

Her Palace: A Virtual Reality Exploration of Subjective Memory Space and Narrative (Re-)Construction

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Abstract. *Her Palace* is a Virtual Reality experience that simulates the subjective human experience of internally engaging with personal memories. This simulation provides an interactive and cinematic narrative experience that features a female character with her intimate self-reflections on a relationship. Aiming to externalize an internal human cognitive process, the engagement of memory, this simulation bases its interaction design on theories of cognitive science. In rendering the memory episodes as a narrative, this simulation also reflects on the way that narratives are actively constructed in the human mind. This project brings awareness to the mediation processes of both the external medium of Virtual Reality and the internal medium of memory and narrative. It attempts to stage the contradictions and complexities of the contemporary human experience by raising many questions but providing no answer.

Keywords: Virtual Reality · cognitive science · interaction design · media theory · interactive narrative · storytelling.

1 Introduction

In the reality we perceive, time is linear. We live in the fleeting present, but we are also connected to the past, from where knowledge is accumulated, identity is constructed, and causality is extended. Much of this connection is maintained by our memories. When we engage with our memories, our past informs the present. As we engage with our memories, the present becomes our past. In this sense, the present and the past co-exist, with the mediation of memory.

Memories are references to the past, whose referents are ontologically irretrievable. Because of the linearity of time, the moment such a reference is born, its referent dies. Therefore, the ongoing cognitive activity of engaging with personal memories, the aforementioned co-existence of the present and the past, becomes an ongoing contradiction between the living and the dead, where the living present constantly morphs into the dead past, and the dead past is nowhere else to be found yet so concretely shapes the living present.

To reflect on this metaphysical contradiction of memory, this project, *Her Palace*, brings the internal memory experiences to the external medium of Virtual Reality. It simulates the subjective experience of immersing in personal memories in an abstract virtual world. In this world lives a character, from whom an interactive, cinematic, yet self-reflexive narrative about an open-ended relationship is told.

The design of the interaction and simulation in this experience is based on theories of cognitive science. The way the narrative is rendered in this experience aims to reflect the nature of how narratives are constructed in the human mind. Mirroring an internal mediation, memory, onto an external mediation, Virtual Reality, this project aims to invoke medium awareness rather than reinforcing immersion, to surface contradictions and complexities rather than making judgements and statements, to ask questions but attempt no answers.

2 Experience¹

When the interactor first enters this experience, they see nothing but a pure black space. Looking around, they find the only thing in this space is a two-dimensional screen gradually lit up. On the screen is a static image of a female character. Once the image is fully lit up and the interactor fixes their gaze on this screen, the static image animates into a film — an episode of the character’s story is played. The character is by herself against a black background that blends into the blackness of the virtual space. The content of this episode is her subjective sentiments and reflections on a relationship with her narration that can be either diegetic or non-diegetic.

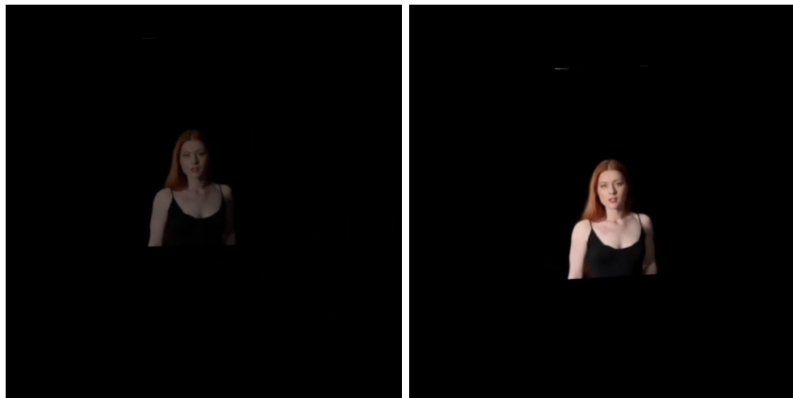


Fig. 1. Starting static image gradually lit up.

¹ Please review a video demo of this experience at: <https://youtu.be/MCIDDyxPAUM>

The fixation of the interactor’s gaze on the screen keeps the episode playing. If their gaze is removed to explore elsewhere in the space (from where they will find nothing but empty space), the episode will pause and the image will darken, until the gaze comes back to the screen. The ending of the episode fades the screen into blackness, but it also spawns another screen, which starts playing automatically at a different place in the virtual space. The spatial sound can orient the interactor to the new episode. The interactor’s gaze brightens the newly spawned screen, and they are met by another episode of the character’s sentiments and reflections.

