## **GUERRILLA GAMES IN PERFORMANCE MODE**

### A READ-ALONG SCRIPT OF THE PIPELINE PINBALL ENERGY THRILL RIDE GAME

Lori M. Shyba
Digital Media Laboratory
Interdisciplinary Graduate Program
University of Calgary, Alberta, Canada
1 403 669-6537
Iori.shyba @ ucalgary.ca

#### **KEYWORDS**

Forum Theatre, Game Design, Play, Interactivity, Pedagogy, Computer Games, Serious Games, Interactive Storyworld.

#### INTRODUCTION

Brazilian activist Augusto Boal once said that what facinated him most about "forum" theatre was the transitive and non-dogmatic character of its pedagogy where proposed solutions are not always necessarily the "correct" ones. In Boal's innovative forum theatre, audience "spectactors" intervene in the action by jumping into the scene and act out other modes of possibility. [14] If the experiential, activist forum theatre of Augusto Boal can get people rehearsing alternative strategies for educational and political change in South America, can "serious" computer games like "The Pipeline Pinball Energy Thrill Ride Game" initiate change by allowing spectator/players to jump in on the political and economic action of our world and its energy industry?

"The Pipeline Pinball Energy Thrill Ride Game" is a component of my PhD research at The University of Calgary where the operative inquiry is, "How can interactive game environments in computer-mediated theatre activate us to better understand urgent social and political issues? This game spun out of my Interactive Performance Media script *Spies in the Oilsands* as a scenographic installation and plot escalation device, making it, by definition, "A Little Game in Some Theatre."

My project here is to show how it's also "A Little Theatre in a Game" and how it steps us through a classical narrative story stucture until a crisis point where, like in Boals' forum theatre, players can express their own solutions. Through a series of musings that correspond to the "PPETRG" game design video, this paper tracks the player/spectators' journeys through a dual point system where a paradox emerges having to do with economic risk in world energy economics. Will the future price of oil stay high enough to the oil sands to remain profitable? What if alternative energy takes the price below the \$20 - \$30 extraction price per barrel? Bearing thisparadox in mind, will Albertans choose to go after fossil fuel pointsor alternative energy points?

#### THE GAME DESIGN VIDEO

THE LEAD IN: Game designer and author Chris Crawford says of game design, "You can't design games if you don't understand play." [2] Since it's easier for me to feel playful in visual rather than literary textual forms, I launched a creative process to create a video that takes a madcap frolic through a simulation of the high concepts of "The Pipeline Pinball Energy Thrill Ride Game," including its narrative, its goals, and its graphics and sound design. Hopefully this gives a sense of how this "serious" game will work once implemented and the concomitance of instructional and entertainment values reconciled through humour and playful irony.







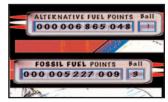


Figure 1: The Lori character describing the game action.
Figure 2: A Little Theatre in a Game.
Figure 3: A game as huge as a wall.
Figure 4: The dual system of Alternative Energy and Fossil Fuel Points.

rigate 1. The data system of ricemative Energy and reson ruler romes

EXT. MONTAGE OF PHOTOS OF PIPELINE WORKERS AND WELDERS

SUPERIMPOSED TEXT

Sure. You can make THEATRE into a COMPUTER GAME. You just have to FIRE UP a PLAN.

For better or worse. Here is my PLAN.

INT. PROFILE CLOSE UP on Narrator.

NARRATOR AND SUPERIMPOSED TEXT The Pipeline Pinball Energy Thrill Ride Game INT. CLOSE UP on LORI. Imagine a computer pinball game as huge as a wall. Bright shiny, bells and buzzers. Where you can score Alternative Fuel Points or Fossil Fuel Points. I'm Lori Shyba and I'm the designer of The Pipeline Pinball Energy Thrill Ride Game. It's a little theatre in a game. Now I'm not one to stuff messages down anyone's throat, but maybe by playing this game we'll find out If we can convince ourselves ... as individuals and as a society ... to keep alternative energy off of the back burner. Let's see how it works.

#### THE EARLY SCENES/LEVELS

THE THEORY: GENERATING ENERGY DIVERSITY AND SHIFTING RESOURCES. When the ball first gets put into play in this early phase of the game, it's like the "inciting incident" in a well-made theatrical script and the first volley of expository risks and challenges. Here we have the "Generate Energy Diversity" goal of the game iterated, implying that the victory condition of the game is to accumulate more "Alternative" than "Fossil Fuel" points.





Figure 5: The three open pipeline chutes.
Figure 6: The alternative energy targets; methane, hemp, and wind

THE SCRIPT: INT and EXT. MONTAGE OF "MOCK-UP" ANIMATIONS REPRESENTING SIMULATED GAMEPLAY

NARRATOR AND SUPERIMPOSED TEXT Generate Energy Diversity

LORI. The player first needs to plunge the energy ball through each of the three open pipeline chutes to activate them. Bumpers, representing hydrocarbon deposits and refineries, keep the ball in motion. Flippers, lined up along the borders, keep the energy ball in Canada.

