

New Digital Worlds to Explore: The Onomastic Styling of Procedural and Open-World Videogames

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Abstract

One genre of videogames (an artistic medium which is only now starting to undergo academic scrutiny) that is currently seeing a surge in popularity is known collectively as ‘sandbox’ titles. These are titles in which the player is presented an open environment in which they can freely pursue different elements of gameplay in a non-linear manner. As a result of such freedom, each such game requires the development of a uniquely shaped closed microcosmic environment that is stylistically tailored to the individual setting; a significant part of which may be observed in the names of people, places, organisations, and products that appear. This paper will compare and contrast the development of these interactive multi-sensory environments, showing how terrapsychological value is used to utmost efficiency in creating emotionally recognisable renditions of particularly desired environments. The development of both procedurally generated and carefully-crafted worlds will be compared, and the semantic value in the names encountered within two of Rockstar Games’ titles, *Red Dead Redemption* and *Bully*, will be assessed in detail.

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Paul Martin’s recent article (2011) on the toponymy and naming within the *Grand Theft Auto* series introduced the merit of open world videogames as a primary resource for onomastic assessment – requiring a level of artistic creativity that extends far beyond the insular and tightly-scripted design of other artistic mediums. The medium is long overdue for a greater level of inclusion in academic discussion, given the increasing social presence of games – the gaming industry is rapidly dominating the commercial entertainment market. Martin’s research focused on the artistic adaptation of New York (transformed into ‘Liberty City’), yet he skirted around the role that semantic identity plays within such developments. A natural opening is thus presented, for combining the methodology developed for the author’s doctoral research, and spoken/written on previously (Butler 2011) to this relatively unexplored and recent form of media.

The field of terrapsychology may be broadly defined as the study of the emotional responses generated by certain types of space and terrain. The author’s take on the field involves the examination of how and why emotional responses to certain types of environment come to be formed, and the ways in which they can be altered or subverted through purposeful or through unintentional means. In doing so, this allows for critical investigation of the functional semantic bond between form and intended effect to be conducted. What has been poetically called the *genius loci*, the ‘spirit’ of place, exploring the responsive interplay between man and environment is a fundamental aspect of artistic interpretation. Once a supposed guardian – a literal spirit – transformed into an intangible

‘sense’, or semantic presence, which is a useful metaphor relevant to such hermeneutic assessment.

It may be proposed that this sense is one which is transferable to – and inevitable has an impact on – linguistic analysis. In regard to how this concept may be applied to onomastic research, especially of artistic resources, it may be argued that stylistic and thematic demands provide an essential overarching framework against which naming strategies may be assessed. It is not necessarily a philosophic question of which comes first: the name or the place, but rather how the two aspects work together to fashion an overarching semantic identity.

Names present perhaps the most efficient manner by which a creator may express base information about any textual asset – but especially for landscape and place. These qualities apply equally across artistic and real-world functionality, providing a key means of assessing the interactivity of any environment in influencing the emotional reaction of the viewer. This is a powerful force that requires precise wordsmithing (a wonderfully apt term beloved by the author), so as to point any such engagement towards an intended direction.

The worlds crafted for the videogame medium necessarily border the uncanny in order to evoke a sense of identifiable contextual placement. However, they are distinct enough to allow the creators utmost freedom to pursue development along their chosen stylistic path, where even subtle colour palette shifts can affect perception (and thereby emotional engagement). So the combination of multi-sensory medium and methodology would appear to be a most suitable fit.

