

Beyond Fun and Games

Interactive Theatre and Serious Videogames
with Social Impact



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ABSTRACT



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The purpose of this thesis is to chart the course of my attempts to bring meaning for myself and for others about our world's energy resources, specifically the Alberta oilsands, through the creation and production of the original artistic case studies *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game*. This thesis also explores the use of theatre as a model for new ways of analyzing videogames and ultimately looks at both theatre and games as ways of rehearsing the reality of our future.

The first part is a review of significant influences that relate to the substantive and theoretical aims of the thesis as well as an exposition of the bearing they have on the interdisciplinary research design. The second part describes the creative process and production details of three case studies: *Spies in the Oilpatch*, *Spies in the Oilsands*, and *The Pipeline Pinball Energy Thrill Ride Game*. It also details the interpretive inquiry design that provides the framework for this personal narrative of imagination combining theatre, games, and the urgent issue of our world's energy resources. The third section features a synergy between theatre, games, and social issues that I have coined "Gamaturgy." Gamaturgy, in both the creative and reflexive realms, as I describe them, is derived from theatrical dramaturgy and provides new ideas for creating and critically analyzing videogames. The last section presents the general framework for ways that interactive theatre and serious videogames can enable us to better understand social issues. With the goal of this thesis being to promote understanding, the contributions of the inquiry models and their processes in the pursuit of knowledge are acknowledged, as is the role of interdisciplinarity in the patterning of meanings. Summaries of claims are made in the substantive, theoretical, and methodological domains, and final thoughts are offered about ways of taking action and making a social impact on the issue of world energy.

*Beyond Fun and Games is dedicated to you
because, for some intriguing reason,
you have been activated to read it.*



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ATTACHMENTS / *Spies in the Oilsands* DVD

INTRODUCTION: FOLLOW THE ENERGY

*315 Billion Probable Barrels of Oil. Rivals the Reserves of Saudi Arabia.
Expensive to extract but the world loves our safe oil.
Air Pollution Capital of Canada. Forests in Danger. Rivers in Danger.
But Still We Need It. How did I decide to take Action?
To Make a Play, and Make a Game.”*

— Lori Shyba, DIGRA 2007

THE RAW ENERGY of this interpretive research inquiry has swirled around me for most of my life. When I originally became interested in the Alberta oilsands in 1970 the world price of oil was \$2.79 US a barrel and in June 2008, it has topped \$130. Northern Alberta has gone from being a virgin boreal wilderness populated by bears and birds to housing the biggest open-pit mine in the world, crisscrossed by myriad pipelines and with over \$120 billion of development on the books. The purpose of this thesis is to chart the course of my attempts to bring meaning for myself and for others about our world's energy resources, specifically the Alberta oilsands, through the creation and production of the original artistic case studies *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game*. This thesis also explores the use of theatre as a model for new ways of analyzing videogames and ultimately looks at both theatre and games as ways of rehearsing the reality of our future.

MY EMBODIED AND EMBEDDED SELF

In the late 1960s when I was in junior high school, I had a neighbour in Calgary who was a petroleum geologist studying what he called “The Tarsands” up in Northern Alberta. He showed me samples of the gooey black sand that he had scraped off the surface of the earth up by Fort McMurray and then lit the stinky sand on fire right before my eyes to exhibit the effects of the fossil fuel oil contained within. Both he and I followed up shortly thereafter with papers about the tarsands, mine being a long-gone grade-seven

social studies paper, and my neighbour, Dr. William Gallup's, being a publication in the proceedings of the 1974 Canadian Society of Petroleum Geologists conference called "Oilsands: Fuel of the Future" (Gallup, 1974). In 1970, smoggy air pollution caused by fossil fuel carbon emissions was simply considered a by-product of The Good Life of progress and prosperity.

Almost 40 years later, in 2007, world oil prices had reached \$95 per barrel and fossil fuel air pollution was under scrutiny in the wake of Al Gore's *An Inconvenient Truth* and rising asthma levels. In the wake of my final case study of *Spies in the Oilsands* at the 2007 Calgary One-Act Play Festival performance, where Tarzana and Terra had waged a bloody pinball battle with the aim of swaying the value position of our active audience, I accepted an invitation from The Arusha Centre, a Calgary social issues lobby group, to talk about the production and perform a version of *Spies* as a one-woman show at their activist event called "Who Decides Our Energy Future?"

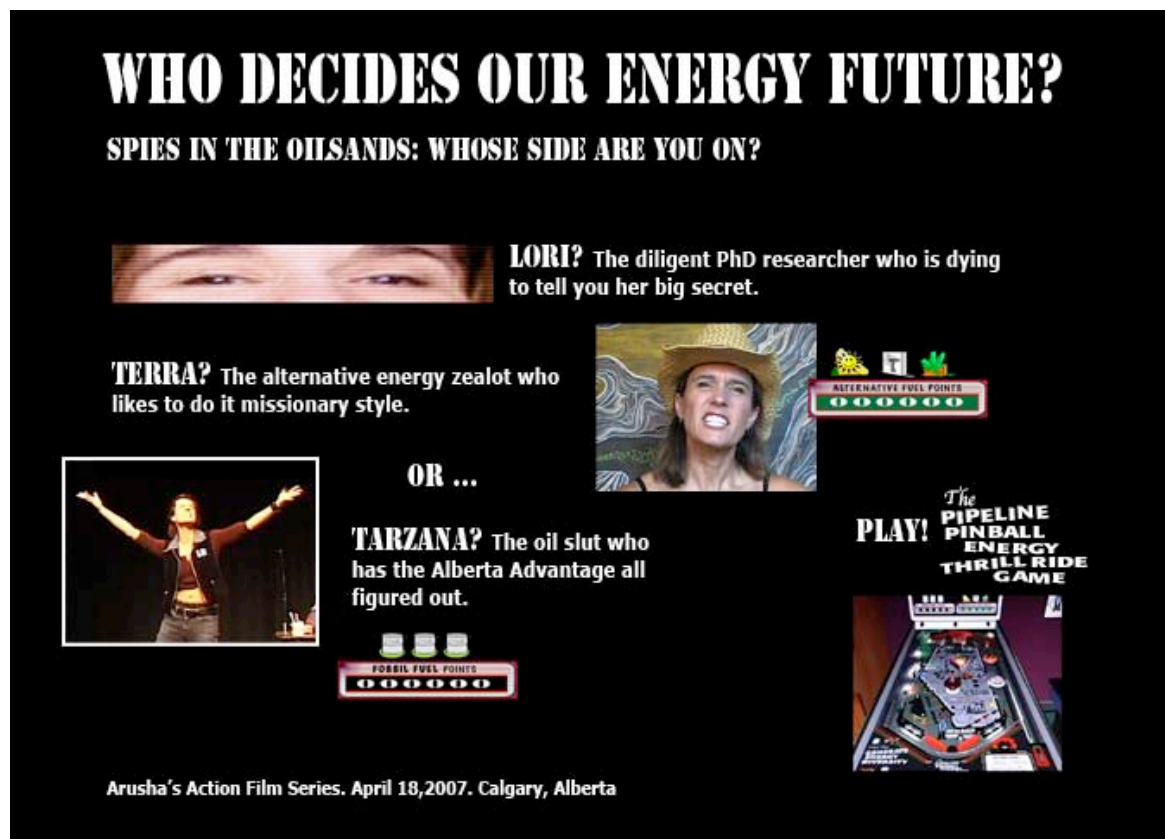


Figure 1: The backdrop screen from the solo performance of *Spies* at The Arusha Centre event called "Who Decides Our Energy Future?," April 18, 2007.

As a way of expressing my own value position, a task crucial at the time to the Arusha performance and crucial now to the task of writing this thesis, I stepped out on stage and expressed my challenges and questions about The Good Life. I pointed up at the screen projection behind me at the Plaza Theatre in Calgary, represented in Figure 1, and asked the audience, “What have I promised you up here?” When a brave soul piped up to say, “You’re dying to tell us your secret,” I positioned myself at the front of the stage and confided to the audience,

Yes, I am Lori Shyba and will disclose to you, for the first time, my secret. My secret is that I know how to glorify the oilsands. Back in the very early years of the 3rd millennium when I was in the media communications industry, I had a special client for a three-phase campaign of multimedia services, a big German company that will conveniently remain unnamed. For phase one of this campaign, I loaned my video camera to the unnamed German client so he could join a media junket up in Fort McMurray to gather footage of the oilsands for a presentation to potential investors.

When he returned, I digitized this footage, added bells and whistles in a glorious edit of the panorama of mud and smoke, threw a little sexy classical guitar music behind it, *et voila*. Client comes back and says, “Looks great, but we can’t use it.” I say, “Why not?” He says, “Because they inconveniently forgot to control the emissions that day and it’s bad PR to show the smoke going into the environment.”

So, in a dutiful fashion, I cut the offending footage out of the show, shipped phase one, and put the money in the bank. Then I had to sit around while UE1 got built. Know what UE1 is? It’s the Upgrader Expansion project meant to boost oilsands production that had all kinds of trouble including an “ammonia-related odour issue.” Anyway, a short wait started turning into a long wait so I went back to graduate school, where as a creative artist, I drilled down into my core values, as artists do, and completed an MFA in performance and multimedia.

Two years later the German client was still waiting for the completion of UE1 already years behind schedule and over triple the original budget, and this gave me a chance to consider my own moral stance. So I entered a PhD program with the thesis question: How can interactive theatre and computer games help us understand urgent social issues? The urgent issue I am compelled to understand? The Alberta Oilsands.

That was my secret, and this thesis is the long explanation.

THE THESIS GOALS AND OBJECTIVES

The central thesis question is this: Can interactive media, specifically forum theatre and serious videogames, enable us to better understand urgent social issues? In “Beyond Fun and Games: Interactive Theatre and Serious Games with Social Impact” I seek to extend existing research through three streams of inquiry: substantive, theoretical, and methodological knowledge building.

Substantively, my aim is to explore and document the process by which one can create art works that perform a particular task and to analyze how the task can be affected by creative impulses introduced by an active audience. In this case, I looked at *Spies in the Oilpatch*, *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game*.

My theoretical aims are firstly to define significant ways that interactive, activist theatre might provide a new form of analysis for social issue games; and secondly to seek out patterns of interconnected ideas and attitudes, based on key factors of the literature and results of the case studies, to advance theories about how we might make sense of the complex problem of our world and its energy resources.

Methodologically, my aim is to uncover knowledge-building models that will enable recovery of meaning from this interdisciplinary study on many levels; as art, as theory, and as methods for further discoveries.

In the spirit of playful enterprise and interdisciplinarity, I have continually, and intentionally collided these inquiries. My purpose is to infuse the illuminations of this study with the energy that occurs at the confluence of substantive, theoretical, and methodological knowledge, and in the realms of art and imagination, specific systems and methods, and prudent wisdom.

MY VALUES AND THE INQUIRY DESIGN

Robin Usher, an educational researcher who studies the relationship between knowledge, methodology, and practice, acknowledges that as researchers our biases are a part of us, cannot be willed away, and are “the marks of the trajectory of our desires and emotional investments in the research act” (Scott and Usher, 1996: 45). This glimpse I have given of the context of the *Spies in the Oilsands* project performance against my own life’s narrative is a way of introducing my values, assumptions, beliefs, projections and the things to which I am committed. I believe in balance and informed decisions. I cannot

tolerate greed or psychopathy in business dealings, just as I cannot tolerate art that preaches. I think that humour can be an enabler of effective subversive action. I believe that common sense is at the heart of complex problem solving. Truth is fleeting and comes in glimpses, but to save humanity from contamination by greenhouse gasses, we need to take action. I think there are lessons to be taken from theatre to inform videogame development. I don't think scientific methods or systematic plans are necessarily the enemy of art and imagination. Finally, I am sure that The Good Life is tied in with prosperity, but not necessarily on a material level. These are personal visions that provoked the creation of the Plays and the Games that comprise the case studies of this thesis exploration.

Artistotle wrote, "The mark of a prudent man is to able to deliberate rightly about what is good and advantageous" (Aristotle, 1976: 209). Phronesis, as an Aristotelian intellectual virtue, values action, ethics, prudence and practical wisdom and it is a key element, along with science, or Episteme, and art, or Techne, to connect with truth. (Flyvbjerg, 2001: 55-58). I did not set up exactly what I expected to find through this work but by prudently following the energy of the relationships between my values, their actions, and then consequences, and by keeping a sense of humour about it, I managed to transform my ideas and experience into substantial, theoretical and methodological illuminations. The glimmers of truth brought about through interpretive inquiry and reflection have given meaning to the Plays and the Games for me and hopefully for others.

INTERDISCIPLINARITY AND LIFEWORLD DOMAINS

*Thinking about our thinking ...
can make us better problem solvers.
— Dietrich Dörner pg. 195)*

The interdisciplinary scope and wide-ranging subject areas of this research and its case studies allow this work to step away from specialist domains and into what James Paul Gee calls "Lifeworlds" or domains where we understand things intuitively as everyday people. As Gee says, we need to "understand and value people's 'everyday' knowledge and understandings" (Gee, 2003: 36) and in taking action about something as

monumental as climate change, I have aimed the Play and the Game at as wide an audience as possible. Since I have defined my work as interactive and have aimed for social impact, making the Play and the Games esoteric or elitist has simply not been a choice. A theme that threads throughout this work is that the message of the art and the message of the writing is straightforward and the followup action has employed common sense as an integral ingredient of the critical thinking and contextualization that is expected at this level of scholarship.

This thesis, in its content and in its form, is committed to communicating in an active way, employing a common sense style and with the intention of finding relevance among the citizens of our lifeworld domain. Gee reminds us, however, that it is also crucial to be able to operate in a wide variety of specialized affinity groups outside of our ordinary lives. I hope the following research groups will respond to this work and help it grow beyond the pages of this thesis: researchers and practitioners in the digital realm of serious games and digital playspaces; artists and activists working in interactive theatre, particularly Forum Theatre; and environmentalists and activists dedicated to bringing awareness to the issues surrounding world energy.



THE DISSERTATION ROADMAP

Part One: The Sources

Chapter One: Ritual and Dramaturgy

In Chapter One I supply a historical foundation for the substantive explorations of my case study work and provide the theoretical underpinning of my eventual discoveries about gamaturgy as an extrapolation of dramaturgy. The chapter gives an overview of sacred play and ritual as it informs a multi-textual approach to play-making and game-making, provides a description of creative and reflexive dramaturgy, and then establishes patterns of possibilities between ritual, games, theatre, and social issues.

Chapter Two: Live and Digital Forum Theatre

Chapter Two is about live and digital games of Forum Theatre. I observe the work of Augusto Boal and David Diamond, auteurs who make theatre that generates change and social justice through performance and dialogue. This chapter supports the substantive and theoretical findings of this thesis, including the use of gamaturgy as an innovative way to extend dramaturgical practices and principles into the study of videogames.

Chapter Two also introduces techniques of creating effective social change through the liminoid actions of the Joker in Forum Theatre. Games, interactive theatre, experiential learning, and complex problem solving are connected to ideas and concepts of serious videogames.

Chapter Three: Serious Games with Social Impact

In Chapter Three, I describe how visionary auteurs working in the field of serious advergames can provoke critical thinking about social justice and ethical decision-making. These games and auteurial visionaries are exemplified because of their sense of play, sense of humour, and innovation in their use of digital display devices as an arena for expression and activism.

Part II: The Work

Chapter Four: Research Design as Playful Activity

This chapter describes the research design strategies that provided the methodological framework for the interpretive inquiry. These methods provided techniques for case study experimentation, for iterative design strategies, and as inspiration for freedom of thought.

Chapter Five: Round 1, *Spies in the Oilpatch*

Chapter Five documents the creative process of case study development that culminated in the Interactive Performance Media Cabaret script *Spies in the Oilpatch*. It is a heroine tale about Terra Incognita, a vivacious alternative energy entrepreneur who steals half-baked alternative energy secrets from oilpatch fossil fools in order to save the world. Although this piece has not yet been produced, the script is attached as an appendix to this thesis.

Chapter Six: Round 2, *The Pipeline Pinball Energy Thrill Ride Game*

In this chapter the concept, design and production phases of *The Pipeline Pinball Energy Thrill Ride Game* are chronicled through to the performance event that took place at the CCIT iCentre at the University of Calgary, Schulich School of Engineering.

Chapter Seven: Round 3, *Spies in the Oilsands, Whose Side Are You On?*

Chapter Seven documents the final case study of this series including the cycle of conceptualization, creative process as a collective collaboration, and its performance as a production at the Calgary One-Act Play Festival.

Part III: The Illuminations

Chapter Eight: Creative Gamaturgy, A Model from Theatre for Serious Games

This chapter articulates a new technique of Creative Gamaturgy as an influence on the “form” of videogames through playful creativity. Ideas that are explored include live improvisational gameplay among development teams and implementation of multi-textual modes of creative development for game designers.

Chapter Nine: Reflexive Gamaturgy, *Pipeline Pinball and the Rally Cry*

In Chapter Nine I expand the idea of Reflexive Gamaturgy as a new way to think critically about the thematic content of videogames and as a new form of game studies functional analysis. I then implement Reflexive Gamaturgy and its multitextual concepts of pretext, context, subtext, and intertext to analyze *The Pipeline Pinball Energy Thrillride Game* with an aim of illuminating ways that firstly frame videogames as an exercise in problem solving, and secondly expose a pertinent philosophy and a new mandate for living.

Final Thoughts: Beyond Fun and Games

This brief conclusion makes summative claims in the substantive, theoretical, and methodological domains. Also, through interconnections of the case study Play and Games, these final thoughts offer ways of taking action and making a social and economic impact on the issue of world energy.



It is possible to become what you are doing; these times come when pouf! — out you go and there is only the work.

— Stephen Nachmonovich, *Free Play, Improvisation in Life and Art*

Through the three rounds of case studies and over three years of creative development and production, this work has produced seven production pieces which are archived on DVD; two playable levels of *The Pipeline Pinball Energy Thrill Ride Game* on CD-ROM; a production wiki and website at <http://www.sundialmedia.com>; and two playscripts, the three-act *Spies in the Oilpatch*, and the Forum Theatre *Spies in the Oilsands*. These artistic entertainments are enclosed as attachments to this thesis. I have come to think of their purpose as being to propagate the understanding, joy, responsibility, and peace that have come from the full use of my imagination.

PART ONE: THE SOURCES



Part One: The Sources is a critical literature review of significant influences that relate to the substantive and theoretical aims of this thesis as well as an exposition of the bearing they have on the interdisciplinary research design. In this section, I introduce the synergy between theatre, games, and social issues that will be explored throughout this thesis.

Chapter One sets out the historical foundation for the substantive explorations of my case study work and provide the theoretical underpinning of my eventual discoveries about gamaturgy as an extrapolation of dramaturgy. Topics include sacred play, multi-textual approaches to play-making and game-making, and a description of constructive and reflexive dramaturgy. Chapter Two takes a look at the work of Augusto Boal and David Diamond, auteurs who make theatre that generates change and social justice through performance and dialogue. This charts a course for creating effective social change through the actions of the Joker in Forum Theatre as a transition into Chapter Three. In Chapter Three, connections are built between serious games, interactive theatre, experiential learning, and complex problem solving.

CHAPTER ONE: RITUAL AND DRAMATURGY

The play-element was present and significant from the beginning ... some serious, some playful, but all rooted in ritual and production of culture by allowing the innate human need for rhythm, harmony change, alternation, contrast and climax to unfold in full richness.

— Johan Huizinga, *Homo Ludens*

This chapter sets out the historical foundation for the substantive explorations of my case study work for this thesis and provides the theoretical underpinning of my discoveries about gamaturgy as an extrapolation of dramaturgy. The chapter gives an overview of sacred play and ritual as they inform a multi-textual approach to play-making and game-making, provides a description of constructive and reflexive dramaturgy, and then establishes patterns of possibilities between ritual, games, theatre, and social issues.

SACRED PLAY AND LIMINALITY

Recognition that sacred play has historical significance as a civilizing force through the cultural ages is an important linkage in the understanding of ritual, drama, and fun and games as temporal artistic entertainments. Johan Huizinga points out that human play has been crucial to cultural developments all across the ancient world. Play was part of Hellenic dramatic poetics and religious games; the *ludus* of Roman gladiatorial combat and associated sacred action; and Hindu *lila-yati* as an act of make-believe and *div-yati* as joking and jesting (Huizinga, 1938/1956: 73-75). Huizinga, who is renowned as a scholar of the play element in culture and whose own doctoral work was about the jester in Sanskrit society, maintains that ritual and human play reside in a sacred sphere that holds significance as a cultural function satisfying communal ideals and that “in the sphere of sacred play the child and the poet are at home with the savage” (Huizinga: 9). Following this same theme, Marshall McLuhan felt that the twentieth century encounter with the

electronic faces of culture created a “return to the Africa within,” or a global village of space resonant with tribal drums — a primitive ritualistic audile-tactile sensorium (McLuhan, 1962: 59). In *Understanding Media*, McLuhan refers to the collective art forms and games of ancient society as direct mythical enactments of a cosmic struggle in which “the spectator’s role was plainly religious” (McLuhan, 1964/1994: 252).

In *From Ritual to Theatre: The Human Seriousness of Play*, Victor Turner describes ritual’s liminal phase as being “a time and place where cognitive schemata that give sense and order to everyday life no longer apply ... and room for play abounds” (Turner, 1982: 84-85). This is not to say that play is entirely a frivolous entertainment, lacking in earnestness. Game studies scholar Frans Mäyrä calls play a form of understanding and playing a contact by interaction that sometimes brings meaning through surprising outcomes (Mäyrä, 2008: 14). This echoes Huizinga’s ideas that play can include seriousness and that “serious seeks to exclude play, whereas play can very well include seriousness” (Huizinga, 1938: 45). This point is crucial if one is to accept that play has pedagogical and moral value and also that play can have activist and social justice implications. Marvin Carlson points out in *Performance, a Critical Study* that Turner became interested in the notion that “liminoid,” or serious individualistic gameplay that evolves from ritual’s liminal phase, is likely to be to be “subversive, consciously or by accident introducing or exploring difference structures that may develop into real alternatives to the status quo” (Carlson, 1996: 24).

Multitextual Modalities and Social Dramaturgy

Ritual comprises message modalities beyond just literary or verbal text. Aural, physical, visual and emotional texts promote visceral understandings beyond expression of anything that might be uttered as language or written down as words. Albert Mehrabian, a researcher of body language in the 1950s, found that the total effect of a message is about seven percent language, or verbal text; 38 percent vocal, including tone of voice, inflection, also known as aural text; and 55 percent nonverbal, meaning the physical and visual texts (Mehrabian: 1981). For this reason, ritual, as an interactive performative cultural engagement, is a kind of discourse in which building understanding through meaning is concerned with much more than language. Mäyrä concurs with this concept of

multi-modality advising that one should look for similarities in such areas as music or dance while aiming to understand the ways in which meaning is made.

Social dramaturgy is a unique way of describing the discourse when cultural and ritualistic social actions are “staged.” Dramaturgy, as both a practical and analytical tool, stems from Greek classical antiquity and over the years it has come to mean the presentation of “a playwright’s passion or director’s vision in a theatrically compelling way” (*Oxford Encyclopedia*). *The Oxford Encyclopedia to Theatre and the Performing Arts* further states that “This goal can be accomplished in myriad ways and the dramaturg’s role often shifts according to context and it always fluid. As there is no one way to create theatre, there is no single model of the dramaturg.”

Much of the available research about dramaturgy is from within the disciplines of sociology and performance studies. Scholars and theorists such as Victor Turner, Erving Goffman, and Richard Schechner use theatrical paradigms, often referring to ways in which ritual and other social interactions, are staged or performed. *Dramaturgy in American Theater* states “Dramaturgy opens the door for an influx of materials into the playmaking process: imagistic, sociological, ideological, critical” (Jonas, Lupu, Proehl: 1997). This door that swings open to a dramaturgical perspective describes Huizinga and Turner’s ideas of how play and liminality satisfy communal ideals as a cultural phenomena. The open door also leads to a brief introduction to my ideas about the creative and the reflexive realms of dramaturgy.

Creative and Reflexive Realms of Dramaturgy

Dramaturgy can be sensual in a creative process of staging interactions, what I call the “creative realm,” and can be functional as thematic analysis, what I call the “reflexive realm.” To my mind these two realms of dramaturgy, the creative and reflexive realms can co-exist and function concurrently within the same project as ways to promote multi-textual discourse. Creative dramaturgy is activated within creative process and is closely tied to a substantive goal, that is, the construction of temporal artistic entertainments, including ritual and process drama, where being swept up in a passion of sacred play is essential. This process parallels *Dramaturgy in American Theater*’s description of “an influx of imagistic and sociological material” and invites possibilities of input of, aural, visual, and physical texts and emotions as subsets of these considerations.

