass bars that form this cage are 3mm thick, 12mmx12mm angles are used in the floor and 16mmx16mm angles are used in the plastered walls and ceiling, these bars line through with openings or the cabinetry so that no line is arbitrary and the overall effect is intelligible. These strips are, of course, at the same time expansion joints for the polished concrete, inserted and spaced to prevent future cracking of the floor.
Detailing holds the brass lines and surfaces in a rhythmic whole. It marries aesthetic aspirations with tectonic needs. It is an art and craft. The large scale detail drawing here drafted at 1:20 explains this resonance. It is a composition of lines and an idealised reality. Specification and notes come later, it is the drawing that always comes first. Practicalities have to be solved first, the weathering, insulation and cold bridging. The drawing is *live* until fully built. A *working* drawing which is always open to change, but fully worked out on paper.

The roof, clad on both sides in brass, so its spatial reading is pure, it is a floating brass fin, which perceptually slides into the depth of the house. It is this floating metal blade that forms the roof of the kitchen. The ceiling is polished brass so it can reflect light into the room and the family activities below.
At the tender stage and through construction, we worked closely with James Healy and Company on this project, a Brass Foundry and Engineering works established in 1946.

This is Healys located behind an anonymous façade in a west Dublin industrial estate. It is an Aladdin’s cave of brass.
Healys is run by three brothers, Brian, Barry and Cormac Healy, their classic 1970s Hino truck, parked outside their premises is the only indicator of their long experience in supplying and fabricating metalwork in Dublin.

On a visit, at the trade counter I played with a series of tubular brass sections before joining Barry Healy on the factory floor.
It was then I was introduced to chosen raw material, their brass, here stacked on a blackened mild steel framework.

There are hundreds of brass sections, channels and rods in different dimensions. It is beautiful, jewel like, golden and shiny when cut. This prefabricated alloy is full of variation and diversity in type and finish.
In the warehouse, I hold a handrail or is it a balustrade?

Barry Healy assembles a potential dado rail in his hand. The conception of fabricating the brass out of pre-formed sections is realized here by handling the material, as is the range of possibilities available to us by using this versatile material.
Barry Healy introduces me to Bobby. Bobby is Healy’s polisher, but he can also be described as an alchemist.

He mixes a dark magical potion, which changes the colour and finish of brass depending how long he applies the solution to the material.
Bobby places a piece of brass on a blackened encrusted window sill. The colour and finish changes before my very eyes in minutes. It is beautiful.

As we detail, draw and develop a project, we are inevitably confronted by limitations. These relate to contingencies which surface in architectural practice, determined at times by a client’s preference or budget or in the use and availability of a particular material on site.

We do our research so these situations are minimized but when they do occur, I always seek to resolve them in the most practical and realistic way possible with the client, supplier or contractor while at the same time holding on to the overall vision of the project.
If clients’ perception shifts or their faith in an aspect of the design falters one must address these issues head on. Early in the construction stage, Cian and Madeline became concerned about the finish of the brass and primarily its maintenance.

Holding true to our original concept, we proposed to use a dark smoked oak in solid timber and veneer on all the new internal joinery and to reduce the use of brass as a facing material. The oak’s colour and texture matched the existing blackened floorboards which run throughout the house. In this adjusted vision, the brass is now conceived primarily in line, rather than as surface and our details change accordingly.

The designs which I show here in this chapter at the pre-tender stage of the project are in the most part realized in the finished house.

Brass pre-fabricated lengths and sections available ex stock in James Healy + Son’s catalogue became increasingly important for our design and fabrication. Through their use, we reduced Healy’s work on the material off-site, ultimately saving on costs.

The finish of the brass is left in its natural state, so Bobby’s alchemist skills were never utilized. But the knowledge and skill of the fabricator, Ned Cody, attended by Gary Tallis, the foreman on site was invaluable to us.

At Rock Abbey, the eurythmic cage is delineated in brass for the first time.
Rock Abbey is an office project based on a material concept, the use of Brass. It is real practice. This chapter explores detail design as an art and a craft. Work at this small architectural scale requires rigor and control as every detail matters in the formation of the domestic world. Through the contingencies of practice, the architectural concept is constantly challenged. Here, the eurythmic cage is made explicit in brass.
Figure g62: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g63: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g64: Boyd, Dermot 2014, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, digital photo
Figure g65: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g66: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g67: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g68: Boyd, Dermot 2014, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, digital photo
Figure g69: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
Figure g70: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil and digital drawing
Figure g71: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g72: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g73: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g74: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g75: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g76: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g77: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g78: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g79: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g80: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g81: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g82: Boyd, Dermot 2013, James Healy and Sons Ltd, Bluebell, Dublin 12, digital photo
Figure g83: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, digital photo
Figure g84: Boyd, Dermot 2017, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, digital photo
Figure g85: Boyd, Dermot 2017, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, digital photo
Figure g86: Boyd, Dermot 2015, Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects 2018, pencil drawing
‘The pavilion is a perfect vehicle for what Kant calls aesthetic judgment, where consciousness of our perception dominates all other forms of interest and intelligence. But he insists out of this apparently purposeless activity we construct our own destiny’ (Evans 1997: 270)

Robin Evans

‘In Eurythmy, we present in the form and movement of the human organism a direct external proof of man’s share in the life of the supersensible world. When people do eurythmy they are linked directly to the supersensible world. Whenever art is formed from a truly artistic conviction it bears witness to the connection of the human being to the supersensible’ (Biesantz and Klingborg 1979: 49)

Rudolf Steiner
If Rudolf Steiner wanted, with the practice of eurythmy, to make music and speech visible and Goethe in his writings, proposes a 'choreography of seeing' (Sharpe 2002: 199) here, I wish to make space visible to you. The chapter is based around three short films. The commentary and testimonies that accompany them, give an insight into my architectural thinking both at a conceptual and experiential level. Each visual and written piece is interchangeable as it is my attempt to capture of my spatial consciousness in one moment of vision. It is at these ignition points that feeling, sensation, intuition and thought transforms into architectural space.
I present my research as a house. This is a real exercise not a metaphorical one for I use the design of The Process House to actualise my research and translate these findings directly into space, so I can see them and analyse them more clearly.

The house is a folly. It is fantasy. I escape reality as the means to better understand it. You too are invited deep within my practice to unravel the eurythmic cage that surrounds me.

This chapter is experimental and could be described as produktionsasthetik or the aesthetics of production using Johann Wolfgang Goethe’s (1749 -1832) terminology, in which we as viewers are together given ‘an active role in the construction of its meaning’. (Sharpe 2002: 197).

The Process House is the intellectual scaffolding that I erect for each project a priori to support my design process. It stands until the completion the building, then it is then taken down, to be assembled again at another time and in another place. It is a eurythmic cage.

Ludwig Wittgenstein states at the end of his Tractatus Logico-Philosophicus published in 1922 that ‘My propositions are elucidatory in this way: he who understands me finally recognises them as senseless, when he has climbed out through them, on them, over them’. (Wittgenstein 2001 6.54 :89 On the contrary my conceptions here on the most part can be embodied and as such their essence as Wittgenstein famously concluded cannot be said but must be at times only shown to you. The process house is what I see in my mind’s eye. It has no imposed physical boundaries, this enables me to test the limits of possibility, my imagination and consciousness.

(1) According to Carl Gustave Jung, the functions of consciousness refer to the different ways in which the conscious mind can apprehend reality; these are (1) Sensation (2) Intuition, (3) Thinking and (4) Feeling. Intuition refers to a deeper perception of inherent possibilities and inner meanings. Intuitive perception ignores the details and focusses instead upon the general context or atmosphere; it perceives (without clear evidence or proof) the direction in which things are moving, the subtle inner relationships and underlying processes involved, or the latent potencies of a situation. Intuition never directly reflects reality but actively, creatively, insightfully and imaginatively adds meaning by reading things into the situation that are not immediately apparent to a purely objective observer. (Jung n.d.)
Today, I want to show you a design for a house, I have called it the PROCESS HOUSE, for in it I want to capture my research so far in this PhD. I also want to make my ideas spatial because my ideas in architecture are always literal and three-dimensional.

The house is in a neighbourhood and in that neighbourhood there are many houses; houses designed by people I know and others I will never meet. But I like all their houses. The Loos live down the road, the Neutras on the brow of the hill and the Wrights on Racine Street. In fact some of you live close-by today, Andrew, Muirne and their family, for instance are close neighbours. You enter the PROCESS HOUSE through a covered portal into a walled garden. The garden is full of images, some in the foreground, some in the background but they surround you everywhere and they are all beautiful. Some planting is larger and some is smaller but they are a constant changing presence in my mind. The house has seven rooms, each with a different shape and volume. You enter into the PROCESS HOUSE through a triangulated porch (1) where you cross into my imagination passing through two frames set at an angle to each other, one brings you into the house, the other can take you out. From the first room you are free to move through every space in the house for there are no internal doors in the PROCESS HOUSE. It is one continuum of thought.

The hall is the Library (2) of the house. It is an orthogonal matrix of shelves and books where knowledge touches every room. The stairs forms a path through this matrix. The Living room (3) is pure eurythmy, a room of classical proportions. It has many views in and out. A fire burns in its hearth and in the living room you can hear the images on the trees rustle outside. Adjoining this room is the Kitchen (4) a space for cooking, eating and drinking. There you can say anything you want and do anything you want. There is a large round wooden table, a glass wall opens on to the garden and you cook at a large marble block. You move upstairs to the Bathroom (5), where there is a deep pool. The roof opens up so you can shower outside or lie in the water looking at the sky but the bathroom is always warm. There is one Bedroom (6), with a huge mattress on the floor and five duvets, one double, three single for each member of the family. They are strewn across this soft floor. There is a large solid window facing east where the morning light leaks in at the edges. The room is always in semi-darkness unless the shutters are open during the day to air out the room. The Study (7) at the top of the house is lined with long oak desk. The view from it is to the distant horizon. The walls of this house are all thick with storage and yes the PROCESS HOUSE is made entirely in brass.

But the PROCESS HOUSE is never empty. There are portraits on the wall, my father, Donald Judd, of inspirational people who cannot be there. But at this moment, Marcelo and Carmen amongst others are dancing in the living room. There is an intense discussion in the kitchen where Richard and Leon are eating at the table. Miriam is breaking bread and Peter is pouring wine. Tara is being charming in the library. The kids are running about everywhere. Yes, you are all invited to the PROCESS House. It is a party and I am really enjoying myself.
In the Critique of Pure Reason (1781), Immanuel Kant states that our mind casts all of our external intuitions in the form of space, and all our internal intuitions (memory and thought) in the form of time. To explore this duality in the intuitive creation of space and time further, I have placed another design project, Kenilworth Park alongside the Process House for dialectical examination.

The two houses were designed in November 2014. They are in constant spatial dialogue and perceptually intertwined in time. Kenilworth Park and the Process House are at both ends of the creative spectrum and although they look radically different, my conceptual intentions are unconsciously informed by the other. Kenilworth Park and the Process House are the same house.

I want to identify spatial categories (1) that give both projects their shared character. It is in the recognition of these archetypes that my own liminality can be re-defined.

