

Article

The Ghosts of Architecture: Point Clouds, Affect and Collaged Hauntopias.

Clear + Park | Professor Nic Clear & Hyun Jun Park

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Introduction

Clear+Park (C+P) use 3D laser scanning to create works that operate across architecture, installation, and media arts. C+P capture, edit and manipulate point-cloud data to document spaces, create speculative projects and spatial propositions; creating digital images and animations that engage with and respond to specific site narratives.

One of the underlying aims in the manipulation of point-cloud data is the opportunity to tell site-specific stories and create spatial possibilities that seek to represent a specific point of view and, in the process, blur the distinction between the quantitative mapping of sites, the qualitative interpretation of the site and a critical intervention into contemporary forms of representation.

In their work, C+P create complex assemblages that combine 3D rendering and post-production effects to create spatial collages that operate between the actual and the virtual. Using the veracity and verisimilitude of the scans opens a powerful opportunity to critique traditional forms of representation where conceptions of authenticity and specificity of place can be radically questioned. In the same way, the images of architectural photography do not simply reflect the inherent qualities of the architecture but actively construct those qualities.

In this essay, I will look at the creative and critical potential for 3d scanning drawing on collage, music and film to argue that in their most recent work, C+P use conceptions of affect to explore the 'spectres' of previous generations that haunt conceptions of the city and betray the simulacrum at the heart of the contemporary urban realm.

Collage

"AMONGST THE ARSENAL OF THINKING METHODS, THE PROCESS OF COLLAGE MAKING, THOUGH PERVASIVE, OCCUPIES A DISRUPTIVE POSITION BY USING TRASH AND DEADNESS TO FORM BEAUTY."

Ben Nicholson (1990)

Collage is neither photography, drawing, painting, nor even writing, and yet it combines many of the characteristics of all four. Its great strength lies in its in-betweenness, brought about by the artificiality of juxtaposing varied materials, whether image, texture or text and in doing so, creating works that are often capable of great narrative power.

Richard Hamilton and John McHale's iconic 1956 image 'Just What is It That Makes Today's Homes So Different, So Appealing? (Just What is It?)' (Hamilton, McHale 1956) uses collage to evoke aspirations of consumer-driven technological domesticity and represents a broadly positive representation of what it 'felt' like living in post-war Britain in the mid-1950s. The technoutopianism represented in the image is viewed through the lens of an ironic bittersweet optimism, satirising the aspirational bourgeoisie consumerism that will become mainstream in the next decade. The collage produced for the 1957 exhibition 'This is Tomorrow' encapsulates an approach that was to be the cornerstone of British pop art, exemplified by the works of Blake, Hockney, and Hamilton and in architecture through the projects of Archigram.

The success of 'Just What is It?' is not due to it being a photo-realistic representation of domestic life and technology, and while it loosely conforms to many of the conventions of perspectival representation, its distortions and artificiality make it more effective in communicating the complexity of its ideas than simply trying to mimic reality. The artifice of 'Just What is It?' creates a tension that succeeds in articulating an anxiety between the promise of utopian futurity and the reality of a more mundane consumer-driven domesticity. This ambiguity is one of the reasons that the image was so resonant in its contemporary setting, and even though the content now looks dated, it still retains that visual power.

Pop promised so much: fun, leisure, futurity, and liberation, yet this failed to be delivered and works such as 'Just What is It?' end up reminding us that the promises made by the glossy images of contemporary culture are also a fiction. In architecture, the collages of Archigram also offered a world of carefree technology; 'pop-up' and 'plug-in' cities, and 'tuned suburbs', but Archigram also reminded us with the Cushicle, Suitaloon, and Living Pod projects that we could become trapped and isolated within that technology. Even Ron Heron's vision of 'Walking Cities' became more believably remade as the 'Municipal Darwinism' of Philip Reeve's 'Mortal Engines' (Reeve 2001), with the idea of the great

cities marching across the globe consuming all before them is a much more plausible narrative than Herron's peripatetic funhouse.

Archigram's use of collage, abstracted drawing techniques and infographics echoed many of the themes set out by earlier architectural avant-garde, such as the Italian Futurists and the Russian Constructivists, but without the belief that the emancipatory powers of technology would bring about the desire for a radical political change.

Contemporary representations of the future still rely on many of the same tropes and assumptions that were the mainstay of pop and other futures of the past, so much so that it is perhaps impossible to convincingly imagine what a progressive future might 'feel' like given current levels of economic inequality and the realities of climate catastrophe. To use the terminology of Jean Baudrillard, we are playing a game that uses the vestiges of previous cultures (Baudrillard 1984). Suppose we are to create new stories and new possibilities that promise progressive alternatives. In that case, it is unlikely that the opportunity to do that lies in using images generated by large language models.