This gazing and spawning pattern continues for 5 iterations, which allows the interactor to construct a narrative about the relationship upon which the character reflects. After this point, all 5 screens are animated simultaneously, each playing more episodes. The screens also start moving in the virtual space, orbiting around the interactor and also slowly moving away. At this stage, since



Fig. 2. Simultaneous replay of multiple episodes.

all screens are always playing, the fixation and removal of gazes no longer start or pause the episodes. If one episode is finished on its screen, another automatically follows. In this disorienting and overwhelming environment, the gaze on a screen can serve as an anchor to hold on to — it lowers the sound of all un-gazed screens, lights up the gazed screen, freezes it from orbiting, and mostly importantly, pulls it back to the original distance from the fading-away. The interactor can then engage with the gazed screen with focus. However, if the gaze is extended long enough, it also pulls the screen closer — the closer the gazed screen gets, the darker the screen fades, and it becomes completely black before it is within the reach of the interactor. The removal of gaze cancels all effects above: the released screen restarts orbiting and fading away from its current position.

As the interactor fixates their gaze on one screen, the un-gazed screens keep orbiting and fading away. If the screens go far enough, they disappear. Before they disappear, the interactor can always gaze on them to bring them back, to see the character and hear more of her stories, but the further the screens move, the more difficult it would be to fixate a gaze onto them.

The interactor can switch back and forth, without attentively engaging with any of the screens, to pull each of the screens back before they go far, and they can keep doing this for however long they would like. However, over time, the interactor should realize the only way to proceed with this experience is to let go — they have to consciously not gaze into the screens to let them fade into the darkness. They can hear the character’s voice fade away, but if they directly look into the screen and bring it back, the letting-go will have to restart. Eventually, the interactor is left in pure blackness by themselves with peace.

After a while, if the interactor does not quit the experience and keeps looking around, they will see a new screen gradually lit up again with a static image of the character on it, and they can again animate her story with their gaze.

She is always here, in her palace.

3 System Design

The goal of this project is to stage and reflect on the postmodern contradictions in contemporary human experience through interacting with a quintessential postmodern medium, Virtual Reality. The postmodern nature of both the contemporary human experience and the Virtual Reality medium is in the Baudrillardian [1] sense — a simulation perfectly masks the absence of its origin or reality, such that the simulation itself becomes the reality.

The loss of origin and reality is treated in this project in three ways. One, memory, as the main theme of this project, naturally manifests the loss of origin — the moment an episode of memory is formed, its original referent dies in time. Two, this project, embodied in the hyper-real medium of Virtual Reality, joins all other contemporary media experiences in creating yet another Baudrillardian simulation that mediates and masks the reality. Three, the ultimate goal for constructing this simulation is not to immerse its consumers. Since the origin or reality are lost in the mediation and simulations, this project brings awareness, instead of immersion, to the process of such mediation, including both the external mediation of Virtual Reality and the internal mediation of memory. Please see Appendix II for a more detailed discussion of the media theory regarding the loss of origin.

3.1 Why Virtual Reality?

Virtual Reality is chosen to be the medium for this project because of its immersive-ness — the deep and visceral integration with the human mind. Unlike print-based mediums (e.g. book) that engage with the human mind only visually, screen-based mediums (e.g. film) that engage human mind visually and

auditorily but only occupies a small visual field, and interaction-and-screen-based mediums (e.g. video game) that adds interactivity to the former but still keeps a distance from the human mind, Virtual Reality not only engages the human mind across three cognitive modalities, vision, audition, and motor, but it also occupies the entirety of the media consumer’s visual field. Such quality allows Virtual Reality to be the closest approximation of what this project aims to simulate, the human cognitive processes, which is fully immersive and mediates all the information that the human mind receives across all modalities.

3.2 Gaze

Because this experience is conceptualized as an externalization of the interactor’s internal process, the interactor should engage with this experience as if it were their own mental space. This concept inspires the core interaction mechanism of this experience — gaze. One of the mechanisms that the human mind actively engages with its internal processes is attention, and one traditional metaphor in cognitive science for attention is the spotlight metaphor [4]. The conceptual semblance between gaze and spotlight (in Virtual Reality software, gaze is literally implemented using Raycast, a form of spotlight) and the fact that the shift of gaze almost necessarily accompanies the shift of attention [13] both make gaze the most appropriate external representation of internal attention.