This is a still from a short film made at the same time as The Process House text was written. I call it WALK THROUGH (2). The film revealed to me, once observed how I instinctively engage with space, how my eye rhythmically moves in space. I literally dance through it. This encounter could be likened to the eurythmics of Rudolf Steiner. It is my choreography of seeing architecture.

(1) Kant characterized the Categories as being “… concepts of an object in general, by means of which its intuition is regarded as determined with regard to one of the logical functions of judgment.” (Kant 1998:226)

(2) The Film WALK THROUGH Kenilworth Park is available to download from the USB Memory Stick attached to this book.
In November 2014, my wife Miriam and I sold one of three small mews houses I designed with my friend and architect Paul Kelly on Stable Lane in Rathmines in 1999, to buy Kenilworth Park in nearby Harolds Cross in south city Dublin.

In Stable Lane, I had complete control over the eurythmic proportions of the house. They were defined by me and were an extension of me. It had been my eurythmic cage for seventeen years and I had grown very fond of it.

The space in each house is horizontal and expansive. The main living spaces of the house is at first floor (our house is in the middle).

Composed elementally as simple rectilinear boxes or sleeves of concrete. The windows (aluminium), floors (timber), internal walls (plaster and timber stud) and furniture (stainless steel and Iroko) are all carefully slipped into each of these three modernist shells.
We purchased Kenilworth Park for the space it contained for our growing family and not for its aesthetic qualities. It is a radical architectural contrast to Stable Lane.

Miriam (who is also an architect) and I like the measured proportions of the rooms in the house at Kenilworth Park. It contains the space which we could use to make our new home.
On the completion of THE PROCESS HOUSE text, I immediately began to draw this imaginary house in my sketchbook on the plane. It took a particular shape in plan and section. Over the next couple of days I developed the project further in sketch form. It was this parti that became the Process House.

In his writings, Albert Einstein states ‘a new idea comes suddenly and in a rather intuitive way, but intuition is nothing but the outcome of earlier intellectual experience’. (Isaacson 2007). The Process House too took on many of the tropes I use in domestic projects but it addressed directly the formal ideas which had emerged in my previous research.

At Stable Lane, I began to design our home at Kenilworth Park. The unconscious moves I make in the open imagined spatial field of the Process House marry directly with the real ones which I make in the given context of Kenilworth Park.
At the ground floor of The Process House, there is a formal living room, a hall of bookshelves and the kitchen is configured as a banqueting table with adjoining work bench. The breaking through of the living room to the kitchen and the thickening of walls for storage and books are all repeated motifs in Kenilworth Park.
There is an open platform for sleeping and bathing at the first floor in the Process House, the rooms here are all shared and interconnected by the family. In Kenilworth Park, as our children are still young, we all sleep and bathe on the same floor. Although we occupy different rooms, due to close proximity, there is a domestic intimacy that is played out on a daily basis in the house. A tight dog-leg staircase is evident in both projects, proposed in one and existing in the other. The toilets and showers in both houses are tightly planned and utilitarian.
On the second floor of the Process House, there is a study. From its desk, the occupant has panoramic views over the intellectual landscape across a large roof terrace. In Kenilworth Park, there is a guest room, bathroom and a study on this attic floor. There are views to the Dublin mountains beyond and a fireplace is located in the study of each house.
In the film LOOK THROUGH (1) I explore the imagined Process House in the same manner as I visually track through Kenilworth Park in the first film.

Alongside it, I describe what I see in another written testimony entitled ‘Talk Through’. As Le Corbusier states in the Le Modular, ‘Architecture is judged by eyes that see, by the head, that turns, and the legs that walk. Architecture is not a synchronic phenomenon but a successive one, made up of pictures, adding themselves one to the other, following each other in time and space, like music’. (Le Corbusier 1956:72)
Conditioning of Space
SEVEN WAYS OF SEEING

Eurythmy
SEVEN WAYS OF SEEING

Freedom of Movement
Invitation to Light
Abstraction of Use
To unravel the eurythmic cage further, I make final spatial adjustments to the design of the Process House as a way to once again evaluate the hierarchies and prejudices that exist in my creative process and to apply the practice of eurythmy to them.

In this process of reification, as my intellectual space takes concrete form in the PROCESS HOUSE film, critical judgement is inevitably applied to its design. This commentary is voiced at PRS 05 by the review panel. (1)

Subsequently, I make immediate and instinctive responses to what I have designed formally and not to what I was thinking through my eurythmic movement in space.

The angled porch is changed in the new design and the stairs is reconfigured. The houses corners are eroded and the tautness of its brass surfaces is disrupted. The corners of the house become structural and concrete.

(1) Richard Blythe, Tom Holbrook, Leon van Schaik, Matthias Ballestrem, Sue Anne Ware. London 23 November 2016
The change to the double height entrance porch has implications at first floor. The bathroom plan is rationalised and the bath moves to a new location in the front façade.

At second floor, the study is adjusted slightly in plan, the layout is now asymmetrical and easier to use.
To contextualise my thinking and realise it in space, I design the garden of the Process House. I make direct reference to the philosophy of Carl Jung in the abstracted world of my imagination so the garden becomes a Mandala. The Mandala is the spiritual and ritual symbol of Hinduism and Buddhism representing the universe. Analogically this garden represents my journey in the PhD and the intellectual world which surrounds it (1).

For Jung, the Mandala is the representation of the self or centre, a psychological expression of the totality of the self. ‘My mandalas were cryptograms concerning the state of self which were presented to me anew each day. In them I saw the self – that is, my whole being – actively at work. To be sure, at first I could only dimly understand them; but they seemed to me highly significant, and I guarded them like precious pearls.

I had the distinct feeling that they were something central, and in time I acquired through them a living conception of the self. The self, I thought, was like the monad which I am, and which is my world. The mandala represents this monad, and corresponds to the microcosmic nature of the psyche’ (Jung 1989 196-197)

I begin the conceptual project of The Process House in my imagination with a text and I complete it now by making the house’s context. For inspiration, I return to the idealised garden I lay on as a child, the Persian carpet in Belfast. With its structural patterns, I landscape the garden. It is planted with images and memories and the limits of it’s imagined boundaries are set by Leonardo da Vinci’s squared circle.

(1) Soumitri Varadarajan of RMIT gave a wonderful and eloquent description of how undertaking a PhD was like walking in a garden at Nick Durant’s PRS 04 on 30.04.17.
The basic form of most mandalas is a square with four gates containing a circle with a centre point, remarkably like Da Vinci's design for his Vitruvian Man. Leonardo of course like the Eastern monks places man at the centre of these two geometries but at a larger scale. My walled garden meets with these two symbolic criteria. For Jung, "the 'squaring of the circle' is one of the many archetypal motifs which form the basic patterns of our dreams and fantasies. But it is distinguished by the fact that it is one of the most important of them from the functional point of view. Indeed, it could even be called the archetype of wholeness." (Jung 1991 para 715: 388)
This compression of my thinking and practice into instinctive action and intuitive reaction in space is how I enter the supersensible world of Rudolf Steiner and apply a higher level of consciousness or the super-added thought which Kant describes in Critique of Judgment of 1790. (Kant 1987)

If the Process House is a conceptual and perceptual experiment, it interesting to note how quickly its architectural expression makes use of the formal modernist language that I utilize in most of my projects. Here in this imaginary ‘house’ too, primordial space is explored, the seven ways of seeing are made explicit and eurythmy is applied. The house is a concrete or real abstraction of my creative process.

But as this house is only a representation of my process, I was liberated in this supersensible world to expose my underlying perceptual structures or hidden spatial rules. I purposefully make adjustments to that metaphysical language, invert it, exaggerate it so as to accentuate them and move beyond the limits of my own conceptual integrity. In this context, I refer you to my final film, SEE THROUGH.(1)

The Process House is an intellectual project and in mind it can never be completed, it is can only remain a metaphysical vision in space and time but it is out of this seemingly purposeless activity I construct my own architectural destiny.

(1) The film SEE THROUGH Process House Redux is available to download from the USB Memory Stick attached to this book.
In this chapter, I enter metaphysical space, to create a vision for a house, a folly or a possible reality where I can test the limits set by my eurythmic cage. Through three films, I move eurythmically closer and closer to a new reality for my architecture with spaces built and conceived within the intellectual context set by this doctoral research. This is an experimental space created for projective design research in which I adopt other tools such as creative writing as the means to change the trajectory of my design process.
The new study of architecture is a discovery of knowledge about existence. As design teaching, it is the song of songs of harmony, as social teaching it is a strategy of balance. This study of building is not a study of style, it is not a constructivist system, nor is it the study of technological miracles. It clarifies equally the concerns of the physical and psychological, the material and the economic. It explores, demarcates and orders the force fields of the individual, the family and society. Finally all architectural design is subject to fate in the form of the landscape: as designers we fulfill the destiny of the landscape. (Fiedler and Feierabend 1999: 564)

Hannes Meyer

‘Today, there are still lines of force
Traversing all space but one can no longer see them
Might they perhaps be heard?
It is only the mental flights suggested by melodies
That can give us some idea or intuition of trajectories
in space-time’. (Valery 1977: 88)

Paul Valery

CHAPTER 07
CONTEXTUS

This Chapter is dedicated to a passer-by

cetext to weave LATIN
us together LATIN

WEAVING TOGETHER
I end this book where I always begin as an architect, in context; in the physical and cultural environment which surrounds me. In The Process House, I was seeing from within my imagination in order to unravel the infinity of thought and capture moments of inception. In this chapter, I carefully record what I look at, and look for, when I visit a particular site. There is always a careful *weaving together* of context which determines the design of each project.
In order to demonstrate the underlying principle of context I describe the design of a house on Mount Prospect Avenue.
These are a series of images, the client attached to the first email at our request which describe the kind of architecture that they like. Pinterest, as for Rock Abbey is the internet source of choice.

A long glazed undercroft, the white modernist villa, a traditional Georgian Dublin house and a futuristic wine cellar are all included, joined rather reassuringly by our project at Burdett Avenue, directly above.
Mount Prospect Avenue is located in the north city suburb of Clontarf in Dublin. The site is adjacent to the public amenity of St Anne’s Park and within walking distance of Bull Island and the shoreline of Dublin Bay.

The garden sets the immediate contextual parameters of this project. It is the garden which forms the house. The eurythmic cage is turned inside out. It is drawn directly out of the context at Mount Prospect Avenue. The mature trees and dense shrubbery of the garden create a series of definable spaces or enclosures of varying sizes into which the new house is stitched. The garden in turn is surrounded by other gardens, giving the house a wonderful sense of seclusion in this inner city suburb.
The present house is not seen from the road.

The trees at the front of the site block the expansive views of St. Anne’s Park at ground floor, but at first floor level, the horizon opens up. We wanted to engage with this view in the design of the new house.
The plot is divided into four distinct enclosures, the front garden, the existing house, the lawn and a wooded plot at the end of the garden.

It is the sense of enclosure which I play up in this design. I am always looking for the contextual limits which will hold a project in place.
The original single storey 1950s house is demolished, a new house of five bedrooms is proposed. Alongside the standard residential accommodation, there is a playroom, wine cellar and gym. (1) We balance the client’s specific needs carefully within the spatial limits set by the site.

(1) I refer you back to the client’s brief at the beginning of the chapter.

