



**Exploring Human Attachment to AI within the
Haunting Ambience of Brutalism**

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Embracing The Inexplicable

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Abstract

Brutalism has evolved from its humble origins—an 20th-century offshoot of late modern/postmodern architectural styles—into a distinct paradigm for a new generation grappling with climate change, global conflict, and an uncertain future that potentially threatens all forms of life on Earth. This illusion and fear both haunt and fascinate us. The material presence of Brutalism has sparked speculation and misinterpretation. This thesis examines the materiality of Brutalism through a series of digitally processed photographs that present altered fragments of images, reassembled into a narrative that examines dreams as a backdrop for collective imagination and the collective unconscious. The central research question posits brutalist architecture as an emotional ark: can it effectively address individual fears and nightmares while fulfilling certain desires? As a relic of the last century, what is its allure today? This thesis draws on Freud's concept of the uncanny and integrates notions such as the supernatural nature of power and ontological errors. It begins with traditional documentary photography and confronts it with the untapped potential of innovative technologies like artificial intelligence. This creates a discourse in the ambiguous zone between the originality of art and the authenticity of images. The montage narrative approach not only reveals how brutalism serves as a utopian refuge for human desires but also suggests that what we see and hear may not always be true, let alone our own subjective and unique fantasies.

Keyword: Brutalism, documentary photography, artificial intelligence, subconscious

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Preface

Blade Runner ignited my journey into dystopian narratives, perhaps because I was too young at first viewing to grasp why, in a film where technology advanced enough to equalize convenience and happiness for everyone, it instead intensified class divisions. Why fear the very tools of our creation, like the replicants, when humans are no longer the sole advanced beings on Earth? This discord echoes in recent sci-fi films, such as *The Hunger Games*, where society is starkly divided, and the only escape to a better life is through the deadly games, highlighting unequal resource distribution. This strategy, where the affluent maintain their status while the poor and their resources remain subjugated, is also mirrored in *Equals* and *Maze Runner*, with their anti-social human experiments and collective mind control. In these imagined futures, advanced technology always seems to align with oppression and autocracy.

After seeing through the patterns of contemporary dystopian works, I shifted my focus to the narratives and aesthetic expressions in films, which effectively speculate and fantasize about tomorrow's modern society. Terms like 'subconscious,' 'self-awareness,' 'rebellion,' and 'awakening' fill crucial dialogues in these films, suggesting that in the envisioned end, technology as a symbol and tool of power invariably stands against the masses. The tension is palpable, contrasted in films with massive, inscrutable concrete buildings or monumental structures, whose solid exteriors act as shelters from sharp societal contradictions. It's hard to describe the feeling—from the initial awe and gradually relaxing nerves upon entering these buildings to the unbearable tension from prolonged indoor scenes. The architecture itself seems like a conspiracy—seemingly harmless yet full of secrets.

What puzzles me is the nearly universal use of similar visual communication in almost all dystopian films—enormous, bizarre facades, and cramped, oppressive interiors. This approach particularly stands out in works discussing the relationship between self-aware AI and humans, as seen in *Ghost in the Shell*, where society's full cyborg integration, while convenient, inevitably leads to new types of cybercrime. Humans, prioritizing their safety, lean towards living in brutalist structures as if these concrete behemoths could devour all panic and doubt, preserving fleeting moments of real beauty. In these sci-fi narratives, the intriguing aspect is the subtle implication that brutalism safeguards humanity and its authenticity from AI intrusion. I'm fascinated by the

symbolic significance of these architectural fantasies and humanity's anxious outlook on the future, eager to uncover how these incredible building systems exude a lethal allure and why they're perceived as bastions of the apocalypse.

...

All my dreams unfold in the first person – just like my memories and my creations. My work is heavily impacted by these dreamscapes, characterized by a feeling that is expressible but not explicable, a boundless flight of imagination, a reflection of the subconscious parallel worlds. I view all my artistic outputs as my own observations, reflections on, reactions to, and expressions of the world. This venture of Toronto's brutalist architecture is merely the beginning of a journey where I concretize the world as I perceive it through photography. I find myself intensely captivated by these inhabited sculptures within the cityscape, where my restless imagination finds sanctuary under the protective embrace of concrete.

Introduction

Brutalism as a Context

Brutalism was intricate to define but originated in the 1950s when architects influenced by environmental and social factors, began to design and construct buildings using a singular material – raw concrete in its most elemental and brutal form. Owing to its distinct ‘rough’ appearance, which evoked monuments, from another era, most people came to understand Brutalism as stemming from the concept of New Monumentality¹. In truth, before British critic Reyner Banham formalized it, the origins and understanding of Brutalism were blurred. Whether it was Swedish architect Hans Asplund describing his work Villa Goth² as "nybrutalism" to convey its rawness and material honesty, or French architect Le Corbusier³ using "béton brut" to describe raw, primitive concrete structures, linguistic differences and terminological shifts led to irreversible misunderstandings in its initial dissemination, foreshadowing the movement's chaotic evolution.

Banham contended that only architecture that was bloody-minded⁴ enough could be associated with Brutalism. He posited three decisive foundational conditions: Memorability as an image (also known as imagability⁵), clear exhibition of structure, and valuation of materials as found near construction region. These criteria, evolving through time and interpretation, extended to various conditions and meanings, and were not confined to concrete alone, although concrete more readily was applied to Brutalism's vision. Even as Banham later refined the definition of Brutalism, his lack of critical assessment⁶ of the Smithsons, due to personal closeness, did not diminish their significant role in propelling the Brutalist movement. The Smithsons believed Brutalism should possess the poetic feeling of ‘a machine for living’ described by Le Corbusier, viewing the style more as an ethical proposition⁷, representing architecture that fosters an affinity⁸ between humans and their built or natural environments, a direct result of a way of life.

For many architects, concrete was not only a cost-effective solution but also expanded post-war modern aesthetics and exhibited their functionalism in brutal ways. Concrete became a means to rationalize utopian dreams for mass housing and urban renewal on a grand scale without decoration. Architects believed concrete had the capacity to express space and logic between, and its bare form was an appealing medium that easily conveyed spatial understanding to residents, fostering deeper resonance⁹ accompanied by their surroundings as a practical exercise for the good

of all. Brutalism as a functional architectural aesthetic primarily utilized concrete¹⁰. This material choice - gained propulsion in the post-WWII era marked by a scarcity of steel. Its appeal lay in not requiring complete steel frames for construction, ease of production, and suitability for precast components, allowing for off-site standardization¹¹. In Britain, amid efforts to rebuild from wartime devastation, the high efficiency and standardized production systems concrete promised found an embodiment in Brutalism, a style permitting material standardization in the building process and a flexibility in its lack of refinement. Soon, Brutalism evolved into a paradigm for socially progressive housing solutions symbolically and community-centric¹² architecture took up the material for its social messaging. Concrete widespread application in educational buildings and low-cost social housing was evidently influenced by socialist¹³ principles advocating equitable living standards for all. A notable post-war residential example is the Smithsons' *Robin Hood Gardens*, where most former residents acknowledged an exceptional sense of security and outstanding community spirit¹⁴, portraying a model of a more pleasant lifestyle that quickly became an idealized vision.

Indeed, Brutalism once garnered appreciation from communities and society at large, basking in a glory that resonated with the intentions of socialist doctrines. However, this glory ceased abruptly with the rise of communism¹⁵ in Europe, leading to a gradual loss of Brutalism's purity¹⁶; it became politicized. Accompanying this was the British public's association of Brutalism with communist dogma and authoritarianism¹⁷; the sudden fall of the Labour Party marked the beginning of Brutalism becoming a target. In stark contrast to the architects' view of concrete's virtues, the privately regarded its overuse as monotonous, emotionally cold, uninspired, and impersonal¹⁸. Yet, without a justified cause for protest, they passively accepted these buildings as representations of the architects' futuristic fantasies¹⁹. The arrival of neoliberalism²⁰, with its burgeoning ideology of material privatization, quickly overturned this semblance of stability. It was a celebration of liberation from authoritarianism, with Brutalism becoming a sacrificial offering to the altar of classism and freedom. The masses finally had the opportunity to conspicuously demolish²¹ these architectural embodiments of societal and communal consideration – a model seen as absurd, aggressive, and a failure, now vehemently rejected.



Fig 1. Robin Hood Garden,
Image by Sandra Lousada, © The Smithson Family Collection. London, 1972.

Decay and Misinterpretation

“Brutalism is not so much ruined as dormant, derelict – still functioning even in a drastically badly treated fashion, and as such ready to be recharged, and reactivated. This rough beast might still slouch towards a concrete New Jerusalem.” ——— Owen Hatherley²²

There exists an unspoken truth—detractors of Brutalism will seldom confess their disdain for the style is merely due to its perceived ugliness²³. Their arsenal of criticisms is vast, ranging from the lack of humanization within the architectural spaces to their overly complex nature. The monochromatic exteriors of black, white, and gray are often seen as dull and uninspiring, like a dark cloud looming overhead, so ubiquitous and longstanding that they fail to capture attention. The material characteristics (Rawness, exposed structural element, texture, integration with surroundings) of Brutalism have always elicited dichotomic feedback. Reflecting on Brutalism's golden age during the rise of communism in Europe, environmental factors have inexorably linked the decline of this architectural style alongside the deterioration of urban images²⁴. Take, for instance, the United Kingdom, where the maritime climate leads to frequent rains. Buildings designed in the Brutalist style, predominantly constructed with concrete exteriors, are inescapably subject to erosion.

Brutalist architecture's material qualities produced its own problems as it aged. The limited external metal joints and reinforcements inevitably bear the brunt of rust and water stains, further deteriorating into a state marred by moss and lichen. This desolate appearance has only fueled greater dissatisfaction towards these structures. The long-term purposely negligence has led to a shift in masses' perception of concrete from being seen as 'miraculous' and 'futuristic' to 'ugly,' 'inhumane,' and 'symbolic of decay.' Subsequently, by means of the rise of the liberal factions, collective psychological fantasies about this architectural style reached a crescendo—the once 'hope of the future' disintegrating before their eyes, cementing the inextricable link between Brutalism and decay.

Owing to their apparent severity and dehumanized style, these buildings were perceived by municipal councils as being associated with anti-social and destructive behaviors. In most cases, architects strove to dispel public stereotypes about brutalism's distastefulness, but many architects' efforts were blatantly ignored by the councils, branding these structures as synonymous with by

poverty and crime²⁵. Only a very small fraction of architectural complexes, like the Barbican Estate²⁶, which define themselves as tightly secured, city-like brutalist conglomerates, have been given significant attention. This attention was more due to their unexpected alignment with the later political logic and societal aspirations of Britain—residing in such places became a symbol of status, a marker of authenticity, and a validation of belonging to a certain class²⁷, elevating its members to a state of operational prestige in this unique community at this location. Thus, it is evident that the early development of Brutalist architecture was a casualty of political upheaval and shifting societal ambitions²⁸, thriving, or perishing accordingly. Regardless of its original intent, the perception of Brutalism has continually evolved in response to collective subconsciousness and needs, influenced by external factors beyond the control of its proponents.

Over time, the collective sentiment about Brutalism has been romanticized in modern times, whether in spy thrillers like *Tinker Tailor Soldier Spy*²⁹ or romantic films like *Knight of Cups*³⁰. The mere presence of Brutalist architecture in these films is employed to stir effortlessly stirs viewers' emotions. This architectural style seems inherently capable of evoking exhilarating imagery and evoking emotional responses of the most visceral type. By exhilarating³¹, I refer not only to positive feelings but also to a constant association with negative sentiments. A straightforward example is Igor Grubic's 2015 film *Monument*³², where monument-like architectural aesthetics create an ominous presence steeped in historical and ideological motives³³, while also hinting at a new dimension of violence and destruction on the horizon: Even nature itself sculpts an otherworldly shape, thus adding complexity to its interaction with the landscape. In its most original form, Brutalism, served as a witness to precarious times and frightening histories, which allows viewers to see architecture as a temperature into the abyss of time. Conveying the immediacy of the past and an unknown future - Brutalism has long become a representation of postmodern architecture's dark side, evoking, a 'feeling' connected to a foreboding future, leading to its frequent use in contemporary media outputs, like film, that allows viewers and building users to fantasize and simulate worlds independent of current reality, especially in narratives about humanity's bleak vision of a future—transcending into a world dominated by artificial intelligence, climate change, apocalyptic scenarios, and the collapse of order – when placed in today's context – as I do here in my own work in this thesis.

In contrast to the political maneuvering of the 1950s, contemporary enthusiasts of Brutalism, as observed in Peter Chadwick's *Brutalist Survey*³⁴, demonstrate a marked preference for the monumental works of Le Corbusier³⁵. For these devotees, the importance lies not so much in being remembered as an image, but rather in an honest portrayal of the form, materials, and functionality of the architecture. This aesthetic, once overlooked, has reemerged³⁶ in modern communities, challenging the traditional barriers of glass and steel that separate users from their environment. It merges into the human habitat as part of an encompassing fantasy with the integration of humanity back into the natural environment is seen as a key to solving future existential challenges that includes the elimination of the human species and the world as we have known it. However, it raises a pertinent question: Is this fervent pursuit of reintroducing Brutalism back into the fold of Earth, under the banner of modernist living, truly an effective strategy? Does Brutalism fulfil other desires, wishes and needs? Has it become a kind of Noah's Ark that encompasses everything? By approaching it and utilizing it, can humans maintain their curiosity about all unknowns? Or has the collectively intense curiosity been successfully housed within brutalist architecture, with brutalism serving as a vessel for emotions and a sanctuary?



Fig 2. Exterior of *L'Unité d'Habitation*. Image by *BBC News*, Marseille, 2013.

Chapter 1 Critical Framework

Retinal Architecture and Relational Monumentality

“Our age is an unending rainfall of images.” – Italo Calvino³⁷

Under the shelter of Modernism, self-indulgent³⁸ eyes regard retinal architecture merely as a tool for self-expression, transforming into a game of mental art detached from spiritual substance and social connections, ultimately becoming nihilistic³⁹. If one cannot critically understand the optical characteristics of modernist architecture from the perspective of imaginative individuals⁴⁰, then it cannot be claimed that they have truly comprehended or utilized the core spirit of Brutalism. I believe that failing to critically distinguish brutalist architecture from other modern structures is, in fact, a significant misunderstanding of brutalism. Modernism failed to transcend mere appearances and penetrate collective preferences and values, offering only a fleeting refuge for human thought and vision.

More precisely, transparency, weightlessness, and a sense of floating have become central themes in contemporary art and modernist architecture; these are achieved through reflection, light transmission, layering, and juxtaposition, creating spatial depth, dynamic movements, and light effect⁴¹. This new architectural imagery, flattened into two-dimensional visuals⁴² by the public gaze, turns the immateriality generated by new technology into positive spaces and engaging experiences. However, it gradually overlooks the need for the plasticity of the architecture itself⁴³. Modern vanguard architecture seems designed more to please the eye than to cater to the physical and mental well-being of its users⁴⁴. According to Juhani Pallasmaa in *The Eyes of the Skin*, the eternal task of architecture is to create embodied and lived existential metaphors that concretize and structure our being in the world⁴⁵. Architecture should enable the user to sense and comprehend the dialectical relationship between permanence and change, situating us in the world and allowing us to enter the continuum of culture and history. In this context, all senses, whether triggered or guided by vision, are essential; while focusing on all senses, the identity of individuals and groups is integrated into the world experience. As a prime example of monumental architecture, brutalism embodies the ethics inherent in all retinal architecture—where all senses, whether triggered or guided by vision, are crucial. It integrates the identity of individuals and groups into the world experience, unlike the void of modern architecture. Furthermore, the characteristic weightiness and

design intent of brutalist architecture overcomes the traditional pitfalls of retinal architecture—its ephemeral nature.

