Occupying Drawings

To occupy is to reside, take up space of time, be situated within or hold a position. To keep yourself busy or distracted (by doing something). To ‘seize’ other words engage, involve, engross, preoccupy, divert, immerse. To occupy drawing in architecture has a vast unwritten history. From Frederick Kiesler’s ‘Correalism’ (Kiesler, 1939) in the 1930s up to the publication of ‘Reflexive Architecture’ in Architectural Design (Spiller, 2002) in the 2000s architects have adducted the drawing and occupied it to investigate fresh ideas of speculative practices as investigations and innovations.

As a practicing architect, I design through a range of modalities from sketching in context while walking through the same ground repeatedly to sketching while sitting on a train to watching TV or doing watercolours whilst sunbathing. Drawing architecture through occupying the context for the design to occupying the drawing as I’m constructing the architecture through the drawing itself as its being worked on through to completion. Drawings for me take a long time, up to three-months, and I occupy the drawing as the design unfolds. The composition of the drawing has three specific ‘time-based’ scenarios one in the foreground, midground and background. The three scenarios are a set-up for the orchestration of the dance of interacting parts, where each scenario has five physical layers with compositions of the same elements from five different times. Drawing is not just a tool but a site within itself that is occupied, embodied sensed by interacting with the drawing itself and external objects and representations in a constructive way. By allowing time, literally, into drawing it becomes open to chance discovery: by process of manipulating new decision, it is possible to make new prosthesis from the drawing itself by editing the two-dimensional shape and making a different three-dimensional form as a tool to re-introduce to the drawing again through its shadow casting and allowing the drawing to take a different route to its conclusion by designing. This kind of making through the drawing as its being drawn could be viewed as a form of ‘possible worlds’ (Murray, 2019)

An example of occupying drawings can be understood through John Berger’s influential art program in 1972 on the British Broadcasting Corporation entitled ‘Ways of Seeing’. ‘Ways of Seeing’ is a BAFTA award-winning series which rapidly became regarded as one of the most influential art programmes ever made. In the first programme, Berger examines the impact of photography on our appreciation for art from the past, and he unpacks Brueghel’s painting as a range of ways it could be occupied and how different media forms, like a computer screen or phone, changes the art form and the manner of occupying.

‘A painting by Brueghel ‘The Road to Calvary’ if you look at the whole painting Brueghel’s intention is fairly clear. In the right foreground are Mary and John and

Shaun Murray, Niche Constructions, 2017.
Shaun Murray, Autochthonic Constructions within the Second Acupuncture: Ineffaceable illumination with Fruiting Bodies, 2017.

the mourners of Christ. Christ carrying the Cross in the middle distance, carried forward by the crowd, which is making its way to the place of the crucifixes, far away on the right, where a circle of onlookers has already gathered. If you look at the whole picture, you will see that it is about grief, about torture and above all, about the callousness, the eager inquisitiveness, the superstition drive of the crowd. If it sets out to be a religious painting, it is an oddly secular one. But the difficulty is that on a screen if you keep the whole painting in view, you don't see very much. You have been waiting impatiently for the camera to go in to examine details. Yet as soon as this happens, the comprehensive effect of the painting can be changed. For example, it is possible to isolate and show detail in a way that makes the painting look like a straightforward devotional picture. With a different camera movement again, it can be shown as an example of a landscape painting. Or details can present it to you in terms of the history of a costume or social customs. In a film sequence, the details have to be selected and re-arranged into a narrative, which depends on unfolding time. Yet in the painting as a whole, all these elements are there simultaneously. In paintings, there is no unfolding time.' (Berger 1972: Episode 1)

I would argue that to see the whole rather than the parts of the whole that there is an unfolding of time as your eyes wander across the painting and begin to linger at the ideas and forms that are painted. To illustrate the point of the unfolding of time, Jochem Hendricks 'Eye Drawings' (Hendricks 1998: 186) from 1984, envisions a relationship between the act of drawing and eye movement. His 'eye drawings' reveal to us that the complex relationships between participants and environments...
through drawing. Through this approach, one could declare the drawing of architecture could challenge the predominant notion of the architectural drawing through reading space with our eye movements.