We exploit the change in atmosphere between the open lawn and the wooded vegetable garden at the end of the long garden.
In the broader context of the neighbourhood, there are a series of clusters of 1930s houses which are sprinkled amongst the streetscape of Clontarf. These white modernist villas provide a marked and welcomed contrast to the more conservative Edwardian character of most of the suburban houses which are located in this area.

It is a residential style, which I like, with reference to the client's chosen images and the need we perceived to justify and situate a larger two-storey house on the site between two single storey bungalows, I take direct influences from these houses in our design.
In my first drawings, I begin to weave together this physical and cultural context. The project begins to emerge out of this contextual eurythmy. I attempt, as Hannes Meyer so eloquently puts it in 1929, to ‘fulfill the destiny’ (Fiedler and Feierabend 1999: 564) of this particular landscape in north city Dublin.

The main living spaces are positioned at ground floor in direct relationship to the garden for view, aspect and access. The dining room is placed at the front and formal side of the house.

The exact location of the neighbouring properties are defined by line and the crossing of lines, the new house sits within this matrix of spatial vectors drawn out from the existing context.

In plan, the front and back of the neighbouring houses set the depth of the new house. In section, our house is two stories with a sunken ground floor level. Its height is equal to the ridge line of the neighbouring bungalows.
The eurythmic cage is in evidence too on the page, a proportioned three-dimensional matrix, where order and hierarchy is applied to the layout and size of rooms in the house. Servant and served spaces are defined and structural intention is rationalised through the continuous rhythmic movement of my thinking and the drawing of more definitive lines.

Structure and shape is now applied to the house. Three or four divisional zones are developed across the plan to allow the garden flow through the house. The linear ancillary spaces provide storage thresholds or fireplaces within the plan. The hierarchy within these drawn matrices gives a rhythmical order to the plan.

Dimension is added at first floor via overlay, the three-dimensional cage is re-enforced once again through measurement. This eurythmy is hidden from view and is present only on the drawing board as spaces begin to align, consolidate through the constant adjustment of each part of the house.

In reality, these lines are being continually erased, eventually disappearing in order to make up the holistic spatial whole of building and site. On first floor, the master bedroom and guest bedroom suites are located at the rear of the house, overlooking the garden. The three children’s rooms are located at the front of the house, overlooking the playing fields of St Anne’s Park.
The new site plan is overlaid on the plan of the existing house so as to articulate clearly the strong contextual relationship the new house has to the adjacent houses and their residents’ enjoyment of their long gardens. By holding the volume of the new larger house within limits determined by its direct neighbours, the physical presence of the new and larger house is greatly reduced.

In section, the house is lowered into the ground by 600mm to achieve a direct spatial relationship with the height of the two neighbouring ridge-lines. This contextual move also facilitates more generous floor to ceiling heights in the main living rooms of the house.
A garden pavilion is placed at the end of the site in order to extract excess accommodation from the main volume of the house. It also avoids the need for the construction of a large subterranean basement in the main house.

The single storey structure is built on the line of the existing hedge which transverses the garden. It's location maintains the secluded atmosphere of the wooded copse behind it.

The pavilion’s design is defined by the structural ordering of the main house. It contains various recreational rooms requested by the client, a playroom, gym, small shower room, office and store. Views from these rooms address both gardens.

In elevation and section, the pavilion’s parapet line is set by the height of the existing hedges and trees that surround the garden.

On the first floor of the house, views open up over and beyond this planted and built sylvan enclosure.
In elevation, the house requires more compositional input. I use the language of the nearby 1930s modernist houses, referencing the brick plinth and the floating white form of the semi-detached villa photographed on the Coast Road. (P440)

The functional and environmental needs of the house drive its design. There is a search for spatial clarity, so the house can be read as volume or a continuous surface and not just as an assemblage of different surfaces.

A long continuous ribbon window is placed in the front elevation at first floor to facilitate the panorama of St Anne’s Park.
The rendered white first floor is volumetric and can be read as one cut, eroded and shaped form. It perceptually floats on the brick walls of the plinth, holding the bedrooms of the house.

As the design develops, the front and rear elevations are given further definition. A topographical brick plinth is built. The ground floor rises and falls, thickens, folds and turns as it accommodates the main living rooms for the Higgins family at ground floor level.
The basement contains the wine cellar, a plant room and storage space. A small void brings some natural light into the lower hallway.

The ground floor plan takes its final shape. The dining room is cut into the site, 750mm below ground level, so the table and outside terrace are set at the same datum. Alongside the dining room is the TV Room. The living room opens on to the south-west facing terrace at the rear of the house. A generous hall leads down to the kitchen in the return; its floor is set at grade, accessible through one of the three brick linear zones, which run through the plan from the front to the rear. The corners of the house are now inverted, a formal construct, proposed for the design of The Process House Redux and now incorporated into the design of Mount Prospect Avenue.
The first floor has its five bedrooms, one main bathroom and three en-suites. The upper hall is roof lit with a void that opens down into the main hall below. Views open up from each bedroom. Cupboards, desks and dressing rooms fill the thickness of the external walls as they step back and forward across the plan.

Three brick chimneys penetrate the first floor's white volume. A steel clad box with integrated roof lights is placed centrally on plan to consolidate the disparate placement of openings. The stairs continues up to the roof to provide access.
The span of timber beams is determined at first floor and for the roof structure. The walls are configured and adjusted between ground and first floor for bearing purposes. Eurythmic order is applied to this project which economises and rationalises its structure.

Heights in the section are tested both against the context and the internal proportional geometries of the house. Levels of floors, cills and ceilings are given a consistency of dimension while also allowing for some variation from room to room in the house. Eye line is important here, enabling the occupant to engage with the garden and views beyond the house at all times.
New gates are erected at the entrance to the new forecourt. It contains three car park spaces and a stepped brick terrace that drops down 300mm to the main entrance of the house. This is an extension of the brick plinth. The trees along the front wall of the site remain in place. A new tree is planted in front of the dining room window to give a focus from the dining room and in turn to provide more visual shielding from the road. There is a spatial flow through the house to the new lawn that is laid in the back garden. The lawn is large enough to accommodate a tennis court and is closed at the eastern end by the brick pavilion.

At the end of this design charette, I prepared a drawing for the client to show in the most direct way possible my intention for the space that they would enjoy in their new house.
In it, they are sitting in their living room, a rug beneath their feet on a patterned brick floor, looking down their secluded garden, over the terrace, towards a brick pavilion.

A thickened wall of brick forms the left side of the room, which you pass through to gain access to the hall and kitchen. On the right hand side of the room, there is a clerestory window and a low full-length storage unit. The space is built in brick and its ceiling finished in white plaster. Two large sliding glazed screens at the end of the room flood the space with light and give an interrupted view down the garden.

Here again, the resemblance of the living room at Mount Prospect Avenue to the room in Maryville Park is uncanny. You can see once again in this project that I continue to weave together my eurythmic cage with every context.
Mount Prospect Avenue is a house where there is a strong integration with context. It is less autonomous in form than Allardstown, the eurythmic cage here is unravelled and stretched to meet adjacent points in space and then it is weaved together as an orthogonal matrix. Design decisions are made directly in response to the site. This is a two dimensional exploration of three dimensional space and in this context, my perspective is ultimately defined by my primordial understanding of space.
Figure i1: Delaney, Miriam 2017, Boyd Cody Architects, Mount Prospect Avenue, Dublin 3, 2017, digital photo
Figure i2: Boyd Cody Architects 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital scan of email with pencil sketches
Figure i3: Boyd Cody Architects 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, email, digital download
Figure i4: Boyd Cody Architects 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital download
Figure i5: Boyd Cody Architects 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital download
Figure i6: Boyd Cody Architects 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital download
Figure i7: Archinfo 2017, Ordnance Survey of Ireland, Mount Prospect Avenue Dublin 3, Ordnance Survey Map, <https://www.osi.ie/products/professional-mapping/historical-mapping/> Viewed 21 February 2018, digital download
Figure i8: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i9: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i10: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i11: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i12a: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i12b: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i13: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i14: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
Figure i15: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, Sketch Designs Kenilworth Park, pencil, pen on paper, digital scan
Figure i16: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i17: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil, pen on paper, digital scan
Figure i18: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i19: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i20: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i21: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i22: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i23: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i24: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i25: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i26: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i27: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i28: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i29: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i30: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i31: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i32: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i33: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil over digital drawing, digital scan
Figure i34: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i35: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, pencil on paper, digital scan
Figure i36: Boyd, W Brian 1963, Maryville Park, Belfast, Co Antrim, W Brian Boyd Architect 1963, slide negative
Figure i37: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin 3, Boyd Cody Architects 2017, digital photo
‘Thoughts without content are empty, intuitions without concepts are blind... The understanding is not capable of intuiting anything and the senses are not capable of thinking anything. Only from their unification can cognition arise’. (Kant 1998:193-94)

Immanuel Kant

‘The words of language, as they are written and spoken, do not seem to play any role in my mechanisms of thought. The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be voluntarily reproduced or combined... the above mentioned elements are in my case of visual and some of muscular type’. (Gardener 1993: 191)

Albert Einstein
It is Carl Jung who seeks out a collective unconsciousness in his extensive writings and Immanuel Kant who, in his lifetime of critical discourse, sought to define a universal consciousness for all mankind. I draw heavily on these two thinkers to describe and explain my inner and outer spatial consciousness. This is essentially the study of its genesis and intuitive expression as an eurythmic cage. My analytical thinking is explained in the text and my synthetic thoughts are shown as images and drawings all in an concerted effort to define clearly a shared architectural idea.
I did not come to these studies with a hypothesis I wished to prove. This is a journey of discovery, a deductive process that enabled me to reflect upon and then project an understanding of "my" practice and "our" practice (in the case of Boyd Cody Architects) for myself and others.

The PhD follows closely the chronological or intellectual order I followed during my studies at RMIT. As framework of the PhD programme is established around the study of 'design practice' (that is the verb not the noun), it is my design process which I was constantly steered towards and as such I choose here to be true to that trajectory. I present my findings as I discovered them over the six practice research symposia (PRS) which I undertook over a four year period of study.

This research also at times follows closely the project work we were undertaking in Boyd Cody Architects. It is written between the years 2014-18, Rock Abbey in Chapter 05 and Mount Prospect Avenue in Chapter 07 are examples of two case studies. Being close to these projects, places and people, focused my mind and helped me draw out an understanding of what was architecturally vital and useful research from the immediacy of working designs.

The thesis is called *Unravelling the Eurythmic Cage*. It is the most apt title I could choose to explain a study of my design process. For in my daily design practice, I am constantly weaving projects together to make real architectural space but here on these pages and with this PhD I had the opportunity to unravel this process for the first time and reveal the hidden intelligible and sensible construct which I have built for myself, the eurythmic cage.

On reflection, it is the physical resonance of the Eurythmic Cage that informs all the designs in this book. It is a metaphysical space, a space of consciousness (1). It is instinctive and intuitive space. The philosophical writing in this thesis is an attempt to site this spatial construct in a context of thought in order to ground my architectural being.

I have discovered now there is constant movement in thought and through space, so time cannot be disconnected from the conception and experience of architecture. It is the fourth dimension. I have realized through these studies that architecture is too often presented to the observer as a static object. There is a reassurance in the creation of a timeless artifact but architecture and the world around it never stands still. It is, as with the human mind, "in perceptual flux and movement." (Hume B1.4.6). I now understand from these studies that I move through architecture and my design process eurythmically.

