

Embodying Environmental Relationship: A Comparative Ecocritical Analysis of *Journey* and *Unravel*

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Abstract

Departing from Jane Suzanne Carroll's contention that "Landscapes are at once geographical and historical, natural and cultural, experienced and represented, and present a spatial interface between human culture and physical terrain" (2), this article draws on game studies (Aarseth; Sicart; Yee; Isbister) and on discussions of game design (Schell; Chen; Sahlin) to analyse the landscape and avatar design of *Journey* and *Unravel*. Developing the term *semiotic register* as an analytical lens, the article seeks to pinpoint the means by which the two games move the player to adopt distinctly different attitudes and relationships to the games' natural scenes. The article starts by positioning the study in relation to previous ecocritical analyses of games (Backe; Bianchi; Bohunicky; Chang; Lehner; Parham) and by discussing some aspects of indirect player management before analysing and comparing the two games in more detail.

Keywords: Ecocritical game analysis, game design, semiotic register, player-to-landscape relationship, embodiment.

Resumen

Alejándose de la afirmación de Suzanne Carroll de que "Los paisajes son al mismo tiempo geográficos e históricos, naturales y culturales, experimentados y representados, y presentan una interfaz espacial entre la cultura humana y el terreno físico" (2), este artículo se basa en los estudios sobre videojuegos (Aarseth; Sicart; Yee; Isbister) y en los debates sobre el diseño de videojuegos (Schell; Chen; Sahlin) para analizar el diseño de los paisajes y de los avatares de *Journey* y *Unravel*. Desarrollando el término *registro semiótico* como lente analítica, el artículo busca precisar los medios por los que ambos juegos llevan al jugador a adoptar actitudes y relaciones con las escenas naturales de los juegos claramente diferentes. El artículo comienza posicionando el estudio en relación con análisis ecocríticos ya existentes de juegos (Backe; Bianchi; Bohunicky; Chang; Lehner; Parham) y discutiendo algunos aspectos de la gestión indirecta del jugador antes de analizar y comparar los dos juegos en más detalle.

Palabras clave: Análisis ecocrítico del juego, diseño de juego, registro semiótico, relación jugador-paisaje, personificación.

Alenda Y. Chang, who has done ground-breaking work on adapting ecocritical thinking to the study of games, has found that many games treat game environments and the representation of natural habitats in an instrumentalist fashion, as is the case in most resource management games (*Playing Nature*, *The Virtual 9*), where the player, via the avatar, harvests and modifies the environment in accordance with player needs. This design is in alignment with the Western cultural tendency to privilege the human over

other life forms (anthropocentrism), a principle well known from ecocritical discussions of artistic and mediated representations of natural landscapes and the environment in other media. However, some videogames display the potential of games to invite play that questions the habitual anthropocentric player-to-environment perspective, as does for instance Thatgamecompany's *Flower* (2009), which effectively positions the player as the wind on which multi-coloured flower petals dance. As Chang notes: "Unlike most games, that offer players human, or at least humanoid avatars, *Flower* destabilizes not only player corporeality but also player agency and perspective" (*Playing Nature: Ecology* 33). The novel player perspective in *Flower* is part of a deliberate and long-term strategy by Thatgamecompany's lead designer Jenova Chen to broaden the emotional palette available through gaming ("Designing *Journey*", "From *Journey*").

Calling for new kinds of gameplay challenges that are more ecologically aware, Chang holds that game designers "tend to lean heavily on clichéd landscapes, abandoning any attempts at regional specificity for pre-patterned and ultimately generic scenes" and that game design more generally "have yet to develop more sophisticated rules for interaction between players and game environments" ("Playing Nature" 9). Both *Journey* (Thatgamecompany) and *Unravel* (Coldwood Interactive) are interesting objects of analysis in this regard, since they undermine the habitual anthropocentric orientation of the gameplay¹ by reconfiguring the relationship between player and landscape in novel ways. Both games also foreground natural landscapes in the games' design. The games' landscapes differ in style and dimensions, but both games rely on the representation of natural features to manage player emotion, while exerting narrative control over the player's perspective to orient the player in a specific relationship to the games' natural scenes.

Departing from Jane Suzanne Carroll's contention that "Landscapes are at once geographical and historical, natural and cultural, experienced and represented, and present a spatial interface between human culture and physical terrain" (2), this article draws on game studies (Aarseth; Sicart; Yee; Isbister) and on discussions of game design (Schell; Chen; Sahlin) to analyse the landscape and avatar design of *Journey* and *Unravel*. Developing the term *semiotic register* as an analytical lens, the article seeks to pin-point the means by which the two games move the player to adopt distinctly different attitudes and relationships to the games' natural scenes. The article starts by positioning the study in relation to previous ecocritical analyses of games (Backe; Bianchi; Bohunicky; Chang; Lehner; Parham) and by discussing some aspects of indirect player management before analysing and comparing the two games in more detail.

