

# Destination Space: Experiential Spatiality and Stories

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## ABSTRACT

*Because stories are important. People think stories are shaped by people. In fact, it's the other way around. Stories exist independently of their players. If you know that, the knowledge is power.* [Terry Pratchett, *Witches Abroad* 1991]

*The z-axis is you seeing something from a different point of view without moving* [Jack Turner]

This paper is about game and virtual world conceptualisations of space and some rich challenges that arise when we undertake the design of such environments for immersive experiences beyond the specificity of game-play. It sets out to explore two facets of this space in particular: the manner in which the space exhibits a designed condition for the forms of experiences which take place within it; and some explorations into ways in which these interactions can be understood in order to design 'different' experiences.

The discussion is based on three case studies of projects which have explored the stories, engagement and experiences within (and without) game world spaces.

## Categories and Subject Descriptors

[**User Interfaces**]: *Graphical user interfaces (GUI), interaction styles, prototyping, screen design.*

## General Terms

Performance, Design, Human Factors, Theory

## Keywords

Games as cultural environments, Spatiality, Game Design, Software Culture, Immersion Design, Affordances.

## 1.DESTINATION SPACE<sup>1</sup>

This is a designer's discussion. The focus of the work is on those interfaces that exploit a metaphor of space and the semblance of spatial depth provided by the illusion of the (digital) z-axis: games and worlds in virtual environments. From the Aristotelian notion of not-space to the frontier dreams of Captain Kirk, space has always been an epistemological perspective and way of seeing rather than a concrete thing. This work is about the stories that we bring to the worlds in digital space as designers and the stories we tend to refer to as virtual world explorers. The overall goal here is the illumination of some concrete ways we can set about constructing new worlds: destination space.

The term 'story' is used here in the cinematic sense: the story refers to those aspects that are not made overt within the world but which provide the backdrop to the experience. Such back stories are inferred, sometimes alluded to, they create the context of the experience. In cinematic design an incident or a conversation is often used to provide the story. My own favorite is Leone's series of introductory vignettes in 'The good, the bad and the ugly'<sup>2</sup> where we are left in no doubt as to who is wearing which hat and what the lives of the protagonists have been before.

In actual game worlds, such stories are usually sketched in with a brief introduction or assumed as the player takes on the role of hero or heroine. This discussion is about those stories – ways of seeing and knowing - and the relationships between the world or context of the design and the experiences that these virtual stages enable.

The profound design problem is whether or not the illusion of space enabled by rich graphic environments can actually afford 'seeing from a different perspective' when that perspective is a cultural one. Does the architecture of the software environment forever affix the experiential form to that of the hero quest? Must we always play the role of Captain Kirk? Or is it possible to escape from such canonical stories and create different kinds of stories where depth of experience is the goal rather than the challenge of the task? What do we need to understand in order to be able to construct such 'other stories in other spaces'?

These questions have been formulated over the course of research into three seemingly different instances. The first was the construction of an Alternate Reality game for tertiary students; the second was a scoping study that inquired about the potentials of using 3 dimensional worlds in the context of drama education in primary schools, and the third – the most illuminating - an ongoing project which exploits a commercial game engine in order to represent Australian Indigenous culture.

The three studies are used to illuminate some design aspects of this tantalizing potential of rich immersive environments and commence a discussion on how we might go about developing an environment that actually enables a different cultural perspective and a different experience of digital space, to exploit digital spatiality in order to see from that different point of view.

## 2.DESIGNING SPACES

The immediate problem to explore when attempting to create a world within the z-axis that offers a specific cultural perspective is perhaps the disappearance of the designer<sup>3</sup>. That problematic and ill used word interaction illuminates the issue. Various descriptions as a 'cyclic process between two actors'<sup>4</sup> or a reciprocal exchange, interaction tends to imply only the presence of the environment and the user – or player. However, in order for a game in a virtual environment to work, the designer needs to predict, manipulate and affect the player's actions – guiding them through levels and challenges, providing sufficient difficulty to feel challenged but providing enough scaffolding for achievement and satisfaction. When that slow creaking door sound frightens the player in *System Shock II*<sup>5</sup>, the presence of the designer becomes palpable. Less obvious is the expectation of the cultural tale – dark rooms and strange creaky noises tell those of us brought up with the genres of horror and mystery that something nasty is afoot!

