2022-06-01

Psychoactive space: Glimpses of the unknown

Emmett, M

10.1386/des_00017_1
Design Ecologies
Intellect

Articles

Mathew Emmett

Psychoactive space

Psychoactive space: Glimpses of the unknown

https://orcid.org/0000-0001-9283-873X~~Mathew Emmett~~

University of Plymouth

CONTRIBUTOR DETAILS

Dr Mathew Emmett addresses both destructive and redemptive themes in society today. His work reveals multi-layered references to the continual study of the *Isenheim Altarpiece*, the *Martyrdom of St Sebastian* and the *Apocalypse of John*. Emmett is an architect and artist drawing upon intermedia disciplines spanning video, sound, photogrammetry and digital technologies. His projects include immersive installations, large-scale public realm AV events, electronic soundscapes, mixed media prints and drawings. Emmett holds a doctorship in situated cognition, and awarded the Gardener Theobald Scholarship at the Architectural Association (London) and the Sir Henry Herbert Bartlett Award at the Bartlett School of Architecture, University College London. He studied fine art at Central Saint Martins and in 2007 researched space music with Karlheinz Stockhausen, Kürten. In 2016 Emmett performed Sender/Receiver at the opening of the Blavatnik Building, Tate Modern and his collaborations include Kraftwerk co-founder Eberhard Kranemann, Node electronics composer Dave Bessell, Candoco Dance Company founder Adam Benjamin, cyberspace architect Neil Spiller and theorist Charles Jencks.

Commented [NG1]: AQ: Please provide your ORCID identifier. ORCID identifier must start with https://orcid.org/ and be supplied in the following format: https://orcid.org/0000-0002-1825-0097.
If you do not yet have an ORCID identifier, please register here: https://orcid.org/register.

Commented [NG2]: AQ: Please provide received and accepted dates for the article.

Abstract

As architecture and the built environment develops beyond static vernacular traditions to a state where buildings and intelligent environments become more advanced within augmented and virtual realities, this article considers how architecture can expand into a transformative dimension beyond the physical reality of architectural space. My practice utilizes cognitive science in combination with art installation and audio-visual (AV) interventions to create immersive environments.

Keywords: audio-visual immersive environments, situated cognition, psychoactive space, transdisciplinarity, Fluxus, *St Sebastian: Plague Memory*

This article investigates the use of psychoactive space (Emmett 2013) in order to make disruptive environments within architectural settings. This innovative way of working transitions architectural space to a more imaginative articulatory experience is for the building users. The article traces the theoretical frameworks underpinning the practice which utilizes collaboration between science, art and architecture – based upon feedback/feedforward loops and the organization of spatial phenomena within an ecological field condition.

By extending architectural settings beyond their built utility, the research opens up fresh avenues of the previous ethic of particular architectural space, transforming the previous built environment into an expanded communicative realm. Such a reflexive architectural practice necessitates a dynamical model to explore these hyper-spatial dimensions. The article traces the theoretical framework for the research that interprets the work of Odling-Smee et al. (2003) to create a spatialized 'experience machine'.

Commented [NG3]: AQ: Please provide complete institutional address (including country) and e-mail address for the author.

Commented [NG4]: AQ: Please check for style. Followed throughout.

Commented [NG5]: AQ: 'Emmett (2013)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG6]: AQ: Please review the edits made in the sentence. Is this okay?

Commented [NG7]: AQ: Odling-Smee et al. (2003) has been cited but has not been provided in the references list. Please provide complete details of the same in the references list.

By examining transdisciplinary methodologies, the article explores the role of imaginative diversity and non-hierarchical collaborations, together with cooperative and motivational goals in expanding the use of architectural settings. Further, the article identifies a shared philosophy with the Fluxus art movement, which is explored as a precursor to transdisciplinary research. Here, the article articulates the relationship between architectural space, articulatory semiotics and the role of the user to create a shift in sociocultural understanding of the built environment.

To conclude, the article documents and reflects upon the AV immersive project *St Sebastian: Plague Memory* (Emmett 2022) in which the public experience a psychoactive environment at the Museo dell'Arte Classica, Rome.

Commented [NG8]: AQ: Emmett 2022 has been cited but has not been provided in the references list. Please provide complete details of the same in the references list.