Affect

"If emotions are personal experiences, then affects are the forces (perhaps the flows of energy) that precede, produce, and inform such experiences."

Steven Shaviro (2016)

The ability of collage to foreground an idea, even though the representation may lack realism, is often due to the disruptive power derived from the juxtaposition of heterogeneous images rather than creating a purely mimetic representation from a single source. In the case of 'Just What is It?', the focus is on conveying what it might 'feel' like to live in post-war welfare state Britain rather than what it might look like. When articulating concepts of what something feels like, we are addressing theories of affect. Furthermore, collage operates in a state of in-betweenness, and in-betweenness is often

cited as a key characteristic of 'affect' (Seigworth and Gregg 2010); therefore, the need to understand the affective potential of our representations is of great importance.

In writings on affect, the term is often conflated with emotion, and they are invariably used as synonyms. Much of the literature around affect resists a simple differentiation between the two. For cultural theorist Steven Shaviro, conceptions of affect are distinguished from emotion by dint of the fact that 'emotions are personal experiences or states', whereas 'affect is pre-personal and pre-subjective; it is social, or even ontological before it is strictly individual' (Shaviro 2016a) and that 'affect isn't what I feel, so much as it is what *forces me* to feel' (Shaviro 2016a). Shaviro's theories of affect follow directly from the ideas of the philosopher Brian Massumi, whose influential essay 'The Autonomy of Affect' (Massumi 2002) holds a central place in recent developments in affect theory. For Massumi, affect is a 'zone of indeterminacy' between thought and action' (Massumi 2002), a position that is in turn informed by Deleuze and Guattari's work, particularly their book 'What is Philosophy?' (Deleuze and Guattari 1994), where they describe affect as a form of 'pre-personal autonomous intensity', or experience, and they differentiate between artistic endeavour, which creates 'affects and scientific discourse, which creates concepts' (Deleuze and Guattari 1994).

However, within areas of neuroscience, the difference between emotion and affect is less of an issue, and their cultural interpretation is less significant. In 'The Hidden Spring' (Solms 2023), neuropsychologist Mark Solms explicitly defines affect as 'the technical term for emotions' (Solms 2023) and the way we 'feel', but the most significant aspect of Solms' work is how he directly relates feelings and emotional states to consciousness. Solms demonstrates through a series of case studies that the ability to feel, to experience the world through emotions, even if other brain functions are severely compromised, is the condition that marks an individual's ability to interact with the world and to manifest that engagement through conscious thought. This leads to the conclusion that consciousness originates in feeling,

even replacing the Cartesian cogito, 'I experience therefore I am' (Solms 2023). Solms further suggests that this capacity for feeling may have been at the centre of our evolutionary abilities, with feelings such as fear, disgust, lust etc, driving the development of consciousness and ultimately responsible for our ability to develop language.

Feelings are essential when considering our subjective experience, which may be why aesthetic phenomena are so important. While all art evokes feelings, some art is more attuned to create affective responses than others. Shaviro affords film an important role in the use of affect, describing films as 'machines for generating affect' (Shaviro 2010) because they immersively integrate image, sound and time. Indeed, the temporal nature of film is essential to evoking an affective response, and the structures of filmmaking as a practice have evolved to maximise the impact of its stylistic tropes in manipulating audience responses. However, architecture could equally hold a similar claim to being a machine for producing affect.

Architecture - Representations

"Architects do not make buildings, they make drawings for buildings."

Robin Evans (1989)

Affect is clearly important when considering the experience of architecture; when we encounter architectural spaces, our immediate response is often emotional; how spaces feel is often more important than how they look or function. Certainly, many spaces can be functionally redundant and yet engage an intense positive emotional response. In contrast, more practical spaces can be highly unpopular because they do not engage with the user's feelings. We unknowingly place constraints on how we engage with spaces and fail to recognise that we have often made up our minds about space before consciously processing all the information on it. We feel spaces before we reflect upon our experience of them, and the decisions about our responses to a 'place' have already been made. However, an important aspect of how we feel about

spaces is contingent on the conditions under which we experience them, how we remember them, how we create them, and even how we represent them.