The reflexive realm of dramaturgy, as a style of critique, can be activated as a resource for thematic analysis with the aim of generating further dialogue, interaction, and change. It seeks pathways of understanding into the world of the play experience as a site in which rich meanings can be gleaned from recognizing the impact of multi-textual communication. Its application is wide and varied. As affiliated with critical thinking, it can form building blocks of understanding and ways to compare and synthesize information about the experience; in education it can problematize assumptions and effects; as a feature of continuing artistic practice it can stimulate discovery of subsequent works; and in an activist context, it can bring about ideological evaluations and desire for change. Robin Usher's main point about reflexivity is that it is a personal and subjective process of interpretive inquiry that asks: "What is going on with this research? What kind of world or "reality" and what kind of knowledge is being constructed?" As a basis for reflexive analysis, he proposes looking at features of pretext, context, subtext, and intertext as critical resources for interrogating textuality and foregrounding reflexivity (Scott and Usher, 1996: 37-48).

A Case Study in Gitsegukla Potlatch Ritual

How can the constructive and reflexive realms of dramaturgy function concurrently within the same project, and at the same time show use of humour, game play, and enforcement of community values? Here, the project is the *Ma'luTg* or "Part Ghost" rite of the Gitsegukla First-Nations Potlach, as chronicled in 1945 by William Beynon, hereditary chief of the Tsimshian First Nation. However, before demonstrating how both humour and community conformity enforcement can be analysed as creative and reflexive dramaturgical realms, it is necessary to conjecture a connection between the ideas and concepts of liminality, community, and symbolic action.

Interactive performance ritual as a liminal activity enforces conformity and communal ideas throughout a community. According to evolutionary behaviourist Howard Bloom, the performance of acts of conformity enforcing stamps similarities into a group in order to unify and pull it together in times of adversity. Tied in with this is humour, an effective way to experientially infuse moral values among community members who act out fun and games. Victor Turner connects play with humour as an instructional force; he states that even dramatic scenarios may be presented as comedic

and that riddling and joking may take place, even in the liminal seclusion of initiatory lodges. Turner speaks specifically of Pueblo clowns as an example of the use of humour in ritual and connects this to the introduction of new forms of symbolic action (Turner, 1982: 85). Further examples, also from North American aboriginal culture, are the Potlatch rites of the Gitsegukla First Nation, demonstrating how humour, community conformity enforcement, and symbolic action can be analyzed as dramaturgical events in both creative and reflexive realms.



Figure 2: Left, Potlatch ceremony at Fort Rupert, B.C., 1898, photo R.B. Dixon: and right, Potlatch at Duncan B.C.

Returning to the case of *Ma'luTg* or the “Part Ghost” Potlatch rite of the Gitsegukla First Nations, William Beynon, hereditary chief of the Tsimshian nation describes the multi-textual entertainment from the perspective of a constructive dramaturg; that is, as a participant in the play-making and game-making within the sacred sphere of a Potlatch ceremony. Potlatch was a ceremony through which conformity to Gitsegukla community values of ownership to economic and ceremonial privileges were enforced. Beynon refers to his fellow participants as “attendants” and “guests:”

.... There was now alarm among the attendants, and they ran about in great concern, and then there came through the front entrance a figure dressed all in black with a skeleton-like costume and a mask resembling death. It was immediately recognized as to impersonate death. The attendants approaching it were overcome and fell on the floor as dead. Then [one of] the other attendants would come running up and take from under his garment a small urinal and from this he would scatter some of the contents, which was supposedly urine, and then

the victims would come to life, and then other attendants would run before the being throwing urine upon the guests. Again the attendants would try to capture the being ... and were revived only by the throwing of urine on the apparently dead attendant, and he would come to. All through the singing the dancer would dance in a threatening manner to the guests, the attendants running before it throwing water (representing urine) upon the guests, and immediately the being would run away, supposedly influenced by the odor of the urine. In the end the attendants then took their urinal vessels and chased the being while the song was being sung by the singers, and the being vanished among the attendants in the rear (Anderson, 2000, 74).

Benyon's fieldnote editor Margaret Anderson evaluated the event as a reflexive dramaturg, describing, among other things, the humour of the situation, introduced by a halait shaman, foreshadowing the liminoid role of activist joker or jester:

Even more paradoxical than the "play" of the naxnox ...is the realization that naxnox may be riddles and jokes as well as displays of sacred powers. The halait are supposed to entertain as well as to show a privilege, and sometimes the performers make the guests the target of rowdy good humour (as in the performance of "Part Ghost," where the halait attendants carried urinals and threw "urine" [water]). The guests are always compensated for any involvement, particularly if they take part in a performance in which the performer "dies" and must be brought back to life by the powers of the chiefs (Anderson, 2000: 74).

In this record of Gitsegukla community building, Benyon's commentary provides an insider's feel of the multi-textuality of the ritual in creative process. Here he is a creative dramaturg, describing the experience of collaborating on the creation of aural, visual, physical, and emotional texts, and even the olfactory as he evokes the smell of urine. Benyon was immersed and embodied within the potlatch play and game, where the play takes on a double meaning as a sacred act and a staged social drama. The game emerges from a sense of player agency, meaning, as Janet Murray describes it, "a power to take meaningful action and see the results of our choices" (Murray, 1997:126).

On the other hand, Anderson, as a reflexive dramaturg, reflects on the pretext, context, subtext, and intertext of the participants' social lives and values, in a critical and ideological evaluation. As an application of reflexive dramaturgy it forms building blocks of understanding about the Potlatch rites by problematising assumptions and effects.

THEATRICAL DRAMATURGS: BRECHT, ARTAUD, BARBA, GAMBARO



Figure 3: Clockwise from upper left: Bertold Brecht, Antonin Artaud, Griselda Gambaro, and Eugenio Barba.

Bertold Brecht , Antonin Artaud, Eugenio Barba and Griselda Gambaro are eminent dramaturges of the twentieth century who have made their innovation on theatrical stages rather than in ritual and sacred play spaces. Because of the auteurial nature of their practice and their polyvalence as writers, producer/directors, and theorists, Brecht, Artaud, Barba, and Gambaro all have connections to both the creative and reflexive realms of dramaturgy. It is not my intention in these brief pages to go into depth about the work of these eminent auteurs. Rather, I have three purposes. First, I wish to show a transition and relationship between the experiential pedagogy of ritual social drama and the interactive Forum Theatre and games of Augusto Boal and David Diamond. Second, I

intend to observe their perspectives on social problem solving. Finally, through a series of speculative questions, I would like to propose ways in which their skills in play-making and play-analysis might transfer into a gamaturgical practice of game-making and game-analysis.

Bertolt Brecht

The stage began to be instructive. Oil, inflation, war, social struggles, the family, religion, the meat market, all become subjects for theatrical representation.

— *Bertolt Brecht, Theatre for Pleasure or Theatre for Instruction*

Bertold Brecht lived and worked in Germany from 1898 to 1956 and among his most influential plays were *Mother Courage*, *Three-Penny Opera*, and *Galileo*. His creative collaborators included the musician Kurt Weill, with whom he penned the famous *Ballad of Mack the Knife*, and philosopher Walter Benjamin, who shared his interest in using modern media of the time, including projected film art, as inspiration for creative work. Benjamin and Brecht also shared a strong belief in Marxist philosophical values and social action. In his “Epic” theatre manifesto, Brecht proposed a dramaturgical poetic in the form of an “alienation strategy,” whereby the spectator delegates power to a dramatic character, who thus acts in his place. Another of Brecht’s innovations in performance was a demonstrative style of acting called *gestus* or, as Benjamin puts it, “making gestures quotable [where] an actor must be able to space his gestures ...the way a typesetter produces spaced type ... like the pictures in a film” (Benjamin, 1939: 419).

As a dramaturg in the creative realm, Brecht would have observed a gesture made by the actor as an expression of visual text. He may have asked questions such as, “What does this visual snapshot communicate as an emotional text? Does the composition of this tableau of images, including the actor and the stage set, express the story I am trying to tell? Is it compositionally sound; does it comprise an expressive non-verbal, non-temporal message?” As a dramaturg in the reflexive realm of critical analysis, Brecht would have reflected both upon history, as a playwright, and upon the work as a staged phenomenon and literary text. He would have contextualized the ideological message and its social effect against the historical precedent. For example, and as a postulation, he might have asked, “How did the allegorical and metaphor representations instruct my political bias? What performance gestures and dramatic actions reinforced my overall

model of epic theatre?” By scrutinizing a production as a multi-textual phenomena, both in creative and reflexive dramaturgical states, Brecht would have brought meaning to the play for himself and others, justifying its value as a work of political art.

Antonin Artaud

In the 1930s in France, Antonin Artaud called for a “Theatre of Cruelty,” ritualistically realizing tribal passions and emotional turbulence. *Les Cenci* is Artaud’s only significant dramatic work based on his principles of the Theatre of Cruelty, but his book of theoretical essays *Theatre and Its Double* has survived as an important attack on the conventions of theatre of his day. Artaud felt theatre’s purpose was “like the plague because ... it is the exteriorization of a depth of latent cruelty by means of which all the perverse possibilities of the mind, whether of an individual or a people, are localized .” (Artaud, 1938/1958: 30). In a lesser-known work, *Spurt of Blood*, Artaud’s stage directions read

There is a noise as if an immense wheel were turning and moving the air. A hurricane separates them. At the same time, two Stars are seen colliding and from them fall a series of legs of living flesh with feet, hands, scalps, masks, colonnades, porticos, temples, alembics, falling more and more slowly, as if falling in a vacuum.

It is easy to imagine Artaud’s role as a creative dramaturg. In creative process the affects of adherence to the sensuous requirements of the stage directions could only be visceral and multi-textual, much like acts of ritual in the sacred sphere. Artaud would have insisted that his actors try out different ways of creating squelching metallic sounds, mega-tempests and calamities of the universe, inevitably exploring physical, emotional, and aural texts. This could hardly have come across as anything but passionate chaos, guttural sighs and wild abandon. In the reflexive dramaturgical realm and as indicated in *Theatre and its Double*, he projected the subtextual fantasies of his deranged mind into his vision of theatre as a release for man’s primitive passions and desires. As I speculate, his interrogations in a reflexive dramaturgical realm would have been, “What is theatre’s magical relationship to reality and danger? What are life’s important truths? How can we purge primitive instincts that lead to wars, murders and rapes?” These are strange and

tormenting social issues with which to be obsessed but they are nonetheless significant in the move toward societal safety and wellbeing.

Eugenio Barba

Artistic discipline is a way of refusal ... a continual exercise in revolt, above all, against oneself, against one's own ideas, one's own resolutions and plans, against the comforting assurance of one's own intelligence, knowledge, and sensibility."

— *Eugenio Barba, The Deep Order of Turbulence*

The work of Eugenio Barba, Italian stage director and founder of the International School of Theatre Anthropology, is more akin to the social dramaturgy of Victor Turner and Erving Goffman than are the philosophies of Brecht and Artaud. Barba's principles of dramaturgy are outlined in an article called "The Deep Order of Turbulence" in which he defines the three faces of dramaturgy. Firstly, an organic or dynamic dramaturgy affects one on a nervous, sensorial and sensual level. Secondly a narrative dramaturgy situates meaning through the interweaving of events and characters. Thirdly an elusive form, which Barba calls the dramaturgy of changing states, captures hidden significances that distill a coherence of community and a sense of mystery. Barba describes his style of dramaturgy as "a physical and sensorial event ... nothing to do with the written text, with the dramaturgy of words, in the same way that the vibratory quality of the singing voice has nothing to do with the score" (Barba, 2000: 56-66).

Barba's first and third faces of dramaturgy position him deeply in the realm of the sensuous and creative. Organic dramaturgy aligns with Johan Huizinga's sacred and play-sphere and Victor Turner's theory that ritual's liminal phase is "quintessentially a time and place lodged between all times and spaces defined and governed in any specific biocultural ecosystem" (Turner, 1985: 84). Dramaturgy of changing states is reminiscent of McLuhan's bias toward the haptic and audile-tactile spaces as creative modes of expression, and Goffman's feelings that interaction rituals speak to man's 'social' rather than 'individualistic' nature (McLuhan, 1962: 93; Goffman, 1959). In this sensual realm of creative process, Barba describes the rehearsal stages of play development as being a time when "the dramaturg as a whole may remain confused, even chaotic, for a long time." (Barba, 2000: 62). He might have asked the following, "How does this confusion

of sensory texts enable us to arrive at a bare and essential action? What can we discard to guide us toward further choices and revealing paths we did not know existed?"

Barba's second face of dramaturgy, that which concerns narrative, could take place in either a creative process constructive realm or a critical, reflexive realm. Barba has directed dozens of plays for the Odin Theatre in Oslo, Norway, and his highly sensual work embodies political action by exposing "dark legend" and telling "dark truths" (Barba, 1999: 291). Questions in a reflexive dramaturgical realm might include the following, "Given that art is a rite of refusal and an exercise in revolt against the comfort of my own ideas, how is this a search for new points of orientation?" By examining and celebrating the personal pretext of his work as a way of growing personal pedagogical values, Barba illuminates and challenges his own subjective moral stance.

Griselda Gambaro

*Guide: Theatre imitates life. If you don't clap
It means that life is rotten to the core
And we may as well just head for the door.
(He moves the audience out toward the door.
From far away can be heard police sirens.)*

— *Final lines from Information for Foreigners*

The work of Griselda Gambaro forms a connective tissue between the staged dramaturgy of Brecht, Artaud, and Barba, and the interactive participatory Forum Theatre of Augusto Boal. Her political performance works engage spectators as not only as voyeurs but also as agents of dramatic change, minimally contributing to the action through their immersion in the scenes. Gambaro is a major Argentinean dramaturg. One of her most-celebrated plays, *Information for Foreigners*, takes place in an interactive themepark-style environment that Gambaro calls an aleatory space, where "the audience sees everything but they see different things." In the scriptwriting process, she imagines the overall textuality of expression that goes far beyond just a written text. About this improvisation with herself, she says, "When I write my plays, I do make my own mise-en-scène. I create the settings, and I act out all the characters (Gambaro, 1987: 703).

Information for Foreigners focuses on Argentinean state terrorism of the early 1970s and subjects the participant audience to a flip-flop between "staged" scenes of police violence and intimate "backstage" scenes of torture in what Gambaro calls a

juxtaposition of a children's game placed in the context of real violence. As an experience in sensuous dramaturgy, the audience is assaulted with the realization that the wall has been removed between the theatre and their lives. For example in scenes where a girl is being drowned and sexually humiliated and where audience members cannot help being sprayed with water, certain questions, as I postulate them, would emerge, "How can I be immersed in this horror and why am I not doing anything about it? Am I making this problem worse by being a silent witness to this cruelty that I hear, feel, and sense all around me?" As an exercise in reflexive dramaturgy, will the audience go home and intertextualize their personal situation against what they saw and talk about it, bring it into the realm of public debate because of the power of their feelings and take action? In a 1987 interview, Gambaro applauds the bravery of The Mothers of the Plaza de Maya who publicly protested the disappearance of their relatives in state police action. She claims that even her darkest work, such as *Information for Foreigners*, has a positive side because, as she states, "It's a call to attention, a means to change our optic, our vision, which means we must also change our ethics" (Gambaro, 1987: 703).

PATTERNS OF POSSIBILITIES

As a study of interdisciplinary patterns of possibilities, the concept of immersion and embodiment is important to recognize, especially as it pertains to participatory "interaction" and player agency in entertainments such as sacred play and games. The term "embodiment," as it is encountered in both drama studies and in game studies, is heavily indebted to the phenomenology of Edmund Husserl and Maurice Merleau-Ponty, who claimed that one discovers the essence of something as it is experienced. In the 1920s, Husserl turned around Descartes' rationalist "I think therefore I am" tenet and asserted that "I am therefore I think." Effectively, Husserl posited that the self is an embodied being whose confidence is manifest in action in the surrounding world, therefore assuming the form of an interaction. Merleau-Ponty moved Husserl's empirical method of thinking about experience into the subjective realm of the body, asserting that the body itself is the very subject of awareness and can be veritably "possessed" by the perceived. Like Husserl, Merleau-Ponty describes perception as an "interaction:"

Every perception is a communication or a communion, the taking up or completion by us of some extraneous intention or, on the other hand, the complete expression outside ourselves of our perceptual powers and a coition, so to speak, of our body with things (Merleau-Ponty: 1945/1962: 397).

Critical here is an acknowledgement that there is a phenomenological affinity between play, embodiment, self-awareness, and confidence; that affinity consequently assumes the form of an interaction. Marshall McLuhan's ideas in this regard concur with Merleau-Ponty's phenomenology. In *Understanding Media: The Extensions of Man*, McLuhan explains that "play," whether in life or in a [gaming] wheel, implies 'interplay'" and that "men without art and men without the popular arts of games tend toward automatism" (McLuhan, 1964/1994: 256). McLuhan continues that art, like games, "Shifts familiar experiences into new forms, giving the bleak and bleak side of things sudden luminosity." He also felt that British and American recent, referring to the 1950s, "self-confidence of spirit was born of the playful spirit of fun and games" with games being "a kind of talking to itself on the part of society as a whole" (McLuhan, 1964/1994: 259). On a more recent note, theoretical linguist James Paul Gee says that games encourage and recruit situated, experiential, and embodied forms of thinking and that real or virtual embodied experiences cover all the perceptions, choices and mental simulations of action and interactivity (Gee, 2003: 76).



The primary focus of this chapter has been play in a sacred sphere of ritual and its links with multi-textual dramaturgy. Further to that, the chapter dealt with the definition of creative and reflexive dramaturgy as a model for challenging the status quo of social problems. As part of their practical and theoretical work, Bertolt Brecht, Antonin Artaud, Eugenio Barba, and Griselda Gambaro shared a common goal: to implement artistic perspectives on social problem solving. The hypothetical questions I have imagined as part of their dramaturgy of play-making in a constructive realm and play-analysis in a reflexive realm are posed for two reason. First, these questions inform my examination of

the interactive theatre as represented by Augusto Boal and David Diamond's Forum Theatre work. Second, the questions find their way into my theory of gamaturgy as a way to make and analyze videogames.

This chapter also explored how conformity and communal ideals are enforced through liminal sacred play and ritual; how shamanistic game activity foreshadows subversion of the status quo, leading to diversity among community members; and how play and games can have "seriousness," implying pedagogical and moral value. Together, these concepts have provided a foundation to move this thesis forward into a discussion on fun and games in live and digital playspaces, notably the Forum Theatre of Augusto Boal and David Diamond. Even more importantly, these concepts and practices have provided me with a subset of inspiring sources to firstly create and now analyze *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game*, using the vocabulary of creative and reflexive dramaturgy.

CHAPTER TWO: LIVE AND DIGITAL GAMES OF FORUM THEATRE

In this chapter about live and digital games of Forum Theatre, I look at the work of Augusto Boal and David Diamond, auteurs who make theatre that generates change and social justice through performance and dialog. Along with Chapter One, this chapter fundamentally supports the substantive and theoretical findings of this thesis, including gamaturgy as an innovative way to extend dramaturgical practices and principles into the study of videogames. Furthermore, the chapter charts a course for creating effective social change through the liminoid actions of the Joker in Forum Theatre. As a transition into the chapter on serious videogames, a relationship is built between games, interactive theatre, experiential learning, and complex problem solving.

AUGUSTO BOAL

If we can understand that in real life we are always performing a play, we can change the play that we are performing.

— Augusto Boal, Interviewed by Chris Vine



Figure 4: Augusto Boal at work with students in a workshop setting.

Augusto Boal was raised in Rio de Janeiro and attended Columbia University in New York, studying both theatre and chemical engineering. After obtaining his doctorate in chemistry he returned to Brazil in the early 1950s to work with the Arena Theatre in São Paulo. Once back in Brazil, Boal wrote some of his earliest experimental plays. They were called Newspaper Theatre plays because news would be translated into theatrical scenes that dealt with issues such as of literacy and democracy. Boal took these shows on the road to factories and farms in Brazil and developed plays around the experiences of people silenced by poverty and oppression. By 1971, his plays were increasingly censored by the Brazilian military dictatorship. He was imprisoned, forced into exile, and spent 15 years in Argentina and Europe before returning to Brazil. In 2008, Boal still travels the world giving workshops and has been nominated as a candidate for the 2008 Nobel Peace Prize.

Boal was greatly influenced by the pedagogy of Brazilian educator Paulo Freire who espoused a transitive and experiential educative style in which, as Boal puts it in *Legislative Theatre: Using Performance to Make Politics*,

the teacher is not a person who unloads knowledge ... the teacher is a person who has a particular area of knowledge, transmits it to the pupil and, at the same time receives other knowledge in return. Teaching is transitivity. Democracy. Dialogue.... Interaction, exchange. We are all subjects: pupils and teachers, citizens, and spectators. For it to work, we need the people's participation (Boal, 1998: 19-21).

From Boal's perspective, and coached, as he was, by the teachings of Freire, conventional theatre was an intransitive relationship in which emotions, ideas, and morality were transported from stage to spectator in one direction (Boal, 1998). Like fellow political auteur Bertolt Brecht, Boal rebelled against the concept of Aristotelian catharsis, "a strong emotional response in an audience to purge them of lasting effects." (Shepherd, Simon, Wallace, 2004: 27). Both men were critical of the neutralizing effect of catharsis. Brecht accepted his audience taking the revolutionary ideas home to mull about through critical thinking. Boal, however, found ways to incite action against oppression by incorporating the audience into decision-making that would affect the

outcomes of the play. He called his unique interactive theatre “Theatre of the Oppressed” (TO). Of all the branches of TO, Legislative Theatre, Invisible Theatre, Image Theatre, and Rainbow of Desire, it is Forum Theatre that connects most seamlessly with the form and function of serious videogames.

Boal championed the idea of reshaping theatre to break down aristocratic domination and Forum Theatre breaks down barriers between the doers and the watchers — in other words, the aristocracy and the crowd. To this end he created a dramatic form that did not exclude the people from the stage. Boal criticized Brecht for not being able to overcome this division and declared that what was needed was

the destruction of the barriers erected by the ruling classes. First the barrier between actor and spectators is destroyed; all must act, all must be protagonists in the necessary transformation of society ... all must simultaneously be chorus and protagonist (Boal, 1979: ix).

Boal’s effort to include the audience in social justice dialogue is a crucial tie-in to Victor Turner’s notion of liminoid, or individualistically serious gameplay that actualizes subversion through the exploration of alternatives to the status quo. According to Turner, liminoid phenomena characterize democratic societies with universal suffrage, legislative over parliamentary power, plurality of political parties, and separation of church and state. These characteristics match closely with Boal’s desires for theatre that brings change through interactive democracy. Boal’s auteurial vision of social justice through gameplay and interactivity also has an intriguing connection with the use of serious videogames as a medium to rehearse reality without exposing players to the risks and dangers they might encounter in real life.

FORUM THEATRE AND LIVE GAMES

In Forum Theatre, as practiced by Augusto Boal and others who have adopted Boal’s methods, actors perform a play charged with inherent conflict and anxiety about a pertinent social issue or community oppression. The play has been collaboratively created through the use of games in a creative process mode. Once the audience has had a chance to see the situation and assess the problem, the Joker, as a group leader, explains the simple rules of the game and starts the play again. This time any spectator can yell

“Stop” at any time when he or she perceives a better course of action for a character to follow. This spectator, who is then referred to as a spect-actor, replaces the character and improvises a scene to try out a different set of consequences. This is what Boal calls a “Rehearsal for Reality:”

spect-actors are invited to come on stage and reveal by means of theatre – rather than just using words – the thoughts, desires, and strategies that can suggest, to the group to which they belong, a palette of possible alternatives of their own invention. This theatre should be a rehearsal for action in real life, rather than an end in itself (Boal, 2006: 6).

Boal’s Forum Theatre harnesses the power of games, both in the dramatic process of creation and in the performance of the play scenario itself. In creative process, games like Columbian Hypnosis and Circle of Knots build tactile sensitivity, and games like Machine of Rhythms create inner rhythms that tune actors in to a passion of listening, feeling, and seeing. Image games like Complete the Image and One Person We Fear, One Person is Our Protector culminate in image tableaux that inspire the narrative components of the evolving Forum Theatre story scenarios. Besides preparing for the physical rigour of Forum Theatre performance creation, the warmup and image games are an experience of creative dramaturgy, tuning the actors in to multimodal meanings released through interaction within physical, visual, and emotional texts. This work also builds dialogue and relationship between actors and inspires trust that becomes a powerful mechanism to bring believability to Forum Theatre verbal text as a written script. Boal is adamant that discussion is vital to the act of rationalizing emotion, helping participants understand experience, not simply feel it. Furthermore, he firmly believes that, “the important thing about emotion is what it signifies” (Boal, 1992: 37).

In performance, Forum Theatre is also a game, immersing spectators into the narrative action of the play to try out their own ideas about how to improve things on stage. These change-making interactions are called “interventions” and pivotal as a facilitator in this process is the group-leader character known as the Joker.

The Joker as Liminoid Diversity Generator

The Joker is a clown, a jester, an animator, a trickster, an improviser, a psychologist, and a dramaturg (Foreman, 2004b). In performance mode, interventions are key and Forum

Theatre plays present problems that incite people into expressing their own solutions. It is clear to see that the Joker has a role as creative dramaturg in process mode, where warmup and image games are facilitated. Intriguingly, though, because of the immersive nature of the audience participation, the Joker's role as creative dramaturg extends into the performance mode as well. Like the long legacy of jesters and tricksters before him or her the Joker goes beyond just fun and games, moving back and forth between liminal frivolity and liminoid subversion to a place where intervening spect-actors are free to challenge the status quo anytime throughout the course of a performance.