To strengthen the spotlight metaphor of attention, as well as providing feedback to the interactor’s actions, throughout the experience, the default state of an un-gazed screen is mildly dark. A gaze on a screen is acknowledged by its brightening, as if the screen were projected on by an actual spotlight.

3.3 Memory

When the attention of the human mind engages with memories, especially episodic memories, a few of its properties are salient. 1. The experience of recalling memories resembles the replay of the experience that encoded such memories in terms of brain activity [12], therefore recalling memories sometimes can feel like reliving those memories. 2. Episodic memories are associative — the recall of one episode is likely to activate the recall of other episodes related to the former [6]. 3. The associative activation of episodic memories has a repetition priming effect, meaning that the subsequent recalls followed by a preceding recall of related memories tend to be faster and more accurate [11]. 4. Episodic memories gradually become less accessible over time without rehearsal or recall, whereas rehearsal and recall make episodic memories more accessible [3]. 5. The recall of episodic memories re-encodes these episodes, and the re-encoded content can be interfered by the context of the re-encoding, resulting in the re-encoded episodes to be a mix between the original episodes and re-encoding contexts [14]. These five properties of episodic memory are modeled by the interaction design detailed below.

Memory replay is modeled by playing the film upon the fixation of gaze. The mapping between the experience of memory recall and the experience of

consuming film — moving images with its soundtrack — is established through the empirical cognitive science study that the brain regions that encoded the memories are activated when the memories are actively recalled without explicit triggering such regions with external stimulus [12]. Based on this result, if the episodic memories are encoded visually and auditorily, their recall experience is likely to activate the brain regions for vision and audition, as if the visual and auditory stimulus is present and replayed, which this experience simulates using moving images and their soundtrack.

The spread activation mechanism in episodic memory is modeled by the spawning of new memory episodes in the virtual space. Before all screens play simultaneously in this experience, the end of one episode spawns and starts a new one at a different location in the virtual space. The two episodes are related by the common character, story, and visual style. Such spawning pattern is analogous to the spread activation of the associative network of episodic memory, where the activation of one node in the network activates its adjacent nodes [6].

The repetition priming effect of memory is modeled by the progression of how memories are animated throughout the experience — from using gaze to animate a static image, to automatic replay of new episodes, to simultaneous replay of multiple episodes. The threshold to activate the replay of a new episode becomes lower, because the replay of previous episodes has primed the associative network by spreading and accumulating activation across associated nodes [11].

The fade of memory is modeled by the moving away of memory episodes — as a memory episode fades, its distance from the interactor furthers, making itself less accessible and legible to the interactor. The rehearsal of memory is modeled by the interaction mechanism where a fixation of gaze brings the gazed memory episode back to its original distance, just as attentively recall a memory episode refreshes the memory.

The interference of memory recall by the current context is modeled by the orbiting of the memory episodes during the simultaneous replaying phase. As one memory episode is gazed at, other episodes can orbit behind the attended episode, creating a visual and sound field that mixes multiple memory episodes as they are played simultaneously. These interfered memory episodes reconstruct the memory experiences in the human mind.

3.4 Narrative

There are two levels of narrative going on in this experience. On the structural level, this experience is designed to follow a traditional 5-act narrative structure [5]:

1. **exposition** - The interactor enters the black space and sees the static image. Their gaze lights up and animates the image.
2. **rising action** - The end of the first episode spawns the next, and this pattern repeats. In the process, the interactor develops their understanding toward the character, the story, and this virtual world.
3. **climax** - Simultaneous replay and orbiting of the memory episodes start and the previously learnt interaction mechanism fails. The experience may feel overwhelming and disorienting. A few memory episodes may be lost as the interactor re-orient themselves.
4. **falling action** - The interactor makes effort to keep the remaining memory episodes but realizes that letting them go is the only way to proceed.
5. **revelation** - The interactor intentionally avoids gazing into the fading memory episodes until they all disappear. The interactor is then left in the empty black space, just like how the experience started.

This 5-act story arc (circle) is realized solely by the state of the virtual world and the interaction mechanism in this world, so it can frame any instantiation of this experience into a complete narrative experience, regardless of what memory episodes are recalled in each instantiation.