Ecocritical Game Design

There is a long-honed understanding within the field of ecocriticism that artistic representations of nature and the environment are mediated expressions coloured by

¹ Gameplay here refers to "the game dynamics emerging from the interplay between rules and game geography" (Egenfeldt-Nielsen et al. 127).

human interests and mental figures. From an initial, literary emphasis on nature writing and romantic poetry, the field has developed to include a broader engagement with all types of artworks and environments, including urban and artificial landscapes (Slovic). In 2012, Greg Garrard offered “the widest definition of the subject of ecocriticism [as] the study of the relationship of the human and the non-human, throughout cultural history and entailing critical analysis of the term ‘human’ itself” (5), thus including the theoretical advances of the posthuman debate in his conception of ecocriticism. More recently, Donna Haraway’s arguments for an understanding of interspecies relationships as entangled forms of becoming through kinship (*When Species; Staying with*) has further refined the material orientation of the field.

Ecocritical perspectives have transference value to game studies, providing that they are appropriately framed in media specific ways. Drawing on Haraway, Melissa Bianchi has argued for instance, that the play mechanics of *Octodad: Dadliest Catch* (Young horses) and Nintendo’s *Splatoon*, which require that the player navigates as cephaloid characters, enable players “to not only think alternative kinships, but also enact making them” (141). She further suggests that the challenge of working the unfamiliar controls of *Octodad*, which forces the player to control one or two of his tentacles at once, with a constant need to switch between tentacles to accomplish what to humans are simple tasks, “simulates the challenge of understanding the non-human” (63).

While interesting work has been done, there is still a need for ecocritically informed game analysis. As noted by Chang and Parham in 2017, “environmental criticism has been little represented in game studies thus far,” offering as their explanation both an alleged humanist scepticism towards technology and a perceived “fetishism” of the player and the act of play on the part of games scholars “in a way that inevitably denigrates game content and context” (11). Benjamin Abraham and Darshana Jayemanne have additionally called for an engagement with climate change in the industry, arguing that “Even a passing familiarity with the cultural output of the mainstream game industry reveals the startling omission of the issue – with very few games telling stories that engage with climate change and the unfolding ecological crisis” (74).² A further reason for the dearth of environmental engagement within game studies is implicit in Yosef Nguyen’s remark that such engagement requires a critical awareness of the material conditions of gaming that potentially interferes with a sense of fun: “If digital games are to contribute to ecological sustainability, they must be self-reflexive of their participation in ecological harm and signal to players their complicity in that harm as part of the cost of playing and having fun” (20).³

Hans-Joachim Backe has commented that “Ecocriticism of digital games has so far engaged with a rather small corpus of examples, often prescriptively and with a quite limited methodological toolkit” (39). Arguably, these shortcomings are rather a result of the scarcity of the research rather than an indication of the quality of the work undertaken. According to Backe, attention has clustered at either ends of a spectrum,

² *Phone story* (2011) and *Little inferno* (2012) as discussed by Nguyen are evidence of such engagement.

³ Arguably, this challenge extends to multiple consumerist practices, not only that of playing digital games.

focussing either on “overtly ecocritical games” or on “negative extremes in the depiction of the natural environment” (41). How overtly ecocritical a game is may to some extent be an interpretive issue, as well as a factor of the interpreter’s familiarity with the field of ecocriticism. While Backe holds that “a certain degree of accuracy in depicting and simulating the natural environment is essential for games to seriously reflect ecological issues” (48), Chang contends that “games need not be explicitly environmental to have important environmental implications” (*Playing Nature, The Virtual* viii). Backe’s assertion that an ecocritical study of a game would be pointless if there is no engagement with the natural environment in the game also seems at odds with the third ecocritical wave that includes urban landscapes in its field of study. Still, analysing games that simulate natural environments is an obvious ecocritical starting point and the two games analysed here both engage with representations of natural landscapes, foregrounding natural features in the player experience.

The emotional effects of game design have so far been sparingly discussed in the ecocritical study of games, even as Backe has touched on the ecocritical potential of designing for complex emotional player experiences. Drawing on Sicart’s (*The Ethics*) discussion of ethical game design, Backe locates the ecocritical potential of games in “dissonances between gameplay and [representational] semiotics” and in the “tension between game goals and player morals” (46) and argues that games become ethically and ecologically relevant “if they provoke conflict in players by implementing game goals that may clash with a player’s extra-ludic values and beliefs” (46).

Without reference to Sicart, Alexander Lehner has demonstrated the ethical and ecocritical potential of designing for dissonances between gameplay goals and player ethics in his discussion of the adventure-quest game *Shadow of the Colossus* (Team Ico), which opens the possibility for ethical gameplay through the inversion of the trope of the heroic protagonist as the player becomes complicit in the destruction of the natural environment, represented in the game in the form of a series of giants, or colossi (66). While the slaying of the colossi satisfies the game dynamics of heroic play invited by the game, the lingering depiction of the giants’ demise mixes player triumph over mastering the requirements of the game with emotions of guilt and regret. Lehner argues that the “hybrid materiality of fur, stones, and ruins also renders them [the colossi] representatives of the environment”, so that “the player becomes an invader disturbing the creatures’ natural habitats and those habitats’ perfectly content inhabitants to fulfil the narrative premise (i. e. saving the girl)” (67). The game’s undermining of the heroic reward thus creates an emotionally complex gaming experience, which for some players takes on an ecocritical dimension.