When spect-actors yell "Stop" to interrupt the narrative action to replace a character who they see as being oppressed or being made to think or feel or do something they're not comfortable with, the Joker asks them to declare who they wish to replace and to what point they wish to back-up the action. They then improvise the scene in a game-like fashion until they see the effects of their offers. This action that the spect-actor takes is no longer a passive and voyeuristic theatrical experience but one of immersion into the narrative that could eventually transfer into real-life solutions.

Once the scene is played out in this unique extension of sensual dramaturgy, the Joker asks the spect-actor questions that rationalize their emotion: "What did you try? How did it make you feel? Did this character make things better and why? Did anything change? What was the payoff?" The other characters in the scenario are also asked about the effects the intervention had upon their character and what they learned. The audience is sometimes asked if anyone has anything else they'd like to try out as a possible way to make things better in this situation of conflict and if there are no other ideas to play out, the narrative action continues.

In live gameplay, the Forum Theatre Joker has many roles, firstly enabling the creative process games that build sensory awareness and imagination among the actors; secondly facilitating the performance games of rehearsing new realities; and thirdly leading discussion that rationalizes the emotion. Within all this, and from my own experience, the games are powerfully multi-textual, revealing and defining personal philosophy, values, and beliefs. In an illustration drawn by Boal called "The Tree of the Theatre of the Oppressed," the roots of a tree that nourish Forum Theatre and other forms of TO comprise the sensual texts of sound, the image, and words, emerging from the soil

of the reflexive texts of philosophy, solidatary ethics, politics, and history. As these elements merge, he notes that

on the trunk of the tree grow, first, the Games, because they bring together two essential characteristics of life in society; they have rules as does society, which are necessary in order for the Games to be enacted; but they also require creative freedom (Boal, 2006: 4).

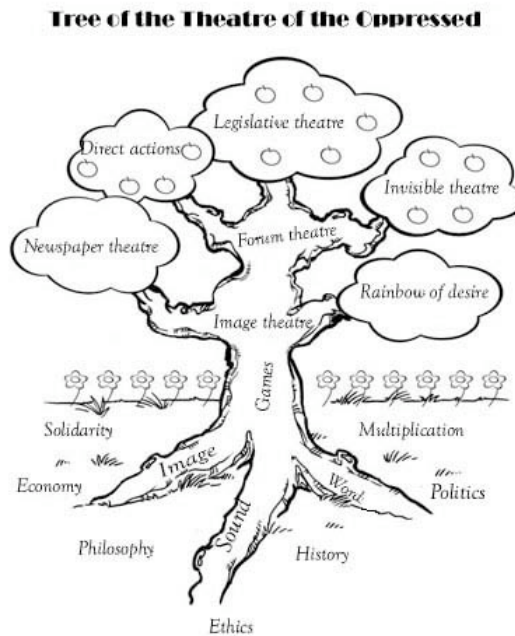


Figure 5: Boal's Tree of the Theatre of the Oppressed. From *Legislative Theatre*.

In analytical mode as a reflexive dramaturg looking back at his own creative work, Augusto Boal implements rules of functional analysis where conflict is scrutinized as the central idea or theme of the play as a clash between a protagonist and his or her oppressors (Boal, 1998: 63). As dramaturgical summation of pretext and context, Boal reflects upon significant political events, such as illiteracy, as they relate to history, such as oppressive regimes and the consequential social struggle. Pretextual and contextual reflections are well documented in his many books such as *Theatre of the Oppressed* and the *Aesthetics of the Oppressed*. As a dramaturgical summation of intertext, he reflects on his own personal involvement and situated self, and when analyzing the subtext, he looks at the affect of metaphor and allegory. For example, the parable "The Political Master

Swimmer,” surprisingly, allegorizes his personal politics as being less assertively Marxist than one might expect (Schutzman and Cohen-Cruz, 1994, 134).

Dramaturgy nurtures the Forum Theatre plays and games like a fertile womb, first of all enriching the birth of the idea, breathing it open into sensory realms of creative process and interactive performance, kicking it into political action, and finally engaging a reflexivity to lay down philosophical wisdom and maturity. Without the ubiquitous mix of creative and reflexive dramaturgy employed by Augusto Boal and those who follow the basis of his teachings, the plays and games of Forum Theatre would not and could not reach beyond the sacred sphere of liminal play into the working world of liminoid phenomena and social reform. In other words, the Joker is the catalyst who ignites the patterns of possibilities between liminoid play, games, theatre, and politics. However, instead of simply reinforcing conformity as is the tendency of ritualistic liminality, the Joker is an agent of change and subversion, provoking the audience to act like a collective learning machine that is out to spawn variety and generate diversity in society.

DAVID DIAMOND AND LIVE DIGITAL FORUM THEATRE

Honour whatever comes up on stage as real. The goal is to create safety.

— *David Diamond*



Figure 6: David Diamond on *METH* set and Joking an intervention. Photos, Shaw Television.

David Diamond is Artistic Director and Joker of Headlines Theatre in Vancouver, British Columbia. Diamond’s work is particularly pertinent to this thesis exploration and to my own case studies because of the experimentation he has done with interactive television and web broadcasts to extend his work into the global community and because of the way

these electronic initiatives promote the idea that activist theatre can be combined with computer technologies to create entertainments that bring awareness to social, political, environmental, and moral issues.

Diamond is a friend and student of Augusto Boal. In the years since the formation of Headlines Theatre, he has evolved a style of theatre he calls Theatre for Living, based on Boal's Theatre of the Oppressed but focusing more closely on building and sustaining the health of communities. Diamond has worked extensively with Gitxsan First Nation communities, whose cultural history includes Potlatch ritual, and with other disadvantaged groups confronting issues of safe sex, addiction, homelessness, racism, and gang violence. As he explains in his book of the same name, Theatre for Living is an "outgrowth of Theatre of the Oppressed in the same way that Boal's work has grown from the work of socially conscious artists before him" (Diamond, 2007: 22). The primary difference is that Diamond perceives the oppressor and the oppressed as being an artificial construct; he believes, instead, that all aspects of life and the world are interconnected. This has dramaturgical implications in both the creative and reflexive realms, where a greater depth of emotional empathy and intellectual cognition must be invested towards understanding the antagonist or oppressor/bully character.

Diamond's overall social intention is to create healthy, safe and respectful communities and that by "engaging in the struggle of the oppressor, as well as the other characters, we can recognize our own struggles" (Diamond, 2007: 43). As a Joker, one of Diamond's most-often post-intervention questions is "How does this bring *safety* to the situation?" This question holds significance when one considers ways that both Forum Theatre and serious videogames can help us understand urgent social issues.

METH: A CASE STUDY IN DIGITAL FORUM THEATRE

I remember very well sitting with Augusto Boal in 1987 and explaining that I wanted to take Forums onto live TV. ... He laughed a very good-natured laugh and said, "You're such a North American."

— David Diamond, *Theatre for Living*

Since 1989, Headlines Theatre been telecasting Forum Theatre events to live television with work such as *Out of the Silence* (1992), *The Dying Game* (1998), and *Squeegee* (1999); with *Corporate U* (2000), *Don't Say a Word* (2003), *Here and Now* (2005) and

Meth (2006) also have gone live to the world wide web. In the case of *METH*, created and performed by people who have struggled with Methamphetamine addiction, spect-actors in the real-space Vancouver venue had a chance to intervene in the narrative action of the play. From my notes and recollections, their purpose was, as Diamond as Joker put it, “to replace a character who they understand to be struggling with the issue of addiction and try to create safety in the world of the play.”

I was on site in Vancouver to participate in several performance of *METH* and what I witnessed was audience spect-actors shouting “Stop” at places where they perceived that characters were struggling with decisions. The spect-actor would come on stage, replace a character, improvise new ideas, briefly engage in a short dialog to rationalize emotion, and return to his or her seat. On one of the performance nights when I was in attendance, the play was broadcast over the Internet and spect-actors around the world at their computers had a chance to make interventions on the narrative action of *METH* via “tele/web actors who were on site in Vancouver. According to David Diamond’s “Artistic Director’s Report on *METH*,”

578 computers logged onto the viewing site for the web cast. Some of these computers (hooked up to large screens) had up to 50 people attending, as there were “web cast parties” organized in many places around the world. We will never know an exact number of web viewers but even averaging 5 per computer, this gives us 4,660 web viewers. If a computer logged into the chat space, they gave us a location as part of their login (Diamond, 2007c).

That night, I witnessed Internet interventions from Australia, Calgary, Honolulu, New York City, Tel Aviv Israel, Washington DC, and Winnipeg. A participant in Perth, Australia who had tuned in to the web-cast on my suggestion, provided me with the following comment about the experience.

I found watching the performance on computer to have both positive and negative attributes ... there was a lag resulting in discussions online about points that were yet to take place for some viewers. The chemistry, which often exists between actors and audience members (or the vibe present in a theatre during a performance) is also obviously not evident when viewing online, resulting in a lessened emotional investment for online viewers. The strongest positive characteristic about watching online would have to be the online chat.

A participant from Calgary, Alberta who had tuned in to the web-cast on my suggestion, provided me with the follow comment:

Yep, very powerful mix of technologies, social issues, and live theater. I would have liked the video to keep rolling after, and have the internet people part of the discussion with the audience at the end.

A participant from Seattle, Washington who had tuned in to the web-cast on my suggestion, had this to say:

The combination of live broadcast and a chatroom gave me a sense that I was forming a relationship with the audience as well as with the characters. I imagine it will become common in movie theaters and stage plays to have consoles enabling the audience to interact, to get information peripheral to the action, and to see what others are responding to, rather than assuming.

David Diamond's attitude about the use of technology is that "it's there to support the work on stage and not meant as a stand alone phenomena" (Diamond, 2007b). In light, however, of Diamond's vision that a community is a "living entity and that individual communities are part of even larger living organisms that comprise the human community that spans the planet," he writes that he feels that it is his responsibility to continue undertaking tele/webcasts to learn how to make them work better (Diamond, 2007: 295). It seems clear to me that traditional Forum Theatre at a live performance venue has a connection with serious videogame play as a medium to rehearse reality without the risks and dangers that participants might encounter in real life, but Diamond moves a step further through innovative experimentation with computational technology as a way to interact and "play" with serious social issues.

SERIOUS VIDEOGAMES AS DIGITAL FORUM THEATRE

Cognitive psychologist Dietrich Dörner makes a plea for the use of computer games as simulations because of the way they can, "make apparent the consequences of our decisions and plan and in this way we can develop a greater sensitivity to reality"

(Dörner, 1996: 199). Compare this to Augusto Boal's responses in an interview with Democracy Now when asked "What is Forum Theatre?"

Everything is going to change in society and in our biological life. ... We don't have the message, we have the questions. We bring ... what can you do? And democratically, everyone can say stop and jump in on the scene and try a solution or an alternative and then we discuss that alternative and then a second or third. So what we want is to develop the capacity of people to create, to use their intelligence, to use their sensibility. Everyone has the right to speak their word and to act their thoughts, not only to talk about, but act their thoughts. (Boal 2005)

By observing the commonalities around experiential learning or learning through doing, one can see the overall similarities of Forum Theatre and serious videogames. Whether they are used for training, for education, or for the activation of social issues, it is my idea that serious videogames are well-positioned to bring us closer to conditions of safety. I define a condition of safety as a freedom from physical or psychological danger, risk, or injury.



Self-proclaimed Jokers, in the sense of being agents of change and generators of societal diversity, Augusto Boal and David Diamond are brilliant and visionary theatre auteurs who create entertainments with strong moral principles and ideologies of social justice. They courageously place those entertainments onto a living stage. Similarly, in cinema, there are film auteurs such as Michael Moore and P.T Anderson whose moral vision provokes critical thinking about social justice and ethical decision-making, their stage being a cinema screen. In Chapter Three, I will identify the auteurs of social-issue serious videogames that align with this description. How are their visions of social change and quality of life improvements disseminated, and what is the look and feel of their stage? In exploring these questions, fundamental differences emerge between the creative forces of videogames and those behind other kinds of art entertainments such as film and theatre, painting or sculpture. That difference is this. Videogames are only rarely the product of

an individual artistic vision. To study serious videogames in the light of their resemblance to Forum Theatre and other styles of interactive theatre that express a moral vision and actively implement it, one must look at the organizations behind the games and the organizations' role as publishers or producers. Chapter Three also looks at the cognitive and pedagogical influences behind the creative impulses and player-experience of serious videogames.

CHAPTER THREE: SERIOUS VIDEOGAMES WITH SOCIAL IMPACT

That's what games are for. They teach us things so that we can minimize risk and know what choices to make.

— Raph Koster, A Theory of Fun for Game Design

In previous chapters, I described how visionary auteurs of theatre, and in particular Forum Theatre, can provoke critical thinking about social justice and ethical decision-making, their arena of expression being primarily a live stage. In Chapter Three, I identify the auteurial equivalents who align with this description, working instead in the domain of serious videogames. Their arena of expression is a digital display device and they also incorporate a sense of play and, for the most part, a sense of humour.

Serious Games are videogames used for purposes other than pure entertainment. A taxonomic matrix of serious games, developed by Ben Sawyer and Peter Smith, identifies serious game subgenres such as Advergames, Games for Health, Games for Training, Games for Education, Games for Science and Research, Production, and Games as Work. Sawyer and Smith have likewise identified the producers, or visionary advocates and organizations behind the work, in the categories of Government and NGO, Defense, Healthcare, Marketing and Communications, Education, Corporate, and Industry (Sawyer and Smith). This chapter highlights games created at the taxonomic intersection of “Advergames” that are produced by Government, NGO, and Educational sectors — namely Political, Public Health, and Social Issue Games. How do such games, as tools of persuasion, advocate a vision? How do they resemble Forum Theatre? Finally, how do patterns of meaning emerge when they are observed as pedagogical and problem solving spaces, in accordance to the theories of Paolo Freire, Dietrich Dörner, James Paul Gee, and others. This exploration informs my explanation of how analytic frameworks

like reflexive gamaturgy can make sense of the complex problem of our world's energy resources.

ADVERGAMING AND PERSUASION

Advertising is only evil when it advertises evil things.

— David Ogilvy, *Confessions of an Advertising Man*



Figure 7: *Pepsi Pinball*, an advergame that was a formative influence on the graphic and experiential design of *The Pipeline Pinball Energy Thrill Ride Game*.

As a subgenre of serious games, advergames are videogames that promote a product or a viewpoint. An advergame may be a pinball game advertising Pepsi-Cola or one that advocates an environmental position like *The Pipeline Pinball Energy Thrill Ride Game*. David Kitchen, co-founder of Skywork Technology Inc., a New Jersey-based company that pioneered the advergame model in 1995, credits the interactive experiences of advergames for the ability to deliver an effective branding environment. Kitchen explains that in building a state-of-the art advergame he and his team must keep the fun factor paramount, at the same time as serving the client's need to benefit from "positive product association and good old fashioned branding" (*Business Week Online*, May 23, 2007). With a client list that includes ESPN, Ford, Mattel, Microsoft, MTV, and PepsiCo, Skyworks's motto is "Turn Play into Profit," inferring that if a game is fun and users get a 'brand experience,' then producing that game is good financial business model. In other words, the games satisfy the needs of both the client and the production company.

Further back in advertising history, David Ogilvy was a master of persuasion and guru to the most influential generation of marketers and advertisers of all time, that of post-World War II America. Throughout the 1950s and 1960s, Ogilvy spun strategic advice for advertising as compellingly as Marshall McLuhan coined aphorisms for the new media, and advergaming's efficacy can be seen as mirrored in Ogilvy's foundational principles. For example, about creative process, Ogilvy says, "Most original thinking isn't even verbal. It requires a groping experimentation with ideas, governed by intuitive hunches and inspired by the unconscious" (Ogilvy, 1963: 20). He also states, "The best ideas come as jokes [so] make your thinking as funny as possible." When it comes to promoting products, one must "be specific and factual ... enthusiastic, friendly, and memorable. Don't be a bore. Tell the truth but make it fascinating" (Ogilvy, 1963: 108). Even though the organizations behind the games identified in this chapter utilize games as tools of persuasion for social good as well as, or in most cases instead of, for profit, Ogilvy's principles of embracing intuition in creative thinking, being truthful yet friendly, making things fun and all the while having a moral conscience, still hold true with advergaming.

FOOD FORCE: THE UNITED NATIONS WORLD FOOD PROGRAMME

We will lose this fight if we don't do something about it. We decided we have to target future decision makers.

— Justin Roche, Food Force Project Manager

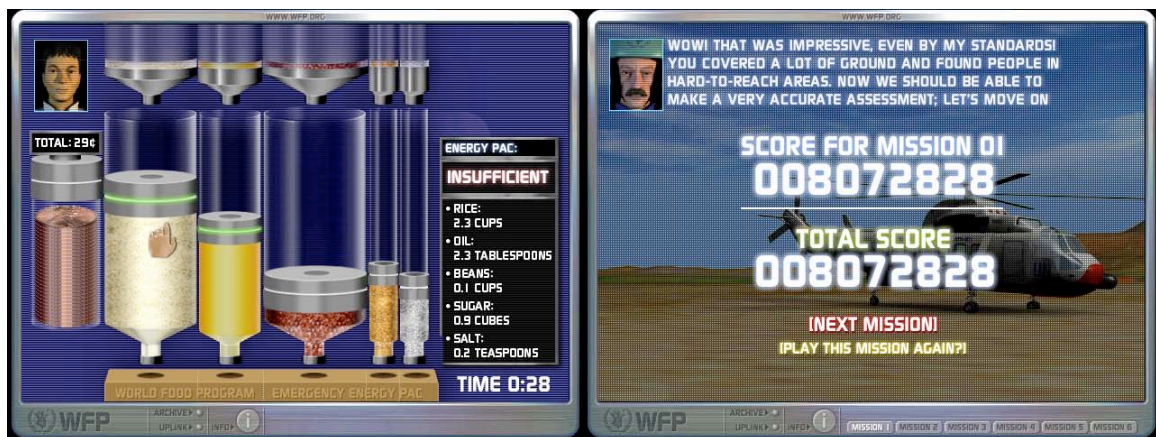


Figure 8: The *Food Force* Balancing Nutrition Mission and the Scoring System.

Publishers of the serious game *Food Force*, The United Nations World Food Programme (WFO) is the food aid branch of the United Nations, and the world's largest humanitarian agency. *Food Force*, a stand-alone advergaming with a target demographic of eight- to 15-year-olds, lets each player become a rookie member of a team containing a nutritionist, a logistics officer, a pilot, an appeals officer, and a director of food purchasing. The location is Sheylan, an island in the Indian Ocean suffering oppression from both drought and a civil war. Game players can undertake missions to find hungry citizens and provide them with a balanced diet, to dispatch supplies, to deal with landmines, and to help develop safe villages by taking care of workers' health and educational needs. *Food Force* has been available as a free download since 2005, and on their web site WFP estimates that the game had over four million players in 200 countries within its first year of release. Other United Nations stand-alone videogame initiatives are *What Would You Do*, an on-line game that addresses HIV/Aids risks and *Stop Disasters*, which deals with helping people in areas where disasters, like floods, earthquakes, fires, or tsunamis occur.

Auteurial Vision: In a 2006 FuturePlay keynote presentation, Justin Roche, *Food Force* program manager at the time, advocates the game's objective as being "to allow young people to interact with problems of global hunger and what they can do to fight it." As a tool of persuasion, this serves to elaborate and extend the World Food Programme's overall mandate (its "brand image," in using the vernacular of advertising) of saving lives, improving nutrition and quality of life, and enabling development in underprivileged regions of the world.

Food Force as Forum Theatre: From a philosophical perspective, in *Food Force* we do not see the binary opposites of the Oppressor and the Oppressed being represented within the character roles, as is the usual case within Augusto Boal's Theatre of the Oppressed (TO). Instead, *Food Force*'s conflict is more complex, having to do with an array of problems including civil war, where the foes are off-stage and just implied, and, more importantly, natural disasters like global climate change, bringing with it drought and malnutrition. These conflicts are in the realm of public safety, aligning more closely with David Diamond's Theatre for Living goal of bringing safety to a situation to "help us live together in healthier ways" (Diamond, 2007a: 24).

From a procedural perspective, *Food Force* is a game that has a well-defined beginning, middle, and end, if one plays it all the way through. This bears more similarity to a classic Aristotelian dramatic action of cause and effect with a clear resolution than it does to Forum Theatre where there is no clearly defined resolution to the conflict. Even though it is not really possible to try out different roles or to substantially change the fate of the “correct” outcome in *Food Force*, there is still a practical point of procedural similarity to Forum Theatre and its impulse for social action. By interacting with the gameplay action of *Food Force* on a computer hooked up with the Internet, players can become engaged in social change, due to the practical convenience of a computer-mediated environment as a mechanism for dialogue. An example of this is the “Feeding Minds, Fighting Hunger” Internet partnership between the American Federation of Teachers and the United Nations, which provides *Food Force* players with mechanisms through which they can, “actively participate in creating a world free from hunger” (*Feeding Minds*).

Food Force and Education: As a proponent of the idea that the world is a problem to be worked on and solved,” Brazilian educator Paolo Freire espoused a transitive pedagogy in which students break free from oppressive order to become critical co-investigators in dialogue with teachers. Freire, who was influential as a educative role model to both Augusto Boal and David Diamond, greatly disapproved of what he called the “banking concept of education [in which] knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing” (Freire, 1968/1970: 68). Bringing this educative theory of transitive learning into the contemporary world of videogames, one can extrapolate this thinking to coincide with *Food Force*’s ability to raise awareness about world food issues by enabling the player to become engaged in a gameplay of actions, re-actions, and rewards.

Food Force and Problem Solving: In *The Logic of Failure*, Dietrich Dörner notes that computer technology allows us to simulate complex situations that help identify sources of confusion, misperceptions, and shortsightedness to become better problem solvers. Participants in the *Food Force* scenario, especially in Mission Two where nutrition kits have to be balanced and Mission Six where Village Happiness is built, experience the

effects of choices being imposed into a complex system of village needs. This is a way of building “structural knowledge,” or knowledge of how the variables in a complex system are related and how they influence one another (Dörner: 1989/1996: 41).

Similar Social Issue Stand-alone Games

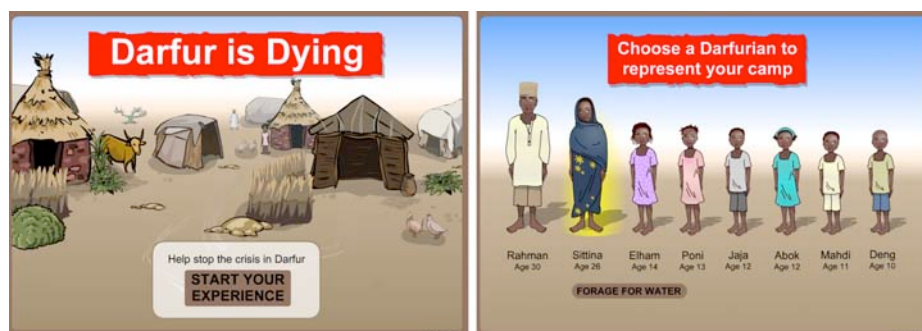


Figure 9: *Darfur is Dying* game from MTV.com

Darfur is Dying: Released by MTV-online in 2006, *Darfur is Dying* pits Darfuran villagers against the oppressive Janjaweed military. As a player, one needs to keep refugee camps functioning in the face of possible attack. The auteurial vision of the development team, from the USC Department of Cinema Studies, was to “increase awareness about Darfur and bring an end to the crisis” (*Darfur is Dying*).

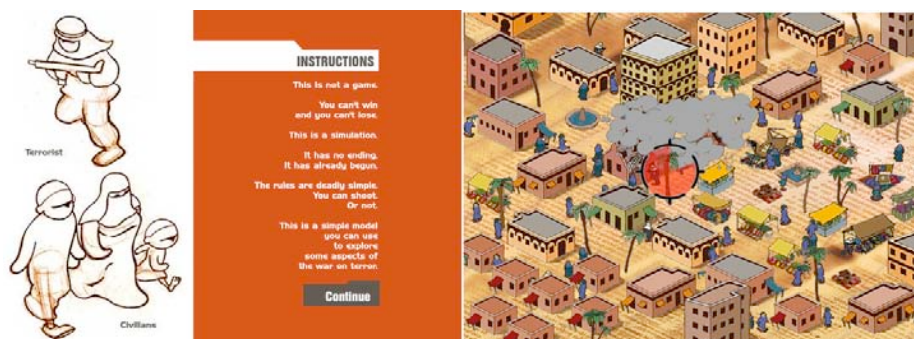


Figure 10: *September 12* from NewsGame.com

September 12: A Toy World: Created in 2003 by independent Uruguayan videogame designer Gonzalo Frasca and disseminated on the NewsGame.com web site, *September 12* explores aspects of the war on terror by simulating a scene in which the more terrorists one kills, the more terrorists appear. The implication is that you cannot fight terrorism

with violence or you will escalate the whole population against you. Frasca was also influenced by the pedagogy of Paulo Freire and Augusto Boal and Frasca's Master's thesis, entitled "Videogames of the Oppressed" advocates an auteurial belief that "by enhancing critical awareness among citizens, society could actually change" (Frasca, 2004: 75).