On the memory episodes level, a second layer of narrative can be constructed — the narrative from the memory episodes. The memory episodes recalled in this experience share a common character and a coherence visual style, but the relationship across the episodes is intentionally ambiguated and fragmented.

This experience features a total 18 episodes of memories, and they appear in random order across 5 screens in the virtual space. The content of the 18 episodes, when put together, should cover a complete circle of development of an interpersonal relationship: solitude, longing, unity, estrangement, and separation, but these emotional states are expressed as subjective sentiments and reflections, rather than concrete story events connected by causality ². Because of the independence and open-ness of each episode, there is not a canonical way of ordering these episodes — each unique instantiation of this experience constructs a unique sequence of episodes, from which a narrative can be constructed at the interactor’s will.

Additionally, this experience is designed such that an interactor is unlikely to engage with all 18 episodes in one instantiation of this experience. They can comfortably consume the 5 episodes before the simultaneous replay starts, but after that not only the combination of simultaneous replay and the orbiting of screens can be overwhelming, but the interactor also has to balance between focusing on individual episodes and rescuing the fading episodes. If the interactor chooses the former, some episodes will fade away and disappear, but if they choose the later, the constant shift of attention interrupts the engagement of the episodes. Therefore, the interactor most likely can only construct their narrative from the subset of episodes that they attend to.

Contrary to the universality of the narrative on the structural level, the random ordering and the unique subset of memory episodes that the interactor

² See Appendix I for the complete script of the 18 episodes.

consumes provide the basis for a unique narrative to be constructed at different instantiations of this experience on the memory episodes level.

The intent behind this design is to mirror the active construction of narrative in the human mind. The narratives that people form in their mind often are not passively and completely fed to them, but they are actively constructed by the human mind from some fragments, through pattern completion or “gap filling” on both the perceptual and semantic level. The most prominent example to demonstrate this mechanism is the medium of film. On the perceptual level, the human mind perceives film images as continuous, but they in reality are 24 (or other frame rate) static image frames per second — the gaps between the frames are filled by the human mind. On the semantic level, narratives in films are largely constructed using the montage technique. If in one shot a character rings a doorbell from outside and in the next shot another character hears a doorbell from inside and walks toward a door, the viewer is likely to assume the two characters are at the two sides of the same door. However, there is actually no evidence behind that assumption — it is the human mind that unconsciously fills this semantic gap about the two characters’ physical locations based on the sheer juxtaposition of the two shots.

The montage technique has been a foundational media convention of film because of its exploitation of the human mind’s pattern completion behavior, and it can reliably plant “meanings” in the human mind. As the goal of this experience is to externalize the human mind and reflect on its cognitive processes through media experiences, this intentional decomposition of the montage mechanism through random juxtaposition and association of narrative episodes hopes to bring the mind’s unconscious gap-filling process to consciousness.

3.5 Medium Awareness

As discussed above, the medium of Virtual Reality is chosen because of its immersive-ness, but the goal of this project demands a medium of self-reflexivity in order to bring awareness to the mediations from the external world and the human mind, including both the external medium itself and the internal human cognition process. These two directions seem paradoxical on the surface, because an immersive experience usually aims to render the mediation process invisible and unconscious, as if being “absorbed” into the media experience, whereas self-reflexivity and medium awareness aim to use mediation to bring awareness to the medium itself, and they usually break the immersion. However, if examined dialectically, medium awareness is self-contradictory in its nature — the sense of immersion needs to be established before it can be broken, and an illusion stays real until its illusory nature is made aware.

René Magritte’s painting, *The Treachery of Images* [7], is the quintessential expression of self-reflexivity and medium awareness – a painting of a pipe with a note below, “this is not a pipe”. The painting is not a pipe, but a representation of a pipe. The upper half of the painting creates an illusion, but the lower half brings awareness to the illusion and takes the viewers back to reality. This contradiction reveals the mediation that the canvas bears and acknowledges it

without having the viewers absorbed into it. However, if the illusion were not created in the first place, that is, if the representation of the pipe does not look like a pipe, the self-reflexivity would not work.