There is one particularly apt category (or genre) of videogames that provide what is known as ‘open-world’, or ‘sandbox gameplay’, which may be taken to provide an especially rich resource for analysis – as noted in the introductory paragraph through Martin’s recent work. They are essentially a self-contained microcosm – representative of wider thematically identifiable areas, but otherwise contained within a smaller navigable environment that allows for a degree of interactivity afforded by the technical limitations. It is important to recognise the restrictions on the elements that can be incorporated into such titles given intense processing requirements to populate such titles, that often graphical fidelity is reduced (such as texture resolution), traversable map size, and the amount of non-prescribed interactive entities that can appear at any given time (for example, the amount of pedestrians and cars on a single observable street). Both of these aspects typically feature as notable selling points during an open world title’s promotional material, and all are key to the development of a believable and thematically-appropriate setting. The world created for a title, as seen in literature, albeit to a lesser extent due to the representational differences offered by textual description alone as opposed to the multi-sensual visual depiction, is very much a paracosm; a self-contained virtual environments that allows for a higher level of player immersion than could be allowed by an entirely pre-scripted experience.

Sandbox titles of one sub-class, currently seeing a surge in interest, spawn random worlds for each and every game, typically referred to as ‘Procedural Generators’, which by their very nature defy a precisely crafted nature. One of the most well known of these titles is *Minecraft*, which forms nigh unlimited worlds comprised of various biomes, from tundras through deserts, arctic forests through swamplands, with some crazy combinations sometimes

occurring, and exploring these forms is one of the primary aims of the title. The question arises of how villages or specific areas can be assigned meaningful names, if these areas are created on-the-go. Players have no means of reference, mapping, or sense of location, other than through visual terrain. There is not a single name to be found in this onomastically barren environment – and as with all other parts of the game, it is left to the players to craft their own environmental identity.

Another procedural title is *Sir You Are Being Hunted*, which situates the player on a series of abandoned islands, overlaid with very ‘English’ stylistic elements. The players are being hunted by swarms of robots bedecked as various types of gentry (each with their own patterns and styles of hunting), whilst searching for a dozen parts of a broken ‘machine’. Each island is generated along a complex algorithm called Voronoi modeling (Rossignol 2012b), designed specifically to emulate the unusual field, road, and stream patterns that occur in the countryside. Abandoned villages and hamlets are an integral part of the game, providing opportunities to scavenge resources and hide from the robotic hunting parties, but like the unique yet still non-descript settlements of *Minecraft*, these too were initially bland, lacked identity, and their utility in providing good locational anchor points was limited because of this.

A script was developed that allowed for the assignment of names crafted from an assortment of elements (Rossignol 2012a). This led to some very curious and quirky combinations, but this only added to the charm, and provided a major boon in the utility of the maps. It shows how important having a name attached to a site is, not only as a frame of reference, but also as a way of meaningfully engaging with a place – even a temporary, digital, creation. Some examples of this quirky means of name creation include: Great Tweaking, Comely Twiddle (Please d-i-e slowly, the two letters from a common road sign welcoming visitors to small UK towns purposefully eroded), Hard Upton (on-the-Wold), and Little End (on-the-end). But no two players will ever encounter the same sets, and their topological relevance can *only* be inferred as the surrounding environment is explored; for there is no underlying basis for particular assignment. The names are provided to create a sense of haunting verisimilitude, a haunting transposition of familiar forms, in addition to serving as a means of creating relational cognitive maps (despite a lack of uniquely identifying elements that could have been included) within a uniquely formed world.

There are many series that provide a more crafted form of open-world game. The key underlying aspect of such games lies in the freedom and open-ended gameplay, with a level of interactivity that allows a player to form their own experience inside the world provided. There are a number of set story and side missions, but the player is not forced to pursue these immediately following a predetermined order, and may instead explore the game world, taking on other optional activities or even creating their own within the parameters of the programming.