**Drawing entwined from the word Disegno**

Disegno is from the Italian word for drawing or design, involving both the ability to make a drawing and the intellectual ability to invent the design. Its meaning extends beyond the literal idea of drawing as a craft towards Disegno as a method and practice of drawing through architecture. From the renaissance this ability to invent and create through drawing and to create by means of raising the status of drawing from craft to art. Central to Disegno was the use of drawings as a foundation of architecture as complex and contingent. Architectural drawings have often been studied whole in space, but never before have they been studied whole in time. We propose that architectural drawings adapt best when constantly refined and reshaped by the editor of situations (the architect) and that architects can mature from being artists of space to artists of the time. The word drawing contains a double reality. It means both actions of the verb ‘draw’ and ‘that which is drawing’ – both verb and noun, both action and the result. Whereas architecture may strive to be permanent, a ‘drawing’ is always drawing and being drawn. Could the idea be revised to match the fact?

The need to continually change our surroundings reveals the commonness of architecture as a human activity and its embodiment of the architects need to sketch. A daily
routine of sketching from what I see around me extends my range of modalities to draw forth ideas is a personal practice Sketching is a form of decompressed drawings with a lightness of touch and an unforgiving willingness to just to be. There is a ‘craft’ to sketching that is centrally about enjoyment and fun in the discovery of making new connections with lines, forms, spaces.

In 1976, Nelson Goodman suggested that architecture cannot enjoy the benefits of a full-blown notational system and clearly states that architectural notation is inadequate in light of his notational theory. He was especially disappointed with architectural plans as a brand for the artistic notation that failed to acknowledge the full descriptions of buildings. His theories are particularly challenging in the light that for a full blown architectural notational system, you must preserve the identity or allographicity of the work. This would, in Goodman’s view, be attained through standardisation of the symbolic characters that represent the elements of designs of a given medium. In 2000, Saul Fisher wrote a paper on Architectural Notation and Computer Aided Design. He recognised that architecture could have a full-blown notational system that meets Goodman’s criteria.

**How do you occupy drawings, and why?**

To unpack how architects can become ‘editors of situations’ we can look at Robert Rosen’s definition of an anticipatory system as ‘a system containing a predictive model of itself and/or its environment, which allows it to change state at an instant in accord with the model’s predictions pertaining to a latter instant’ (Rosen, 1985: 339). *Anticipatory Systems* (1985) which is ‘modelling relations’ and requires that we find the appropriate encoding and decoding, ‘notations’, to translate back and forth

Shaun Murray, Autochthonic Relic, 2017.
between the systems, for example, occupant and draw-ings through context, consistently. Without the proper encoding and decoding, there can be no comparing of the system, and no way to establish congruence between them. 'Anticipation' in Rosen’s terminology is a style of control, which is based not as cybernetic systems on a deviation from a desired behaviour. Anticipation is based on having a predictive model of the system you’re trying to control and using the predicted behaviour to generate the control, which will modify the behaviour in a desired way. Rosen suggests you have to have more than one scale of real time in a system, like two notions of measure in a family of sub-sets- you come to the idea that these various times are tied to modes of system decomposition and this lead fairly directly into the wider notion of complexity. The modelling relation thus provides us with a methodology for studying one system in terms of another system.

In 2006, the four members of the Swedish practice, Front Design, have developed a method to materialise freehand sketches entitled Sketch Furniture. They make it possible by using a unique method where two advanced techniques are combined. Pen strokes made in the air are recorded with motion capture and become three-dimensional digital files; these are then materialised through rapid prototyping into full-scale pieces of furniture. The participant’s gestures and hand move-
ments being recorded in the environment with motion capture devices. The information thorough the working drawing of gesture and movement is then made into a three-dimensional digital file. This three-dimensional file can then be sent to a rapid prototyping device that will fabricate the working drawing as an object with liquid plastics. The practice of gesture and movements to communicate an object allows us to construct the once invisible relationship between our environment and us. The immediate act of gesture as drawing becoming visible through an object is somehow describing space in a more complex and contingent manner. The participant embeds the working drawing through gesture and hand-movements within the context of designing a piece of furniture.

To have a dialogue with drawing is to design architecture while being distracted by something else, like travelling through the scenery on a train, staring out the window, we can design through this constant dialogue. It is to study of non-physical phenomena through shamanism and mandalas can reveal the collapse of the drawing onto a building. Building as a constructed reality.