The configuration of the game environment as hybrid giants of stone that are ultimately conquered by the player introduces the conception of an agential environment, that actively resists human appropriation. Kyle Matthew Bohunicky has used the term agential landscape in an ecocritical analysis of *Minecraft* (Mojang, 2011), albeit in a different sense. Discussing the crafting interface in the game, he argues that “the entire space of *Minecraft* is a writing technology” and thus that *Minecraft* models ecomposisiton, also in the sense that the game system displays the effects on the in-

game landscape of the players' building activities. "Minecraft models an agential nature that, unlike many digital games, challenges players to develop practices that enable them to survive within [it]," he holds (226). As will become clear, both *Journey* and *Unravel* engage the player in the experience of moving through agential nature, albeit in a sense different from that suggested by Bohunicky.

The present article is interested in how *Journey* and *Unravel* build meaning semiotically through the configuration of the player-to-landscape relationship. Sicart's distinction between a game's procedural "core" and its *semiotic domain* is useful in unravelling this significance (*Beyond Choices*). According to Sicart, a game's semiotic domain unites "all the metaphors, contexts, and cultural practices that wraps around a game's procedural core" and that engages the player by means of "metaphors, audio-visual elements, and the design and incorporation of interpersonal dynamics into the activity of play" (*Beyond Choices* 45). Making Sicart's term analytically usable, this article coins the term *semiotic register*—a term denoting the process by which semiotic signs in games (including the game mechanics and game interface) compile procedurally to represent (clusters of) thematic and cultural meaning to the player.

In its analysis of *Unravel* and *Journey*, this article further uses the terms "game space" and "landscape" to denote subcomponents of what Chang calls the "game environment", which refers somewhat comprehensively to "the apparent virtual worlds presented by art and programming, and specifically to those worlds' ecological implications" (*Playing Nature, The Virtual* vi). The more specific terms of game space and landscape are useful here since the emphasis is on the features of the game landscape both as representations in the semiotic domain and in the ludic topography "presented by art and programming" that the player engages with. On the level of programming, this notion of "game space" builds on Aarseth's narrative theory of games that discusses game worlds in terms of the structures: single room, linear corridor, multicursal labyrinth, hub-shaped quest landscape and open landscape ("A Narrative" 5). In the semiotic domain, landscape is here considered specifically as the representation of natural topographies in the game by aid of metaphors and audio-visual elements, combined with the range of ludic activities the player is invited to engage in within that landscape, all of which suggest that the mediated landscapes are also carriers of cultural and symbolic meanings. What the article seeks to demonstrate is that the player-to-landscape relationship in the two games is comprised of both thematic and cultural semiotic registers that combine to position the player in a specific relationship to, and with a particular attitude towards, the games' landscape features. Before moving on to the analysis of landscape and avatar design in *Journey* and *Unravel*, a brief discussion of game design is helpful.

Player Management Through Indirect Control

In a Game UX Summit'19 keynote, Chen argues that while the film industry offers a wide range of emotional experiences through established genres, the output of the game industry has so far tended to offer its players a limited emotional spectrum of vicarious experience and one that is dominated by what Chen terms "strong and primal" emotions

(“From *Journey*”). The game industry would be emotionally healthier if it could develop games that cater to a wider emotional bandwidth, he argues, such as genuinely romantic games, family games, and games with significant dramas developed through gameplay. Focusing on providing their players with feelings of empowerment, designers have catered in particular to the emotional desires of juvenile players, whose power and influence may be restricted in real life, Chen notes. The design of *Journey* grew from Chen’s own search for games that might provide different, and more mature, kinds of emotional experience, of which he found very few (“Designing *Journey*”).

In line with Chen, Katherine Isbister (2017) argues that games are “intentionally designed emotional experience” and discusses the “building blocks” of such emotional design (1). She emphasises meaningful choices, flow, social emotions, avatars, non-player characters and character customization, but surprisingly does not discuss the potential of sound and music to emotionally affect the player as one of her “building blocks” of emotional design (even if she intermittently comments on the effects of music in individual games). Suzanne K. Langer has argued that “music is the morphology of feeling” (8) and Chen remarks that *Journey* was moulded around the musical theme composed by Austin Wintory and that he generally develops his games by first prototyping music because “music is the most effective and powerful medium that can create emotions” (“Designing *Journey*”). The lead designer of *Unravel*, Martin Sahlin (2019), also cites a piece of music as the inspirational starting point for the game, namely Björk’s “Unravel”, which has the following opening lines: “While you are away my heart comes undone, slowly unravels in a ball of yarn, I will collect it with a grin” – a line representative of the game’s mechanics.

Both games were designed with the emotional quality of the game experience in mind. According to Chen, with *Journey* he aimed to “induce positive emotion between two strangers online”, causing genuine social bonding, while making sure the game could still be played as a single-player game (“Designing *Journey*”). Sahlin notes that *Unravel* was designed to create a feeling of “genuine, deep joy”, after he realised that his games were reaching an extensive audience and started thinking more deeply about the meaning and impact he wanted his games to have.