These include the likes of: *Fallout* (retrofuturistic nuclear apocalyptic wasteland), *Just Cause* (South American dictatorships over a tropical archipelago), *Dead Rising* (micro Las Vegas-inspired entertainment complex overrun with zombies), *Saints Row* (street gang turned commercial entrepreneurs in a darkly-comedic urban environment), and *Assassin’s Creed* (campaigns of cat-and-mouse warfare with Templars throughout Jerusalem, Rome, Venice, and Constantinople, in just the earlier entries). Such a broad range of environmental types

provided by the snapshot description of just five different series, exemplifies one of the fundamental appeals of the medium – a source of active fantasy entertainment, in worlds very different from our own. Each of these series could provide a fascinating semantic analysis in their own right, for the representation of a strong characterised area in this way bears a significant resemblance to Robinson's argument that all such artistic works possess a unique 'cultural geography' (2013: 70) that is imposed to shape audience expectations and provides authorial guidance (or even, it may be proposed, limitation). Each of the worlds is rich in a particularly stylised manner, providing a hyper-realistic representation of the real world, exaggerated in key aspects in order to emphasise particular environmental motifs.

Two of the titles from Rockstar Games – critically lauded as the finest designers of open world games – shall provide examples to showcase functional terrapsychology behind generating semantic content of names within the confined remit of this paper.

First of all, *Red Dead Redemption* – a wild-west epic with a storyline that spans repercussions, the ever-changing world, and revenge. And that summation does the complex story very little justice. But the setting is a sprawling landscape divided into three distinct areas, each of which bears topological designs intended to approximate and emulate the semantic identity of the entire United States in an extremely condensed form. The names provide a concise, succinct, and economical way of expressing this within a world that is necessarily condensed for both technical and gameplay reasons (providing long rides, but not excessively so, between territories).

The player starts in **New Austin**, based on the American South-Southwest (from California, through Arizona, New Mexico and Texas into Louisiana). Desert covers most of the region to the west, becoming rolling prairie as one travels eastward, turning into wetland and culminating in a rich arable environment; this covers what may be taken for the archetypal landscapes for this genre of work, but condensed so that the slice is representative of the country as a whole.

Nuevo Paraiso, 'New Paradise', is the second major area, stylistically based on the southwestern Arizona and the Mexican border state Nuevo Leon. This area is even vaster and emptier than New Austin with swathes of desert scrubland, enormous mesas, canyons and mountains. One of the three constituent regions is named Perdido ('Lost') reflecting the vast, mostly empty wilderness.

The final explorable state is **West Elizabeth**, characterised by mountainous pine forests to the west, snowy mountains in the far north, and large empty prairie to the east. It is the equivalent of the American Rocky Mountains region (Colorado, Utah, Wyoming, Arizona).

There are so many individual settlements and named places within each of these states that an hour would not even be enough to cover them all. But five key settlements spread amongst these regions will demonstrate the environmental diversity that is reflected in the underlying semantics of the assigned names.

Blackwater – The north-eastern most point of the setting, this town represents the concept of 'civilisation' that is slowly encroaching on the remnants of the wild lands below it. Serving as a major port for the area, the designers chose the name 'black' to convey the threat posed to the natural wilderness of both world and man; the town consists of brick buildings, cobbled streets, electric lighting, and primitive automobiles. This is especially felt when

considered in conjunction with the state's name of West Elizabeth, where humans are literally remaking the landscape to their own design.

Manzanita Post – bearing a name for all intents inspired by a Native American word or tribe that once resided there, now displaced, and the onymic origins forgotten as being of little importance to the role of the site, this remote settlement lies in the midst of a forest that is being quickly hunted empty and torn down – the lumber sent to service industrial needs in the east.

Thieves Landing – set within swamps and bayous, with architecture reminiscent of New Orleans, and the Mason Bridge and Dixon Crossing that lead into town, referencing the Mason-Dixon Line; the traditional border between the Northern states and the South (which resulted in the realworld nickname of 'Dixie' for that area of the United States). The name reflects its role in the game, as a dangerous and lawless place, filled with ideologically disparate groups interested only in self-gain.

Armadillo – named literally for the animal commonly found in the land around the town, this is a stereotypical boom town, consisting of one main street, in which duels frequently occur. Like its former rival – now ghost-town – **Plainsview** – this is named for environmental features, emulating the quintessential role of names in allowing ease of recognition for reference, is a commentary on the need to work within the limits of nature.