The pedagogical structure of the PhD and the academic community which surrounds it I found to be most supportive to the development of my thesis. It was at times the passing remark by colleague which burned in my consciousness, just as much as more intensive exchanges of opinion and conversation I had with my supervisors on the programme.

Peter Cody as always remains my sounding board. We think differently but we hold the same spatial values. Peter would most probably declare that the Eurythmic Cage is a Practical Fiction (1) and I would argue it is a Concrete Abstraction. Our day to day architectural practice continues together outside this intellectual exchange.

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(1) 'a process in which information about multiple individual modalities of sensation and perception is combined into a unified multidimensional representation of the state of the system and its environment, and integrated with information about memories and the needs of the organism, generating emotional reactions and programmes of behaviour to adjust the organism to its environment...’ (Thatcher and John, 1977: 294)

(1) Title of Peter Cody's thesis of 2017
When I attended other PhD candidates’ Practice Research Symposia (PRS) as part of the RMIT process. It revealed to me how much I take for granted the way I was taught and the design methodology which was instilled into me at that time in Ireland. In RMIT’s international academic forum, differences in architectural education and value systems are made more explicit. If my intellectual and sensual aspirations are universal, my spatial ones when contextualised are very specific. All my Irish colleagues I noted, use precedent, we were taught that way. It is this typological understanding of architecture which continues to form a strong basis for our work.

All ambitious architects judge themselves against the previous generation and seek to do things better or maybe just differently from them. In college, I quickly railed against the post-modernist language which defined the avant-garde of the late 1980s and which was promoted heavily by the more progressive and best members of the teaching staff at the Dublin Institute of Technology (DIT). (1) I sought solace in the uncontaminated modernism of Spain and Portugal. It was this purist or minimalist approach which I essentially liked at a perceptual level and it was a progressive spatial counterpoint, for at that time in my architectural career I had no nostalgia for the distant past.

The Irish generation that followed me and those who have also recently undertaken their doctoral studies at RMIT, TAKA Architects, Steve Larkin, Clancy Moore Architects have also chosen to shift their architectural approach, this time back into a more playful and expressive formal realm for they too follow the ongoing creative zeitgeist.

If there is a means to define a shared consciousness in Irish Architecture, it is I believe through the use of context. In the best Irish work there is a sensitive and appropriate spatial reading of the physical context and the architecture whatever style is forged out of a specificity of place wherever it is located on the globe.

This is a value, I use and promote as an architect and teacher. I conclude my research in this book with the practical demonstration of this contextual approach to architecture in real space and time in Chapter 07.

In this PhD, I go deeper, to plumb my own depths in order to understand how I instinctually shape space and why I remain so comfortable with the modernist language I use in architectural design.

With my study of primordial space, I did not seek out repressed unconscious activity of the sort Freud or Jung uncovered in their studies but the mental activity or unremembered experiences that lie beneath the realm of my own spatial consciousness. This is a primordial grounding we all share, however particular to the individual. It is a process of architectural understanding which cannot be learned, but can only be unlearned. By recognizing this phenomenon we can move to a higher sensibility and awareness of space.

The eurythmic cage evolved out my desire to articulate how I actually see space and engage with it in my imagination. If the eurythmic cage is the metaphysical vision through which I explore my spatial consciousness then the Process House is the closest realization of this abstract construct. Through my designs for the Process House and the ever-evolving perceptual freedom of its introspective and immersive space, I can begin to shift my design of space beyond the immediate sensory realm to a more intelligible reality.

Philosophical thinking on any subject seeks to and opens up an ever-expanding multiplicity of possibilities, interpretations and questions, while design, on the other hand by its very nature seeks, to provide purposeful answers to specific problems.

(1) All members of Group 91, Michael McGarry of McGarry NeEanagh Architects; Niall McCullough and Valerie Mulvin of McCullough Mulvin Architects.
So architecture in my opinion remains the perfect vehicle to use to help resolve perceptual and conceptual problems in the world. In this study, I hope I have gone some way to further this investigation or maybe in this age of relativist thinking, I have just added more fuel to the inextinguishable fires of doubt.

Hermann von Helmholtz (1821-94) suggests ‘that perceptions are conclusions of unconscious inductive inferences’, he thinks of perception as given by learning and as empirical. It is not passive acceptance of stimulus patterns, but rather projection (though not merely geometrical projection) from internally organized knowledge of objects and processes'. (Gregory1987: 608-609)

Through this study, I too realise that my perceptions in architecture are primarily based on my senses and my bodily interaction with the space. However, I do not always need to occupy the building, for I can look at it and see its quality through my imagination. It is my projected being that occupies the space first, my body follows and provides the final qualitative test.

The body is an exacting spatial instrument. It is also free from potential doubts that formulate in the mind. The body's demands are attuned to the capriciousness of nature, as it always remains robust and primal in its quest for sensual pleasure or on rare occasions, sheer survival.

However, a purely empirical stance in architecture is too limiting for it too readily denies the power of the individual imagination and how I naturally go beyond a direct interaction with a building or space and enter into an imagined world of projective creativity. How does it work? How could it be better? How is it made? What would I do better?

Martin Heidegger explores this process of projective creativity in The Origin of the Work of Art as the means of ‘going all the way down’, or plumbing the depths of being by reaching a ‘primordial level of engaged existence’. This is something that he states mere artistic representations or theoretical images cannot attain as they presuppose a level of existence they cannot explain. (Thomson 2015)

I have a strong social and ethical interest in architecture but I have not brought this thinking into this research. This study is an examination of a particular aspect of my design practice that has come to the fore through my research into the unlearned nature of design.

At Boyd Cody Architects, we create singular houses for singular people, who seek us to address directly their desires for a home in the projects that we design for them. We often share the same physiological ambitions but they do not ever pose a philosophical question nor do we ask this of them. Our clients simply wish us to answer the human need for comfort and shelter with informed aesthetic judgment. These limits in practice for me explain the introspective nature of this research.

I am also a teacher of architecture and have been for over twenty years now. I use philosophical thinking as part of my critical theory classes and refer to it in studio. At times I do struggle to find its direct relevance to architectural design however, so in this study I have focused on philosophy that I have found most useful over the years and those thinkers that directly support my thesis and provide the intellectual scaffolding upon which I stand and view the world.

This is a visual rendering of my intellectual intuition and the promotion of a higher spatial sensibility in architectural design achieved through the art of eurythmy. These are innate attributes that we can all share as architects. They are transcendent and universal as they can be applied across architectural design at all scales.
In practice, I think fast and I draw myself rapidly out of problems. I am in constant creative movement. My most profound engagement with architecture is often made in a moment (of vision) and these instinctual spatial reactions have occurred throughout my career.

Aldo van Eyck who wrote in 1959 at the Otterlo Meeting of Team 10 that ‘Man is always and everywhere essentially the same. He has the same mental equipment though he uses it differently according to his culture or social background, according to the particular life pattern of which he happens to be a part. Modern architects have been harping continually on what is different in our time to such an extent that they have lost touch with what is always essentially the same’. (Newman 1961:27).

I distill my research in this study in order to reinforce unlearned truths about architecture so they can be easily identified, shared and implemented by other architects. It is this trajectory of research which I wish to develop further in this subjective study.

I do not simply occupy or think about architecture, I create it, so architecture is an extension of my consciousness or as Gaston Bachelard puts it, drawing heavily on the work of Carl Gustave Jung, of my psyche. I am emotionally involved in architecture. (Bachelard 1994 Introduction xviii)

There is an appreciation in this study of the meditative centering of space and my heightened consciousness of that apperception. In our work, there is continuing desire to make architectural space and not to create architectural form. The failing of most Post-Modernist architecture, in my opinion, is the obsession with form-making at the expense of usable and aesthetically pleasing space. This observation is based on an understanding of how you can or wish to live. Our houses are to be inhabited, enjoyed and not analyzed. We wish their rooms to become an inherent part of our clients’ sensory realm.

This book contains seven chapters which stand in opposition to each other in a continuing visual dialectic, There is my worldview in Concrete Abstractions and my subconscious vision in Primordial Space; the deductive study of our work in Seven Ways of Seeing, against the inductive study of The Eurythmic Cage. An inward looking perspective in The Process House against the design of Mount Prospect Avenue in Contextus where it is the garden that shapes the internal space of the house. I constantly unravel and weave together this subjective understanding of space.

The perceptual relationship between the two stereoscopic images chosen for each double page spread should be explicit and I hope instantly recognisable to the eye. The intellectual comparison may at times be less obvious until explained in the text below each image but as Gaston Bachelard states in the Poetics of Space, ‘Man lives by images. Like all important verbs, ’to emerge from’ would demand considerable research, in the course of which, besides concrete examples, one would collect the hardly perceptible movements of certain abstractions’. (Bachelard 1994: 10)

This visual dialectic is the means by which I set my thesis out, assess, qualify and synthesize it, so critical judgment can be made. It is also in this visual reciprocity, that an opportunity is given to you as reader (or see-r) to make your own aesthetic synthesis and create a third space in your imagination. This is where intellectual stereoscopy is realised and new concrete abstractions are conceived.

Your thinking is as important to me as the thoughts I formulate or write about below the image on each page. For if you are looking closely, at both images together, it is what you understand and see that I am really interested in.
To give my design practice a context, in the first Chapter, I present our domestic work, the philosophy which informs it and the community of practice that surrounds it. I entitled this visual text *Concrete Abstractions*, as architecture I would argue is a real, or to use the philosophical and architectonic term, concrete abstraction.

Architecture is at first inductive, as it quickly moves from the particular to the general in conception, building on a lifetime of spatial experience and interaction. I use eidetic memories to inform my actions and build my own intellectual intuition.

Architecture also begins with an abstracted idea or intention taken from a given situation. This deductive idea is exposed to a continual process of reification until it becomes real and concrete in the construction of a new reality.

The idea is at first imagined, drawn on a page and then built in bricks and mortar (or concrete). Architecture exists in this dialectic. It is a real abstraction, which is entered into with the mind and passed through with the body.

This is the epistemology of our design process in the domestic realm. It is from this intuitive basis that I enter quickly into technique, hone the skills that I have evolved so as to work more instinctually and productively, unencumbered by broader metaphysical questions.

Concrete Abstraction is the foundation upon which I build my thesis. The Eurythmic Cage can be described as a concrete abstraction, for it too is a conceived reality, a structure and a corpus of intelligible forms. The chapter (1) is introductory, the influences shown are directly translatable and therefore are highly instructive to me as an architect.

(1) Following the methodology set out by Leon van Schaik, this chapter can be seen or read as the survey of my enchainments (van Schaik and Johnson 2011: 28).
In Primordial Space, I write at length about our family living room in Maryville Park from the experience and wonderment of a child. This was my education in architecture at a very young age. It was a strong and highly formative one. It was in this a room amongst others designed by my father that I spent the first eleven years of my childhood. This is a long time in one’s spatial history and when you think of the scale with which I was engaged with it, as a four year old for instance, it is wholly immersive.

