

# The Problem with Immersion

Nick Alexander M.Des.

Ontario College of Art and Design (OCAD) University  
Toronto, Canada  
nick@nickalexander.ca

## Abstract

Existing terminology is inadequate for the study of immersive design theory. This paper proposes alternatives for the catch-all term “immersion” and suggests a structure for reliably deploying immersive practice. Absorb/engross replaces the general use of “immersion”, the distinction between engrossment by form and engrossment by transportation is highlighted, and *embodied praesence* is proposed as a term that engages with the sublime experience of an alternate reality that is at the heart of immersive design practice.

## Keywords

Absorption, communitas, embodiment, engrossment, experience, immersion, praesence, presence

## Introduction

“Immersion” is not not a term that is sufficient for design or analysis of an immersive practice. A glance at Webster’s dictionary sees “immersion” defined as “the act of immersing or the state of being immersed”; “immerse” is defined primarily as “to plunge into something that surrounds or covers” and secondarily as “engross, absorb”. In art and design disciplines terms like *immerse*, *immersed* and *immersion* are all but meaningless. At best, definitions differ between disciplines. Some examples of the various definitions of immersion encountered while examining disparate disciplines include:

- “...the player assuming the identity of the character by pretending to believe her identity only consists of the diegetic roles” [1] from role-playing
- considering an experience immersive because it “feels inhabitable” [2] from theme park design
- an experience ““so true to life that they could be confused with reality” [3] from panoramas
- an experience in which “you can drill down as deeply as you like about anything you care to” [4] from transmedia properties

Outside of art and design, immersion has definitions that further confuse its meaning; for example, in educational contexts, immersion is a methodology that emphasizes “that learning occurs as a function of its context” [5]. Its

meaning has been so obscured that it has become an advertising buzzword, signifying nothing (Fig 1).



Figure 1: an advertisement using the term “immersive” uncritically. (NVidia 2018)

In order to effectively explore immersive design as a distinct discipline it is necessary to invent new terminology to refer to the core phenomenon undergone by a participant in an immersive experience. Since “engross” and “absorb” are often used interchangeably with “immerse”, any experience that might be called engrossing or absorbing might be considered. Figure 2 lays out a series of example experiences that could be called immersive on a scale drawn from Milgram’s Taxonomy [6] of real to virtual environments laid out against a scale of physical vs conceptual methods of engrossment. These experiences are fundamentally different, but share commonalities in how their participants are expected to receive them.

Kendall L. Walton’s theory of make-believe describes being “caught up in a story” as an experience in which the player is made to “participate psychologically in a game in which the story (or play or painting) is a prop” [7]. This psychological participation is the kernel of the immersive experience — Walton’s choice of the term “caught up” evokes the notion of “transportation” that is the foundation of many other thinkers’ definitions, and a core component of the sublime state of total immersion. Dunne and Raby use Walton’s theory of make-believe to discuss the act that takes place when readers take on the building of an imaginary world as they participate in a story. “It takes imaginative effort but the result is the viewer or reader takes ownership of the idea, and each experience is different” [8]. *Immediate art*, described by Mike Pohjola, is a category of art that “is experienced as it is created and has no use for the division between performers and