Engendering innovation through transdisciplinary research

When we think of disciplines, we think of the roles they play within academic institutions and by extension, professional services. Disciplines shape our careers, faculties, imagination and individual viewpoints. In short, disciplines shape values. And yet, there is so much potential for innovation when considering inter- and trans-disciplinary methodologies. We can seek out commonalities, explore the spaces between and the connections across. I would like to argue that the root of innovation itself lies in transdisciplinarity and the re-combination of different disciplines within a kaleidoscopic synthesis of disciplinary approaches. I make this claim as an architect/artist with an expertise in creating immersive environments, which often includes diverse collaborative practices within my research-led projects. To illustrate what I mean, I will be exploring the science of situated cognition within an architectural discipline, whilst referencing the Fluxus fine art movement. Whilst my projects have a common architectural and fine art

thread, my research seeks innovation through the leverage of multiple disciplines ranging from cognitive science, the arts, interactive technology and cultural semiotics. The projects are part of an ongoing quest to understand the relationship between architecture and immersive experience, where my particular curiosity is directed at the intersection between cognition and articulatory semiotics within architectural settings.

My research utilizes fine art installation and AV interventions to create immersive environments. By extending architectural settings beyond the utility, I expand architectural space into a communicative realm, whereby I intervene within architectural spaces to create psychoactive environments. Such a reflexive architectural practice necessitates a dynamical model to explore these hyper-spatial dimensions. The theoretical framework for my work is contextualized by the interpretation of intentional Niche Construction (Odling-Smee et al. 2003) to create a spatialized 'experience machine'.

Figure 1: Mathew Emmett, *Smoke and Sulphur*, 2021. ~~by Mathew Emmett (~~Digital print on aluminium dibond~~.) in TRANSFORMATION, 2021.~~ Galerie Weithorn, Düsseldorf, Germany. ©Mathew Emmett.~~.~~

Commented [NG9]: AQ: Please provide a caption for Figure X in the following style: Figure X: Creator, *Title*, Year. Medium. Dimensions [if applicable]. Location (city/state/country). Copyright holder information [Courtesy of / ©].

Commented [NG10]: AQ: Please check for correctness.

Part of my argument is that the more diverse the disciplines we assemble, the greater the potential for novel insights. Perhaps here, it would be useful for me to explain what I mean by transdiciplinarity. Firstly, I do not mean an increased specialization, rather, transdisciplinarity is a search space that seeks the creation of new connections across a number of different disciplines unified through any given project. I do not have in mind collaborations amongst shared disciplines who operate within a common field, for example, architects and engineers, rather transdisciplinarity promotes a dialogue across disciplinary boundaries. Whilst it is important that affiliated disciplines form

important collaborations, they are often not required to carry out transgressive breach of territory, nor are they likely to encounter resistance. Lastly, transdisciplinarity are not hierarchical structures, rather, transdisciplinary teams are considered to be purposefully non-hierarchical so that discursive operations can flow between, around and across any boundaries which become obsolete. So, if I rule out increased specialization and collaboration amongst the usual participants, and I do not mean hierarchy, then what do I mean? I have three senses of the term transdisciplinary: first, I think of transdisciplinary as transformative – relating to or effecting the fundamental nature of something. Secondly, I think of transdisciplinary as a verb. People who work in transdisciplinary projects are people who actively engage, realize thorough and complete reform. Here the action is important, transdisciplinaries do not sit on the side lines, they actively engage.

Commented [NG11]: AQ: Please check the sentence for correctness.

So, what do we do to engender transdisciplinary practice? I would like to argue that there are certain essential ingredients. The first is diversity, we need diverse disciplines, diverse perspectives, diverse viewpoints, diverse skills and diverse talents. Transdisciplinaries can be described as 'T' shaped, a deep expertise in an area so as to contribute uniquely and yet also have the ability to create a broad vision. They see how these contributions might apply across a wide range of fields and problems. Diversity needs to be celebrated in itself and with no particular end goal in mind. Second, we need an appropriately sized network. If the network is too small, the possibility of novel combinations are limited. But we also have a problem if the network is too big as we can fall into groups of similar people – diversity is lost. The third thing we need is turnover, they cannot be static or they generate into old ways – innovation is lost. Then lastly, we

need the ties themselves. Establishing ties across disciplines can be difficult for it is the respect that you must have for one another that truly gives rise to innovation.