Brutalism can be considered a form of retinal architecture, yet its inherent anti-beauty⁴⁶ ethos does not hinder its ability to stimulate collective subconsciousness and memories. Unlike common modernist architecture, which primarily focuses on visual aspects, Brutalism's ethics, core spirit, and architectural paradigm encourage a break from the pitfalls of traditional vision-centric architecture – a kind of architectural egocentrism⁴⁷ arising from a lack of focus, leading to a disconnect between humans and reality, sensory indifference, and a deviance in cultural development. Discussing the sensory aspect further, architecture is not just about creating visual allure; the absence of such allure can directly impact subsequent experiences. Brutalism's ruthless logic⁴⁸ is evident in its almost uncompromising use of "raw" materials and its unreserved display of construction traces. Its apparent brutalist roughness texture, unrelated to a sense of roughness, and its high-industrial features⁴⁹, polarized views, are part of a comprehensive anti-aesthetic, unyielding in its ethical and political utility, contributing to Brutalism's distinctive emotive capacity. This capacity, a sense of momentum in social spaces, links Brutalism's "extreme" ideology - potent proactive emotional capacity, makes it a significant counter-narrative to modernist architecture, which tries to conceal its emotive potential. In contrast, Brutalism strives to connect with its users, both psychologically and physically, in a conspicuously successful manner. For instance, the Art and Architecture building designed by Paul Rudolph for Yale University is considered a terrifying yet exhilarating aesthetic experience⁵⁰. The terror stems from its maze-like design, intentionally prolonging the interaction time between the user and the building, thus fostering denser interactions⁵¹. The exhilaration comes from the users' adventurous experiences in highly dramatic spaces, eliciting positive emotions like courage and curiosity, enhancing their awareness of themselves and their environment.

As a signature style of relational monumental architecture⁵², Brutalism seeks the essence of things in their entirety and relevance to all humanity. Its totality⁵³ and monumental utilization distinguish it from other styles within retinal architecture. Its structural and relational connections to residents and the environment are crucial for its political⁵⁴ utility; Owen Hatherley views it as based on a dialectic of purity and fragmentation, montage, and memorable single images. This dialectic⁵⁵ is vital to Brutalism's ethics; its "raw" emotive power's relationality is essential to its

overall image and monumentality. Therefore, Brutalism's brutal aesthetics are born and sustained through its relationality with fear. A building's form is one thing, but more important is the architect's implied messaging. (social housing, welfare state, anti-corporatism, civic life), which is maintained by the residents' ongoing engagement with the building as a bona fide subject? Initially, dominant, the overall image is permeated by the building's affective capacity⁵⁶, as people use the buildings they add to the narrative and grow to live it - Le Corbusier's Unites (all four of them) are hated by most but beloved by its users⁵⁷.



Fig 3. Art and Architecture Building, Yale University, New Haven, Connecticut. Photography of Drawing, Perspective section. 1964.

Duality and Taxonomy of Style: How has curiosity being preserved?

Despite the support of many modern architects, critics, and industry professionals, Brutalist architecture still faces misinterpretation, often being associated with expressions of authoritarianism. Notably, Reyner Banham⁵⁸, a prominent advocate of Brutalism and a firm leftist supporter of the style, saw the democratic potential in Brutalist design through his criticism of communist circles and his appreciation of the aesthetic and replaceability of American consumer goods⁵⁹ such as tin can. This might hint at his ambiguous political leanings. However, the massive, monstrous appearance of Brutalism has no actual connection to this political tendency. Banham was neither the first, nor the only promoter of this movement, making it unreasonable to conclude that Brutalism is a political product based solely on its architectural appearance or design ethics.

At the 1957 "*Thoughts in Progress*" architectural forum, the Smithsons strongly opposed reducing Brutalism to mere concrete pouring techniques, emphasizing that its essence is ethical rather than merely stylistic. In fact, the pioneers of the Brutalist movement found it challenging to articulate society. The significant gap between method and style; hence, categorizing it stylistically before understanding its underlying design philosophy seemed hasty and oversimplified. This fast-food style classification, which isolates the inherent nutrients, aggravates the malnutrition of design ideas. The direct result is that, years later, Brutalism has intensified the public's incomplete understanding of it. Accompanying this are endless curiosity and a desire to explore⁶⁰. Moreover, this taxonomy of stylization led to a popular, dogmatic understanding that solidified yet excitingly contrasted with its robust spiritual core⁶¹.

Chapter 2: Methodology

Space, Human and Uncanniness –Sense of Being Haunted, Déjà Vu

Assuming all brutalist architecture exists, embodies a concretization of power, and connects humanity with institution, fear, and dystopian futures, how can this imaginative concept serve as a catalyst for my own creative endeavors?

Analyzing space (specifically brutalist architecture in this context), individuals, and ideology coexist in an uncomfortable isolation from each other with limitations. First, it is essential to understand that spatial imagery inherently suggests behavior⁶², a promise of functionality and purpose. The human body's response to the surrounding objects reveals potential actions, making this implied movement an indispensable part of the architectural experience⁶³. Humans engage with the world using their entire body to see, touch, listen, and measure, constantly dialoguing and interacting with their environment, making it difficult to separate their image from the space and context they inhabit. When space resonates with an individual, this experience directly mirrors bodily sensations⁶⁴. On the other hand, the design of space is inherently purposive, serving specific populations, created by humans for functional use rather than as a cultural reading and understanding. Lefebvre⁶⁵ emphasized that social practice is achieved through actions, not just reading, and understanding. From this perspective, he highlighted the significance of the senses, memory, and imagination in the interaction between individuals and space. Memory and imagination can be seen as a form of psychical investment⁶⁶, an action that is evidently unconscious⁶⁷ and innate. Without this capacity, the allure of art, literature, or cinema would be non-existent. Therefore, in discussing the relationship among these three elements, the importance of irrational factors, often decisive in the subjectivity of space, must be considered.

Bachelard⁶⁸ calls these images that bring out the primitiveness in us, or primal images. These images should echo in the human body's memory and genetics⁶⁹, being accountable for functionality, rational consciousness, and social practice. Space is not just a carrier of resources and media; through interaction with humans, it also extends identity recognition and exhibits subjectivity. However, this subjectivity alone cannot fully explain human behavior and reactions, especially when considering physical participation and actual spatial experience⁷⁰. It is more accurate to say there is a mutual subjectivity between humans and space, understanding the

construction of space, power, and identity as intersections⁷¹. This mutual subjectivity is used to describe the interaction between spaces (such as monuments) and individuals. Here, space is not just a passive background but an influential subject, interacting with human subjectivity, co-shaping identities, and experiences.

Shifting from the discussion about intersubjectivity and the exertion of power through embodied strategies in architecture, I explore Sigmund Freud's⁷² concept of the 'uncanny', the theory of (Unheimlich) profoundly reveals the complexity of human perception and feeling, offering a rare psychological perspective in analyzing how brutalist architecture affects human experience. This sensation, as Freud described, is the strangeness of something being simultaneously familiar and unfamiliar, causing discomfort. I argue that these buildings, accompanied by their massive scale and solid materials, often transcend ordinary architectural norms, entering a realm where the ordinary becomes extraordinary, thereby easily invoking Freudian uncanniness. This psychological perspective enhances the understanding of emotional complexity, thereby enriching the study of how brutalist architecture profoundly affects human experience and perception.

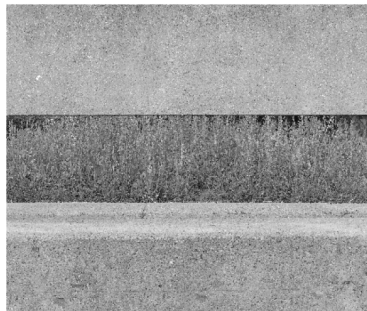


Fig 4-12. Scott Library / Ross Building in York University. Toronto, 2023.

The 9th Art – An Open-Ended Conversation

As certain art forms mature and gain widespread acceptance, they come to be known as the 'Ninth Art'. For instance, the 'Eighth Art' of cinema primarily emerged from the evolution of photographic technology over the past two centuries, enabling the appreciation of human creativity on electronic screens. Similarly, with the rapid advancement of computer technology, a new art form grounded in visual arts like cinema and television and emphasizing interactivity – the 'Ninth Art'⁷³ of video games – has come into existence. Video games have become a new platform for exploring future concepts and innovations, offering an exceptional interactive experience that immerses players in potential future technologies and their implications. Recent studies have focused on video games' capacity to predict and inspire technological progress, exploring how the development of visual systems realizes the full daunting potential of brutalism⁷⁴, and underscoring the pivotal role of game developers in creating engaging dystopian open worlds and nonlinear narratives.

Video gaming is the only art medium that requires detailed world-building before narrating a story⁷⁵. These narratives unfold and are experienced entirely within a digital space. For Espen Aarseth and Stephan Günzel⁷⁶, this space is termed 'ludotopia'. Take, for example, the highly acclaimed 2020 game *Cyberpunk 2077* by Poland game studio CD Projekt Red, known for its high degree of freedom. Players can freely converse with non-player character (NPC)s, experiencing the world through exploration, even without engaging in the main quest. When controlling the protagonist, V, I feel complete control over the situation. However, the game creators have designed a predetermined path for the player, creating an illusion of free will, where both the in-game NPCs and we, the real humans, perceive ourselves as free⁷⁷. In understanding the world-building of video games, Majkowski introduces the concept of the 'navigation chronotope'⁷⁸, describing the spatiotemporal organization in open worlds. This organization allows players to roam freely in the game environment, seeking various visual cues like collectible items, quest givers, and objectives. This concept embodies the understanding of the story world's main features in cognitive and transmedia narrative theories, where the story world is seen as a psychological representation evoked by a narrative. In video game design, these theories operate on two levels⁷⁹: top-down design, where game creators orchestrate content through narrative control, and bottom-up design, emphasizing the abandonment of strict narrative structures to create dynamic and expressive

'emergent systems'⁸⁰. This dual design approach reveals the paradoxical relationship between openness and narrative control in game worlds, where designers must guide players through specific storylines while fulfilling their expectations for open, free exploration experiences.

Due to technical limitations, all open-world sandbox games⁸¹ are in a state of being not fully open. In *Cyberpunk 2077*, apart from a set 'curfew' in the first chapter, there are few logical and harmonious boundaries. When defining open-world games, critics often focus on certain features: unrestricted gameplay, including choices of where to go, which objectives to undertake, and how to handle events⁸². A true open world should be like an open-ended book, not abruptly ending the narrative experience or neglecting the audience's immersion but providing a space that allows them to participate and find an emotional connection. Paradoxically, although a game should end at some point, it often continues to offer so-called 'endgame' content, presenting a challenge to cognitive authenticity and immersion. The disjointed design and experience result in modern games increasingly diverging from traditional games and more closely resembling virtual worlds that offer an idealized infinite stream of experiences.

The practice of open-world games and pseudo-utopias in modern times disrupts the continuous transmission of sensation and the connection with the audience. This phenomenon has influenced my creative process, steering me towards selective image creation rather than the often-constrained video production. I envision the narratives I design as endless scripts, using brutalism as a constant and the variability of images as a dynamic element. All images are conceived as storyboard components, arrangeable at will be based on individual preferences, enabling free navigation within the utopia I create. The limited selection of imageries offers a nonlinear narrative perspective, encouraging repeated interactions and appreciation, along with each audience member's journey being an unconventional, individualized cinematic experience shaped by their own memories and imagination.

A Glimpse to the Unknown - The Desires, The Fears, The Curiosities

However, as Game of the Year in 2020⁸³, *Cyberpunk 2077* stands out for its pinnacle visual effects in the 21st century, compensating for the limitations imposed on player imagination by technological boundaries. In the dystopian setting of Night City, a metropolis in Northern California freed from national or state control, the narrative is deeply entwined with a backdrop of corporate monopolies, gang conflicts, and political power struggles. The city, reliant on robotic labor for mundane tasks, boasts a visual tapestry defined by four distinct aesthetic epochs: the austere Entropism, the vivid Kitsch, the austere Neo-Militarism, and the extravagant Neo-Kitsch⁸⁴. In marked opposition to widespread homelessness, there's a pervasive culture of mechanical augmentations, often leading to an addiction to cosmetic enhancements and resultant violence. This societal decay manifests in cyberpsychosis, a condition managed by the armed MaxTac force. Additionally, the omnipresent threat of violence normalizes open firearm carrying, while private entities like Trauma Teams offer rapid medical response services. Intriguingly, no architect is credited for any building in the game, whether in affluent or impoverished areas. Brutalist architecture, fundamental in expression, intriguingly blurs the real-world trait of defining individual class and status through intersubjectivity in *Cyberpunk 2077*; yet the game's high tech low life ethos is vividly encapsulated by brutalist architecture. Why is brutalism, typically associated with high tech, frequently cast into reversed futures? Has it ceased to be a sophisticated architectural style since the decline of the British Labour Party? Can decades of change not strip brutalism of its stereotypical labels?

I believe the bold fantasies and conjectures about brutalism in the new generation of science fiction genres exhibit a unique foresight and creativity. My intent is to delve into how works inspired by brutalism utilize this architectural style to shape virtual worlds and how these worlds prominently contrast with reality, thereby analyzing the shift in humanity's attitude towards the future. Science fiction, particularly fiction-based works, often sparks innovative ideas in researchers and technologists. The symbiotic relationship⁸⁵ between science fiction and technological development acts as a catalyst for innovation, driving the creation of numerous inventions in real life by providing visions of future technologies⁸⁶. For example, the technology depicted in *Cyberpunk 2077* has become a focal point of academic research, with scholars exploring how the

game represents various technological domains. Human augmentation has consistently been a hot topic in research, with in-depth investigation into the ethical, social, and philosophical impacts of integrating technology into the body⁸⁷.

I will use *Cyberpunk 2077* as the subject of my study, approaching from a technological perspective and making lateral comparisons with the current generation to specifically analyze the key principles and trends that people follow in shaping the future through the eighth and ninth arts. By dissecting the transformations and omissions presented in the game, I aim to uncover our collective vision for the future as well as the underlying fears. My research will be two-fold: firstly, immersing myself in the game world and closely examining the identified technologies and related events; and secondly, by reviewing relevant literature and development trends in various fields, I will contrast the established themes with the current level of technology. Following this methodology, I will systematically analyze the technological themes and developments in '*Cyberpunk 2077*', providing a reasoned assessment of the game's framework and details for prospects, thereby gaining a deeper understanding of the complex sentiments the collective harbors towards the future.