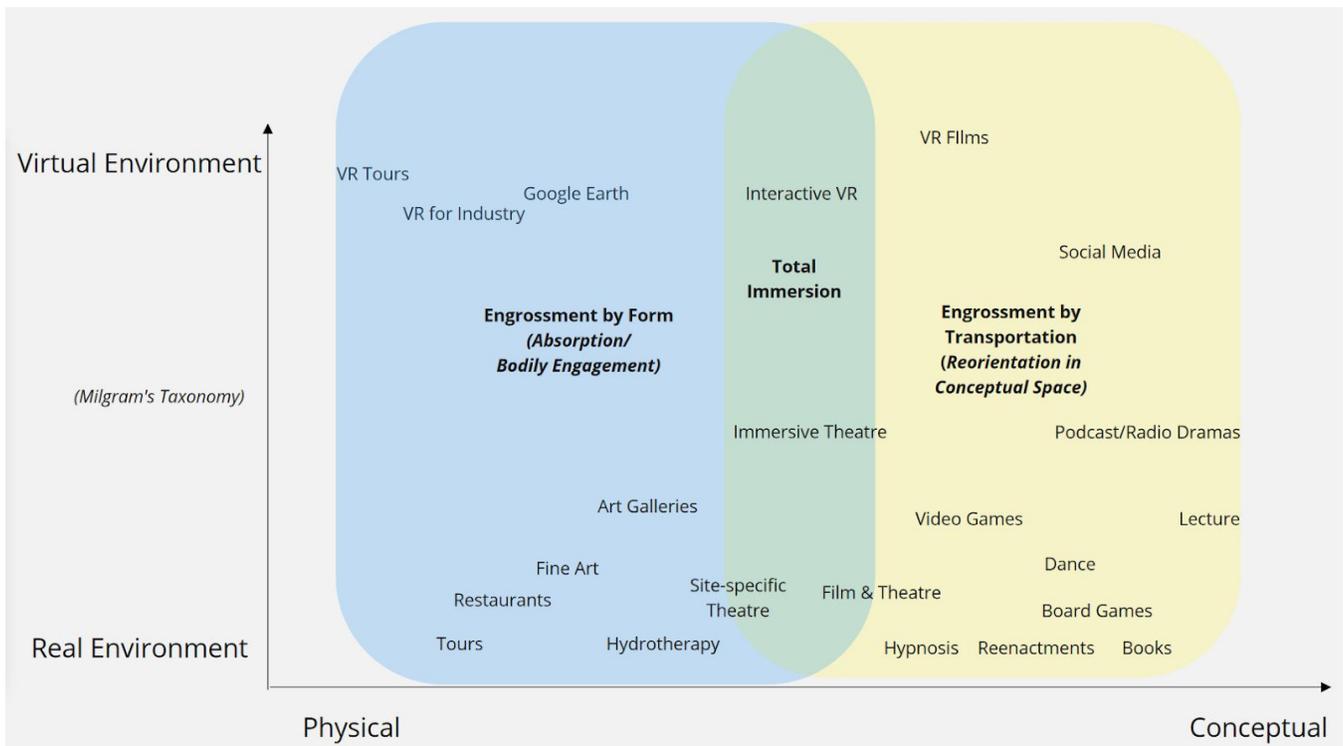


Figure 2: Engrossing experiences by means of engrossment

audience” [9]. He uses musical jams and parties as examples, and particularly highlights role-playing games as works of immediate art. He describes, citing Hakim Bey, all experiences as being mediated to some degree, with immediate art being characterised by engaging “immediately (at once) & immediately (without mediation).” The sentiment of a unique experience generated by each participant is echoed by theatre theorist Josephine Machon in her explanation of what it means to be *praesent*: “The live performance of the work is fleeting and only of the moment, never to be repeated in any form, yet it also lasts in the receiver’s embodied memory of the event, a pleasurable and/or disquieting impression that remains.” [10]

This notion of *praesence* — translated by Machon as “being at hand” [Ibid] — is a cornerstone of immersive practice. A participant should be undergoing a unique experience defined largely by their own experience of it. Gordon Calleja in his *Player Involvement Model* describes a player’s *involvement* in a video game experience — that is, the degree to which a player simultaneously experiences themselves as being present in a video game’s virtual space as well as present in their real physical location — as being based on a player’s cognitive effort. An experience that is ergodic (an experience that will generate a different result based on a different input) is defined by the cognitive effort placed into it by a player, which includes engaged inactivity (such as passively considering the experience). A non-ergodic experience, such as a film that will not

change regardless of the cognitive effort invested in it, cannot be immersive as it does not engender *praesence*.

Calleja’s involvement can be thought of as being synonymous with *embodiment*, a core tenet of immersion theory in other disciplines. Embodiment is described by David Crouch as “a means of grasping the world and making sense of what it feels like... in a process of ‘making sense’” [11]. According to Adriana de Souza e Silva embodiment is required for experiential learning. Machon declares that “immersive practice is, and must be, and embodied event” [12].