Theoretical constellations

When approaching transciplinary work, we accept different viewpoints and become empowered to question our own assumptions. Transdisciplinarity forces us to ask fundamental questions like ‘how do we expand?’ or ‘how do we innovate?’. By changing the space of possibility, we must first be open to uncertainty, as uncertainty creates a possibility beyond any assumptions or recalled memory. Because we tend to conflate multiple aspects of any given project, we tend to bias known/learnt responses. However, working across multiple disciplines in collaborative teams where diversity is encouraged, creates the opportunity to expand. Transdisciplanrity enables us to see the problem from a collective, extended sense, i.e. we are able see, think and imagine more. New opportunities arise in this manner, where transdisciplinarity becomes the vehicle to travel in multiple directions across any given field.

Transdisciplinary methodologies transcend any one speciality by actively promoting unpredictability and ambiguity. Although these conditions may create moments of uneasiness, transdisciplinarity is inherently cooperative and intrinsically motivational. Transdisciplinarity, if framed as a collective experiment, can lead to innovative discoveries, where the reward for discovery is the discovery itself. Any distinctions between disciplines become arbitrary, for these different methodologies become an ecology, a poly-chorus environment where different voices are synthesized to see things differently and ultimately to move courageously beyond the norm.

Transdisciplinary teams have the benefit of being able to identify disciplinary assumptions. They are inherently diverse and through diversity, we can complexify assumptions. A diversity of possibilities, with diverse experiences help shift perspectives and expand possibilities. Diversity through transdisciplinarity, has the power to evolve any given setting beyond its prescribed limitations. Transdisciplinarity allows us to travel between disciplines, create innovative languages that open up new avenues of thought, to glimpse the unknown. Transdisciplinarity is a transformative platform that allows us to engage with new layers of meaning, to expand upon them that ultimately lead to adaption and transformation.

The development of a transdisciplinary platform is important in my research. It enables the testing of a hypothesis through diverse perspectives. Variables are openly explored and tested in the form of a model embedded with theoretical hyperlinks associated to each discipline. Friction between and even mistranslation can lead to innovative insight. There is usually a theory behind why you wish to bring the variables together stemming from the conceptual drive of the work, but when working within a transdisciplinary situation, the emergence of a conceptual model or touchstone helps establish a sense of new, expanded possibility. Transdisciplinarity functions to unblock barriers, providing a new space of possibility to emerge. Novel connections, a diversity of constraints all become opportunities to draw out innovation. This includes the ability to see variables in a new light – providing both critical and imaginative ways in which you can measure to seek better understanding. The purpose here, is to showcase how the ecology of relationships are informed by critical practice and not limited or biased by any single hierarchical discipline. The theoretical framework allows the implicit theory to

become more clearly defined. When developing the theoretical framework within a transdisciplinary team, it is important to consider other possible frameworks and alternative theories as well. And these theories might challenge the limitations or even support your perspectives associated with your theories whereabouts highlighting that your problem can be better understood by other theoretical frameworks. The framework helps determine how you may proceed, make sense of and provide a new vision interpretation. The freedom in interdisciplinary research, opens doors and dissolves barriers by initiating innovative explorations.

Neo-Fluxus intentions

I began exploring the dynamics of spatial fields and affective experience whilst researching the German Fluxus artist Joseph Beuys at Central Saint Martins. The creation of avant-garde events and multi-media happenings interested me as immersive situations where different artistic genres blended together to create an extended sense of reality as a 'free-dimension' (Harrison and Wood 1999: 724). Founded by the Lithuanian-born American art-theorist George Maciunas (1931–78), the group emerged from Germany before spreading to neighbouring European continents and then New York around 1961. The reason why I found the movement interesting and why they are relevant in interdisciplinary discourse is that Fluxus challenged the separation between every-day life and high art, and instead sought to fuse cultural, social and political creativity into a living-dynamic artistic situation, adopting the name Fluxus 'with its connotations of flow, fusion' (Harrison and Wood 1999: 727). The Fluxus movement thereby opened up a new field of investigation for me, initiating a long-term enquiry into the complex interplay between architectural space, audience participation and spatialized modes of affectivity

