

The Virtual Unconscious

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Received 24 July 2026 | Accepted 27 July 2026 |

Published online 26 August 2026

Abstract

This paper conceptualises the *virtual unconscious* as an emergent psychic layer. Drawing on workshops exploring the intersection of analytical psychology and VR, we examine how a technical *glitch* acts as a site of psycho-social rupture, unveiling how VR and XR may reconfigure the way in which psychological material is manifested and communicated to consciousness. VR experiences function as *transitional objects*, creating—in the sense proposed by Hauke (2009) and Hockley (2014)—a ‘third space’ that enables serious play and the externalisation of unconscious material. VR experiences, furthermore,

lend themselves to being adapted for therapeutic use, due to their capacity to catalyse somatic immersion while allowing users to maintain a clear anchor in consciousness even as they explore a simulated landscape. The paper suggests two areas in which the *virtual unconscious* may be productively applied, before noting future directions of research and practice.

Keywords

virtual unconscious – virtual reality (VR) – extended reality (XR) – video games – glitch – third space/image – transitional object – somatic immersion

1 Introduction¹

Rapid advances in digital technologies such as artificial intelligence (AI) and large language models (LLMs), virtual reality (VR), extended reality (XR),² and ever-evolving sophisticated video games (both in terms of gameplay and technological advancement) are reshaping human experience in profound ways. These developments offer immersive, potentially compelling and symbolically rich environments that create new modes of expression, communication and self-representation. They challenge traditional boundaries between inner and outer worlds, between individual and collective thought and identity.

These technological transformations carry significant psychological and social impacts. Digital environments and tools influence identity formation, imagination, symbolic life, and interpersonal connection (Rossi et al. 2025; Osimo et al. 2015; Slater et al. 2019). They hold promise for supporting psychological therapy, personal development (Rossi et al. 2025; Brahnham 2013) and embodied experiential learning.³ Yet they also carry risks, including a possi-

1 We would like to acknowledge the financial support of both the Outreach Working Party and the Academic Subcommittee of the International Association for Analytical Psychology (IAAP) that enabled this research. We are grateful to Emilija Kiehl for her encouragement and Dr Nic Abraham and Amr Din for their respective contributions to the initial event held at RCSSD.

2 Extended reality is an umbrella term for all immersive technologies amalgamating digital and physical worlds. It encompasses specific 'branches' including virtual reality (immersion in a completely digital world through use of a VR headset) and augmented reality (AR, which superimposes digital images in the 'real', physical world).

3 In the context of body ownership—where an individual experiences a different body (which includes a virtual one) as their own (Slater and Sanchez-Vives 2023)—studies have shown a

ble disruption of symbolic capacity,⁴ a blurring of inner and outer experience (Osimo et al. 2015, Ross et al. 2025), the potential disruption to more organic *individuation* processes (Howe 2022; von der Heiden et al. 2019), and negatively impacting on emotions, identity formation, self-esteem, and coping strategies. Yet in this productive tension between the possibilities and limitations of how new technology shapes our thinking about, engagement with, and treatment of, the psyche, more fundamental questions arise: are the theoretical tools of Jungian, post-Jungian (Samuels, 1985) and neo-Jungian (Carpani 2021) studies capable of articulating the ever-expanding boundaries of research and clinical practice in this area? Do existing concepts fully capture the extent to which the psyche is recalibrating due to this new technology? Crucially, are contemporary *archetypal images* and unconscious processes being reconfigured to such an extent that to imagine their manifestation without considering the impact of new technology simply impossible?

Jung entertained the possibility that the *collective unconscious* is not a static formation, but one capable of transformation in light of seismic shifts caused by collective events, as well as due to the individual sparks of consciousness—transformed through a process of individuation—that can reshape the unconscious, even if these changes are imperceptible to the naked eye (Jung 1989). We are witness to a truly psycho-social phenomenon, where what is happening ‘out there’ radically shapes what’s happening ‘in here’. Our multidisciplinary research group has been working at the interface of psychotherapeutic thinking and practice and new technology over the last several years, drawing on Jungian and psychotherapeutic ideas to explore how VR and AR spaces might facilitate opportunities for a reconnection with meaning, imagination, and the inner life in an era marked by uncertainty, polarisation, and psychological fragmentation. It is through our research and practices that we offer the concept of the *virtual unconscious* as a theoretical formation and tool not only to capture the impact of these new technologies on the psyche, but to assert that the psyche itself mobilises technology as a new grammar and logic to express the unconscious. Crucially, the material and contents that arise cannot be divorced from the context of their formation; the advancement in new technologies enable the specific ways in which the psyche is now enacted. The forms that emerge do

reduction in implicit racial bias when White participants take over a dark-skinned body. See (Peck et al. 2013).

4 For instance, slow thinking and processing, which Dragana Favre frames as an *ethics of friction*, are required to support vitality, symbol formation and psychic transformation. By virtue of the immediacy of answers provided by AI, this symbolic time is lost. Favre calls for a reinstatement of this time, with practical strategies for doing so (2025).

so *because* of these advancements, not *despite* them. We therefore offer the virtual unconscious as a structural formation that reorganises our experience of psychic contents as well as a conceptual space that holds and generates the liminality and uncertainty—for all its rich possibilities and apocalyptic projections—arising as a result of technological advancements and the speed with which these have permeated most facets of our collective and psychological lives.

It is important to draw some parameters around what we mean by the ‘virtual’, and noting the conditions in which our thinking, theorisation and experimentation have occurred. This does not preclude the possibility that the concept may prove useful more widely, but clarity about the technologies and mediums with which we have concerned ourselves is key. While ‘virtual’ can refer to virtual worlds and experiences (for instance, interactive, computer-generated gameplay possessing internal rules, spatial organisation and both human and non-player characters) and in the wider sense of something that does not exist in physical reality but solely as digital code (for instance, the online document from which our research team are working), we are focusing on interactive digital media and its enabling technologies; that is, digitally mediated “virtualities” that are enacted and co-created. Such media can include single-player games, multi-user experiences, AI agents within worlds, story-driven games, XR and immersive art. In this paper, we pay particular attention to VR and XR as a medium that encompasses the affordances of games and interactive media with the addition of spatial presence and embodied interaction. While the virtual unconscious is a theoretical formulation capturing the extent to which the psyche is more fully enabled to express itself by virtue of the attributes and capabilities of new technology, our definition—and, indeed, a central research question that has arisen as a result of our initial findings—is equally relational in scope: what distinct psychological potentials might be unlocked by such enactment within, and co-creation with, the virtual?

In this paper, we begin by reviewing a selection of relevant literature. Given that this is a relatively new area of application for Jungian, post- and neo-Jungian studies, it is important to situate our contribution within larger discussions surrounding the use of VR in therapeutic practice—how this has developed and is now being delivered. We then outline the work our group has accomplished thus far, with an emphasis on findings and the data supporting our offer of the virtual unconscious as a conceptual framework for therapeutically informed research and practice. What we mean by the virtual unconscious is defined, and our positioning of its ‘location’ is informed by post-Jungian developments delineating the liminal expanse encompassed by such theoretical interventions: what does the virtual unconscious ‘hold’ within its boundaries, what does it yield,

and what are the conditions shaping its formation? On this basis, we illustrate how applying the term supports work across two key areas: video games and XR. We conclude by outlining the future direction of our research, arguing that the immersion, interactivity and narrative potential of XR (Aylett & Louchart 2003) provide fertile ground on which to explore that which is activated—both conscious and unconscious—in a co-creative experience. It is precisely because XR amplifies the possibility of individuals bringing both their conscious and unconscious selves into the virtual space that magnifies it as a generative site for the expression of unconscious contents.

2 Critical Literature Review

Mel Slater and Maria V. Sanchez-Vives' work (2023) define the psychological 'illusions' underpinning virtual reality experiences, which has shaped how therapeutic interventions are conducted through VR. Starting with the rubber hand illusion (RHI)⁵ that was successfully expanded into VR, studies demonstrate that body ownership is triggered just as effectively by synchronous movement as by tactile stroking. On this basis, explorations of full-body ownership from a first-person perspective were conducted. Slater and Sanchez-Vives discover that when a user looks down and sees a virtual body substituting their own, the illusion of full-body ownership can be established, even if the visual appearance of the virtual body does not match the user's. This evidences the brain's plasticity and capacity to adapt to and control unfamiliar physical traits. The key point for our purposes here is that the brain's acceptance of a virtual body is linked to a fundamental transformation of the user's psychology. Coined by Nick Yee and Jeremy Bailenson as the *proteus effect*, individuals are prone to conform to the expectations associated with their digital appearance. If someone is made taller, for example, they exhibit greater confidence in negotiations. Slater and Sanchez-Vives argue that a sense of self is highly plastic; a change in bodily representation can lead to changes in attitude, social biases and behaviours. This potential shift is made wholly plausible with VR as the conduit for a body-transfer illusion. While this later publication stands as a cumulative articulation of Slater's work, earlier co-publications point more directly to the potential therapeutic value and impact of body ownership facilitated through VR.

5 A participant watches a realistic fake hand being stroked synchronously with their own hidden real hand, giving rise to the illusion of ownership over the rubber hand.

Sofia Adelaide Osimo et al. (2015) investigate whether VR can support self-counselling. Their study suggests that adopting the embodied perspective of an authoritative ‘outsider’ can improve problem-solving and wellbeing. After inducing a strong body transfer illusion, participants alternate between an avatar of themselves and that of Sigmund Freud, enabling them to communicate with themselves from an external, authoritative perspective. As an avatar created to resemble their actual bodies, participants present a personal problem to Freud.⁶ By pressing a button on their controller, they then assume the body of Freud, seeing their own likeness across from them. Hearing their own voice describe the problem, the participant-as-Freud is given an opportunity to respond. Shifting back to their individual avatar, they listen to the advice, but with the voice slightly altered to support an illusion of being counselled by Freud. Participants felt that they inhabited Freud’s body—assuming the position of an expert—with the outcome of improved moods and levels of happiness after the session. This cognitive detachment prompts the brain to access a different internal perspective, delivering self-advice with a much higher likelihood of acceptance. VR, therefore, can do more than change how we perceive our bodies; it can enhance problem-solving and emotional wellbeing. Osimo et al. conclude that the automated, virtual self-counselling paradigm could serve as an effective, cost-efficient tool for clinical and therapeutic practices, allowing individuals to safely explore and resolve less severe personal issues through embodied perspective-taking.

