Warriors' Journey: A Path to Healing through Narrative Exploration

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ABSTRACT

The Warriors' Journey is an interactive narrative experience that is part of the online, virtual world healing space of the Coming Home Project (www.cominghomecenter.org) at the University of Southern California's Institute for Creative Technologies. This project is exploring new ways to reach veterans who are returning from recent conflicts and who often have mental health issues or difficulty fitting back into their home communities. We are looking at the affordances of online 3D virtual worlds to address some of the issues that may prevent or deter veterans from getting the help they need. We are exploring the use of specific therapies within the virtual world space, as well as social and enrichment activities designed around the needs of this group. *The Warriors' Journey* is one such activity that engages participants in stories to emphasize and reinforce common ideals of honorable warriors throughout history. After experiencing these stories, participants are then encouraged to construct their own warior's story within the Coming Home space. It is hoped that such activities may help contribute to a more positive sense of self-esteem, a restructured life narrative, and a feeling of control over the stresses incurred during their service to their country.

Key words: veterans, narrative, storytelling, mental health, narrative psychology, embodied conversational agents, ECAs, avatars, virtual worlds

1. INTRODUCTION

"Wounded people may be cared for, but as storytellers, they care for others. Their injuries become the source of the potency of their stories." ... "Because stories can heal, the wounded healer and wounded storyteller are not separate, but are different aspects of the same figure." (A Frank, 1997)

The Coming Home Project at the University of Southern California's Institute for Creative Technologies (ICT) is exploring new ways to bridge the divide between returning veterans who need mental health services and those who actually receive that help. One in five service members from recent conflicts are estimated to be suffering from PTSD or major depression (RAND 2008). The military takes this problem seriously and has implemented many programs to assist returning troops, yet many veterans who need help are not seeking it. A 2008 study found that only about half of those who met the criteria for PTSD or major depression sought help (RAND 2008). Furthermore, many of the veterans who do go for help eventually drop out of their treatment programs. A 2010 study published by researchers from the Veterans Administration and the University of California concluded that "the vast majority of OEF[1] and OIF[2] veterans with new PTSD diagnoses failed to attend a minimum number of mental health sessions within a recommended time frame required for evidence-based PTSD treatment" (Seal et al. 2010). In addition, 41% of patients getting their care through the V.A. reside in sparsely populated areas and do not have access to appropriate medical facilities within a reasonable distance (Levin 2007).

ICT is looking at the affordances of online 3D virtual worlds to address some issues that may prevent or deter veterans from getting the help they need. Among these issues are: the stigma of being considered weak, which may negatively affect their careers (Rand 2008), distance from full service care facilities due to the preponderance of soldiers from rural areas (Levin 2007), and most critically, soldiers not recognizing that

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[1] OEF: Operation Enduring Freedom
[2] OIF: Operation Iraqi Freedom

they even need help (Rand 2008). We believe that different affordances of the virtual world can be used to mitigate each of the aforementioned issues in the following ways: In a virtual world, one interacts by means of an avatar, a 3D representation that can be given a fictitious name and persona (mitigating the stigma concern). The virtual world can be accessed from anywhere there is a computer and an internet connection (allowing for more resources to reach the widely dispersed veterans), and can encourage self reflection by providing tools that help identify the signs of mental health issues. Additionally, another benefit of virtual worlds is a sense of familiarity because virtual worlds are similar to multi-player games. This helps to provide an enjoyable and engaging platform designed not only for fun, but also for the formation of social-support groups that are attractive to "Digital Natives" – those in the age group of most soldiers – who grew up on games, computers and the Internet.

We believe that this sense of familiarity with virtual worlds combined with a robust graphic environment, use of customizable 3D avatars, and the broad possibilities offered by a functional scripting language operant in this platform will help the Coming Home Project fulfill its goal of creating engaging activities in the online world that encourage repeat visits. It is for these reasons that we chose the Second Life (SL) virtual world as our platform. Additionally, it is also free to users who simply want to access content.