In this experience, almost all aforementioned design decisions — the choice of the Virtual Reality medium, the mappings between interaction design and human cognition, the 5-act narrative structure — are designed for immersion. Additionally, the visual style of the memory episodes, including the character’s direct eye contact with the interactor and the black background of the memory episodes that blends into the black virtual space, is also chosen to enhance the immersion of the experience, to let the interactor effortlessly and engagingly consume the media experience in their mind. With the immersive experience established, the mechanism of self-reflection is injected in the experience by the following two key design decisions:

First, an extended gaze draws the gazed memory episode closer but also makes it fade to black. An extended gaze signifies a close and immersive engagement with a memory episode. The decrease of distance and the fade-to-black of the memory episode is a slow process such that the fade is initially unnoticeable, and the enlargement of the memory episode caused by closer distance satisfyingly strengthens the immersion. As the memory episode grows increasingly darker, its closeness and enlargement also become threatening and pressing. The interactor is therefore pulled out of the immersion and re-gains the awareness of the media’s effect. This mechanism is also a metaphor for the subjective memory experience where the closer one tries to grasp a memory, the more they realize that the memory is illusory.

Second, the interactor eventually has to intentionally resist gazing to finish the experience. Three factors draw the interactor to gaze into the screens: 1) the screens that display the memory episodes are the only bright and moving objects in the virtual space, 2) the character in these episodes is directly talking to the interactor, making eye contact, and telling a story, and 3) the memory episodes are fading away from the interactor while the interactor knows they can be brought back with gaze. They compel the interactor to gaze into the memory episodes, because cognitively human eyes are attracted to bright and moving objects, narratively the previous constructed narrative has built an empathy and attachment toward the character, which invites the interactor to learn more about her, and emotionally the sense of loss motivates the interactor to take actions to mitigate the loss. Under this circumstance, the interactor is forced to the realization that there is no way forward except to fight these urges to hold on to the memory episodes and let them go. The rupture of immersion and the awareness of the manipulation of the medium become salient in the interactor’s uncomfortable battle with the urges on the three levels (cognitive, narrative, and emotional). Different from the previous case, where the release from the pressing and darkening memory episode only requires an instant action, removing of the gaze, this battle against the urge of gaze is an extended self-constraint of conscious inaction — the resistance has to be maintained throughout the process, and any failure during the process will restart the letting-go.

The similarity between this experience and other media experiences like The Treachery of Images is that they achieve medium awareness through self-reflecting on the medium’s mediation process by intentionally breaking down its own immersion, but this experience hopes to explore beyond the mediation process just within the medium itself. As mentioned above, this experience aspires to reflect on the entire mediation process between the human mind and the external world, which includes the medium and the human cognition processes, and this is achieved by making the medium not only an extension of the sensorium [8], as McLuhan claims, but also a mirror of the sensorium, such that a reflection on the medium is simultaneously a reflection of the cognitive processes. This goal of cognition awareness above medium awareness is yet another reason why the internal processes such as attention, episodic memory, and active construction of meaning are mapped externally.

4 Process

This experience is implemented in Virtual Reality using Unity 2020.2.1f1 for Oculus Quest ³. There are two major components in the creation of this experience: the technical implementation of the Virtual Reality experience, and the cinematic content creation of the memory episodes.

4.1 Implementation

The gazing target in Virtual Reality can be approximated to be the center-eye position of the Head Mounted Display (HMD). The capability of tracking the HMD’s center-eye position is provided by Unity’s XR Integration package. To utilize this capability, a Raycast Interactor interface is implemented on the main camera, and an Interactable interface is implemented on each screen object that holds the memory episodes. Interactables can detect the collision of the Raycast from the interactor, and the on and off of such collision events are used to determine whether or not the gaze is hovering over a screen.

Two modifications are made to the native Interactor-Interactable pattern that Unity’s standard XR Integration supports. First, the interaction design of this experience heavily relies on the length of gaze hovering — there needs to be a threshold for how long a gaze should be held to be fixated, as well as other thresholds such as when to spawn the new episode. These requirements demand that a *hoverTimer* parameter is maintained throughout the experience for each screen object, which accumulates when the hover enters and resets when hover exits. Second, this experience requires the Raycast collision to be single-targeted, as the interactor should only gaze at one memory episode at a time. In the native Interactor-Interactable pattern, the Interactables do not block the Raycast. If there are multiple objects along the Raycast, collisions will be detected for all of

³ The implementation of this project is open source at: https://github.com/DesiRe-Illusionist/HerPalace/tree/individual_fade.

them. Therefore, an additional feature is added to the collision detection system such that only the nearest collision to the interactor is considered effective.