What drove improvement for participants in the experiment was the body-swapping illusion and the opportunity to enter into an active self-dialogue facilitated through VR (Slater et al. 2019). In a 2019 study, results show a significant advantage for the self-conversation group (where participants are able to switch between a lookalike avatar and embodying Freud to deliver advice) as opposed to a group that was offered a pre-scripted exchange with Freud (but without the ability to swap into Freud’s virtual body). While both groups displayed improvements after the experiment—suggesting that talking about a problem in VR has some baseline therapeutic value—the capacity to see new solutions was tied to the body-swapping dialogue; the ability to deliver advice to oneself from an external body facilitated its acceptance and integration. Described as a process of *de-identification*, an ability to transcend one’s defence mechanisms is permitted by literally adopting a different perspective. This creates the ‘objectivity’ necessary for one’s latent problem-solving capacity

6 It should be noted, however, that what was presented was pre-screened and that delivery followed a specific script. There are thus limitations to what can be presented and securely addressed within this context.

to resonate with, and be accepted by, oneself. The study reinforces the finding that embodied self-dialogue facilitated through VR is a potentially viable tool for psychological counselling.

VR's capacity to catalyse de-identification is further supported by Falconer et al.'s (2016) study of self-compassion. Assuming a baseline prevalence of self-criticism across psychological disorders, the researchers asked depressed patients, embodied in a gender-matched adult avatar, to comfort a distressed virtual child. The positions were then reversed: embodied as the child, the patient watched their adult self-avatar deliver the words and gestures they had just recorded. Depression severity and self-critical thoughts decreased, while a capacity to reassure and soothe themselves increased. When embodied as the child, patients recognised that they were directing compassion towards themselves, an awareness that traditional talking therapies may struggle to instil. The authors attribute this outcome to VR's ability to express different aspects of the self through distinct virtual bodies. The intervention activates a capacity to show compassion to another while making the patient more receptive to receiving that same compassion. Falconer et al. argue that virtual body ownership is both a promising pathway for treating depression and self-criticism and a practice that can be scaled into a digital therapeutic tool complementing more traditional clinical practices.

The findings nevertheless warrant caution. Although VR has shown promise in exposure-based treatment, Kate Anthony stresses that it should support rather than replace the therapist. "VR is a good opportunity for helping psychotherapists [...] but we're not at a stage yet where virtual reality is going to be able to replicate a human therapist" (Anthony quoted in Hattenstone 2017). Without an actual therapist providing meaningful responses to what clients present, they are unlikely to progress. She is also sceptical of the accessibility of such therapy-based programmes with the rapid rise of consumer VR headsets, and what the commercialisation of therapy might mean for the quality of therapeutic interventions. In the event that the efficacy of therapeutic VR tools has been further evidenced and strengthened, they should be made available on prescription; any alternative scenario would be too risky. "It we're talking about paranoia," she explains, "any of these situations can trigger the client. The trouble with something like that is it could bring up all sorts of issues. I would want to see it closely managed" (ibid). Others argue, as we have noted, that the benefits outweigh the risks; VR therapy can democratise mental healthcare (Osimo et al. 2015), making high-quality, anonymous and affordable treatment available directly in people's living rooms. This presents a viable intervention within the UK context, where overstretched counselling services leave service users either waiting months for care or traveling prohibitive distances—

barriers that directly compound existing structural inequalities (Hattenstone 2017).

Sheryl Brahnham (2013) highlights a critical gap in the literature, noting “the limited research on VR within theory-guided and insight-based practices in psychotherapy, such as psychoanalysis, psychodynamic psychotherapy, analytical or depth (Jungian) psychotherapy, humanistic, existential and relationality psychotherapy” (12). She addresses this gap by exploring VR’s potential for creative expression, play therapy, and dramatherapy. Drawing on Rosenzweig’s *dodo bird conjecture*, which proposes that no single psychological approach is consistently more effective than another, Brahnham argues that VR research’s emphasis on cognitive behavioural therapy has restricted engagement with other modalities. Brahnham identifies two areas in which VR’s distinctive characteristics may support therapeutic practice: virtual healing environments or playspaces, and VR dramatherapy. VR can expand playspaces such as those used in Jungian sandplay beyond the physical limits of the sandbox and its figurines. Clients could manipulate virtual environments and objects in ways unavailable within conventional sandplay therapy. VR may likewise extend dramatherapy⁷ through its affinity with improvisational theatre, in which the user actively participates in an unfolding narrative. Virtual role-play could also allow remotely located therapists with specialist skills to work with patients. Crucially, dramatherapy practices—including role rehearsal, role expansion, role reversal, narradrama, fixed-role therapy, the empty chair dialogue intervention and playback theatre—can inform future VR applications and developments. The conversation is thus mutually beneficial—not only is VR well-placed to enhance the therapeutic efficacy of modalities reaching beyond CBT, but VR development can be deepened by existing therapeutic practices.

Although Brahnham calls for a paradigmatic shift in research emphasis, she overlooks Rita Lauria’s (1997) earlier contribution which draws extensively on analytical psychology. While we challenge Lauria’s treatment of concepts such as *active imagination* and her failure to preserve Jung’s distinction between *archetypes* and *archetypal images*, she nevertheless offers valuable insights into the convergence of VR and psychology. Lauria suggests that VR is well placed to contribute empirical investigations of our psychology and its metaphysi-

⁷ It is more accurate to name the existence of *dramatherapies*. Of note is the difference between the Sesame approach and Jacob Moreno’s *psychodrama*. Whereas psychodrama is literal and biographical (clients dramatising experiences from their own lives), Sesame is oblique, symbolic and metaphoric, prioritising psychological insight through myth, fairytales, story and movement with touch and sound. See (Hougham and Jones [Eds.] 2017) and (Stephenson [Ed.] 2014) to draw further comparisons.

cal foundations. “Aside from a conceptual sense”, she writes, “[...] such virtual realities could allow for the exploration of alternate realities in a psychological sense” (ibid. 6). She continues: “The implications of this ‘reality crossing’ between the real world and the virtual world are currently unknown. But it would be safe to say that the comparison of realities, both from a conceptual as well as from a psychological perspective, has metaphysical implications” (ibid.). Significantly, Lauria articulates VR’s potential as a tool for integrating the unconscious through its capacity to freely mix physical and imaginary possibilities (ibid. 8). She emphasises Jung’s realisation that psychology, as a discipline, extends beyond science to include philosophy, theology, comparative religion and the humanities more generally. In this context, Jung writes that psychology “has no self-consistent mathematics at its disposal, but only a calculus of subjective prejudices” (Jung 1954/1960, § 421). There is no “Archimedean point” that acts as a baseline for ‘objective’ observation; the psyche reveals itself by observing itself. Lauria pithily answers Jung’s lamentation that “[t]here is no medium for psychology to reflect itself in” (ibid.) with the assertion that “VR could prove to be such a reflective medium” (Lauria 1997, 7).

Chiara Rossi et al. (2025) consider how VR complements psychodynamic psychotherapy, an area of direct relevance to our research. Although VR has been widely incorporated into clinical psychology and CBT, its psychotherapeutic application remains in its infancy. VR’s capacity to generate presence and embodiment can: unlock unconscious processes; facilitate the exploration of relational patterns, externalise and image inner conflicts and catalyse emotional insight. The body-transfer phenomenon also allows patients to explore hidden aspects of their identity, adopt alternative perspectives and potentially address distorted body images or a fractured sense of self.

Immersive technology offers a means of extending core psychodynamic concepts. In psychoanalysis, for instance, *reality testing* distinguishes between inner mental fantasies and the external world. VR creates a unique psychological space where users recognise the environment is artificial yet respond physiologically as if it were real. This allows patients to safely navigate difficult unconscious material while maintaining a conscious foothold in the ‘here and now’, echoing Jung’s (1989) use of personal anchors during his descent into the unconscious.

VR environments provide three-dimensional canvases onto which unconscious material may be projected, externalising conflicts, desires, and anxieties through virtual spaces and avatars. Abstract mental processes and conflicts are made tangible, allowing the patient and therapist to examine them in tandem which can reduce the length of therapy.⁸ The ability to invest internal energies

8 This is not dissimilar to one of Jung’s original intentions with the Word Association Exper-

in a virtual other can nurture an exploration of *transference and countertransference*, especially if avatars are designed to embody significant others by whom the patient has been impacted. Despite its challenges, VR may allow relational conflicts to be enacted and potentially repaired (Rossi et al. 2025, 321).

The very configuration of, and encounter with, VR draws productive comparisons with D.W. Winnicott's notion of *transitional space*, offering an avenue for "symbolic elaboration of dissociated self-states or internal conflicts" (ibid., 322). The VR headset, in combination with the immersive world it produces and the user's engagement, potentially creates a safe environment in which play materialises and the rigid boundaries of the ego can be softened. Rossi et al. maintain that,

VR can function as a kind of third transitional object in therapy: a shared experiential space in which the patient's internal world is externali[s]ed and engaged with symbolically, often through avatars, environments, or narratives. This symbolic function is not merely cognitive, it is emotional and relational. The VR setting, like the child's imaginative play, becomes a medium through which unconscious content can emerge, be symboli[s]ed, and eventually integrated.

Ibid.

VR may also contribute to what Thomas Ogden calls the analytic third, "a co-constructed space between therapist and patient" (ibid., 323). Although technologically mediated, this setting extends interpretation beyond verbal exchange to the patient's embodied interaction with symbolic elements. Difficult reactions, including discomfort and avoidance, may themselves provide rich material for psychodynamic reflection. VR can therefore elicit creative exploration, facilitate regression in the service of the ego and support psychological growth. Rossi et al., echoing Anthony, nevertheless insist that VR must not replace the therapeutic relationship. Instead, it serves as a powerful catalyst:

[...] VR should be understood not as an autonomous therapeutic modality, but as an adjunctive tool, one whose efficacy depends entirely on its integration into a thoughtful, individuali[s]ed, and ethically attuned psychodynamic process. Without this clinical scaffolding, the depth and

iment (WAE), mainly, to reduce the time spent in psychoanalysis by unearthing underlying complexes with greater efficiency. It may be suggested, therefore, that Jung himself was not against a short-term therapy based on depth psychological principles and practices (Jung 1973).

complexity of therapeutic work risk being flattened by the very medium meant to enhance it.