NARRATOR AND SUPERIMPOSED TEXT Shift Your Resources

LORI. Once the three pipeline chutes have been activated, the three alternative energy target holes light up. These represent biofuel hemp crops, wind generators, and geo-thermal gas hydrate methane reserves.

#### THE MIDDLE SCENES/LEVELS

THE THEORY: THE OILSANDS AND THE PIPELINES This middle section of the game continues to build the plot through a series of escalating actions. In Michael Mateas' and Michael Stern's theory of dramatic writing for interactivity — acknowledged to have been derived from Robert McKee's principles of story — "beats" are the smallest unit of dramatic action, and are, "annotated

by the author with preconditions and effects on the story state ... in the interest of creating an overall dramatic narrative — a plot. " ("Façade: An Experiment in Building a Fully-Realized Interactive Drama," 6) In "The Pipeline Pinball Energy Thrill Ride Game," as a result of the protagonist being a moving energy ball, the primary exchanges of dramatic action take place as interstitial beat units of energy ball-to-obstacle possibilities. For example, if the player fails to keep the ball in play with good flipper action, it could be game over at any time, however, assuming the balls are kept in play, it's this middle section where the game branches off into interactive, non-linear possibilities. For example, if the player fails to get the ball properly into the nuclear target hole, the game may simply blow up, versus if the ball is played skillfully, the game may go into a black-light radioactive mode advancing the action to the next level.









Figure 7: The Alberta Oil Sands Figure 8: The Pipeline Target Holes Figure 9: The Global Clients Figure 10: The nuclear target hole

THE SCRIPT: INT and EXT. MONTAGE OF "MOCK-UP" ANIMATIONS REPRESENTING SIMULATED GAMEPLAY

NARRATOR AND SUPERIMPOSED TEXT The Alberta Oil Sands

LORI (Voiceover). Once the balls are locked, this opens up the MacKenzie Valley Pipeline and the Alberta Oil Sands. The player needs to plunge the energy ball down through the pipeline and then back up through the loop and into the oil sands target hole. Once the energy ball travels through the loop, the global energy markets open and five clients appear as popup targets.

NARRATOR AND SUPERIMPOSED TEXT Build it and They Will Come

LORI (Voiceover). The player needs to activate each global market by knocking down each of the five clients. Knocking down the clients lights up the nuclear target hole. The player needs to lock the energy ball into the nuclear hole. If these balls are not played skillfully and end up in the gutter too soon due to bad flipper action, or if the game is tilted, a nuclear meltdown occurs and the whole game interface explodes. However, if the balls are played skillfully, the game goes into black-light radioactive mode.

#### THE END SCENES/LEVELS

THE THEORY: SPIES AND DANCING/SINGING ANIMALS Assuming that the player gets by the game's nuclear booby trap, which in theatrical terms could be considered the penultimate moment or the crisis decision, the climax is in sight. However, there are still the Spies in the Oilpatch to clobber before the final climax of birds and animals dancing and singing, along with the resolution of game scores and decisions about win/loss variables.

In A Theory of Fun for Game Design, Raph Koster says, "To achieve the potential of the medium, we're going to have to push at some boundaries .... We'll assert that games are not only entertainment and we will probably produce some work that may shock, or offend, or present themes that challenge deeply cherished beliefs." He doesn't stop there either, he goes on to remind us that, "All the other media do it." This includes theatre. Through the ages, social activist drama has engaged interest in issues that are happening on a global scale. Catherine Graham, editor of Canadian Theatre Review, puts it this way, "Activist theatre artists have helped expand our sense of the role that dramatic performance can play in developing alternative visions of public life by re-evaluating some of the terms in which we consider that question." In Canada, for example, this includes theatre practitioners such as David Diamond of Vancouver's Headlines Theatre whose work stimulates communitybased dialogue; and playwright Rahul Varma, author of Bhopal which is about Union Carbide's crimes against humanity in India.

So-called "serious" computer games have a long and rich legacy of activist theatre to turn to for inspiration and courage. One day, for every hundred Space Invader-type games, maybe there'll be a Pipeline Pinball for players who, as Koster says deserves, "real challenges, challenges as sophisticated as the best stories give them."





Figure 11: The international spies in the oilpatch. Figure 12: Dancing caribou signaling the end of the game.

THE SCRIPT: LORI (Voiceover). Now, three pop-up enemy spies show up in place of the global energy clients.

# NARRATOR AND SUPERIMPOSED TEXT Spies in the Oilpatch

LORI (Voiceover). Once the spies are knocked down, the animals light up. Conformity or diversity point gain. When the animals light up, the whole game is ablaze with bells and flashing lights signaling the climax of the game. The player needs to activate the birds and the caribou and at the end the birds flap and sing and the caribou spin and dance. Diversity point jackpot gain. The final reward is that if fossil fuel points are greater, the Voiceover says "You are still enforcing hydrocarbon conformity, try again." The map dissolves and fades away to black. However, if alternative points are greater, the Voiceover says, "You have succeeded in energizing the world in ways you cannot imagine. You are a national treasure."