In this research, I was confronted with the immediacy of this room’s form and its architectural language once again and I attempted to explore its strong psychological presence in a phenomenological way, drawing heavily on Gaston Bachelard’s writings and in turn through Carl Gustave Jung’s writings on intuition and instinct. As part of my research, I made images and drawings that I have lived, to explain this primordial spatial grounding.

I believe now that this actual spatial experience, which is highly particular to me, was subconsciously absorbed and as such its inherent spatial influence continuously comes to the surface as my instinctive response in architecture. I cannot deny its direct influence on me and how seemingly conscious and aware I was of this space at that age for I can still see and touch it, today.

Jacques Derrida states in his text On Seeing and Touching that it is the eyes that are the part of the body that does not age, and one can find one’s childhood in the look of the eyes. Hegel, he states, says that the eyes are the outer manifestation of the soul. Derrida translates this thought as follows, ‘one’s act of looking has no age. It is the eyes and hands that are the sites of recognition’ (Derrida 2002). The room at Maryville Park as my primordial space transcends space and time.
Seven Ways of Seeing is built upon a suggestion to look again at our work in order to define the tectonics of the spatial archetypes set out in the previous two chapters. (van den Burghe 2014)

In the act of looking again I sought to reveal what Carl Gustave Jung defined as the shared imagery of my unconscious or the archetype. (Jung 1991) My architectural archetypes can be seen through the making of space where they become both the formal and methodological basis of my work.

I identified seven ways of seeing and the poetic power of John O'Donohue’s parable set for me an appropriate and meaningful limit to this research. Seven is also the number of lamps chosen by John Ruskin to illuminate his treatise on architecture, and of course there are seven chapters or ways of seeing described in this book.

Most importantly, the art of eurythmy or my sensual or physiological desire for a well-considered three-dimensional proportionality in architectural space, surfaced here for the first time in this chapter.

There is no hierarchy applied here in the seven ways of seeing that I describe, but the importance of each is paramount to explain my formal approach to design. In each case the work drove the adoption of a particular idea or archetype.

Eurythmy offered two things for my research, a principle or practice in architecture that could be described as primordial, used by Vitruvius in 1BC (Vitruvius 1960) or defined by Hans van der Laan through the megalithic ruins of Stone Henge in the south of England. (van der Laan, 1983) It is also a value or idea that can be applied across the discipline of architecture, which is not defined by either style or form.

Some of the drawings that I chose to make as part of this spatial analysis are maybe too prescribed to our work or too familiar a trope of the modernist aesthetic. The ‘shadow gap I used to illustrate the abstraction of use would be one example for instance. However, it is architectural intention that I communicate clearly here and how my spatial reasoning transforms itself directly into built form. The drawing of the Living Room in Carrick Terrace as a eurythmic cage was fundamental to this understanding as here this spatial construct was drawn for the first time.

Seven Ways of Seeing, I discovered also, could be used to define the architectural approach used by my father in the primordial space at Maryville Park. There is an obvious continuity not only in its architectural language but also in my instinctive act of choosing it and indeed unconsciously seeking to design with the same language. Again, this is a spatial transcendence that I could not have predicted at the beginning of my studies.
The Eurythmic Cage can be visually read or seen in many ways. What is critical to me is that it is spatially tangible. It sets my design limits, I embrace those limits and I am comfortable within them. I work with them and use them in practice. If the room in Maryville Park is the self-portrait of my instinct then the Process House could be described in perceptual terms as the spatial expression of my own intuition. Both spaces could be described as eurythmic cages.

I further define Eurythmy through the writings of Vitruvius, Gottfried Semper and Hans van der Laan. These are some of the very few architects who have written on the subject and realised their theories in built form. I seek also to define eurythmy in my own abstracted terms in a market in Zurich, but it is in the making of the house at Allardstown, which the full eurythmic process is clearly set out.

The eurythmic cage in its abstracted form is orthogonal and it adapts itself to the site and situation. The cage is in constant flux until it becomes eventually concrete and real as a building. It is unseen in reality but it is definitely there. It is what I always draw, its bars are my drawn lines.

The cage contains multiple spaces, internal and external rooms that are all designed in rhythmic harmony to each other. This is achieved through constant adjustment until ultimately I can see that the cage instinctively looks right to me.

Unlike van der Laan, it is sized space that is my building block in each project and not form. I design a house’s space first and then the enclosure that surrounds it. In turn, I work with this enclosure as a continuous plastic surface of solid and void and it is carefully worked to achieve spatial balance.

At times the cage must unravel to meet contingent needs but this adjustment is carefully weaved back into the whole composition so it becomes an integral part as Richard Blythe explained, in his view ‘the eurythmic cage is not a closed project, it is open. It surrounds a continuum of actual work. It is a mercurial condition. It is how you materialize space’. (Blythe 2017).

I unravel intellectually this cognitive construct, in order to come closer to a better understanding of my architectural being, to delineate the eurythmy as a physical and metaphysical cage that I work within as an architect.
This is an important chapter because it describes my approach to a real and current design project in the office. The conception and realisation of Rock Abbey falls within the same time frame as these doctoral studies. *Just Think Brass* is a deliberate counterpoint to the chapter on the Eurythmy Cage and the application of theoretical research, a desire maybe as Marcelo Stamm puts it, in the language of the Spanish toreador “to get closer to the bull” and the reality of practice. (Blythe 2015)

In many ways the design of this house is a wonderful indulgence for the client and architect alike, its spatial scope is limited, being a domestic refurbishment with a twenty-seven square metre kitchen addition but the budget and ambition for the project are generous.

My visual narrative revolves around the formation of a material concept through detail design, in this case the use of brass and how this copper and zinc alloy is carefully utilised to articulate my "intentions regarding space". (Hendrickx 2015)

Just Think Brass becomes a battle cry, a simple statement and the means of reinforcing the concept of the project with all the parties involved. It is a direct but amusing way to answer every question asked about the project or the means by which to offer a solution for each design decision sought. “Just think brass!”.

Leon van Schaik (van Schaik 2015) perceptively noted that it is in Rock Abbey that the eurythmic cage becomes explicit. The cage is articulated for the first time, in real space, most obviously as the orthogonal matrix of lines or brass bars in the kitchen for instance, or in the use of brass box frames in the bathrooms. It is everywhere in this project, rhythmically this material holds the whole project together. This is not a conscious decision on my behalf but reinforces the notion that there is a higher intellectual intuition always at play in design.
Claude Levi Strauss' (1908-2009) structuralist hypothesis is that an applied process of analytic or synthetic thinking can create its own intellectual context. So for this research, I have conceived in my mind a hypothetical space that consolidates my design thinking. This is the Process House.

The Process House is a live tool for spatial research not contaminated or influenced by the contingency of real life and circumstance. It is both an intelligible and sensible space which sits within a theoretical context and is in constant dialogue with it. The context I use is my doctoral studies at RMIT both as a living and learning environment. The house’s design mirrors closely the trajectory of my academic experience up to PRS 06.

As I mostly design houses it seems only appropriate to represent my spatial consciousness as a house. The Process House is actualised research. It is a percept as I look through it at it and a concept when I see through it. It’s space changes, as my ideas change. I evolve the house through time and my design process, as I occupy it and the intellectual world that surrounds it.

The Process House is a folly which I move through eurythmically to understand my intuition. The two films I made of it show how I perceive then achieve, as Johan Wolfgang van Goethe (1749-1832) sought, a choreography of seeing. In the 1795 Baukunst he emphasised that architecture is not primarily for the eyes but for all senses involved in body motions, comparing the pleasant sensation one may have dancing to a rhythm with the feeling one should experience entering a well built house, even with one’s eyes closed’ (Sharpe 2002: 197)
The Process House can also be read here in the context of my studies as a hermeneutical house or the research tool by which I seek to interpret a specific text spatially. With it, I am pursuing an artistic method of research rather than scientific one to test the limits of my creative process. I adopt a practical philosophy using Hans Georg Gadamer's (1900-2002) thinking to square the hermeneutic circle through a foregrounding of my spatial presumptions.

With the Process House or in it, as Gadamer states in Truth and Method, we are 'not [to] transpose ourselves into the authors mind but instead we try to transpose ourselves into the perspective within which he has formed his views'. (Gadamer 2004: 292) The Process House is not formally realised but it is in the anticipatory movement of thought through its seven rooms (for seeing) that there is a heightened understanding of the space it contains. The films specifically show more clearly my eurythmic perception of space.

I also make a distinction between a proposition and a conception. Philosophy for Gilles Deleuze is a conceptual discipline so should provide solutions and not simply pose questions in the world. With the Process House I am making a design conception through the application my eurythmic research. It is a metaphysical space where there is movement of thought. It is an experiential event, a conception in a field of coherence. The Process House encompasses my thinking, doubting and being in its artistic realisation allowing you to see space in a transformative way, through my eyes and not just through your own. (Deleuze and Guattari 1994). It is a metaphysical vision.
I always encounter or set a context for my work, an imagined one, an abstracted one, or a real one. I end the book in Chapter Seven, where I always begin with context and my careful reading of reality in a given site or situation. In my design process I continually put a harmonic order in place, I build a eurythmic cage into or out of the spatial context that is given to me. I fulfill the potential of a site for I hold its future only for one moment in space and time. If the Process House is seeing space within my imagination, my approach at Mount Prospect Avenue sets out again what I am really looking at as an architect.

If I plant a conceptual garden out of my thinking in the Process House, it is with Mount Prospect Avenue that I make a house from a garden and the physical and cultural context that surrounds this place. In chapter six, I unravel the eurythmic cage, in chapter seven, I weave it all together again with imagined lines, projected vectors and points in space that surround me. I build a spatial matrix.

I observe once again that I essentially end up unconsciously in same place, standing in my primordial space and eurythmic cage.
To de-compartmentalise your thinking as architect can be a hazardous pursuit for it denies the existence of a complex weave of intelligible and sensible interconnections where each element or thought is tied inextricably into the other and cannot be simply cut out or a ‘stitch’ dropped from the fabric of creative life.

In my desire to weave together my thinking so as to establish an intelligible and clear aesthetic logic, I constantly discovered moments of intellectual serendipity which I stitch into my thesis.

If an intellectual revelation was discovered through my practice, it was naturally coupled with a requirement to explain this phenomenon academically. On a numerous occasions, this observation would somehow magically fall into line with a newly found reference, text or a long forgotten thought, revealing to me that there is a underlying consciousness in my thinking.

The central themes of this study revolve around the application of real abstractions and the practice of a three dimensional proportionality, so it seems apt to conclude with John Ruskin’s words from The Lamp of Beauty in his Seven Lamps of Architecture, that ‘Proportion and Abstraction’ are the ‘two especial marks of architectural design as distinguished from all others.’ (Ruskin 1909 :179). It is these two phenomena which I make visible through sensory and intellectual movement in space and time.

Space is an abstract concept which we can see and experience as architects. It is only fully intelligible through metaphysical thought and what we imagine. Form on the other hand is essentially what we look at and touch, as such it is a physical construct. In this dialectic, looking becomes seeing and seeing becomes looking. One action is interdependent on the other until a complete synthesis appears.

This study is essentially how I define myself spatially. The eurythmic cage sets my intellectual and sensual limits as an architect. Life is the movement through it, over it and around it.