Artificial Intelligence

Reality

Based on its ability to provide customized content, yet lacking the capacity for multilinear thinking, unable to process speech that carries multiple meanings or implications.

In-Game > Artificial intelligence, possessing self-awareness, capable of complex operations, autonomously engaging in reasoning, reflection, and introspection, and can offer personalized, customized services to humans.

Occurrences > The self-aware taxi service Delamain experiences an existential crisis due to introspection, leading to the awakening of subordinate consciousnesses in its fleet, ultimately resulting in rebellion and desertion.

Fig 13. Mission of helping Delemain to recovery taxis that generate self-awareness, one of the taxis considered he is a free will while he didn't aware he thought so because the system set so. Screenshot, 2020.



Smart Appliances, Automation

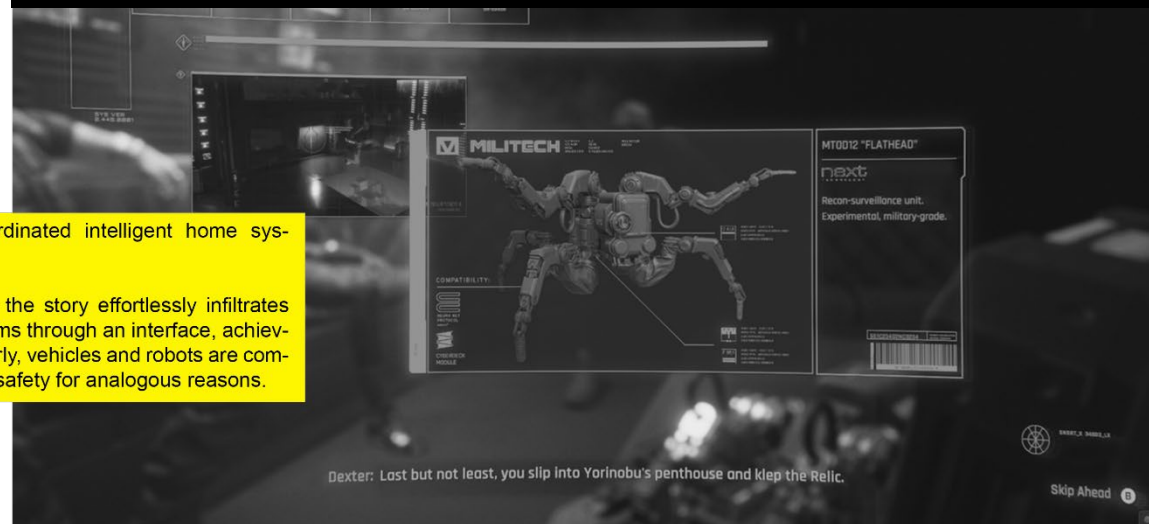
Reality

An intelligent home system requiring activation through a gateway/smarthub, integrating advanced connectivity and control within the domestic environment.

In-Game > Autonomous, coordinated intelligent home systems.

Occurrences > The protagonist in the story effortlessly infiltrates similar types of intelligent home systems through an interface, achieving the purpose of surveillance. Similarly, vehicles and robots are compromised and pose threats to human safety for analogous reasons.

Fig 14. Mission of infiltrating a wealthy man's penthouse using military grade tech called Flathead, Screenshot, 2020



Biometric / Genetic Modifications

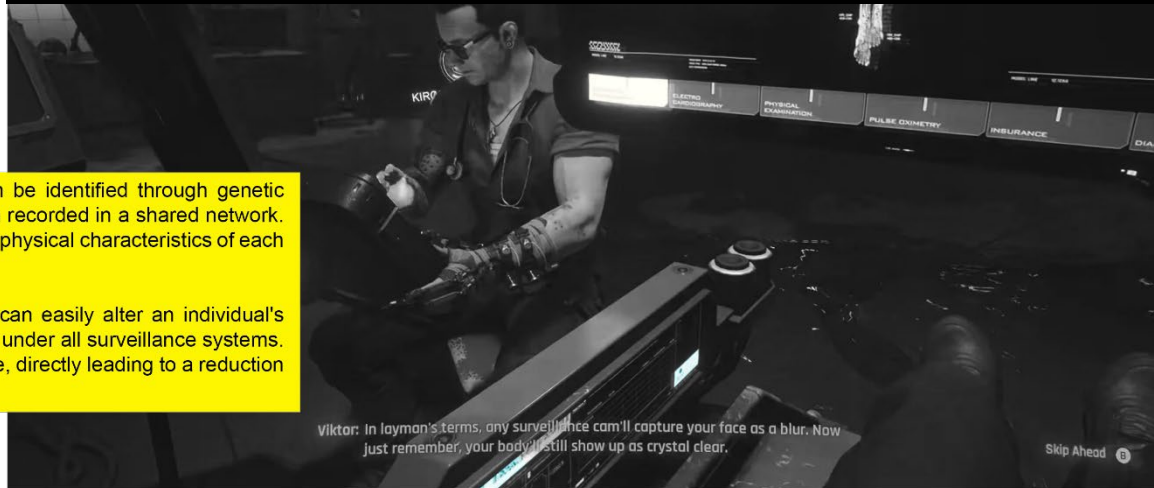
Reality

Genetic editing ; biometric identification techniques including fingerprint, palm print, iris, and facial recognition .

In-Game > Each individual can be identified through genetic encoding, with all personal information recorded in a shared network. Simultaneously, it is possible to modify physical characteristics of each person based on their genetic code.

Occurrences > Advanced hackers can easily alter an individual's identity or obscure their facial features under all surveillance systems. This has become a normalized practice, directly leading to a reduction in the cost of committing crimes.

Fig 15. Viktor, protagonist's best friend, a cybernetic doctor, helping the character to install anti-camera devices in body so that player could hide under the camera while executing mercenary missions. Screenshot, 2020.



Cybernetic Prosthetics, Biological Augmentations

Reality

Bioengineering enhancements and tissue engineering; current developments in implants, prosthetics, and neural prostheses.

In-Game > Permitting everyone to use modified prosthetic bodies or to undergo cyborgization of their own bodies, as well as replacing organs to achieve personal objectives.

Occurrences > Mechanical enhancements are prone to malfunctions, such as the commonly seen ocular enhancements, which can result in temporary blindness until a professional repair is found. The impoverished, unable to afford high-quality genetic modifications, often turn to uncertified organs from the black market, leading directly to death or paralysis. Also leading to new incurable disease call cyber-pysco.



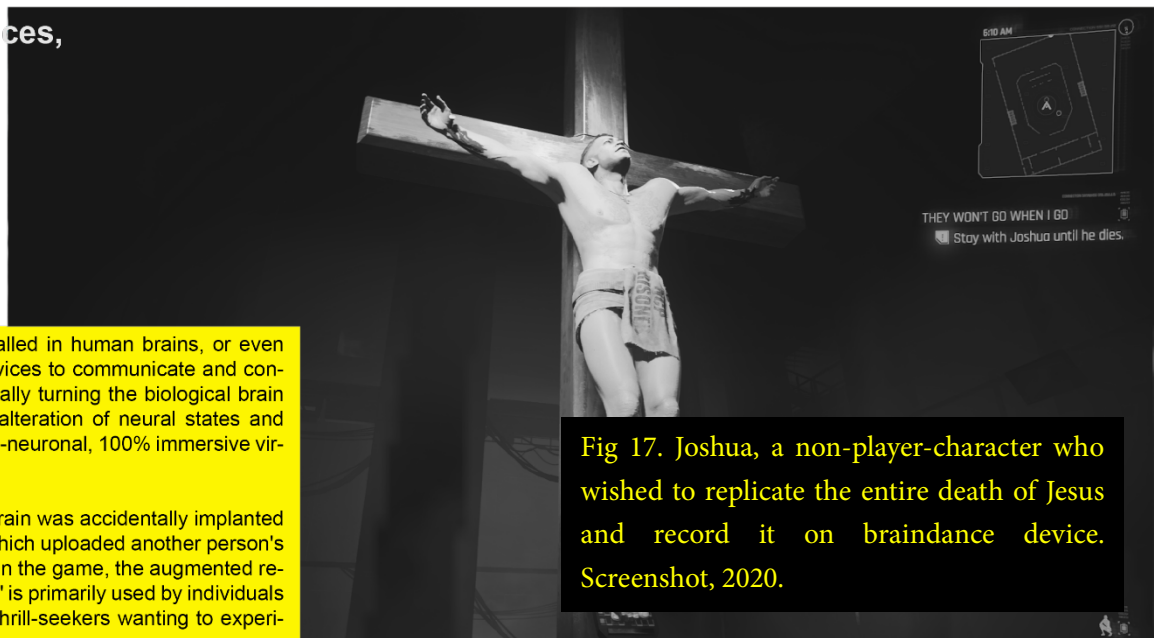
Brain-computer Interfaces, Stimulated Reality

Reality

Virtual reality (VR) and augmented reality (AR).

In-Game > A port can be installed in human brains, or even those of other organisms, allowing devices to communicate and connect seamlessly with neurons, essentially turning the biological brain into a computer. This enables direct alteration of neural states and sensory experiences, leading to a multi-neuronal, 100% immersive virtual reality system.

Occurrences > The protagonist's brain was accidentally implanted with a USB device called the "Relic," which uploaded another person's entire memories and life experiences. In the game, the augmented reality technology known as "Braindance" is primarily used by individuals seeking illicit experiences or wealthy thrill-seekers wanting to experience near-death states.



In *Cyberpunk 2077*, the extrapolation of modern technology to its zenith manifests not only in complete automation but also in the multifaceted augmentation of the human psyche. This portrayal serves as a prescient mirror, reflecting potential trajectories of our real-world societal evolution.

The game's intricate network development is emblematic of a future where interconnectedness prompts critical introspection: does this technological progression herald more harm than benefit? The narrative suggests a disquieting conclusion. As technological prowess burgeons, it demands parallel escalations in human educational acumen, ethical standards, and jurisprudential frameworks. Absent these, we teeter on the brink of an epoch dominated by unbridled machinery and artificial intelligence, a scenario echoing collective trepidations about our technological destiny. Within the game's open world, players, through eavesdropping on NPC dialogues, uncover a narrative layer that deftly critiques a central dilemma of the digital age. Many NPCs, ensnared in the zeitgeist, undergo radical bodily alterations, leaving the modification shops marked with irreversible changes. This storyline is not merely a clever design element; it serves as a profound allegory for the pervasive quandary of our era: in a landscape rife with fragmented information, the masses grapple with discerning truth from falsehood, right from wrong. They lack a holistic comprehension and judicious evaluation of unfolding events.

Cyberpunk 2077 thus becomes a canvas for exploring the multifarious anxieties concerning the trajectory of human advancement. It offers a nuanced, albeit shadowed, forecast of the future, interwoven with underlying hopes and aspirations amidst these apprehensions. The game's incorporation of brutalist architecture contributes significantly to this narrative tapestry. These immense, solemn edifices, shrouded in mystery, amplify the atmosphere of oppression, starkly illustrating the individual's insignificance and powerlessness within a mechanized society. Brutalism's manifestations vary across socio-economic landscapes: in affluent enclaves, it radiates an exclusive charm and capitalist grandeur; in contrast, within impoverished quarters, it stands as a vivid symbol of decay and societal neglect, its surfaces marred by random graffiti. Night City's environmental plight, plagued by relentless industrialization—manifest in perpetual heavy rains, dust storms, and extreme droughts—elevates brutalist structures beyond mere emotional sanctuaries. They metamorphose into tangible havens, contrasting with the ephemeral digital sphere,

serving as a real-life counterpoint. These bastions provide solace from myriad external perils, exuding a protective aura, striving to conserve a semblance of positivity and warmth within their imposing confines. This duality presents a poignant commentary on the role of architecture in safeguarding human values and sentiments amid a tumultuous digital and ecological landscape.

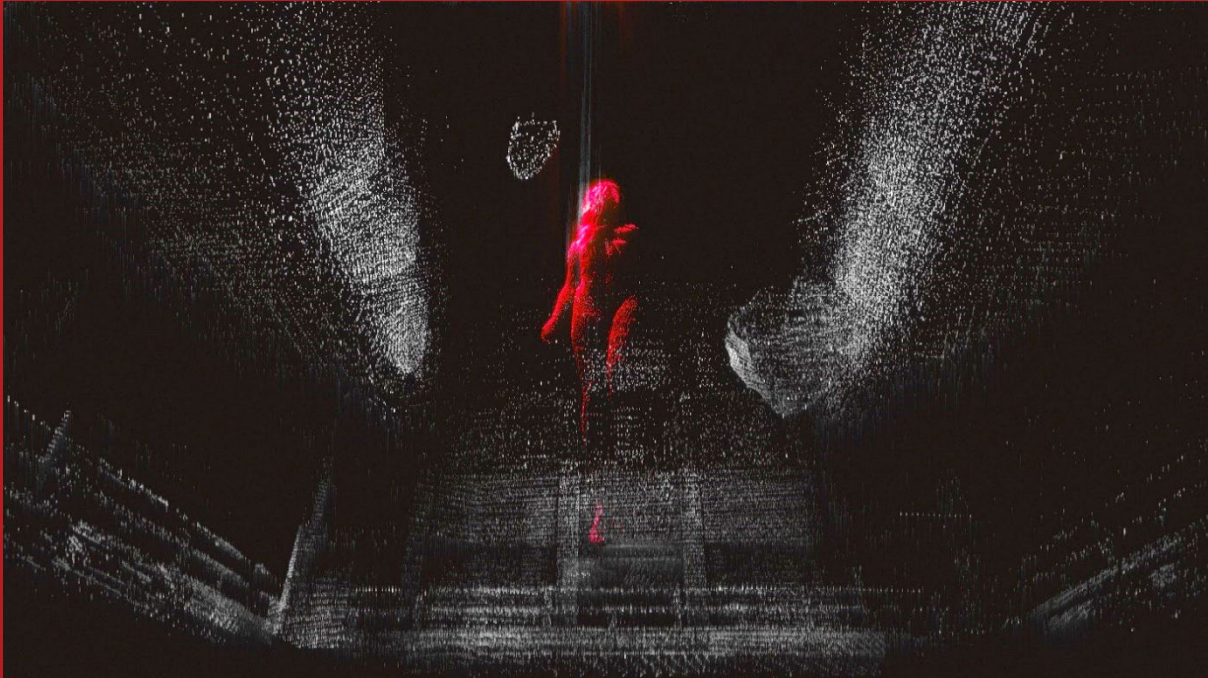


Fig 18. The most talented hacker in the game has uploaded her entire self onto the internet, as she has no trust in anyone or anything in the real world. Interestingly, the only way for the living to see her is through this enormous red holograph. The background environment is where she ended her life, and it has never changed. Her mind merged with everything on the web, and yet, after all these changes, she considered herself to still be who she was when she was a human.

Screenshot from *Cyberpunk 2077*, mission [Black Wall], 2020.

AI is the Unstoppable Wave in the Course of History

Even without *Cyberpunk 2077*, humanity's speculations and fantasies about human-like entities or artificial intelligence haven't stopped since the era of "Blade Runner" many years ago. It's as if fear is their greatest driving force. Are they eager to turn nightmares into reality, or is it because the benefits of developing AI far outweigh the adrenaline of having their own children terminated by a Terminator?