‘Dialogue comes from the Greek word dialogos. Logos means ‘the word’ or in our case, we would think of the ‘meaning of the word’. And dia means ‘through’ – rather than two. A dialogue can be among any number of people, not just two. Even one person can have a sense of a dialogue within himself, if the spirit of the dialogue is present. The picture of the image that this derivation suggests is of a stream of meaning flowing among and
through us and between us. This will make possible a flow of meaning in the whole group, out of which will emerge some new understanding. It’s something new, which may not have been in the starting point at all. It’s something creative. And this shared meaning is the ‘glue’ or ‘cement’ that holds people and societies together.¹

Through dialogue with drawing, you can explore the ways in which ‘buildings’ (Brand 1995) and ‘ways of seeing’ (Berger, 1972) can be twinned. Our buildings can be best understood as “twinned” vessels: vessel-like in that they have constraints and are unpredictable; the dialogue, in that buildings, always exist in an intricate relationship to a larger context. A building does not end at its walls; it is a nexus in a complex field of social relations, ecological systems, cultural norms and local histories. Through explorations of the causal and unpredictable dialogue between occupying drawings, can they truly exist without the other – or are they inseparably linked. Janus, the Roman God of transitions and time, of doorways, passages and dualities, of the material and the abstract, of all beginnings and endings, of the risings and settings of the sun, is shown with two faces, one looking to the past and one to the future. These alternating fluxions are in perpetual dialogue with each other. If we think of a dialogue as a hinge, a dynamic architectural element, one having the capacity to throw seemingly static components (the door) across space we might look to Cardea, the Goddess thresholds, door handles and hinges, beloved by Janus of whom Ovid said, ‘Her power is to open what is shut; to shut what is open’. If we further consider a dialogue as a hinge we may begin to think of a hinge as ‘making (something) dependent on something else’. A reciprocal dialogue.

**Occupying drawings is not a neutral code**

Within architectural practice, the communication from architect to participant or environment is not at all straightforward. This is also true of the dyadic relation between context, design and communication in architectural education. Notational systems within architectural education used as a communication tool have made the composition of architecture an activity like the composition of fiction: the activity of communication. So deep is the connection between architecture and communication in our culture that for much of the time we ignore it and behave as if notation were really a transparent window – just as in reading a working drawing in architectural practice we may ignore the intermediacy of notation and imagine that thoughts are reaching us directly from the architect’s mind. The most important criterion of notational systems, whether literally or architecturally, is precisely that it should not draw attention to itself, nor disturb the illusion of neutrality and faithfulness.

Through Jochen Hendricks ‘Eye Drawings’ project from 1994, our understanding of drawing and reading are connected in an intimate and complex manner as an abductive process. ‘Eye-drawings are drawings done directly with the eyes, without the slightest interference of the hands - the organ of perception being turned into the organ of expression. By means of technical aids (infrared-, video-, and computer-techniques) human eye movements are traced and digitised during the visual process of looking at something, so as to be able to do an ink-jet print out of these movements eventually’ (Hendricks 1998: 186). Whilst the reading of the newspaper has already been read, this drawing becomes an intimate re-reading through the participant of the project. The environment in which the participant is reading the newspaper is not included in the drawing, but what remains behind is a trace of the intake of information. Something of the otherwise invisible process of reading is made visible, and a trace of the absorption of information remains. The result is a drawing which has already been read. The drawing becomes embedded through the participant’s eye movement in the context of reading the newspaper.

Most architects use notation to represent and communicate their architectures. Notations are essentially used to mediate the experience of the design towards building; they occupy most working drawings in architectural education and practice; they can confuse clients, builders, lecturers and architects alike and disrupt projects. Yet architects mostly take them as given, as a neutral code towards the final design. Here I aim to challenge and reverse this well-worn assumption. We design notation to suit a new vision of how we can communicate our architectures embedded, spatially and experientially, not to suit the arbitrary specifications of the notation. The technologies that make this possible are advanced holography, telematic communications, ubiquitous computing and advanced control software. They allow us to define a fundamentally new, radically restructured architecture for our notational systems.

Notations are used to construct all architectural drawings and have often been studied as a whole in space, but never before have they been studied as a whole in time. My interests reside in a synthesis that proposes that notations adapt best when constantly refined and reshaped by their occupants, and that architects can mature from being artists of space to becoming artists of the time. More than any other artefact notations improve with time. The word ‘notation’ contains a double reality. It means both the ‘action of the verb notate’ and ‘that which is notated’ – both verb and noun, both the action and the result. Whereas architecture may strive to be permanent, a notation is always notating and being notated. The idea is crystalline, the fact fluid. Could the idea be revised to match the fact?