PLAY THE NEWS: IMPACT GAMES

A news game is a short interaction ... to highlight a core issue to be examined ... to allow you to put yourself in the shoes of the different perspective ... and to predict what will happen in the real world.

— From Play the News FAQ Web Page



Figure 11: On left, a *Play the News* Game. On right, the web portal showing a series of games.

Play the News was developed by Impact Games to “create compelling interactive entertainment around current events.” Founders Asi Burak and Eric Brown disclose that their overall aim is to “partner with and enable organizations to change the way people consume information and understand the world around them” (*Play the News*). *Play the*

News, in Beta 0.92 version at the time of this writing, features news games on topics ranging from global and American news to technology and entertainment. There are centre-piece placements within their web portal space that include discussions, a system of leader boards, and archived links to other news games within the site.

Play the News games can be played at no cost to the user. When a news game is released, based on current events of the day, I, as a player, can enter the game from a Facebook or other social network link, or I can go straight to the web portal when prompted by e-mail. When logged in, I am enticed: “Choose a Role. Take an Action. Predict the Future.” I read a backgrounder, call up opinions to inform my gameplay strategy, and then play out various stakeholders’ roles. I can cast a prediction on what I think should happen, and I can also play the same role and make a prediction about what I believe actually will happen. I can earn extra points by partaking in discussion and can reward my fellow debaters with extra points for their comments, either as a “yay” or as a “nay.” As the news plays out in real space and time over the next days or weeks, I am awarded a prediction ranking and points for activity levels and discussion input. Mixed in as front-and-centre design elements of the *Play the News* web portal space are placeholders for advertising. That suggests the use of a magazine-industry dissemination model in which commercial advertising underwrites editorial content endeavours. For this reason *Play the News* can be considered an “out-of-game placement” advergaming in which the commercial messages appear outside the field of view of the game itself but is an essential component of the overall publishing plan and monetization model.

Auteurial Vision: As advergaming entrepreneurs, the creators behind Impact Games aim to “change the paradigm of news consumption from passive reading to active engagement” (*Play the News*). In their introductory video, they describe an aim of wishing to provide players as “more than just passive viewers in the headline, we’re going to take control of the situation ... to get a deeper understanding of the headlines of today while shaping the news of tomorrow.” From a business perspective, and according to an interview with Eric Brown in the *Pittsburg Business Times*, Impact Games expects to start turning a profit in 2009 and predicts revenue from advertising, media partner sponsorship and syndication to reach \$50 million by 2011.

Play the News as Forum Theatre: Like the Joker in Forum Theatre, *Play the News* unrolls a story, familiarizes me with the influential characters involved, then allows me, as a spect-actor, to stop the narrative action at strategic points along the way. The game provokes me to first decide how I would play the moves, and then to decide how I think the moves will actually be played. I am given statistics about how my fellow players made their choices too.

This approach speaks to Augusto Boal's overall philosophy of trying out alternatives. He says, of his style of theatre, that "for it to work, it needs the people's participation" (Boal, 1998: 22). Boal's model of theatre as transitive democracy counts on the Joker to interpret a collective process and come up with new strategies to solve a problem, much in the same way as *Play the News* guides players through a decision making process to become more than passive viewers. Gameplay is transitive by definition, that is, like the theatre of Boal and Diamond and the educative techniques of Paulo Freire, it encourages monologue to become dialogue, with the games themselves initiating a series of potential experiences, no matter what the content. With the Joker as facilitator, or what Boal and Diamond both call a "difficultator," learning is de-complicated through a process of non-judgmental trial and error. Connections are made at a deep level, activating what Diamond calls "a communication in the room, provoking a higher consciousness" (Diamond, 2007b).

Play the News and Education: An even earlier proponent of experiential learning than Paulo Freire, John Dewey was from the philosophic school of pragmatism. He believed that the meaning of a proposition is to be found in the practical consequences of accepting it, that impractical ideas are to be rejected, and that experience and beliefs form a framework for action. This philosophy intersects with the notion of both Forum Theatre and *Play the News* in several key ways. Firstly they are both entertainments in which one can play out an action in a game-like way to re-affirm one's personal moral and ethical beliefs — in other words learning through doing. Secondly, by using the experience of a live theatre game in the case of Forum and a digital game in the case of *Play the News*, one pragmatically accepts the freedom of aiming for practical positive consequences and rejecting the impractical ones. Thus, in effect, one rehearses reality. Forum Theatre practitioners Augusto Boal and David Diamond use the motto "If it is not

expressly forbidden, it is allowed;” and Eric Brown from Impact Games claims that by taking a role in real-world events, one can “take a role in a variety of real-world events, from domestic to global, even entertainment” (*Play the News*).

Play the News and Problem Solving: Like Dörner, theoretical linguist James Gee sees games as a system of interrelated parts that engage players in metalevel critical thinking. Games, according to Gee, are semiotic systems and design spaces comprising of clusters of semiotic domains that encourage people to take on and play with alternate identities. These semiotic systems, as he describes them, are “human cultural and historical creations that are designed to engage and manipulate people to ... think, act, interact value, and feel in certain specific ways” (Gee, 2003: 35). This notion ties in with the specific values of social goods such as status, respect, power, and freedom. By playing different characters and becoming immersed in their particular semiotic domains, one can choose which social goods to accumulate and decide if it matters. Within *Play the News*, semiotic domains can be perceived on two levels, the layer of the actual game-play and the layer of the web portal. In the game layer, playing different roles, can open horizons to accumulation of social goods by way of high scores. The player is coached by an array of advisors’ opinions that are available on demand. At the same time, on the level of the web portal and in the commercial presence of advertising messages, an analogy can be made with print-based magazine media.

Similar Out-of-Game-Placement Serious Games:



Figure 12: *Free Rice* game from United Nation WFP.

Free Rice: Like *Food Force*, *Free Rice* is a United Nations World Food Programme game; however, like *Play the News*, it is an Out-of-Game-Placement game rather than a Stand-alone. The strategy is that players, by correctly answering vocabulary questions, ramp up advertisers' contributions of rice to hungry nations. The *Free Rice* auteurial vision of this is: "We believe that when enough people around the world become knowledgeable about hunger, it will no longer be tolerated" (*Freerice*). In the six months since the launch of the game in October 2007, over 25 billion grains of rice have been donated through the programme to Burmese refugees in Bangladesh, Bhutanese refugees in Nepal, pregnant women in Cambodia, and schoolchildren in Uganda.



Figure 13: *Re-Mission* from Hope Labs.

Re-Mission: Published in 2006, *Re-Mission* is a video game for young people with cancer. Although the Sawyer and Smith taxonomy of serious games categorizes *Re-Mission* as a "Game for Health" rather than an Advergame, *Re-Mission* conforms to the overall standards of Out-of-Game Placement Advergames, in that it educates about risks and diseases while promoting the viewpoint of Hope-Labs, which appears as a link from the web portal. Pam Omidyar, Founder & Board Chair of Hopelab states that *Re-Mission* is a "means for adolescents with cancer to learn about and improve the quality of their life through gameplay" (Hope-Labs).

THE BOOZE CRUISE: A DRIVING GAME WITH A SERIOUS DRINKING PROBLEM

It's going to be a great tool. Whatever education that we can get out there is always going to be beneficial as far as drinking and driving go.

— Constable Rob Haffner, Calgary Police Service



Figure 14: Left, *Booze Cruise* in-game billboard. Right, a game-over score screen.

As an example of my own work, *The Booze Cruise: A Driving Game with a Serious Drinking Problem* is an In-Game-Placement serious game developed with a group of fellow graduate students at the Digital Media Laboratory at the University of Calgary, under the direction of James R. Parker. It is a humourous video driving game that gives the player an insiders' feel of what it is like to drive under the influence of booze and pills. Our information release stated that

As either a male or female player, you crawl out of the trunk of your car, hammered, but still aiming to get Home in 90 Seconds. Problem is, bizarre hazards emerge – kids, Elvis, checkstop cops, zombies, pink elephants, and as you crash and collide you lose demerit points, your insurance costs skyrocket, and your licence gets suspended for years. How might you run the course clean? And how did you get into the trunk of the car in the first place?

The scoring system is devised so that players get demerits for making bad choices like failing to stop at the Checkstop or colliding with pedestrians. In-game placement takes the form of 3-D Checkstop scenarios and billboards promoting the work of the Calgary Police Service and its initiative to inform youth about the dangers of drinking and driving. The game conveys real-life consequences in an effort to change real-life behaviour and the overall stylistic approach to the game is to use humour and a factor of

fun to dole out the information that it is idiotic to drink and drive. The player's feeling of being under the influence of alcohol and drugs is simulated in several ways: through the other-worldly sound design and music, the saturated colours and liquid weirdness of the design aesthetics, and, most importantly, the woozy action of the vehicle itself. These actions and reactions were developed directly in conjunction with Constable Rob Haffner of The Calgary Police Service Alcohol Unit.

The Booze Cruise won the Peoples Choice and the Student Game Award categories at the 2007 FuturePlay conference and has received media coverage with CBC and CTV National news broadcasts and print and online newspaper coverage with *The Globe and Mail*, *The Boston Globe*, *Scientific American* and many other publications.

Auteurial Vision: My own auteurial vision as a co-creator of *The Booze Cruise* was born of the fact that a young family friend had recently been killed in a motorcycle crash caused by his own drunk driving. My feeling was that if one life could be saved by playing out the experience in virtual rather than real space, it would be worth the effort that went into this project.

Booze Cruise as Forum Theatre: *The Booze Cruise* game ties in with Forum Theatre in the same fundamental way that *Food Force* and *Play the News* do, insofar as there are no real-world consequences, whether that failure takes the form of dropping bags of rice out of the back of a plane and not factoring in the wind direction, voting on war efforts rather than peace efforts, or driving while impaired. Another way of looking at this is that the Forum Theatre performance playscripts have a beginning, a middle, and no end. Essentially, Forum Theatre truncates traditional Aristotelian narrative structure by terminating at a moment of crisis. With the use of the story style of Robert McKee as a contemporary elaboration of Aristotelian poetics, the inciting incident is that the player crawls out of the trunk of a car, inebriated but with the objective of getting home within 90 seconds. The escalating action speeds the player down a course in which progressive risk activities and road conditions reward or penalize the player depending on his or her level of ability, tied in with the level of sobriety. The moment of crisis arrives when the 90 seconds is up and the beginner player is almost inevitably confronted with the fact that they're "Busted," that is they've stacked up a bad driving record, out-of-this-world

insurance costs, and years of jailtime. It is the player's task, in subsequent gameplay, to reach Home and, as with Forum Theatre interventions, the trial and error of suffering the negative as well as the positive consequences will enable a player to attain this condition of safety.

A fundamental difference between *Booze Cruise* and Forum Theatre is that the Joker in *The Booze Cruise* is a devilish character who eggs the driver into taking more drinks and driving faster. Having a Joker who is more of a trickster than a guide intensifies the irony and fun factor of the game.

The Booze Cruise, Humour, and Educative Impact: An important concept behind the pedagogy of *The Booze Cruise* is the power of humour as a tool of subversion. Humorous subversion helps to bring meaning to *Booze Cruise* as an artistic entertainment and is especially valid when viewed as a part of a continuum of art activism that I call "Art that Mouths Off." That is an idea I gleaned from the headline of a *New York Times* article, "Pardon Me But the Art is Mouthing Off" about artist Lynn Hershman's politically incorrect robot. The rebellious *Booze Cruise* Joker who subverts social norms with her whispered advice for the player to go "faster, faster," and to "come-on — have another drink," is an alter-ego personifying the effect of alcohol on the brain. She teaches through bad example and parody and is part of a long legacy of tricksters who mouth off and misbehave, from Shakespeare's Puck to Gitsguka haliat attendants who throw water, representing urine, upon Potlatch guests to provoke "rowdy good humour" (Anderson, 2000: 74). In more contemporary times, Country Joe and the Fish mobilized a counter-culture rebellion against the Vietnam War with their satiric song *I Feel Like I'm Fixin' to Die Rag*, one of the defining anti-war songs of the 1960s

Well, come on mothers throughout the land, pack your boys off to Vietnam.
Come on fathers, don't hesitate, send 'em off before it's too late.
Be the first one on your block to have your boy come home in a box.

The practice of subverting the status quo through humour is also embodied in the educative impact of Homer Simpson of *The Simpson* television fame as a reverse role model for Generation Y. Homer Simpson is not cited as often as Paulo Freire or John Dewey within circles of educational research but he is every bit as much a purveyor of

experiential pedagogy. He is a dependable satirist and we know his advice has to be turned around 180 degrees before a reliable path is exposed. Just as teenagers know it is foolish in real life to follow the *Booze Cruise* Joker's satiric advice to "come on, let's give her a scare" when speeding toward an old lady crossing a street, so they also know better than to trust Homer in a real-life belief system when he says, for example, "Here's to alcohol, the cause of, and solution to, all life's problems" (Simpson's). Other television media figures that educate as well as entertain through use of satire include Jon Stewart and Stephen Colbert of the *Daily Show* and the *Colbert Report*, Rick Mercer, *The Royal Canadian Air Farce*, and *This Hour Has 22 Minutes*, all of whom bring glimpses of truth in politics and social issues through irony and humourous subversion.

Activist art holds power to tune us into the world around us by spinning reality around into a metaphorical representation and then challenging us to bring meaning back through our own interpretation. Herein lies the secret at the core of experiences such as *the Booze Cruise* and other activist entertainments in which engagement in the recovery of meaning is a active process, laying down foundational life skills and ideological values by flipping back the layers of irony.

The Booze Cruise and Problem Solving:

Following on the concepts of metaphor, ideology, and television, media theorist John Fiske developed a semiotic structural knowledge system in the specific field of television studies that offers an effective way of framing the artistry of videogames into a valid model for methodological analysis. In the book *Television Culture*, Fiske illustrates the multileveled cultural codes of television as being; observing signs of reality, discerning the way they are encoded electronically into representations, and then organizing and projecting them into ideological codes such as those of individualism, class, patriarchy, race, materialism, capitalism, and so on. According to Fiske, these ideological codes assist in "producing a congruent and coherent set of meanings that constitute the common sense of a society" (Fiske, 1987: 6). As it relates to *Booze Cruise*, the 3D comic characters of the little old people, for example, can be seen as representing elderly and defenceless victims of drunk drivers. If leveled up in Fiske's framework of cultural codes, the targeting of old people could be shown ideologically as a social malady of ageism and lack of respect for elders. Likewise, the character of the Joker devil could be

seen as signifying a personification of substance abuse and if leveled up in the Fiske framework, could be scrutinized ideologically as a drawback of alcohol addiction or even a scenario of collective bullying and peer pressure. Like Dietrich Dörner's observations about computer technology allowing us to simulate complex situations that help identify sources of confusion and misconceptions, Fiske's semiotic framework provides another method to unravel meaning and take action on social issues.

Other In-Game-Placement Serious Games:

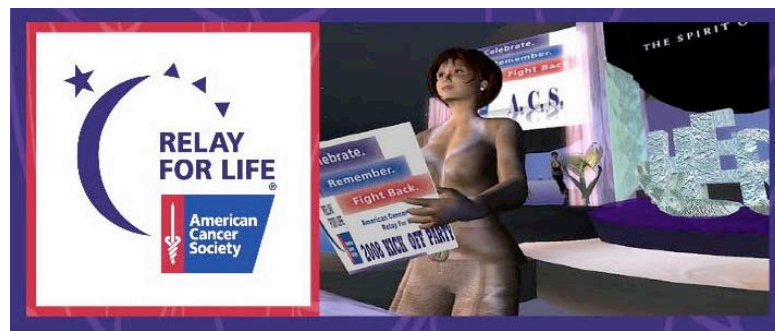


Figure 15: *Relay for Life* game in *Second Life*.

Second Life Relay for Life: A fund-raiser for The American Cancer Society, *Second Life Relay for Life* is “A walk-a-thon in cyberspace, where Seond Life (SL) residents gather, camp out, dance, donate money and walk a custom-built track themed ‘A Quest for a Cure’” (*Second Life Relay*). Along the way, SL virtual character avatars partake in opportunities such as sky diving, roller coaster rides, and treasure hunt games. In 2007 *Second Life Relay for Life* raised more than \$118,000, attracting 1,700 participants.



Figure 16: *Parking Wars* on Facebook, advertising the A&E program.

Parking Wars: This game, available to play on the Facebook social network, was created by area/code for A&E Broadcast Network as a way of promoting their *Parking Wars* television show. As area/code puts it, “Games and media define imaginary spaces that we enter into and explore and they highlight the connections between these imaginary spaces and the world around them.” This practice brings up questions about the ethics of in-game advertising placement or other persuasive tactics in games, and especially pervasive games that cross over into public spaces. Does embedded advertising in games bring with it realism or deception? Do we, as consumers of media, know where to draw the line between a commercial message and an unbiased representation of reality? Who is to decide? These questions are beyond the scope of this thesis but are still crucial to consider in relation to the overarching issue of games and moral obligations.



Ben Sawyer, who along with Peter Smith developed the taxonomy that defined the games within this chapter as social-issue advergames, asserts that “gaming has the capacity to teach us that problems are multifaceted, ... [and that] this is a clear case of learning by doing. The U.N. game, for example, can show you what an organization is all about — and let's face it, it's far more effective than a pamphlet” (NY Times). As has been noted in this chapter, the foray of the United Nations into awareness-raising social-issue games is a source of optimism for the future of videogames as a pedagogical tool. The chapter has also identified the vision of other auteurs of the specific subsection of advergaming, has defined the look and feel of their electronic stage, and has speculated on the pedagogical impact, problem-solving ability, and ethical responsibilities around their work. The connections of these social-issue videogames with Forum Theatre, and especially the Joker figure, has been looked at from the varied perspectives of Raph Koster, David Ogilvy, Augusto Boal, David Diamond, Paulo Freire and others. Most compellingly, these auteurs variously speak of their work as a way to minimize risk and know what choices to make, a way to tell the truth and make it fascinating, and a way of bringing safety to a situation to help us live together in healthier ways.

Looking back at Part One, the exploration of influential sources affecting my work, I have come to realize that my own work is as much about the underlying concepts

behind the work of the auteurs and creative forces as it is about the theatre and game projects themselves. Sacred play and ritual's liminal and liminoid phases, following the work of Huizinga, Turner, Goffman, and others; the theatrical exploits of Brecht, Artaud, Barba, Gambaro, Boal and Diamond and their connections to multi-modal and multi-textual realms of sensual and realms of dramaturgy; and the artistic perspectives on complex problem solving in social-issue videogames all speak to the central research question of ways that forum theatre and digital playspaces can help us understand urgent social issues.

The purpose of this study is to see how the conventions of Forum Theatre can be combined with computational technologies to design innovative game environments and how the resulting artistic tool might uncover new meaning about our world's energy resources. The next section, called *The Work*, aims to illustrate and unfurl the interdisciplinary research design whereby my values, assumptions, beliefs and the things to which I am committed were transformed into the Forum Theatre and videogame entertainments, *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game*. In my work, make-believe is used as a way of preparing myself and other Albertans for the real thing.

PART TWO: THE WORK



In Round One, Terra sings:

It's the time, fossil fuels, stop polluting our earth.

Introducing Terra Fuel. We put an end to smelly air.

— *Script fragment from Spies in the Oilpatch, Round 1.*

In Round Two, Lori projects:

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.

— *Voiceover from The Pipeline Pinball Game Design Video, Round 2.*

In Round Three Terra and Tarzana square off.

Terra: Sustainability | Tarzana: Progress

Terra: Sustainability | Tarzana: Progress

Together: Whose Side Are You On?

— *Script fragment from Spies in the Oilsands, Round 3.*

In the beginning of this thesis adventure, there was the beautiful province of Alberta with oil riches beyond belief and a native daughter who was joyful about it but puzzled all the same. She thought, what will happen when the oil riches run dry? Then where will we be in Alberta with all our big shiny buildings and high standard of living to maintain? What kind of fuel can we peddle when it's all gone? Then, when reminded that there was enough oil in the Oilsands to last hundreds of years, she opened her ears and turned her concerns, instead, to the environment. What will happen to northern wildlife if

Oilsands development is left unchecked? Instead of flowing freely over the western plains, great rivers are converted into vast sludge ponds of toxic waste. Instead of absorbing carbon dioxide from the atmosphere, forests are destroyed to make way for gaping open pit mines and sinuous networks of pipelines. How will the ducks and caribou and polar bears handle the changes? Then, when reminded that people are impacted by environmental changes too, a final inquiry presents itself. How can we test and possibly revise our moral stance about the energy we consume? Will our decisions ensure a happy future for ourselves, our children, and our children's children? This cluster of questions confront the social effects or thematic "content" of the thesis case studies, *Spies in the Oilsands*, and *Pipeline Pinball*.

A second cluster of questions confronts the "form" or aesthetics of the works as artistic entertainments and includes: How is the theatre also a game? How is the game theatrical in narrative and in process? Finally, in response to the three rounds of art and design as being partial answers and glimpses of truth representing a collation of form, or aesthetics, and content, or social effects, a third cluster of questions emerges that guides the inquiry toward the construction of new models of analysis for serious games. Hans-Georg Gadamer claimed that before we understand ourselves through self-examination, we understand ourselves through our family, our society and the world around us. Individual self-awareness, he said, is "only a flickering in the closed circuits of historical life" and the prejudices of the individual constitute the historical reality of his being (Gadamer, 1975, 278). It should come as no surprise that I, Lori Shyba, am the native daughter of our beautiful Alberta and that the characters that enter through the course of the experiment, Terra the eco-zealot and Tarzana the oil slut, are my alter-egos of renewal and sustainability on one hand and of progress and consumerism on the other. I am about to raise the figurative curtain on the three rounds of case studies, *Spies in the Oilpatch*, *The Pipeline Pinball Energy Thrill Ride Game*, and *Spies in the Oilsands: Whose Side Are You On*. First, however, it is incumbent on me to describe the research design strategies that have provided the methodological framework for this personal adventure of imagination combining theatre, games, and the urgent issue of our world's energy resources.

CHAPTER FOUR: PLAYFUL INQUIRY DESIGN

Originality does not mean being unlike the past or unlike the present, it means acting out of your own centre Paradoxically, the more you are yourself, the more universal your message.

— Stephen Nachmanovich, *Free Play, Improvisation in Life and Art*.

This is what fundamental novelties of fact and theory do. Produced inadvertently by a game played under one set of rules, their assimilation requires the elaboration of another set.

— Thomas Kuhn, *The Structure Of Scientific Revolutions*.

As the title of this dissertation suggests, I set out in this inquiry with a solid ambition to find out what lies beyond fun and games. How might I immerse myself into this task of knowledge building when the exploration is so inherently multitextual and interdisciplinary? How can meanings be recovered from the process of making repeated iterations of a play and a game that might lead to novel ideas and innovation? How do the ethics of the social issue emerge? Early in the inquiry, I sketched out a series of visual and temporal allegories that have guided my process on many levels. The first drawing, “Phronetic Pinball,” was reflective of an intuition I had of needing to stay free and fluid in my imaginative thinking, especially in light of the wide variation of source material and knowledge stances. This method of inquiry was influenced by Aristotle’s concept of phronesis as an intellectual activity and the beliefs of Stephen Nachmanovich about childlike play and creative expression. The second model, “Experiments in Puzzle Solving,” based on Dietrich Dörner’s theories of complex action organization and Thomas Kuhn’s way of testing ingenuity, is the technique I used for the case studies as they were carried out. The third, the “Experiential Cycle of Reflection and Understanding,” influenced by the hermeneutics of Hans-Georg Gadamer and the Joker from Forum Theatre, reflects the iterative design process of prototyping, balancing interpretations, and transforming a work. These visual allegories, and the methods and

systems they imply, supply a framework for understanding and recovery of meaning that match with the aims of the substantive, theoretical, and methodological research goals.

A RESEARCH ADVENTURE IN IMAGINATION

Self-preservation is to be regarded as the true being of the work of art.

To this end we invoke the concept of play.

— Hans-Georg Gadamer, *Truth and Method*.