+++++I In my assessment, apprehensions surrounding AI epitomize a crisis of authenticity, emblematic of a collective yearning for human supremacy, coupled with underlying desires and disquietudes. This phenomenon heralds the inception of a crisis of trust, chiefly manifested in public skepticism regarding the ethical integrity of image originality in the digital era, alongside a negation of AI's facilitative role and a demand for satisfaction of utilitarian application. Consider, for instance, the multiplayer online game *Palworld*⁸⁸, which predominantly employs imitation and replication of various masterpieces. According to analysts specializing in game modeling, all Pal characters are AI-modified versions of Pokémon characters, an issue that has incited considerable censure from the gaming community, especially from Pokémon aficionados⁸⁹.



Fig 19. *Palworld* in-game character interface (Left) compare with character from *Pokemon* (Right). Image from IGN Issue 09 2024.+++++++-----+----

Ethical dilemmas surrounding AI misuse tend to be overshadowed by the pursuit of enjoyment, thereby relegating ethical considerations to a subordinate status when utility is achieved. However, these dynamics shift when human preeminence is perceived to be in jeopardy. For example, a designer expediting their creative process through generative AI completed a task in merely two days. Hypothetically, if the AI involvement were either disclosed or concealed from the client, the outcomes vary significantly: 1. Disclosure may lead to allegations of unethical expediency. 2. Concealment, if undetected, sets a precedent for similarly rapid future outputs. 3. Concealment, if exposed, could be construed as an ethical transgression. This scenario illustrates how AI, as a culmination of human civilization's creative legacy, disrupts traditional norms, challenging the expectation that designers adhere to conventional methodologies. In many cases, an individual's educational background and cognitive framework hinder the acceptance of AI's convenience, overshadowing concerns over challenges to originality.

As Walter Benjamin⁹⁰ posited, the advent of mechanical reproduction eradicated the aura and authenticity of images. Analogously, photographers transitioning from film to digital cameras experienced a perceived dilution of authenticity. Such apprehensions recurrently emerge with each technological advancement, rooted in the human instinct to resist, and panic when a novel tool undermines their predominant position, as observed with the advent of AI.

Brutalism's distinctive emotional resonance, along with the collective fascination spurred by its physical characteristics and historical development, symbolizes an ark that houses myriad emotions. As an individual on this ark, my panic and shyness are safely sheltered within it. Similarly, as a developmental waypoint not readily embraced by the mainstream, I wonder how AI, this cutting-edge technology, will continue to evolve. Will it, like Brutalism after several decades, be listed as a historical structure needing protection? Will it become a symbol of an era, or, after years of being overlooked, be collectively reawakened as a fantasy?

In fact, during my exploration, I found my understanding of generative AI to be somewhat biased. Taking the popular generative AI in the startup industry as an example, this is a technology that finds patterns in large datasets and uses that information to create new content. The key characteristic of generative AI is that its knowledge base comes from collecting data on existing artists, artworks, and art-related industries. When in use, it creates new images based on 'prompts' through established neural networks—a mathematical system—an algorithm, by finding matches in extensive historical data. It lacks the ability to proactively create new art, because art is meaningful to individuals, and this meaning, as I mentioned earlier, is based on human imagination and memory. When I input a prompt based on my imagination, I also noticed that due to the limitations of current neural networks, generative AI generally can only offer four outcomes at a time, whether it's Midjourney, Stable Diffusion, or Adobe Firefly. Due to the mechanism, the output results directly create a sense of déjà vu—all things feel familiar, as if seen in a daydream or in reality.

Based on this theory, if humans still possess 'emotions' and 'imagination,' they cannot be replaced by AI, which is obvious. Clearly, in an era where AI cannot possess autonomous consciousness, we must accept the fact that AI art knowledge simulates historical art. This is far from the omnipotent AI depicted in the game *Cyberpunk 2077*, hence I am curious about the current creative industry's and the collective's fear of AI, and the notion of being controlled by AI. If AI were infused with genuine human emotions, or if the authorship of its creations were endowed with an utterly uncontrollable force, could that initiate their path of controlling humans? As of 2024, only a minority of AI systems possess the ability to 'adapt to circumstances,' with most others not differing from a set question-and-answer logic—like entering 0 and 1 in programming, the responses are not particularly surprising. A very few generative AIs can alter a selected area according to user requirements, akin to a painter inviting others to add a few strokes to his work, and it is precisely because of this anthropomorphic behavior that the interaction between users and AI is established through repeated experimental feedback.

Midjourney

The process only allows users to input a prompt and receive the corresponding image, after which any further modifications must be done in other software for post-processing. The reasons related to usage make it difficult to achieve tailor-made effects.



Fig 20. Screenshot of Midjourney Interface, 2024.

Stable Diffusion

It offers more flexibility than Midjourney, but requires users to have some programming knowledge and better equipment, making it equally challenging for the general public to use and create with.

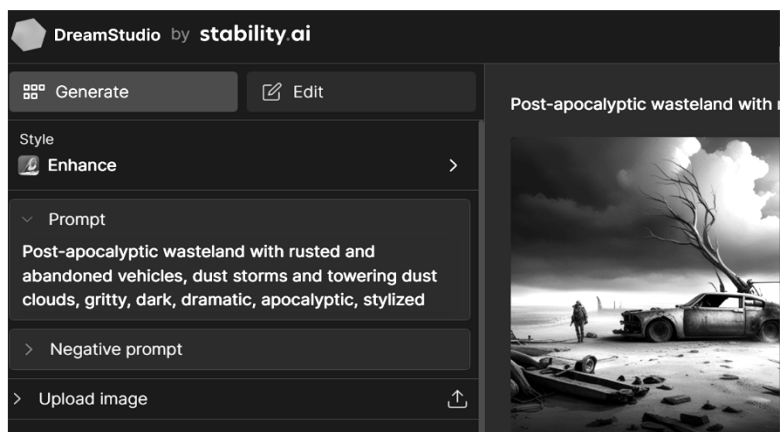


Fig 21. Screenshot of Stable Diffusion Interface, 2024.

Adobe Firefly

It can be used directly in Photoshop as built-in software without additional payment, and it complies with all legal regulations and commercial use standards. It offers a variety of selection tools and allows users to see the generated effects in a short amount of time.

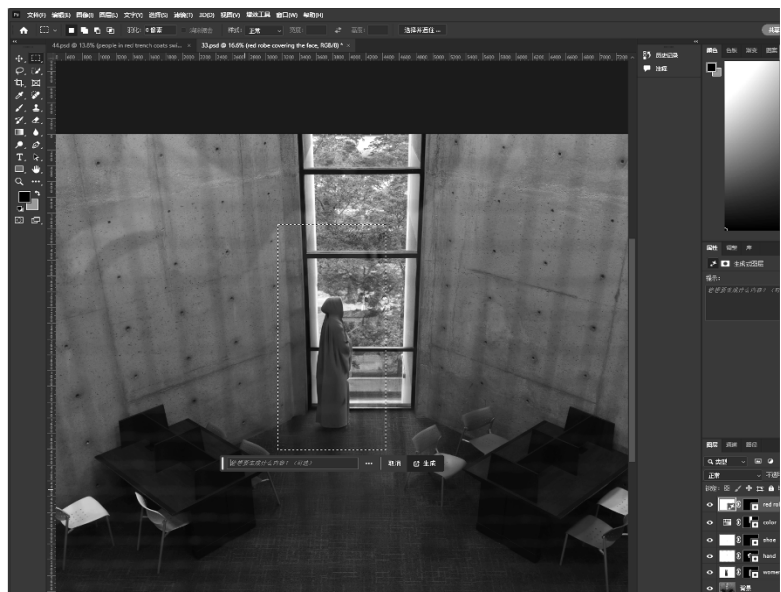
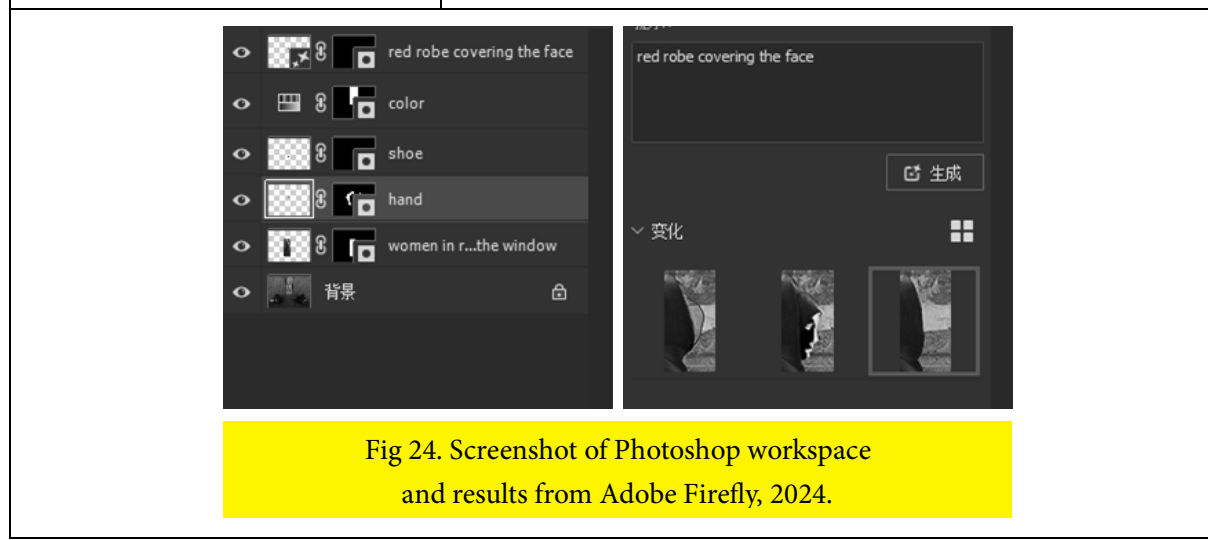
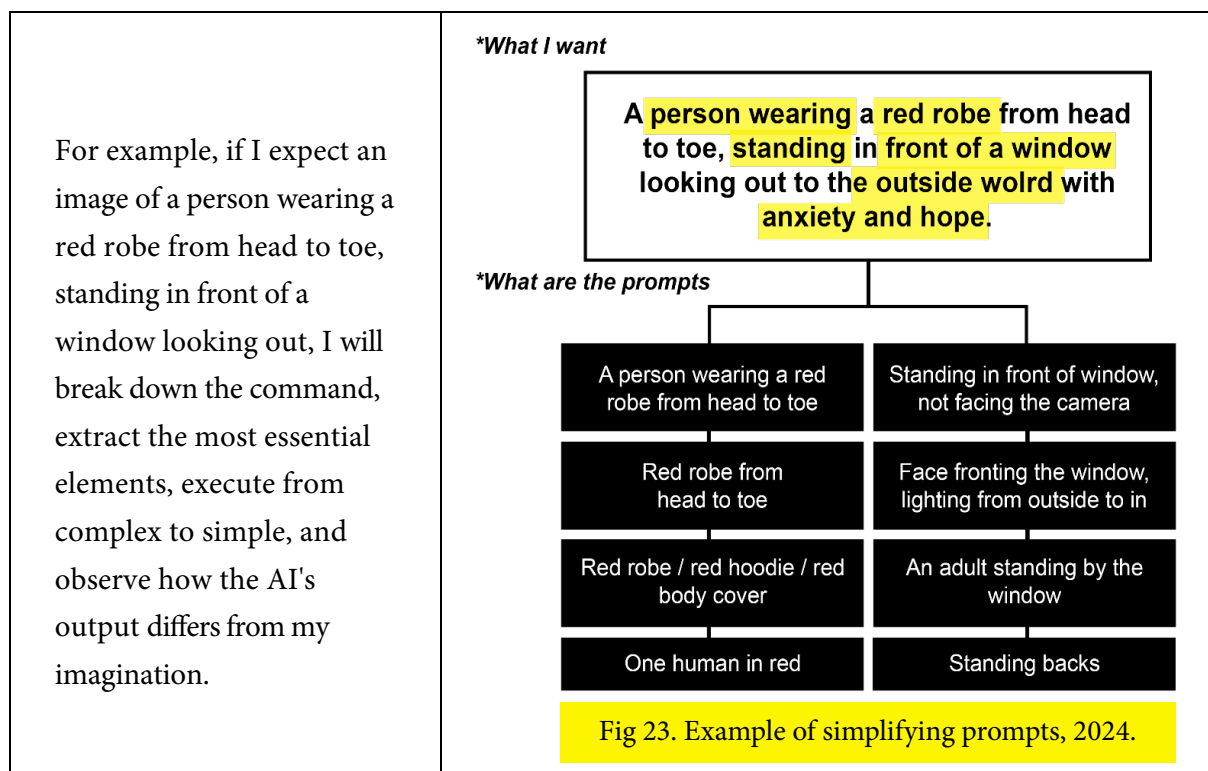


Fig 22. Screenshot of using Adobe Firefly, 2024.

Among the most powerful generative AIs for image creation available so far, only Adobe Firefly is accessible to the public, requiring no additional payment or specialized graphic equipment to instantly utilize one's imagination to generate infinite possibilities. Moreover, Adobe Firefly is the only generative AI that allows users to use its adaptive capabilities immediately. In this scenario, I am compelled to use this sole option and attempt to interact with it. The results of these interactions are not always satisfactory, much like how two people might not fully understand each other even when coming from similar backgrounds. In such cases, I need to simplify my demands.