**Drawing Dialogues in the ‘Ineffaceable Beaduric’s Island’**

This project reverberates around ‘Ineffaceable Beaduric’s Island’ through a series of ‘split’ sites linked to each other within a complex web of feedback loops and retro-sensing devices. It centres on the harnessing of natural phenomena and complex ecological networks within the unique environmental conditions of the Beaduric’s Island in Battersea on the River Thames. The drawings become like detective work where you discover information that has been laid down, and then you use the drawing to investigate all the potential reasons why that information is there to enable the design ecologies of ‘Inhabitable Mandalas’, ‘Mirror Curtains’ and ‘Ineffaceable
Illuminati'. These architectures are processional through island sites. The key points to be discussed in this project are firstly to engage in multiple ground histories, futures (issues, opportunities) through materiality and the relationship with its natural trigger. Following that, I will tickle out an architecture to embrace the occupant. This will be unpacked through the inhabitation of abducted ground in multiples times with multiple endings.

**The Mirror the Curtain and the Screen**
The Enchantment of the Virtual through The Screen, The Spectrum and the Pendulum: Horizons of Acceleration and Deacceleration. Various places in the Battersea record information and they are called natural archives. The natural archives that I look at are the former marshlands, channels, drift filled hollows and gravel islands from the borehole information sourced from site investigations for the new Northern Line Extension and Battersea Channel Project. If you can imagine in the air right now, you are breathing in pollen, charcoal, dust, insects, everything. All that stuff is falling on top of lakes, and then settling at the bottom and being preserved. So, it is reflective of what’s going on around the lake at the time. What I do is take a core, or sediment sequence, and sequentially sample throughout the whole thing to build up a story through time. The things I mainly look at are pollen, because that is reflective of the vegetation, and charcoal, which is produced by fires. Once you have got all this wonderful information, you can understand what’s going on before, during and after periods of environmental change. What we have come to appreciate is that ecosystems don’t respond in a linear way. They shift suddenly when a threshold has been crossed. Hypothetically there are early warning indicators we can pick up that show a system has lost resilience and is vulnerable to switching.
The Force of Ambiguity: Dialectical Balances

The Screen and the Mirror Curtain that doesn’t reveal themselves immediately as you are encouraged to discover new spatial relationships. So, one thing I am trying to do is to unpack how do we measure resilience, how do we predict that an ecosystem is about to switch, and what are the factors involved. To design ecologies to create a better predictive ability. We have been really concerned about climate change over the past century or two, but we are dealing with a system that beats to multiple different rhythms in time and space. There are all sorts of patterns and scales that our natural systems behave, respond and operate in. If we can piece together how natural systems change both with and without human intervention, then we can have a better understanding of how things might change into the future.

**The Spectrum: Ineffaceable Illuminati**

The Spectrum enables a kind of predictive engine into opening up the hidden complexities of specific spaces. To illuminate the ineffaceable facts through geomorphology, social histories and our current continual occupation of contexts bound through a designed world with the architect editing the situations to bring forth to the ever present. To look at the wider perspective of the relationships in architecture between occupation, drawing and environment would allow us to connect the flows or the trace of the relationships over time, these ‘in’, ‘off’ and ‘by’ spaces are ineffaceable.

**The Pendulum: Tactile double bind as Inhabitable Mandala**

More and more people live in large cities, suffer from a terrible emptiness and boredom, as if they were waiting for something but never arrives. The Inhabitable Mandala involved a way of making contact with the living reality, trying to give a constant amount of attention to what is already there. Like trying to live simultaneously on two levels or in two different worlds. One should allow multiple thoughts to intrude one’s attention and should engage in all the senses. The pendulum is used as a contact with the regulating centre. There are two main reasons why we lose the connection or the instinctual drives of where we are, and we carry an image that is one-sidedness and makes us lose our balance. Another threat to the inner balance comes from excessive daydreaming, which usually circles around particular complexes in a
secret way. The second obstacle is exactly the opposite and is due to all the consolidation of consciousness. The use of the mandala (Magic Circle) is to designate the structure of this order whose essence we do not know. The mandala is used in order to restore a lost in a balance. By means of an inhabitable mandala-structured tactile map. A kind of reorientation tool to bring us back in harmony with ourselves. The inhabitable mandala is a healing ritual; the person sits in the painting and must be circled by a patient before entering.