Ibid., 324

Further limitations, which our own research has corroborated, include the need to balance a containing environment (which necessitates clear boundaries and ‘rules’ of engagement) with agency within these parameters. Excessive control stifles spontaneity and may adversely force patients to ‘fit’ their experience within pre-existing narrative structures. Yet striking advantages include the possibility of constructing “customi[s]ed environments” to simulate “complex scenarios and [...] situations” (ibid.); improving “user engagement and treatment adherence” (ibid.); and providing the therapist with fertile opportunities to explore interpersonal dynamics.

3 25 January 2025

Our pilot event at RCSSD explored Jung’s notion of the *shadow* through an immersive, VR gaming experience. We recruited participants (capped at 21, aged 18 and over and of any sex and gender)—which included Jungian analysts, psychotherapists, psychiatrists, healthcare professionals and academics specialising in psychosocial studies, VR360, and scenography—to help build a robust foundation for the work through critical feedback. Our aim was to delineate a depth-psychologically informed model to both curating and facilitating sessions in a safe and supportive environment. The pilot was designed to explore the hypotheses that gaming and VR: 1) could be sites of unconscious fantasy, psychological projection, and displacement; 2) may provide opportunities for working through inner experience, and 3) could benefit from dialogue with depth psychology as it provides a language to frame gaming and VR’s psychological dimensions.

The event included: an introductory lecture on Jung’s concept of the shadow delivered by Rupert Tower; a briefing to all participants regarding what to expect from their VR experience; engagement with the selected game, *Layers of Fear* (2019) (a psychological horror adventure game), which was delivered in two separate groups; and a final, group discussion and reflective session. *Layers of Fear* was chosen as it very explicitly engages with and evokes shadow-like material, placing the player as a tortured painter striving to complete their magnum opus, while uncovering fragments from their past to piece together their current, psychological struggles.

4 25 January 2025—Findings

Participants reported a range of experiences, including contrasting feelings of alienation and immersion. The use of a VR game—while allowing a certain freedom and autonomy but confined within boundaries of available actions and a pre-determined narrative structure—may have forced, somewhat heavily-handedly, the connection between the gaming experience and the shadow concept. This feedback echoes Rossi et al.'s (2025) point of needing to balance control and autonomy within the virtual environment to procure satisfactory psychological outcomes. The feedback also brings to mind Aylett and Louchart's (2003) contention that given VR's unique characteristics, a narrative structure for VR needs to abandon a pre-authored plot and must embrace an emergent narrative that 1) leans into the user's input (not dissimilar to improvisational and participatory theatre) and 2) benefits from the oversight of a host or facilitator (not dissimilar to the role of a 'Game Master' in Live Action Role-Playing Games [LARPs]) whose sole focus would be to judiciously drive the narrative based on levels of satisfaction experienced by the players. The perceived lack of autonomy constituted, for less experienced VR users, an impression of being controlled and, consequently, subjectively feeling 'closed off' and being led to a particular outcome. Participant K noted:

[...] it has no, there's no human around. It's [...] just you and an instrument. So, there's no sense of empathy [...] you're fitting in with something that's structuring your experience of inside it in some form. And we don't have much. We can't really move. You don't have many [...] choices and it tells you where the choices [are]. [...] I sort of felt it was a bit like a straitjacket. And I did feel it could do what it wanted to at any point, if it wants to. [I]t felt slightly [...] alien, like a sort of creature I was facing. I was inside.

Group reflection transcript, 25 January 2025

This mythological framing presents the VR experience as akin to Jonah in the belly of a whale, bringing the shadow elements of technological development into sharp focus. For less experienced users, being 'inside' an unfamiliar, overwhelming virtual space may feel similar to confronting the unconscious. This initial reaction compelled us to reflect on specific aspects of VR that might invite intense projections, activating archetypal conjectures of the apocalypse (Edinger 1999).

In contrast, Participant M, who had a limited experience of VR, felt a strong sense of presence and engagement with the game:

But because I'm a [...] novice in VR [and] my approach to play [...] I was really aware [of] the intensity of seeking and so that kind of obsession for looking at something [was] brought to mind [...] You know this dream, I think it's a dream or maybe a fantasy of [someone] holding this flame. It's completely dark. He's completely focused on the purpose of going forward, whereas there's this great big shadow behind him and I feel a bit like that in the sense that as long as I was moving forward so that I was just full of purpose and [then there is] suddenly a surprise [...].

Group reflection transcript, 25 January 2025

Here, the unique, immersive capacity of VR—blurring the boundaries between reality and fantasy, conscious and unconscious—is expressed. How do we articulate the liminality that is created by VR, one that can transport its users while allowing them to maintain a grounding foothold in reality? What is this other 'place' to which users are going, and how is the unconscious evoked and held there? Or, because of VR's design and bearing in mind its potential psychological impact, does the unconscious already *reside* there?

Participant L framed their VR experience as bearing similarities to immersive theatre, requiring analogous 'agreements' from the audience to suspend reality that enables a fuller engagement with the immersive environment. This 'unsaid' yet implicitly agreed 'contract' between performers and the audience reminds us not only of Kevin Fauteux's (1997) comparison between creativity, performance and therapy, but also of the relational turn in therapy (Brown & Saban [Eds.] 2026). We contemplated the extent to which the unconscious—if it is located anywhere—is positioned between the 'I' and an 'Other', the dynamic space in between two entities that gives rise to fantasies, depth, creativity and connection. In what way does VR foster and amplify the spaces in between, the gaps in which the unconscious resides and takes up occupancy? Alternatively, is VR itself the 'in between'?

Participant E, being more experienced with gaming and VR, acknowledged the existence of "unwritten rules" that place experienced users at a greater advantage. This is echoed by Participant L, who suggested that those growing up with this technology possess an innate digital literacy:

[...] this generation, they've grown up doing Minecraft and various 3D modelling sort of computer games [...] It's their language that they are actually doing all the time, so for them, it's that they're already fluent in communicating that and it doesn't feel discombobulating [to] them.

Group reflection transcript, 25 January 2025

Our research team grappled with the possibility that the ‘language’ of digital literacy might also constitute a new grammar of the unconscious—our experience of, and experimentation with, VR confronts us with the reality that, for contemporary generations, the way in which the unconscious ‘speaks’ is adapting to the realities of new technologies and the types of communication it prioritises. Psychic energies are being channelled into new forms; new riverbeds are forged due to tectonic cultural shifts and, as Jung (1959/1978) aptly notes, “new wine should not be put into old bottles and that, like a snake changing its skin, the old myth needs to be clothed anew in every renewed age if it is not to lose its therapeutic effect” (§ 281).

Additional themes were distilled that would shape the future direction of our work. First, a palpable tension materialised between agency and control within the VR experience we had chosen, which was in turn correlated with a participant’s level of prior experience. Those with more experience felt a greater degree of agency and comfort within *Layers of Fear*, whereas those with little to no experience largely felt at the behest of the game’s pre-determined narrative and framework. When considering this finding, we were reminded of Jung’s distinction between *psychological* and *visionary* art.⁹ Analytical psychology is, arguably, an open system that focuses on the amplification of possible meanings rather than a reduction to a single ‘source’ of psychological ‘truth’. Jung’s psychology, then, leans more heavily on the merits of the open system fostered by visionary art, and more guarded towards the closed system represented by psychological art. In what ways was the workshop design complicit in forwarding a *psychological* form of knowing and engagement? Was our choice of VR experience registered as a *fait accompli*, presenting VR as an exemplar vehicle for transmitting and expressing knowledge of depth psychological concepts? Our learning, therefore, was the need to find examples and ways of fostering an open systems ethos more akin to analytical psychology’s very own, embedding this at all levels of our work and design. Crucially, we need to maintain agency within the space to counter negative transferences of feeling trapped, dehumanised, and instrumentalised.

Second, when reflecting on the potential therapeutic value of VR, participants articulated the centrality of preserving the analytic dyad to combat disorien-

9 Psychological and visionary art represent two modes of artistic creation that reflect different relationships between the artist, the unconscious and the world of images. Jung describes the ‘psychology’ in psychological art as already being mediated for audiences, ready-made interpretations that do very little in evoking the unconscious. Visionary art, on the other hand, arises from the *collective unconscious* and is not about personal experience but archetypal images, mythic visions, and numinous forces that evoke awe, terror and wonder (Jung 1923).

tation. A guide is needed, not dissimilar to the therapeutic setting, to create relationality and with whom to co-create meaning. Interestingly, the drive for the presence of an ‘other’ was intrinsically connected to anxieties regarding the replacement of therapists by VR. This feeds into a larger, third theme surrounding the ethics of using VR for therapeutic purposes. Fourth, positive responses to the potential contribution of VR to therapy were also noted, primarily how VR creates the ‘atmosphere’ and immersion that might support processes of transformation. Finally, the positive contribution of VR to therapy was tempered with an understanding that the technology should be used as an additional tool at the therapist’s disposal, and not as the end goal in and of itself, thereby echoing the perspectives of Kate Anthony (Hattenstone 2017) and Rossi et al. (2025). These themes unequivocally informed our future workshop design and offered inspiration for prospective research; our immediate focus, however, returns to themes compelling us to reflect on whether the observed phenomena can be adequately articulated within existing theoretical parameters and clinical practices germane to the talking therapies. Crucially, if current frameworks are limited, what evidence can we draw on that might suggest a nascent formulation that keeps pace with the advancements witnessed, and gives form to the feedback, hopes, fears and anxieties captured in our data? In this regard, the notion of the *glitch* is pivotal as a justification for our theoretical offering.

5 The Glitch

Participant M reflected on how a technical glitch in the VR experience could be interpreted as meaningful, offering a lens through which the impact of VR on psychotherapy might be viewed:

And then I had quite an interesting experience that I assume is sort of [a] glitch, but for me became quite meaningful where I got [stuck] up to my knees [...] in a floor. [This was akin to an] [e]xperience of [being] a child [...] And that was quite beautiful. So, I had to put my hand up to open doors. And I had, like, sort of an experience [...] like being this [...] small child. And of course I was developing a theory [...] in that. That’s the point. You are [...] becoming [a] child in the game [...]. [I]t’s [...] very interesting that [...] small things that shift in perspective [*that you*] *know that are not really possible in real life*. [It became] quite interesting and powerful in this world now where all of a sudden I had a completely different, I don’t know, it was 10, maybe 10–15 minutes of the entire period that I was a child.