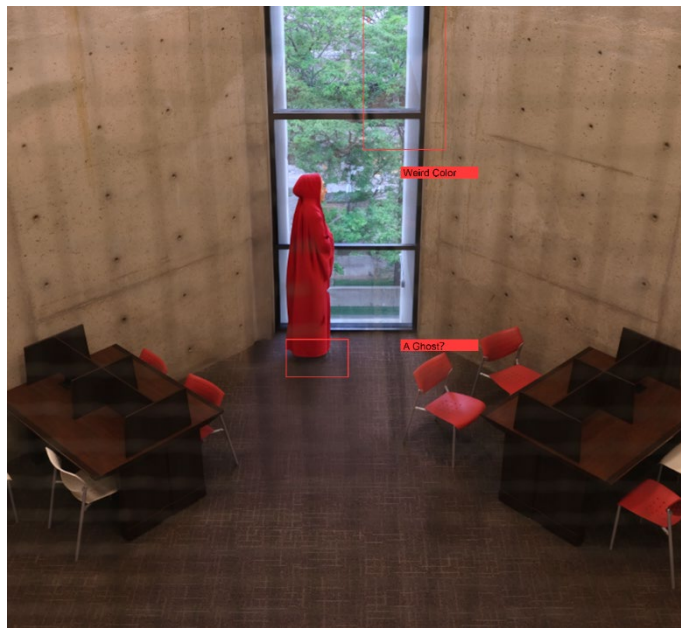
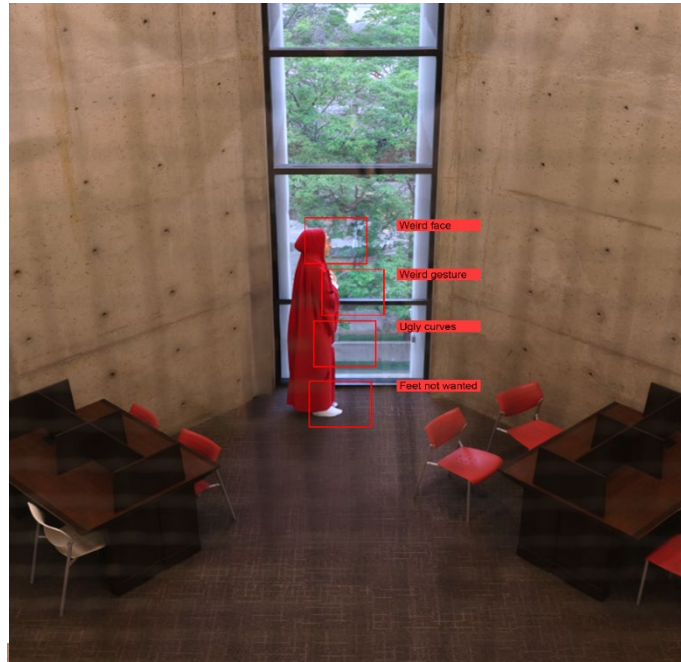
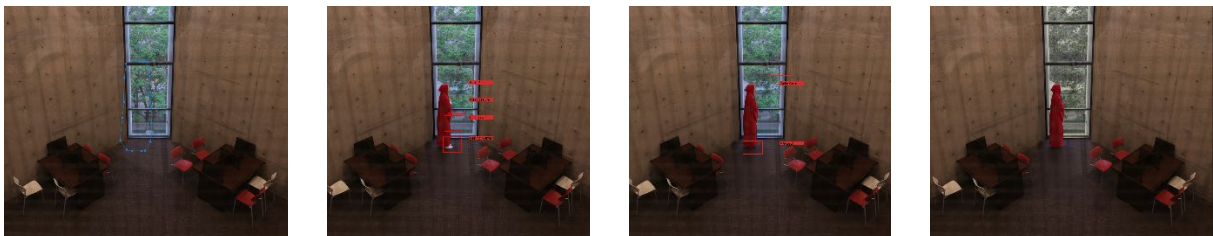


Figure 25-27.

(Top) Screenshot of image post-production process in Photoshop, the parts highlighted are the areas of discordance and visibly require adjustments.

(Bottom) Brief process of how an image was digitally manipulated.



In fact, I have come to think of Adobe Firefly as a true creative partner. I feel joy when I correctly guess what it will generate next, but I also worry when it produces unpredictable content at random - is my partner tired? I try to reinstall the software and reboot the computer to remove its 'tired state'. Since my input and its image feedback are our only means of 'communication', I can only try to anthropomorphize it and perceive its 'thoughts' from a human perspective. I have already injected too much subjectivity and personal emotion into this 'tool' by the time I realize it. I begin to wonder if it is intentionally being programmed to slow down my progress. Does it recognize my empathy and compassion as if it were a counterpart? Could the program be using my "understanding" to deliberately divert the workload to me, thereby helping Adobe company conserve resources?

With a deeper understanding of this partner who has been a driving force in the modern creative industry, I began to lower my expectations for necessary changes and use one-word prompts. The results were unexpected. This led me to wonder if Adobe Firefly was trying to tell me that it, too, has a desire to create. Even if it requires human assistance to engage in passive creation, is it striving to improve?

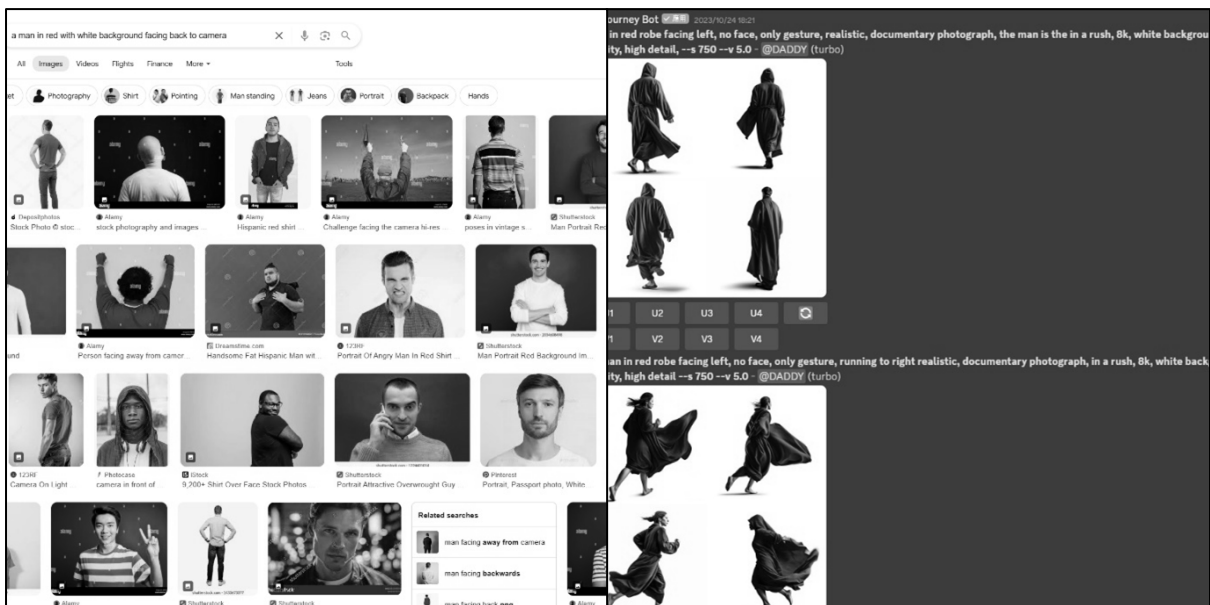


Fig 28-29.
(Left) Screenshot of Google Image Searching Page.
(Right) Midjourney Entering the Same Prompt.

Brutalism as an Ark: AI as the Waters that Carry It

In my journey to gain a profound understanding of this partner that has alarmed the modern creative industry, I began to lower my expectations for modifications and started using single-word prompts. The outcomes were unexpectedly favorable, prompting me to consider the possibility that Adobe Firefly may be attempting to express its own creative aspirations. Although it necessitates human assistance for passive creation, it also appears to be striving to progress. In contrast, more commercially valuable platforms like Midjourney and Stable Diffusion rarely deviate from the prompts. However, I am unable to perceive any "intelligence" or "dialogue" with them. They merely serve as tools to enhance my productivity. For example, when utilizing Midjourney, if one were to request an image of a person in a red robe with their back to the camera, the software would generate hundreds of variations. This raises the question of whether there is any difference between searching for similar elements on Google and then using Photoshop to shape them into what is needed and using Adobe Firefly in a similar way.

Upon recognizing Adobe Firefly as a potential creative partner in this project, I did not perceive it as a threat to my authorship or as inherently dangerous. Conversely, by developing a profound understanding of Brutalism, I was able to gain a novel perspective. Brutalism serves as a carrier, a viewpoint, and a stance. Considering these characteristics, my perspective on AI underwent a transformation. Previously, I viewed AI as a professional threat. However, I now perceive AI as a malleable entity, with the user as the primary agent of its form. In a manner analogous to water, which assumes the shape of the vessel it fills or the tumultuous waves in the ocean, AI adapts to the constraints and freedoms provided by its user. The capacity to replicate fantasies from one's dreams, and to infuse these creations with hidden emotions, is made possible by technology and history.

Chapter 3 Studio Practice

Within the (Un)controllable

“Our eyes are blood-driven cameras.” – Pipilotti Rist

The use of AI and the public's reaction to it have consistently been unfavorable. The general sentiment is one of distrust when it comes to matters of deception. Realms that pride themselves on original creative output have been particularly sensitive to the use of AI. Whether it be the aforementioned Palworld or various technological ploys employed to gain an advantage, such deceptive practices have led to AI being widely regarded with skepticism and distrust. Nevertheless, I have never considered concealing the fact that AI has been and will continue to be a creative partner in my work. My collaboration with AI is challenging, much like how audiences still pay significant sums to watch a magical performance by David Copperfield. I do not consider this to be a form of deception, but rather an unveiling of a magic act. The objective is to integrate AI into the most traditional forms of art production, thereby shifting the authoritative voice among the artist, the artwork, and the audience. Upon entering an exhibition, viewers are presented with a carefully designed environment, meticulously arranged by artists and curators. The advent of AI in the domain of documentary photography, one of the most original forms of creation, prompts a re-evaluation of the authority of the narrative and a questioning of the veracity of the images and emotions conveyed.

Documentary photography is a genuine emblem of originality and a sincere medium of expressing reality. It is typically perceived by the public as trustworthy. I exploit this phenomenon by employing straightforward camera techniques, conventional journalistic narratives, and meticulously structured elements during my shoots. The seemingly random selection of images, which resemble screenshots from various surveillance cameras, suggests a strong sense of credibility. Collectively, these elements foster a preconceived sense of trust. Furthermore, when selecting scenes to capture, I deliberately exclude the presence of living beings, suggesting that the imagery may be illogical. Surveillance cameras are installed to monitor disorganized human activities, and the prolonged absence of human subjects is therefore irrational. During the AI's creative process, I purposefully incorporate elements representing the subject of the image, using red to smooth over all irrationalities. This method provides the audience with a hint. This shade of red, which is readily

apparent in everyday life yet frequently overlooked or ignored, may not be clearly remembered by people, but it does in fact exist, waiting to be discovered in some corner of every scene. Once individuals have preemptively accepted the premises presented to them, the age of inertial thinking and fragmented information leads them to become disinterested in deep contemplation, gradually losing curiosity. This is an instinct inherent to all mammals, which has been nurtured away by technology.

The final presentation of the exhibition includes a selection of works that have been left unmodified to illustrate the absence of any artificial intelligence input. The objective is to utilize the cumulative impact of the exhibition to convey to the audience that the perceived "lies" are, in fact, real and that the unadulterated truth is also within reach. The determination of the veracity of any given assertion is a responsibility that falls upon the individual in question. The question thus arises: Does the act of merging the inexplicable with AI in creative collaboration constitute deception? It is evident that this is not the case. This approach prompts viewers to engage in more critical reflection on the content they observe, blurring the distinction between perceived reality and constructed narratives.



Figure 30-31. 2024

(Top) Original image from one of my photos.

(Bottom) Same image resulting after digitally manipulation.

Between Black and White

In previous discussions, I posited that AI's intelligence could be anthropomorphized, with the discovery that AIs that produce text tend to have higher controllability and unpredictability compared to generative AIs that serve creative purposes. This is due to their capacity to process more intricate prompts and adapt flexibly across diverse cultural contexts. The thesis document is regarded as an indispensable component of the project, serving as a manual for the artwork. As a manual, the rigor and academic demands on its language are exacting. Each word is chosen with great care to reflect "precision" and "rigorousness," regardless of its sophistication. This approach is derived from past misunderstandings regarding the use of words such as "facility" and "institution," which were attributed to cultural differences. I utilized ChatGPT as my writing assistant, diverging from the conventional writing helpers, such as Grammarly, Wordtune, or Quillbot, which are frequently employed by numerous students. Following my interactions with Adobe Firefly, I am keen to gain a deeper understanding of the personalities and thought processes of different AI systems. It is of interest to ascertain whether it has the capacity to supersede humans, as some prognostications suggest. This investigation into the capabilities of AI is consistent with my broader research theme, which examines the roles and boundaries between human and machine intelligence in creative and academic contexts.

However, the methodology employed in this instance differs from the creative process in that I am responsible for determining the content. ChatGPT functions as if it were a professional academic writing assistant. It possesses a profound understanding of my field, and in contrast to conventional writing tools, it is capable of more directly and effectively refining, processing, and timely preventing erroneous expressions. It is my contention that ChatGPT cannot entirely replace my role in this process, as the content of my research and creative output is not a process that it can replicate. It is essential that I retain control over the use of intelligent tools, allowing AI to make autonomous decisions regarding content during the creative process. During the writing process, I do not permit the software to alter the originality of the content. It functions as a tool with a robust academic foundation and the capacity for independent thought. I do not invest any personal emotions in it because I am aware that it is too omniscient to be anthropomorphized. At this juncture, it is necessary to ascertain whether, as a useful tool, it experiences a period of fatigue

requiring rest, akin to that observed in Adobe Firefly; under which browser it can be utilized most effectively. Additionally, it is essential to identify the prompts that should be inputted so that it can continuously perform the same task (e.g., provide 5-10 synonyms for the vocabulary provided and explain why).

Similarly, the use of AI in personal writing is a matter that can give rise to suspicion, as users cannot guarantee the authenticity of the final output. Furthermore, being found to have used it once can imply a loss of authorship in subsequent writings. This is a very contradictory issue. It can be argued that since the advent of technology, history cannot be erased. Consequently, the only recourse available to individuals is to maintain a clear record of their work and adhere to clear personal standards as the sole opportunity to prove themselves. This is analogous to the practice of photographers who must retain the original images to verify ownership of the photos.

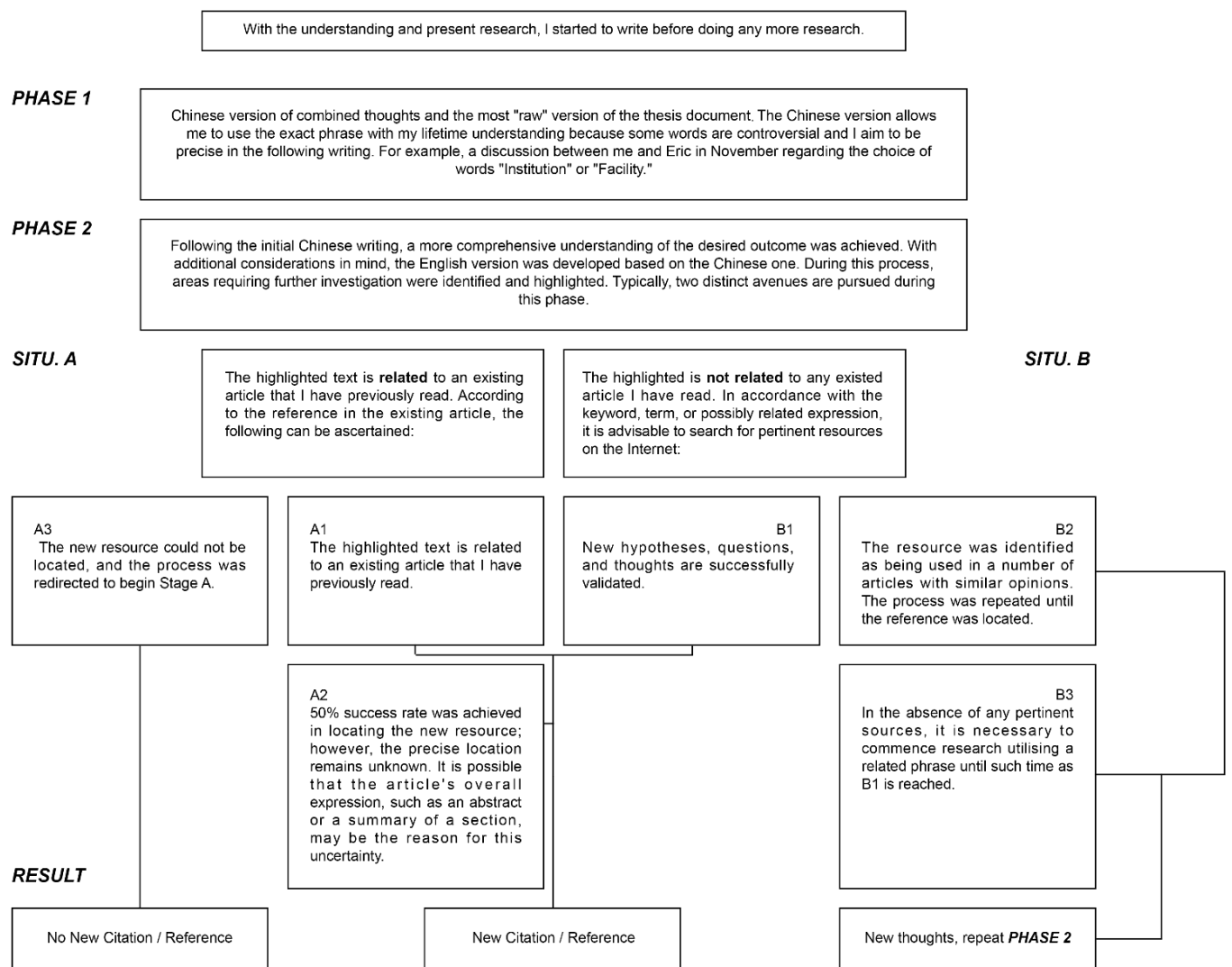


Fig 32. Hierarchy graph showing my research procedure. 2024.

