

Citation:

Clear, N and Park, HJ (2025) The WavEs: A Project. Architecture Image Studies, 6 (2). pp. 130-143. ISSN 2184-8645 DOI: https://doi.org/10.48619/ais.v5i2.1163

Link to Leeds Beckett Repository record: https://eprints.leedsbeckett.ac.uk/id/eprint/12177/

Document Version: Article (Published Version)

Creative Commons: Attribution-Noncommercial 4.0

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please contact us and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.



Vol.6, Issue 2, Digital Capture: Advanced 3D Scanning and Architectural Representation, 2025

<u>by AP2</u> on Creative Commons 4.0

International License (CC BY-NC 4.0)

Article

The WavEs: A Project

Clear + Park | Professor Nic Clear & Hyun Jun Park

Nic Clear

Professor of Architecture & Dean of School of Arts and Humanities, University of Huddersfield n.clear@hud.ac.uk

Hyun Jun Park

Course Director Postgraduate Architecture, Leeds Beckett University h.j.park@leedsbeckett.ac.uk

"The wave paused, and then drew out again, sighing like a sleeper whose breath comes and goes unconsciously."

Virginia Woolf - The Waves (1931)

Words

The waves come and go, they go, and they come back again and again. The church clock chimes and the pen of the author scratches out a more chaotic temporal signature.

The waves are pulled and pushed by invisible forces, some of which are as old as time itself. Could time exist without those forces? Could time exist without words? We are a speck, an aberration, the arbitrary intersection of bandwidth. The fact that all this matter coalesced within this space is a pure chance. The fact that we are here to record it is due to a very different set of aleatoric processes.

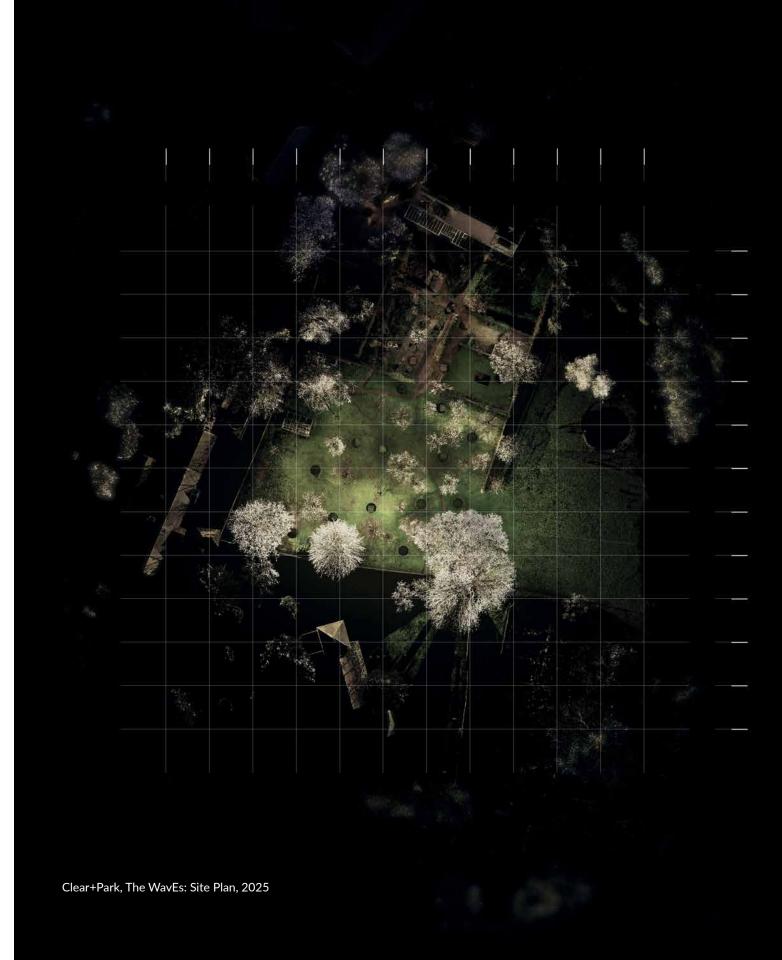
Months and years are marked by physical changes, emotional ups and downs, the highs and the lows of inspiration; sometimes, the clock feels as if it runs backwards. As neurons fire, they speak through the words on the page; the emptiness is filled with characters, perhaps half remembered, half made up.

The writer alone walks the garden, writing the text in their head. There are things to do but the garden is a needed distraction, a place to plot and pace out the stories that want to be told.

The words map out a rhythm, the melody of the prose is deliberate, and meaning is not always the priority but subsumed by the pattern and shape of the words but, most of all, their cadence. The text is constructed from rhythms, an interior dialogue, created in the small shabby structure under the tree next to the wall.

Written time is not constant, it forms eddies and currents, there are patches of relative calm against a background of continuous tumult, nothing is still, nothing is fixed until it is, and the type has been set.