If this research is to be useful to further studies in design practice, I am obligated to share my individual experience as an architect with you, to explain my thoughts in order to equip you with the perceptual tools to determine the origin and space of your own eurythmic cage.
Figure j1: Boyd Cody Architects 2017, Unravelling Freedom of Movement, digital drawing
Figure j2: Tierney, Paul, 2004, Alma Lane, Monkstown Co Dublin Boyd Cody Architects 2004 digital photo
Figure j3: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j4: Boyd Cody Architects 2017, Persian Rug Detail, Maryville Park, Belfast, digital drawing
Figure j5: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j6: Boyd Dermot 2014, Carrick Terrace Dublin 8, Boyd Cody Architects 2014, pencil on paper
Figure j7: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j8: Boyd Dermot 2015, The Eurythmic Cage, Frames and Enclosures pencil pen on paper
Figure j9: Boyd Cody Architects 2017, The Process House Redux, still from digital film
Figure j10: Boyd, Dermot 2017, Rock Abbey, Cashel Co Tipperary, Boyd Cody Architects 2018, pencil on paper, digital scan
Figure j11: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j12: Boyd Cody Architects 2016, LOOK THROUGH Process House, digital film still
Figure j13: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j14: Boyd Cody Architects 2016, LOOK THROUGH Process House, digital film still
Figure j15: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still
Figure j16: Boyd, Dermot 2017, Mount Prospect Avenue, Dublin A Boyd Cody Architects 2017, digital photo
Figure j17: Boyd Cody Architects 2017, SEE THROUGH Process House Redux, digital film still

Figure k1: Eiler Rasmussen, Steen 1959, Experiencing Architecture, Steen 1959, Dust Jacket (First English Edition), Digital scan 2017
Figure k2: Boyd Cody Architects 2016, LOOK THROUGH Process House, digital film still
Figure k3: Boyd Cody Architects 2011, John Dillon Street, Co Dublin, Boyd Cody Architects 2011, digital drawing
Figure k4: Blythe, Richard 2015, PRS 04 Just Think Brass, Photograph and Notes 2015
Figure k5: van Schaik, Leon 2017, Testing the Limits of the Eurythmic Cage, Barcelona, digital photo
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Chapter 03: STAIRS Chestnut Lane 0’ 19” 2012
TREES Chestnut Lane 0’ 45” 2012
Chapter 06: WALK THROUGH Kenilworth Park 3’ 26” 2016
LOOK THROUGH The Process House 2’ 48” 2016
SEE THROUGH The Process House Redux 2’ 48” 2017

(1) These six films are available to download from the USB memory stick attached to this book.
SELECTED DOMESTIC PROJECTS

Rock Abbey
Mount Prospect Avenue*
Kemnworth Park

Cashel, Co. Tipperary
Clontarf, Dublin 3
Harolds Cross, Dublin 6

2018
2017

* Unbuilt

Carrick Terrace*
Bleach Road
Burdett Avenue

Dublin 8
Kilkenny, Co. Kilkenny
Sandycove, Co. Dublin

2014
2014
2014
Chestnut Lane
Laburnum Road
John Dillon Street

Galway, Co. Galway
Clonskeagh Dublin 14
Dublin 8

2012
2012
2011

Summerhill
Harcourt Terrace
Ragsey Park

Co. Meath
Dublin 2
Dublin 4

2010
2009
2009
Bohermore
Palmerston Road
St James

Graiguenamanagh, Co. Kilkenny
Rathmines, Dublin 6
Clontarf, Dublin 3

2008
2007
2006

Richmond Place
Allardstown
Wellington Road

Ranelagh, Dublin 6
Co. Louth
Dublin 4

2005
2005
2004
SELECTED DOMESTIC PROJECTS

Alma Lane
Temple Cottages
Crabtree Street
Monkstown, Co. Dublin
Dublin 3
Dublin 8
2004
2003
2001

Longwood Avenue
Stable Lane
Bond Street
Dublin 8
Rathmines, Dublin 6
Noho, New York
2004
2003
2002

2001
1999
1996
Each review panel presentation and feedback are contained in the recordings on the USB memory stick, which is attached to this book.
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‘Remember you are the world’s greatest expert on you’  (Delaney 2014)

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Timothy Murphy
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Typography

The layout of each A5 page is an eurythmic adjustment of Leonardo da Vinci’s drawing of the Vitruvian Man c1490. The inside covers of this book show the Adobe InDesign 2017 coloured guidelines used to set up this two dimensional graphic cage. The guidelines which are the most used in the book’s layout are weighted accordingly and it is these lines which are embossed on the cover of the book.

Typefaces

Helvetica Neue Light 9pt
Arno Pro Light 7pt
‘The mind is the real instrument of sight and observation, the eyes act as a sort of vessel receiving and transmitting the visible portion of consciousness’. (Gombrich 1972:15)

Pliny the Elder

‘Man should be concerned not with what is, but with what should be. Now the latter is always an idea, and he is concrete in a concrete situation; and so he continues, in never ending self-deception, in order to give to what is concrete, the honour of the idea’. (Sharpe 2002:168)

Johann Wolfgang von Goethe

This Afterword is dedicated to my mother Norma Boyd

spatium: room, area, distance, duration of time LATIN
conscius: knowing with others or in oneself LATIN

EXAMINING
The final examination or viva is the summation of my research. In it, I attempt to weave together the various strands of my thinking and present my findings in a clear, dynamic and eurythmic way. This Afterword addresses the minor amendments and recommendations suggested by the examiners in their reports.
I welcome the recommendations from the examiners, Dr Rene van der Velde of Technological University, Delft and Professor Gabriele Seifert of University of Graz, who were both present at my examination. Their commentaries are insightful, expansive and helpful. I am grateful to them.

Dr. van der Velde seeks further clarification on the ‘contributions, insights and propositions’ that I make for eurythmy, and recommends other avenues of inquiry or ‘additions’ to eurythmy (van der Velde 2018:2). I address his commentary in Part 01 of the Afterword under a series of titles which relate directly to the Dr. van der Velde’s preliminary notes and final recommendations. They are Intellectual Stereoscopy; Dwelling: a Programmatic Stance; Bergson and Mind Body Consciousness; Context in the Cage; Movement and Transitioning in Eurythmy and Conventional or New Eurythmy.

Prof. Gabriela Seifert seeks a short written supplemental of further reflection on the ‘role’ of the Eurythmic Cage and in particular its use as ‘a tool for future design insight’ (Seifert 2018:3). This is addressed in Part 02 of the Afterword.

I include the five films made for my examination. I recommend that they are viewed, as this text is read. (1)
Eurythmy
01

Left eye & Right eye: Figure 1:
Floor with Eurythmic Cage and Persian Carpet,
Viva Examination.
Dermot Boyd
Barcelona 2018
Intellectual stereoscopy is used in this research as the means to examine work of Boyd Cody Architects as a visual dialectic; as practice and theory; as perception and conception; and as I argue, something to look at and see.

The two images on each spread of the book are visually similar so they form a perceptual reciprocal relationship. This visual dialectic allows the reader to make a direct intelligible connection between what is viewed in front of them, through the mind’s eye.

In Intellectual Stereoscopy, each reader ultimately applies his/her own visual intelligence and creates an individual vision or idea (1) from this experience. This is the third space that floats over and between the two images. This space is most evident in the series of overlays or Primordial Spaces that are created for Chapter 02. It is full of architectural potential for the third space has metaphysical reality.

(1) The etymological roots of the word idea are from the Greek idein - to see. For ‘(Descartes, Locke) immediate object of thought or mental perception (Kant), conception of reason transcending all experience’ (OED 1967: 601)

Intellectual stereoscopy is strongly aligned in Chapter 01 – Concrete Abstractions; Chapter 03 – Seven Ways of Seeing. In Chapter 04 – The Eurythmic Cage and Chapter 07 – Contextus, however this visual dialectic is more complimentary, as each image follows a set narrative or argument in these chapters.

This is a thesis written for the eyes (1). So my dissertation is visually structured and as such perceptual understanding is paramount. As Bachelard states ‘the image in its simplicity, has no need of scholarship. It is the property of naïve consciousness; in its expression, it is youthful language. The poet, in the novelty of his images, is always the origin of language. To specify exactly what a phenomenology of image can be, to specify that the image comes before thought, we should have to say that poetry, rather than being a phenomenology of the mind, is a phenomenology of the soul. We should then have to collect documentation of the subject of the dreaming consciousness’ (Bachelard 1994:xix). It is in the act of stereoscopic vision, not in thinking but only in seeing that perceptual space is created and architectural ideas can emerge.

(1) I adapt William Butler Yeats statement about poetry. “Write for the ear, I thought, so that you may be instantly understood, as when an actor or folk singer stands before an audience” (Yeats 2001: 24)
Eurythmy can be applied at all scales and to all buildings; it is and remains a fundamental principle of architecture. However, the main body of work at Boyd Cody Architects is domestic, and my academic focus is to attain a deeper and fuller understanding of my design process at all stages of a project.

I define architecture as a concrete abstraction in Chapter 01 and examine this categorization further in Chapter 03, when I reveal seven spatial archetypes (or ways of seeing). I begin with the Conditioning of Space, which alongside the Freedom of Movement explain my approach to citing and sculpting domestic space to meet the needs of our clients. I use a current small domestic addition as a case study, Carrick Terrace, to explore these principles in practice. In Chapter 05, with the house at Allardstown; Mount Prospect Avenue in Chapter 07 and ultimately with Harbour Road at my examination, I expand further on the weaving together the physical and cultural context. The programmatic stance of our clients is usually conservative so we seldom seek to subvert the archetypal nature of Irish family life in everyday practice.

I see my own domestic preoccupations exaggerated and fetishised in the creative freedom and active imaginative context of the Process House. There is a party; expansive views radiate from the study and roof terrace; bathing is spectacle, as it can be seen from the kitchen through a glass wall; and the library is a labyrinthine matrix of bookshelves, representing the workings of my mind. All these ideas lend themselves to investigation in future domestic projects in the office. To be also true to the intellectual context that I set for myself in my studies, I provide only seven rooms (for seeing) in this Process House. To accommodate this concept in its design, I make a substantial change to the sleeping arrangements at first floor. I provide only one bedroom for my family, a large semi-darkened room, where it is comfortable to sleep throughout the night and day on a series of interlocking mattresses which make up the floor of this room. All these moves are consciously driven to re-define the spatiality of domestic life and the nature of dwelling, as Dom Hans van der Laan suggests ‘everything one sees, windows, doors, columns, halls, galleries, gardens and the outer forecourt, constantly re-establishes us in the space which we live, and that is true dwelling: mastery over space’ (Voet 2017: 204).

Programmatically, each room and architectural element in the Process House provides a platform by which the rituals of family life play out at a base and primordial level. In my imagination and practice, it is ultimately the occupants of the house and the visitors who come to it which provide the vitality and life-force in each house we design.
The writings of Gaston Bachelard and Maurice Merleau-Ponty are philosophical touchstones in this book. Both these French thinkers are well versed in the writings of Henri Bergson (1859-1941) and his thinking on instinct and intuition in mind-body consciousness.