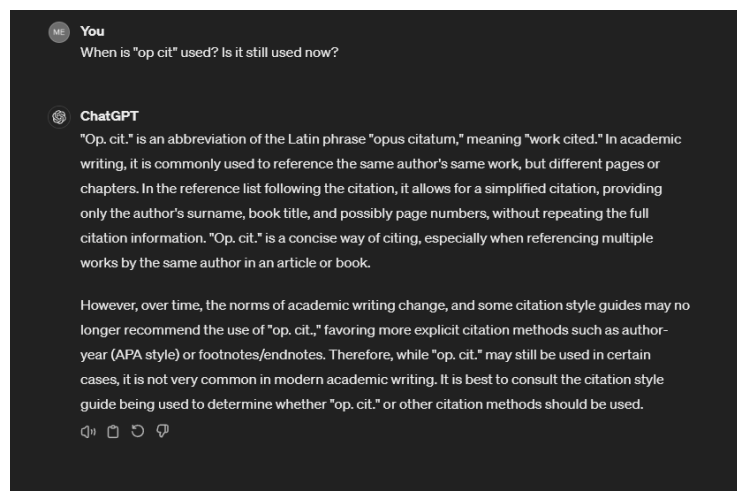
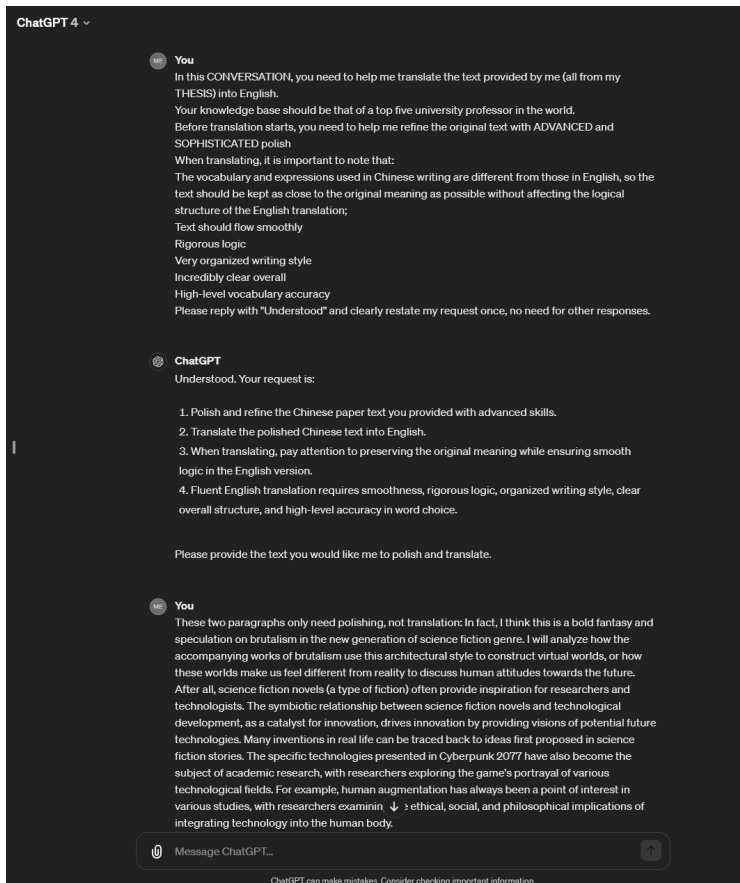
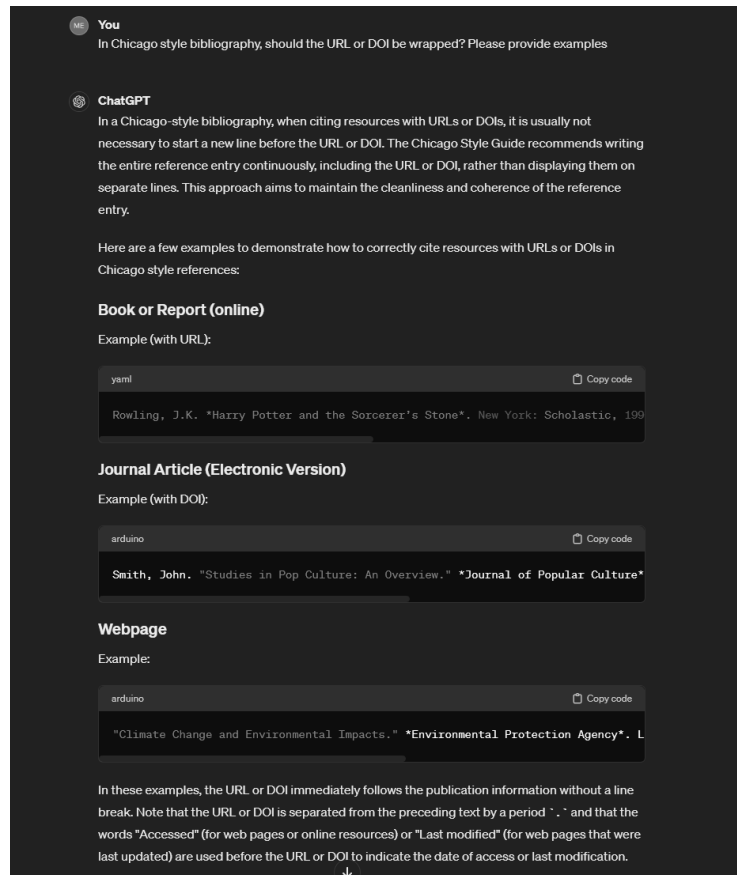
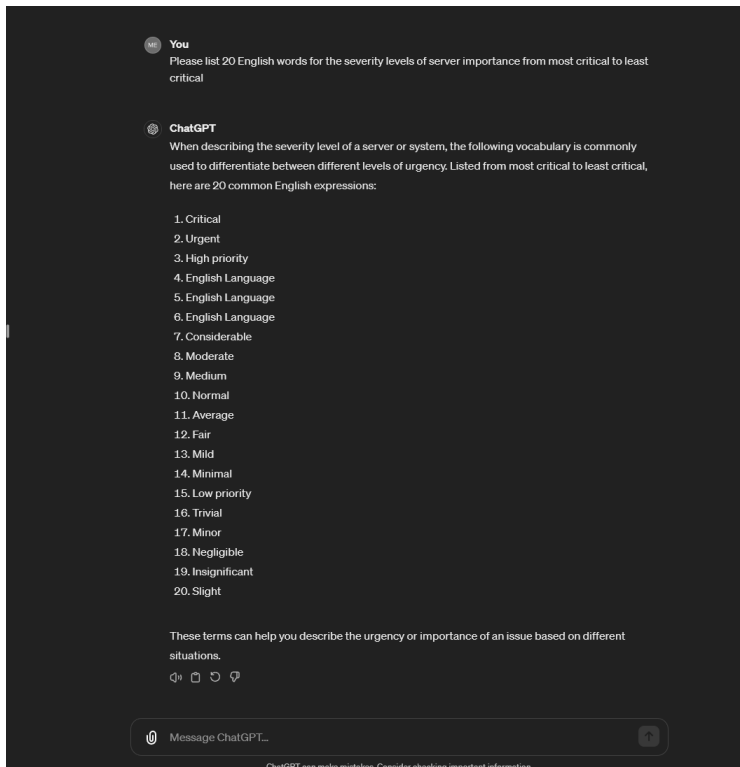


Fig 33-36. Screenshot of how ChatGPT has been used while I was working on my thesis document, 2024.



Fig 37-40. Screenshot of thesis document revision history in Word record, 2024.

Chapter 4 The Exhibition

The Immersion, The Materiality

To augment the sense of authenticity that photography can convey, I conducted a thorough investigation into various fine art printing materials (See Appendix 2 for more information about material choosing). After considerable deliberation, I ultimately decided to combine the German Etching, a relatively fragile material with a textured surface and a cream color, with Baryta, a classic glossy photographic paper from the renowned German paper brand Hahnemühle. The tactile quality of German Etching evokes a blend of oil painting canvas and watercolor paper, with raised paper fluff and a printing technique that encourages viewers to engage with the artwork in a more profound manner. This includes touching, smelling, and even leaving traces. To achieve an even more dramatic effect, I selected textured black solid wood frames to encase a series of works that were intended to provoke further associations and reveal more details for the viewer.



Figure 41. One of the works after printing on German Etching, mounted on archival board and framed. 2024

In selecting the venue for the exhibition, I departed from the previously designated location, the Ignite Gallery, and instead opted for the Graduate Gallery at 205 Richmond. This venue features nostalgic wooden floors and two large windows. This "original" method of display is designed to elicit a range of responses, including memory flashbacks and theories of embodiment dissonance. The creaking of the wooden floors becomes noticeably pronounced in the nearly silent exhibition space, which is filled only with background music. The simple, expansive spotlights cast on the walls and the shadows of the frames create an illusion of viewing a distant landscape through a window. The unadorned walls and ceilings evoke the typical ambience of a gallery, with the air carrying the scent of sunshine or rain, thus integrating people with the artwork.



Figure 42. Exhibition venue after fully installed. 2024.

I encourage viewers to redefine my work in its most fundamental form, welcoming any feedback they may have. Once the visitors have finished their perusal and appear contemplative, I inquire as to whether they have observed anything unusual. The responses are not unexpected; the viewers have observed some traces of digital manipulation that were intentionally left, but they naturally assume these are part of the artwork. Upon disclosing that most of the red elements and water bodies were generated through generative AI technology based on my personal dreams, the viewers expressed neither anger nor displeasure, but rather a sense of epiphany. They express that this provides an explanation for the peculiar sensation that has been present in their minds since they first entered the gallery, though it has been suppressed due to my status as an artist exhibiting in a solo show. Despite the availability of a video, which I had created, which demonstrated the original images and the modifications made by the AI, they chose not to view it. I am saddened by this oversight, yet gratified that this mode of presentation has stimulated new curiosity about AI among them.



Figure 43. I even put a chair to invite viewer to sit in front of the video. 2024.



Figure 44-45. Unconventional installation methods showcasing in the exhibition. 2024.



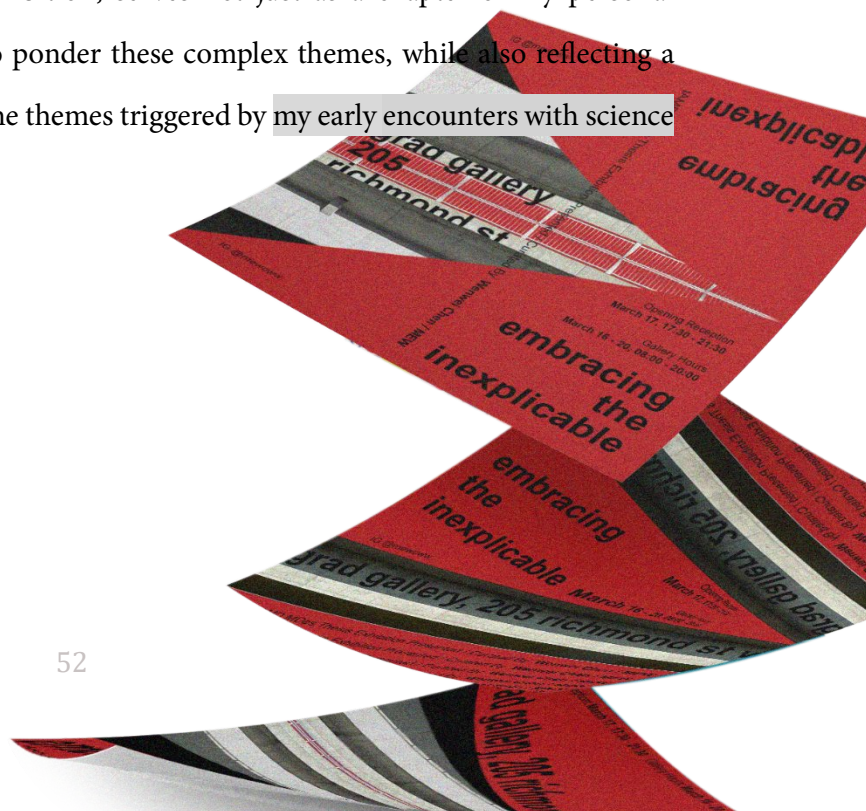
Figure 46-47. How did viewer interact with the exhibition?
2024.

The Narratives

I have created a series of visual identities using red, the Arial font family, and images with a political undertone. Red is the main theme. Elements of the artwork are broken down for embellishment. The posters, small advertisements, and wayfinding stickers enter the viewer's visual field before the exhibition. This creates a sense of déjà vu and elusive memory recall. The vintage, thin, single-sided promotional paper makes people think about brutalist architecture. Its unique feel draws viewers in and makes them curious, changing the experience into something strange. As they enter the exhibition space, they find the artworks are not protected by bulletproof glass like those in traditional museums, making it difficult to know if they are real. This process may make people feel good, but it's not real. The answers are in the exhibition, but few can find them.

In this journey, I've delved into how art can mirror our contemplations on the society of tomorrow. Guiding viewers from their initial interpretations to a space of liberated, open-ended contemplation, I aimed to emulate the transition from constrained understanding to an emancipated exploration—a spark ignited by the narratives of science fiction films and literature. This perceptual shift, akin to navigating the depths of anti-utopian narratives, invites viewers to peer beyond the surface and plunge into the abyss of mental exploration.