Underlying this presence is the cultural context of the designer, the story forms that they subscribe to, the cultural history of those forms and the expectations of the stories themselves. We talk

about the 'active creation of belief'<sup>6</sup> and the careful enabling of a 'magic circle'<sup>7</sup> when designing game worlds. These techniques afford the construction of an immersed reality form where the rules of play and subsequent meaningful interactions within the world are scaffolded within the game world, recognizing the player's part in the fabrication. Playing a game in a virtual space involves an engagement with the shared meanings and stories of the game and through the game, the shared meanings and stories of the cultural context that produced the game and the potential of the software architecture, its apparent affordances.

### 3.BACKGROUND

Some of the ramifications of this cultural context are explored through three case studies presented here. All of these projects evidence the need for different experience, outside of the established game world story forms: the first needed a town that seemed alive, the second needed the feeling of ice and snow and the third demands a whole new perspective on cultural experience of the land itself.

The case studies offer indication that deconstructing the driving power of the shared cultural expectations is a fruitful exercise. In their different goals, each case demands a designed spatiality where the stories and meanings are not shared in the same depth and where there is no game to be played, only a world to experience. This has become a critical design challenge in the third case study described, where the concept is to create an Indigenous Australian experience, not as voyeurs or players but as a cultural immersive experience. What happens when there is no actual game to play and established background stories are no longer operative?

The studies are presented as a narrative of a growing awareness of this issue, culminating with the dilemmas of the Digital Songlines Environment where it became evident that there is a serious dissonance between the operative demands and the cultural expectations of the game engine used to develop the environment, our notions of spatial exploration based on previous game world design and the very different culture being represented.

The three projects were and are, all supported by the Australasian CRC for Interaction Design<sup>8</sup> (ACID). Each individual project has different goals and involved different contexts and teams, so it has been very interesting to find the common issue of the need to exploit digital space as an opportunity for experience rather than play across them all.

#### 3.1Case Study – Story One: Creative Town<sup>9</sup>

This work describes a case study involving a cohort of over four hundred undergraduate students in the Creative Industries who needed a place to explore, so as to create their own visions and projects within the confines of a unit schedule. For the students, the goal was the production of site specific Arts and Business project proposals which reflected their understanding of the unit material. The actual city as a hypothetical situation was considered inappropriate as it privileged local knowledge rather than understanding of the process. The place had to inspire, trigger engagement, and their imaginations. At the same time it was important that the place did not coerce activity, or distract from the task by confusing tools with task, or architectural navigation with conceptual skills.

The solution in this instance was an alternate reality game design. Alternate Reality Games (ARGs) are essentially designed to create a situation where participants engage with the game world as *if it were real*. The ARG is constructed using actual world objects

such as websites, posters and internet forums. They avoid overt 3D immersive environments and prefer exploitation of common communication technologies such as mobile phones and email<sup>10</sup>, constructing the magic circle within the real world.

The original intention of the Creative Town project was to provide a scoping and feasibility project to test the potential of exploiting rich immersive multiplayer environments in educational contexts. The initial prototype was intended to be a proof of concept and was made in simple common media, mainly websites and blogs.

Contrary to our expectations, the use of real world spaces and the fabricated reality of the ARG proved to be a powerful approach for the visualization of the imaginary place as an actual experiential space. The strengths of ARG design, as opposed to use of more graphic or technologically rich environments are the strengths of the dream of interface design: that the task can be achieved without noticing the technology; that the environment doesn't coerce any particular style of activity and the imaginations of the players are allowed full reign.

The most telling phase was the stage the overall project reached, where opportunity to build the Creative Town in a rich 3D environment (using the Torque Game Engine) was beta-tested with a group of project participants. Providing visualization and machine-based access to the z-axis of digital space seemed to change their engagement with the whole (imaginary) world.