Escalera – the town's name translates to 'ladder' or 'stairway'. It is named for its physical characteristic of being built on a hill divided into levels, with the market and shanty town being at the bottom, and a ruling colonel mansion being on top.

These are very different names and symbolic applications, but they all convey important details of a unique semantic identity, carefully cultivated and designed.

However, the craftsmanship of openworld names requires the coverage of all manner of scale, and this paper would like to 'zoom-in' from this expanse, to visit a very different setting in *Bully / Canis Canem Edit* ('Dog Eat Dog', as it was known in the UK upon initial release, the original name censored due to political concerns and pressure). Mackenzie (2006) provides a brief description of the title's erroneously perceived gameplay focus – set in a public school within a small, remote New England town, the player discovers the area in the shoes of new pupil from out of state, Jimmy Hopkins. The world of this title is on a much smaller scale than most open world games, but still offers distinct areas with their very own character or identity.

The major theme explored by the game – as its title suggests – is bullying, in its myriad of forms, and a lot of this is mechanically borne through populating the school with five distinct archetypal student groups, which differ not only in personalities, but also in social status. This is not a sprawling city surrounded by miles of barren countryside, but rather a small town comprised of various districts (each housing the families of different student groups), and small patches of land between them, traversable by pushbike and skateboard, rather than exotic sports cars, helicopters, or fully-armed tanks, to accurately reflect the typical school students' situation. There is a very noticeable shift in where these groups are randomly found outside of the confines of the school (and the world is slowly opened up to the player as they progress through the story, interacting with these different groups) It was with great pleasure the onymic semantics were noticed to strongly reflected this relational and associational aspect.

The Old Vale – a semi-gated community of mansions, estates, and sprawling gardens. The use of the definitive marks this area with a prominence so desired by the residents, attempting to set themselves apart from the rest of the community. Old money and old family names that emblazon the neighbourhoods are the aspects that matter most to the residents, nicely shown in the name.

Bullworth Vale – suburbs: quiet, tidy, tree-lined streets, a small shopping plaza of designer boutiques, and populated by well-to-do families of the Jocks. The generic ‘vale’ reflects marked upper-middle class pretensions; the setting is topographically correct in that the area is situated atop and within a valley, making it a popular place for bike races. The in-game nickname of ‘B-Vale’ is taken in part to denote that still, for some, the area holds only a secondary status.

Bullworth Town – more down to earth, noticeably more populated and not as well maintained as Bullworth Vale. A commercial borough, this is where the Nerds live, and is very much middle-of-the-road, socially. Far fewer detached houses, and more built up with apartments, emphasise the identity of this area as truly being a representation of a typical American town.

New Coventry – very much a rougher part of town, where the streets are lined with litter, the street lights are strung haphazardly, derelict houses abound, filled with tenement housing, and the player is likely to be accosted by the greaser gang members. The name, like the stylistic design, is meant to evoke the feeling of an inner-city suburb through its ironic retention of the (presumably) older colonial honourific reference.

Blue Skies Industrial Park – the most run-down and neglected part of the town, holding factories, storage warehouses, trailer parks, and populated with the delinquent townies – the lowest social tier encountered in the game. The two parts of the name attempt to mask its actual nature through semantic amelioration, which showcases the onomastic trickery frequently employed in the naming of such sites.

The creation of these virtual worlds lies in their ability to provide an archetypal template built upon concentrated features that are instilled with what may be identified as a ‘feeling’, ‘essence’, or ‘sense’ – the aforementioned *genius loci* – and so onomastic assessment of artistic resources may be identified as an assessment of how assigned names mutually work with this semantic presence, complemented by environmental characteristics and attributes. The interactive, graphical, and audio nature of videogames allows for a greater variety of stimuli to shape an emotional response; all of which contribute to the rich onomastic definition of a setting. The artistry behind videogame – particularly openworld titles – require entire worlds to be created, spanning countries, groups, shops, and even individual products, and hopefully this paper is a convincing first step for the viability of future onomastic work on these creations.

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