Emphasis added, group reflection transcript, 25 January 2025

The theoretical orientation underpinning this observation is Lauren Berlant's (2022) conception of *infrastructure* (Soreanu & Minozzo 2024). Infrastructures are the shared networks—social, physical, and organisational—that structure our daily lives. They keep society running smoothly, but they also lock in the habits, desires, and routines that keep us stuck in old ways. Accordingly, infrastructures may constrain creativity, preserve the status quo, and tether us to broken and exhausting ways of living. Navigating and negotiating infrastructures requires constantly tweaking daily habits, exploiting systemic loopholes, and creating informal networks to survive—or quietly reshape—the rigid systems that organise life. From an analytical psychological perspective, an infrastructural approach accentuates the *trickster*-like (Jung, 1954/1959) qualities of life itself.

As infrastructures operate silently in the background, they are rarely brought to light unless a moment of rupture manifests, what Berlant (2022) terms a *glitch*—a sudden interruption in the transmission of life, an unexpected breakdown or failure that stops the normal flow of things (24). When a glitch occurs—shattering our expectations in a manner that mirrors the disruptive, meaning-making shock of a *synchronistic* moment (Jung 1952/1960)—we are gifted with an opportunity to see beneath the surface and recognise that inequality is embedded within the very structures meant to sustain us.¹⁰ Seeing the operational level of infrastructures and choosing to contest the inequalities residing therein are ethical imperatives that can bring forth change, not dissimilar to a recognition of how unconscious forces shape our lives in powerful ways and consciously prioritising their integration to expand the personality. In the substantive and generative moment of pause necessitated by a glitch, a deceleration of the immediacy of contemporary life gives rise to what Daniel Kahneman (2013) calls *slow thinking*, a second 'level' of mental processing that demands our full attention. In this heightened frame of awareness, a fantasy of a conflict-free future is broken. Glitches offer opportunities for well-worn paths and outmoded approaches (i.e., represented by *senex* energy) to be disrupted, enabling us to imagine new ways of being and being together (represented by the more productive aspects of *puer* energy) (Yeoman 1998).

What this momentary glitch—experienced in the context of our initial workshop—asks of us is to re-vision our understanding of the relationship

10 See Briony Clarke (2023b) who develops the connection between digital rupture and synchronicity through practice-writing. When met with an attitude of active engagement, technical interferences, mistyped words, and troubled transmissions may be encountered as meaningful, acausal events rather than errors.

between VR, therapeutic practice and ‘therapy thinking’ (Samuels 2010). It is an invitation to re-imagine relationality and co-creation in a digital landscape that can productively blur the lines between inner and outer reality. While Berlant’s infrastructural framework requires critiquing how new technologies may enforce existing inequalities and power structures (Pedwell and Stowe 2024), several studies cited above emphasise VR’s potential to eradicate financial barriers in accessing mental health support.¹¹ Crucially, we suggest that the glitch opens a new doorway to apprehending the fluidity and adaptability of the unconscious. It both reveals, and is a manifestation of, a liminal realm of possibility (Turner 1967), a third space emerging between the ‘real’ and the virtual and in which psychological reality is amplified. For participant M, the glitch reveals how VR experiences may evoke past memories that subsequently shape personal reflections in the present. Reality, the ‘virtual’ and psychological reality become entangled, and we struggled to find existing concepts that could articulate the productive space revealed by the glitch. What the ‘virtual’ offers is nothing less than a structural reconfiguration that invites an exploration and deepening of our understanding of the psycho-social infrastructures of the mind.

6 9–10 May 2025

Several learning elements from the pilot were integrated to hone the workshop method of our second event. First, participants were presented with a VR experience—*Conscious Existence* (2019)—rather than a game. This provided a less goal-driven experience, focusing on the theme of wonder and awe. Second, a guided imaging prior to the VR experience was introduced to scaffold and deepen participant engagement. Imaging guides participants into a process of contacting their inner world and sharing this with someone else. The process promotes a clearing of consciousness of all preconceptions and letting the unconscious speak to consciousness through images.¹² After the VR experience, an opportunity to create images with paper and arts materials was

11 This capacity inherent within new technologies is explored by Briony Clarke (2023a) who develops a methodological extension of active imagination to digital mediums through game design to aid in liberating the technique from the strictures and confines of economic privilege.

12 The structure of a symbolic journey was chosen, specifically, “The Traveller on Life’s Journey”, wherein a pilgrim sees life as a quest (Gordon-Brown and Somers 2008, 18–20).

offered.¹³ The group later returned for small group sharings of their images before engaging in the final, reflective session comprising the entire group. To frame the parameters of the workshop, a briefing and lecture on active imagination were delivered online prior to the in-person session. The workshop recruited 15 participants, including academics, drama and movement therapists and trainees, Jungian analysts-in-training, psychotherapists and mental health specialist support workers. Integrating previous feedback, participants were invited in groups of 5 for the VR experience. This minimised disruption and any potential rupture of the containing space. Participants were, on this occasion, seated to mitigate against cybersickness (i.e., nausea, dizziness and headaches).

7 9–10 May 2025—Findings

The findings from the second event reinforced those from the first, while providing insights that would be translated into design prompts for a future initiative. Participant 10 raised concerns around ‘VR fatigue’; the barrage of images presented without inbuilt time for pause and reflection work against active imagination:

[B]ut then by the end of it, I was feeling like it was just like an image and an image and an image and an image, and it was just, it was really quite exhausting [...]. And there were [...] very rich images of nature, like mountains and sea and everything [...] I wondered if what, what I was lacking in that [...] [This was] [t]ime to sit with each image and really take it in [...].

Group reflection transcript, 10 May 2025

A therapeutic VR tool needs to keep pacing in mind. When considered alongside findings from the first event, sensory overload can be mitigated against by centring agency and co-creation. Yet, to our knowledge, no such tools/programmes exist within the parameters of supporting therapy.

¹³ *Response art* is an art-making practice mobilised by therapists, researchers and community practitioners to process and reflect upon experiences and emotions. Rather than being created for purely aesthetic purposes, response art focuses on the process itself; the act of making helps to express that which may not be immediately verbalised and fosters self-exploration through containment and reflection. See (Bird 2018; Haaken & O'Neill 2014; and McNiff 2018).

Some participants compared the quality of imagery encountered in the guided exercise and VR experience, with participant 11 preferring their own unprompted, meditative mental imagery over VR visuals:

And I personally enjoyed [...] some of the VR, although I didn't incorporate it that much into my drawing, I think. More of it came from the imagination. [The] [m]editative exercise we did in the first part. So that was kind of, yeah. I'm not sure why I think I prefer to have my own kind of images and things come up.

Group reflection transcript, 10 May 2025

Participant 4 concurred, offering that,

[W]hat is so great about [the] imagination and the technique of it is that we are granted like 5 minutes or 4 minutes to circumambulate around each image and [...] you sit with it until something comes out and you got to distil something else and you keep going through it.

Group reflection transcript, 10 May 2025

Pre-mediated imagery, while aesthetically pleasing, should not eclipse the potential *psychological experience* that VR may stimulate. What should be leveraged, then, are VR's unique capacities to curate a distinctive encounter neither available nor possible through other means. Participants agreed that one special aspect of VR is its facility to create a different form of relationality, one which prioritises co-creation and user input. Participant 2, citing a study conducted at the Royal College of Art involving digital sculpting, highlighted how giving clients agency to alter, sculpt, or move through an environment changes how memories are triggered:

[T]ouch and [...] haptics [...] would really be the way to connect the unconscious with the digital conscious representation. [O]nce we figure that out and you can [...] express something which perhaps you can't verbalise [...] that will [...] unlock a lot of things.

Group reflection transcript, 10 May 2025

Significantly, participant 2 emphasised the need for the presence of an Other in virtual spaces if the full, therapeutic potential of VR is to be activated. Citing a research study conducted at UCL, clients are more likely to feel isolated if the therapist is not accompanying them in the VR world:

[E]ven though the therapist was here, even [though] you have the headset on and you can touch them[,] because the therapist wasn't in the [virtual] space [the participant] felt totally alone. [The therapist's absence] compounded [...] their isolation, and that's massive.

Group reflection transcript, 10 May 2025

8 The Shadow of VR

While participants expressed advantages of using VR therapeutically (including an acknowledgement of its capacity to act as a transitional tool, echoing the findings of Rossi et al. [2025]), the feedback largely raises concerns about how VR potentially dehumanises therapeutic experiences and creates barriers. Participant 9 noted that VR remains inaccessible to those from lower socioeconomic backgrounds while participant 4 rightly observed that certain patient profiles might force us to reflect on a blanket acceptance of VR's efficacy. Individuals with specific neurodivergences—particularly children—with education and/or healthcare plans might react negatively to sensory overload. The headset itself is potentially invasive, restricting, overstimulating and traumatising for some. While these valid points require us to clarify 'who' benefits, to be more sympathetic to different learning profiles and to acknowledge intersectional factors limiting access, the one-sidedness and emotional tone of the feedback points to the emergence of negative transferences and a constellation of *complexes*. What is being feared, or how is VR catalysing these anxieties? Was this negativity heightened by the juxtaposition of a guided imagery exercise and the response art activity with the VR experience? Alternatively, was the higher concentration of Sesame drama and movement therapists and trainees—who prioritise movement, embodiment, presence and attunement in the physical space with their patients—also a contributing factor? The evidence suggests that VR and the virtual landscapes it generates could become receptacles for, and sites of, negative emotions, a space in which fears, fantasies and projections are jettisoned, serving as a contemporary site of and for scapegoating (Brinton Perera 1986). What are the characteristics and specificities of this real and/or imaginal space that invite such intense projections and anxieties¹⁴ about both individual and collective futures, not to mention the future of clinical praxis and therapy thinking?