A small area of the original AR town was constructed as a test case. An area of derelict railways yards was chosen as it was felt that these empty buildings might inspire the group to think of possible project ideas exploiting available space. A number of small focus groups<sup>11</sup> consisting of students who had completed the unit the semester previously were then invited to come and explore and comment. As soon as they entered the rich immersive environment, the protagonists became players. They took notice of only those aspects of the world which appeared to have relevance to their navigation of the digital space and sought goals and challenges rather than trying to envision the place as a living breathing town to experience. Where they had previously believers and active selves in role within the ARG environment, the test group gave in to the environmental desires of the apparent game world. They looked for sets of clues and indications common to such environments – things to pick up, doors to open, choices to make. Much time was spent on the mechanics of navigating the environment. The experience was fascinating. Where the low tech fabrication of the alternate reality had allowed the students to imagine themselves as protagonists and had encouraged them to view the whole illusory town as an inspiration, the 3D visualization seemed to coerce a specific role. They clearly moved from exploring the fabricated world of the town as a potentially real environment where they could enact a Creative Industry project to exploring it as a game space where they would find expected challenges. They exhibited a mutual consenting with the cultural expectations of the interface and became heroes and heroines of the construct.



**Figure 1. The 3D version of the derelict rail yards**

This is the first useful pointer for consideration when designing a cultural perspective as a spatial story: the rather simple observation that our visualizations of digital space provide a specific set of affordances. It is also important to observe that the 3D version of the town was desolate in Mary Flanagan's sense of the term<sup>12</sup> because it represented a test world and there were very few assets and world objects implemented. This observation is discussed in more detail further – as the Digital Songlines demonstrates; the experience of spatiality really requires detail in order to avoid this mutual consenting with the expectations of the designed environment. The next case study described here – History's Purchased Page - offers insights on the desires of participants when designing such experiences in virtual worlds.

### 3.2 Case Study – Story Two: History's Purchased Page<sup>13</sup>

The second case study, History's Purchased Page Project (HPP) was one of the same set of ACID projects researching the potentials of multi-player worlds for educational purposes. The HPP project explored the apparently loud resonance between Drama Education, process drama in particular, and forms of play and engagement in rich immersive worlds.

Process drama, as it is used in schools, is a dramatic exploration based on improvisations, physical visualizations of scenes and spontaneous role-play with no audience beyond the group involved. The emphasis is on the process and engagement in wider issues. In the case of the HPP project, this was the awareness on the part of the students that history is written by the powerful<sup>14</sup>. The events described here involved a cohort of about thirty upper primary school students, their teachers and the researchers. The process took a whole school day.

The scene was set by giving the groups of school students the background role of being media designers given the brief of proposing a CD about 'The conquerors of Everest'. The students commenced by becoming researchers and soon found out about Sir Edmund Hillary and his ascent of the mountain. They were then encouraged to visualize the events via dramatic reconstructions. At this juncture, the drama teacher then took on the role of a contrary protagonist – in this case she was an outraged descendant of George Mallory, an earlier climber whose body was found below the final ascent to the summit. Recent investigations and evidence suggest that Mallory may well have reached the summit before Hillary and his team and might indeed have died on the return journey. This dramatic process challenged the participants' faith in their research materials; they returned to research and rethink their understanding of the events. The next stage invited a further change of roles, engaged in the story and its possibilities, the students then became media designers, storyboarding a Conquerors of Everest media piece to present to a client.

This is where process drama really gets interesting and profoundly engaging. The students spent the whole day engaged in these activities, and they were immersed in their showing of the events as they understood them. At the end of the process, the client entered into the role play and listened to the project presentations. Here the fun started. The client represented a New Zealand based company and it soon transpired that they were only interested in those projects which showed Edmund Hillary, a New Zealander, as the first to the summit. Any of the carefully prepared projects which threw doubt on this as a fact were rejected. This phase was rather amazing to watch as a designer, the groups of students were outraged, vocal and their reactions to such evident bias were clearly (and audibly) heartfelt. They had discovered, the hard way, that history is indeed written by those with money! Resonant with the experiences of the Creative Town ARG groups, the students were very active in their belief in the roles.