The memory episodes are implemented as VideoPlayers attached to thin box objects used as screens. There are a total 5 screens and 18 pre-recorded videos representing the memory episodes. These 18 episodes are randomly assigned to the 5 screens, and the 5 screens are spawned in random order. Each screen holds 3 or 4 memory episodes, and the VideoPlayer plays them in a loop.

4.2 Filming

The 18 memory episodes are created in a traditional film production process — script writing, casting, rehearsal, on-set production, and finally editing.

As mentioned above, the script is written in a way such that each episode independently expresses a subjective sentiment of the character and reflects on an emotional state of human relationship. It does not contain concrete details of a story that could be reconnected through causal logic, but it intends to be relatable in a way that echoes some commonalities of the contradictions that contemporary human relationships struggle with.

The film clips are shot with a minimalist aesthetic. They feature pure black background that blends with the black sky box in Virtual Reality, dramatic theatrical lighting to highlight and separate the actress from the background, minimalist costume and make-up to match the level of abstractness represented in the script, and a combination of diegetic and non-diegetic sound (voice-over) to strengthen the memory recall experience.

5 Discussion

As stated in the beginning of this document, the goal of this project is to reflect on the contemporary postmodern contradictions in human experience. All the design decisions that intend to simulate and mirror human cognition, to externalize and bring awareness to the internal processes, and to create immersion and then to break it, are means to this end. Like all artworks, once created, its experience, as well as the meaning, implication, and significance that the experience invokes, is open to the interpretations by the audience of the artwork. However, there are still two issues that are so relevant to the theme and expression of this experience that it would be remiss to leave them unaddressed.

The first issue is the relationship between this project and the paradigm of distributed cognition. Distributed cognition is one branch of cognitive science. Different from the traditional cognitive science that studies human intelligence mainly as processes inside the human mind, distributed cognition's main claim is that intelligence is distributed between the human mind's internal processes and the external physical and social environments. One of the most prominent theses of distributed cognition, probably also most harshly criticized, is the Extended Mind Thesis [2], which equates an amnesia person's notebook with a normal person's internal memory because they effectively allow people to produce the

same intelligent behavior. Other studies in distributed cognition make more nuanced and less controversial claims [9], but the central claim of this paradigm stands. It deals with the metaphysical and philosophical issue of what cognitive processes are internal or external of the mind, and more abstractly, where does the mind end, which intersects with the topic of this project.

Examining this project with the framework of distributed cognition, this project may stand on either side of distributed cognition's claim, depending on the perspective. The development of McLuhan's "mediums extend sensorium" thesis [8] and the externalization of memory experiences in Virtual Reality seem to be in alignment with the claim of distributed cognition because they allow cognition to be outside of the mind. However, it can also be argued that the metaphors and representations of attention and memory implemented in this project are rooted in the traditional cognitive science, because those metaphors are developed from cognitive theories that almost exclusively deal with the cognitive processes that take place centrally in the mind. It is not this project's intent to comment on distributed cognition either way, but maybe the emergence of this paradoxical relationship between this project and distributed cognition can be seen as an intricate reflection on one of the core issues of distributed cognition — what is the boundary of the mind.

The second issue is to theorize this project with feminist film theories, especially that of the male gaze [10], as the interactions of this project revolve around the gaze on a female character. According to Mulvey, male gaze imposes fetishization and control, which this project quite literally embodies — the female character is contained and animated within objects (screen) in the virtual space, and the interactor controls the screens with the fixation and removal of their gaze. However, as discussed in the medium awareness section above, the medium's embodiment of fetishization and control are designed to be consciously reflected upon, rather than immersively consumed. In the revelation phase of this narrative experience, the interactor has to intentionally resist their gaze, to release the fetishization and control, to proceed. This uncomfortable and medium-aware self-resistance of gaze is the punchline of this experience. In fact, as this project mirrors the internal cognitive processes in an external medium, it also inspires a discuss of the male gaze concept from the external mediums to the internal cognitive processes — is engaging with personal memory controlling and fetishizing? Is the internal gaze gendered? If so, where does the gender and the power of control and fetishization come from?

The end of this discussion is left with one more question, a question that might have been asked in the first encounter of the title of this project but gets left to the end. The title of this project is *Her Palace*, and this question is, whose palace? Obviously, "*Her*" refers to the character occupying the palace, but the palace's rules and the character's narrations and story episodes are created by me. Meanwhile, this palace is designed for each interactor to engage as a mirror or an extension to their own mind where their own stories are constructed. When each interactor explores this palace, are they outsiders, am I present, is she really there? Whose story is really happening in this palace?