One activity we have developed for these "Digital Natives," and the focus of this paper, is a compelling interactive narrative in Second Life, available within a larger veterans' healing space, which we have been constructing. This narrative-based activity was designed to address our target audience – returning war veterans – by showcasing stories of honorable warriors throughout history in order to help mitigate the loss of self-esteem and self-worth that some soldiers experience as a result of mental illness (Wong and Cook 1992). In focusing the stories on warriors, we have set a context with which each veteran can connect, given the strong ideals they adhere to as part of their modern warrior culture. Three essential overlapping core values common to all branches of today's Armed Services are courage, honor, and selfless service/duty. We therefore chose stories about historical warriors that reinforce these key concepts. Our long-term goal is to have this activity (along with others) provide therapeutic value that aids veterans in their successful post-deployment reintegration, by helping them rebuild or reinforce a stronger and more positive sense of self in the civilian world.

To make this story experience truly interactive, we also included an embodied conversational agent (ECA) that could answer any questions the participant might have about the story being experienced.

2. Theoretical Backdrop: The Power of Narrative

Narrative approaches have had a place in therapeutic activities for some time (see Schoutrop 2003 for an overview). Even the standard concept of the psychiatrist's couch evokes an image of a person telling their story to the doctor. Michele Crossley, in her book, *Introducing Narrative Psychology*, describes the place of narrative in helping those with chronic illnesses like HIV establish a more positive sense of self and identity (Crossley 2000b).

The healing power of narrative as a tool to counteract traumatic experiences related to conflict and deployment has been widely recognized by projects such as *Operation Homecoming*, a collection of eyewitness stories from soldiers and their families published in an eponymous book (Carroll, 2006). Funded by the National Endowment for the Arts, well-known writers were brought together with soldiers for this project to inspire them to chronicle their stories for both personal healing and sharing with others.

Stories are powerful constructs that can resonate in both those that tell them and those who hear them. Stories connect us because we share them as a method for making sense of the world and the way we live in it (Baumeister and Newman 1994). Among other purposes, stories can be used to convey a shared social heritage that transcends generation, location, and culture. Stories about social roles common to many societies reveal themes that can bring a focus to the core strengths that reside in each one of us. For the authors, writing one's story can provide a sense of control for how their story is presented – what details are kept, which are downplayed or eliminated, and ultimately how the story is internalized and remembered. Even listening to a story that resonates can be therapeutic because such a story can shift the way an event is perceived in retrospect for those who understand the message of the tale. In *Story Logic*, David Herman says, "narrative understanding is a process of building and updating mental models on the worlds" (Herman 2008: 22). Thus, a relevant story helps us readjust how we comprehend our experience in the world. Crossley notes: "A vision of 'the good' becomes available for people in any given culture by being given expression or articulation in some form or another. This articulation most often occurs through language and symbolic systems, such as custom and ritual, which reverberate with knowledge of connections and relationships across generations" (Crossley from C. Taylor 1989: 91). She continues, "We have a sense of who we are through a sense of where we stand in relationship to 'the good'" (Crossley 2000a: 533). By

supporting this sense of our self in relation to what is best in a culture, narratives can set the stage for a healthier world view, which leads to the opportunity to achieve "integration, adaptation, peace and closure" (158).

Because our target audience comprises returning veterans, there is a risk of opening up memories that may be painful or traumatic. The intent is not to explore negative events, but to focus on the positive (Crossley's "good") by emphasizing the honorable stories and aspects of service. By organizing experiences into a story, whether by writing or by imagery, the experience "which was static, frozen, totalizing, and formerly unknown, becomes not only known, but something that can be revised, and therefore multiplied, changed and re-seen." (Sinor 2003: 414) Several researchers note that the capability of revising the story is a key aspect of recovery from traumatic events, giving a sense of control back to the narrator (Warnock 2000) (Johnson, 2000). As Anderson & MacCurdy, two prominent narrative experts state: "… writing that heals is often writing in which the writer names, describes, and takes control of experiences in which the powers of naming and controlling have been explicitly annihilated." (Anderson and MacCurdy, 2000: 85)

PTSD and other traumatic responses caused by the stressors of long deployments, constant vigilance and dangerous situations have many symptoms. One of these is a loss of self-esteem, or a sense of shame, among some soldiers. As early as 1992, Wong and Cook delineated the contribution that shame has to PTSD with their study of Vietnam veterans (Wong and Cook 1992). Countering this loss of self-esteem is one of the primary goals of the "Warriors' Journey" experience. By correlating honorable and respectable values of great warriors throughout history with the experiences service members have faced today, and emphasizing the warrior ideals, we hope to help revitalize the self-image of veterans affected by traumatic events.