The tension in architectural discourse between objectively conveying spatial information and representing the subjective experience of space is a central problem that dates to Architecture's birth as a modern discourse in the Enlightenment's quest for reason and the drive for standardisation initiated with the rise of the industrial revolution with the processes of architectural drawing codified as part of the emerging system of architectural education. In France, the Ecole Polytechnique and the Ecole des Beaux Arts were both keys to the regularisation and codification of various systems of graphic representation that had been used previously. At the Ecole Polytechnique, this was manifested as a taxonomic approach to architectural form, while at the Ecole des Beaux Arts, it was the issue of style that was of great importance; not just the neo-classical stylings of the orders but the types of representation used in the production of the architectural drawing. The stylistic renderings of the final presentation drawings were as important as the architectural syntax and codified the formal demonstration of the student's mastery of their craft, measured through the ability to communicate intense representations of feeling.

The combination of a belief in reason and the need for standardised systems of production that would facilitate the mass production of cities, buildings and products created ideological goals and values that persisted and became more concentrated through modernism, albeit the 20th century saw the belief in a greater objectivity and appeal to reason rather than emotion, a predilection that was not shared by many of its users and the spectre of those frameworks is an invisible armature which still lingers within contemporary architecture.

There is no space here to fully account for the development of architectural representation. However, it would be reductive to see architectural representations simply in terms of the technical representation of a building, as Wikipedia does. Architectural drawings combine instrumental and technical aspects with

stylistic elements to boost affective response. Like the role of photography in architecture, it is often intended to appeal to misplaced conceptions of authenticity. Even reducing drawings to a minimalistic technical status can itself be a stylistic trope, as evidenced by the reluctance of Frank Gehry to use presentation drawings of many of his early projects.

Simplifying to the extreme architectural representation can be characterised as a continuum with two poles, the practical and the conceptual. There are those architectural drawings whose objective is primarily to communicate processes and objects as a material reality, and there are those more concerned with communicating ideas and philosophical concepts. In practice, all architectural drawings combine both qualities, albeit often privileging one part of the continuum, and it needs to be emphasised that there are no representations that only sit at one of the extremes. At some level, all drawings embody practical concerns, however frivolous, and all embody some kind of concept, however mundane.

There is one characteristic of architectural drawings that further complicates their status as Robin Evans reminds us that architectural drawings are often an intermediary and that unlike 'fine art' representations, they are not normally an end in themselves (Evans 1997), the supposed outcome of an architectural drawing is a building. However, architects are very rarely the people who make the buildings, even in the age of computer-aided fabrication. Despite transformations that have occurred in all areas of architectural production, elements of this illusory performative approach to drawing still dominate even within contemporary digital imaging.

In an age where BIM standardisation is becoming ubiquitous and one of the consequences of the dominance of certain software and rendering styles is the uniformity of visualisations and the simple fact that many commercial visualisation images end up making projects all look the same, which given the relationship of corporate architecture to the global property industry may be deliberate.



Clear+Park, The Digital Exploration of Three Sites in Huddersfield Chronograms: Huddersfield Railway Station
- Oblique Zoom with Elevation, B&W, 2025



Clear+Park, The Digital Exploration of Three Sites in Huddersfield Chronograms: Queensgate Market
- Composite Tracking Shot with Elevation, B&W, 2025

An ironic outcome of contemporary CGI images is that they often try to use hyperrealism to communicate what architecture feels like but only succeed in showing us what that architecture 'looks' like. Despite the photorealistic nature, they are invariably emotionally bereft.

3D Laser Scanning

"The relocation of perception (as well as processes and functions previously assumed to be "mental") in the thickness of the body was a precondition for the instrumentalising of human vision as a component of machinic arrangements."

Jonathan Crary (2000)

The technical and instrumental capture and representation of space has been a significant part of the history of architectural representation (Kemp 1990), from the perspective grids of Durer, through the Pantograph, the Camera Obscura and Camera Lucida to the theodolite, the photograph and the film sequence, instrumental forms of spatial mapping have aided the representation, measurement and quantification of the world around us, albeit often with the side-effect of abstracting and distorting the spaces they represent.

The move to technical instrumentality has found its apotheosis in the use of 3D scanners to capture spaces in ways that are both eminently practical, utilitarian and realistic, yet the nature of the images created has an aesthetic quality that also lends itself to an emotional engagement with the scanned space.

The aesthetic qualities of point-clouds are something that practitioners do not always foreground; perhaps it is felt that such discussions undermine the technical veracity of the data. Point-cloud models are undoubtedly evocative, even beautiful, and present a powerful way of describing spaces. 3D scanning has already clearly established itself within architectural production, and the process of capturing spaces using 3D-laser technology is well understood as part of the surveying process and as a way of automating the development

of highly accurate information and creating information from editable mesh models to CAD drawings while the images from the scans can be used for visualisations. The days of the traditional hand-drawn measured survey are, for many, as anachronistic as the drawing board and the parallel motion.