14 Orsolya Lukacs (2026) has provided the useful term, *psychosociotechnical imaginaries*, to describe this phenomenon.

9 The Virtual Unconscious

New technologies have always become conduits for an expression of the unconscious, as Christopher Hauke (2009) rightly intuit. By the time of his paper's publication, the prevalence of portable media had transformed how clinical material emerged during analysis—most notably through patients presenting films, scenes, and fictional characters to articulate their inner psychological states. Such practices, Hauke argues, should neither be ignored nor discouraged, as moving images are just as legitimate as dreams, fairytales and artwork in magnifying the unconscious. We extend this and proffer that technological advances in any age have ushered in different means with which to revivify the images of both culture and the unconscious. In addition to constituting new pathways for expression, these advances also have the power to 'rewrite' the terms with which we individually and collectively relate to both culture and the unconscious. With the advent of virtual reality, however, a paradigmatic shift has occurred. Not only does VR constitute a new doorway to accessing the unconscious (Lauria 1997; Rossi et al. 2025), VR's inherent capacity to facilitate engagement with an alternate reality while allowing users to maintain a foothold in consciousness—i.e., one knows that what one is experiencing is not 'real' but yet remains immersed—can support the development of ego-strength and a *more conscious engagement* with the unconscious (Chodorow [Ed.] 1997). How can this technology be harnessed in the service of nurturing psychological health, emotional resilience and personal flourishing? What can be developed for the purpose of encouraging and birthing—in a safe and ethical manner—unconscious material that supports the practice of psychotherapy?

Theoretically, we draw inspiration from several sources. First, within analytical psychology, Jung himself acknowledged, in a 1926 diagram, that a meaningful consideration of the psyche extends beyond the individual, and includes the family, clan and larger groups (Singer 2013), which reflects an interest in the psycho-social (Lu, 2024). While the origins of the *cultural unconscious* as a concept are contested (Lu, 2013), there is agreement that configuring and imagining a layer of the psyche—situated between the personal and collective unconscious—supports researchers and practitioners in articulating the influence of culture and society in shaping the psyche.

Second, we draw on Hauke and Luke Hockley who conceptualise, in the context of film, the existence of a *third space* and *image* situated between audiences and screen, individual and film. Drawing on Walter Murch, Hauke (2009) suggests that while movies offer structured, coherent content, audiences bring a highly unstructured reservoir of psychic energy, wishes, and desires that they then project onto the film. Whereas films may offer coherence in structuring

individual experience, they are truly brought to life by the energies of its audiences, thereby turning latent meaning—which Hauke frames as virtual meaning (ibid., 56)—into genuine meaning activity existing between the two. Hauke thus defines the *third image*—arising from the interaction between audiences and screen—as:

[...] that which arises ‘between’ the object and the perception. Or rather, not ‘between’ but as the result of the *negotiation between the viewer and the screen*. We do not create the third image; in a way, *it creates us*. We are not in charge of making it, just as we are not in charge of making the movie, neither are we in charge of making the images in our dreams. What we do have a hand in is bringing the energy of conscious attention to all of these to the enrichment of ourselves and our humanity in general.

Ibid., 57

In the context of our own research, there is both evidence of and a utility in imagining the virtual realm—arising through the interaction of and situated in between the individual and VR experience—as a psychic, third space in which unconscious contents (both positive and negative) are enlivened and activated. Where we extend Hauke’s assessment is with regards to agency, and who in fact ‘creates’ the ‘image’ in this realm. While we wish to retain an open approach that honours the unpredictability of the unconscious, facilitating a space of co-creation and individual agency has the benefit of destabilising power dynamics (a finding from both our workshops) and is pivotal to nurturing a more relational, psycho-social understanding of unconscious dynamics. What we want to guard against is the erosion of an individual’s independent symbol making capabilities, to acknowledge the dialogical nature of symbol formation (whether this is informed by culture, the individual or in relation to new technology), and to fully leverage VRs capacity to support the development of ego-strength. Furthermore, overly structured experiences that limit intentionality—we have learned—might not offer sufficient space for individual symbol formation and projective processes to take place; retaining individual agency, both practically and theoretically, is key.

Hockley expands upon the third image by clarifying where cinematic meaning unfolds, which has ramifications for our own articulation of VR’s unique capability to animate psychological meaning. Drawing on the notion of an *inter-subjective third* activated during therapy between the client and therapist—in which “unlooked-for, unaddressed, unseen, unbeckoned and unexpected personal responses” (Hockley 2014, 1) may manifest—the third image comes into existence as an unconscious field between the viewer and the screen. Acting as a

bridge that connects the 'objective' artifact of the film and the subjectivity of the individual, the unconscious field generated between the two provides a space of exploration and reflection, where personal, repressed and unformulated psychological meanings may be projected onto the film's content. "Sometimes in these experiences of the third image," Hockley writes, "the narrative meaning of the film is lost, or at least heavily inflected, and in its place, individuals come to find a personal meaning" (ibid.). Something arises that neither belongs to the film itself nor solely to the mind of the viewer but exists precisely within, and because of, the "psyche-laden" (ibid.) space existing between the two. The third image is not merely an intellectual construct; the meaning generated is felt viscerally in the body. Drawing on the work of Vivian Sobchack, viewers have a "range of tactile responses to films that go beyond the visual and the auditory" including "goose bumps, tears, laughter, gut-wrenching feelings [and] joy" which are fundamental to a cinematic experience. "Whatever the feelings we have when we are in the cinema," Hockley evocatively notes, "they are both heart-felt and genuine, and these emotions tell us something that is important about ourselves" (ibid., 108). Where we draw parallels with Hockley's definition of the third image is a) the capacity of a third (virtual) space to hold and facilitate the projections of users; b) its potential to energise new configurations of psychological material if the space is relationally-held and remains open-enough to invite co-creation; and c) its ability to provide a more holistic experience and possible integration of psychic material given its innate function of centring somatic immersion.

The 'virtual' as a distinctive site and manifestation of the unconscious is intrinsically tied to the historical moment of its arrival and the conditions giving rise to VR's prominence. The *virtual unconscious* ascends as a product of our neoliberal reality (Harvey 2005), an unconscious space that emerges to answer our cries for deeper self-experience, a vehicle through which compensatory imaginaries are animated. It is both a window into our vanishing humanity and the place in which it may be recovered, restored, and re-storied. It is a realm in which unconscious, instinctual energies can be experienced (i.e., games that allow us to become hunters, shamans, thieves, or messiah figures) and a place where higher faculties of meaning through story, relationality and contact with the *numinous* may emerge.

We define the virtual unconscious as a psycho-social realm arising from, and shaped by, the rapid advancement and proliferation of immersive VR and XR technologies. We ground our approach in a relational stance toward the unconscious (Loewenthal and Samuels 2014). From this perspective, the unconscious is situated in the 'in-between'—manifested, evoked, and continuously reproduced within the relational matrix connecting two entities, be they individuals

or a user's relationship to new technologies (Hauke 2009; Hockley 2014). The virtual unconscious exists at the interface of our interiority and the diversity of our highly connected and interconnected world. It arises as a theoretical necessity given that new possibilities, meanings, and psychological scenarios materialise *because of* VR's unique affordances. The virtual unconscious also provides a pivotal vantage point to observe a seismic shift in how archetypal energies manifest and are expressed. The nature of the virtual unconscious has been glimpsed through a *glitch*, a pocket of productive breakdown that reveals how VR specifically and XR more generally provide an emergent language and grammar of the unconscious. VR and XR constitute the new 'wine skins' in which human 'advances' and extensions of the *Self* are contained; they will come to define how we relate and can 'be' together. The virtual unconscious is a neutral conception of psychic space that evokes intense projections, resulting in both positive and negative transferences. While it constitutes a level of depth from which projections may arise, it is simultaneously a psychic repository in which existential dread, fantasies, hopes and desires have been placed because of the very parameters and possibilities of the technology itself—what it is capable of and what it invites. From fears of therapists being replaced to a loss of human agency to a productive space in which mental health may be cultivated, improved and made accessible, the virtual unconscious holds the oscillation between paired opposites at the heart of human experience: between symbolic life and death, sickness and health, presence and absence, interiority and exteriority, authenticity and simulation, permanence and impermanence, belonging and isolation. These emotional undercurrents point to an active, dialogical unconscious, the operations of which are uniquely contoured by the virtual environment and technology that plays a part in its genesis.

VR experiences introduce a 'third thing'—a bridge and threshold to a virtual realm that accelerates our engagement with, and production of, emergent unconscious material. VR experiences act as transitional objects (Winnicott 1971/2005) that facilitate potentially meaningful and serious play in a liminal, intermediate zone of psychological existence. Users can immerse themselves in a novel domain while maintaining cognisance of its imaginal origins. This dual awareness can help build the ego strength required to safely encounter and process unconscious material. We emphasise, however, that while VR may present conditions in which a strong-enough ego may be cultivated, VR alone does not unilaterally develop such faculties. This requires—as our findings show—the accompaniment of a therapist who uses VR as a tool, and not the solution. What we are suggesting is that the immersive affordances of VR galvanise its potential to activate the whole psyche, which includes an experience of embodiment

(including through avatar bodies). We now turn to two potential areas of application that are uniquely positioned to leverage and advance the framework of the virtual unconscious.

10 The Virtual Unconscious: Video Games

If the psyche is now choosing technology as a logic of expression, the video game is among the places where that choice is most legible. The medium is made of rules that exist only in their execution. Without being played, as Galloway (2006) observes, a game remains an abstract rule book. A game is not primarily a body of images or a story, but a structure governing what a player may do, perceive or become. When the game becomes digital, its rules pass into code and are implemented alongside the player, responding and generating. This is procedurality: the computer's capacity to execute rules and generate behaviour from defined processes, long regarded as the medium's essential property (Murray 1997; Bogost 2007).

The ludology–narratology debate was game studies' central quarrel, between those who approached the video game as a new form of storytelling (Murray 1997; Ryan 2001) and those for whom games are rule-systems first, their meaning arising in play rather than plot (Aarseth 1997; Eskelinen 2001; Frasca 2003). Its implications matter more here than its resolution (Juul 2005): the medium's distinctiveness lies in what it does, not only what it shows. The debate has precedent within Jungian theory itself. Early analytical criticism approached literature through its content, reading texts for universal images (Bodkin 1934). Jung warned against this use of his psychology (1950/1966, §159). For Susan Rowland, Jung's own writing does not describe the psyche but enacts and performs it (Rowland 2005). The *Red Book*, in particular, constitutes a practice in which knowledge is *made* through the doing (Rowland and Weishaus 2021). The parallel between the two debates is striking: one tradition treats the object as a container of content (story, archetype) awaiting interpretation while the other locates significance in what the form does. In each field, the second position prevails by insisting on the specificity of the medium.