Like the Creative Town project, this initial experience was also intentionally very low tech, using only simple web-based media as a source of information and visual support via 2D images. However, this time the reasons were background research, not design parameters. We hoped that this approach would give the students a chance to identify and design the kind of virtual world they themselves felt they needed to support their learning. The day was approached as a participative design opportunity.

The responses generated during the debrief section of the day reflected the fact that many of these students were very experienced in virtual world and multi-user communication, being habitual messenger users and regular players in shared online environments such as *Runescape*<sup>15</sup> and *The Sims*<sup>16</sup> online worlds. Many were also experienced stand alone game players, and indeed the majority of the submissions for the Conquerors of the World project aspect of the process drama were clearly influenced by a strong tendency to games.

The strongest response from the school students was that the most profound engaged moments were produced in the furor over injustice and that this could never be replaced by a representational experience via a rich immersive game world. It became apparent that the group perceived such worlds as being specific to play rather than visualization of a different space.

The students' actual virtual desires were for those aspects of the drama they had no experience of: the cold of snow and the sound of the wind on the world's highest mountain. They demanded the ability to experience this other place where a few hundred meters becomes an impossible distance. These insightful children highlighted design habits and culture - the legacies of rationalist design philosophy. As Coyne<sup>17</sup> puts it:

*Paradoxically, even virtual-reality systems deny the importance of engaging the senses in the physical world. One of the more extreme aims of virtual reality is to present sense data "directly to the brain," circumventing the body's normal engagement in the physical world.*

The consensus on the part of the students was clearly that the virtual can best be used to aid and abet imagination by providing rich graphic visualizations and sense-based inspirations – such things as the look, feel and sound of snow experienced on the ascent of Everest. They were very aware of where they wanted assistance in their imagined worlds and where they viewed such assistance as intrusive. While they were happy to undertake the in-role challenge of designing a game like version of this story of conquest, they were not particularly interested in playing it as a

game themselves and reconstructing the story in that form. They wanted to experience the richness of, not Weiser's<sup>8</sup> walk in the woods, but a climb on the higher slopes of the world's tallest mountain.

This desire for rich visualization, depth of experience and sense-based inspiration is most interesting as this is an overt design goal of the third case study.

### 3.3 Case Study – Story Three: Digital Songlines Environment

The third study reported here is a much larger project and currently in early stages of research. The Digital Songlines Environment is a product of a further ACID project. A vital aspect of the project is the collaboration of CyberDreaming, an Indigenous owned multi-media company, as part of the management and design team and the very active participation and contribution of the Indigenous communities involved. In essence, the project tries to avoid cultural voyeurism in favour of the enabling of a digital space where community participants can tell their own stories.

The Digital Songlines Environment (DSE) uses the Torque Game Engine in order to represent the landscape of Australia and in an attempt to incorporate Australian Indigenous Culture within its setting<sup>19</sup>. This ancient Culture is not homogenous; rather there are 600 tribal groups across Australia with over 250 different languages spoken. It is not only the languages that are different, the tribal stories vary across the continent with common themes, morals and knowledge, yet each tribal group is very careful that their stories and their knowledge should not be mixed or conflated with other tribal groups. Critically, the stories told by the Indigenous communities actually belong to the landscape; they are the feeling and nuance of the landscape itself as the community interrelates with it. This is the meaning of Songlines, no one community possesses a complete Songline, they are tracks, spatial stories across the land that extend in all directions across the entire continent of Australia, giving the pattern and meaning to the connections between Indigenous groups.

The design goal of this project is to reconstruct the Indigenous experience from an Indigenous perspective rather than the usual cultural archiving which tends to prioritise the needs of the database structure and meta-data tags and fields. The insight is simple and direct: if the culture sees its knowledges as embedded in the land, recreate the land in order to provide a more appropriate cultural storehouse. In Indigenous perspectives, landscapes are not the parcels and lots of the Western view; the country is like a living breathing entity:

*People say that country knows, hears, smells, takes notice, takes care, is sorry or happy. Country is not a generalised or undifferentiated type of place, such as one might indicate with terms like 'spending a day in the country' or 'going up the country'. Rather, country is a living entity with a yesterday, today and tomorrow, with a consciousness, and a will toward life.*<sup>20</sup>

The rich potential of visualization made possible by game world generative solutions here is extraordinary. Observations made here are based on the first two iterations of the DSE: the Irene's World DSE being a representation of the country north of Dalby, Queensland where the Gunggari community are traditional custodians and the second being a smaller world based on the area south of Carnarvon Gorge, Queensland where the artist, Vincent Serico<sup>21</sup> grew up and which inspires his work.