The introduction of 3D scanning, while representing the continuity of this tradition, also represents a paradigmatic shift in the technology of spatial capture as previous technologies involved direct human agency in the capture of spaces; 3D scanning heralds the start of a period where capture could be completely automated and in the work that will be discussed later human agency is still central to the final outcomes of the work.

The images created by 3D laser scanning present difficulties when considering where to place them on the practical-conceptual continuum mentioned above as they are highly technical mimetic representations created through an indexical relationship to the space or object being scanned, and yet they are also abstract, and ephemeral being formed from digital data mapped onto a 3d matrix. Their complexity suggests they are by no means a straightforward objective representation of the scanned subject. One central characteristic of point-cloud images is that they combine photographic and digital veracity with an incompleteness that comes from an image composed of points in space; they are highly mimetic, they embody qualities of digital models more generally, but they are also partial and, in many ways, quite strange.

Like photographs and film sequences, point-clouds capture spaces at a particular moment in time, yet as representations, these are always encountered as something experienced in the present. They are time-machines, but the relationship of the three-dimensional scan to the building is quite unlike the flat photographic image, and unlike the film sequence, there is no embedded point of view. However, in all cases, their spectrality and pastness mean that they can be seen as literal ghosts.

Given that point-clouds are always mediated, it is surprising that they tend to convey such a level of authenticity as representations. One feature often remarked upon is that they seem to resemble our perceptions of what memory or dreams are like. Furthermore, like our memories and dreams, they represent a consensual fiction that relates to reality but is not identical to it in the way we might assume.

The idea that we can represent spaces in unmediated way is influenced by the histories of architecture where the nature of representation is itself viewed as neutral and transparent. The principal means in which we have historically documented sites, such as plans, privilege issues of ownership by marking boundaries whilst claiming objectivity. The way we describe experience relies on pictorial forms, such as perspective, which distort spaces and rely on undeclared value judgements implied by an embedded POV.

As was noted earlier, if affect is found in in-betweenness, then Point-cloud models where in-betweenness is an important characteristic of both their quantitative and qualitative properties; part digital model, part photograph, information drawn directly from the physical object and space and yet manipulable in ways only available to virtual spaces. This ambiguous nature is vital to their aesthetic and affective qualities. Moreover, once animated, the ability to immerse the virtual subject into a scene that would be physically impossible within the corporeal world further adds to how these representations are highly amenable to creating an affective response.

Point-cloud models in themselves do not tend to be used as a creative tool within the design process, largely due to technical issues in manipulating the large file sizes, but as the workflow becomes more manageable due to changes in both hardware and software, then the opportunity to directly manipulate the scan data will be realised. Like all imagery born in an instrumental approach, Point-clouds can be very deceptive; we have come to doubt the veracity of the camera, as they certainly can lie, just as point-clouds can be manipulated albeit through the intervention of human agency as part

of a creative process. However, their manipulation may go unchecked as they become integrated into machine learning systems.

3D scanning is at the point that Crary describes photography in the middle of the 19th century (Crary 2000); the equipment is expensive, the skillset to use the data is relatively arcane, and the process of capturing spaces and using the data is quite laborious and time-consuming. However, that is changing with the proliferation of photogrammetry and Gaussian splats. While it may never be, as with all 3d tools, even AI, simply about pressing a button despite what certain theorists might claim, the wider availability of these tools is something to be welcomed.

Between the Analytic and Synthetic

"The cubists focused on representation, giving us pictures of pictures rather than pictures of things, because they thought that pictures were more like perceptions, in which respect, they too, were perpetuating a long tradition."

Robin Evans (1995)

Clear + Park (C+P) have been using 3D scanning as part of their creative practice for nearly ten years; creating projects that fall into two distinct categories that we would like to describe, loosely appropriating the terminology of Cubism as the analytic mode and the synthetic mode.

The terminology surrounding the differentiation between the two phases of Cubism was developed to reflect the shift between its initial development under Picasso and Braque and its more widespread adoption among their contemporaries. The analytic phase is often understood as systematic and technical, while the synthetic phase is viewed as a more general utilisation of those techniques. Albeit, as Herbert Read noted, the usage of the terms within Cubism is somewhat arbitrary and does not hold up to rigorous scrutiny, stating that 'there is actually no possibility of making an aesthetic distinction between these two phases of an evolving style' (Read 1959). The usage of the terms here is aligned



with their formal meanings and rooted in the processes and implementation of scanning technology itself. However, the association with Cubism is still important because the popular misconception still endures.