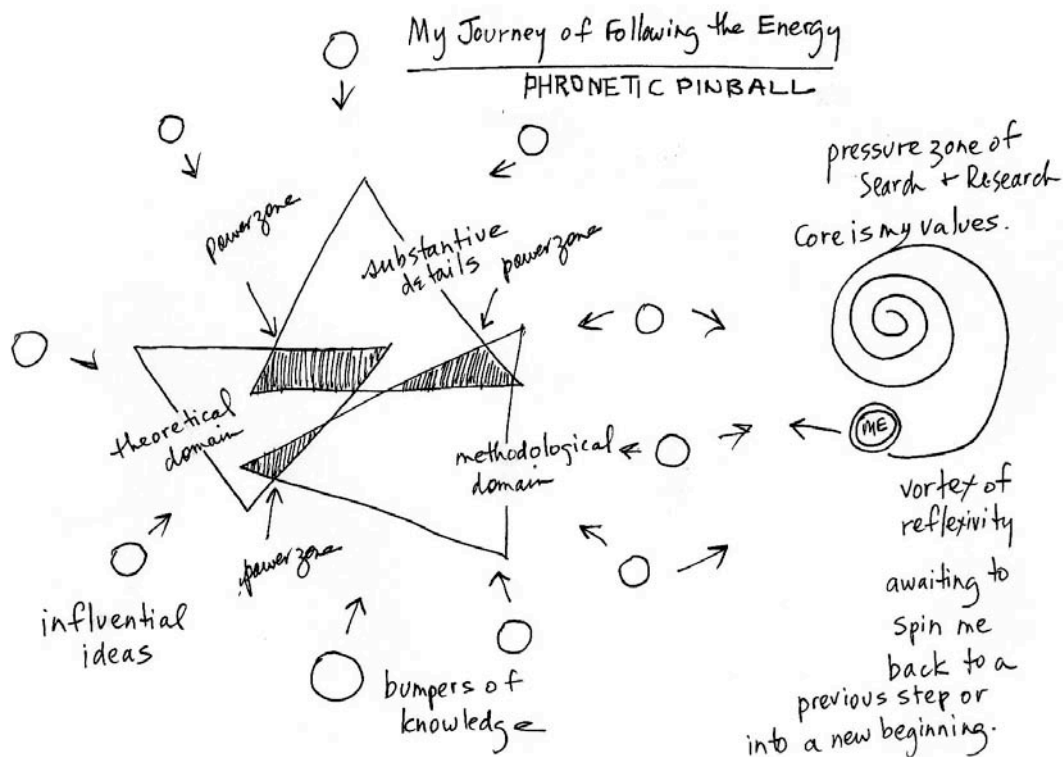


Figure 17: Phronetic Pinball as an implicit, playful reality model for creativity.

Phronetic Pinball was drawn up early in the study as a roadmap for the events and effects that I intuitively knew were in front of me as a researcher. This inquiry design has managed to guide me through the creative and analytical process of this work and yet has allowed me to stay firmly in the middle of the experience as a personal, and more than occasionally risky, artistic journey. Phronetic Pinball is named after the Aristotelean concept of phronesis that, along with the other virtues of episteme and techne, forms an intellectual connection with wisdom and, ultimately, truth. Phronesis requires that practical judgment and experience act as a point of departure for prudent social action.

Phronetic Pinball immerses me in the action of knowledge building like an energy ball, bouncing off bumpers of influential ideas, gaining momentum over intersections of inquiry domains, and occasionally going down the drain but gathering courage to play another round. In between, when the ball rolls over the “power-zone” intersections of these domains, bonus surprises occur when substantive, theoretical, and methodological energies merge, infusing explorations of an inter-inquiry nature. As an instrument of design, Phronetic Pinball is interactive. It is a game and it is fun but goes beyond fun and games because it uses freedom of imagination to explore the details and emotions.

The simple rules of the game are that the subject of this qualitative narrative, namely me (as epitomized by the pinball), gets propelled into a complex system of variables with the goal of solving a complex problem through imagination and intuition, or what Dörner calls “getting a feel for things” in a subjective gestalt of inter-related supersignals (Dörner, 1989/1996: 39). Bouncing off the supersignals of pins and bumpers representing the review questions, influential sources, my own values, and the social issue of our Alberta energy resource gave me an overall sense of expansion and confidence through the a gestalt of implications and connections. Stephen Nachmanovich likens this kind of unbridled exploring and experimenting as being like a child, “insistently snooping into every little corner that is open to us — and the forbidden corners too!” (Nachmanovich, 1990: 117). Nachmanovich observes that the convergence point of childlike simplicity, intelligence, and the power of mind at play is a potent site for creativity and this coincides closely with Dörners impressions of make-believe being a important way for us to prepare for the real thing and the value of “playing in dead earnest” (Dörner, 1989/1996: 39). Aristotle’s *Poetics*, as cited by Hans-Georg Gadamer, asserts that “play itself contains its own, even sacred, seriousness” (Gadamer 1960/1975: 102). This is the way that my Phronetic Pinball exerted power as a step in the act of recovery, a childlike act of play that opened up my awareness to what lay beyond.

The Substantive Focus

As was stated at the onset of this paper, the overall thesis exploration is to discover how interactive Forum Theatre and serious videogames can help us understand urgent social issues. Substantively, my aim is to explore and document the process by which one can create live/digital art games that challenge the status quo and provoke action and

discussion among participatory audiences. The existing research and practice that I have drawn upon for these art entertainments are from widely varied and diverse disciplines, including William Gallup's decades-old research papers espousing the future of the Alberta Oilsands, the multi-modal and multi-textual creative processes of making social-issue theatre and games, the role of a Joker persona as a guiding force, and the value of truth and integrity in persuasion games. Rational game theory also plays a role in the extrapolation of substantive findings into the game analytical technique of gamaturgy.

Theoretical Issues

My theoretical aims are to find significant ways in which Forum Theatre can provide a new form of analysis for social issue games and to seek out patterns of interconnected ideas and attitudes to advance theories about how we might make sense of the complex problem of our world and its energy resources. The theoretical basis that I have drawn upon for these new instruments of analysis includes the concepts of liminal and liminoid ritual activities, experiential pedagogy, and media studies semiotics, especially in television studies.

THE METHODOLOGY

The range of anticipated, and thus of assimilable, results is always small compared with the range that imagination can conceive.... If it is to classify as a puzzle, a problem must be characterized by more than an assured solution.

— Thomas Kuhn, *The Structure of Scientific Revolutions*

The overarching knowledge stance and methodological model is subjective, interpretive, qualitative, and practice-based in that my artistic case studies, informed by the work of my inspirational sources, helped shape the theoretical findings. As a novelty of methods within the methodology, I implemented a modified scientific framework as a case study development rule set (Figure 21), and integrated an iterative prototype creation process of evaluation into a hermeneutic cycle of reflection and transformation (Figure 22).

In *The Structure of Scientific Revolutions*, Thomas Kuhn argued that a new theory is seldom or ever just an increment to what is already known and that paradigm shifts can be brought about, in part, by novelties of discovery and invention based on awareness of an anomaly within a previous fact or theory. With regards to novelties of fact and theory,

he said, “Produced inadvertently by a game played under one set of rules, their assimilation requires the elaboration of another set” (Kuhn, 1972/1996: 52). My intention has been to uncover novelties and anomalies through Phonentic Pinball under a loose rule set of freedom of imagination and then recover meaning through another methodological rulesets, or techniques that help recover meanings further levels of understanding. These techniques are “Experiments in Puzzle Solving” and “The Experiential Cycle of Reflection and Transformation.”

Experiments in Puzzle Solving

To be successful a planner must know when to follow established practice and when to strike out in a new direction.

—Dietrich Dörner, *The Logic of Failure*

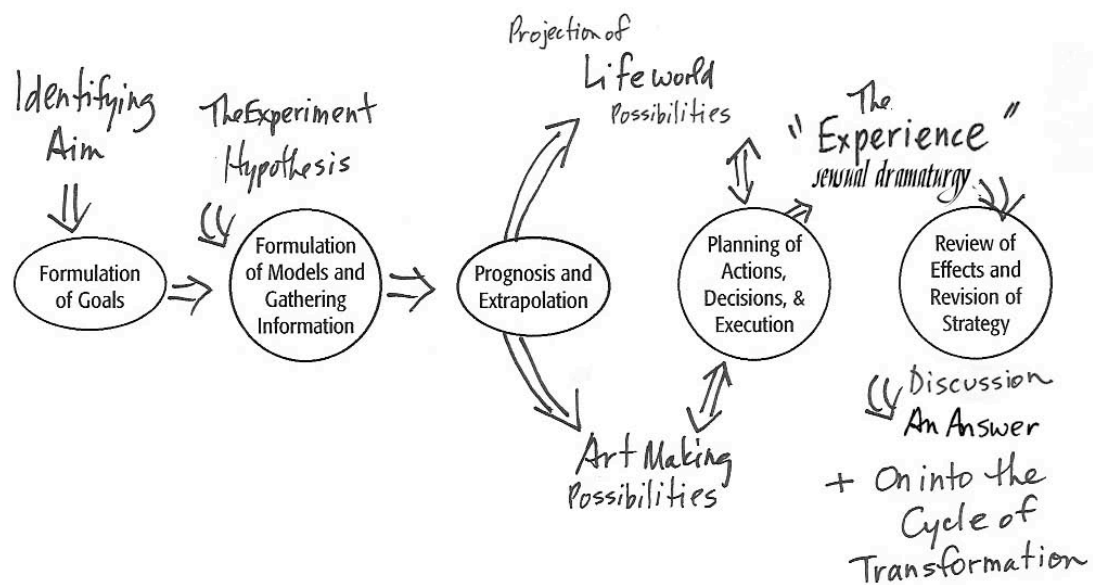


Figure 18: “Steps in Planning and Action” that strikes out in new directions.

Based on Dietrich Dörner’s “Steps in Planning and Action,” (Dörner 44) and Thomas Kuhn’s “Puzzle Solving in Normal Science” (Kuhn 35) and then modified to my own needs, this technique sets out to discover meaning through experimentation.

Implemented from the onset of the case study work, the experiment begins by my identifying an aim or a goal and proceeds through a more-or-less linear pattern of my formulating a model of action based on a hypothesis and projections of possibilities,

developing an array of ends-in-view, planning out the execution, creating the experience, reviewing effects and then taking it on into the Cycle of Reflection and Transformation. An important thing to know about this system is that even though it projects possibilities and has ends-in-view, it does not set up expectations or pre-conceived notions in a positivistic way. It is, instead, a hybrid art and science framework designed as a way of working through the individual case studies.

The Experiential Cycle of Transformation

The work starts when the story is told. The first act is an act of recovery.

— My Field Notes

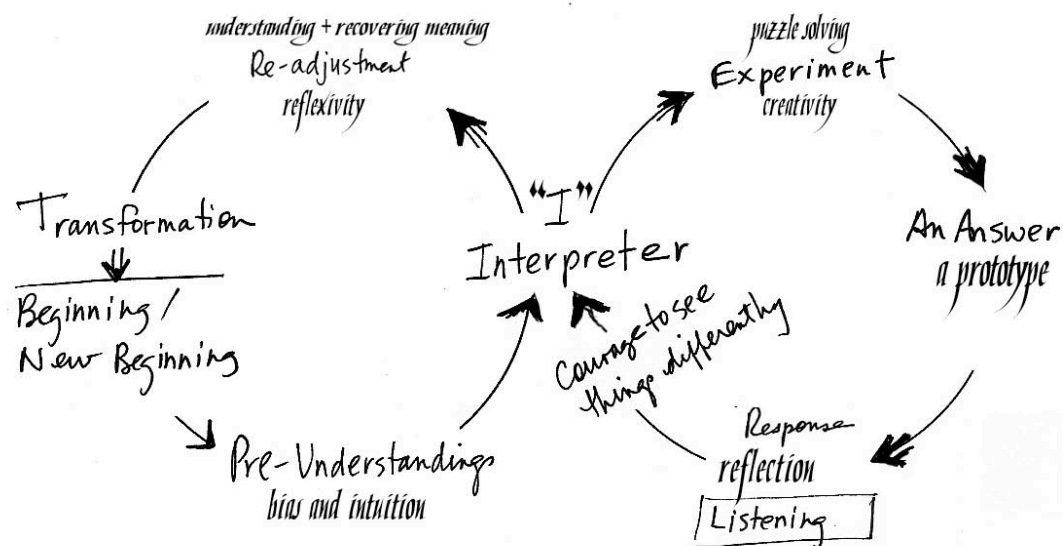


Figure 19: The Experiential Cycle of Transformation,” subjective model for understanding based on the philosophy of hermeneutics, and the iterative design process.

As an adjunct to each iteration of the experiment, the interpretive model pictured in Figure 19 is implemented as a way of following the energy of case study transformation. The starting point of the experience is always a beginning, or a new beginning, that identifies the bias and pre-understandings brought into the experiment. After the case study experimentation is run, coinciding with Figure 21, an “answer” is asserted in the form of a prototype. The experience-as-prototype then moves on to the prickliest point of all that takes courage to negotiate, the courage to see things differently and make the necessary changes for the next iteration. Re-adjustment of the prototype and

transformation to the new iteration follows, with greater understanding and recovery of meaning being the ultimate goal.

This iterative system of intuition, creation, reflection, understanding, and transformation, is based on the hermeneutic philosophy of Hans-Georg Gadamer. In *Truth and Method*, he challenged scientific systems as the model for understanding in the humanities. Gadamer praised Aristotle's estimation of the role that reason has to play in moral action and noted that "Aristotle restored the balance by showing that the basis or moral knowledge in man is *orexis*, striving ... and the very name 'ethics' indicates that Aristotle bases *arete* on practice and *ethos*" (Gadamer 1960/1975: 310). The fact that *arete* translates from ancient Greek as "virtue" and *ethos* translates as "moral competence" aligns Gadamer's hermeneutic circle with my own quest to understand ethics as part of the overall focus of *Spies* and *Pinball*.

This system also, intriguingly, draws upon the principles and pedagogy of the Joker in Forum Theatre, in which the act of interpretation is much like the act of "Jokering." Augusto Boal said, in an interview with the Norwegian Dramaiskolen, "As the Joker, you have the responsibility to coordinate all the creations and the creators ... You are not superior to anybody. You have your opinions, you have your intelligence, you can have all the qualities you have but you never say I am like this or I have more knowledge than this" (Dramaiskolen). This statement speaks to my theory of understanding in an experiential cycle of reflection in which a vital part of recovering meaning is giving oneself permission to see things differently.



The ideas outlined in this chapter are important in the scope of the overall study because the goal of the thesis, being a matter of understanding, is greatly influenced by the process of the inquiry design and its pursuit of knowledge in practical terms. The process of risk-taking tempered with reflection and re-interpretation is crucial in the concurrent creation of both a Play and a Game and then the coordination of the two into an integrated experience. The activity also promotes investigation that is open to balanced and informed re-evaluation.

The interdisciplinarity of this inquiry is not a trivial matter. It fuels the synergies that form at the intersections of inter-inquiry exploration, extrudes the patterns of meanings that spring from imagination, and stimulates the gestalt of supersignals that viscerally perpetuate a greater sensitivity to reality. These are all vital ingredients of the next chapters in which the case studies of *Spies in the Oilsands* and *The Pipeline Pinball Energy Thrill Ride Game* are explained and then elaborated into theory and methodology.

The data-collection techniques used in the experiments were primarily my own impressions informed by discussions and meetings with audience participants in an informal environment. There were two ethics board-approved sessions at which I collected data that factored into the evaluative process through verbal discussion and written surveys. All told, this study has taken three and a half years, from September 2004 to the present, which is June 2008.

CHAPTER FIVE: ROUND ONE, *SPIES IN THE OILPATCH*

Dr. Amen-Ra: Terra Incognita. Live up to your Manifesto. Save us from the crisis. Energize the future ahead and ... detox the earth from hydrocarbon addiction. Harvest the sun's gift of perpetual energy. It's not too late.

— *Script fragment from Spies in the Oilpatch, Round One*



Figure 20: Sketch of the characters from *Spies in the Oilpatch*. Drawing by Rich Theroux.

PRE-UNDERSTANDINGS AND CURIOSITY

At the very onset of my *Spies* and *Pinball* artistic case study experiments in 2004, curiosity was my primary motivation. From a social-issue content and perspective, I'd had intimate, lifelong relationships with people and situations from the oil industry, economy, and culture of Calgary, Alberta. I was curious to know why it should be such a hard and fast rule that when oil booms, Calgary booms and when oil sags, Calgary suffers. What will happen when the oil riches run dry? Then where will we be in Alberta, with all our big shiny buildings and high standard of living to maintain? What kind of fuel can we peddle when it has all gone? From an artistic perspective of theatre and games as entertainment forms, I had challenges with traditional live theatre's spectator and audience dichotomy and was also curious to know how theatre might be combined with my passions of computational technology and new media to present something new.

For *Spies in the Oilpatch*, Round One in the three-round series of *Spies* and *Pinball* case study experiments, and included as an attachment to this thesis, I created the character of Terra Incognita as a reflection of where my biases resided at the time. Terra, the protagonist, was owner/operator of an alternative fuel company, Terra Fuels. She wanted to save the world and, at the same time, prove herself as a generator of diversity in the global energy game. The Tarzana character was only a bit character at his point in the project. She was simply a camp cook and assistant to antagonist Larry Fosso, a fossil fuel conformity enforcer and oil patch scout.

STEPS IN PLANNING AND ACTION

Identifying Goals and Hypothesis: My primary goal with *Spies in the Oilpatch* was to get the production mounted so that I could test my assertion that interactive activist theatre and digital playspaces could help us better understand social and economic issues. I wanted this to be a theatrical event in which the action would take place in a virtual “screen space,” in the form of cinema and projections, juxtaposed with live performance in a “real space.” I referred to this set up as an Integrated Performance Media Cabaret (IPM) — a hybrid art form, combining live performance, story, and songs with computer-mediated imaging and sound design and audience interaction through live- and video-gameplay. To my knowledge, this was a unique interactive media art endeavour that drew upon theories and practice of ritual, experiential pedagogy, the spirit of fun and games, humour as subversion and the like, but had not been tried before in precisely this way.

Projections of possibilities: In a “lifeworld” domain, or, in other words, a place where everyday people intuitively apply practical knowledge and understandings, I was proposing to test the social effects of my content idea with audiences who would interact with the proceedings of the event. Would taking on roles as content decision-makers endow audiences with greater understandings? Would it provoke them to take action on the issue of oil and alternatives? Would fragmenting a story bring about unique forms of meaningful story choices? These were outcomes I was hoping to discover.

I had continuing interest about live and digital games and multimodal textuality in sacred playspaces as an exploration of artistic form; carry-overs from my master’s degree work in theatre studies. I also had an intense desire to continue exploring computer-

mediated creativity through which screens, projections, and sound design might bring about innovative narrative possibilities. Terra's mission in live and digital playspaces, as I saw it at the time, was to work with a live audience within a ritual sphere of sacred play to connect with ideas and actions for the wellbeing of the global community.

Formulation of Models and Gathering Information

The primary sources that informed the content issue of world energy supplies and pricing for *Spies* were part of my everyday media and social lifeworld. In August 2004, oil hovered around \$45 US a barrel and in Calgary's glass towers, numerous big money big oil deals were being brokered. CNN reported that "Oil could touch \$50 ... generating nervous headlines and anxiety on Wall Street." (CNNmoney.com, August 5, 2004) and The *National Post* posted statistics about world oil demand almost doubling from 47 million barrels a day in 1970 to nearly 85 million barrels per day in 2004.

By early 2005, Gordon Jaremko, my former editor when I worked at *Oilweek Magazine*, was covering energy stories for the *Edmonton Journal* that included one called "Alberta's Next Great Leap" (*Edmonton Journal*, March 4, 2005). In it, he cited Alberta energy minister, Greg Melchin, declaring "I have been almost blown away by the magnitude of the opportunity before us," and former energy minister Murray Smith saying, after a trip to Washington, "Here's our big chance as Albertans." Jaremko carried on to cite the \$50 billion of development in the oilsands and new pipeline routes to Asia and the U.S. as being major factors leading to this optimism. At about that same time, U.S. President George Bush was smiling in the general direction of Canada while he pledged to reduce dependence on "foreign oil," (*National Post*, April 21, 2004), and the average Canadian was astonished to be paying 88 cents a litre at the pump for gas (*National Post*, March 22, 2005).

There was also, in early 2005, a growing controversy brewing over the issue of peak oil. An article in the *Calgary Herald* headlined "The Fallacy of Peak Oil" caught my eye. The article took a critical view of the theory of peak oil but at least served to introduce me to the theories of peak oil proponents M. King Hubbert and Colin J. Campbell. The article, well-placed to feed the egos of the Calgary oil elite, took the stand that even though we may be running out of conventional oil, that did not matter since the oilsands were poised to take up the slack now that "higher prices are transforming

unprofitable plays into moneymakers” (*Calgary Herald*, August 14, 2005). It seemed that no matter how we looked at it, the situation was win-win for Alberta.

In the artistic development stream of *Spies*, I was inspired by Henry Jenkins’ ideas about spatial environments, Maureen Thomas, Clem Martini, Robert McKee and Aristotle on myth and story, and Keith Johnstone, Kathleen Foreman, Uta Hagen, and Stephen Nachmanovich on improvisation, character development, and creativity. (Jenkins, 2004; Thomas, 2004; Martini, 2005; McKee, 1997; Aristotle, 350 B.C./1984; Hagen, 1991; Nachmanovich, 1990). For example, Nachmanovich claims that creativity as a collective process involves “the ability to see the connections between formerly separated facts and the ability to break out of outmoded mindsets” — attributes that I relied on to help me sift through the myriad of complexities of form and content that made up this study (Nachmanovich, 1990: 184).

Another kind of in-between study bridging form and content was my fascination with Howard Bloom’s writings about human behaviour and evolutionary psychology. Bloom’s book *Global Brain: The Evolution of Mass Mind from the Big Bang to the 21st Century* claims that evolutionary change comes about as collective learning based on cooperation and information-sharing among living organisms, from bacteria to humans. As Bloom explains it, a collective learning machine that achieves its feat using five essential elements. These essentials are: (1) conformity enforcers; (2) diversity generators; (3) inner-judges; (4) resource shifters; and (5) intergroup tournaments (Bloom, 2000: 42). Intriguingly these steps of a collective learning machine made their way into my inquiry in a myriad of ways, the most obvious being the way they shaped the *Spies* characters.



Figure 21: Character descriptions showing Diversity Generator and the Conformity Enforcers.

For example, the conformity enforcing fossil fool antagonists characters were, much as I saw our business-as-usual Calgary oil elite of the day, poised to

stamp cookie cutter similarities into members of a group to give it identity, unify it when pelted by adversity, make sure its members speak a common language and pull together in efforts so vast that no single contributor can see the larger scheme in its entirety. ... [changing] the way that adults see, a collective perception which makes one groups reality another’s mass insanity. (Bloom, 2000: 42)

In comparison to this, the protagonist Terra Incognita is a diversity generator who spawns variety where, as Bloom puts it

a few individuals have exactly what it takes to trounce the foe. Among human beings, difference personality types embody approached which, while they may not be necessary today, could prove vital tomorrow (Bloom, 2000: 42).

Extrapolation: As I gathered and processed Bloom's information about the social-issue content and artistic form of this inquiry and churned it through my wild imagination, I came up with the interactive playscript *Spies in the Oilpatch*. The genre of the piece was a musical comedy in the form of an Interactive Performance Media Cabaret, with the use of humourous subversion and playful irony as ways of cajoling the meaning of the work beyond just fun and games. This is the project description as described in the introduction of the script:

Set in Japan, the Gulf of Finland, Northern British Columbia and a Fort McMurray beauty spa, *Spies* is about Terra Incognita, a vivacious alternative energy entrepreneur who steals half-baked alternative energy secrets from oil company "fossil fools" in order to save the world. The fossil fools want to keep their secrets suppressed so they conspire to kill her, but she kills them first. Her guilt-ridden soul is tormented by the burden of their brutal assassinations so she confesses to her beauticians and is dealt a series of public retributions from global courts (*Spies in the Oilpatch*).

This playscript is available as an attachment to this thesis and reading this work would be useful in understanding the case study development.

Planning of Actions Decisions and Executions: Besides reading the *Spies* playscript, another way to comprehend the possibilities of *Spies in the Oilpatch* as interactive theatre is to consult the following diagrams. Figure 22 is an early framework of the modular story constructions that theoretically gets navigated through by audience/players in non-linear variations; Figure 23 is an escalating action schematic.