The garden has its own calendar: hour by hour, day by day, week by week, month by month, year by year. It is not a constant flow but is marked by sharp events and abrupt shifts. Within this macro universe, there are an infinite number of micro-calendars that turn relentlessly, moving onward without conclusion. The garden is constant, but it is never the same.







Entropy is everywhere, in the ground, in the trees, in the bodies and even in the words. The hut is a world of entropy, and yet, within the confinement of that universe, a force is created that is more than the sum of its parts. Seemingly, out of nothing, a something comes into being. But, as soon as the word is written, it starts to fade.

A life lived marks out its own time. There are threads and continuities, relationships with other timelines, some of which explode and some fizzle into nothing. There are things said that shouldn't be said and things done that could change history, there are memories forgotten, and there are the words left behind. The body is a clock, but it is neither accurate nor reliable, and you can't even say that it is correct twice a day. The time of the body runs on a combination of internal and external forces, the chemistry of the cells setting patterns and moods that will change the perception of time itself.

The only precise measures are the autonomic regulations, beyond conscious choice, beyond the force of the words, and the implications of their meanings outside the pages of the book. The words on the page are like the heartbeat of a body without organs. They are empty until they are encountered. The book can sit on the shelf dormant for years, for centuries, fraying at the edges, but it is ready to come to life when it is encountered.

I am seduced by the words, but the characters they describe mean nothing to me. This is a persistent problem. The writing always dazzles, I can open the book at any point and read it for pleasure, but I do not care about the people. Their world is alien and dead. The interludes are more resonant, significant, and universal, and to hear the words spoken by various overlapping voices conjures thoughts that I can use to gain insight. They become a tangible way to think of time itself.

I remind myself that this is not the garden where you walked, and yet it occupies the same space and shares the same history. Although decades have passed, the trees have matured, and the buildings have transformed from homes to national treasures. The paths are more

worn, and at what point will they need to be replaced? Is it right to try to stop time to maintain the pretence that the writer is still there and still writing?

If a life is like a book (or a book like a life), it is because they are finite in form but potentially infinite in impact and meaning. There is fixity to the form and a duration, but the consequences can remain open and extend beyond the physical shell.

"If form is fixed, I am infinite," said Time.

Process

136

The apparatus rotates with its own rhythms, completing its cycle regularly as clockwork, the motion is both lateral and vertical, and the cone of 'vision' extends beyond the limits of human perception.

Comparing the apparatus to vision is not quite accurate; the apparatus does not 'see'; even though its processes are partially optical, its actions are more akin to touch. The apparatus feels the space with the beam of a laser, reflected to create a virtual map of the surroundings.

There are dual movements, a horizontal rotation and a vertical pan, which can capture information within a significant radius beyond the boundaries of the garden. However, the beams are straight lines and can only record what is in the direct line of the site. The layering of objects means that multiple scans are required. The apparatus is moved to avoid blind-spots, but the grid is not regular. The operator must use their judgement to ascertain the best positions to capture the optimum amount of information.

The machine leaves its presence with an absence; the locations of the apparatus leave black circular voids as they cannot scan beneath themselves. It is decided that these voids should be left in the final scene, marking the tracks taken. The number of scans is decided by the speed of the apparatus, the level of detail required, and the time allotted for the task – and the patience of the operator.

As the apparatus rotates, capturing data to map onto the 3-dimensional grid, it creates a multiple number of cartesian instances of the spaces that need to be conformed into a single cloud of points. The capture of the space is not immediate; there are further tasks, and additional apparatus is required to create the scene that will be used to pursue the project.

As with early photography, the apparatus is exotic, expensive, and the process arcane, almost alchemic. Moreover, in the same way that photography became more available and industrialised in the 20th century, the process of capture is also becoming transformed, and the apparatus is becoming more available. A phone may contain both a high-definition camera and a lidar scanner, but there are still limits.

The data as captured is meaningless, it needs to be interpreted, it needs to be resolved. The points, like words, contain information, but that information needs to be given structure and value. Most of all, it needs to be given meaning. The process of interpolation is performed on another machine, preferably one that is powerful with fast processing capabilities, a time-machine.

So many decisions are to be made, many unthinking, it is called intuitive, but it is evolved through practice, through craft. There are many levels of knowledge involved in the process, there is the knowledge that precedes the activity, and there will be knowledge that exists well beyond the activity. Completing the process is not only a technical task but also an aesthetic one, in the integration of the cloud of points, anomalies occur, and in editing, data choices are made. Not all errors are removed: some may even be enhanced.

The raw data is shapeless, formless: it needs choice, judgement and will. The choices made will not always be obvious. The process will not be seen. There will be an assumption that the look is natural, but it is not. It looks like this because we want it to look like this. Press the button and hey-presto.