In the analytic mode, which can be seen as the standard usage, scanning technology creates representations of spaces and objects that can be used for documentation or translated into editable mesh models. Meanwhile, in synthetic mode, the data of the point-cloud models are manipulated to create hybrid models and assemblages. Even within the analytic mode, a purely quantitative approach is not inevitable, and there are several points where the subjective intervention of the point-cloud artist can have a significant effect.

In their work, C+P use scans to develop spatial research that is aligned with wider research objectives, exploring histories and theoretical ideas integral to the scanned material. The scans are used to create and tell stories, fictional or otherwise. In the analytic mode, spaces are scanned, and the point-cloud models are principally used as part of a process of documentation, bringing to life the subject through stills and, or animation. When the data is manipulated, usually through processing, editing and post-production techniques to create narrative sequences where the information taken from the scanned object is principally 'enhanced' but the forms in the scans are not radically altered. A good example of this approach is the 'Turning Forms' project, where scans for a recently restored Barbara Hepworth sculpture were animated to show the rotation of the original object, which is no longer possible even after restoration (Clear 2023).

In the synthetic mode, tactics of deformation can be quite varied, ranging from simple overlays, mirroring and multiplication or through distortions caused by rotation to projects where the model itself is manipulated, hybridised or baked in through cumulative iterations. However, in their synthetic projects, C+P use point-cloud models to hybridise the data to create complex compositions and assemblages while still using techniques such as compositing and animation alongside particle systems and installation.

There are two principal intentions driving the Synthetic projects: one is speculative, and the second is critical. The first speculative approach is to use the scanned objects to create hybridised design projects by editing existing scanned data. An example of this approach is the Hyperreal Huddersfield project, where scans of the Huddersfield Queensgate Market, a truly remarkable modernist building utilising innovative asymmetrical hyper-parabolic geometry in its structural columns, become the site of a re-enactment of Iannis Xenakis's polytope sound-image-space experiments of the 1960s which I have discussed elsewhere (Clear 2022). The project draws on the remarkable fact that Xenakis performed at the Huddersfield Contemporary Music Festival on two occasions, and though there is no record of him visiting the Queensgate Market and he never created a Huddersfield polytope the co-incidence with his own utilisation of hyperbolic geometries presents an intriguing point of departure.

The second approach marks a critique of representation itself and the ability to represent places in a way that is seemingly authentic while the representations are, in fact, simulacra, copies with no original. The projects that will be discussed here are urban interventions formed from fragments of multiple scans as virtual assemblages that question the authenticity of our urban space and stand in for a type of urban alienation that is prevalent in the age of neo-liberal capitalism which we have named Hauntopias, or more loosely Ghosts.

Hauntopias

"What's at stake in 21st century hauntology is not the disappearance of a particular object. What has vanished is a tendency, a virtual trajectory. One name for this tendency is popular modernism."

Mark Fisher (2014)

Certain trends in electronic music of the 1990s and 2000s used digital sampling to create a type of uncanny soundscape that was both different to and yet echoed previous forms of electronic dance music; these works were described by Mark Fisher and Simon Reynolds under the name hauntology (Fisher 2014, Reynolds

2011). In the analysis of these tracks from artists such as Burial, The Caretaker or William Basinski, it is noted that we feel the links with previous music, the ghosts of 90's rave or 80's electronica, without necessarily cognitively processing them, they too can be said to operate on an intense level of affect.

The appropriation of the term Hauntology is taken from the work of Jacques Derrida, whose 'Spectres of Marx' (Derrida 1993) used as its point of departure Marx's claim that 'a spectre was haunting Europe, the spectre of communism' (Derrida 1993) and incorporated hauntology as a very Derridean play on word the ontology. Within music, Fisher noted that music seemed caught in a cycle of living in the past but recreated that past in different ways at each re-recording; he deployed the term hauntology as it had the ability to conjure an image of culture literally being 'haunted' by the ghosts of its own past, while also conveyed the melancholy aesthetic of the musical compositions.

One of the key characteristics of this music is the inclusion of 'crackle', the noise of a traditional record stylus as it runs across vinyl alongside other analogue sounds that have been digitally captured and manipulated. However, the inclusion of these sounds is, for Fisher, not a sign of nostalgia or pastiche; it is to delineate the ghost of the analogue and the absent figure of the physical that is still always already present.

Fisher relates this idea to Frederic Jameson's conception of history as a 'nostalgia mode'; according to Jameson, one of the defining characteristics of postmodernism (one word all lowercase) was the idea that history was replaced with the more generalised concept of 'pastness' (Jameson 1984). Pastness is not concerned with historical veracity or understanding but a way of trying to recreate a historical simulation of what the past 'felt' like. This is particularly important when considering architectural Post-Modernism (two words capital P, capital M), as Jenksian historical eclecticism, was not a faithful reproduction of the past but a looser, more nostalgic interpretation of the visual tropes of a pre-modernist romanticism that only existed in the minds academics and then delivered as the populist architecture of late-capitalism.