Videogames, which typically position the player as agent by way of the playable avatar, and which often are mediations of competitive activities, like sports or war, thus featuring scores and competitive conditions, lend themselves well to facilitating the emotion of empowerment (for those who master the game mechanics). Understanding the emotional rhetoric of empowerment-as-domination as a kind of gaming default-position helps explain Chang’s observation (*Playing Nature: Ecology* 9) that the configuration of the relationship between player and game environment most often is one where the player is positioned to “master” both the game and the in-game landscape. In search of a different emotional gaming register, both *Journey* and *Unravel* modify this habitual logic of environmental conquest.

A significant trait of games, as suggested by Espen Aarseth’s term cybertext, is that they are dynamic “text-machines”, the experience and ordering of which unfolds in relationship to player input (*Cybertext*). This means that the player exerts influence over

the unfolding of game events. From a designer perspective, game experiences are equally constituted by the range of player options the designer orchestrates for the player. As Jesse Schell points out, the designer has multiple tools with which to suggest and constrain player behaviour, using both direct (or “forced”) and more indirect (cognitive and psychological) means:

If a clever designer can make a player feel free, when really the player has very few choices, or even no choice at all, then suddenly we have the best of both worlds, the player has the wonderful feeling of freedom, and the designer has managed to economically create an experience with an ideal interest curve and an ideal set of events. (343)

The “clever designer” might accomplish this through the use of what Schell terms “indirect control methods”, such as limiting player choice, establishing goals that directs player activity, or through visual design that directs the players’ line of sight, carefully guiding them through the level without seemingly exerting any form of control. As in film, music and sound may powerfully affect players’ emotions, but only in games can they affect the player’s movement and action. Unique to gaming is also the design of the virtual interface, which is another such indirect control method: “If a player controls a human adventurer, they will try to do certain things. If they control a dragonfly, an elephant, or a Sherman tank, they will try to do very different things” (346). Thus, indirect control works mainly by suggesting certain things to the player, that the player, often subconsciously, accepts.

Positioning the Player as Avatar

The player avatar determines the player’s modes of interaction with the game environment. It positions the player in a specific relationship to this environment, not least through the range of actions and interactions it permits the player to engage in. Avatar design thus comes with ecocritical implications. Rune Klevjer has discussed how the player becomes intuitively attuned to the environment through which the playable avatar moves.

When we play, because the avatar extends the body rather than pure agency or subjectivity, screen space becomes a world that we are subjected to, a place we inhabit and where we struggle for survival. We learn to intuitively judge, like we do in the real world, the opportunities and dangers of the environment. (13)

As the embodiment of the player’s agency in the game world, the avatar positions the player in that world, not only kinaesthetically but also psychologically. The avatar is the player’s environmental stand-in.

Both *Journey* and *Unravel* make use of other-than-human avatars to reshape the habitual gaming rhetoric of anthropocentric mastery. The avatar in *Unravel* is a robed figure with a head band and luminous eyes. Its orange robes and long flowing scarf are suggestive of a Tibetan monk (an interpretation strengthened by the gongs and chanting in the opening soundtrack). While the figure is humanoid, its shape is highly stylised. Significantly, it has no arms and thus cannot grab or hold onto anything. Consequently, the player cannot make use of the landscape in any common, human way, excepting the

avatar's ability to walk. The avatar has no power of speech but communicates through sounding a musical note that may activate in-game information and rewards.

The avatar in *Unravel*, Yarny, is a tiny stick figure wrapped in red yarn, reminiscent of a child's toy. Much of its expressiveness comes from its ability to blink. Sahlin notes that the designer team worked to convey emotion through movement and body language rather than speech, and the absence of spoken language is a design feature shared by the two games. In both games, the avatars apparently have few biological requirements and consequently do not need to harvest the landscape in any materialist sense. In *Journey*, some biological constraints are signalled by the fact that the avatar can perish in the snow, while in *Unravel*, the need to breathe is simulated since Yarny may drown. These biological features are significant in that they cause potential interruptions in the player's advancement in the game. Both avatars are, in principle, gender neutral.

Additionally, both games modify the habitual player-to-landscape relationship by making the avatar small in relation to the natural environment: according to Chen, he was going for "a sense of small" like the feeling of an astronaut in space ("Designing *Journey*"). Yarny is even smaller. The core of the art direction in *Unravel*, Sahlin says, was pursuing the idea that there is beauty in everything if you just look closely enough at ordinary things in a mindful way. The small scale of Yarny and its slow pace facilitate this mindfulness since the avatar comes up very close to things and linger by them. Isbister notes that the technique of shooting at close range creates the illusion of intimacy between the character and viewer and will "amplify identification with the virtual people and situations" (7). Yarny's tiny size brings the player close to the naturalistic scenery in the game and position her in a different relationship to ordinary objects.