The DSE environment emphasises the landscape and the experience of journeying within the landscape by the careful and accurate representation of detail. The Gunggari traditional lands were reconstructed using satellite data and topographical maps. The topology has been kept as true to the actual as possible with world boundaries being slightly invented via use of impassible bush areas and hills. Fauna models are taken from photographic data and are both accurate in appearance and ecology.



Figure 2. DSE Gunggari Country: by the Maranoa River<sup>22</sup>

The world is also richly populated with careful 3D representations of actual flora, the majority of which were specified and placed in consultation with the Gunggari community. The yumba or campsite, and the non player character (NPC) denizens, is laid out according to the local tradition and the activities and objects implemented within the camp are contextualized with stories and language of the community. The player can pick up objects and examine them in detail. Some objects such as boomerangs and spears can be carried out into the bush. A particular feature is the audio environment which lends depth and richness to the experience, the sounds of birds and native fauna echo in the world, the song of many frogs is heard down by the Maranoa River. Another feature is the use of artificial personality for many of the fauna: the kangaroo mob exhibits the startled behaviour of a real mob when the participant approaches. They can be chased.

This representation of landscape has received encouraging feedback from the Elders of the local Indigenous community whose tribal area it is (*I can almost feel the dust between my toes* one lady said).

The subsequent player story stage is where some issues resonant with those of previous studies mentioned, start to appear: the breathing of a different perspective into this landscape and the rationale or story for the activities of participants. The primary design brief was to provide an environment which could assist cultural heritage by visualisation of Indigenous culture. Critically, the stories actually belong to the landscape; they are the feeling and nuance of the landscape itself as the community interrelates with it. Such stories are very different to the stories of the Western tradition; they do exist independently of their players. So what then, does a (3D world) player do?

The project is still in its infancy but thus far the temptation to simply provide a rich environment based role playing game would seem an inappropriate solution. For such to happen, each individual tribe would both have to construct their own knowledges and stories into the play. An ideal solution for a multi-player version perhaps, but the discussions with the participating tribal groups makes it clear that each individual elder even within a group holds only a single aspect of a whole. It is for this reason that the first iteration has been called Irene's World after the informing Gunggari elder and not Gunggari Songlines. More importantly, the physical reality of the knowledge, its basis in the landscape and its specificity, can only be trivialized by the

creation of simple game play. Not all the stories are for everyone, they belong to the land not the people. An example to best demonstrate this is the frequent segregation of knowledge according to gender. A true role play environment would have to physically recognize whether the player was actually male or female, simple choice options would be insufficient. A delight of game world architecture is that it can circumvent the embodied normal engagement with the physical world; a vivid issue is that this is not appropriate in the cultural context of Songlines. It would promote what has been termed epistemic violence<sup>23</sup> - while the cultural themes and stories of our own game worlds might encourage this kind of engagement, it represents cultural imperialism in the context of Indigenous culture.

The participant nature of typical game play and agency or the enabling of meaningful decision making within a game world raises further issues. A fear expressed during discussions with a Gunggari language group about potential constructive or generative options within the world was that if the participants were allowed to enact their own stories, make their own decisions in the manner of a role playing game, then it would effectively 'corrupt' the validity of the culture presented. In particular, the idea that each individual game player or group could construct and implement their own media was strongly rejected. Indigenous cultural knowledges come from a very different perspective, knowledge is not constructed by the individual but carefully passed on by tribal Elders who ensure continuity and continued connection with the landscape and the past. Generative solutions typical of commercial game worlds where any individual, no matter their background, is free to construct their own stories are an anathema.