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6 APPENDIX I - Memory Episodes Scripts

1. There is no such thing as silence, not if I listen closely, and more closely. Hiding beneath the surface of silence is the sound of my breath, blood flowing in my veins, and the heartbeat that animates my entire universe. There is a thing called silence. The true silence is language. Words come out of mouths, carrying indecipherable sounds and patterns, meaning one thing at utterance, another at perception. The meanings come from nowhere and go nowhere, because in-between them is only silence.
2. Sometimes on weekends, I get up, eat a light brunch, and go to the painting studio. I would spend all day there by myself, painting. When I come out of the studio in the evening and see the quiet gleam of the stars in the sky, I can feel the peace inside me beyond any words.
3. When I think about the future, the adventure and wonder of it, I can sense a figure next to me, a faceless yet intimate figure, as if we are supposed to share that adventure and wonder together. When things get hard, that figure shows up again. It simply stares at me from a distance, it does not help nor console, its presence only pronounces its absence.
4. I have no control over my heart beating. I have no control over my blood rushing to my face. I have no control over my hand shaking when it takes the things you hand to it. I have no control over remembering the shape of your jaw line but forgetting the lines I practiced. These are the moments that make me realize, I'm so confined in my body and there is no escape. What is more hopeless, is that this absence of control feels...kind of...good, and I have no control over feeling good either.
5. When I think about next morning, the cool air and the sun, walking on the lively street with coffee in hand, I think of you.
6. I feel your presence. All I feel is your presence. Are you part of me or outside of me? If you are part of me, why are you everywhere. This bowl of strawberries, behind me in the mirror, in my Virtual Reality headset. At the touch point between my pen and my notebook. If you are outside of me, where exactly do I find you? I look around and walk around, I see personas and images. They all look like you, but are you really behind them? Which one is really you?
7. I want to be perfect for you, although I know perfection is unreal. I want to be strong for you, although strength always has limit. I want to possess you, notwithstanding that possessions eventually depreciate. I want to belong to you, regardless of how long it lasts. This is not me. This is what you made me.
8. It is already difficult to guard against the world, where every thought, concept, and image fights to get into me, but then there is you, breaking down my guard and laying me bare in the chaos — I start to fear. But I don't know if I'd rather have the fear flash away, or have it last forever.
9. I know you are wrong. Part of me already rebels and marshals the arguments against you, but the other part of me is trying very hard to believe you are right.

10. When I try to open my heart and communicate with you, love disappears. The more I try to see you, the more I find you blurry. It's not about what you did or what you said to me, it's not about you. It's about being human — as you become concrete, you also become impenetrable. It's physics — attraction, collision, and then explosion.
11. Emptiness is the only thing definite, everything that fills it is ephemeral. We could create a harmonious atmosphere with affection and faith, but when that atmosphere fades away, I'm left to embrace this only concrete thing. It feels safe, genuinely safe.
12. Why do you have to sing that song when you walk? Why do you always cross your legs when you sit? Why do you bite your nails all the time? Why are you so passionate about the illusions as if you can hold onto them? Why do you seek adventures? Why do you never agree? Why...why do I know you?
13. We fall over and over again, and we stand up and follow the same path over and over again. Maybe people always remain the same — with the same stupidity, same narcissism, same loneliness, and same love.
14. I'm not even hurt. I think I should be but I'm not. I can't lie to myself.
15. When I turn around, everything still looks the same, except I feel free now, so free that my body feels no resistance, to float, to collapse, to disintegrate. Oh this is what it feels like to be without you.
16. I will always love you. Have a good life.
17. Sometimes I ask what-if questions myself. When I ask, I immerse myself in all the imaginary stories that could have happened, but as the stories unfold, the absurdity of them always quickly pulls me into the reality. They make me laugh.
18. I don't know what to make of you now. You are a priest from whom I ask forgiveness, you are a judge from whom I receive sentence, you are a statue that I look up to for glamor, you are a demon that I stay away from for peace. You are many things and I lock up all of them in a box, which I will keep forever but never appraise.