The term Hauntology has never found common parlance in contemporary architecture, and where it has been used, it has not been expanded upon; one reason may be the use of the term uncanny often conveys similar ideas. Anthony Vidler suggested that the 'architectural uncanny' signifies a persistent malaise that denotes wider issues of alienation that intrude into modern life and our Nietzschean impulse for the eternal recurrence of the same (Vidler 1992).

Hauntology is the preferred term for the C+P's Ghost projects to be discussed here because the approach to acquiring and compiling the scan data is analogous to the way digital material is used in music. Equally, hauntology evokes much of the existential dread inherent in these architectural representations and is something that a speculative use of point-cloud images can critically explore. The incorporeal nature of point-cloud images underpins their spectral hauntological aesthetic with the fractured nature of the textures and surfaces corresponding to music's 'crackle'. The spaces look familiar, yet they are composed in a way that the configurations are completely fictional, in much the same way that Fisher describes the musical compositions of Burial or The Caretaker. Urban space is sampled and remixed to create hauntological assemblages of highly plausible but fictitious urban configurations. The analogy to musical hauntology is deliberate; the scans represent the architecture of the past experienced in the present.

Point-cloud images exist in an uncanny representational milieu that includes the phantasmagorical images of the Victorian Pepper's Ghost, the antique patina of early Daguerreotypes, the grainy imperfection of the Zapruder footage and the glitch videos of designers such as Tomato and perhaps more recently those images developed using generative software where the ghost is literally in the large language model.

However, with their apparent ability to see through a building's structure and the translucency of the image, they perhaps most closely resemble the X-ray or its modern counterpart, the MRI scan. Beatrice Colomina places the X-ray at the centre of the development of modern architecture and its obsession with health and disease (Colomina 2019). However, the point-cloud is

not a flat projection on a 'screen' but rather a spatial model. While point-clouds can be used diagnostically to assess a built structure's fitness, they do so by reproducing the object rather than merely representing it.

Colomina pays particular attention to the glass architectures of Mies Van der Rohe and Phillip Johnson, especially Johnson's New Canaan guesthouse, remarking on how the house uses the exterior as wallpaper. Jeff Wall gives a similar reading of the house in his essay 'Dan Graham's Kammerspiel' (Wall 1991), where he links Graham's work to the high modernist glass house, particularly Mies and Johnson. Wall dramatically claims that the architecture of the New Canaan guest house is a haunted crypt for the ghostly spectres of the ancien-regime. During the day, the princely spectre is excluded by the building's radical transparency, while 'at night the vampire awakes' (Wall 1991). This ancient figure does not need to be invited in as they already reside inside. The dilemma of modern architecture is that it always already contains the 'vestiges' of the past; despite the transparency of modern architecture, the nature of light means that the optical characteristics of the glass box will break down given the right lighting conditions, and the transparency turns to the opacity of the reflected surface.

Ghost and haunted house stories are not merely about the supernatural; they represent repressed fears, a narrative manifestation of dread and a phobia of the present. In the current political climate, it often seems that ghosts and haunted house stories are all we have left.

The Ghost Series

"We are not dealing with the spectres of last possibilities, the ghosts of things that never happened, or the traces of forgotten events photoshopped out of the end of history. Instead, we are confronting the CGI signs of a massive pseudo-event. A pre-scripted PR initiative disguised as an authentic happening full stop."

Mark Fisher (2018)

The collage 'City of Composite Presence' created by David Griffin and Hans Kolhoff (Griffin, Kolhoff 1977) was employed by Colin Rowe and Fred Koetter as a frontispiece for their book 'Collage Cities' (Rowe Koetter 1978) to signify the eclectic approach to urban bricolage that formed the main thesis of the book. The image was created under Rowe's supervision at Cornell University as part of a student project to create urban compositions from fragments of existing architectural plans sourced from numerous historical periods combined to create proposals for fictional urban masterplans. 'City of Composite Presence' is one of many such collages produced during this period to announce the rise of a radical shift in city planning, which followed the decline of CIAM modernism and serves as the 'prototype' model for New Urbanism.

Because 'City of Composite Presence' is composed of plans, there is no real description of the spaces and forms created from such a piece of architectural bricolage; they are merely inferred from our knowledge of the architectural fragments (this is a drawing by architects for architects). The image is explicitly playing a Baudrillardian game of vestiges (Baudrillard 1984), creating a seemingly consistent architectural composition from heterogeneous elements unified most obviously through a uniform graphic style in the drawn plan, which unwittingly represents the nostalgia mode for a haunted architecture.