This brings us to the whole issue of digital space and the z-axis, succinctly defined by my son as 'allowing the player to see something from a different perspective'; the z-axis does offer an illusion of space. However when that space occupies the interstice between a cultural perspective and the world, it becomes apparent that the illusion is culturally specific in its forms. The question is an interesting one: is it actually possible to truly see a whole world from the perspective of the other? Or, will the embedded cultural materiality of the medium and the context based understanding on the part of the designers and players always render such attempts as mere phantasms? Feedback from various focus groups during developmental phases has been interestingly pertinent. Older tribal knowledge holders have been appreciative but demanded accurate detail – they wish the world to be faithful to the land and its life, perhaps so that they themselves can feel the meaning and discuss their knowledge in their own ways exploiting the world as a mnemonic. Younger focus groups have clearly enjoyed the potential but have consistently asked for more engaging and active opportunities. They seem to want to make their own meaning. The game experienced age group in particular is encouraged by opportunities to pick up items within the world to ask for game type challenges like hunting the kangaroos and taking them back to camp. There is a challenging design problem to explore here.

Songlines in its early iterations has opted for some solutions. The primary one is of course to ensure that the Indigenous communities whose lands are being represented are directly involved in the telling of the stories and the implementation of content. Cultural experiences thus shared are implemented into the world as a serendipitous journeying of the cultural worlds of

the peoples whose lands are entered. The conceptual design is one of a visit rather than the typical hero quest and a world to conquer.

The environment triggers audio files of stories at certain proximity points, so on arrival the player, explorer<sup>24</sup> or perhaps the most appropriate term is guest, hears a an almost bi-cameral voice telling the totem story of the peoples whose camp they are approaching. Other information is embedded in in-world pop ups which strive for a similar companion voice whilst also including as much of the community language words as survive.<sup>25</sup>

In terms of visualizing the community and context of the Indigenous groups whose landscapes have been represented in this early stage of the project, the environment can be seen to be a success: Songlines offers a window into the culture.

### 3.3.1 Looking through windows at the stars



Figure 3. Vincent Serico<sup>26</sup> - .Detail showing the night sky

A recent iteration of the project exploits the work of a Queensland Indigenous Artist, Vincent Serico. The image here depicts the night sky, a reflection of the living earth, populated and similarly alive. As others have observed<sup>27</sup>, such windows into cultural perspective use a set of symbols which confirm the cultural perspectives and knowledges of the peoples. In this work (Fig. 3) the sky is a reflection of the land, not a distant cold space but an intertwined aspect of the entity. It is not seen as a destination at all.

The DSE iteration presenting Vincent's work created a mnemonic of his inspirations by constructing an area reminiscent of the actual places which inspired the images. Working with the artist, it placed the artworks in the context of the landscape along with video footage of the artist talking about his life and work. The visitor is able to hear the artist and see the works as embedded in the landscape, inspired by the landscape. However, whether such visualizations can ever offer a 'way of seeing from a different cultural point of view' is another matter entirely. The manner in which the materiality of the software, in this case, the visualization engine, coerces a set of expectations about story and activity forms still remains. Experiencing Vincent's artwork within the landscape setting deepens understanding but it doesn't provide the full picture of the world through the artist's eyes.

This iteration is populated with dreamtime animals, the designs based on Vincent's imagery. Those younger focus group participants will take pleasure in being able to throw boomerangs at the kangaroos but without the challenge of game play, role playing tasks that they clearly expect, will they always see the environment as 'educational', an immersive diorama and not a fully immersive experience? While a window into the culture is interesting, it remains voyeuristic. The actual desire is to enable a doorway to understanding, to provide a space where the communities involved can tell their own stories without the autocracy of established design re-presenting and reforming the experience.