Commented [NG12]: AQ: 'Harrison and Wood (1999)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

(e.g. time, space, event, etcetera). I started to question how architectural space could both absorb and transmit narratives in response to inhabitation, but also how environments could exert their influence onto the users. Later, I originated the term psychoactive architecture (Emmett 2013) to challenge the physical boundaries of Cartesian dualism. By considering architecture as psychoactive in nature, that is stimulating a range of psychological, behavioural and temporal responses, I situate architecture as an effector system within a performative framework that recognize the co-evolution of communicative situations. The theoretical interpretation of cognitive science within an architectural discipline aims to make more explicit the fluid transition between physical architectural space and internalized cognitive disciplines, siting architecture at the interface of a communicatively charged environment.

Figure 2: *Joseph Beuys Redux*, AV performance by Mathew Emmett and Eberhard Kranemann (co-founder of KRAFTWERK) at The Atlantic Project, Plymouth. Artistic director: Tom Trevor, 2018.

By re-framing architecture within a psychologically affective framework, an extended potential for semiological articulation is revealed. This was of particular interest to me, as I was able to draw links between my interest of Joseph Beuys and his theory 'social sculpture' (Tisdall 2011: 68), and the notion of being able to re-stage architecture within an *event* paradigm. Suddenly I could see how architectural settings could function as an articulation device, transforming the void space between engineered motivation and techtonic expression into animated phrases of semiological communication. Buildings reframed as a form of communication, could be prepared in the same way that John Cage (Cage: Bacchanale, 1938/1940) temporarily altered a piano by placing bolts, screws,

Commented [NG13]: AQ: 'Tisdall (2011)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

mutes, rubber erasers, etcetera to alter its sound. Altered buildings, in the same manner could receive performative interventions designed to recode and prepared to transmit sociocultural information. The functional demands of this form of architecture is more concerned with adapting and reordering the spatial context that produces a certain morphological dimension both in the psychical space, but also at the cognitive realm of the users, where the mediation of affect in space itself serves an articulatory function. Here, the spalization of communication, using AV techniques and performance in conjunction with altered architectural settings became for me a work of architecture in itself. Architecture remains a powerful tool of organization, but rather than utility, architectural settings became a canvas to express ideas and their volumetric and techntonic nature re-framed to help guide the communicative frame.

An ongoing series of AV immersive installations followed, situated within cultural buildings within a variety of temporal conditions ranging from a derelict German military hospital (180° Trauma) (Emmett and Littlefield 2012) to the new Tate Modern: Blavatnik Building in London (Sender/Receiver) (Emmett 2016). These buildings were either physically altered or digitally extended to create new immersive experiences. My work addresses both the destructive and redemptive themes in society today, revealing multi-layered references to the continued study of the *Isenheim Altarpiece*, the *Martrydom of St Sebastian* and the *Apocalypse of John*. The adaptive alteration of the host buildings is focused around cognitive-space transference, formed through emotive and sensorial interactions between the architectural settings, users and environmental cues that are engineered to trigger a shift in the users' psychological response. The realization of these projects required the ability to alter the physical environments to

Commented [NG14]: AQ: Please check and confirm for correctness.

Commented [NG15]: ÄQ: Emmett and Littlefield 2012 has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG16]: AQ: 'Emmett (2016)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG17]: AQ: Please check for correctness.

support such hyper-connectivity, and also necessitated a collaborative team comprised of neuroscientist and roboticists including Professor Sue Denham (CogNovo), Perception Lab (Germany), Dr Anthony Morse, Dr Frank Broz and Dr Torbjorn Dahl. Each art and science collaboration has used science and technology to create new forms of expression, deepening the understanding of the project, creating a diverse network of connection and meaning.

Figure 3: Mathew Emmett, *Digitally Augmented Bullroarer*, 2016. Digital sound performance, ~~by Mathew Emmett~~ at the opening of the Blavatnik Building, ~~2016~~. Tate Modern, London. ©Mathew Emmett.