#### **EPILOGUE**

THE THEORY: In *Truth and Matter*, Hans-Georg Gadamer discusses artwork as "language" and says that no matter what its medium, it opens up a space in which both the world, and our own being in the world, is brought to light as a single, but inexhaustibly rich totality in 'fulfilled' or 'autonomous' time. Thus both theatre and games could be seen as artwork with a festive temporarily, a symbolic and playful character that opens us up to the true possibility of community.

Temporality is an important consideration of both theatre and games as narrative forms where over time, the action leads from exposition and inciting incident to a series of escalating risks to a crisis decision, a climax and finally a resolution. Whether they traverse through linear or a non-linear narrative terrains, they are still journeys of discovery for us as participant players or audiences. In the case of serious games, as in activist theatre, we might even be opened up to possibilities of connections with our community, glimmers of meaning or truth, and maybe even hope for a better world.





Figure 13: "Let's Go Alberta! Let's exploit our existing hydrocarbons. Figure 14: The Spies say, "What does she know about the bitumen?"

THE SCRIPT: INT. CLOSEUP of LORI. (*Ironically*) Let's go Alberta. Let's exploit our existing hydrocarbon resources, the Alberta Oil Sands for example, but let's make sure we've got some kind of energy fuel to peddle when it's all gone.

SFX and cut to SPIES ANIMATIONS /SUPERIMPOSED TEXT. What does she know about all the bitumen sittin' on the planet?

SFX and cut to LORI

There are spies in the oilpatch and whose side are you on?

ROLL CREDITS

#### **CONCLUSION**

I can't predict the future about our world and its energy resources ... but it's my feeling that "The Pipeline Pinball Energy Thrill Ride Game" can tune us in to the economics of the oilsands by subjecting us to playful checks and balances of interpretation and interrogation. Do we count on a continuing oil spike, bank on the fear and speculation factor and develop the hell out of the Alberta oil sands just because they're there and it's the simple way out? Or should oil companies take up the challenge of alternative fuel research, development, and marketing and prove themselves to be real energy companies by following up on long-term energy planning. To reiterate a script fragment from the Pipeline Pinball Energy Thrill Ride Game design video, "Maybe by playing this game we'll find out if we can convince ourselves as individuals and as a society to keep alternative energy off of the back burner." Or perhaps we can at least tune people in to what's going on around us.

#### **BIBLIOGRAPHY**

- Campbell, C.J. (1988) The Coming Oil Crisis. Essex: Multi-science.
- 2. Crawford, Chris. (2005) *Chris Crawford on Interactive Storytelling*. Indiana: New Riders.
- 3. --- (2003) Chris Crawford on Game Design. Indiana: New Riders.
- 4. Deffeyes, Kenneth S. (2003) *Hubbert's Peak: The Impending World Oil Shortage*. Princeton: Princeton University Press.
- 5. "Fallacy of Peak Oil." Article by Paul Haavardsrud, Calgary Herald. August 14, 2005.
- Gadamer, Hans-Georg. (1994) Truth and Method. New York: Continuum.
- Graham, Catherine. "Editorial" in Canadian Theatre Review Number 117, "Activist Theatre" 10 – 13. Winter, 2004.
- 7. Koster, Raph. (2005). *A Theory of Fun for Game Design*. Scottsdale: Paraglyph.
- "Left or Right, this energy crisis is real," Article by Victor Davis Hanson, Stanford University. National Post, May 4, 2005.

- Mateas, Michael, and Andrew Stern. (2005) "Build It to Understand It: Ludology Meets Narratology in Game Design Space." DiGRA Conference, Vancouver, B.C., June 16 - 20, 2005.
- 10. McKee, Robert. (1997) Story: Substance, Structure, Style, and The Principles of Screenwriting. New York: Regan.
- 11. Newsgaming.com. September 12th (online game) http://www.newsgaming.com
- "Observers denounce oil flight as 'logic-defying'", Article by Jon Harding. *National Post*, August 9, 2005.
- 13. Parker, J.R., Tibet (online game), http://pages.cpsc.ucalgary.ca/~parker/new/Tibet/tibethome.html
- 14. Schutzman, Mady, and Jan Cohen-Cruz. (1994) *Playing Boal: Theatre, Therapy, Activism.* London: Routledge.
- 15. Shyba, Lori M. 2005. "Spies in the Oilsands" Integrated Performance Media script excerpt. http://www.sundialmedia.com
- 16. U.S Energy Department statistics cited in *National Post*, March 22, 2005 in an article by Joe Carrol, Bloomberg News.
- "Why It Won't Work," Article by Jon Hykawy, directory of technology research, Fraser Mackenzie Ltd. *National Post*, March 24, 2005.