## 4. GAME WORLDS AS CULTURAL SPACES

*Moreover, any such experiments in this area are at the mercy of the engineers who design the machines (both hardware and software) with the express purpose of constructing a limited, Cartesian, surface based representation of reality.*<sup>28</sup>

### 4.1 Destination: Space

*The canon always blinds, the vision is always false.*<sup>29</sup>

Perhaps, like the protagonists of the failed television series, the actual problem to be illuminated is that of our own perspective and the manner in which it has to be unpacked critically in order to even attempt the first rocket flight. Space in game environments can be seen as culturally specific because such digital spaces are constructs, designed and authored with underlying conceptual models of intent<sup>30</sup>. Such game spaces are viewed throughout this work as cultural colonized spaces, they are not only designed and developed as events spaces by authors but they are also developed in authored constructs enabled by legacies of hardware, software and operating systems. Yellow-Lees Douglas<sup>31</sup> refers to the authors of these layers of text as ‘secret choreographers’ and Laurel hints at the presence of ‘stage designers’ in her conceptualisation of computers as theatre<sup>32</sup>. In task oriented software the construction of the environment reveals itself through the task universe<sup>33</sup> and wider cultural assumptions become evident as the objects and actions within the task universe are decomposed. In game spaces, the task universe is exactly that – a universe. While task oriented software generally offers somewhere to enact the user’s own goals, game environments require that the designer is with the user every step of the way and that their plans and designs reveal themselves piece by piece as the user progresses. The environment or game space, the designer and the player form a triad of identities essential to the nature of the experience. This ‘ménage a trois’ becomes problematic when the world design goals are the constructions of experiences and perspectives unknown to the designer.

Game environments and those environments that offer virtual spaces where multiple participants can interact together with the landscape are extraordinary in this on-going mediation. Poole recognises this when he discusses the nature of game realities and the careful, designed tailoring of reality in order to provide satisfying play and achievable challenges<sup>34</sup>. Fuller articulates the relationship when he says:

*[E]ach piece of software constructs ways of seeing, knowing, and doing in the world that at once contain a model of that part of the world it ostensibly pertains to and that shape it every time it is used*<sup>35</sup>

It is indeed an exhortation on the part of commercial game developers:

*Every single thing you do when you create a game, from the look of the interface to the colors of the spaceships to the way the avatars move to the amount of grass you put on the ground tells a story.*<sup>36</sup>

The question posed here is whose story? Is the dynamic between the visualization engine and the cultural context of the designer eternally fixed in a single perspective? Each of the studies here demonstrate a desire to be inspired to understand their own stories, rather than becoming players in a story told to them by the world choreographers. It is of interest then, whether or not we could ever design a game-less world or immersive experience that tells a story other than our own, the software’s own – or whether

such a goal would be akin to producing a culturally lethal text<sup>37</sup> – a text which perhaps does not destroy the mind of the reader but one which alters their perspective permanently. How can we set about constructing such designs?

### 4.2 Telling stories

*In Greek, narration is called ‘diagnosis’: it establishes an itinerary (it ‘guides’) and it passes through (it ‘transgresses’)*<sup>38</sup>

Telling our own stories is an art; skill in story telling depends on engaging the reader or listener and creating a response on the part of the intended audience<sup>39</sup>. Stories (well) told and written can engage and engender a magic circle of belief via use of imagery and symbolism and structure. But we also tell stories as aspects of our daily lives, these stories construct the fabric of our realities, they depend on a shared social and cultural construction of reality and a sympathetic listener. This latter form is story telling as a shared perceptual activity<sup>40</sup>. Visual story telling is dependent on the same strata of engagement, immersive visualization of worlds even more so. When we design a world in digital space, be it a game world or other, the design of the environmental story itself ranges from the backdrops of *Tekken*<sup>41</sup> to the intricate detailed worlds of *Oblivion*<sup>42</sup>. Don Carson’s classic feature on environmental storytelling<sup>43</sup> tells us to create worlds that are rich in this embedded narrative:

*Much of this is done by manipulating an audience’s expectations, which they have based on their own experiences of the physical world. [ ] The trick is to play on those memories and expectations to heighten the thrill of venturing into your created universe.*

Perhaps a key element here is this design artifice; the dependence on what Jenkins<sup>44</sup> has called the emotional residue of previous narrative experience. If I were to undertake the design of one of my beloved Sergio Leone films as an immersive world, I would construct the expected dry sierra landscape; add the wind and erratic tumbleweed and perhaps a touch of Morricone-esque music. Such a mise-en-scene would evoke pre-existing associations and my world participants would be ready to don gun belts and search for some kind of justice in our shared perceptions of the Wild West garnered from our cultural histories of film and television. They would be ready to play.