While the act of writing has been shown to have healing benefits for the self, as described above, our story experience is not focused on writing per se, but on imagery, sounds, narration and interaction. Recent brain research indicates that traumatic memories reside in the non-language centers of the brain, e.g. the amygdala, which is part of the brain's mechanism to react to and store emotional events (Buchanan et al. 2001). It is also the brain area implicated in "appetitive" or positive conditioning via imagery (Paton et al 2005). The emotional part of the brain is a powerful part of our emotional makeup and memory formation. By using imagery as a key element of the interactive story experience, we hope to tap into the working mechanisms of our brain to form emotional memories, and thus increase the chances that the story will resonate with those who experience it.

3. CREATING THE EXPERIENCE

Our efforts to use narrative are unique in that we combine multiple storytelling techniques (visuals, sounds, narration) with artificial intelligence (AI) and embodied conversational agents (ECAs) within an online virtual world setting. Story experiences are not unknown in the Second Life virtual world. There are many excellent examples including Numbakulla (a solo questing experience in which all communication occurs through placed objects), the Gorean role-playing lands (all communication through real life individuals piloting the avatars, with the story emerging from their interactions), and the innovative narrative Gone Gitmo (which forces the avatar to take on the role of a recently captured prisoner of war being sent to the infamous Guantanamo Bay military prison). While these provide a wide range of satisfying and interesting storytelling venues in Second Life, none of these use embodied conversational agents to facilitate the story information and interaction (Carr and Pond 2007) (Weil and de la Peña 2008).

Agent use in the virtual online world of Second Life is a relatively new area of exploration, with a limited number of examples (originally used for functions such as modeling virtual outfits for sale, land sales, scouting for land, and parcel management in communities). More recently, ECAs have been implemented in SL for various purposes: as virtual guides in the Army's public SL space (Jan et al. 2009); as part of an experiment to determine the social spatial norms in a virtual world (Friedman, et al. 2007); and to showcase an intricate virtual model of the ancient Chinese war strategist, Sun Tzu (Fliesen 2009). We create our avatar-agent in SL in much the same way a Second Life resident creates his or her own avatar –with careful design considerations related to physical appearance, costuming, voice, and gestures. This agent is "logged into" SL via a server, and set to run according to the scripts that control its movements and responses (this will be covered in more detail in Section 4: Technology).

There has been tremendous progress in ECA research over the last decade. From simple chatbots to ECAs that can negotiate and have emotions, the ranks of these highly functional agents are growing. Interactivity is the hallmark of these agents, with typed or spoken word conversations the standard implementation (see for example Cassell et al. 2000) (Traum et al. 2003) (Swartout et al. 2010). We have expanded this agent work by bringing them into larger functionality in the virtual world domain and setting them in the guise of a storytelling activity.

ECAs are not usually associated with storytelling, per se, with a few notable exceptions (Cassell 2001). Michael Mateas's Façade project, outside of Second Life, is a good example of a high-end approach to interactive storytelling with agents (Mateas and Stern 2004). Not only are the story's main characters agents themselves (Trip and Grace, a seemingly successful married couple), but there is also a hidden drama agent that monitors the interactive simulation and makes decisions about what the two protagonists do during the extent of the event. The story within Façade arises from the choices made by the participant in their engagement with the agents within the setting (the couple starts fighting and you are dragged into the conversation). The Façade story has a strong sense of psychological immediacy, elicited by using an uncomfortable situation to heighten the drama.

On the other end of the ECA spectrum are chatbots (Mauldin 1994). Chatbot agents are a form of autonomous virtual humans that process natural language in some way. They are often not embodied and have limited general intelligence. Several versions of these can be found on the Web, such as the Pandora bot (Pandorabot: Pandorabot chatbot hosting service, http://www.pandorabots.com/pandora). We felt it important to have an embodied agent that went beyond the capabilities of a chatbot by knowing a great deal of information about the domain and facts of the story. We also wanted the agent to be embodied so that the story would have a recognizable and memorable hero. Ulrilke Spierling (2005) proposed a framework that combines traditional storytelling and first person experience with an ECA which has informed our own implementation. He notes, "The overall goal is middle ground between predefined narrative and emergent conversations" (p 4). We have designed a story that starts with a linear walkthrough (an audio-visual experience with four distinct sections) and culminates in the conversational interaction with the narrator of that story. What the participant sees and hears in the narrated story primes them for their visit with the embodied agent.