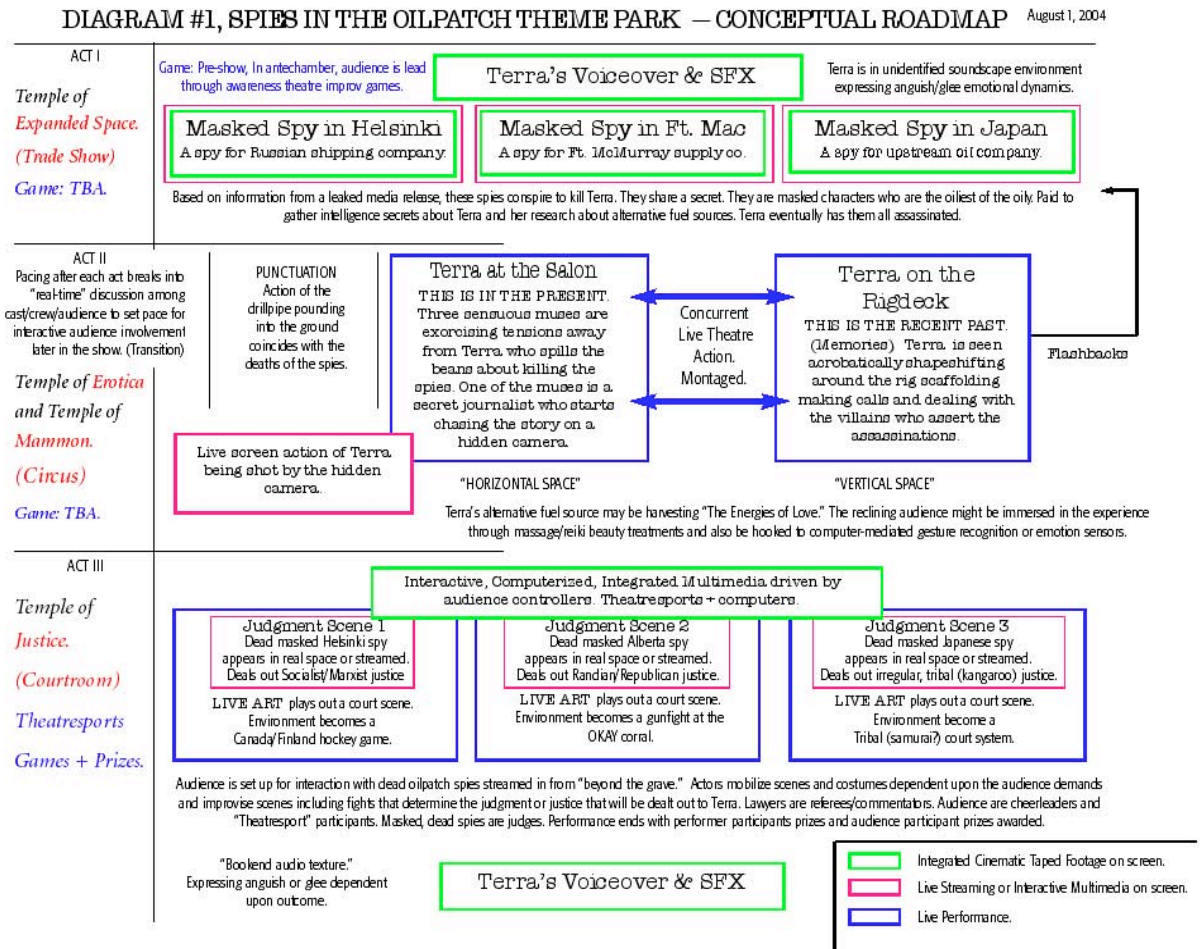


Figure 22: The Conceptual Roadmap of Round One, *Spies in the Oilpatch*

As seen in Figure 22, scenes in Acts One and Three could have be played in any order or played only one-at-a-time in specific shows, for example at a lunchtime performance, where time constraints would prevent the performance of all three scenes. If the audience member were to return to the performance another time, another set of possibilities might occur, dependent perhaps on the availability of performers, audience players' encrypted game choices, or other factors. This roadmap was conceptualized in collaboration with Maureen Thomas at the University of Art and Design in Helsinki, Finland (Thomas, 2004). It draws heavily on Thomas' theories of meaningful relationships between real space and screen space as well as her insights, informed by the work of Joseph Campbell, about globally expanded spaces expressed as mythological temples.

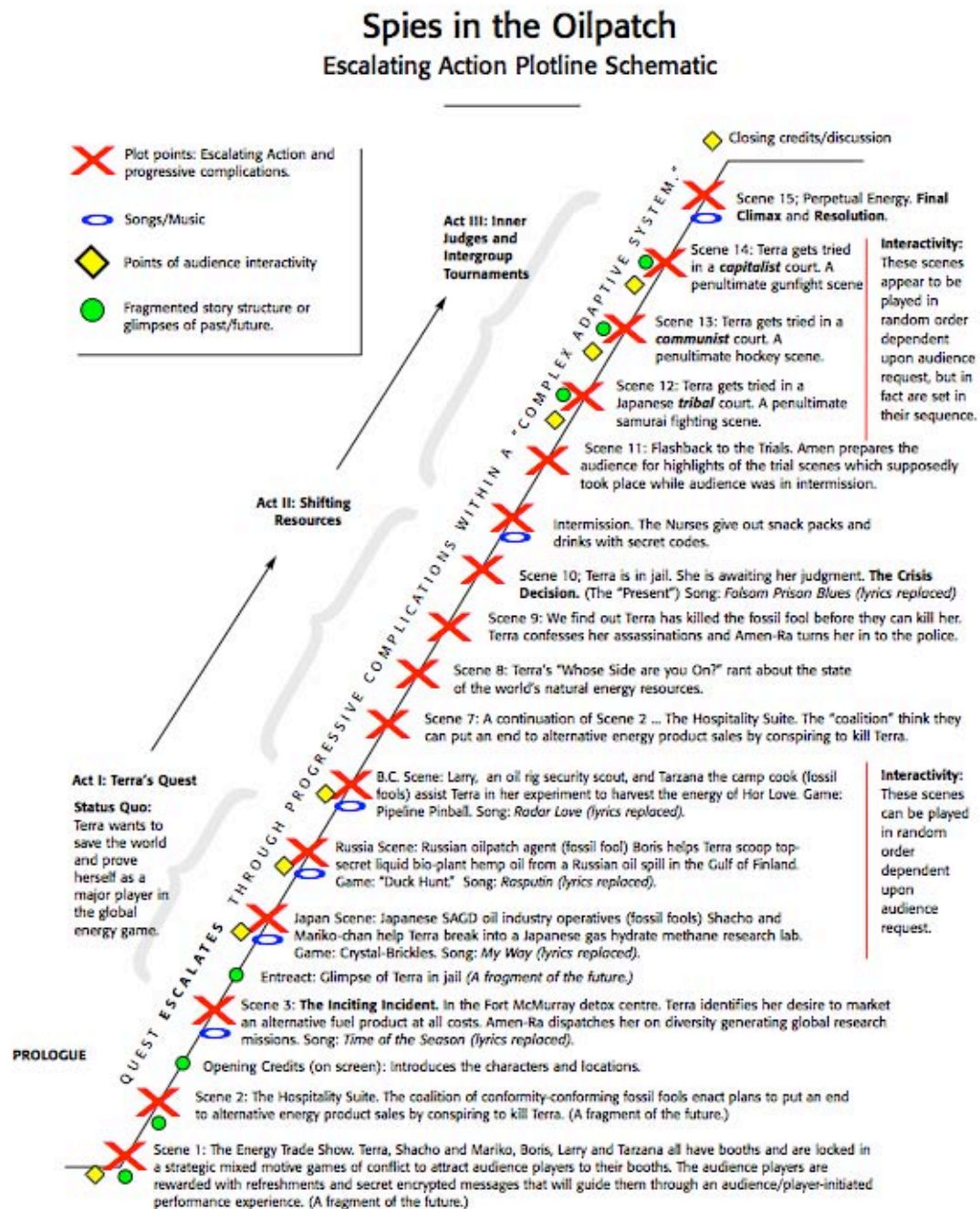


Figure 23: The Conceptual Roadmap of Round One, *Spies in the Oilpatch*

The escalating action plotline schematic chart in Figure 23 came about primarily through collaboration with playwright Clem Martini and a thorough implementation of Robert McKee's principles of story structure (McKee, 1996). As seen in this chart, the *Spies* story characters progress through a three-act escalation of action utilizing McKee's

recommended structure of an inciting incident, progressive complications, a crisis decision, a climax, and a resolution. The *Spies* script followed the storytelling advice of McKee, albeit in an interactive playspace rather than in the linear progression that one would normally expect in McKee's usual working medium of film.

I also looked at another example an interactive creative drama that utilized Robert McKee's principles of story — Michael Mateus and Andrew Stern's *Façade*. Mateus and Stern used McKee's "beat structure" principles in building this project and in a similar way to my intentions, *Façade*'s explicit goal was "to explore new ways to deconstruct the potential events of a dramatic narrative into small grained-size pieces, annotated to allow the system to dynamically mix and sequence the pieces in response to player interaction" (Mateus and Stern, 2004).

THE EXPERIENCE

Spies in the Oilpatch was not produced and so, as an experiment in gauging audience interactions, it did not succeed and was never fully realized. Budget considerations, casting and venue constraints were primary drawbacks that prevented its production. In retrospect, I also feel it may have been slightly ahead of its time in 2004. My observation is that the general public is only now, in 2008, being made fully aware by mainstream media about the complexities of global energy marketing, pricing, and exploitation of both traditional oil energy and alternative energy sources.

REVIEW OF EFFECTS

At the Interactive Entertainment 2005 conference in Australia, I presented a paper called "Opening Doors to Interactive Playspaces." This paper was co-written with J.R. Parker (Shyba and Parker, 2005). In the wake of the failed attempts to mount *Spies in the Oilpatch*, we hypothesized the kinds of live and digital playspaces that might emerge from *Spies* as a playful extension of the non-linear and modularized playscript. Among the criteria we used to visualize potential interactive play spaces were that they:

- Have the possibility of a self-contained “story” in them;
- Allow a player to put their own “stamp” on the experience;
- Provide a dynamic symmetry of experience between audience/players and the “author”;
- Embed a serious message of depletion/replacement of our world’s natural energy resources; and
- Provide a model for qualitative research data collection, verification, and validation through discussion and interpretive discourse.

Following are the various possibilities, articulated as a “door opening experiences to interactive playspaces” that we imagined in this paper as a followup to the *Spies in the Oilpatch* prototype.

Opening Door Number One, A Role-Playing Computer Game (RPG)

This is the most direct game interpretation of the *Spies* IPM where a player, on either a computer or a video-game setup, proceeds through a computerized revision of each scene of the *Spies* IPM script much the same way the IPM audience/players experience the story — in a primarily linear fashion with occasional gameplay options. As is the usual case with the RPG game genre, the player identifies with a character avatar who undergoes a journey or quest to retrieve desired objects, builds experience points, slays enemies, and advances through the levels. This game behind the RPG door most closely resembles the complete author-initiated narrative intentions of the IPM script as written where there is a beginning that escalates to a middle that escalates to an ending that signals the successful victory condition.

In many ways, Adventure or Role-Playing Games follow a reliable dramatic path and this genre of computer/video game most closely resembles the narrative causality of risks related to objectives, progressive complications and turning points, and dramatic arch of a well-made play or film script. Even though there are alternative routes available to reach milestones along the story’s path, the leveling up process is much the same as the general pattern of progress in place for the characters of the *Spies* IPM script — set a goal, encounter the dangers/risks, procure the objects of desire, slay the enemy, and proceed to the next level. This variation of the interactive play space does not need additional story assets as it represents the script pretty much as-is.

The benefits of this RPG game is it ramps up through the general dramatic arch of the IPM story narrative, even though the player might ascend

through the various levels of rising action in different order. The constraint on the development and implementation of a Spies RPG game is the difficulty of programming and graphics development, even if an existing game engine is used. Major RPGs that have been successful entertainment properties include Cyan World's *Myst* Square Enix's *Final Fantasy* series, and Lionhead Studio's *Fable*.

Opening Door Number 2, Gameplays in Virtual Reality

The Spies IPM script functions as an incubator of gameplay scenarios that can be thought of as interconnected sequences of "plot nodules." Install these gameplays into a virtual reality (VR) facility, and the individual plot nodules containing character, sound, set/property, as well as narrative assets, weave together to create an environment in which audience/players can put their own "stamp" on the experience.

The plot nodule concept is a design attribute, and should naturally be invisible to the audience/player. A nodule is a small portion of a narrative that, alone, is self-consistent but is not a story in itself. It has a set of assumed pre-conditions: the location in which the action takes place, the emotional state of the characters, the current goals of the characters, as examples. The story narrative is relayed as the specific sequence of nodules visited, and the pre-conditions are satisfied by the set of plot nodules that have been visited prior to entering the current one. By a cunning decomposition of the Spies IPM story into plot nodules, the various threads can be tied together into a single conclusion, or at least a small number of possibilities.

This gives the audience/player the perception that there are vastly more choices than there really are. While apparently giving the player free will, the game guides him or her inexorably through a collection of predefined story lines based on a small set of choices that the player make implicitly. The computer mediates this process seamlessly, and the player reaches one of the preordained conclusions to the story feeling that they had complete control of the situation, and that the consequences were logically based on their choices. This is like the design of a narrative for a computer game, which also has the property that the players feel that they have much more choice than they actually do. It also resembles the way in which film or stage actors subdivide scenes into turning point beat units, or interstices, to help them ascend through a journey of subtextual desires that give their character motivational believability within a set of authorial preconditions.

Scene Six, as an example, might be deconstructed into a scenario of sequential plot nodules in the following way: a) a virtual, electronic version of Terra Incognita as game guide or narrator welcomes the audience/players and introduces the rules, b) Larry, the oilpatch security scout, and Tarzana, the camp

cook, guide the player through decisions about what games to play to kill time at the rig, c) a stereoscopic version of the “Pinball Pipeline Energy Thrill Game” boots up, d) the audience/player navigates through the game which comprise non-linear sequences of plot nodules until the player reaches, e) one of the preordained conclusions to the story. In this way, they are guided to feel that they had complete control of the situation, and that the serious messages of depletion/replacement of our world’s natural energy resources were logically based on their own choices.

This virtual reality plot nodule variation is an exciting prospect for Spies as a gameplay space. A benefit is that when gameplay scenarios, complete with their designated stereoscopic games, are produced for a specific VR facility they can be bundled and sent around the world as a Spies International tour — new venues for a new form of performance game experience. VR experiments offering visual arts-aligned installation or “toys” are plentiful but those that interactively unravel stories in a time-based temporality or “game” are not as common. Examples of successful interactive VR gameplay productions over the years are Brenda Laurel and Rachel Strickland’s Placeholder at the Banff Centre, Canada; and Mark Palmer’s Alice in Wonderland VR production at the University of Teeside, U.K.

Stand-Alone Computer and Video Games

Several of the computer games that play out in the Spies IPM script scenes could be developed with the idea of augmenting the event with integrated electronic games for computer or video game dissemination. In the Spies script these games occur at transition points between the scenes and, for that reason, are easily fragmented and lifted out of the dramatic action. Like the IPM event and the plot nodules, the stand-alone games also have potential to present valuable social commentary about energy issues that are facing our world today. Some of the choices we imagined could serve this purpose were:

- The Pipeline Pinball Energy Thrill Game, extracted from the action of Scene Six of “The Energy of Hot Love.”
- A gas hydrate methane crystal game, modeled after a PacMan computer game meeting Karaoke. The concept for this game is extracted from the action of Scene Two, “The Japanese SAGD Research Lab.”
- A Global Positioning game, modeled after a Duck Shoot computer game extracted from the action of Scene Three, “The Russian Oil Tanker Spill.”
- A Simulated Drilling Lease game modeled after a Sim City or Sim Theme Park concept.



Figure 24: An early design sketch of the Pipeline Pinball Energy Thrill Ride Game depicting the dynamics, if not the details, of the imagined gameplay. Drawing by Rich Theroux.

The idea behind each of these computer games listed above, whether it appears in the IPM script as part of the story narrative or as a stand-alone computer-game implementation, is to deliver an entertaining message about alternative energy choices. This genre of games is known as “serious games.” They could take place as corporeal “body-operated” games, in which the player would initiate gameplay through the use of giant ball-thrusting plungers or giant flipper buttons. They could also be deliverable on the web in a simple version as a flash animation, or in a complex MMORG (Massively multiple-player online games) – a venue particularly well-suited to the theme of the Drilling Lease Game, especially if taken to global proportions. Examples of existing web based serious games are *September 12*, *Tibet*, and *Madrid*.

Behind Bonus Doors: Other Possibilities

In *The Gutenberg Galaxy*, Marshall McLuhan talked about an “electric dilation of the senses — an inherent phenomena of circa third millennial media and information systems that allow a quantum projection of the collective mind ... a global village ... a simultaneous happening.” One spatial environment suggested by McLuhan’s insights is a theatre event enabled by global communications technology, for example a dynamic interaction between a “spy” character who is streamed into the virtual “screen space” from a globally distanced location, and a character/actor or audience/ player in the real performance space. Using a transmission system of advanced videoconference technology, a designer could facilitate a theatrical game scenario could be facilitated in which the character/actors and audience/players in the “real space” interact with oilpatch spy characters who show up in virtual “screen space” from a globally distanced location — Finland, Russia, or Japan, according to the story. An interactive story narrative develops where character/actors and audience/players in one location interact with their counterparts in the other location developing, in effect, a technologically expanded global interactive theatre game. This performance game uses converging media technologies to allow the development of cross-cultural dialogue around socio/political and environmental issues that interconnect us on a global level. This global communications event might be suited as a sequence of plot nodule add-ons to a VR gameplay scenario.

An Alternate Reality Game (ARG), would also be a McLuhanesque “electric dilation” of the *Spies* IPM., SuperGaming, or ARGs, are clusters of massively scaled game networks. Wikipedia further describes ARGs as “cross-media games that deliberately blur the line between the in-game and out-of-game experiences.” In the case of a *Spies in the Oilpatch* ARG, “pods” of players would be dispatched to discover mysteries and glean secrets about world energy subcultures through a combination of web clues, chats and text messages, snailmail, live events, peer to peer internet, email, and so on. If the rules are enforced within an artistically metaphorical model of Howard Bloom’s complex adaptive system, as described in *Global Brain* [1], the *Spies* ARG gameplayers might emerge from the slumber of their alternative energy imaginings to activate fresh realities within a global village of simultaneous happenings (Shyba and Parker 2005).

Born from a review of the effects of the ill-fated *Spies in the Oilpatch*, these hypothetical door openers to digital playspaces were the key to the furtherance of this project. I mourned the loss of this playscript as a viable thesis project but the characters, the spirit, and the belief in getting the message out did not go away.



All artists must learn the art of surviving loss: loss of hope, loss of face, loss of money, loss of self belief.... Artistic losses can be turned into artistic gains and strengths, but not in the isolation of the be-leaguered artist's brain.

— *Julia Cameron, The Artist's Way.*

Howard Bloom explains that inner-judges, as a critical component of a complex learning system, are often far from kind. In *Global Brain* he warns that

inner judges activate our self-destruct machinery ... kill off brain cells, dull our wits, sabotage our immune systems, make us ill, depress us, steal our pep and often fill our minds with an urge to curl up and disappear or die.

Not getting *Spies in the Oilpatch* mounted as a production did not quite make me feel like disappearing or dying or even completely giving up on the thesis project, but it was a definitely a disappointment. The problems I faced were mostly out of my control, so I gathered up what was valuable about this initial journey of discovery, recovered my sense of faith, and developed a new course of action.

CHAPTER SIX:

ROUND 2, THE PIPELINE PINBALL ENERGY THRILL RIDE GAME

After the prototype *Spies* script was created and I was not able to get it produced, I took my artistic and moral underpinnings on a trip through an Experiential Cycle of Transformation. Firstly, I assessed the impact and value of the *Spies* script by acknowledging my own thoughts, and those of others, as a way of critically assessing the ideological and philosophical value of the project. This was an act of reflexive dramaturgy in which I reflected on the pretext of the work as being about using theatre and games in an innovative way; the context of the work as being a vital exploration about global energy pricing and economics; the subtext of the meaning being about ideology and finding a better way to use resources; and the intertext being how the game blends with my own life narrative and hopes for the future of the world.

I gathered up the courage to make changes, revisited and verified my values and moral stance about alternative fuels and fossil fuels and came up with an adjusted and simplified idea. The new model was based on the paper I wrote with J.R. Parker called “Opening Doors to Interactive Playspaces” which identified stand-alone games as being a possible way to augment the *Spies* event. I decided that designing and producing *The Pipeline Pinball Energy Thrill Ride Game* as a stand-alone game of this description would be a way to maintain the same social commentary with the added benefit that I would be able to do much of the work myself. As a proposed final production, it still contained a live-theatre element, namely Scene Six of *Spies in the Oilpatch* which takes place at an oil rig where Larry Fosso, the oil scout, and Tarzana, the campcook, discover that their passion for each other produces wind power. I did not expect all the surprises that would crop up as a result of deemphasizing the interactive live-ness of the theatre in favour of the interactive digital-ness of a videogame.

TRANSFORMATION: THE GAME DESIGN VIDEO

Game designer and author Chris Crawford says of game design, “You can’t design games if you don’t understand play” (Crawford, 2005: 35). Since it’s easier for me to feel playful in visual rather than literary text form, the transformation from the Round One *Spies in the Oilpatch* script prototype into Round Two became a game design video that communicated the high concepts of *The Pipeline Pinball Energy Thrill Ride Game*, including its narrative, its goals, and its graphics and sound design. As a kind of ritual of multitextual constructive dramaturgy, I sat down in front of a camera and spontaneously projected how this imaginary game could fulfill the quest to find alternative solutions to dwindling oil. Humour and playful irony continued to prevail as a style choice. It was Stampede time in July, the closest thing Calgary has to a sacred ritual. I already had my cowgirl hat on and allowed myself to be swept away in the passion of sacred play.



Figure 25: Lori/Terra describing the game action and the theatre in a game.
This video is available to view on the *Spies* DVD or thesis web site.

Lori: Imagine a computer pinball game as big 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.

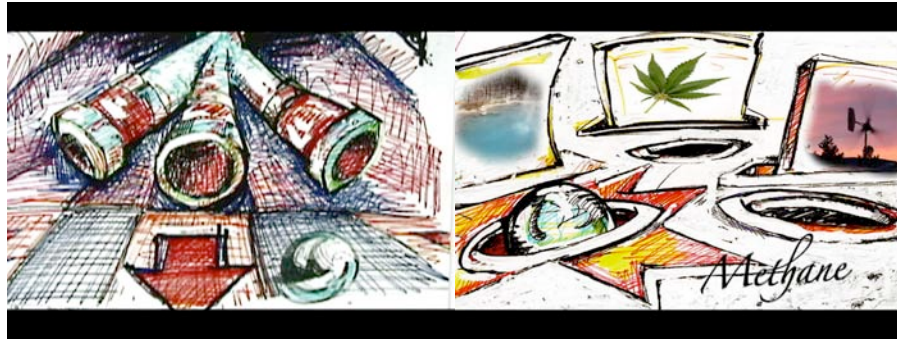


Figure 26: The pipeline chutes and alternative energy targets.

Lori: *Generate Energy Diversity*. The player first needs to plunge the energy ball through each of the three open pipeline chutes to activate them. Bumpers, representing hydrocarbon deposits, keep the ball in motion. Flippers, lined up along the borders, keep the energy ball in Canada. *Shift Your Resources*. Once the three pipeline chutes have been activated, the three alternative energy target holes light up. These represent bio-fuel hemp crops, wind generators, and geo-thermal gas hydrate methane reserves.



Figure 27: The Pipeline Target Holes, The Global Clients, and the Nuclear Target Hole.

Lori: *The Alberta Oil Sands*. 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. The global energy markets open and five clients appear as popup targets. *Build it and They Will Come*. Knocking down the clients lights up the nuclear target hole. The player needs to lock the energy ball into the nuclear hole.



Figure 28: The international spies in the oilpatch, and dancing caribou.

LORI : Now, three pop-up enemy spies come up in place of the global markets. Once the spies are knocked down, the animals light up. When the animals light up, the whole game is ablaze with bells and flashing lights signaling the climax of the game. The final reward, or what we call the Victory Condition is ... If your fossil fuel points are greater. *You are still enforcing hydrocarbon conformity. Try again.* The map dissolves and fades away to black. However, if alternative points are greater ... *You have succeeded in energizing the world in ways you cannot imagine. You are a national treasure.*

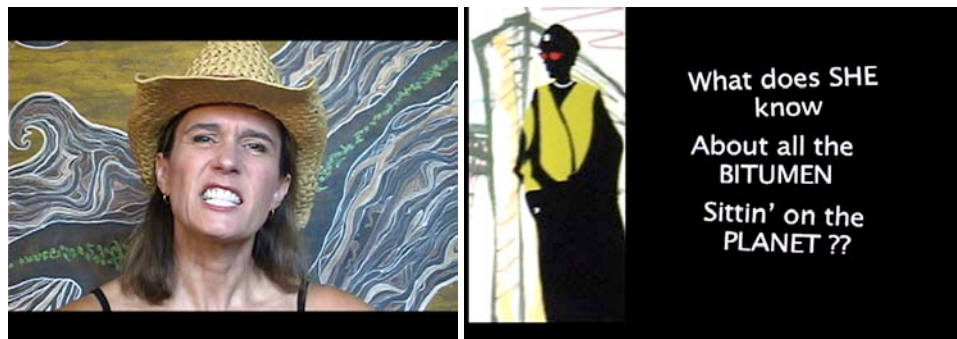


Figure 29: “Let’s Go Alberta! Let’s exploit our existing hydrocarbons.

Lori. There you go, there’s the game. Let’s go, Alberta. Let’s exploit our existing hydrocarbon resources, the Alberta oilsands for example, but let’s make sure we’ve got some kind of energy fuel to peddle when it’s all gone.

What does she know about all the bitumen sittin’ on the planet?

There are Spies in the Oilpatch and Whose Side Are You On?



STEPS IN PLANNING AND ACTION

Identifying Goals and Hypothesis

As the *Pinball* design video transitioned from Round One to Round Two, I was relieved that it started filling in the gap left by the untimely demise of *Spies in the Oilpatch* as a viable thesis experiment. The primary goal of Round One of *Spies* had been to create a public production in order to gather responses from a participating audience. This same objective translated directly to the Round Two iteration. As I was engaging in a study of social commentary, I was determined to collect ethics-approved comments from participant audiences that would aid me in the sorting out of meanings around the issue of world energy resources. I was also involved in a study of aesthetic form. I had made a claim in the design video that *Pinball* was “Theatre in a Game.” I was interested in testing this out, plus testing the idea of *Pinball* being “A Game in the Theatre.” In addition, and as a synergy of form and content, what might emerge about in a social issue context about the wellbeing of the global community? Would the players see it as being beyond just fun and games?