Designing other cultural perspectives and stories, perhaps even game worlds where the rules might be different and strange, would seem to demand a depth of story detail that, as world designers, we thus far have had a tendency to avoid. If the world participant is going to complete the story for us with only a deftly laid set of clues, indeed, why would we bother? The studies briefly presented here, it is hoped, provide some good reasons to explore this further.

This discussion is about design, it is about developing design so we can create new worlds from other perspectives and implement other voices, new stories. Commercial game design has made an interesting sortie into this area with Bethesda Softworks *Oblivion*. This is definitely a game world; the player has a role and many challenges. It is also a rich graphic environment with a depth of detail that permits hours of exploration aside from the main quests. In this, *Oblivion* perhaps represents the beginnings of spatial stories<sup>45</sup> – stories which privilege exploration of the space over any game or culturally biased plot development.

This seems to offer a solution to the issues illuminated by the three case studies: design the environment to a depth of detail where the richness of the world itself becomes a protagonist in the tale. In the case of Creative Town, the goal of really ‘active

creation of belief' was clearly undermined by the dearth of detail provided in the test 3D world. The primary school students involved in the HPP project were forcefully loud in their requirements for this same depth of detail. The Indigenous community focus groups responding to Songlines, both the elder and younger groups, with their different emphasis, challenge the creation of a rich experiential visualization of their lived experience, not the culturally constructed reality of a typical game world.

## 5. REFLECTIONS & DIRECTIONS

Is it so simple? If we design the Songlines world to the point where the world itself becomes a protagonist, then we will be playing with some extraordinary issues. How will we deal with time? At the moment, one early iteration of the DSE encompasses 2.5 square kilometers of central Queensland. The territory is dry and parched. Travelling by foot from the southern end of the actual area to the north would take perhaps an hour or more. Should our digital spatial experiences mirror physical constraints? This is exactly what the school students in the HPP case study were demanding? Water would become vital. It would be hot. How would we deal with death in such a realistic detailed simulation of experience? Other rich directions beckon as well. Without those shared cultural stories, a question begged is whether or not the perception of the landscape itself would be the same. How can we privilege a perspective from an entirely different point of view?

In the case of Songlines, the primary directive is in the attempt. Designing a living breathing landscape gives us a meeting space between two cultures that not only assist our understanding of the perspective of the other but also refreshes our own concepts of design, giving us a chance to view our own stories from the outside.

## 6. ACKNOWLEDGMENTS

The Creative Town project was funded by a QUT University Teaching and Learning Development grant and this research was conducted within the Australasian CRC for Interaction Design, which is established and supported under the Australian Government's Cooperative Research Centres Programme. The other project personnel were Dr. Axel Bruns, Anne Morrison, Jude Smith and Dr. Barbara Adkins. The Creative Town research was undertaken with Ann Morrison of the School of ITEE, of the University of Queensland. History's Purchased Page was an aspect of the Australasian CRC for Interaction design project: Media Station. The other project personnel were Dr. Julie Dunn and Dr. John O'Toole. The Digital Songlines Environment is currently sponsored by ACID under the Indigenous Communities Program. The project managers are James Hills and Brett Leavy. The commitment and hard work of the whole DSE team and the Gunggari community members who have participated in the project must be acknowledged here.

## 7. NOTES & REFERENCES

<sup>1</sup> The title of this work is taken from the 1959 TV series 'Destination Space' directed by Joseph Pevney which never progressed beyond the CBS pilot episode.

<sup>2</sup> Il Buono, il brutto, il cattivo, (1966) Directed by Sergio Leone

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- <sup>9</sup> The Alternate Reality of Creative Town is discussed fully in *Suit Keen Renovator - Alternate Reality Design* by Ann Morrison and truna aka j.turner, Interactive Entertainment 05, Sydney, Australia.
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- <sup>23</sup> This term was used by Aileen Moreton Robinson in her keynote at the Indigenous Knowledge Conference 2006, Surfers Paradise, Queensland Australia 28 - 30 June 2006
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