Commented [NG18]: AQ: Please provide a caption for Figure X in the following style: Figure X: Creator, *Title*, Year. Medium. Dimensions [if applicable]. Location (city/state/country). Copyright holder information [Courtesy of / ©].

Inspired by the Fluxus movement, the interventions were designed to challenge habitual modes of inhabitation by positioning the user into a progressive encounter with an architectural setting 'out of sync' thereby amplifying the immersive experience in creating moments of recursive inhabitation. User participation within these recalibrated building-scapes increased with the force of affect. By researching sensory illusions in aviation including vection and the sensation of movement of the body in space produced by AV stimulation, I was able to direct attention to a level of articulation and relational signification.

Kevin Rhowbotham (1999) interpreted spatial communication as the 'phenomenogical aspects of spatial experiences' (1999: 28). Whilst the German term *Raumfindung* can be translated as 'felt-space', most architects would generally understand the interpretive meaning as presence (Zumthor 2006). Nevertheless, many architectural projects are designed without detailed knowledge or understanding of the potentials for semantically charged built environments that provide a communication

Commented [NG19]: AQ: 'Zumthor (2006)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

potential. Nor do many architects consider the consequential psychological impact that may arise from their buildings. Architectural considerations for this communication nexus between social and spatial structure rests upon the semiological dimension of the built environment. In cognitive science, situational communication or inference, operates as sets of behaviour dispositions and can be broadly defined as situated cognition (Robbins and Aydede 2009).

Commented [NG20]: AQ: 'Robbins and Aydede (2009)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Situated cognition is the notion that to fully understand how cognitive properties operate, you first have to acknowledge that the brain is embodied within a body:

> First, cognition depends not just on the brain but also on the body (the embodiment theory). Second, cognitive activity routinely exploits structure in the natural and social environment (the embedding thesis). Third, the boundaries of individual organisms (the extension thesis).
>
> (Robbins and Aydede 2009: 3)

Each idea expresses the concept of mental activity as being contingent on the situated context and the notion of the 'extended mind' (Clark ~~and Chalmers~~ 1998), which is a dynamical theory of agent–environment interaction.

Commented [NG21]: AQ: 'Clark and Chalmers (1998)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style. Also please provide the page number for the quote.

Situated cognition intentionally problematizes the mind–matter division of Cartesian dualism. Gilles Deleuze (1925–95) also questioned the mind–body dualism, describing the phenomenological affect of embodiment as a sensation affect contingent on modes of relationality:

> I become in sensation, and something happens through sensation, one through the other and one in the other.
>
> (Deleuze 1993: 187)

Commented [NG22]: AQ: As per the journal style, quotation of over 40 words long should be set as a display quote. Please confirm whether the quote 'I…other' be set as in-text quotation as it is less than 40 words.

Commented [NG23]: AQ: 'Deleuze (1993)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Embodiment is key here, the brain lives in a body which it uses to gather all of its sensations using a system of sensory epithelia and sensory organs. The very way in which

we enquire information, the way in which we sample our world to create a sense of reality is tightly contingent upon and tethered to the world we are immersed within. A high proportion of our existence depends upon bodily movement. Therefore, the primary way in which the brain interacts with the environment is mediated through our bodies. The brain is more than just a filtering device that operates beyond the task of making sense of sensory input. We can think about the brain as actively reaching out to sample the world around us – using the body and all its multimodal sensory systems as a highly calibrated interface.

My interdisciplinary research focuses on the continued blending of cognitive science and architectural design, situating political, environmental and sociocultural narratives within the spatio-cummunicative dimension of the built environment. By studying the mediation and deformation of communication as *becomings* to use a Deleuzian term, one can design an immersive AV event choreographed to infer articulatory cognitive and perceptual processes. These immersive events can be considered as 'phenomic environments' (Cassidy 1997: 23), whereby my work heightens the importance of semiological articulation. Siting the built environment as spatio-morphological inference signals, users can be immersed within an architectural setting defined as a frame for social communication.