*Total immersion* [13] is Machon’s term for the psychological state characterised by the experience of *engrossment by form* and *engrossment by transportation* simultaneously. Engrossment by form (also called *immersion as absorption* by Machon, and described by her as “bodily engagement”) occurs when a participant is engaged in a task that requires focus to the point where they are engrossed/absorbed and lose track of their embodiment in their physical space. An example of engrossment by form is the player of a crossword losing track of time while they complete the puzzle. Engrossment by transportation (also described by Machon as “reorientation in conceptual space”) involves the participant being reoriented in another place through the act of imagining, such as what might occur when an attendee at the Wizarding World of Harry Potter begins to believe that they are in the storyworld of the fiction rather

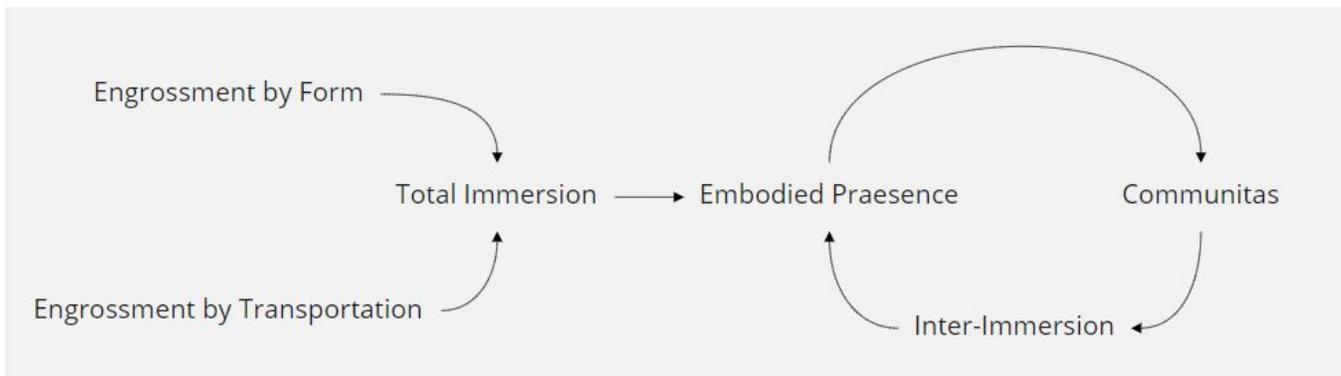


Figure 3: *Embodied praesence* sustained through *communitas*

than a guest at a theme park. When an experience brings the participant both forms of engrossment simultaneously, *total immersion* occurs.

In order to effectively induce a truly immersive experience in a participant, an experience needs to be a work of immediate art that exhibits *praesence* and invites participants to be embodied inside it. The participant must accept this invitation, and then take a step beyond Machon’s total immersion into a state that escapes easy definition. This is the phenomenon at the heart of the truly immersive experience, and it is the thing that most defies description.

This phenomenon is, perhaps, why immersion has been difficult to pin down as having any single clear definition. Dwight Conquergood, writing about performance studies, suggests that there are “nonserious ways of knowing that dominant culture neglects, excludes, represses, or simply fails to recognize” [14]. He quotes Kenneth Burke:

The [written] record is usually but a fragment of the expression (as the written word omits all telltale record of gesture and tonality; and not only may our “literacy” keep us from missing the omissions, it may blunt us to the appreciation of tone and gesture, so that even when we witness the full expression, we note only those aspects of it that can be written down). [15]

At the core of a truly immersive experience is the sublime and uncanny experience of being transported, body and soul, into an alternate-reality space where the rules of the experience overrule those of real life; where the participant can willingly forget for a time that they are participating in a fiction, and believe instead that the rules of the experience are the rules of reality. This is a state of being that I refer to as *embodied praesence*. The actual mechanisms, physical and psychological, experienced by a participant in a truly immersive experience are difficult to capture through literature, and the research required to do so is outside the scope of this paper.

My term — *embodied praesence* — can be used synonymously with Machon’s total immersion, but it is shorthand not only for the simultaneous applications of engrossment by form, transportation, embodied experience, and Machon’s *praesence*, but also for the ineffable

experience of willingly putting aside the rules of reality to participate in the rules of an alternate one while simultaneously choosing to forget that one has done so. To induce the experience of *embodied praesence* in participants should be the goal of the designer of any so-called immersive piece, as it is this sublime and uncanny experience that cannot be replicated in any non-ergodic medium.