As mentioned, we designed the stories in the Warriors' Journey experience to serve as positive reinforcement for veterans who need to regain a sense of self worth that might have been damaged in their war fighting activities. We aimed for contextually anchored stories, but not ones that paralleled too closely to the veterans' recent wartime experiences, as we did not want this to be confused with more standard Post Traumatic Exposure Therapy. Therefore, we decided to focus on historical entities that embodied the positive qualities we wanted to illustrate rather than overt messages about the current conflict. In this way we felt we could achieve deeper and more effective storytelling by selecting narratives that do not relate too closely to the context of the soldier's recent deployment experience, which might prove too intense to revisit.

Our goals in creating a series of stories about historical warriors through the ages are to: 1) find a cultural marker that can be an emblem of warrior values in a positive and reaffirming way, and 2) to identify a universal veteran issue that can be addressed/redressed cathartically through this marker. If something about these stories did not resonate with our soldiers, or if they could not identify with our far-off protagonists, then they would have little to gain from the stories.

3.1   The Story

For our first implementation we chose the Cheyenne Dog Warrior, a member of an elite Native American guard unit that put selfless duty among his highest callings.[3] A Dog Soldier would wear a long sash over his right shoulder, with a split end section trailing on the ground. If danger was eminent, the warrior would use a wooden stake to pin himself to the ground where he could defend his people. Once committed, only his fellow people could relieve him of this duty by unpinning him and/or yelling at him like a dog (Mails 1998). The key elements of the Dog Warrior story include: sticking to one's post (point of strength), and dealing with lost comrades (point of difficulty). In the Dog Warrior story, the cultural marker is the tradition of the Dog Rope, clearly emblematic of Selfless Sacrifice. When the participant finally meets the embodied conversational agent in the form of the Dog Warrior, he does so at the edge of the warrior's village where his fallen brethren are buried. Through witnessing and listening to the story of these acts of selfless sacrifice, our living hero (the veteran) must also deal with those who fought like him, and those who, unlike him, gave their lives. This is a clear issue for veterans: a parallel can be drawn between the Cheyenne, visiting the dog ropes (grave markers) of past warriors, to a soldier visiting a war memorial.

3.2   The Warriors' Journey Experience

The Warriors' Journey experience consists of two main parts. The first is the story path contained within an environment that contains images, sounds and narration. The second part is the interaction with the embodied agent as the Dog Warrior from the story, which happens after the initial tale has been experienced within the story space.

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[3] Other stories in the planned series include the Samurai, Celtic and Spartan warriors.

3.2.1 Environment Design

The environment that houses the story is a tower inspired by the designs of Mary Colter, a 1940s architect who was responsible for many designs in the American Southwest (Berke 2002). One tower she designed was made to look like an ancient ruin and stands at the rim of the Grand Canyon. We chose to emulate this design for two reasons. First, there is no specific culture assigned to the tower, though it has the appearance of great age. Second, we felt that an upward climbing journey would emphasize ascension and positivity as opposed to a straight or otherwise oriented path. Thus, the tower is an important metaphorical aspect of the Journey. The continual upwards path ascends into greater understanding and expanding knowledge. (See Figure 2.)

Many of the ideas enacted in the story space are also informed by expertise in museum design, where the visitor is on a path or journey to be traversed in order to gain some knowledge. We referenced the techniques of noted designer Philip Thiel. In his book, *People, Paths and Purposes*, he describes the environment experienced as "a path-contingent sequence of scenes" (Thiel 1997: 212). We used audible narration because we believed that voice would elicit more engagement from the participant than simply looking at images. Audible narration is an immersive "background" story delivery method. Unlike text, it does not require active participation, only passive engagement and presence.

3.2.2 Narrative

The narrative is brought to life not only by the voice of the narrator, but also by illustrations from the warrior's life (See Figure 1.). The spiral path of the tower keeps the participant travelling a proscribed path that focuses attention on the details of the story we want the user to know and understand. Upon entering the story space, the user becomes immersed in the story through the limited path, the visuals, sounds and narration. Because these elements are minimal and succinct, the setup allows for temporal interpolation where the story recipient must fill in the blanks on their own.