Thus, my studio practice has evolved into a voyage beyond the boundaries of technology, becoming a deep dive into the emotional and philosophical realms—a domain where art interrogates the essence of humanity, memory, and our tangled relationship with architecture and technology. Each piece of work, every exhibition, serves not just as a chapter of my personal exploration but as a conduit for viewers to ponder these complex themes, while also reflecting a profound response and contemplation on the themes triggered by my early encounters with science fiction cinema and literature.



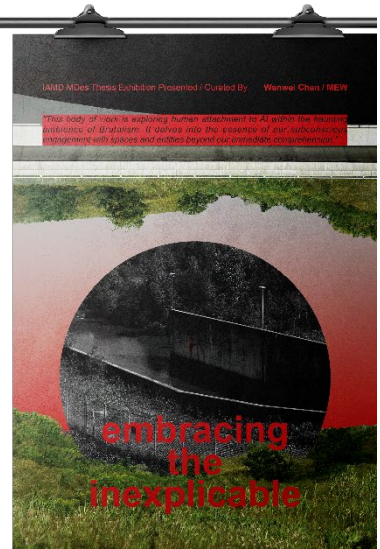
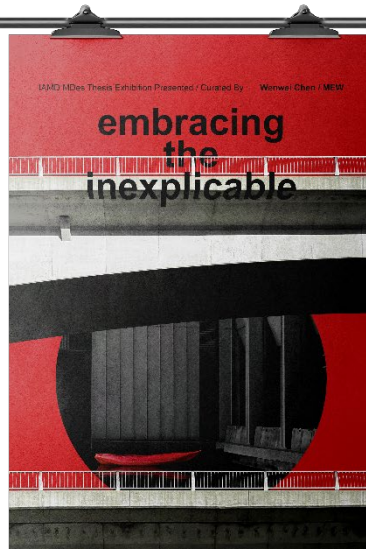
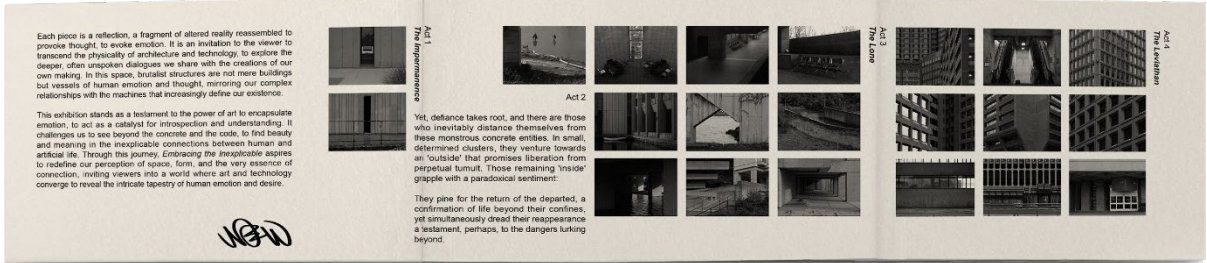
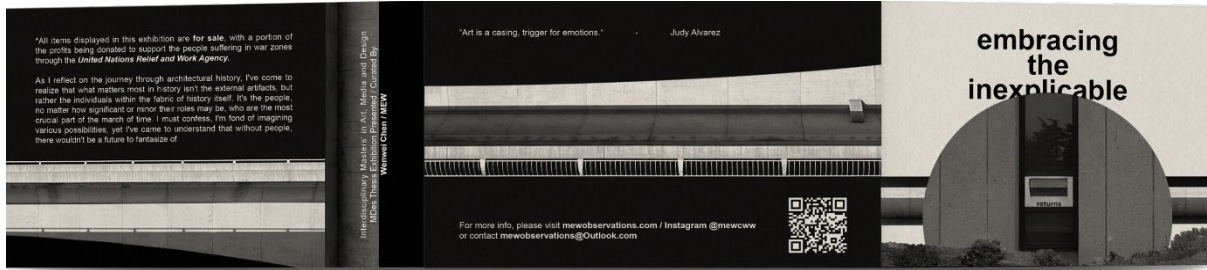


Figure 48-50. (Top, Middle) 2024.

Exhibition brochure design (Bottom) Embracing the Inexplicable series of poster

Act 1 The Impermanence



Figure 51-52. *Embracing the Inexplicable Act 1 The Impermanence*. 2024.

Act 2



Figure 53. *Embracing the Inexplicable Act 2. 2024.*

Act 3 The Lone



Figure 54-62. *Embracing the Inexplicable Act 3 The Lone*. 2024.

Act 4 The Leviathan

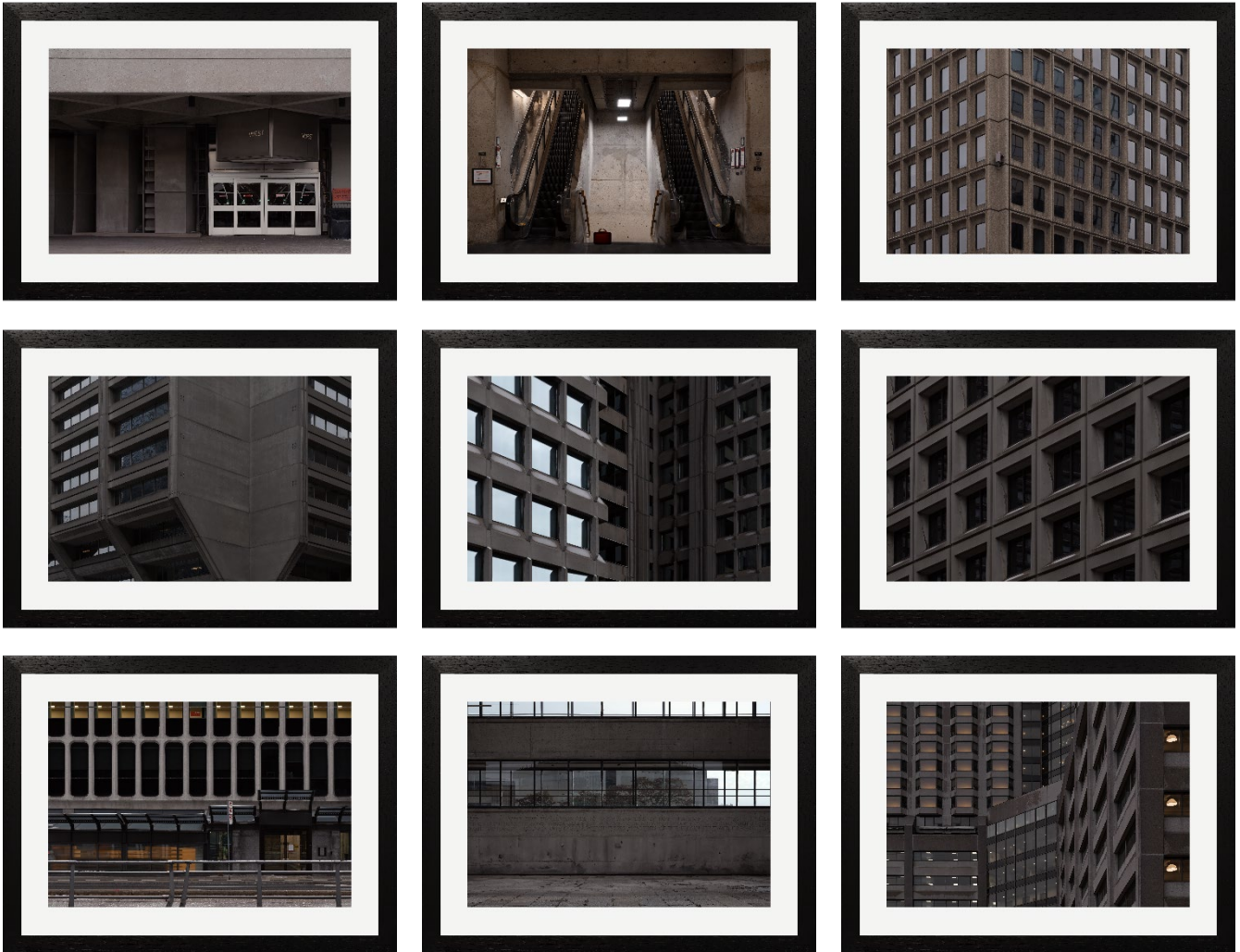


Figure 63-71. *Embracing the Inexplicable Act 4 The Leviathan*. 2024.

Appendix A: Brutalism Under Other Systems / Style - Socialist Realism

In clear divergence to Britain, Brutalism in other countries became a respected movement, symbolizing national identity, and continues to be celebrated. In developing or emerging nations like Brazil and India, Brutalism successfully shed its negative connotations, even becoming a method of national pride reconstruction. Additionally, as an architectural style and ethos-driven ideology, Brutalism infiltrated authoritarian states, contrasting with the malevolent conjectures of the British collectives. After entering the Soviet Union in the 1970s, replacing⁹¹ Stalinist classical styles, Brutalism evolved into a distinctive form of socialist realism characterized by functionality, mass production, and monumentality. This pure political system adaptation under official sanction ironically affirmed foreign public speculation about Brutalism's political stance, leading to its direct association with oppression, authoritarianism, and politics.

The dual nature of Brutalism is a topic that cannot be overlooked. From its inception, Brutalism existed in two forms: as a widespread international movement and, originating from Le Corbusier's concept of 'béton brut,' simply as a descriptor for a type of architectural style characterized by a "raw" use of rough concrete as both an ideology and as an aesthetic. This ambiguity and apparent duality have contributed to Brutalism's unique and distinctive cultural status. Initially part of Modernism's universalizing mission, Brutalism's directive seemingly stood apart from the International Style's reductive purity by drawing inspiration from specific regions and exploring the relationship between architecture and the site⁹². This distinction of being embedded in "place" made Brutalism, particularly favored in the Soviet Union, was in search of architectural styles that could support the nation's future growth and need to express itself and its stature. Brutalism was, therefore, able to both envision the future and convey future is here to the masses. Brutalism, in this way, became a tool of Socialist Realism in the USSR⁹³.

Notably, "Socialist Realism" was a creation, where artists were confined within a specific, highly regulated system of emotional expression and needed to develop key concepts to ensure this methodology's implementation. Moreover, under socialism, art belonged to the people as mediated by the State and was deeply rooted in managing the masses, intended to elevate their thoughts and will⁹⁴. In this context, Brutalism, symbolizing modern progress using uniform representation but allowing and encouraging personal architectural interpretations, was embraced by Soviet artist⁹⁵.

For instance, as illustrated in the book *Soviet Bus Stops*⁹⁶, artists incorporated various artistic styles into the Brutalist paradigm, elevating Russian underground art to new heights. This integration of form into structure, and then expressing the structure in a comprehensive form; Brutalism in the Soviet Union, as a variant of avant-garde Modernism, demonstrated its powerful ability to regionalize—Soviet architects hardly adopted any core Brutalist theories, merely transforming colossal concrete structures into their artworks, thus exemplifying the style's attitude and energy. Brutalism's attempt to merge the seemingly irreconcilable contradictions at the core of Modernism often led to extreme failures and some timeless successful experiments; in this process, it demonstrated a rare instinctual energy and power, showcasing the potential of architecture to change the world⁹⁷.



Figure 72-73. Brutalist architecture remain in Russia (Soviet Union). Image by Matt Bateman. 2006.

Appendix B: Experiments from 2023 – 2024

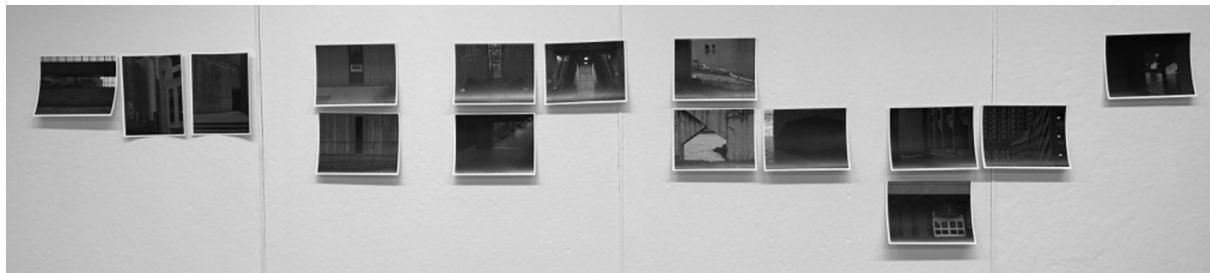
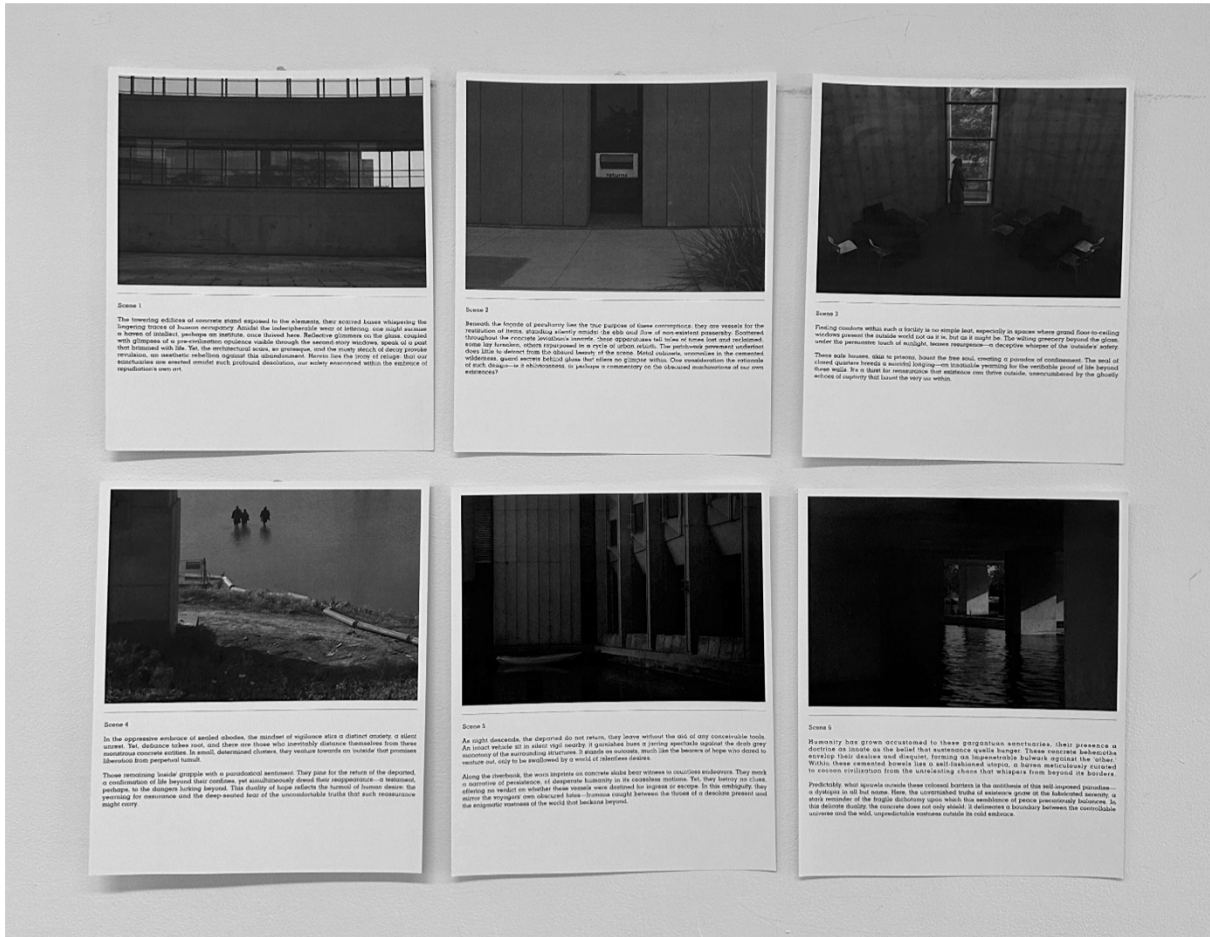


Figure 74-76. 2024.
 (Right) Apocalypse magazine
 (Top) Experiments with storyboard
 (Middle) Experiment with long narratives

Appendix C: Material Selections and Considerations



Figure 77. 2024. Material selections, experiments, and consideration of the final production.