26-rule translation

Rules are the way I codify space and conduct our interrelations into beginning to understand the consequences of our actions in a new kind of contextualism. To use a set of rules is to consider a range of steps towards designing architectures and the manners in the way we communicate design as a dialogue through drawings to reveal interactions, gestures and existing conditions. A dialogue between two worlds becoming inhabited by the 26-rule translation. The differing pressure on the flow of lines to connect with the spatial geometries reveals the dynamic of the form.

The current 26-rules for translation through the drawing are.

1. Sampling Ground
2. Mental wanderings
3. Slingshot Histories
4. Meaningless Objects in Featureless Space
5. Accelerated Painting
6. Fibrillation Edges
7. Symbiotic Relationships
8. Vacillating Object
9. Reflexive Incisions
10. Autocatalytic sets
11. Gobleni Notations
12. Epigenetic Landscapes
13. Dissipative Structure
14. Polarisating Objects
15. Mirror Curtain
16. Within Within Mandala
17. Autochthonous, formed in its present position.
18. Resonating Skulls
19. Environmental Stoppage
20. Reader to Editor
21. Partial Object Space
22. Recursive Epistemologies
23. Affective Touch
24. Tactile insertions
25. Volatile Signalling
26. Landscape Signature

The 26-rule translation is a dance of interacting parts from Gregory Bateson’s idea of ‘recursive vision’. Gregory Bateson, an anthropologist, developed ideas of ‘recursive vision’ which is about a framework of thinking which is called ‘an ecology of mind’ or ‘mind in ecological settings’ (Bateson 1972: xxiii). It strives to discover a set of rules from which we can derive principles about the environment and the relations between human activity and the environment. These principles are a group of interrelated interacting or interdependent parts for a complex whole. It’s a term that we frequently use in architecture. How one thing interacts with another. Modelling relationships within the field will be an architecture that has an active and recursive engagement with its environment. If we understand our environments to be composed of multiple ecologies, then we may be able to operate as a designer within them.

Notation can serve two different functions which are not necessarily exclusive. One function is as a means to communicate the other is to enhance cognitive processing, for example, as a memory aid. Notations are not defined by a fence or line but are dynamic and transformative forever interacting with the boundaries between the natural and artificial. The fact that when working drawing can fully exchange information with natural phenomena, architecture’s capacity for knowledge and communication would be far deeper and more extended than presently understood. It would also disturb the boundary lines of our individuality – our very sense of separateness with the built environment and tease a different path.

Hence, is there a way to make the relationship of occupying drawings towards the environment, more authentic or original? Why are we not as comfortable about identifying an architectural work with a design rather than a building as we are about identifying a musical work with a composition rather than a performance?
Conclusion

In providing an ecological window into what space could become. Occupying drawing as kind of predictive engine into opening up the hidden complexities of specific spaces. Awareness that time is with you when occupying drawings, the things around you change as you change. Architecture slips between one space and another at different periods of time. Like an archaeologist discovering a fragment, the physical act of discovery is time-stamped from where in space and time it’s come privileged over when it was discovered.

In a bootstrap paradox, an object or information from the future is sent back to the past. That creates a never-ending cycle in which the object no longer has any real origin. It exists without ever having been created. Things travelling back in time and finds us before they have been created. Question of origin.

To argue that drawings are not neutral in the architecture of occupation, like buildings, drawings are both. All my projects focus on grand themes and small human frailties. Teasing a different path through the clash of a new situation incidental in how drawings are related to these sweet little moments from direct observations. Draw the environment as you experience it, experience the environment as you draw it.

It is through this unravelling of the complexity of this relationship to occupy drawing that we can reveal that architecture happens prior to building.

If architecture alters the environment, will it be able to be maintained by artificial sub-systems to replace the natural ones, in a way to allow technology to 'keep ahead' of nature until eventually architecture becomes completely independent of the natural order by technological means, this could be seen as an argument for a future prescription rather than analysis. With the emergence of burgeoning practices within the field of a non-reductionist, non-localised and non-anthropocentric world view, opens up the potential for a challenging and ultimately an architecture that is communicative.

References