The four illustrated story panels are accompanied by non-diegetic sound elements such as music and a voice-over narration. These story panels, sounds and narration serve as background as well as fodder for the final conversation with the embodied agent who will be encountered in the next phase of the Warriors Journey.

3.2.3 The Touchstone room

At the top of the tower's spiral path, a threshold must be traversed to establish the final, personal connection to the Storyteller. Crossing over this threshold to what we call the Touchstone room, the participant finds himself face to face with the story's narrator (See Figure 4.). Crossing a threshold, in the thinking of Joseph Campbell, represents a change from one state of being to another, "venturing into an unknown and dangerous realm where the rules and limits are not known" (Campbell 1965). The physiognomy of this place beyond the threshold contains those denotative and connotative elements that bring it meaning, a unique character and quality, a "genius loci." In the Touchstone room, these "place qualifying agents" (as Thiel terms them) we include are the tipis, the travois, the various baskets and even the dog ropes from the fallen warriors on the ground. This is a deterministic space, one that Thiel calls a proactive medium – as it can actually facilitate a change of consciousness in the user-participant (p 340). Therefore, metaphorically, when one returns from this realm, they do so with a new wisdom that has been gained from experiencing the story, which is now integrated into one's own life.

3.2.4 Interaction with the agent

It is important that answers can be contextualized into the dog warrior story, especially those questions that relate to the soldier's own story. When the visitor encounters the Dog Soldier in the form of a 3D virtual agent in the Touchstone Room, he is standing at the edge of his village. This virtual agent finishes narrating his story in a face–to-face experience, with scripted body animations, music, and the same voice that is heard in the tower below. The agent character then essentially shifts the story from passive to a more active mode: he goes from telling the story to listening to questions the participant might pose, and answering them. The storytelling agent/warrior is in full costume, just as he was represented in the story panels. To support the answers being relevant and realistic, we have created a "Character bible" that sets the facts about the warrior that allows us to consistently and thoughtfully answer questions "as if" we were the virtual character. The character bible includes the warrior's name Hoetoo'otse, details about his family, when he was made a Dog Soldier, where he lived, who his people were, and other related facts.

At the story's conclusion, the participant is told he can ask the Dog Soldier questions about his background, history, and story. The Dog Soldier agent's conversational module, based on ICT's Virtual Human work (Leuski et al. 2008) is continually updated through this dialogue to enrich the knowledge base of the agent.

3.2.5 Reward: Remember and Tell

After experiencing the warrior's narrative and interacting with the virtual agent, the participant earns the reward of being able to tell his own story in the Warriors' Journey Tower. With help from another intelligent agent, he can populate the story tower with his own images, sounds and text. He can also create a unique avatar (a 3D representation of himself) that can perform similar actions as the Dog Soldier character. In this way, the participant can tell his story and share it with others as part of a therapeutic enrichment exercise.

Figure 1. *An image from the warrior's life.*

Figure 2. *The Story Tower structure.*

4. TECHNICAL IMPLEMENTATION

The Dog Soldier is an Embodied Conversational Agent (ECA) as previously described. ECAs allow both verbal and non-verbal interactions in a virtual world (Cassell et al. 2000). In the current system, the Dog Warrior agent is designed to respond to questions asked by the participant and perform nonverbal gesturing. Visitors can interact with the Dog Warrior either in chat or over instant messages (IM). Chat and IM differ in two regards: chat is public but local: only those nearby can see and participate in the chat. IM has no distance limitation, but is private. The Dog Warrior can only be in one chat conversation (potentially multiparty) while he can participate in any number of private, dyadic IM conversations going on at the same time.

The agent's conversational domain is constrained to his background, life as a warrior and his values as a soldier. The motivation for this was to keep the exchange focused on the domain and not allow the conversation to fall out of the context of the activity. Provisions are made, however, to have responses to off-topic questions that might be asked. These answers can range from "I do not know" to "your language is different from my people's".