Formulation of Models and Gathering Information

Just as I had done in Round One, for Round Two I dipped into everyday lifeworld media for primary sources of content inspiration. By August 2005, oil at “\$63.94 a Barrel, and Rising” made big headlines, along with assertions that fear factors of terrorism and hurricanes had much to do with the price (*National Post*, August 9, 2005). Alberta’s Premier Ralph Klein gifted every Albertan with a \$400 resource rebate cheque and former Premier Peter Lougheed warned Albertans that we ought to be on guard for battles with Ottawa over resource wealth (*Calgary Herald*, August 27, 2005). Peak oil enthusiasts were losing momentum as facts emerged about the vast wealth of oil deposits in the Alberta oilsands — 1.5 trillion barrels of recoverable bitumen, rivaling the total reserves of Saudi Arabia. In January, 2006, George Bush said in his State of the Union Address that America was addicted to oil and that he had a goal to make American dependence on Middle Eastern oil a thing of the past. At about this same time, at a meeting organized by Natural Resources Canada and the U.S. Department of Energy, oil executives and governments officials made plans for a fivefold expansion in Alberta

oilsands production. This all followed on the heels of Bush's declaration at the Earth Summit in 1992 that, "The American way of life is not negotiable."

New pipeline projects like the Alaska and Mackenzie Valley pipelines made big front-page headlines as did \$100 billion big oil development deals but quietly, small ripples of concern were emerging about the impacts of oilsands development on the environment. For example, at the end of a five-part *Calgary Herald* feature series that gushed enthusiasm about the oilsands, a tiny article appeared about "the caterwauling over Kyoto." Positioned down below the fold on page eight, was an article entitled "Greenhouse gas deal darkens bright oilsands outlook" (*Calgary Herald*, Oct. 25, 2005).

Seemingly in contradiction to the beliefs that drove *Spies in the Oilpatch*, the world wasn't quickly running out of oil. Not with an estimated 300-plus barrels of recoverable crude oil in the Alberta oilsands. But at what cost to the environment?

Planning of Actions, Decisions, and Executions

The Game Design Document – A Structural Gameplay Analysis

On the basis of the imaginings of the game design video, how might I create an art object and event that would perform the task of helping us better understand the urgent social issues building around the Alberta oilsands? As a first step, I locked the high-concept ideas of Pinball into a structural design analysis that served to attract funding and artistic and programming personnel to the project. The written design document, excerpted below, solidified the abstractions in these ways:

- Logline: Through its dual scoring system of Alternative Fuel Points and Fossil Fuel Points, this wall-sized computer pinball game delivers a message that as individuals, and as a society, we can't afford to ignore alternative energy development while we exploit existing hydrocarbon resources, such as the Alberta oilsands, to their inevitable depletion.
- Genre: A "serious game" meant to activate a clearer understanding of important social, economic, and cultural matters; specifically, this work concerns our world's energy resources, the economics of energy consumption and politics of production.
- Demographics: Any and all age groups.

- Overall Research Goals: *Pinball* explores ways that arts practice can take technology and science into contexts that might not otherwise be visited.
- Game Structure and Gameplay: Describes the 10-scene experiential design path of how the pinball game ramps up through escalating challenges and difficulties, with the use of Robert McKee's Principles of Story (McKee, 1997).
- Scoring: The dual point systems were described as conformity points from fossil fuels and the diversity points from alternative energy.
- Other: Ideal spatial requirements, input and output devices, and sound systems were identified and the play duration was specified as being 10 minutes.

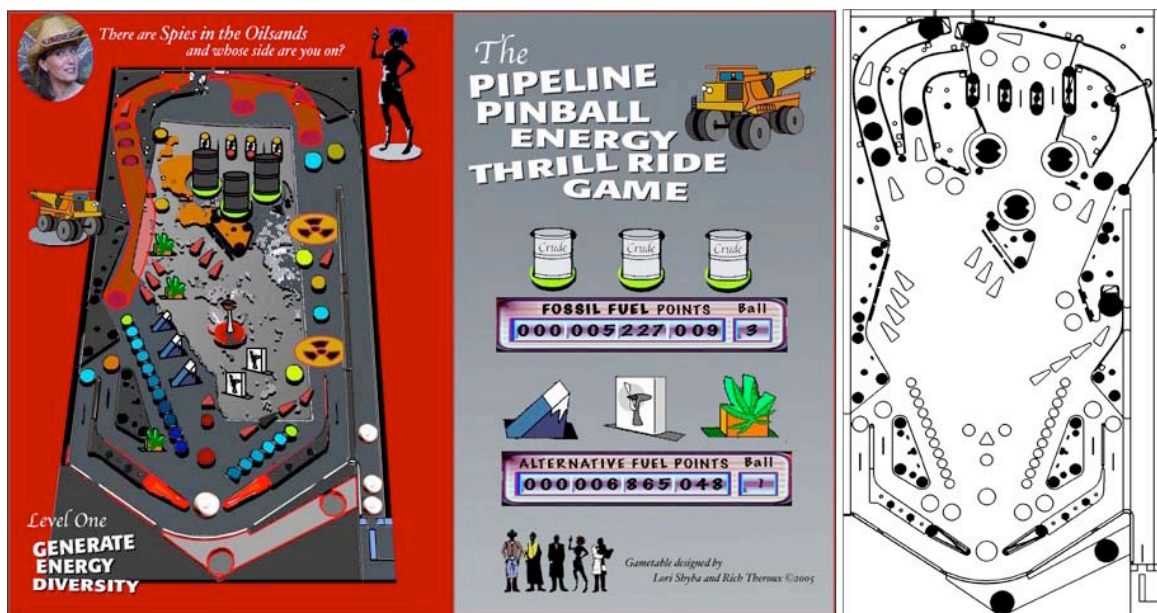


Figure 30: Level One of *Pipeline Pinball* table design along with a blue-print architecture of a sample Future Pinball table. Drawings by Rich Theroux.

Technical Considerations and the Future Pinball Game Engine

As good fortune would have it, a pinball game engine called Future Pinball came into existence in beta format at precisely the time that early art renderings were being created for the pinball game table. Developed by Christopher Leathley from Perth Australia, the Future Pinball software facilitated the simulation of a true-to-life pinball arcade machine through its real-time 3D and advanced physics. The table logic was provided in Visual Basic and was flexible enough to allow us to program custom concepts such as the dual

scoring system. Following is an excerpt of the technical description from Leathley's Future Pinball web site.

Future Pinball is a real time Pinball Development System. It allows you to design and play your very own pinball simulation in True real time 3D. ...Tables are built up out of Standard components (Plastics, Pegs, Bumpers, Lights etc..) which are placed onto the playfield via the Editor. Objects like Surfaces, Lights and Rubbers are shapeable within the editor and generated real-time when the table is played. Other objects (Bumpers, Flippers, Gates, Triggers, Targets etc..) use pre-made 3d Models.

The Table logic is scripted in Visual Basic Scripting (via the Microsoft Scripting Technology's built into Microsoft Windows). Scripting is designed to be simple but flexible enough to allow a wide variety of Original Games to be created. Only a limited subset of the Visual Basic Scripting Language is used as a lot of extra functionality is provided by the game engine.

Full Sound/Music Support is also provided with multiple Music Channels to allow cross fading. As Future Pinball is a Game Construction Program it contains some advanced concepts which may require a little bit of time (and patience) to learn and fully understand (such as computer graphics and scripting concepts).

Hardware and Platforms are: A Pentium / Athlon processor of 1800 mhz or greater, 256meg ram and at least a (or better) Geforce FX / Radeon video card. Video Card MUST support shaders. Microsoft Windows Vista and XP (SP1 or above) or 2000 (unsupported) running Open GL 1.5 and Direct X 8 (Direct Input) (*Future Pinball*).

Adding the Theatre

Scene Six of *Spies*, by this time called *Spies in the Oilsands*, was rehearsed and workshopped as a staged reading with a cast composed of faculty and students of the University of Lethbridge and the University of Calgary. The CCIT iCentre, Schulich School of Engineering at the University of Calgary was booked for an April 2006 for a production called *The Pipeline Pinball Energy Thrill Ride Game: A Staged Reading and Gameplay Event* from the Integrated Performance Media Script *Spies in the Oilsands*. Ethical approval was applied for and awarded by the University of Calgary Conjoint Faculties Research Ethics Board. (See appendix for program and ethics certificate.)

THE PRODUCTION EXPERIENCE

A video of the CCIT iCentre production is included in the accompanying *Spies in the Oilsands* DVD. Below are selected screen shots. The final script and playbill program is attached to this thesis. It includes cast and crew lists as well as an artistic statement.

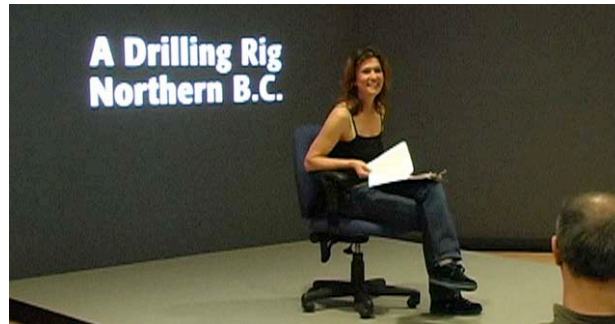


Figure 31: As a preamble to the event, I pointed out, “Here we are, immersed in the very building where research experts are discovering the best way to extract the 250 billion barrels of sweet crude out of the 1.5 trillion barrels of bitumen in the oilsands.” Photos, Austin Andrews.



Figure 32: The cast of players at the staged reading in April at the CCIT iCentre. The setting of the story is an oilrig well site in British Columbia.



Figure 33: *Pipeline Pinball* was projected on the four projection screens. Within the staged reading the players watched the game design video as a manual for play and then played and sang along to videotaped, simulated gameplay of *Pipeline Pinball* as part of the dramatic action.



Figure 34: The projected mise-en-scène included animations of the Terra character scrambling up the oil rig to install a wind generator that spins faster as Larry and Tarzana's passion for each other heats up.



Figure 35: On left, Terra plays the game her way and scores alternative energy points for the benefit of the caribou and birds of the boreal forest. On right, programmer Andrew Stagg sets up the game for the audience to play.



Figure 36: Audience members playing level one and level two of the game.

The event experiment was attended, over the three-day run, by approximately 30 people, most of whom were invited but some of whom came in response to a call for participation. On each day I informed the audience of the ethics procedures, we ran the staged reading, and then the audience was invited to play *Pinball* on the big screens.

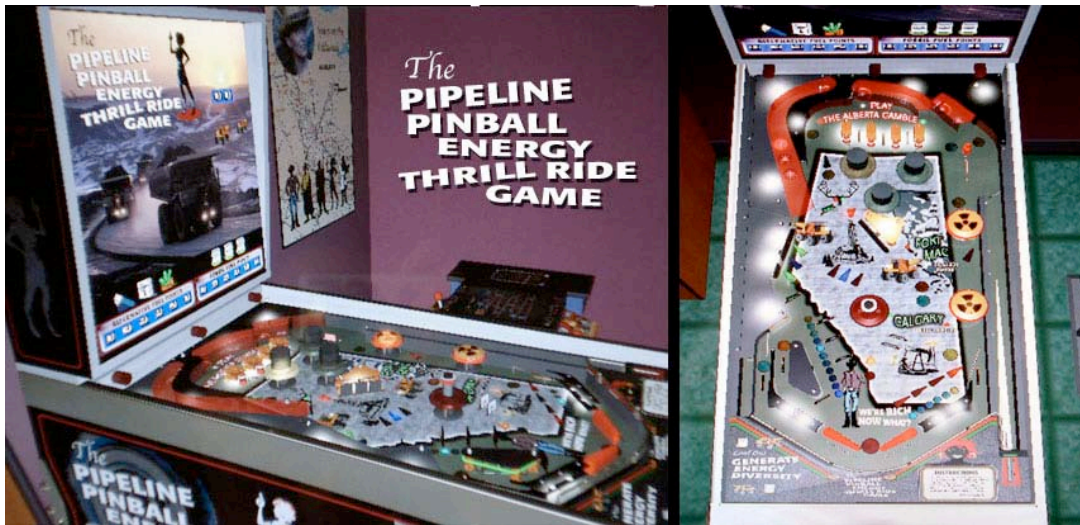


Figure 37: Prototype of *Pipeline Pinball*, Level One, Generate Energy Diversity.

REVIEW OF EFFECTS

In my re-amble to the event, I asked the audience “What will you notice and what will you find interesting? What connected for you?” Here is an excerpt of their replies:

About the Theatre

Female, 30s

Most of my suggestions are about how to put more "game" into the play. I wouldn't call the play a game because there isn't enough audience interaction. Personally given the choice I would probably play the game and once I became bored of the game I may watch the play, or I'd watch the play while playing the game. ... Also, have you looked at improv? In my opinion improv is probably more closely related to gaming.

Female, 40s

Very first impressions were that parts of The Reading seemed a bit dry and unconvincing. I found it awkward to be viewing a narrated “reading” which was mostly just that, but incorporated bits of actual acting (eg. the delivery and playing of The Game CD)...I realize that it was not meant to be an actual play, but perhaps more emphasis on the making The Reading more compelling, more engaging...? The characters didn't seem to resonate (except Terra!) with each other - no relationships developed. Certainly in the script there was a strong relationship between Terra and Amen Ra, and between Larry and the cook (now “Tarzana”) but even this seemed invisible during The Reading.

About the Games

Male, 20s

This game is addictive. I haven't stopped playing it. Look at these alternative fuel points! You could power a small nation with it.

Male, 30s

Since we're dealing with Spies and Espionage in some form, is there a cheat mode ... ability to jump ahead?

Male, 30s

What about the idea of the main screen focusing on the game and the side screens as cutaway flipper cams or target cams?

Female, 40s

What I would like to see is a few players playing against each other in the presentation and more linkage between the game and energy issues with the players and audience gaining more true energy facts as the game unfolds.

Female, 50s

The graphics are great! especially Terra climbing the tower with the turbine blade! The pinball game itself is amazing! Hard to follow for a non-game player, at times I even felt a bit sea-sick...but it is very ingenious and could be marketed as an icebreaker for difficult stakeholder sessions!! Could the playing of The Game (final activity) be set up as a team event rather than a solo experience? This would develop a bit more relationship among audience members, some of whom might be reluctant to try their skills at playing but would make a great cheering section!

Female, 50s

Interesting; audience became very social when someone started to play the game. An activity (computer gaming) that is very often solitary (or "remote social" mediated by technology) became very face to face. Actors talking to audience, audience members talking to each other, audience reacting to moves played in the game. In the second level – many questions about of what winning would consist of e.g. if countries/leaders go down, what does this mean? Is this a win or a loss in the game? Is this a win or a loss for a sustainable planet? Is winning even involved or is it simply an exploration of issues?

About the Integration of Theatre and Games

Male, 20s

I think the real advancement in society is the advancement of technology as integrated new media art form and ultimately one of the greatest access points to social commentary.

Male, 30s

Good to see the mix in the medias. Not sure where it's going to go in the long run but it's good to see it's starting ... People aren't used to integrating media and viewing it and it's easy to grab onto the media that catches your attention. There were sound mixing issues on video, effects, video, still, voice not being mixed correctly.

Male, 50s

Integration was interesting. I've seen a number of projects that try to integrate and it's a tricky bit of business. So it's interesting to see how the electronic multimedia elements work with the individuals... I kind of like the surround image but when it gets busy back there the actors kind of fade. On the one hand, I like that they have an environment that sweeps around that they can immerse themselves into. On the other hand, if it gets too overpowering in terms of movement, the actors start to feel very static. If there was a way of emerging out of the screen. If there were ways the actors could be implanted in the screen, I would be excited about that.

Female, 50s

Very idiosyncratic piece that is not easy to situate but because of this, one stays very alert to the moment. Many different energies created. I was very engaged.

Female, 50s

This was so off the wall. A combination of discomfort (guilt at our oil consumption) and admiration (for the making of a fun and engaging theatre-sport depicting a world dilemma while profiling alternative fuel solutions). Well done.

About the Social Issue

Female, 20s

There are powerful themes in the story. This is what level three should be ... an Alternative and Universal Energy game that is implied by a harmonious mandala.

Beautiful chimes and tones rather than bells and buzzers. A beautiful new world.
A Shangri la.

Male, 20s

Fort McMurray, Alberta, is an odd, odd place. Often considered the heart of the Athabasca oilsands, I grew up there in its bitumen embrace. Of course I knew that my town was different from others, but until I had the chance to leave for a while, I had no idea how different it was. Money and isolation have left McMurray with drug problems, high crime rates, brutally inflated housing prices, and infrastructure overload. So when the province continues to celebrate and consume the revenue generated by the oilsands, it's pretty frustrating.... You can't really argue with the money. I'm angry at the exploitive attitude our government has towards Fort McMurray and the oilsands in general. There seems to be a willingness to generate as much revenue as possible from the Athabasca tarsands without concern for the people that do the grunt work.

That's why "Spies in the Oilsands" hits home for me. I see the renewable energy projects in Southern Alberta, and the lifestyle it encourages, and Fort McMurray stands in stark contrast. Our government, citizens, and major corporations are all focused on the wealth the oilsands are generating. I think it's greedy, shameful, and irresponsible. And I think the more that people are made aware of exactly how our energy resources are being used in Alberta, the better. "Spies in the Oilsands", bringing the exploitation of the oilsands to the stage, throwing the curtain back on our provinces' prosperity, is a timely tool to encourage people to think about what we're doing as a province.

Male, 50s

Wind and sun energy doesn't get the support (from the Alberta government) that it deserves.

Male, 50s

I just laugh when I see the spies. They think they're doing such a big service ...
I think it's high energy and something people can relate to.

Female, 50s

Although not a "morality class," there seemed to be a right answer – a position that happens to suit me but if the content displays a bias, how is not a "morality class?" If the medium is the message – what content does the medium carry?

Female, 50s

The social issue, one we only guiltily acknowledge – needs this kind of exposure.



Simply read, the audience at the CCIT iCentre was much more interested in the game and the Social Issue than the Theatre component. So was I, and it showed.

According to the feedback, the game was “addictive” and “amazing” and the social issues was “powerful” and “hits home for me,” but people felt the theatre was “dry” “unconvincing” and “the characters didn’t resonate.” The balance was powerfully tipped away from the theatrical component. It was not the actors’ fault that it fell flat; it was my lack of commitment to the form and a lack of preparation in getting the emotion off the page. In addition, the way that the huge projections and digitized audio overshadowed the live action was a factor. The game and the social issue message went over well but the theatre fell short. I was prepared to revise my vision and focus on creative artistry and social activism in the medium of serious games.

As a summary of preliminary conclusion, in June 2006 at a presentation at the Deconstructing Empire conference at the University of Victoria, where the focus was on world peace, I said that

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 (Shyba 2006).

Shortly after this, however, I was made to face the fact that the purpose of my research was to discover if live interactive theatre, in combination with game environments, can

activate us to better understand urgent social and political issues. The biggest surprise that arose as a result of de-emphasizing the interactive live-ness of the theatre in favour of the interactive digital-ness of a videogame was that it did not serve the express purpose of the research to do so. There was clearly more work to be done.

CHAPTER SEVEN: ROUND 3,

SPIES IN THE OILSANDS, WHOSE SIDE ARE YOU ON?

You know what the matter is with you environmentalists? You're cramping our style around here. Standin' in the way of progress.

— Tarzana, *Spies in the Oilsands*.

In Round 1 of *Spies*, the creative adventure was about chasing innovative ways to produce alternative fuels because of a fear that the world was running out of oil. Terra Incognita, as a thinly disguised version of me, trotted the globe looking for ways she could find new fuels to peddle to keep up The Good Life. After the realization that there was enough oil in the Alberta oilsands to last the world for decades to come, I refined Round 2 to recognize and confront the environmental perils, specifically the welfare of the flora and fauna of Northern Alberta. The pinball game, in all its glory of four screen projections and stereo sound, provided a “great” and “amazing” experience, to use actual audience testimonials, but the live theatrical was weak in comparison. Question was ... Could I re-inject the live theatrical component with a vibrancy that would allow it to hold its own against the big impact of the computer-mediated visuals and interactive videogame? Further to this, how might I bring more meaning to the increasing debate over climate change and the hazards of The Good Life, on our environment, since our lifestyle is deeply dependent upon production and consumption of fossil fuels? The key to these questions lay in the lessons learned from the prototypes formed from Round 1 and Round 2 and the insights and perspectives of the participating audience.

PRE-UNDERSTANDINGS AND TRANSFORMATION

The substantive goal of this inquiry has always been to create an artistic entertainment that performs the task of bringing clarity to a social issue and, additionally, to see how this outcome might be affected by the creative impulses introduced by an active audience.

The audience comments from Round 2 of *Spies* and *Pinball* at the CCIT iCentre had a profound effect on this next round of changes. I knew that level one of the pinball game was a satisfying experience and was, according to the audience, “addictive,” “very social,” “amazing” and the like but the theatrical component had some growing to do. “Have you looked at improv?” was one of the most challenging comments that had come from the audience because improvisation had been my stated intention for the live theatre from the onset and had simply not survived the transformation from Round 1 to Round 2. Comments that the theatre was dry and unconvincing and lacked relationship development between the characters were equally painful. I had to fix these flaws or I would be facing a personal creative disaster.

I drove away my insecurities, re-evaluated the key concepts of form and of content and incorporated yet another entertainment model, this time based on the interactive Forum Theatre and games of Augusto Boal and David Diamond. Due to its inherent game-like nature, this new model provided an artistic condition in which the theatre, the games, and the social message promised to link together more cohesively.

As I described in Chapter 3, Forum Theatre was developed by Brazilian theatrical visionary Augusto Boal as a way of implementing social change through theatre art. In Forum Theatre there is a pivotal player known as The Joker who is a trickster and an activist, a psychologist and improviser as well as a director and dramaturg. In performance creation mode, the Joker guides participants through the playing of games and constructs a dramaturgy of physical, visual, verbal, aural and emotional texts, animating scenarios of social change from within. In performance mode, The Joker lets the audience watch the play to experience the situations and the problems presented. The second time they become “spect-actors;” in game-like fashion, they jump into the action to replace a character they see struggling with social conflict, thereby taking the story in new directions. These are both ways of rehearsing reality, an experiential way of learning by doing.

For Round 3, I assembled a new group of actors trained in Forum Theatre and christened them “The Gamer Players.” At the heart of the Gamer Players was Mariette Sluyter as Joker and Director of this new case study, now called *Spies in the Oilsands: Whose Side Are You On?*

STEPS IN PLANNING AND ACTION

Identifying Goals and Hypothesis

My hypothesis for Round 3 was that I could synergize the theatre, the integrated media, and the videogames to create a hybrid entertainment that would allow me to warrant an assertion that would finally fulfill the thesis inquiry. The Alberta oilsands, as a microcosm of world energy, became both the location and the economic focus of this Round 3 case study. Another goal was to revisit the patterns of possibilities identified within the scope of Part I of the thesis so that I could gain momentum on my aims to implement dramaturgy as a way of constructing and recovering meanings within the field of serious videogames.

Planning of Actions Decisions and Executions

Becoming Tarzana and Rehearsal Games: As I described in Chapter 3, Boal's Forum Theatre harnesses the power of games in both the dramatic process of creation and the performance of the play itself. Major changes came for me when another actor took on the role of Terra and I became Tarzana, so that the tables were turned on my perspective of the moral issues and my personal bias was challenged. Instead of espousing the value of alternative fuels, I became the unabashed champion of unchecked profits and no-holds-barred development of the Alberta oilsands. Rather than aiming for cooperation and peace for the planet, Tarzana was all about "What's in it for me?"

In rehearsal, our Joker tuned me in to Tarzana's personality through games of emotional recall that unleashed a flood of feelings. To my guilty pleasure, I immediately connected with this persona, recognizing that I was every bit as much Tarzana as I had been Terra. It was easy for me to get behind Tarzana's cussing and swearing, smoking, drinking, debauching, gambling and generally misbehaving because it was not far beneath the surface of my life as an independent-minded fourth generation Albertan from rough-and-tumble rural stock. Compared to the Tarzana of Round 2, the Round 3 Tarzana was even more assertive and as we played through the rehearsal improvisations, she became more than just an oil rig sidekick and campcook. She became a fully fleshed red-neck, hard-living, gritty, greasy oil slut boss lady working in the Alberta oilsands.

Another game we played as we improvised the dramatic action was Boal's "Complete the Image," a game that, as Boal outlines in *Games for Actors and Non-Actors*

“reflects memories, imaginations, and emotions” (Boal, 1992: 139). This culminated in a series of visual texts, as seen in figure 39. These images formulated the progression of the play’s plot structure by visually identifying our objectives through imagination and emotional text. Through the formation of 12 visual images, we were able to construct the action of the play.



Figure 39: Some of the visual image tableaux that helped formulate the dramatic action of *Spies*. The Gamer Players were Ruth Lindsay Hunt; Mike Unrau, Lori Shyba and Mariette Sluyter.

Creative Dramaturgy: Besides the visual text that emerged through image games, other sensual texts emerged through the creative dramaturgy in the creative process. Movement and physical text arose as a result of breaking free the visual images into action improvisations that also brought forth the aural text, or what the scene “sounded” like, and, eventually the verbal text or, in other words, the written or literary work. This verbal

text was, incidentally, improvised in both live space at rehearsals and in digital space by means of a production wiki where we, as performers, collaborated on the script from our own computers.