According to Isbister, immersion happens as players project themselves into playable avatars on four levels: the visceral, cognitive, social and fantasy levels (11). On the visceral level, the strength and skill accumulated by the player in the game is reflected in the virtual body of the avatar. Undercutting the rhetoric of dominance, both *Journey* and *Unravel* downplay the visceral level of player experience. In *Journey*, the most readily visible token of avatar experience is that the avatar's scarf grows longer and can hold more energy as the player progresses through the game. In *Unravel*, the avatar unravels as it moves through the game world and constantly must collect new bundles of yarn along the way. Other than that, the avatar does not viscerally change in the course of gameplay (apart from turning white in the snow). Player experience and progress is marked by Yarny's collection of a series of crocheted yarn figures, representing old memories, that it sticks on the cover of an old photo album. Both games thus de-emphasize the rhetoric of competition that usually makes the visceral level significant to the gaming experience.

On the cognitive level of gameplay, certain strategies and actions are rewarded over others (Isbister 11). *Unravel*, as a physics-based puzzle platformer, rewards cognitive puzzle solving, where the player makes use of physical objects in the game world. For instance, in an early puzzle the player-as-Yarny must collect apples to drop in an empty well, before pulling a lever to fill the well with water, in order to ride across the watery expanse on the floating apples. Each stage in the procedural logic of this sequence

must be figured out by the player. *Journey* tasks the player with landscape traversal, exploration, and the collection of luminous pieces of cloth. The reward of collecting the cloth is the ability to fly rather than walk across the landscape. In places, flying is necessary for player advancement.

The social level of avatar projection is inhabiting the avatar's social persona to try out social qualities the player may not normally possess (11). In *Unravel*, this social level consists of encounters Yarny has along the way with various insects and animals, such as being carried through the air in the beak of a magpie and chased underground by a lemming – all “social encounters” than a human would not be able to have except vicariously through Yarny. *Unravel* thus explicitly encourages encounters with flora and fauna in ways that depart from a habitual human viewpoint.

In the game's online mode, the players of *Journey* can sound their notes to each other and boost each other's energy through proximity, thus making progression through the game easier for both – a dynamic that for many players facilitate deeply touching experiences of community, cast against the austere and sometimes forbidding desert environment. These three design levels work together to “allow the player to explore alternate fantasy selves though actual in-game performance”, providing a “fantasy level” of experience (13). In both *Journey* and *Unravel*, this “fantasy level” allows the player to experience a (compressed) life-journey, from a perspective where the avatar is dwarfed by the landscape.

Chang has touched on how sprawling game worlds may render the player character a negligible entity, noting that in terms of player relationship to the environment “it matters whether we play as small, middling, or large entities” (*Playing Nature: Ecology* 69). However, she says little about the psychological mechanisms underpinning the effects of avatar scale, which may be explained with reference to experimental studies conducted by Nick Yee into the psychological effect of avatar appearance. In a study, conducted with Bateson, testing whether a taller avatar made players more confident, they found that players with such avatars tended to make higher bids in their own favour, indicating a sense of self confidence (and also, perhaps, an impulse of greed unchecked by humility) (Yee 151). Yee holds that even “subtle manipulations in avatar appearance have dramatic effects on how people interact with each other in virtual worlds. And these effects occur rapidly, fewer than sixty seconds after being in a new digital body” (152). Yee and Bateson further found that the effect of the avatar identification was carried forward into the participants' subsequent real-world choices (153), even if they fail to say anything about the duration of the effect.

Based on this research, the design choice of dwarfing the avatar in relationship to the natural landscape and thus to situate the player in a humbler position relative to it, potentially induces a sense of respect for the natural world that is absent from more anthropocentric game design. Arguably, the device of dwarfing the avatar is also used to great effect in *Shadow of the Colossus*, where the landscape is represented by the colossi that the player participates in destroying. Because *Shadow of the Colossus* simultaneously retains the drive towards dominance common to battle games, there is a clash of emotional registers that the player experiences as unease.

Given the powerful psychological effects of changes in avatar appearance, the design choice in both *Journey* and *Unravel* of not allowing for avatar customisation consequently enables the designers to retain a tighter emotional control over the game experience – a degree of control that is important as both games aim to shape player emotion through design. Yee and Bateson’s findings indicate that when players “learn to intuitively judge” the opportunities and dangers of the in-game environment (Klevjer 13) through virtual embodiment, they are simultaneously shaped by their experiences in the game in a manner that may not be conscious.

However, while both games dwarf their avatars to foreground natural landscapes in the gaming experience, the gameplay of the two games requires the player to adopt widely different attitudes towards, and relationships with, these natural environments. One difference lies along the axis of aesthetic engagement, since both games invite aesthetic experiences of landscape: where, due to the scale and barrenness of the environment, *Journey* leans towards the sublime,⁴ *Unravel*, given its attention to tiny natural detail and picturesque vistas, rather deals in the beautiful (Burke). More significantly, the games invite the player to embody different relationships to landscape in an agential sense, that is, in terms of the range of actions they afford the player through the playable avatar. Thus, the games’ construction of landscape relies on what I here term their semiotic registers, made up of the procedural compilation of semiotic signs into clusters of cultural meaning. I will exemplify what is meant by the concept of semiotic registers in the following.