Scholarship on analytical psychology and gaming has, however, largely replayed the older pattern. Games are read and at times made for their symbolic and mythic content (archetype, shadow, monomyth) (McWhirter 2017; Power and Corchnoy 2024; Grann 2025) or treated empirically as stimuli whose effects can be measured (von der Heiden et al. 2019). Each is valuable; each keeps the game safely on the far side of the glass, a text to interpret or a stimulus to assess, rather than a structure through which the psyche comes to be organised. Yet

this paper's central claim, that the contents arising at the technological threshold cannot be divorced from the context of their formation, asks more of the medium. The game, on our account, asks to be met in the manner both debates point toward: not as an artefact to be decoded but as a structure in and through which the psyche is organised and comes into form.

The structure is, moreover, a bounded one. Huizinga (1949) named it the magic circle: the marked-off ground within which the ordinary determinations of life are suspended, and another order of meaning holds, a ground not formally distinguished from consecrated space. Winnicott's (1971/2005) transitional realm occupies the same intermediate zone. Analytical psychology's name for the protected precinct of transformation is the *temenos*, and Jung (1953, § 219) himself equated the alchemical vessel with the magic circle: in both cases, it is a matter of protecting what is inside from intrusion.¹⁵ The game is one of the few contemporary cultural forms constituted by its boundary; the form itself, prior to any content, rehearses a structure that depth psychology has always required for its work. The shape of the medium and the shape of the work—prioritising a boundaried and sacred space—coincide.

Taking games seriously in this way means loosening the medium's equation with its commercial centre of gravity. Conflating the game with its commodification and capacity to entertain is an error worth challenging: the arrangement is historically recent, and it conceals a far older understanding of the game as an instrument. The astragalus was a tool of divination before and alongside its life as a die. The *I Ching* is precisely such an instrument—a rule-bound operation of chance, consulted rather than won, in which the sorting of yarrow stalks or the cast of three coins is read for meaning (Jung 1950/1989). The twentieth-century avant-garde renewed the same instrumental understanding: the Surrealists devised games as deliberate techniques for surfacing unconscious material (Brotchie and Gooding 1995) and the Situationist *dérive* turned playful traversal into a method of research (Debord 1958). The video game inherits this lineage alongside its commercial one, and it is perhaps this inheritance that matters here.

What then, does the video game contribute? It makes the virtual unconscious playable. In so doing, it makes it shareable, in a manner neither the consulting room nor the XR encounter alone quite affords. Whereas the clinical encounter works through relationship and immersive XR through embodiment, the video game works through operative structure. Together, they constitute three containers for a single emergent phenomenon—the virtual unconscious—and

15 On the circle's sacral sense in games, see (Conway 2019; Crichton 2019).

its articulation will manifest across and require all three. There is something uncanny in a medium that works this way: agency where we do not expect it and a designed structure that appears to respond to more of the player than the player knowingly brings to it. To take video games seriously as a site of the virtual unconscious is neither to pronounce them good or ill for the psyche nor to decode them as encrypted myth, but to recognise the video game as one of the forms through which the psyche may be expressed and extended. For practitioners of the psyche, this means we must be willing to meet it in the playing.

11 The Virtual Unconscious: VR and XR

Virtual reality presents new possibilities across entertainment, education, training, and the arts (Bailenson 2018). The virtual unconscious offers rich new ground from which to consider and design virtual experiences. Here, we will consider emerging potentials and the application of the concept in and to immersive design.

11.1 *Engaging the Archetypal through Audience Agency and Identity*

Given that more of the sensorimotor self is present in VR than in most digital media (Slater et al. 2023), an engagement of archetypal material has potential to be significantly amplified by immersive design. However, commercial VR experiences often skew towards masculine modes of action and hero narratives such as *Blade and Sorcery* (2018) and *Batman Arkham Shadow* (2024). Designers might therefore draw more widely on global myths, stories, and rituals to explore archetypal situations, roles, and behaviours uniquely supported by VR. It may be especially fruitful to consider those identities and roles most compensatory to modern life. Audience appetite for this diversity of roles may already be reflected in the growth of ‘anti-games’ and simulators in VR, such as *Maestro* (2024) where audiences conduct an orchestra or *Garden Tend* (2026) where players grow a garden.

Future research could survey the dominant player roles, scenarios, and choices in virtual experiences to identify which archetypal images are overrepresented or neglected. Research could then examine whether inhabiting neglected behaviour patterns increases engagement, meaning, or self-understanding. The point, however, is that these cross-disciplinary dialogues require the virtual unconscious, as a theoretical orientation, to honour both the psyche and the impact of immersive design in VR experiences.

11.2 *The Body as a Crucible for Symbol and Meaning*

Immersive experiences place audiences bodily within stories and situations, allowing them to enact choices through gesture, posture, and movement. The body becomes a locus of interaction between the physical, digital and psychological. The relationship between the body and psyche has a rich history of consideration as a site for symbolic and transformative processes. Marion Woodman holds that psyche and body are best explored together (Woodman 1985), while Jung posits that “psyche and matter are two different aspects of one and the same thing” (Jung 1954/1960, § 418). Designers might consider how bodily gestures, poses, and actions reinforce virtual identities and activate their underlying archetypal potentials. For example, will sitting on a throne and barking an imperious command with a flick of our wrist engage unconscious elements which might remain dormant if we simply need to press the button ‘X’? Could falling to our knees in adoration allow us to connect with a feeling—or source—of reverence beyond what we can feel sat on our couch? It is worth considering how such bodily actions might consolidate the engagement of symbols and meanings already aroused by our in-world choices. As noted above, the virtual unconscious is not merely an intellectual space, but one in which the body is both engaged and privileged as a site of psychological meaning.

Across human societies, ritual and symbolic action have provided embodied ways to engage with meaning and to relate to the ineffable (Otto 1917/1980; Turner 1982). Ritual actions from across cultures, such as bowing or wielding a judge’s gavel, may provide valuable inspiration for VR design. These gestures may deepen engagement and communicate meaning beyond explicit language. Immersive designers might also explore the wide variety of bodily forms audiences can inhabit, including expanded and non-human bodies (Lanier 2017). The symbolic significance of animals, hybrids, and shapeshifting across cultures suggests that non-human embodiment may carry particular potency (Cirlot 1962/2001), a potential transformation that is unique to VR and in which new meanings may emerge in and through the virtual unconscious. This is beginning to be explored in popular VR titles such as *I Am Cat* (2024). For Lanier (2017), exploring the limits of what is possible through immersive design is not an escape from our humanity, but constitutes an opportunity to rediscover it.

The virtual body might also act as a vehicle for symbolic expression. Virtual bodies may provide alternative sites through which to express and process what words cannot. This possibility is supported by one study which showed a placebo analgesic to be effective when applied to a virtual avatar which had been adopted (Ho et al. 2022). Events and choices in VR might similarly produce visible changes in an embodied avatar, symbolising the emotional or archetypal

qualities activated by the experience. The virtual unconscious therefore adds a symbolic axis to existing accounts of presence and embodiment.

11.3 *Psychic Architecture and World Design*

Most XR experiences consist of navigable three-dimensional worlds. These worlds may reflect real environments and architecture, radically remix them, or present 'impossible' spaces. The relationship between depth psychology and architecture (Huskinson 2018) offers a powerful starting point for 3D designers. Designers might consider how built environments symbolise the structure and dynamics of the psyche and encourage particular forms of behaviour or engagement. For example, the videogame *Diablo* (1997) centres on a prolonged descent beneath a church, with threats and potential treasures increasing at each successive level. This may symbolise a descent beneath the sanctioned conscious institution of the church or alter ego into the represented realm of the unconscious. Its impact derives partly from beginning in a plausible physical location before breaking through its basement into impossible, almost mythical depths.

The architecture of dreams which transgresses physical rules while following its own logic offers another source of inspiration for VR designers. One example that utilises this to good effect is *Accounting+* (2016). This comic VR experience casts users as an overwhelmed accountant. To resolve the 'dodgy books', the audience puts on a headset within VR, beginning a journey through successive dream-like layers of reality and creating complex dimensions of intertextuality that would not be possible through other means. Once more, the virtual unconscious becomes the productive, liminal space where the boundlessness of psychological creativity is met with the means to realise its incarnation.

The appeal of such 'dream architecture' is also suggested by the popularity of 'backrooms' and 'liminal space' content, including VR experiences such as *Dreambound* (2026) and *Wonder* (2025). Exploring these liminal labyrinths bodily may give them an added psychological charge. And, just as architects use modular elements with established functions, future research might develop a library of 'psycho-architectural' elements that bring metaphoric and symbolic power to virtual environments, diverse strands that are once more brought together by the conceptual space created by the virtual unconscious.

11.4 *Creating Space for Individual Symbolic Exploration*

Our workshops identified the significance of allowing for symbolically open XR experiences for therapeutic applications. Non-therapeutic sandbox experiences such as *Open Brush* (2021), *Gravity Sketch* (2017), and *Soul Paint* (2024) also tend to be symbolically open. However, for more authored and narrative works, there

is a tension between structure and symbolic freedom. Designers might therefore incorporate small moments of open-ended expression into authored experiences. *Half Life: Alyx* (2019)—a linear narrative VR game—offers a good example in a scene where audiences can draw on a frosted glass window using coloured pens. This moment has no bearing on the plot or game progression but offers a playful respite in an emotionally fraught virtual world. It lets us play, reflect, and leave our mark on the world. Future research could examine emergent creative behaviours and the potential for symbolic exploration through interactions not explicitly designed by creators. These behaviours might indicate which creative freedoms best support symbolic play through XR.

11.5 *New Forms of Meeting*

Social and multi-user VR allows many users to inhabit the same virtual space. On platforms such as VRChat (2014), users control avatars through tracked head, hand, and sometimes body movements, while microphones capture their voices. Audiences are co-present in worlds where they might socialise, play games, explore, or create. Less examined forms of social XR allow people to meet and interact in ways unavailable in physical reality. Our body movement and voices can be translated into almost any effect on our virtual form or environment (McVeigh-Schultz et al. 2021). Our arms and legs might sway the branches of a tree; our breath might cause a light to glow or dim; our voice might create floating bubbles colour-coded by sentiment-analysis. Nascent examples of this can be seen in VR Chat where so-called ‘cursed avatars’ might resemble warped figures or simply be a geometry or particle system.