While its authors would resist accusations of uniformity, the apparent complexity of the proposal is an illusion as the source materials are deliberately treated as equivalent, and as such, this approach has become the template for an architecture of the extruded line promoting a methodology that will come to dominate commercial property development in the following years. While it is claimed that such an approach is people-centred and environmentally sustainable, it is, in fact, the model used by neo-liberal developers to turn our cities into privately owned gated communities where commercial collage is used to maximise profit and create the homogeneous space of late capitalism.

In the Ghost series, C+P use a similar approach, combining fragments of scanned buildings collected from different

locations at different scales to create imaginary urban landscapes and uncanny compositions where specific conceptions of place are being artificially manipulated. Where the assets used by Griffin and Kolhoff were abstracted 2D plan images, the point-cloud models include spatial data and surface textures, as well as the ability to edit, resize and remake elements of the point-cloud models. Combining the fragments from laser-scans offers the opportunity to create more complex spatial assemblages with the advantage that these models can be explored as time-based representations.

In the Ghost series, the aesthetic qualities of the point-cloud are central to the way in which C+P utilise them in the work. Point-clouds retain coherence on one level and are highly mimetic, but the fact they are composed of individual points of information gives them a spectral quality; they appear both solid seeming and insubstantial at the same time. Their semi-transparency creates an illusion, allowing viewers to see through the solid walls, a form of x-ray vision, an effect heightened in C+P's work by the monotone rendering.

When multiple point-cloud models are edited to isolate individual elements and inserted into a new scene, the combined fragments create a hyperreal mise-en-scene that alludes to a new existing urban syntax while simultaneously being entirely fictional. These assemblages allow the creation of highly detailed and seemingly realistic urban spaces that have many real-world characteristics, but they are completely synthetic and played out as parodies.

The Ghost Series is a series of spatial collages that blur the delineation between the actual and virtual; these models are created from actual scans and represent a literal mapping of the objects. But they are still abstract representations of those objects combined in often frivolous combinations.

The Ghost Series images explore the critical potential of point-cloud data through a direct indexical relationship to the specific spaces, and this correspondence is used to give scans a sense of authenticity, as they are direct reconstructions and replicate the exact forms and even

textures of specific sites and objects. Once the data sets are manipulated, that relationship is problematised as our conceptions of 'place' are based on the unique qualities of a site. However, these unique qualities are reproduced, replicated and modified to create a simulacrum, a copy of a space with no original (Baudrillard 1983) and using post-production techniques, the 'feel' of an original can also be heightened.

Further complexity can be added if additional synthetic compositions are also integrated into the scene; the resulting scene blends virtual and actual to create dramatic juxtapositions that blur ideas and spatial certainties.

The process of creating these composite landscapes is a form of conceptual play that operates as a critique of the authenticity revered by architectural phenomenology and lionised in the collages of New Urbanism. Unlike previous collage approaches, the scans are not pieced together from flattened images, and they are not simply Photoshopped reconstructions using multiple renders; these are assemblages made of 3D data.

As it has been noted before, viewers of point-cloud images often remark that the incorporeal nature of images reminds them of dreams or memories, and that dreams and memories are both unreliable and often allude to wider emotions and feelings. The Ghost Series use the affective nature of laser scanning and its appeal to emotions and feelings through their spectral hauntological dynamics to simulate spaces that feel authentic. The Ghost Series is designed to be authentic-fake spaces as a critical comment on the 21st-century urban experience, where the Built Environment, through its visual replication, is already a copy of a copy.

The images shown here are from a series created for an exhibition, 'Between the Analytic and the Synthetic', in Seoul that took place in the summer of 2024. They were originally intended to be used as publicity material for the exhibition, as they combined models from various projects that were exhibited. However, during their creation, they took on a life of their own. The images feature various buildings from Huddersfield as well as





Clear+Park, The Ghost: Triptych of Fragments, 2025

other historic sites and projects: a neo-classical façade, part of a shopping centre, a Victorian folly, and a writer's shed. Their origin here is not important; what is significant is that these are architectures untethered from their original context and assembled in new paradoxical relationships.

The images are rendered out in black and white as ghostly overlays, yet they are clearly recognisable. The black and white aesthetic, along with the reference to the x-ray, also alludes to issues of time and the patina of age, situating these images outside of time while creating an apparent uniformity. The compositions also deliberately draw on drawing types taken from the canon of architectural history and consciously echo the drawings of Beaux Arts academicism.