***Journey*—Landscape as Abstraction**

The ludo-topographic structure of *Journey* is close to Aarseth’s unicursal labyrinth (Farca 5), since the game has a linear route to a final destination (Aarseth’s linear corridor, “A Narrative”) but includes “larger multicursal areas for exploration and task fulfilment” (Farca 11). This narrative structure invites the player to alternately linger in the landscape and progress toward the “destination”: the top of a distant mountain. The player is guided in her navigation through visual cues in the landscape, where the traversal of sand dunes and the exploration of half-buried ruins provide points of interest. Thus, the game smoothly guides player attention through seamless visual design, accomplished in large part by stripping the game environment of visual distractions so that the game’s landscape features implicitly guide and direct player attention.

In the design of *Journey*, Chen sought to instil environmental awe in the player by pitting the avatar in a vast, barren desert landscape. He also modelled the game experience to replicate the emotional curve of what Joseph Campbell terms the archetypal hero’s journey (“Designing *Journey*”). In the game, this emotional curve is created by

⁴ In a discussion of *Journey*, Parham describes the game as “a genuine and complex green representation” and as “Encapsulating just about all of the elements by which [Timothy] Morton describes the ambience of dark ecology,” albeit combined with “the tempering influence of the sublime” (228).

managing player emotion so that, from the mellow beginning, there is a rise of intensity towards the game's end, giving the player a sense of catharsis through transformation. Player emotion is managed both through visual design, through navigational flow and not least by aid of sound effects and visual symbolism.

The opening cut-scene of the game presents several of these semiotically significant elements. The game environment is first introduced through the sound of a whistling wind. As the image gradually dissolves into a vista of glittering desert sand, the sound of gongs and a brief chord of vocals blend with a wistful cello, which accompanies a cut to a pyramidal sand dune, the sun visible behind it. A close-up of the hazy sun blends into a camera pan across a series of tomb-like structures emerging amidst the wind-swept desert sand. As a luminous object falls from the sky, there is a musical crescendo following the luminous object as it races across the sand, before the point of view comes to an abrupt halt and the avatar rises into the frame in the open desert landscape. From that moment, the player is in control of the avatar, which may be moved in any direction in the vast landscape, where the eerie half-buried ruins attract player attention. At game's end, the avatar merges back into the light, suggesting that its life cycle is complete—a narrative arc underscoring the game's spiritual symbolism: the avatar returns into the light—only to begin the journey again.

Making use of stripped-down and stylised landscape features, *Journey* leads its player to continuously engage with a series of archetypal symbols, several of which are introduced in the opening cut-scene: the sun, the stars, the desert, temples, light, and a towering mountain. The gameplay repetitively sends the player avatar through narrow passages, over tall bridges and through gates, all symbolising initiation. At times, the player perspective is locked, in cut scenes, as the avatar rushes through narrow tracts in the landscape. The lack of any in-world flora or fauna underlines the abstract nature of the scenery.

The “spiritual” quality of the game reported by many players is semiotically developed both through the soundtrack (featuring gongs and chanting), the visuals (where light guides player advancement) and through the walking and gliding movement of the avatar in the deliberate staging of an archetypal journey, embodied as a series of symbolic acts. At intervals, cut scenes show the avatar assuming a meditational pose to receive “guidance” from taller, higher order beings that enable advancement in the game. The spiritual or otherworldly quality of the gameplay is enhanced by the avatar's ability to lift off the ground and fly, powered by light accumulated in its scarf, further underlining the disembodied and symbolic nature of the journey. The luminous “codes” or glyphs collected by the avatar to “power” its scarf contributes to the mood of “mystery and awe” that Chen was seeking to convey. Thus, the player of *Journey* is invited to “soar above” the landscape and, being unable to physically touch anything, engages in what is at times an other-than-human embodied experience, given that humans are physically unable to fly.

In this manner, a range of evocative semiotic elements combine in suggestive ways into a semiotic register that denotes a spiritual journey—a unity of meaning accentuated through the archetypal natural forms of the game and the game's sublime aesthetics, as well as through the explorative nature of the gameplay, revolving around the mysterious

and “alien” ruins encountered in the landscape. Thus, while the game’s natural forms are predominantly represented as cross-cultural, archetypal symbols, contributing to the game’s thematic semiotic register, which hints that the gamer is undertaking an inner journey, the semiotic signs representing the journey’s spiritual quality combines into a register suggestive of Asian culture: the robe clad monk, the chanting, the “prayer flags” dispersed in the landscape, the avatar’s meditational pose, the temple gates at journey’s end and the cyclical pattern of the journey itself, alluding to the Buddhist concept of reincarnation.

While *Journey’s* opening scene indicates the cosmic scope of the game’s implied space, it also introduces the concept of death and ruin; a series of murals that the player activates while progressing through the game tells the story of the rise and fall of a great civilisation now buried under the desert sand, the ruins of which the player encounters in the landscape. The murals depict a civilizational trajectory of increasing mechanisation, followed by an overuse of available resources that eventually leads to the civilisation’s downfall. This environmental backstory lies hidden and must be excavated by the player through the pleasurable, flowing gameplay, thus exemplifying the kind of ecocritical awareness called for by Ngyen (2017), since embedded in the pleasure of gameplay there lies hidden a message of player complicity (given the resource requirements of gaming hardware use and production) in an energy- demanding practice that in the long run contributes to ecological harm.