Because of the reciprocal nature of this coupling, we can be interpreting this user-environment feedback system as an 'reflexive idea' (Spiller 2001: 5). Gibson's (1904–79) ecological theory of affordance (1979) explored these reflexive ideas by stating that the ways in which we perceive things is only in the service of how we can act upon them. So, something that can be seen is only seen in virtue of how it can be manipulated, that is: I

Commented [NG24]: AQ: 'Cassidy (1997)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG25]: AQ: 'Spiller (2001)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG26]: AQ: 'Gibson (1979)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

see a door handle, what I actually see are the opportunities afforded by the handle for acting upon it. Gibson's book *The Ecological Approach to Visual Perception*, written in 1979, argued for the understanding of 'direct perception' (1986: 10) as means to describe the direct realism of agent–environment interaction. Like Marshal McLuhan (1911–80) who wrote on the extensions of 'human faculty-psychic or physical' (1967: 26) described the environment as an active agent:

> Environments are not passive wrappings, but are, rather, active processes which are invisible. The ground rules, pervasive structure, and over-all patterns of environments elude easy perception. Anti-environments, or counter situations made by artists, provide means of direct attention and enable us to see and understand more clearly.
>
> (McLuhan 1967: 68)

~~Further, T~~the philosopher Alva Noë (2004) describes the content of experience 'as potentiality' (2004: 215), where every perceptual capability is grounded in a fundamental way by the opportunities for action that perception triggers – hence Gibson's affordance theory.

Situated cognition amplifies the interrelation between context and user, whilst the extended mind thesis (Clark and Chalmers 1998), proposes that the mind extends beyond the body into the environment, whereby external objects are considered extensions to our internal cognitive processes. The extended mind thesis claims that the mind is not exclusively tethered to our brain or even our physical bodies. The extended mind thesis questions if cognitive competence can be extended into the physical world beyond our bodies to form partnerships directly with the environment – i.e. creating a two-way partnerships or recursive coupling. When we think about architecture's role within this action–perception cycle we can postulate about circular causality, i.e. one can argue that

Commented [NG27]: AQ: 'Gibson (1986)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG28]: AQ: 'McLuhan (1967)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

Commented [NG29]: AQ: Please amend the sentence for completeness.

Commented [NG30]: AQ: 'Noë (2004)' has been cited in text but not provided in reference list. Please check and provide complete details of this reference in list following Intellect House Style.

the environment is acting upon you and you are acting upon the environment. Hence the term agent, which promotes the ‘user’ complete with the service connotations to ‘agent’ which promotes the ability to actively influence these (cybernetic) mutually beneficial inter-relationships.

When architecture is conceived as an articulatory interface, a principal consideration is the articulatory integration within the morphological consequences of the building. The level of immersion relies upon the speed and confidence with which the audience can make new and meaningful experiences. The orchestration of the event within a manifold offering, must be designed to make meaningful connections. In order to pursue effective articulation, the installation needs to act as a guide orchestrating the exchange between you and the architectural settings with sensations going in one direction and actions in the other. This relationship can also be transposed, meaning your action upon the installation becomes the installations way of ‘perceiving’ you. This recursive symmetry acknowledges ecological fundamentals, i.e. the circular causality of a niche environment where the audience are causally embedded in a situation through the embodiment of their cognition. And we can use that to make inferences about how we can interact within architectural settings and how they inform our understanding of self-modelling relative to environmental-modelling. So, internal states contextualize external states and vice versa – they contextualize each other, creating a cognitive environment as a coupled system within a socio-technological environment.

Today, we are wrapped up more and more within numerous spheres of interconnected communication. As we surround ourselves with more and more technology, each with layers upon layers of hyper-connectivity, our minds are being

extended within this externalized web. So much so, that when the environment is disrupted, we think of it as interfering with ourselves. With this complex interweaving and tangling between brain, body and world, we can think of architecture as the outsourcing of cognition. If consciousness is embodied, embedded, extended and enacted, architecture must be considered as nested within cognition, feeding off from embodied cues and feeding into environmental settings.

St Sebastian: Plague Memory

When I came to develop the *St Sebastian: Plague Memory* project, we were dealing with the pandemic and the global sense of death and alienation. The project reflects upon pandemics and vulnerability, metabolizing our past with the present. The work spatializes the story of St Sebastian the 'protector of plague victims' within the catacombs of Rome and draws particular attention to Saint Irene who heals St Sebastian's wounds with ointment.