A concept highlighted by Machon as necessary to immersion is *communitas*, summarized as the ability of immersive practice to “encourage individuals to invest in each other as much as the work” [16]. Immersion occurs because a story-world “feels inhabitable - as detailed as the real world and shared with others as a sort of imaginary habitus” [17] according to Abby Waysdorf and Sijn Reijnders, theme park scholars. Mike Pohjola, in examining communities of role-players, identifies a state he calls *inter-immersion*:

As the player reaches the inter-immersive state, she starts to forget she is just pretending to believe it is all real. She acts as if she really believes the diegesis, and when everybody else does the same and reacts to each other’s beliefs (instead of the pretensions), they forget they are just pretending and start to really believe. [18]

A sense of *communitas*, then, enhances the phenomenon of *embodied praesence*. Engagement with the experience becomes a form of performance held for the self as well as the other participants, who support one another and enhance the experience with a shared engrossment that reinforces the engrossment of others. The notion that the rules of the world ought to be set aside for the duration of the experience no longer need be held by an individual; it becomes a notion held and supported by a community. It behooves a designer of an immersive experience to induce a sense of *communitas* among participants, whose shared experience of *embodied praesence* may lead to inter-immersion among other participants and ultimately a stronger sense of immersion.

An immersive experience can be generated and sustained in an ergodic medium by invoking the experiences of engrossment by form and engrossment by transportation in a participant through engagement with an

activity requiring embodiment and a narrative or setting allowing for transportation to occur (see Fig 3). Once total immersion is reached, the sublime state of *embodied praesence* can be sustained through an experience that engenders a sense of *communitas* among the participants, whose shared experience allows for inter-immersion that strengthens the experience of *embodied praesence*.

## Conclusion

A truly immersive experience is one that engenders sublime transportation. It can be generated by placing the participant in an experience that combines engrossment by form and engrossment by transportation, and then supported by a shared communal experience that allows multiple participants to strengthen one another's experiences through inter-immersion. "Immerse", in its common usage as synonymous with "absorb" or "engross", should be used sparingly during discourse in the discipline of immersive design. To avoid confusion and further muddying of the term, I propose *engrossment by form* and *engrossment by transportation* to refer to the mechanisms by which an experience engrosses its participant, *total immersion* to refer to both forms of engrossment applied simultaneously, and *embodied praesence* to refer to the sublime experience of transcending the rules of reality to exist among new ones for the duration of the experience.

## Acknowledgements

I would like to express my very great appreciation to Cindy Poremba who offered invaluable guidance and humoured me as I researched something so frivolous as immersion.

I would also like to thank Judith Doyle and Haru Hyunkyung Ji whose advice and encouragement I could not have done without.

## References

- [1] Pohjola, Mike. "Autonomous Identities: Immersion as a Tool for Exploring, Empowering and Emancipating Identities." Edited by Montola & Stenros. *Beyond Role and Play: Tools, Toys and Theory for Harnessing Imagination*, 2004, 81–96.
- [2] Waysdorf, Abby, and Stijn Reijnders. "Immersion, Authenticity and the Theme Park as Social Space: Experiencing the Wizarding World of Harry Potter." *International Journal of Cultural Studies* 21, no. 2 (September 2016): 173–88. <https://doi.org/10.1177/1367877916674751>.
- [3] Comment, Bernard. *The Panorama*. London: Reaktion Books, 1999. pp. 1-27
- [4] Rose, Frank. *The Art of Immersion: How the Digital Generation Is Remaking Hollywood, Madison Avenue, and the Way We Tell Stories*. New York: W.W. Norton & Co., 2012.
- [5] De Souza e Silva, A.. "Hybrid Reality Games Reframed: Potential Uses in Educational Contexts." *Games and Culture* 1,