Even when the scene is set, there are still further decisions to be made and some of these may be made by other people with different skill sets and different forms of expert knowledge and may involve other bits of apparatus involving additional skills. The process is an assemblage, and it all takes time. Sometimes, it takes a long time.

The apparatus captures the space, the software composes the data into a meaningful order, but we create the narrative, we write the story. The goal is not verisimilitude but affect.

Models of large language could compose a story, but that story would be an aggregate of other stories, there would be no choices, just an algorithm averaging possible outcomes. The model would not have grappled with the author, the garden, pondered time and the absurdity of what we are doing and never dreamed of the potential beauty of the outcome. Models cannot deal with affect because there is no just before, everything is immediate. To paraphrase an American artist, there is no 'huh' before the 'wow'.

"If feelings are real, nothing is lost", said Space.

Motion

The camera moves through the garden at a constant speed, mapping out different perspectives with a steady rhythm and pace. The camera traces dreamlike vectors as if motivated by the desire-lines of the restless wanderings of characters, both real and imaginary. The camera maps out contours that imagine an embedded point of view, while other contours present more impossible visual journeys.

The camera captures the architecture, the trees and the landscape in ways that appear both substantial and yet incorporeal. The camera explores the physicality of the site through a virtual dérive that uses movement to allude to the restless cadences and syntax of an absent text.



Clear+Park, The WavEs: the Garden, 2025







There are seven paths that trace out different motions as if the camera is a point of view, but this is a chimera, it is a trick, a formal device to move through the virtual space as if it were a phenomenal reality.

The fixing of points and paths is deliberate, with each vector serving a purpose, the paths each have their own characteristic, their own signature, between point A¹ and point B¹, A² and B², A³ and B³, etc.

The corporeality of the trees, the walls, the footpaths is rendered permeable and, at times, translucent. That which is solid is no longer so as the camera traces its impossible path.

The light is uncannily even. This is a hallmark of the process. There are no shadows, the light is not from a single external source, for the light emanates evenly from within. Within the scene, there is no outside, there is no beyond. This is not the infinite space of the real but a simulation, a fiction created from points of data fixed in space and textured with pixels.

The telemetry of the points is calculated by the apparatus, which collates multiple data sets into a scene that appears coherent and consistent, but only because the software makes it so. We edit the data points to create the fiction, albeit one that appears real. We create individual sequences and combine those sequences into a larger structure.

The edit moves across the garden not based on the geography of the garden but on the flow of the sequences, incidental elements within the shot suggest the next vector. The edit creates a rhythm, a cadence that recalls the structure of the text. The edit is not linear, but neither is it chaotic, it is designed.

"If time is real, then matter is a special effect," said Movement.

Timeline

00:00:00:00 Opening title sequence.

00:00:24:00 Opening shot of the hut in full colour, a light-pulses within the hut, suggesting furious activity, the camera slowly tracks toward the hut, there is no sound. The scene fades to black.

00:00:38:00 The scene fades up from black to low-level tracking shot along the hut rendered in monochrome, the music fades in with the image, in the background, a voice starts to read an excerpt from the book. Part of the hut is translucent, revealing an empty interior. The shot cuts to a tracking shot moving away from the hut, and then the shots cut between the different tracking shots, additional voices start reading different sections of the book when they join, overlapping to create an insistent cacophony.

00:03:32:00 Shot cuts from a tracking shot to a camera rotating, looking up. These rotating cameras shot cross dissolves into similar sequences, overlapping waves of abstract shots of the trees spinning, long dissolves are used to merge the different parts, it looks confusing, but it is meant to. It attempts to reflect the moments of confusion, panic, and fear when clarity is illusive, this is reflected in both the musical score and the use of the voices. The voices become chaotic and repetitive.

00:06:36:00 The film cuts back to a single tracking shot approaching the hut accompanied by a single clear voice reading the first interlude. As the camera approaches the hut, the colour returns through a long cross dissolve, at the point of transition, the image distorts slightly, creating an echo of the image. At full colour, the camera moves through the door into the hut, the voice stops just before the camera, and the film fades to black.

00:09:12:00 End Titles and credits

00:09:38:00 END

Throughout, the sound reinforces the narrative structure, the sound was a gift, multiple gifts: colleagues, friends, and family. The sound is another set of choices conscious decisions, weighted by affect.

Throughout the film, the presence of an absent body is implied by the camera as if the camera, through the deployment of cinematic convention, presents an embodied point of view. But, there is no point of view, the camera is virtual, but it becomes tangible through design, the implication of vision is constructed, the scopic regime is re-established, and it becomes familiar.

"WE are the camera".1

NO AI TRAINING: Any use of this publication to 'train' generative artificial intelligence (AI) technologies to generate text, images, videos or any other material is expressly prohibited. The authors reserve all rights to license uses of this work for generative AI training and development of machine learning models.

143

^{1 -} The WavEs film is available via https://vimeo.com/952260716