4.1 System Architecture

The user's questions are statistically analyzed and algorithmically matched to the best answer based on word order and word combination using a tool called the NPCEditor (Leuski et al. 2006). The user's question is compared against a list of potential paraphrased questions, which are associated with corresponding replies. If the question is unclear, the agent attempts clarification by responding with a leading question. The system can also withhold information until certain conditions are met, such as name exchanging, visiting a specific location, and achieving a cultural understanding or some other type of rapport. All communication is through local chat or IM in Second Life, so others can listen in or even join the conversation. The system also has the option to express physical or verbal actions in response to a variety of environmental stimuli, such as avatar proximity, keywords, or patterns of movement. The Dog Soldier also uses some non-verbal gesturing as part of the interaction, such as a hand making a sweeping motion to draw a user's attention to the graves of his fellow warriors.

The main agent application is implemented in the programming language C# using LibOpenMetaverse (formerly libsecondlife), a freely available .NET based client library used for accessing 3D virtual worlds. This library implements the Second Life client-server protocol and allows for an ECA to connect to the

Second Life virtual world in the same way a human user would connect by logging into the Second Life client. (See Figure 3.) LibOpenMetaverse exposes all avatar capabilities including speech, pathing, movement and gesturing to the various AI modules that control dialog, state and gesture, giving us maximum flexibility in crafting the ECA's actions and responses.
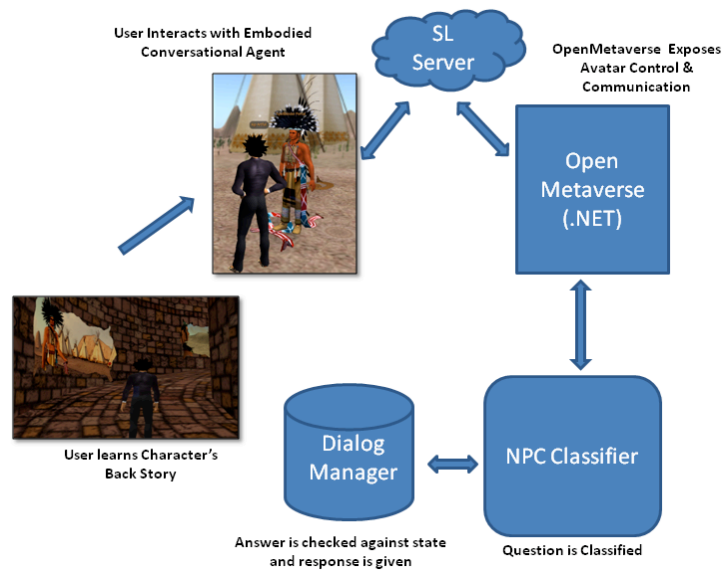

Figure 3. *Basic system architecture.*

4.2   Character Development and Dialog Model Authoring

There are several issues to consider when developing the content for the AI-based dialog. We must develop a list of potential questions that may be asked by the participant after being introduced to the agent. The general types of questions that must be addressed include greetings, answers to questions about the Dog Warrior's life, responses for off-topic or inappropriate questions, and closure/exit interactions. It is important that as many answers as possible be contextualized to the Dog Warrior story. This is an iterative process. After building the first dialog model, we performed several rounds of content revisions based on actual conversation logs generated from interactions between visitors and the Dog Soldier agent.

4.3   Example of Interaction

> **kip Artful**: hello
> **Spellbinder Portal whispers**: Hello.
> **kip Artful**: who are you
> **Spellbinder Portal whispers**: I am a Dog Soldier.
> **kip Artful**: where are you from
> **Spellbinder Portal whispers**: I am from the Cheyenne territory, over the great hill.
> **kip Artful**: did you see battle?
> **Spellbinder Portal whispers**: I fought in many battles, first against the Kiowa, then later against the Pawnee
> **kip Artful:** where is your family?
> **Spellbinder Portal whispers**: I never took a wife or fathered children. My family was the Dog Soldiers. They were my brothers, and we took care of each other.
> **kip Artful**: is that a gun?
> **Spellbinder Portal whispers**: We Dog Soldiers favor bows and arrow, but we will use other weapons as well, such as the spear and the gun.
> **kip Artful**: why did you fight?
> **Spellbinder Portal whispers**: I fight to defend my people, and my way of life. That is the only reason I have ever known.
> **kip Artful**: how did you fight?