- no. 3 (January 2006): 231–51. <https://doi.org/10.1177/1555412006290443>.
- [6] Milgram, Paul, and Fumio Kishino. "A Taxonomy of Mixed Reality Visual Displays." *IEICE TRANS. INF. & SYST, E77-D*, no. 12, 12 Dec. 1994, pp. 1321–1329., [www.alice.id.tue.nl/references/milgram-kishino-1994.pdf](http://www.alice.id.tue.nl/references/milgram-kishino-1994.pdf).
- [7] Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. Erscheinungsort nicht ermittelbar: MIT Press, 2014. 90.
- [8] Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. Erscheinungsort nicht ermittelbar: MIT Press, 2014. 91
- [9] Pohjola, Mike. "Autonomous Identities: Immersion as a Tool for Exploring, Empowering and Emancipating Identities." Edited by Montola & Stenros. *Beyond Role and Play: Tools, Toys and Theory for Harnessing Imagination*, 2004, 81–96.
- [10] Machon, Josephine. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*. Palgrave Macmillan, 2013. 44
- [11] Crouch, David. "Spatialities and the Feeling of Doing." *Social & Cultural Geography* 2, no. 1 (January 2001): <https://doi.org/10.1080/14649360122124>. 62.
- [12] Machon, Josephine. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*. Palgrave Macmillan, 2013. 83.
- [13] Machon, Josephine. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*. Palgrave Macmillan, 2013. 63
- [14] Conquergood, Dwight. "Performance Studies: Interventions and Radical Research." *TDR/The Drama Review* 46, no. 2 (2002): 145–56. <https://doi.org/10.1162/105420402320980550>. 146
- [15] Conquergood, Dwight. "Performance Studies: Interventions and Radical Research." *TDR/The Drama Review* 46, no. 2 (2002): 145–56. <https://doi.org/10.1162/105420402320980550>. 146-147.
- [16] Machon, Josephine. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*. Palgrave Macmillan, 2013. 85.
- [17] Waysdorf, Abby, and Stijn Reijnders. "Immersion, Authenticity and the Theme Park as Social Space: Experiencing the Wizarding World of Harry Potter." *International Journal of Cultural Studies* 21, no. 2 (September 2016): 177
- [18] Pohjola, Mike. "Autonomous Identities: Immersion as a Tool for Exploring, Empowering and Emancipating Identities." Edited by Montola & Stenros. *Beyond Role and Play: Tools, Toys and Theory for Harnessing Imagination*, 2004, 90.

## Bibliography

- Calleja, Gordon. *In-Game: from Immersion to Incorporation*. MIT Press, 2011.
- Comment, Bernard. *The Panorama*. London: Reaktion Books, 1999. pp. 1-27
- Conquergood, Dwight. "Performance Studies: Interventions and Radical Research." *TDR/The Drama Review* 46, no. 2 (2002): 145–56. <https://doi.org/10.1162/105420402320980550>.
- Crouch, David. "Spatialities and the Feeling of Doing." *Social & Cultural Geography* 2, no. 1 (January 2001): 61–75. <https://doi.org/10.1080/14649360122124>.

De Souza e Silva, A.. “Hybrid Reality Games Reframed: Potential Uses in Educational Contexts.” *Games and Culture* 1, no. 3 (January 2006): 231–51.  
<https://doi.org/10.1177/1555412006290443>.

Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. Erscheinungsort nicht ermittelbar: MIT Press, 2014.

Machon, Josephine. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*. Palgrave Macmillan, 2013.

Milgram, Paul, and Fumio Kishino. “A Taxonomy of Mixed Reality Visual Displays.” *IEICE TRANS. INF. & SYST, E77-D*, no. 12, 12 Dec. 1994, pp. 1321–1329.,  
[www.alice.id.tue.nl/references/milgram-kishino-1994.pdf](http://www.alice.id.tue.nl/references/milgram-kishino-1994.pdf).

Pohjola, Mike. “Autonomous Identities: Immersion as a Tool for Exploring, Empowering and Emancipating Identities” Montola & Stenros (ed.) *Beyond Role and Play: tools, toys and theory for harnessing imagination*. 2004, pp 81-96.

Rose, Frank. *The Art of Immersion: How the Digital Generation Is Remaking Hollywood, Madison Avenue, and the Way We Tell Stories*. New York: W.W. Norton & Co., 2012.

Waysdorf, Abby, and Stijn Reijnders. “Immersion, Authenticity and the Theme Park as Social Space: Experiencing the Wizarding World of Harry Potter.” *International Journal of Cultural Studies* 21, no. 2 (September 2016): 173–88.  
<https://doi.org/10.1177/1367877916674751>.

## Author Biography

Nick Alexander is a director, writer, and mixed reality interaction designer specializing in uncanny immersive experiences. A graduate of the Ontario College of Art and Design University (OCADU)’s Digital Futures graduate program and York University’s School of the Arts, Media, Performance and Design, Nick has created escape games at Casa Loma, immersive theatre as co-founder of Truesight Collective, and mixed reality worlds at the National Film Board of Canada. Their practice situates audience members as active participants inside immersive fictions and asks them to engage in play in altered realities. By inhabiting fictional worlds we might, perhaps, come to better understand the real one. Their website is [nickalexander.ca](http://nickalexander.ca).