This opens new possibilities for how people express themselves, relate to others, and share space, providing conduits for both personal and collective unconscious contents moderated through, and shaped by, the virtual. The virtual unconscious can orient designers within this broad field of possibilities. The concept reframes immersive design not simply as the construction of convincing virtual worlds, but as the creation of symbolic environments in which audiences participate bodily, imaginatively, and psychologically. Rather than replacing existing theories of presence, embodiment, narrative, or interaction, it complements them by asking what kinds of unconscious processes these affordances might enable, and how they may be intentionally cultivated through creative practice. The proposals outlined here are necessarily speculative, but they suggest a fertile programme of interdisciplinary practice and research, spanning XR, depth psychology, architecture, game studies, cognitive science, ritual studies, and the creative arts. The virtual unconscious offers a vocabulary for asking new questions about how and why certain virtual experiences might resonate deeply, how symbolic meaning emerges in digital worlds, and

how immersive media might become a key psychological and cultural creative medium of the era.

12 Conclusion and Future Directions

The virtual unconscious as a theoretical offering and contemporary necessity arises from our research findings. What started as an exploration of ways to more effectively engage younger audiences—introducing them to key concepts in analytical psychology to frame feelings of disconnect, disillusionment and disenchantment—quickly evolved into questioning existing theoretical frameworks and whether they are best suited to explain the qualitative data captured. As we reviewed our data, we kept returning to the technical glitch that was experienced. Occupying the tension of this space (Saban 2019)—created at the boundaries of individual and virtual experiences, physical and virtual reality—provided the emergent path forward. The glitch was not a ‘mistake’ to be fixed, but a profound moment of psycho-social rupture when we witnessed how the unique features of VR enabled the psyche to express itself in novel forms. The ‘realm’ into which participants entered materialises at an interface of possibilities and choice, when an individual chooses to cross a threshold. In doing so, VR experiences become transitional objects that can elicit creative exploration and serious play in a liminal ‘third space’ (Hauke 2009, Hockley 2014); an intermediate, relational, and psychologically active field that unfolds ‘in between’ the individual user and the VR experience. Crucially, the novel immersive encounter catalysed by VR allows one to maintain a foothold in consciousness while exploring an expanse that more readily enables an articulation and manifestation of unconscious material.

Within this third space, the participant’s choices and emergent psychological material are actively amplified by the unique affordances of virtual reality, which can include a distinct capacity to evoke somatic immersion, giving way to an embodied experience of the psychological. Drawing on Winnicott’s notion of transitional space and Jung’s articulation of the *temenos*, the third space constitutes a unique realm that may be conceptualised as a boundaried ‘magic circle’, where the rigid parameters of the ego can soften, allowing users to project, externalise, and play with what lies within.

Ultimately, the third space is the foundational middle ground in which the virtual unconscious is enacted. It is a layer of the unconscious that emerges as the psyche draws on and mobilises new digital rules and grammars to express, extend, and reconfigure itself. The virtual unconscious is also a source from which projections may arise and in which they can be housed, a realm of dis-

placed psychological material and fantasies in relation to a technological Other. Whether the virtual unconscious becomes a psychological crucible containing our hopes—energising fantasies of possible futures—or a dumping ground for anxieties and fears, it remains neutral in scope; what arises does so precisely because of the relationship we *choose* to build with it. Rather than pathologising new technology as a symbolic ‘devil’ ushering in civilisational decline, our research team recognises its permanent integration into contemporary life. We view this transformative medium as a compensatory imaginary arising from a hyper-connected, neoliberal world—an extension of who we are and a literal mirror into our souls. VR specifically and XR more generally are contemporary ‘wine skins’ holding aspects of our phenomenological reality. We must meet the psyche *here* if we are to understand how humanity and its future generations will relate, heal, play, individuate and co-create meaning.

Given our findings and emerging research questions, our future trajectory will expand into several distinct yet interconnected domains. Most immediately, the insights underscore the necessity of designing ethical, creative frameworks utilising immersive technology to improve mental health and advance depth psychological research. In collaboration with Lillian, a research-led digital design studio, psychologically informed VR experiences are being developed that draw on our findings, with the aim of building prototypes to support psychotherapy. The standard pipeline of development separates clinical knowledge from design practice and hopes that substantial ‘briefings’ can bridge the gap. We argue that they cannot. The knowledge lost at each handoff is significant. What clinicians specify in a brief, moreover, do not always map clearly to design solutions, and what is then produced does not map back to clinical reality. Where our group differs is centring a practice-based co-design methodology at the intersection of fields that have rarely been brought into this configuration.

The main findings driving the co-design process are:

1. Pre-authored VR content overrides the participant’s own psychic material
2. Shared, virtual presence—not solo immersion—is the critical therapeutic direction
3. The importance of setting the *temenos* using guided imagery or an alternative approach as a future research protocol to enable an enriching ‘bridge of transition’ and psychic containment for participants prior to an immersion into a VR experience
4. The analyst/guide must be present alongside the patient/participant within the VR space
5. The patient/participant must be author, not consumer, of the virtual experience
6. VR cannot replace relationship, it must serve it

Our findings lead to the insight that VR may function as a clinical aid when it is relationally held, symbolically open, and co-authored by the participant. Crucially, VR and the broader landscape of XR operate as mediums that activate latent psychological energies through profound sensory and somatic immersion. As more of our essential being is pulled into the virtual, it ceases to merely be a temporary destination but crystallises into an inhabited reality in which our humanity may also be found.

References

- Aarseth, E. (1997). *Cybertext*. Baltimore: Johns Hopkins University Press.
- Aylett, R. and Louchart, S. (2003). Towards a Narrative Theory of Virtual Reality. *Virtual Reality*, 7, 2–9. DOI: 10.1007/s10055-003-0114-9
- Berlant, L. (2022). *On the Inconvenience of Other People*. Durham: Duke University Press.
- Bird, J. (2018). Art Therapy, Arts-Based Research and transitional Stories of Domestic Violence and Abuse. *International Journal of Art Therapy*, 23(1), 14–24.
- Bodkin, M. (1934). *Archetypal Patterns in Poetry*. Oxford: Oxford University Press.
- Bogost, I. (2007). *Persuasive Games*. Cambridge, MA: MIT Press.
- Brotchie, A. (comp.) and Gooding, M. (Ed.) (1995). *A Book of Surrealist Games*. Boston, MA: Shambhala Redstone Editions.
- Brahnam, S. (2013). Theory-Guided Virtual Reality Psychotherapies: going beyond CBT-Based Approaches. *Lecture Notes in Computer Science*, 8022, 27–36.
- Brinton Perera, S. (1986). *The Scapegoat Complex*. Toronto: Inner City Books.
- Carpani, S. (2021). *The Plural Turn in Jungian and Post-Jungian Studies*. London: Routledge.
- Chodorow, J. (Ed.) (1997). *Jung on Active Imagination*. Princeton, N.J.: Princeton University Press.
- Cirlot, J.E. (1962/2001). *A Dictionary of Symbols*. J. Sage (Trans). London: Routledge.
- Clarke, B.O. (2023a). *Animate Being: extending a practice of the image to new mediums via speculative game design*. Doctoral thesis, University of Essex.
- Clarke, B.O. (2023b). Synchronous Glitch: the serious play of digital matter. *Journal of Analytical Psychology*, 68(2), 443–447.
- Conway, S. (2019). FIFA: Magic Circle. In M.T. Payne & N.B. Huntemann (Eds.), *How to Play Video Games*, (pp. 13–20). New York: NYU Press.
- Crichton, J.A. (2019). The Magic Circle: Gaming and Postmodernity. *Jung Journal: Culture & Psyche*, 13(4), 35–52.
- Debord, G. (1958/2006). Theory of the Dérive. In K. Knabb (Ed.), *Situationist International Anthology*, (pp. 62–66). Berkeley, CA: Bureau of Public Secrets.

- Edinger, E. (1999). *Archetype of the Apocalypse*. Chicago: Open Court.
- Eskelinen, M. (2001). The Gaming Situation. In *Game Studies*, 1(1). <http://www.gamestudies.org/0101/eskelinen/>
- Falconer, C.G., Rovira, A., King, J.A., Gilbert, P., Antley, A., Fearon, P., Ralph, N., Slater, M., and Brewin, C.R. (2016). Embodying self-compassion within virtual reality and its effects on patients with depression. *British Journal of Psychiatry Open*, 2, 74–80.
- Fauteaux, K. (1997). Self-Reparation in Religious Experience and Creativity. In C. Spezzano & G.J. Gargiulo (Eds.), *Soul on the Couch*, (pp. 11–41). London: Analytic Press.
- Favre, D. (2025). The Ethics of Friction: *élan vital*, artificial intelligence, and the temporal conditions of individuation. *International Journal of Jungian Studies*, 18(2).
- Frasca, G. (2003). Simulation versus Narrative: Introduction to Ludology. In M.J.P. Wolf and B. Perron (Eds.), *The Video Game Theory Reader*, (pp. 221–235). London: Routledge.
- Galloway, A.R. (2006). *Gaming: Essays on Algorithmic Culture*. Minneapolis: University of Minnesota Press.
- Gordon-Brown, I. and Somers, B. (2008). *The Raincloud of Unknowable Things*. Dorset: Archive Publishing.
- Grann, L. (2025). Archetypal Play: Contemporary Video Gaming as a Playground for Interactive Individuation. In J.J. Dillon (Ed.), *Complex and Archetype*, (pp. 113–136). Cham: Palgrave Macmillan.
- Haaken, J.K., & O'Neill, M. (2014). Moving Images: psychoanalytically informed visual methods in documenting the lives of women migrants and asylum seekers. *Journal of Health Psychology*, 19(1), 79–89.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- Hattenstone, S. (2017, October 7). 'After, I feel ecstatic and emotional': could virtual reality replace therapy? *The Guardian*. Retrieved 06/06/2026. <https://www.theguardian.com/technology/2017/oct/07/virtual-reality-acrophobia-paranoia-fear-of-flying-ptsd-depression-mental-health>
- Hauke, C. (2009). Turning on and Tuning Out: new technology, image, analysis. *Journal of Analytical Psychology*, 54, 43–60.
- Ho, J.T., Krummenacher, P., Lesur, M.R., Saetta, G. and Lenggenhager, B. (2022). Real Bodies Not Required? Placebo Analgesia and Pain Perception in Immersive Virtual and Augmented Reality. *The Journal of Pain*, 23(4), 625–640.
- Hockley, L. (2014). *Somatic Cinema*. London: Routledge.
- Hougham, R. and Jones, B. (Eds.) *Dramatherapy*. London: Palgrave.
- Howe, A. (2022). Active Imagination and *The Legend of Zelda*: an unlikely source of modern mythology. *Psychological Perspectives*, 65(3–4), 436–445.
- Huizinga, J. (1949). *Homo Ludens: A Study of the Play-Element in Culture*. London: Routledge & Kegan Paul.
- Huskinson, L. (2013). *Architecture and the Mimetic Self*. Abingdon: Routledge.