Unlike Immanuel Kant, Bergson differentiates between the a priori of space-time. For him, ‘perception is the master of space in the exact measure of time’ (Bergson 2002:95). In his doctoral thesis, Time and Free Will (1889), Bergson identifies the immediate data of consciousness as temporal. He calls it la duree (duration). La duree for Bergson is heterogeneous and dynamic and no images can represent duration because it is of time and ‘pure mobility’ (Bergson 1992:165). L’elan vital (vital impetus) is the instinctive or intuitive impulse in duration and therefore the most powerful moment in the creative process.

As our thought processes are in constant motion, duration, for Bergson is the true understanding of consciousness because it is of time. In philosophical terms, and in architecture as materialized space, l’elan vital represents our consciousness in a frozen moment, it is a constructed abstraction of our thoughts and imagination.

Bergson also raises the importance of instinct and intuition in the operations of the mind. It is instinct which can attain the essence of life in its duration while it is intelligence which ‘consists precisely in an analytic, external, hence practical and spatialised approach to the world.’ (Bergson 2002: Introduction to Metaphysics) Bergson defines intuition as ‘the true empiricism ... He also sees intuition as sympathy (1) and consists of entering into the thing, rather than going around it from the outside’ (Bergson 1992:175). The process of entering into can give us a true understanding of the world and absolute knowledge.

So in my research, I adopt this premise and the advice of contemporary French philosopher, Henri Pena-Ruiz (1947- ) when he writes on Bergson’s l’intuition de la durée créatrice, ‘Let us return to ourselves and remain attentive only to our inner life. Our consciousness then becomes itself in its intimate temporality, the living duration of a self-narrative without breaks. It is discovered as a continuity, a sort of story closer to melody than harmonic chords, cinematic fluidity than a slow series of photographs projected one after the other’ (Pena-Ruiz 2015). It is precisely this thinking which I apply to my eurythmic understanding of space.

(1) The German Philosopher Theodor Lipps (1851-1914) in his writings on aesthetics defines it as: Einfühlung, feeling into or empathy.
When you enter into our architecture or my eurythmic cage, each room is seen alongside each other, all are perceived in rhythmical movement through a spatial continuum, as Leon van Schaik observed in *The Process House* ‘different cages are linked to each other as you pass through the house, in passing through, conviviality is completely revealed’. (van Schaik 2016) But Bergson goes further than this when he notes in *Matter and Memory* ‘if you abolish consciousness … matter resolves itself into numberless vibrations, all linked together in uninterrupted continuity, all bound up with each other, and traveling in every direction like shivers. In short, try first to connect together the discontinuous objects of daily experience; then, resolve the motionless continuity of these qualities into vibrations, which are moving in place; finally, attach yourself to these movements, by freeing yourself from the divisible space that underlies them in order to consider only their mobility.

It is in this undivided act, which your consciousness grasps in movement and that you yourself execute, that you will obtain a vision of matter, which is perhaps fatiguing for your imagination, but pure and stripped of what the requirements of life make you add to it, in external perception’ (Bergson 1994:208-209).

When the scope of the practice of eurythmy is broadened conceptually by using its ancient Greek meaning, rhythmical order, this eurythmic description of our inner perception describes how we ultimately attune and adjust our various thought processes to harmonize, order and unify consciousness in architecture and for the world itself.
The Process House actualises then spatialises my instinctual and intuitive thinking. It is not a building and should not be seen that way. The Process House is in intellectual flux. It is duration and a product of an array of internal perceptions where each creative moment is an integral part of the other in my mind.

Bergsonian duration cannot be experienced in reality so it is only in this temporality or the rhythmical order of projected thought and memory in the Process House when duration is weaved together with intelligence that spatial consciousness is established and seen.

Richard Blythe observes that in the Process House, ‘there is proximity of memory as you move from one room to the next. One can anticipate the character of the next room, as each proportional system used is projective’ (Blythe 2016). This too can be interpreted as eurythmy’s role in achieving duration or mind-body consciousness in architecture.

Thinking is the interweaving movement of memory through contemplation and action. In architecture too, intuition allows us to place ourselves in the instinctual creative impulse or primordial moment. In that space, we overcome the obstacles that stand in the way of true knowledge. It is due to our instinct and intuition that we can turn intelligence in on itself and attain the true essence of life, embodied in architectural space.
Through the case studies of Mount Prospect Avenue in Contextus (Chapter 07), and the Harbour Road project presented at my examination, I promote the use and importance of context as the ontological foundation of our work as a practice. This weaving together (context-us) of the primordial space of the eurythmic cage with its physical and cultural surroundings is critical to the aesthetic enjoyment and success of our work.

The same creative process is played out in The Eurythmic Cage (Chapter 04) with the design of house at Allardstown, where ground lines, contours and hedgerows are all taken into account in my perception of the spatial possibilities and limits of the site and the subsequent design of this dwelling. The immediate landscape or site here is carefully judged and tempered in a rural context. Field patterns, roadways and copses of trees all provide spatial indicators and points of reference in the eventual rhythm of my spatial composition as it harmonizes eurythmically with its surroundings.

Eurythmy in architecture is only fully appreciated, if it is considered out of (the sequence of) time as choreographic notation.

In the making of an abstracted plan or an analytical drawing of the broader context the building is located in, spatial interrelationships can be understood and compared hierarchically, not sequentially; for each space does not necessarily need to lead into the other, in the freedom of projective design thinking.

The proportionality of details, buildings, spaces and materials at every scale from all periods are studied and assessed in the surrounding area when we design projects, and some are selected and used. At the urban scale, this is the study of morphology and grain. At the domestic scale too, it is essential to be conscious of the proportionality of context, as its size in various spaces and forms gives each design a unique character and local identity which is balanced with the universality of the language of our architecture that we may apply at the conceptual level.

(1) Both Rudolf Steiner with his free eurythmic movement and Rudolf van Laban (1879–1958) in his more structured geometrical studies of choreography explored spatial harmony.
The consequence of this critical regionalist approach is the formation of a contextual proportionality which surfaces in the final design, an eurythmy gathered from the sizing of things; the length of a neighbouring garden, the dimensions of an internal room, the height of eaves and the thickness of a window frame, all scales play a part in each of our architectural compositions.

This is eurythmic morphology, the means of judging and sizing a built culture proportionally from a variety of sources and historical periods, transmogrifying it through time, so as to weave it back into the present context as enriched, harmonious and meaningful space. This is the architectural space that surrounds and includes all of us.

The design of the houses at Mount Prospect Avenue and Harbour Road both draw upon their contexts in this eurythmic manner.

The immediate spatial conditions of each site also determine the limits of the cage. Invisible lines or vectors are drawn out from points or planes in the neighbouring buildings and placed on to the page. They define the height, width, shape and volume of the house to be designed. This three-dimensional orthogonal hierarchical matrix forms the unseen eurythmic cage, the externality of abstracted space in our architecture.

The cage is then harmonised and materialised in its setting from the inside to outside and then back again. The design evolves out of the functional and aesthetic requirements of the family home and the house takes shape in this context. The film [SITE ROTATIONS Harbour Road](1) illustrates how this space emerges and how in this case the embedded red cage emerges and surfaces within the spatial limits set by the site in Skerries.

(1) The film SITE ROTATIONS Harbour Road is available to download from the USB Memory Stick, attached to this book.
Vitruvius, van der Laan and Semper all see eurythmy not as theory but as design practice. Like all classical and neo-classical architects, their perception of actual space is an idealistic one, to be enjoyed in materialised silence, from a series of fixed viewing points. Only Gottfried Semper in his writings pertains to define the experience of eurythmy in architecture through the means of framing, enclosing and centering the occupant, but this too is from a fixed perspective.

Although I see my architectural quest to wrestle back Eurythmy from the quasi mysticism of Anthroposophy, it is in fact Rudolf Steiner through his (and my) reading of Goethe who promotes the importance of self-conscious movement or eurythmy in space as the means of achieving a higher understanding of the sensual world.

Johann Wolfgang von Goethe writes about the choreography of seeing and it is this phenomenon I sought to realise in my studies and particularly in the films I produced throughout my research. The term describes the means by which I track or literally dance through space with my eyes. This is how I occupy space first. I see it in reality and in my imagination. It is my body, which then follows that trajectory of thought, embodying itself in the act of design.

This is the spatio-temporal reality of eurythmy. Architectural space is always occupied before it is entered. Each spatial move is choreographed before the next step is taken. The arrangement of the spaces, can always be seen in the minds eye, the sequence set out, one space after the other. This is eurhythmic movement as demonstrated in the Process House films and in *LAST DANCE Harbour Road* (1), made for my examination, everything is transparent in my imagination, everything can be seen and it is the transitioning of space.

Movement however is not an essential component in Eurythmy and the making of architecture in the conventional or neo-classical meaning of the word, because architecture is understood primarily as the making then tempering of built form. As my eurhythmic cage is a spatial construct, fourth dimensionality (or movement) becomes critical to a contemporary understanding of this space. Movement is an expression of my mind-body consciousness. Movement also becomes the life that occupies the space, as it dances in around and over the eurhythmic cage. In our work, space is connected, dynamic, harmonious in order, however when it takes material form, it remains silent and still. This is the result of the art of eurythmy.

(1) The film *LAST DANCE Harbour Road* is available to download from the USB Memory Stick, attached to this book.
My fascination with Eurythmy stems from a visit in 2009 to St Benedicts Chapel in Vaals, the Netherlands designed by Dom Hans van der Laan in 1967. This is a primordial space and I find sublime beauty in the rhythmical shadow-play of its arcades. This was the powerful impetus for me to study further van der Laan’s thinking on architecture in order to understand the genesis of the church’s noble simplicity (1). It is in the pages of his treatise Architectonic Space (1977) that I (re) discovered the art of Eurhythmy as van der Laan spells it.

The theoretical origins of eurythmy are Vitruvian. It is his third principle of architecture, so of course this practice has had an important influence on the production of architecture. However, there is little written about eurythmy in the annals of architectural history and Chapter 04 – The Eurythmic Cage documents my research into the subject. It highlights the few references I found and the series of different interpretations made by a small but significant group of accomplished architects throughout the ages. I research eurythmy in this conventional learned manner so it frees me to define the practice in my own terms and in a new way.

In Chapter 02- Seven Ways of Seeing, I state that eurythmy is primarily spatial, a well-considered three-dimensional proportionality involving constant adjustment and pure perception or aesthetic judgment.

In Chapter 04 – The Eurythmic Cage, I describe and record eurythmy in practice through a sketch design for the house in Allardstown (P268-287). At this initial work stage, I go through numerous iterations adjusting ever so slightly the proportionality of the project as I go. The design could be said to be in constant rhythmical movement until its final spatial resolution, as a frozen moment determined by my mind’s eye.

The sketch perspective of Allardstown that opens this Chapter (P226) is revelatory, for it captures the formation of that very moment of vision through the laying down of rhythmic vibrations of numerous drawn lines of different weights and intensities.

This eurythmic drawing shows me what I truly see when I make space. It is primordial, for it is the architectural instinct’s perception of itself. The drawing positions me in context, in a hollow, surrounded by an orthogonal matrix, looking to the horizon, at the centre of things. This is my eurythmic cage. It is my design practice drawn out for you.