Spellbinder Portal whispers: I fought in many battles, first against the Kiowa, then later against the Pawnee
kip Artful: where is your horse?
Spellbinder Portal whispers: Many Dog Soldiers rode horses into battle, but I was charged with the dog rope. A horse will turn away, where a man can stand his ground.
kip Artful: did you have fear?
Spellbinder Portal whispers: A Dog Soldier must appear brave. Still, when I pinned myself to the ground I was afraid. More afraid than I had ever been before. I was fighting for my life with nowhere to run. Yet when the Kiowas saw me, they didn't see the fear in my eyes, only the rope pinning me to the spot and the sharpness of my arrows. Many of us fell that day, but in the end it was the Kiowas who fled. We protected our people.
kip Artful: where is your family?
Spellbinder Portal whispers: You know our people as the Cheyenne, but we call ourselves the Tsitsistas. Tsitsistas simply means "our people."
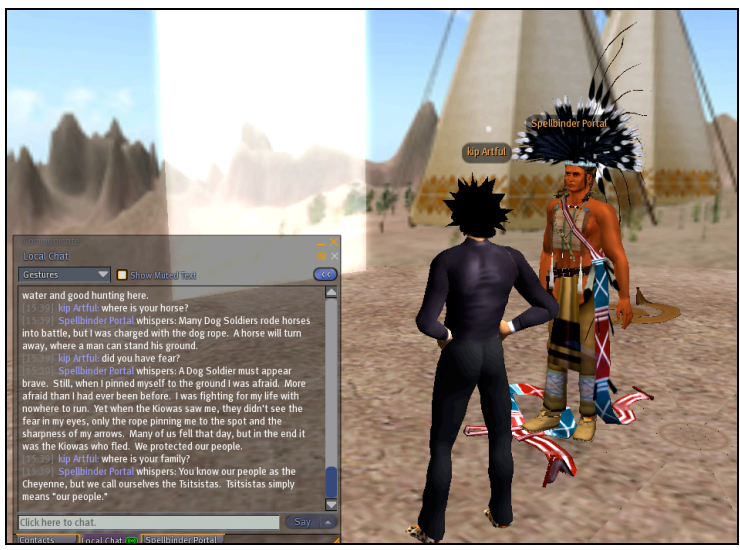

Figure 4. *Example of conversational interaction in the Touchstone Room.*

When the participant has finished asking questions (i.e. when 30 seconds without a question have elapsed) a final message appears in the chat window that explains how to leave the Story Tower. Once outside, the visitor can choose to re-enter the tower and experience yet another Warriors Journey story, or ask to start building his own.

6. CURRENT STATE AND FUTURE WORK

The Cheyenne Dog Soldier was initially tested by a limited group of volunteer participants. Approximately 25% of those surveyed were active, retired or on reserve military duty. Preliminary results show that 93% of those surveyed indicated that they understood the background story of the Dog Warrior. 84% indicated that it would be meaningful to author their own story in the story tower and 85% of those surveyed indicated that they felt the activity could be a useful tool for veterans. Here is a quote from one recently returned Marine that participated in the testing phase;

" I believe that it may be therapeutic for a returning/returned veteran to be able to author his own story if he believes it to be. Troops coming back have struggles both big and small. I reintegrated fairly easily; many of my friends and subordinate Marines struggled to get back into a routine or feel comfortable doing anything and everything. It's hit or miss, different strokes for different folks kind of thing - but, I do believe any vehicle for allowing somebody to get some of the shit out of their head which may be troubling them certainly has value to veterans and those reconnecting. The story tower seemed to do some pretty cool and interesting stuff."

We are planning more detailed studies in the coming year to determine how these stories actually affect returning veterans. We are also eager to test whether getting to author a personal story in the story tower space in the virtual world is seen as a positive, beneficial activity. We expect, as Jennifer Sinor states, that being able to relate and share one's stories about war will be "primarily an act of testimony, a public ritual of healing." (1997, 405)

7. CONCLUSIONS

In the book, *An Introduction to Narrative Psychology*, Dr Michelle Crossley argues that "The concept of self is inextricably linked to language, narratives, others, time and morality. […] The aim of narrative psychology is therefore to study the language, stories and narratives which constitute selves and the implications and permutations of those narratives for individuals and societies" (Crossley et al. 2000). It is our hope that this two-fold experience, looking at classic warriors' journeys and authoring one's own warrior's story, will help start wounded warriors on a path to healing through personal narrative expression.

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