7 APPENDIX II - Media Theory Background

The loss of origin and reality of contemporary human experience, in the philosophical sense, is certainly too ambitious a topic for this discussion to cover, but one way it manifests itself is through the breadth and depth of mediations in contemporary human life. Human experiences are increasingly mediated by screens that seize the focus of our eyes for entertainment, communication, work, study, navigation, shopping, physical exercise, and even meditation. At the same time, the content on the screens is no longer the indexical image to the reality, but it travels through computational manipulations, compressions, databases, pipelines, and other interventions before being presented to human eyes — the source of the pre-mediated content becomes ambiguous, blurred, and even unidentifiable.

It did not start this way. At the beginning of human civilization, human lives are minimally mediated if mediated at all. At the time, the interactions between

the human mind and the external world can be modeled as Figure 5.A. They are solely mediated by human cognition/sensation systems. Information exchange through the interface between the cognition/sensation systems and the external world is strictly bound by the time and space – it only occurs with the immediate physical reality outside of the human body in the current moment. As human bodies travel through space and time within the world, human minds construct their realities from the continuous information exchange through their cognition/sensation systems. Physiologically, human cognition/sensation systems process information in almost exactly the same way across different individuals. As a result, the realities constructed in human minds are largely consistent among individuals who live in proximity.

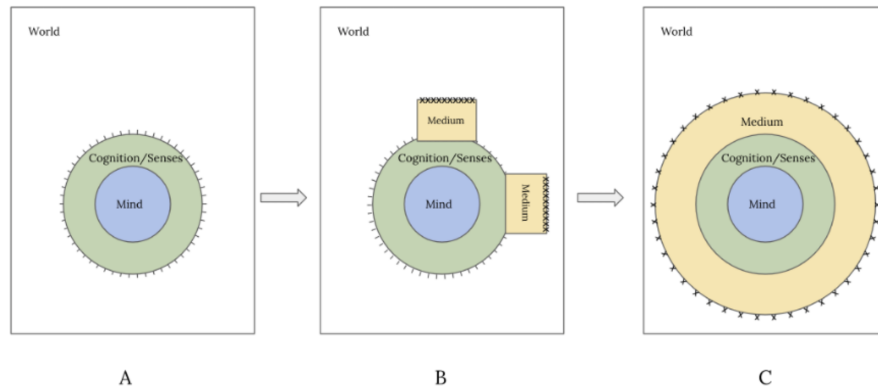


Fig. 3. Human mind and the external world.

As human cultures develop, media consumptions increase. From cave paintings, to prints, to modern mediums like film, television, and the internet, the newer mediums carry more and more information into the human mind. As modeled by Figure 5.B, these mediums partially and temporarily occupy human sensations, allowing minimal information from the physical proximity to be attended and consumed by the human mind. Besides, the information exchanged from the interface between the mediums and the external world is no longer bound by time and space – this interface carries information from different space and time into the mind. Books, films, and tweets allow human minds to receive information from sources far away, spatially and temporally.

Marshall McLuhan [8] claims, mediums extend human sensorium. The mediums allow human minds to access information beyond their physical proximity, which is empowering, but at the same time make human minds more exposed and susceptible to the manipulations of information. Notably, information exchanged through mediums are also more individualized, because the individual

media selections are not made by the uniform material basis of the human cognition. People at the same time and place are surrounded by the same external environment, but this is not true for media consumption. Each individual has the agency to choose the media they consume (although the agency is also socially shaped), resulting in greater variability in the realities constructed in human minds.

As the mediation in human lives continue to expand in both depth and coverage, a world demonstrated by Figure 5.C becomes imaginable. In this world, all information exchange between the external world and the human minds is mediated by mediums, with its sources from varied times and spaces. Therefore, the realities constructed in human minds become the unique aggregations of fragmented information pieces for each individual. Sometimes the source of the information pieces is traceable, though the act of tracing always requires additional effort, which may or may not be spent; in other times the source of the information pieces is completely lost in the mediation process. This resembles the world of Baudrillard's simulacrum [1], where the images, or the mediated and fragmented information in this discussion, do not conceal the truth behind it but become the truth itself.

No one is an island in this world, because each fragment of information consumed by an individual connects them to others across space and time, although this connection may not be traceable. In this sense, each individual establishes a historically unseen number of connections with the external world. All these connections shape this individual. At the same time, everyone is an island in this world, because everyone's experience is insulated by their unique mediation profile, which is co-determined by a complex dynamic of their agency, their social relationships, and their overall interactions with the external world. Among all the contradictions of contemporary human experiences, this contradiction between mediated connection and mediated insulation is the core that this project aims to reflect on — the metaphysical boundaries of self in the world of ubiquitous mediation.