(1) ‘The words ‘nobilis simplicitas’, noble simplicity, recur throughout like a refrain. Those words are drawn from my own heart: I have sought nobility in the correct proportions and simplicity in the material and forms. (Voet 2017: 199) Letter VII from Dom Hans van der Laan.
Left eye:
Figure 12:
Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects
2018, Steps Rear Terrace, 2018

Right eye:
Figure 12.3:
Rock Abbey, Cashel, Co Tipperary, Boyd Cody Architects
2018, Fireplace, Bedroom 03, Second Floor, 2018
Left and Right eye:
Figure 124:
Rock Abbey,
Cashel, Co Tipperary, Boyd Cody Architects 2018,
Fireplace Dining Room, 2018.
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Left eye: Figure 125: Rock Abbey, Cashel, Co. Tipperary, Boyd Cody Architects, 2018, Dado Rail, Living Room, 2018.

Right eye: Figure 126: Rock Abbey, Cashel, Co. Tipperary, Boyd Cody Architects, 2018, Desk and Screen, Study, 2018.
Left eye:
Figure 127:
Rock Abbey, Cashel, Co. Tipperary, Boyd Cody Architects 2018, Main Bathroom (Mirror on end wall missing).

Right eye:
Figure 128:
Rock Abbey, Cashel, Co. Tipperary, Boyd Cody Architects 2018, Handrail, and Brass Fascia and Soffit.
THE EURYTHMIC CAGE AS A TOOL FOR FUTURE DESIGN INSIGHT
I focus upon the psychology of design practice and specifically on spatial consciousness (1). The Eurythmic Cage represents this new found design insight. If the cage is considered to be analogous, it is a literal interpretation not a metaphorical one, for my cage, although abstract in conception, is a spatial tool and therefore practically useful in architecture; The Eurythmic Cage is how I materialize space (2). I study the eurythmic cage as a continuum, its character, its spatial expression and the formal values that make it up in order to unravel it, know it and to come to terms with it. This ultimately offers me the possibility of escaping from the cage and adapting my design practice in the future. The Eurythmic Cage allows me to recognize the nature of my architectural instinct and intuition through a process of spatial individuation. With it, I consciously make my unconscious architectural moves sensible then intelligible.

(1) Consciousness is a process in which information about multiple individual modalities of sensation and perception is combined into a unified multi-dimensional representation of the state of the system and its environment, and integrated with information about memories and the needs of the organism, generating emotional reactions and programmes of behaviour to adjust the organism to its environment. (Thomas and John 1977:294)

(2) As Matthias Ballestrem commented at PRS 05, the Eurythmic Cage can be read as the triadic representation of ‘personal preoccupations, a methodology of design and the characteristics of concrete space.’ (Ballestrem 2016)

The Process House is self-experimentation, it is a fantasy and such it is associative and imagistic. In its garden, I create a mythical unrealizable world. Within the house, I challenge my spatial mythology. With the Process House, I explore my inner sense and use my imagination unhindered by contingency and circumstance to make actual space out of sense, imagination and apperception (1).

Immanuel Kant distinguishes two kinds of consciousness of the self; consciousness of ones own psychological states – empirical apperception, from consciousness of oneself or pure self as subject – transcendental apperception. The latter is the original unchangeable consciousness which is the foundation of experience and through it we can unify human experience and share it as collective thinking. The source, on the other hand, of empirical apperception is what Immanuel Kant called the inner sense. He states in Anthropology (1798) that the ‘inner sense is not pure apperception, consciousness of what we are doing; for this belongs to the power of thinking. It is, rather, consciousness of what we undergo as we are affected by the play of our own thoughts. This consciousness rests on inner intuition, and so on the relation of ideas, as they are either simultaneous or successive’. (Brook 2006:96)

(1) There are three subjective sources of knowledge according to Kant, upon which rests the possibility of experience in general and knowledge of its objects; sense, imagination and apperception.
The Process House is the means by which I fully represent the eurythmic cage using my instinct and intuition. Through this process I gain a greater level of self-consciousness, but it is not fully realised until I apply higher intuition (Kant calls this intellectual intuition) or reasoned insight. It is then that the process house bridges the gap between the empirical apperception of my practice and the transcendental apperception of collective architectural knowledge.

The Eurythmic Cage is also the vehicle by which I represent my instinct and intuition as archetypes or primordial space, so they can be clearly perceived and apperceived. With the Process House I create a synthetic sensorium. For as Kant postulates, the way in which you become conscious of the act of representing is not by receiving intuitions but by doing it, because for Kant ‘synthesis as an act, is conscious to itself.’ (Brook 2006:96)

Carl Gustave Jung defines instinct as a purposive impulse to carry out some highly complicated action; an interruption of consciousness, and intuition as the unconscious, purposive apprehension of a highly complicated situation, an irruption of unconsciousness (Jung: 1970:178). As such, instinct and intuition cannot be isolated from the practice of architecture. They must be acknowledged and made intelligible to others if we are to fully understand the nature of spatial consciousness.

William James (1842 -1910) states in the Principles of Psychology in 1890, that ‘incoming ideas or sensations are said to be apperceived by masses of ideas already in the mind’ (James 1890: 77). For Edmund Husserl (1859-1938), it is our ability to bracket off these cognitive processes of sensory perception which is so important, for it is only then we can truly reason existence and understand our own consciousness. For Husserl, this is the essence of phenomenological research.

With the Eurythmic Cage, I return to primordial space and ‘go back to things themselves’ (Husserl 2002:168) through this process of architectural epoché because I do it through my lived body but also with my projected embodied self.
If the great Swiss historian Jacob Burckhardt (1818-1897) indicates that the primordial is intuitive (1) and Jung states it is instinctive, it is Johann Wolfgang von Goethe who sets out the scientific methodology or Urphanomen as he calls it in the Theory of Colours (1810), to realise primordial phenomena and reach ‘the limits of experimental knowledge’ (Goethe 1840:73).

For Goethe, all investigations begin by observing the phenomena as they appear in everyday practice ‘from henceforth, [he writes] everything is gradually arranged under higher rules and laws, which however, are not to be made intelligible by words and hypotheses to the understanding merely, but, at the same time, by real phenomena to the senses. We call these primordial phenomena, because nothing appreciable by the senses lies beyond them, on the contrary, they are perfectly fit to be considered as a fixed point to which we first ascended, step by step, and from which we may, in like manner, descend to the commonest sense of everyday experience’ (Goethe 1840:72).

(1) Jacob Burckhardt writes to his friend Albert Brenner in 1885 on reading Goethe’s Faust (1808): ‘Listen: take the whole back to the reading rooms where they belong. What you are to find out about Faust will come to you through intuition. For Faust is a genuine myth i.e. a great primordial image in which each individual has to intuit his being and destiny in his own way’ (Meier 1995:42).

These are the intellectual limits set for every primordial space and each eurythmic cage. It is only the author, who is fully aware of his/her own primordial phenomena.

The cage is a current simulacrum of my design process and academic studies at RMIT, so inevitably it will change shape and form in the future. But this perceptual cage will always be eurythmic because the making of volumetric beauty in architecture remains for me an essential art of our discipline.(1)

Proportion is an innate spatial ability we have as humans, to judge, then size our embodied selves in the world we live in. Architecture is the means by which we measure, build, then inhabit proportion and express spatial order back to ourselves in the world around us. It is with eurythmy, we adjust, harmonise and inter-relate proportion across space and time.

(1) At times, eurythmy, proportion or scale is exaggerated or distorted. It is then our human perception or natural appreciation of it becomes intelligible rather than sensible as Claude Levi Strauss accurately observes in the Savage Mind (1962).
In the course of my design research, the nature of the Eurythmic Cage evolved, altering the nature of my design practice at Boyd Cody Architects. On representing then seeing the Process House as a transparent construction of lines, the primacy of structure becomes self-evident and the sculptural form of architectural elements, like the chimney, shower, toilets, kitchen counters and stairs in this spatial construct become more pronounced as figure, rather than ground.

In Process House Redux, I seek to articulate and differentiate these elements from the main body of the house by making more particular domestic forms and utilizing different materials to articulate them.

Alongside the ubiquitous brass, exposed concrete forms the structure of the house and oak is introduced to construct the folded plane of the second floor, and to clad its terrace, internal balustrade and the ceiling below. This elemental shift in my design approach is unconsciously made in parallel at Rock Abbey, where the use of brass in the house changes from planer investigation to a material composition of line and articulated edge.

If the eurythmic cage has a specific role in my architecture to determine the nature of space and create embodied order out of it, the final project, Harbour Road demonstrates how the cage changes shape and form once again.

By applying higher intuition and the idea of the choreography of seeing, the cage at Harbour Road follows and encloses the spatial trajectory of the views that define the inhabitation of this house on its coastal site. This ‘red’ cage is embedded in the house’s stepped orthogonal matrix formed by contextual vectors and lines.

Unlike the platonic purity of the Alma Lane house, the Red Cage grows out and pinwheels off the tiled vertical structure that forms the chimneys and fireplaces throughout the house. The Red Cage is an open-ended, dynamic and elemental space, surfacing at times on the exterior of the house as it surrounds the movement of, first, my abstracted thinking, secondly the perceived views, and then eventually the daily pattern of family life which makes this house a home.
Consciousness is a shared human condition, it is how we think and what we are. The infinite possibilities that consciousness can create and the intellectual freedom embedded in that awareness, is our creative gift as human beings. To use this transcendent function, Bergson encourages us abolish our consciousness and Jung (1) desires us to create a conscious vacuum in which like Kant’s state of intellectual intuition, we can marry perception and conception in unconscious and conscious thought, transcend the self and gain a deeper insight into the world.

(1) Jung described his technique for inducing such spontaneous fantasies (like The Process House): “The training consists first of all in systematic exercises for eliminating critical attention, thus producing a vacuum in consciousness” … Once these fantasies had been produced and embodied, two approaches were possible: creative formulation and understanding. Each needed the other, and both were necessary to produce the transcendent function which arose out the union of the conscious and unconscious contents. (Jung 2009:53,54) It should be noted that the fantasies which Jung refers to here are evoked in a waking state and not in dreams. Gaston Bachelard later calls this the poetics of reverie, the psychology of wonder from a phenomenological viewpoint.

I argue that consciousness, like space and time is a priori human condition. It is altered most profoundly, in the elan vital or the moments of vision when intuition and instinct interrupt and irrupt into consciousness.

This aspect of design practice is too quickly dismissed and I use the Eurythmic Cage as the instrument to give me this deeper design insight. The Eurythmic Cage is a concrete abstraction, the materialization of my spatial consciousness. It is the moment that primordial space emerges onto the page and into the built reality of architecture.

For the Eurythmic Cage to be a tool for future design insight, I invite you now to look and see your own cage, so we can all draw and build a collective spatial consciousness for architecture.
Afterword: Spatial Consciousness

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Ballestrem, Matthias (2016) PRS05 Review London November 26
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LEFT EYE:
Figure 142:
THE SERPENT
Harbour Road,
Boyd Cody
Architects 2018,
digital film still.

THE METAPHYSICAL REALITY OF COLOUR Johannes Ittens Sphere 1' 30"
EURYTHMY Six Houses 1' 29"
SITE ROTATIONS Harbour Road 0' 52"
LAST DANCE Harbour Road 1' 20"
THE SERPENT Harbour Road 1' 00"
THE EURYTHMIC CAGE Viva 1' 00"

DANCING THROUGH

These six films are available to download from the USB memory stick attached to this book.