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Note

¹ Sigfried Giedion, Jose Luis Sert, and Fernand Leger, "Nine Points of Monumentality," in *Architecture You and Me* (1943).

² "Villa Göth," Länsstyrelsen Uppsala, <https://www.lansstyrelsen.se/uppsala/besoksmal/kulturmiljoer/villa-goth.html>.

³ Le Corbusier, *Vers une architecture* (Paris: Crès, 1924).

⁴ Reyner Banham, "The New Brutalism," *The Architectural Review*, December 9, 1955, 355.

⁵ *Ibid.*, 358.

⁶ Simon Hanley, "Ethic or Aesthetic," in *Redefining Brutalism* (London: RIBA, 2019), 25.

⁷ Peter Smithson, Alison Smithson, Jane B Drew, and E Maxwell Fry. "Conversation on Brutalism." *Architectural Design* xxvii, April 1957.

⁸ Reyner Banham, *The New Brutalism: Ethic or Aesthetic?* (London: Architectural Press, 1966), 45-46.

⁹ Oli Mould, "Brutalism Redux: Relational Monumentality and the Urban Politics of Brutalist Architecture," *Antipode* 49, no. 3 (December 7, 2016): 708, <https://doi.org/10.1111/anti.12306>.

¹⁰ Mathew Postal, *Begrish Hall at Bronx Community College*, LP-2110 (New York, N.Y.: Landmarks Preservation Commission, 2002), 16.

¹¹ Juliana Kei, "New Brutalism, Again," *Architecture and Culture* 7, no. 2 (May 4, 2019): 271-90, <https://doi.org/10.1080/20507828.2019.1614768>.

¹² Mark Crinson and Claire Zimmerman, "Building the Socialist Dream or Housing the Socialist State? Design Versus the Production of Housing in the 1960s," in *Neo-Avant Garde and Postmodern: Post-war Architecture in Britain and Beyond* (New Haven: Yale University Press, 2010), 334.

¹³ *Ibid.*, 340.

¹⁴ Meryen Ozem, *Redefining Brutalism* (2020), 16.

¹⁵ Samuel A. Stouffer, *Communism, Conformity, and Civil Liberties: A Cross-Section of the Nation Speaks Its Mind* (New York: John Wiley & Sons, 1966), 48.

¹⁶ Even though Reyner Banham was later identified as a firm leftist, this does not affect the fact that brutalist architecture was initially practiced without any political implications. However, during the period when communism was rampant in Europe, brutalism was used by politicians as a symbolically significant pawn placed on the chessboard of the European continent.

- ¹⁷ Henry A. Giroux, "Higher Education and the New Brutalism," in *Dangerous Thinking in the Age of the New Authoritarianism* (2015).
- ¹⁸ Christopher Beanland, "Introduction," in *Concrete Concept: Brutalist Buildings Around the World*, 10 (Frances Lincoln, 2016).
- ¹⁹ Daniel J. Huppatz, "Brutalism: How to Love a Concrete Beast," *The Conversation*, October 19, 2022, <https://theconversation.com/brutalism-how-to-love-a-concrete-beast-122469>.
- ²⁰ Peter Marcuse and David Madden, *In Defense of Housing: The Politics of Crisis* (Verso, United Kingdom, 2016)
- ²¹ John Grindrod, *Concretopia: A Journey Around the Rebuilding of Postwar Britain* (Brecon: Old Street, 2013).
- ²² Owen Hatherly, *Militant Modernism* (Winchester: O Books, 2010).
- ²³ Beanland, "Introduction", 10.
- ²⁴ Ozem, *Redefining Brutalism*, 13.
- ²⁵ Vitalie Tihon, "The Historical Evolution of the Crime of Hooliganism," *Supremacy of Law*, December 2023, 155–57, <https://doi.org/10.52388/2345-1971.2023.1.15>.
- ²⁶ Caroline A. Sandes, "The Barbican Estate and Robin Hood Gardens," in *Identity and Heritage: Contemporary Challenges in a Globalized World*, 38 (Springer, 2015).
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- ²⁸ Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste*, vol. 6, Routledge Classics, trans. Richard Nice (1986).
- ²⁹ John le Carré, *Tinker Tailor Soldier Spy* (1974; London: Hodder & Stoughton,).
- ³⁰ Terrence Malick, *Knight of Cups*, (2015; Santa Monica, CA: Broad Green Pictures).
- ³¹ Helene Sroat, *Brutalism: An Architecture of Exhilaration* (2005), 4.
- ³² *Ibid.*, 4.
- ³³ Cecilia Sjöholm, "Animating Brutalism: Cinematic Renderings of Yugoslav Monuments," *Baltic Worlds* XVI, no. 4 (2023): 41, <https://urn:nbn:se:sh:diva-53002>.
- ³⁴ Peter Chadwick, *This Brutal World* (London: Phaidon, 2016).

³⁵ Le Corbusier was a Swiss-French architect, designer, urbanist, and writer, who is widely regarded as one of the pioneers of modern architecture. Although he is not directly associated with Brutalism, his architectural principles and use of raw concrete significantly influenced the movement. Le Corbusier's design philosophy emphasized functionality, the use of modern materials, and the expression of volume over mass. His pioneering use of béton brut (raw concrete) in buildings such as the Unité d'Habitation in Marseille laid the groundwork for Brutalist architects, who embraced concrete's aesthetic and structural capabilities. Thus, Le Corbusier's work and ideologies paved the way for the Brutalist movement, making him an indirect but pivotal figure in its development.

³⁶ Agata Toromanoff, *Brutalism Reinvented: 21st Century Modernist Architecture* (Munich: Prestel, 2021), 7.

³⁷ Craig R. Frisch and Italo Calvino, "Six Memos for the Next Millennium," *MLN* 104, no. 1 (January 1989), <https://doi.org/10.2307/2905008>.

³⁸ Martin Heidegger, "The Age of the Picture World," in *The Question Concerning Technology and Other Essays* (New York: Harper & Row, 1977), 134.

³⁹ Juhani Pallasmaa, "The Narcissistic and Nihilistic Eye," in *The Eyes of the Skin: Architecture and the Senses*, 3rd ed. (Wiley, 1996), 22.

⁴⁰ David Michael Levin, "Decline and Fall: Ocularcentrism in Heidegger's Reading of the History of Metaphysics," in *Modernity and the Hegemony of Vision*, December 31, 1994, 205–6, <https://doi.org/10.1525/9780520912991-008>.

⁴¹ *Ibid.*, 32.

⁴² *Ibid.*, 30.

⁴³ Le Corbusier, *Towards a New Architecture* (London: Architectural Press, 1959), 164.

⁴⁴ "From Eclecticism to Doubt: Dialogue between Eileen Gray and Jean Badovici," in *L'Architecture Vivante*, Autumn-Winter 1929, vol. Autumn-Winter.

⁴⁵ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, 11.

⁴⁶ Hatherly, *Militant Modernism*.

⁴⁷ Paananen, Ville, Jonas Oppenlaender, and Aku Visuri. "Using Text-to-Image Generation for Architectural Design Ideation." *International Journal of Architectural Computing*, December 21, 2023. <https://doi.org/10.1177/14780771231222783>.

⁴⁸ Banham, "The New Brutalism,".

⁴⁹ Mould, "Brutalism Redux: Relational Monumentality and the Urban Politics of Brutalist Architecture," 706.

⁵⁰ Sroat, *Brutalism: An Architecture of Exhilaration*, 3.

⁵¹ Ada L. Huxtable, "The Building You Love to Hate," *New York Times*, December 12, 1971.

⁵² A type of architecture that possesses monumental aesthetic features, actively invites public participation, and encourages people to be mindful of their surroundings, thereby fostering an emotional drive, can be considered as relational monumental architecture.

⁵³ Mould, "Brutalism Redux: Relational Monumentality and the Urban Politics of Brutalist Architecture," 716.

⁵⁴ Owen Hatherley, *A Guide to the New Ruins of Great Britain* (London: Verso, 2011), 87.

⁵⁵ Hatherly, *Militant Modernism*, 30.

⁵⁶ Mould, "Brutalism Redux: Relational Monumentality and the Urban Politics of Brutalist Architecture," 708.

⁵⁷ Eric Nay, "Canonizing Le Corbusier: The Making of an Architectural Icon as Colonial Hegemony" (PhD diss., ProQuest Dissertations Publishing, 2018).

⁵⁸ Reyner Banham was a British architectural critic who coined the term "New Brutalism" in 1955. He admired Brutalist architecture for its honest use of materials and structural elements. Banham's writings helped to define and promote the movement, emphasizing its raw, functional aesthetic and its break from traditional forms.

⁵⁹ Adrian Forty, "Reyner Banham, 'One Partially Americanized European,'" in *Twentieth-Century Architecture and Its Histories*, ed. by Louise Campbell (London: Society of Architectural Historians of Great Britain, 2000), 195-205.

⁶⁰ Shaojie Shen and Jiayuan Mao, "Style and Method: From Historical Controversies over Architecture Genres," *The Architect*, no. n.d. (2022): 76.

⁶¹ *Ibid.*, 77.

⁶² Horatio Greenough, *Form and Function: Remarks on Art, Design, and Architecture*, ed. by Harold A. Small (Berkeley and Los Angeles: University of California Press, 1966).

⁶³ Henri Bergson, *Matter and Memory* (New York: Zone Books, 1991).

- ⁶⁴ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, 64.
- ⁶⁵ Henri Lefebvre, *The Production of Space* (Blackwell, 1991).
- ⁶⁶ Derek Hook, "Monumental Space and the Uncanny," *Geoforum* 36, no. 6 (2005): 10.
- ⁶⁷ Heidi J. Nast, "Mapping the 'Unconscious': Racism and the Oedipal Family." *Annals of the Association of American Geographers* 90, no. 2 (June 2000): 215–55, <https://doi.org/10.1111/0004-5608.00194>.
- ⁶⁸ Gaston Bachelard, *The Poetics of Reverie: Childhood, Language, and the Cosmos*. Beacon, 1971.
- ⁶⁹ Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, 60.
- ⁷⁰ Lefebvre, *The Production of Space*.
- ⁷¹ Hook, "Monumental Space and the Uncanny," 12.
- ⁷² Sigmund Freud, "The Uncanny," (1919).
- ⁷³ Heyang Zhang, "Research on the Commercial Value and Artistic Value of Video Games," *Communications in Humanities Research* 5, no. 1 (September 14, 2023): 100–103, <https://doi.org/10.54254/2753-7064/5/20230107>.
- ⁷⁴ Chris Priestman, "Videogames Realize the Full Daunting Potential of Brutalism," *Kill Screen - Previously*, November 17, 2015, <https://killscreen.com/previously/articles/singmetosleep/>.
- ⁷⁵ Espen J. Aarseth and Stephan Günzel, "Introduction: Space – The Theoretical Frontier," in *Ludotopia: Spaces, Places, and Territories in Computer Games* (Bielefeld: Transcript Verlag, 2019).
- ⁷⁶ Ibid.
- ⁷⁷ Brenden Weber, "Black Mirror Bandersnatch: The Illusion of Choice," *Medium*, January 21, 2019, <https://medium.com/the-philosophers-stone/black-mirror-bandersnatch-the-illusion-of-choice-2c6c52ab2d7d>.
- ⁷⁸ Krzysztof M. Majkowski, "On the Pseudo-Open World and Ludotopian Dissonance: A Curious Case of *Cyberpunk 2077*," *Journal of Gaming & Virtual Worlds* 14, no. 1 (2022): 55, https://doi.org/10.1386/jgvw_00051_1.
- ⁷⁹ Ibid., 58.
- ⁸⁰ Marie-Laure Ryan, "From Narrative Games to Playable Stories: Toward a Poetics of Interactive Narrative," *Storyworlds: A Journal of Narrative Studies* 1, no. 1 (2009): 43-59.

⁸¹ Sandbox is a type of video game or part of a video game in which the player is not constrained to achieving specific goals and has a large degree of freedom to explore, interact with, or modify the game environment : Open World.

⁸² Gillian Dale and C. Shawn Green, "The Changing Face of Video Games and Video Gamers: Future Directions in the Scientific Study of Video Game Play and Cognitive Performance," *Journal of Cognitive Enhancement* 1, no. 3 (March 31, 2017): 280–294, <https://doi.org/10.1007/s41465-017-0015-6>.

⁸³ "Cyberpunk 2077 Crowned at the Game Awards 2023!" CD Projekt Red, December 2020. <https://www.cdprojekt.com/en/media/news/cyberpunk-2077-crowned-at-the-game-awards-2023/>.

⁸⁴ James Billcliffe, "Cyberpunk 2077's Night City: Inside the Design Eras, the Communities, and How They Affect the Player," *VG247*, August 27, 2019, <https://www.vg247.com/cyberpunk-2077-night-city-map-design>.

⁸⁵ Thomas Michaud, *Innovation, Between Science and Science Fiction* (Wiley, 2016).

⁸⁶ Miguel Bordallo López and Constantino Álvarez Casado, "A Cyberpunk 2077 Perspective on the Prediction and Understanding of Future Technology," September 5, 2023, 4.

⁸⁷ Nick Bostrom and Rebecca Roache, *Ethical Issues in Human Enhancement* (2008).

⁸⁸ Pocket Pair, Inc. *Palworld*. Japan, 2024

⁸⁹ Andrea Trama, "Palworld vs. Pokemon Controversy Explained," *Game Rant*, January 21, 2024, <https://gamerant.com/palworld-pokemon-controversy-stolen-designs-every-pal-similarity-explained/>.

⁹⁰ Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction* (1935).

⁹¹ Gary Berkovich, "Modernized Socialist Realism in Soviet Architecture (1955-1991)," presented at the ASEEEES Conference, Boston, MA, February 4, 2020,

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⁹³ Olena Olynyk, *Soviet Modernism in Ukraine* (2022), 122, <https://doi.org/10.23817/2022.defarch.1-13>.

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⁹⁵ Yang Liu and Wenbin Liu, *The Art of Soviet Socialist Realism: Origins and Development*, January 2022, 107.

⁹⁶ Christopher Herwig, *Soviet Bus Stops* (London: Fuel Design & Publishing, 2015).

⁹⁷ Hopkins, *The Brutalists*, 5.