While there is a degree of verisimilitude in the mediation of the avatar’s movements in the desert landscape in that the game controls give the player a kinaesthetic sense of its movement through the sand, the avatar’s momentum in the game world does not comply with the laws of physics: When the avatar moves uphill, the controller vibrates with resistance and movement is slower and more grinding, while sliding downhill induces a sense of flow, but this is not how sand naturally behaves, as it would arrest downward movement. Thus, the flowing movement of the sand is part of the game’s “fantasy level” (Isbister) of experience. “We tried to capture realism” Chen says, “but we tried to capture the realism that we wished” (“Designing *Journey*”).

The meditative, flowing state of the gameplay is encouraged through the soothing music, the sounds of the avatar’s flapping robe and the rushing sounds of sand and wind, kinaesthetically combined with the walking, sliding or floating progression of the avatar through the visually “clean” landscape. Since the avatar lacks arms, the player can only interact with the landscape by moving through it, feeling and seeing the effects of the wind, sand and sun. The natural landscape does not respond to the note sounded by the avatar, as do fellow travellers and the temple structures (by lighting up). The game thus positions the player as the receiver of an at times agential landscape, where, in places, showers of cascading sand or fierce winds prevent player advancement, suggesting the immensity of natural forces, while at the same time acting as barriers of avatar advancement, directing the player along the game’s linear corridor of game narration. The game’s strict narrative control, enforced not least through the game’s environmental elements, imbues the player with a sense of ultimately not having any genuine control

over the “destiny” the game portrays, but of being moved along by forces greater than her own—an at times humbling environmental experience.

***Unravel*—A Sustainable Work Ethic**

Unravel too has a backstory that the player must piece together by navigating the game space as an obstacle course, while gathering mnemonic clues in the game environment. Dispersed in the various locations in the game are photographic memories of a Swedish childhood that the player must collect and assemble in a photo album belonging to an old woman. Player experience and progress is marked by Yarny’s collection of crocheted yarn figures, and by the compilation and “activation” of the photographs in the photo album, as they are retrieved from various locations.

Unravel’s opening cut-scene positions the player inside a living room, a camera tracking towards a grey-haired woman sitting by the dining table in her small cottage. The soundtrack is a melancholy violin, mixed with the sound of chirping birds. Rising to walk upstairs, the woman stops to straighten a photograph of a small child on the wall. A ball of red yarn drops from her knitting basket and rolls under the table, from whence, after a short fade, Yarny emerges. The tiny yarn-wrapped stick figure climbs unto the table, passing an embroidered cushion with a Swedish motto that translates: “Happiness grows from small, simple things”. The cut-scene ends, and the player gains control over Yarny and may explore the, at first, empty photo album. Following a trajectory through the living room, the player-as-Yarny then makes her way outside the house through the “portal” of a photograph and into the woman’s garden. A series of signs connoting childhood makes up the game’s main thematic register: Yarny’s tiny scale, as well as his shape as a toy, are indicative of this. Furthermore, the gameplay follows a trajectory where Yarny leaves the childhood garden, riding a tricycle, to explore the wider landscape, engaging in childhood activities like flying a kite.

As Yarny, the player moves along a 2D plane, traversing a “linear corridor” type of game architecture, while the game’s non-ludic space (Aarseth, “A Narrative” 4) is a 3D perspectival rendition of beautiful scenery that is not static but alive with wind, waves, insects, and animal life. This verisimilitude counteracts the games’ 2D movement options that allow for strict narrative control of player movement. Furthermore, it presents an environment that is alive, agential, and changing, going through its own (also seasonal) processes irrespective of Yarny’s individual project. The effect is achieved through the simulation of a macro photographic perspective, where the depth of field is reduced so that Yarny stays focussed in the foreground of scenes while the background is slightly blurred to indicate its remoter position. Thanks to the layering operation of digital media software (Manovich), the in-game milieu in *Unravel* is composed of layers that move independently of each other, providing the natural scenery with an agency seemingly independent of Yarny’s movements within it.

Yarny’s diminutive size, and his domestic origin, signals a more earth-bound perspective that *Journey*’s archetypal and cosmic drama and brings the player close to the naturalistic settings in the game, as Yarny orients the player in a novel relationship to

ordinary objects. A lot of the enjoyment in *Unravel* comes from moving around in and experiencing the beautifully rendered landscapes of the game world, which are naturalistic representations of the Swedish countryside, from Yarny's perspective. The elaborate construction of the game space, composed of the independent movement of flora and fauna in different image layers, experienced from Yarny's close-to-the-ground perspective, calls attention to minute details, such as strands of wafting grass, the iridescent petals of flowers, and the cups of individual stems of lichen. Creating the game, Sahlin made an actual yarn figure using sticks from a Swedish forest that he carried around and photographed in various natural settings. The musical soundtrack sets the mood of the different scenes with folk musical motifs that are blended with natural sounds from the landscapes Yarny moves in and through, such as buzzing insects, running water and bird calls, contributing to the game's sense of environmental realism.