- Jung, C.G. (1989). *Memories, Dreams, Reflections*. Aniela Jaffé (Ed.); Richard & Clare Winston (Trans.) New York: Vintage Books.
- Jung, C.G. (1973). *The Collected Works of C.G. Jung, vol. 2: Experimental Researches*. Sir Herbert Read, Michael Fordham, Gerhard Adler & William McGuire, (Eds.). R.F.C. Hull (Trans). London: Routledge & Kegan Paul.
- Jung, C.G. (1966/1978). *The Collected Works of C.G. Jung, vol. 15: The Spirit in Man, Art, and Literature*. Princeton, N.J.: Princeton University Press.
- Jung, C.G. (1959/1978). *The Collected Works of C.G. Jung, vol. 9 part 11: Aion: Researches into the Phenomenology of the Self*. Princeton, N.J.: Princeton University Press.
- Jung, C.G. (1954/1960). On the Nature of the Psyche. In *The Collected Works of C.G. Jung, vol. 8: The Structure and Dynamics of the Psyche*, (pp. 159–234). London: Routledge & Kagan Paul.
- Jung, C.G. (1954/1959). The Psychology of the Trickster Figure. In *The Collected Works of C.G. Jung, vol. 9 part 1: The Archetypes and the Collective Unconscious*, (pp. 255–272). London: Routledge & Kegan Paul.
- Jung, C.G. (1953). *The Collected Works of C.G. Jung, vol. 12: Psychology and Alchemy*. London: Routledge & Kegan Paul.
- Jung, C.G. (1952/1960). Synchronicity: an acausal connecting principle. In *The Collected Works of C.G. Jung, vol. 8: The Structure and Dynamics of the Psyche*, (pp. 417–531). London: Routledge & Kegan Paul.
- Jung, C.G. (1950/1989). Foreword to *The I Ching*. In *The Collected Works of C.G. Jung, vol. 11: Psychology and Religion: West and East*, (pp. 589–608). Princeton, N.J.: Princeton University Press.
- Jung, C.G. (1950/1966). Psychology and Literature. In *The Collected Works of C.G. Jung, vol. 15: The Spirit in Man, Art, and Literature*, (pp. 84–105). Princeton, N.J.: Princeton University Press.
- Jung, C.G. (1923). On the Relation of Analytical Psychology to Poetic Art. *British Journal of Medical Psychology*, 3(3), 213–231.
- Juul, J. (2005). *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.
- Lanier, J. (2017) *Dawn of the New Everything: Encounters with Reality and Virtual Reality*. New York: Henry Holt and Company.
- Lauria, R. (1997). Virtual Reality: an empirical-metaphysical testbed. *Journal of Computer-Mediated Communication*, 3(2), Article JCMC323.
- Loewenthal, D. & Samuels, A. (Eds.) (2014). *Relational Psychotherapy, Psychoanalysis and Counselling*. London: Routledge.
- Lu, K. & Yeoman, A. (2024). Jungian Psycho-Social Studies: *Akira*, Great Thunberg and Archetypal Thematic Analysis (ATA). *International Journal of Jungian Studies*, 16, 77–112.
- Lu, K. (2013). Reply to Thomas Singer. *Psychoanalysis, Culture & Society*, 18, 416–422.

- Lukacs, O. (2026). Psychosociotechnical Imaginaries: encountering AI as the Other. *International Journal of Jungian Studies*, 18(2).
- McNiff, S. (2018). Philosophical and Practical Foundations of Artistic Inquiry. In P. Leavy (Ed.), *Handbook of Arts-Based Research*, (pp. 22–36). London: The Guilford.
- McVeigh-Schultz, J. and Isbister, K. (2021). The Case for ‘Weird Social’ in VR/XR: A Vision of Social Superpowers Beyond Meatspace. *CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI EA ’21)*, (pp. 1–10). New York: Association for Computing Machinery.
- McWhirter, A. (2017). Pokémon GO and No Man’s Sky: sandbox gaming’s next level in tech-heavy society. In *International Journal of Jungian Studies*, 9(1), 66–71.
- Murray, J.H. (1997). *Hamlet on the Holodeck*. New York: Free Press.
- Osimo, S.A., Pizarro, R., Spanlang, B., and Slater, M. (2015). Conversations between self and self as Sigmund Freud—A virtual body ownership paradigm for self counselling. *Scientific Reports*, 5(1), Article 13899.
- Otto, R. (1917/1980). *The Idea of the Holy*. J.W. Harvey (Trans). London: Oxford University Press.
- Peck, T.C., Seinfeld, S., Aglioti, S.M. and Slater, M. (2013). Putting yourself in the skin of a black avatar reduces implicit racial bias. *Conscious Cognition*, 22, 779–787.
- Pedwell, C. and Stowe, E. (2024). What does Lauren Berlant Teach Us About Networked Affect? *Capacious: Journal for Emerging Affect Inquiry*, 3(2), 1–21.
- Power, P. and Corchnoy, S. (2024). The World of Gaming and Jungian Analysis. *Psychological Perspectives*, 67(1–2), 1–10.
- Rossi, C., Frisone, F., Riva, G., and Osmano, O. (2025). Virtual Meets Reality: a psychodynamic perspective on immersive technologies. *Clinical Neuropsychiatry*, 22(4), 320–326.
- Rowland, S. (2005). *Jung as a Writer*. London: Routledge.
- Rowland, S. and Weishaus, J. (2021). *Jungian Arts-Based Research and ‘The Nuclear Enchantment of New Mexico’*. London: Routledge.
- Ryan, M.-L. (2001). *Narrative as Virtual Reality*. Baltimore: Johns Hopkins University Press.
- Saban, M. and Brown, R.S. (2026). *The Relational Jung*. London: Routledge.
- Saban, M. (2019). ‘Two Souls Alas’. Asheville, NC: Chiron Publications.
- Samuels, A. (2010). The Transcendent Function and Politics: NO! *Journal of Analytical Psychology*, 55(2), 241–253.
- Samuels, A. (1985). *Jung and the Post-Jungians*. London: Routledge.
- Singer, T. (2013). Response to Kevin Lu’s “Can individual psychology explain social phenomena? an appraisal of the theory of cultural complexes”. *Psychoanalysis, Culture & Society*, 18, 405–415.
- Slater, M., Neyret, S., Johnston, T., Iruretagoyena, G., de la Campa Crespo, M.A., Alabèrnia-Segura, M., Spanlang, B., and Feixas, G. (2019). An experimental study of a virtual

- reality counselling paradigm using embodied self-dialogue. *Scientific Reports*, 9(1), Article 10903.
- Slater, M. and Sanchez-Vives, M.V. (2023). A Plastic Virtual Self: how virtual reality can be transforming. In A.J.T. Alsmith and M.R. Longo (Eds.), *The Routledge Handbook of Bodily Awareness*, (pp. 459–477). London: Routledge.
- Soreanu, R. & Minozzo, A. (2024). Manifesto for infrastructural thinking: living with psychoanalysis in a glitch. *Psychoanalysis, Culture & Society*, 29, 323–342.
- Stephenson, C.E. (Ed.) (2014). *Jung and Moreno*. London: Routledge.
- Turner, V. (1982). *From Ritual to Theatre*. New York: PAJ Publications.
- Turner, V. (1967). Betwixt and Between: the liminal period in *rites de passage*. In *The Forest of Symbols*, (pp. 93–111). Ithaca: Cornell University Press.
- van der Kolk, B. (2015). *The Body Keeps the Score*. London: Penguin Books.
- von der Heiden, J.M., Braun, B., Müller, K.W. And Egloff, B. (2019). The Association Between Video Gaming and Psychological Functioning. *Frontiers in Psychology*, 10, Article 1731.
- Yeoman, A. (1998). *Now or Neverland*. Toronto: Inner City Books.
- Winnicott, D.W. (1971/2005). *Playing and Reality*. London: Routledge.
- Woodman, M. (1985). *The Pregnant Virgin*. Toronto: Inner City Books.

12.1 Media References

- Blade & Sorcery* (2018). Developed by WarpFrog [VR Video game]
- Batman: Arkham Shadow* (2024). Developed by Camouflaj [VR video game]
- Conscious Existence—a journey within*. (2019). Developed by M. Zimmerman [VR Experience]
- Diablo* (1997). Developed by Blizzard North [Video game]
- Dreambound* (2026). Developed by GoodSoup [VR Video game]
- Garden Tend* (2026). Developed by Theory Studios [VR video game]
- Gravity Sketch* (2017). Developed by Gravity Sketch [VR Software]
- Half-Life: Alyx* (2020). Developed by Valve [VR video game]
- I Am Cat* (2024). Developed by New Folder Games Ltd [VR video game]
- Layers of Fear* (2019). Developed by Incuvo and Bloober Team [VR video game]
- Maestro* (2024). Developed by Double Jack [VR Video game]
- Open Brush* (2021). Developed by Icosa Foundation [VR Software]
- Soul Paint* (2024). By Sarah Ticho and Niki Smit [VR experience]
- Titans Clinic* (2024). Developed by New Folder Games Ltd [VR video game]
- VRChat* (2017). Developed by VRChat Inc. [VR Video game]
- Wonder. VR* (2025). Developed by Chronicle Studios LLC [VR video game]