The scenes are formed from multiple models and can be represented in numerous ways: the stills shown at the exhibition and here as part of this essay, but they can also be animated and shown either as a conventional film sequence or as part of an installation. Equally, they can be inserted into a game engine to be experienced through a VR headset with the added use of sound to further intensify the affective nature of the work.

The ability to create multiple views, including perspective and axonometric (including worms-eye views), also demonstrates the disembodied nature of the models; there is no assumed POV, and all concepts of the viewer are artificially constructed. The use of repetition is another tactic to create an uncanny effect in the images, challenging our concepts of originality and authenticity. The views are deliberately funereal, marking the death of the post-war welfare state consensus and a shift toward market capitalism.

These images are not realistic, and yet their status as point-cloud models means that they are accurate representations of the various captured architectures; they are not trying to convey what it feels like to walk down a high street at the end of the first quarter of the 21st century, through the ruins of neo-liberal capitalism. These Hauntopias are already dead cities; the architecture may be poignant, it may be beautiful

– it is certainly rendered as if it is – but the feelings that these images convey are not the convivial views of architectural heritage. Moreover, they acknowledge that many of the elements of contemporary urbanism have reached a point where they have become reduced to empty signifiers.

These images aim to convey what it feels like to create work in a simulacrum where all that is solid melts into point-clouds. These images encapsulate what it is like to make representations in the city of the 21st century where 'nothing is true, and everything is permitted'.

Conclusion

"What must be made clear from the start is that all this breaking up, distorting, multiplying, and disarranging, apart from the emotional reactions it can elicit, is nothing more than a systematic criticism of the concept of place, carried out by using the instruments of visual communication."

Manfredo Tafuri (1981)

In the middle of the 18th century, at the dawn of the age of Enlightenment and the Industrial Revolution, the architect Giovanni Battista Piranesi created a series of etchings depicting a suite of disparate underground spaces united by their common form of representation: the stylised perspective etchings of fantastical architectural forms or capriccio. Piranesi's *Carceri d'Invenzione* (Piranesi 1761) prints are remarkable achievements in any context, and their meanings are as opaque as the spatial atmospheres they conjure. However, it is clear that the *Carceri* images do not represent a suite of coherent, connected architectural spaces but rather a group of disparate speculative environments united by their graphic language and the stylistic continuity of the excessive neoclassical gigantism primarily designed to evoke intense 'feelings' about the spaces they depict. According to Manfredo Tafuri, the *Carceri* etchings mark the end of the ancien-régime, the final moment in the belief of the unity of the classical order. The period when the sanctity of the divine as something that was knowable and representable was

over, and a more broken, fragmented and uncertain period was initiated (Tafuri 1981). These ideas are, of course, not literally represented by the images; they are communicated through affect.

Laser scanning and the resultant point-cloud models are predominantly used to map and represent existing buildings, either for documentation or to convert that data into a format applicable in a BIM workflow as part of a traditional methodology within the building industry. Their creative and critical potential remains largely unexplored, perhaps due to the technical challenges involved in manipulating such large data sets. However, with ever more powerful machines, more effective compression regimes, and readily available alternatives that are changing, a particular possibility exists that all these processes could become completely automated. Just as the etchings of Piranesi's *Carceri* would become obsolete with the introduction of halftone printing, the technologies that are allowing the capture, manipulation and intervention into our existing spaces are marking an end of the enlightenment regime of an architecture that is created by, and designed for human agency, the dawn of this technology places human endeavour as the ghost in the machine.

Architecture is always already haunted, both literally; the dead are constantly with us in the place names and road names of our towns and cities, in the wear and tear of the fabric of the city, and in the statues and commemorative reliquary of the built environment. The dead are also with us allegorically in the accumulated past of the stories and fables that gather like litter in all the nooks and crannies of our urban landscapes. As individuals, we are also haunted by our own memories and experiences and something that architectural phenomenology sees as a virtue is also potentially the trap of nostalgia.

While the architecture of the distant past bears the imprint of feudal inequalities, the architecture of the 18th and 19th centuries carries with it, the spectres of colonialism with the legacies of slavery and rampant exploitation. The architecture of the 20th century is haunted, too. It bears the stamp of the failed social

experiments of the welfare state and the free market economy. What is left are soulless gated communities, zombified shopping centres, fast-food chains, vape shops and charity stores. The architecture of the 21st century is already haunted because many of our cities are already part dead, slowly suffocated by neo-liberal capitalism, which makes as much money from the corpse as it does from a living entity and even the architecture of the future is firmly rooted in the futures of the past.

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