In contrast to the actions of the armless avatar in *Journey*, who must activate changes in the game environment through sounding its musical note or by moving close to objects, Yarny's interaction with the landscape is highly physical and kinaesthetic. The player must control and time Yarny's movements as it walks, runs and climbs through the landscape, frequently pushing or pulling objects to stand on or use as leverage, often lassoing branches or other types of levers to swing across obstacles along its way. Leaving few traces in the landscape due to its diminutive size, Yarny thus enacts a kind of self-sufficiency ethic, drawing on natural resources without using them up. Through this working relationship with the natural elements, as Yarny traverses the landscape, the game space shifts for the player from being a represented *space*, in Buell's sense, to becoming a *place*, imbued with meaning derived from the player's engagement with varied landscape features, like trees, dams, caves, hills, the seashore, rivers, and marshes, all with their unique flora and fauna. The scenery is picturesque, but also treacherous: Yarny is nearly stepped on by an elk and run over by a car and has its raft crushed by a giant fish. While natural beauty is celebrated, Yarny also moves through human debris - a contrast apt to trigger ecocritical reflection on the human uses and abuses of the natural environment.

Where *Journey's* avatar is framed as a cosmic "alien" journeying through a barren space, Yarny is quite literally "locally grown", its organic form derived from the branch of a tree. Even as the landscapes of both games hold specific cultural memories that the player must uncover, the player's activities seem more "at one" with the local environment in *Unravel*, since its relation to the landscape is more varied and intimate. Yarny's landscape exploration also leads the player through a series of activities grounded in Scandinavian culture, thus building the game's cultural semiotic register. From its early antics in a homely garden, via its forest trekking, fishing and tobogganing, Yarny engages in a series of typical Scandinavian activities in a series of typically Scandinavian settings. The local flavour and significance of Yarny's landscape traversal is underlined by its many close encounters with local flora and fauna as well as by the cyclical seasonal changes that are a pronounced feature of Nordic natural landscapes—a signifying of the in-game landscape that perhaps is most keenly felt by Scandinavian players.

Yarny's cultural ties are further highlighted in the gameplay, for instance in the chapter in which the player must navigate a berry mire, where the game invokes the practice of cloudberry picking - a rather strenuous exercise, as anyone having undertaken it will know. The practice underscores the game's embeddedness in a specific, local context, since in Scandinavian culture, cloudberries are a treasure so rare they are served up as a special Christmas treat, not least due to the labour-intensive process of wading through mosquito infested mires that is required to collect them—a struggle recognizably replicated in the gameplay of *Unravel*.

While the avatar in *Journey* enables the player to see but not touch, *Unravel* develops a different semiotic register that places the player in a working relationship to the game's natural scenes. This orientation is partly a result of genre, as the player must work to solve a series of physical puzzles, drawing on natural resources along the way, but is also developed by way of the game's settings, which include several (derelict) work locations, like a mine, a factory, an office, a farm and a garage. Thus, while natural beauty abounds in *Unravel*, human culture is represented through human subsistence industries—all of which are perilous to Yarny's progression but also significant aspects of the gameplay.

Concluding Observations

As the article has hoped to demonstrate, emotional game design has led the creators of both *Journey* and *Unravel* to reconfigure the “clichéd landscapes” and “generic scenes” of commercial game environments, making use of the games' landscape features as signs that guide and direct player experience and compile through play into semiotic registers imbuing the game experience with cultural meaning and significance. While *Journey* and *Unravel* both overall seek to instil pleasant rather than complex emotional experiences, both games problematize idyllic player-to-nature relationships through the incorporation of scenes and game mechanics that question the human use, abuse, and control of natural resources. On a structural level, the natural landscapes in both games feature as obstacle courses, directing player traversal and attention, while the cultural nuances of the in-game landscapes are configured as different semiotic registers. In both games, natural landscape structures function as a form of cultural repository, imbuing the player's obstacle traversal with layers of connotative meaning.

As the in-game landscapes are experienced by the player, the represented natural elements also become emotional signifiers in the game experience: On a semiotic level it matters that the forms and structures constituting the game environment invokes non-human nature. The stylized, archetypal forms making up *Journey*'s in-game environment connote an inner journey *because of* the long-standing human relationship to these forms and their cumulative cultural significance: the sun, the desert, the wind, and the mountain, while the intimately detailed natural scenes of *Unravel* have resonance and poignancy, perhaps particularly to Scandinavian players, *because* they are anchored in a specifically Scandinavian landscape.

From an ecocritical perspective, the games succeed in re-orienting the players' relationship to the in-game landscapes, not least by stripping their avatars of human characteristics, and, significantly, of most of their biological needs. Thus, while *Journey* leaves the player humbled in relation to the agential forces of the in-game landscape and *Unravel* succeeds in creating a genuinely localized gaming experience, they both manage this emotional reorientation by silencing human biological requirements. In that sense, both games represent environmental conduct that the player may not easily adopt in real life.

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