St Sebastian: Plague Memory (Emmett 2022) is a multi-channel AV immersive installation showing infected tissues of the human body undergoing pathological transformation under the witness of St Sebastian, the protector of plagues, who represents the archetype of mortality and protection. The site of the installation is the Museo dell'arte Classica in Rome. The passage of the light and sound reveals a series of infectious manifestations of the body's material form that are visible on the museum's figurines. Layers of physiology and psychology are seen to appear and disappear in successive stages, as the skin, then organs degenerate alongside emotional and behavioural disturbances, leaving only the essential luminosity of St Sebastian's image.

Figure 4: Mathew Emmett, *St Sebastian* (Gian Lorenzo Bernini) digitally reimagined by Mathew Emmett, 2022. AV Installation, Museo dell'Arte Classica, Rome. ©Mathew Emmett.

Commented [NG31]: AQ: Please provide a caption for Figure X in the following style: Figure X: Creator, *Title*, Year. Medium. Dimensions [if applicable]. Location (city/state/country). Copyright holder information [Courtesy of / ©]. Also please provide the figure citation.

St Sebastian was born in third century, continued to be the patron saint of the plague through centuries of recurrent epidemics. Tied to a tree and shot by arrows during Diocletian's persecution of Christians, was rescued by Saint Irene of Rome, healed in the catacombs and later clubbed to death for warning Diocletian of his sins. Using historic references and details the project contemporize the narrative making us ponder on what possible forms the society-to-come might take, body like home of the edge of spirituality; and reflect on our current world and the world to come.

Commented [NG32]: AQ: Please check if the edit made is fine?

Visitors are immersed within a space reminiscent of an 'intercessory prayer' formed by light, video and sound. The architectural settings of the museum are transformed into a discomforting narrative of necrotic flesh-like forms, and through the projection of light evoke the catacombs of Rome to reimagine earlier artist interpretations of the *Martyrdom of St Sebastian*. As the sonic turbulence subsides, opposing walls and existing sculptures are bathed in an intense gold liquid representing Saint Irene's ointment. The existing museum sculptures act as three-dimensional screens that both reveal the pathological journey and their forms are also illuminated by piercing rays of red light representing the arrows piercing St Sebastian. A minimalist soundscape recalls the breath and pouring on of the ointment of St Sebastian.

Figure 5: Mathew Emmett, *The Healing of St Sebastian* ~~by Mathew Emmett~~, 2022. AV Installation, Museo dell'Arte Classica, Rome. ©Mathew Emmett.

Commented [NG33]: AQ: Please provide a caption for Figure X in the following style: Figure X: Creator, *Title*, Year. Medium. Dimensions [if applicable]. Location (city/state/country). Copyright holder information [Courtesy of / ©]. Also please provide the figure citation.

Certain emotional events have shaped my thinking and practice, where the work spatializes states of emotion that connects the audience to an internal, yet communally shared dialogue situated within a spatial experience. The work heightens the coupled perceptual phenomenon of affect and spatiality, by creating an 'immediately embodied' (Massumi 2002: 25) value of perception, leading to a heightened awareness of the pandemic. *St Sebastian: Plague Memory* constructs a hybrid space formed through an immersive performance that is both site-responsive and culturally political. The result is an AV performance that reflects the human search for refuge and protection in the face of fear and violation.

Figure 6: Mathew Emmett, *The Martyrdom of St Sebastian* ~~by Mathew Emmett~~, 2022. AV Installation, Museo dell'Arte Classica, Rome. ©Mathew Emmett.

Commented [NG34]: AQ: Please provide a caption for Figure X in the following style: Figure X: Creator, *Title*, Year. Medium. Dimensions [if applicable]. Location (city/state/country). Copyright holder information [Courtesy of / ©]. Also please provide the figure citation.

St Sebastian: Plague Memory was curated by Camilla Boemio in collaboration with the scientific board Francesca Gallo and Irene Ranzato at Polo Museale Sapienza, Piazzale Aldo Moro 5, Museo Dell'Arte Classica Sapienza Università Di Roma.

References

Baudrillard, J. ([1981] 1994), *Simulacra and Simulation*, Michigan: The University of Michigan Press.

Brown, B. (2002), *Cinematography: Theory and Practice*, :Oxford, Focal Press.

Cassidy, T. (1997). Environmental Psychology: Behaviour and Experience in Context, East Sussex: Psychology Press Ltd.

Clark, A. (1998). Being There, Putting Brain, Body, and World Together Again, Cambridge, Massachusetts: The MIT Press.

Clark, A. (2008), *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*, New York: Oxford University Press.

Commented [NG35]: AQ: Please provide the publisher city.

Commented [NG36]: AQ: Please provide the publisher city.

Corrigan, T. and White, P. (2009), *The Film Experience: An Introduction*, : Boston, Bedford and St Martins.

Deleuze, G. ([1983] 2005), *Cinema 1*, London: Continuum.Gallagher, S. (2009), 'A short primer on situated cognition', in P. Robbins and M. Aydede (eds), *The Cambridge Handbook of Situated Cognition*, New York: Cambridge University of Press, pp. 3–9.

Deleuze, G. (1993), The Logic of Sense, New York, Columbia University Press.

Emmett, M. (2013), Felt_space infrastructure: Hyper vigilant spatiality to valence the visceral dimension, Ph.D. thesis, Plymouth: University of Plymouth

Gibson, J. (1986). The Ecological Approach to Visual Perception, New York: Psychology Press, Taylor & Francis Group.

Harrison, C. and Wood, P. (eds) (2002), Art in Theory 1900-2000: An Anthology of Changing Ideas, Blackwell Publishers Ltd.

Lewis, C. I. ([1929] 1956), *Mind and the World Order*, Rpt, New York: Dover.

McLuhan, M. and Fiore, Q. (1967), The Medium is the Massage, An Inventory of Effects, Berkeley, Ginko Press.

Massumi, B. (2002), *Parables for the Virtual: Movement, Affect, Sensation*, Durham : Duke University Press.

Merleau-Ponty , M. ([1945] 1962), *Phenomenology of Perception*, New York: Routledge.

Odling-Smee, F.J. & Laland, K.N. & Feldman, M.W. (2003), Niche Construction, The Neglected Process in Evolution, Princeton: Princeton University Press.

Noë, A. (2004). Action in Perception. Cambridge, Massachusetts: The MIT Press.

Commented [NG37]: AQ: Please provide the publisher city.

Commented [NG38]: AQ: Please provide the publisher city.

Commented [NG39]: AQ: Please provide the first name in initial for consistency.

Nusselder, A. (2009), *Interface Fantasy: A Lacanian Cyborg Ontology*,:Cambridge, MIT Press.

Pallasmaa, J. (2005a), *Encounters*, : Rakennustieto Oy (Building Information Ltd).

Pallasmaa, J. (2005b), *The Eyes of the Skin: Architecture and the Senses*, Chichester: Wiley-Academy.

Revonsuo, A. (2006), *Inner Presence, Consciousness as a Biological Phenomenon*, MA: Cambridge, MIT Press.

Rhowbotham, K. (1999), *Field Event/Field Space: Architecture & Urbanism 2*, London: Black Dog Publishing Limited.

Robbins, P. & Aydede, M. (2009). The Cambridge Handbook of Situated Cognition, New York: Cambridge University Press.

Smithson, R. (1996), *The Complete Writings*, CA: Berkely, University of California Press.

Spiller, N. (2002), Reflexive Architecture, Chichester: John Wiley & Sons Ltd.

Tisdall, K. (2011), Joseph Beuys: The Artist Teacher, in Vartanian, I. (ed) Artwork, Seeing Inside the Creative Process, San Francisco: Chronicle Books.

Zumthor, P. (2006), Atmosphere: Architectural Environments - Surrounding Objects, Basel, Birkhäuser GmbH.

Commented [NG40]: AQ: Please provide the publisher city.

Commented [NG41]: AQ: Please provide the publisher city.

Commented [NG42]: AQ: Please provide the publisher city.

SUGGESTED CITATION

Emmett, Mathew (2022), 'Psychoactive space: Glimpses of the unknown', *Design Ecologies*, X:X, pp. 00–00, https://doi.org/10.1386/des10.1386/des_00017_1.