Activism: As we became immersed in the games of creation, juxtaposed with the activism of discussion and research about world energy, I began to get a sense that this Round 3 production would satisfy the needs of the thesis inquiry. As McLuhan professed can occur, and as mentioned in Chapter 1, my confidence of spirit soared beyond the expected through the fun and games that we used to guide the performance collaboration. In addition, the games got me into a zone of experience that undoubtedly stimulated action and interactivity in the same way that Paul Gee suggests can happen in videogame environments (Gee, 2003: 76). The dramaturgy was confused and even chaotic at times but as Eugenio Barba explains, that sometimes happens as part of the process of arriving at a bare and essential action and finding exciting new points of orientation. Just as in Barba's *Dramaturgy of Changing States*, we continually challenged the comfort of our ideas and our subjective moral stance (Barba, 2000: 62).

This process of creation likewise aligned with the practice and theory of Augusto Boal and David Diamond. By definition, Forum Theatre comes from a strong relationship between games, interactive theatre, experiential learning, and complex problem solving. Like Boal, we aimed to break down the barriers between the doers and the watchers and to include the audience in a dialogue about social justice (Boal, 1979: ix). As agents of change through humourous subversion, we aspired to provoke the audience into acting like a collective learning machine, spawning variety and generating diversity in society. As in David Diamond's *Theatre for Living*, our overall social intention was to enter into a dialogue about what would create a healthy, safe, and respectful Alberta community and I had a hope that since both Tarzana and Terra were activated as possible "oppressors" in this situation, our audience might come to recognize our struggle as Albertans.

When woven together, these possibilities made me feel that we as "The Gamer Players" were ready to try out our artistic perspectives on social problem solving. I booked the production into the slate of events at the 2007 Calgary One-Act Play festival at the Pumphouse Theatre, a venue where projection screens and audio had little chance of overpowering the live-theatre, and we gave Round 3 a go. The video of this production is on the *Spies in the Oilsands* DVD attached to this thesis and on the thesis web site.

A TRAIN-OF-THOUGHT REMINISCENCE

At the 2007 Calgary One-Act Play production of *Spies in the Oilsands*, our Joker, Mariette Sluyter, started out the night by saying

We're exploring an issue that is pertinent to Alberta right now and we'd like to have a dialogue with you to see if we can find a path to go on. We don't have the answer, nor do we espouse an answer. We hope you will play with us and indulge this experiment. We're going to present this a couple of times and when you watch it this first time, just watch it with critical thought and places maybe where the whole story isn't coming out. Maybe there are some other perspectives that need to be heard?

How will our *Spies in the Oilsands* audience play this out? Will they follow the energy of the Play and the Game and jump in on the action to join Terra's team of environmentalists by cheering on alternative energy points? Or will they prefer Tarzana's big oil and cheer on fossil fuels and big money? Whose side are they on?



Figure 40: Left, Tarzana, in the oilsands for the fast buck. Photo, Ewan Nicholson. Right, the Calgary One-Act Play Festival performance of *Spies in the Oilsands: Whose Side are You On?*

Tarzana the Oil Slut, A Conformity Enforcer

Tarzana swaggers onto the set of *Spies in the Oilsands* amid the rumble of her idling truck, all the while spouting off-colour remarks about gambling debts and the Oilers hockey pool. She stomps the mud off her big boots, butts out her smoke, takes a big breath and declares “Ah, there’s nothing like the smell of bitumen in the morning.”



Figure 41: Clips of video and satellite images that make up the projected backdrop.

After guiding her sidekick A.J. and the assembled audience through an aerial tour of the oilsands terrain from the Syncrude and Suncor lease to Husky and Encana and Shell, she boasts about her employer, Boss Energy and especially their huge profits. Launching a thousand-mile stare way out past the theatre walls, she surveys her territory of enormous mining trucks, belching smokestacks and toxic tailing ponds and confides her joy. “You know,” she says to AJ, “Boss Energy made \$6.5 billion profit last year. Let’s see, if you lined 6.5 billion in hundred dollar bills end to end, they’d stretch all the way to” Tarzana searches her mind for the idea of a paradise far away and continues, throwing her arms into the air, “...all the way to Heaven. Well at least from here to fucking Timbuktu ... and back. And that’s,” she says as she snaps her G-string, “the Alberta Advantage.”

The backstory was that Tarzana didn’t just pull that \$6.5 billion number out of thin air. Behind the scenes in rehearsal mode amidst stacks of newspapers and oil company annual reports, The Gamer Players had scrummed over the latest financials along with political data and environmental statistics to create Tarzana’s boastful banter. Focusing on big money and February 2007 world oil prices of \$82 a barrel was a front-page headline in *The Calgary Herald* that read

“Encana Shatters Profit Record.” Laid end to end, the \$6.5 billion profit amounts to enough dollar bills to circle the Earth 22 times or make three one-way trips to

the moon. EnCana's profits exceeded the gross domestic product of countries such as Fiji and Mongolia. (*Calgary Herald*, February 16, 2007)

Tarzana swells with pride. She's lived through ups and downs in Alberta and herein lies the energy of personal narrative, because I remember these things too. Does that make me Tarzana? Is Lori Shyba, as an average Albertan, an enforcer of oil industry conformity? Whose side am I on?

Terra Incognita the Ecogeek, A Diversity Generator



Figure 42: *Spies in the Oilsands* character Terra Incognita (on right), condemning Tarzana for her wasteful ways. Photo, Shawn Lynch.

“Tarzana,” hollers Terra the campcook as she clomps into the Boss Energy spyshack with her basket of sandwiches. “You’ve left your truck running again. How many times have I told you to turn off your fucking truck? It’s ruining the environment.” Tarzana spits back, “You know what the matter is with you environmentalists? Yer cramping our style around here. Standin’ in the way of progress.”

Just as Tarzana’s motto is to “get while the getting’s good,” Terra’s is “reduce, reuse, and recycle” and she has as strong an emotional connection with the issue of carbon emissions, global warming, and carbon footprint as Tarzana does to big money and big oil. Simplistically, Terra represents the great hope for environmental accountability and the salvation of our world. Hoping to win him over to her side, Terra begs Tarzana’s sidekick A.J. to think about where the smoke goes once it leaves the upgrader stacks. She rants, “It doesn't disappear. It stays right here. It stays in our

atmosphere. It's contributing to so much crap. Makes the earth hotter and hotter and eventually you won't be able to have kids, you're not going to be able to live on this land." She sobs, "I know what I'll do. I'm going to live way up in the Boreal Forest. I'm going to tread so lightly on this earth, no one will ever even know I existed."

Behind the scenes, once again the Gamer Players had waded through piles of media material, weighing the Pembina Institute's Carbon Neutral Fact Sheet against *National Post* letters complaining to the editor that "global warming is a sham and getting boring," and Premier Ed Stelmach's Rotary Club announcement, on February 17, 2007, that "you can't just step in and lower the boom on the oilsands." The Gamer Players know Terra and Tarzana are in place to represent the polarities of the showdown that is brewing about progress versus sustainability in Alberta and that AJ represents every-man-or-woman undecided Albertan, Canadian, world citizen for that matter.

Simply put, Terra, is naïve but understandably fearful of the effects of carbon emissions and rampant consumerism is having on the planet. She sees biggy-size-me housing and SUVs when she visits the city, and smells the stink of Tarzana's idling truck when she is back at work in the oilsands. She breathes in stinking fossil fuel emissions. Herein lies the energy of personal narrative because I recognize the peril of these things too. Does that make me Terra? Is Lori Shyba, as an average Albertan, ready to walk the talk of generating diversity? Whose side am I on?

Integrating the Pipeline Pinball Energy Thrill Ride Game



Figure 43: (Left) *Spies in the Oilsands* characters A.J., Terra, and Tarzana playing *Pinball* within the scene of the play. (Right) A cutaway of the "Alberta Gamble" game level.



Figure 44: Screen grabs from *The Pipeline Pinball Energy Thrill Ride Game*.

Terra and Tarzana square off with insults most of the time but they have things in common too. They both like playing videogames and they both hope to swing A.J. over to their values about the energy, environment and the oilsands. The projection screen behind the actors bursts into pinball action with world leaders clustered around the bubbling Athabasca river system. The scoring system of this “Alberta Gamble” level is simple; build world demand and ramp up global warming; a reality but not very challenging, so that doesn’t hold their attention for long. However, action escalates as the “Generate Energy Diversity Level” boots up on screen. Tarzana describes strategic gameplay to AJ by saying “See, you got fossil fuel points and you got alternative energy points. The idea is that you don’t want to get your ball up into this green pipeline shoot or you open the stupid alternative energy targets. And you don’t want that. You want to score fossil fuel points in the oilsands.” Terra counters with, “All wrong, you want to get your balls up into that green pipeline because then those alternative energy targets open up. It’s a little harder to begin with but it’s worth it in the long run.” A battle mounts for A.J.’s affection. Terra and Tarzana ask him ... Whose Side Are You On? The assembled audience laughs when A.J. declares, “My balls are all over the place!”

REVIEW OF THE EFFECTS



Figure 45: Mariette Sluyter in the scene, joking an intervention in which an audience member replaced the neutral character A.J. Photo, Shawn Lynch.

When the play ended, Mariette the Joker stepped forward again, saying, “What we want to do before we start playing this piece again is see if anyone wants to play the videogame. Is there anyone out there who’s brave enough to play?” A player came down to the Boss Energy pinball computer and the both teams started building membership. After the game, the Joker asked the assembled members on the teams, “Why did you choose the side you’re on? Here are some of the comments:

Teenage girl on Terra’s team.

Because well, wind and solar energy, we’re not going to run out of it and it doesn’t really harm the environment so why use fossil fuels?

Woman, 20s on Tarzana’s team.

I came over to Tarzana’s side because I need the money.

Random comments from the audience.

We need money and we all drive cars.

We want to invest with a clear conscience.

We need to find a balance.

Male, 50's.

In some areas, we can actually have our cake and eat it too; reduce emissions significantly and do it cheaper (but) the attitude of the oil companies are standing in our way. They need to think, in what we're doing, can we, in fact, both produce the oil and reduce CO₂?

Our Joker then asked the crowd a multiple choice question. Did they most closely identify with, a) Terra, b) Tarzana, c) the neutral character of A.J. or d) all of them? The loudest cheer came at the end when they chose d) all of them. At the end of Round 3, what we found out is that it is not that easy to decide whose side you are on.



Life, as Aristotle knew so well, is a matter of avoiding the extremes. Conformity enforcers are necessities. But they are mass-mind throttlers when they grab hold totally. Diversity generators are equally essential. But taking them too far can destroy a civil culture and devastate once-vigorous centres of humanity.

— Howard Bloom, *Global Brain*

As a wrap up of the evening, our Joker offered up words that had sprung from our rehearsal play-time together within our sacred sphere of collaborative energy:

I think there's an interesting struggle here in Alberta that we live with. We know there is an economy that needs to exist. We know that there's an environment that has to exist, and we know we have to pay our bills. So, I guess that that's where we need to find the right balance.

If make-believe is, as Dietrich Dörner suggests, “an important way to prepare ourselves for the real thing” (Dörner, 1989/1996: 199) perhaps what we have managed to accomplish in Round 3 is a way of analyzing our complex situation in Alberta to draw conclusions from them for reorganizing our thinking and behaviour.

Did this creative simulation in the way of a Play and a Game enable a greater sensitivity to reality? A way of redefining what we might consider to be The Good Life and finding the right balance? Before confronting these puzzles in the conclusion of this thesis, I will firstly consider the use of creative dramaturgical techniques of play-making to see if it holds value for serious video game-making. I will then look at reflexive

dramaturgy as a possible new model for game studies analysis, including a look at the metaphors and representation of *Pipeline Pinball* to see if an ideology emerges that can help us define a new path for the wellbeing of our world community.

PART THREE: ILLUMINATIONS



In *Spies* and *Pinball* the theatre informed the game and, at times, the game reciprocated, so that the entertainment was both “Theatre in a Game” and “A Game in the Theatre.” This process of creative inspiration that went back and forth between the media was at the core of its inter- and multi-disciplinary expressiveness. As a next step, the main reason it made sense to place the study within a playful research methodology was to look for relationships between the actions of form and content of the case studies and track the possible consequences. The purpose of Part Three, Illuminations, is to symbolize these relationships as theories and new knowledge that can hopefully be used in the field for further problem solving.

Part III, Illuminations, features new a synergy between theatre, games, and social issues that were barely in view when the research aims were originally identified. “Gamaturgy,” in both the “Creative” and “Reflexive” realms, as I describe them, are derived and extrapolated from theatrical dramaturgy and provide new ideas for the creation and critical thematic analysis of videogames. In Chapter 8, I maintain that as a practical influence upon the “form” of games, creative gamaturgy can infuse a spontaneous playfulness that can inspire not only narrative, character, and social issue possibilities in videogame development, but can also tease out creative ideas through live improvisational gameplay among design teams. In Chapter 9, I look at the patterns of influences behind reflexive gamaturgy as a thematic content exploration of videogames. I then apply reflexive gamaturgy to my case study *Pipeline Pinball* with an aim to show firstly how games can be an exercise in problem solving and secondly to extrude a pertinent philosophy and mandate for living.

CHAPTER EIGHT: CREATIVE GAMATURGY

Videogames are a unique art form ... closer to living inside a symphony than living inside a book.

— Paul James Gee, “Videogames: A New Art Form”

As I described in Chapter 2 of this thesis, dramaturgy can be described as a way to “open the door for an influx of materials into the playmaking process: imagistic, historical, sociological, and critical” (Jones, et al, 1997). I also alluded to ideas I had about applying the principles of dramaturgy to game design and game studies through a new technique of creation and analysis I have coined “gamaturgy.” In this chapter my intention is to show that gamaturgy is a way to open the door for an influx of materials into the game-making process as a creative tool for game design in what I call the “creative realm” of gamaturgy. This material from drama process comprises concept and experience improvisations, character modeling, and a multitextual creative toolset that releases meaning into visual, physical, aural, and emotional texts. These techniques have their roots in sacred play and ritual, immersion and player agency, and activist theatre principles, all of which are detailed more thoroughly in Chapters 2 and 3.

Before elaborating on these gamaturgical techniques, I’d like to make a case for videogames as art experience. Both theatre and videogames are temporal and transitive — temporal in that they unfold as an experience over time and transitive in that they provoke an action dialogue of interaction and exchange. Categorizing both of these kinds of entertainments as art forms therefore is not a stretch, especially if one narrows the videogames under discussion to those of the social issue genre, and the theatre under discussion to interactive activist theatre, notably Forum Theatre. As tools that allow one to see the world from a different perspective by being able to play another “side” of the story, they are both are “ways of tuning people in to what’s going on around us,” as Stephen Nachmanovich puts it, and “ways of bringing meaning to oneself and to others,”

as defined by Ruth Zaporah. I find these two definitions of temporal art particularly rewarding (Nachmanovich, 1990; and Zaporah, 1995).

A workshop I presented in 2007 at the FuturePlay conference called “Experiential Game Creation: From Activist Theatre to Serious Game Design” was billed this way:

A dynamic place of interactivity. An environment where spectators becomes “spect-actors.” A forum for direct action and social change. Although these are descriptions of a potent kind of political theatre, they might also apply to serious computer games where social impact is a component of the experience. In this workshop interactive theatre techniques will be used to liberate creative ideas for computer games with social impact. Participants at FuturePlay will discover new ways to plan interactivity in games and, at the same time, embrace their potential to initiate social change (Future Play 2007 proceedings).

After facilitating a series of creative dramaturgy games and performance interventions with a group of participants from France, Canada, USA, and Finland, I led a post-workshop discussion that unraveled an idea that drama games can be useful as creative tools in videogames in several ways. The first and most obvious way is that improvisation can spark up creative design teams by loosening everyone up with the spontaneity of fun and games. The other ways went beyond the fun and games factor. Firstly, drama games can be an effective way to plan plot escalations and branching opportunities in videogames, and especially role-playing games. Secondly, they can help us examine personal values and belief systems to discover the strength of our ethical perspective and moral stances. The results from this workshop helped me formulate the techniques and methodology of creative gamaturgy.

SPARKING UP CREATIVE TEAMS THROUGH IMPROVISATION

Reading about spontaneity won't make you more spontaneous, but it may at least stop you heading off in the opposite direction.

— Keith Johnstone, *Impro: Improvisation and the Theatre*

“Be spontaneous, use your imagination and get up on your feet and play!” In one form or another, this is the mantra and rebel yell of improvisational musician Stephen Nachmanovich, Action Theatre innovator Ruth Zaporah, Theatresports founder Keith

Johnstone, and Augusto Boal, whose activist Forum Theatre features “rehearsals” for real situations. Each of these practitioners also feels that being true to spontaneous insights is a way of keeping the editor of self-censorship out of the process of creation.

Stephen Nachmanovich passionately believes that art comes from inner sources of spontaneous creation. He claims, “What we have to express is already with us, is us, so the work of creativity is not a matter of making the material come, but of unblocking the obstacles of its natural flow.” He asserts that by inventing a channel of flow from one’s heart directly into reality, one is allowed to “experiment without fear of consequences, to have a play space safe from fear of criticism, so that we can bring out our unconscious material without censoring it first” (Nachmanovich, 1990). Ruth Zaporah’s Action Theater puts Nachmanovich’s theory to work, offering games and exercises to work through what Zaporah calls “the body-heart-head thing” that links the three in a body-based flow through time and space, opening up expression and a sense of play (Zapora, 1995: 24). Her group games aim to move the participant player effortlessly from thought to feeling to imagination to remembering ... rather than “worry, think, conjure ... what we’re going to do, say, or be next.” Recognizing situations and patterns as they arise through relaxation of imagination leads to transformation of the form and content of an action into a resolve, or a “meaning” for oneself and, eventually, others. Keith Johnstone concurs with this sense of spontaneous creation and relates that when people are asked to give an original idea, they are thrown into chaos. He states that “if they said the first thing that came into their head, there’d be no problem,” and that, in the context of imagination and spontaneity, striving too hard after originality ... “makes your work mediocre.”

These masters of improvisation offer ways to uncover new methods of involving interactivity in digital game design and, at the same time, recognize that one role of spontaneity is to keep the internalized editor at bay (Shyba, 2007).

SENSUOUS TEXTUALITY

Visual Text and Initiating Narrative

Constructing a narrative is an essential part of both theatre and videogames and it is required on several levels throughout the process of concept creation. Narrative on the level of personal values is about our emotion and moral stance on issues that are important to us, and on a level of storytelling, it imbues the temporality of the artistic

experience with the structural plot points towards the formation of dramatic action. Forum Theatre image games that culminate in a display of visual tableaux can release creative gamaturgy in aid of both of these levels of narrative — on the level of personal values and as a vehicle for releasing ideas into a story plot escalation.

Exploring Personal Narrative: In the Spies in the Oilsands rehearsal period, our way of firing up personal value positions on the issue of the Alberta oilsands was to play Boal's "Complete the Image" game that culminated in a series of visual tableaux, as seen in Chapter 7, Figure 39. As a dramaturgical tool, this game, especially as it was combined with games of emotional recall, provided a passion and intensity of inner feelings that enabled us to better understand our characters and also enabled us to embrace an emotional connection with the issue of climate change. I attribute this to the transitive, interactive learning factor of games and "learning by doing," whether the games are in a digital or in a live environment.

Extrapolating that into the gamaturgy of the case study, these same values translated over to the Pipeline Pinball videogame as an offshoot of the understanding that had come from the work in the theatre, a slightly round-about way of applying visual text to videogames but one that worked in this context. Another way of applying this experiential visual textuality to videogame concept development would be to run these same games with a design team and to transfer the fruits of the image gameplay directly to a videogame creative endeavour.

Initiating Story Narrative: As I mentioned in the section on ritual and social dramaturgy, studies show that over 90 percent of our visceral understandings, or gut feelings, come from factors other than expression uttered through language or written down as words (Mehranbian, 1981). Visual texts such as photographs and graphic illustrations work in much the same way as Forum Theatre live-action image tableaux as purveyors of meaning, however, the benefit of working with live-action image tableaux over photographs or cartoons is the potential of story creation as the frozen image comes to life and starts carving out a story narrative from image to image through time. The live-action image tableaux, usually signifying moments of dramatic conflict between oppressor(s), the oppressed and bystander characters, can act as focal points of narrative

plot nodules for character or situational development in roleplaying games. Other applications of this creative form of gamaturgy are character and scenes creation for 3-D motion capture, and 2-D modelling for game design storyboards.

But it is not until these tableaus get “tweened” or animated over time through improvisation and imagination that the powerful connection between image games and story narrative come to the fore.

Physical Text and Non-Linear Narrative

Transforming an image text into a physical text is key to creating a temporal experience; when art moves over time, dramatic changes occur due by virtue of its becoming a simulation of a lived experience. Finding a cohesion between a series of static visual art images is an act of perception and cognition that enraptures the mind into recognizing an event as a performance or a ritual or a “play.”

My proposition in relation to visual text has been that creative gamaturgy involves live actors playing games and stopping a moment in time to capture a readable tableau that represents a plot-point of conflict. This may not always be possible and in the absence of live actors, “improvisation with self” is a viable alternative where imagination takes over. Whether working with live actors or with just imagined visual tableaus or storyboards, the frozen moments in time are significant in the patching together of a non-linear narrative when one thinks of the visual images as branching opportunities in a multi-directional dramatic story action.

For example the *Pipeline Pinball* game concept was, according to my definition, a “Theatre in a Game.” This “tweening” or animation of visual text into physical text also hits key benchmarks of dramatic action as defined by Robert McKee’s *Principles of Story*. (McKee, 1997). As paraphrased from the Pipeline Pinball game design document

The inciting incident takes place when the heroic energy ball opens Alaska and Alberta Clipper pipelines before the Alternative Energy Targets open. This leads to progressive plot complications and escalating action. The MacKenzie Valley Pipeline opens and up pops clients from the global markets. Knocking down the global clients ramps up the story action to a penultimate moment. Playing nuclear targets clumsily can cause the whole game to explode. The crisis decision of whether or not to annihilate the Spies in the Oilpatch leads to the *climax* where the birds flap and caribou spin. Resolution? Larry and Tarzana play to the end of

the game one way. Terra plays to the end of the game another way. (Shyba 2006a)

Because Pipeline Pinball is a videogame, the non-linear narrative can be branched off into many directions, dependent upon the skill of the player and the player's aspiration to collect fossil fuel points or alternative energy points. At the very least, and true-to-form of Forum Theatre, the narrative progresses to a point of crisis or climax and then the resolution is entirely left up to the audience to activate in their own way.

Another example of creative gamaturgy and physical text is the Booze Cruise narrative. Paraphrased from the design document and supporting the idea of Booze Cruise being "Theatre in a Game" is this extract:

Exposition: The player first gets in a car and drives a sober stretch of road that contains a selection of hazards and conditions they will encounter further along the course route. Inciting Incident: She stops at the cocktail bar called The Cruise. This is the location where the player/protagonist must decide whether to remain sober by drinking soda pop, step up to the legal limit of .08 by drinking two beers, or get blotto on a whole row of martinis. Progressive Risks: Once she gets back in the car, the course takes her through a progression of escalating risk activities and road conditions that reward or penalize her depending on her level of ability, tied in with her level of sobriety. Crisis Decision: This is faced when she comes to a fork in the road that aims her either home destination or on a loop back towards The Cruise for more drinking. If she goes home, she is safe, and maybe bored, and if she drives back toward The Cruise she has to negotiate dangerous, but maybe exciting, landscape and artwork. Climax: The climax of the game comes when she reaches either one or the other destination to get her score to check out their tally of consequences. Resolution: It is our intension as authors of this serious game, that the resolution to this story gets played out in discussion and thought when players have a chance to analyze and contextualize the factors and results of their choices and decisions and the resultant alcohol to scoring points ratio.

The concept of positioning the resolution of the Booze Cruise into the domain of discussion illuminates another of Boal's dramaturgical principles: dialogue rationalizes emotion. According to Boal, and as described in Chapter 2, this transitive practice of dialogue helps participants understand experience, not simply "feel" it (Boal, 1992: 37).

Serious videogames, much like Forum Theatre, are well-suited to activate social change by virtue of player agency and the interactivity of non-linear story narrative. As an example, player agency, in Pipeline Pinball or The Booze Cruise or other serious games players can implement a “Stop” action at any time when they think they see a better course of action for a character to follow. The player can then follow a different path of action, thereby improvising a scene to try out a different set of consequences. This rehearsal for reality is reminiscent of Boal’s “palette of possible alternatives of their own invention ... a rehearsal for action in real life, rather than an end in itself” (Boal, 2006: 6).

Aural Text

When it comes to aural text within videogames, Forum Theatre games and performance practice contribute a subtle but significant gamaturgy. “The Machine of Rhythms” and “The Song of the Mermaid” are two games from within the canon of Forum Theatre that have latent potential to produce passionate and emotive sound effects and sound ambiance environments for videogames. I have played both these games and have been deeply moved by the emotion that can be mobilized through sound, hearkening back to Marshall McLuhan’s thoughts about sacred play interfacing with “the Africa within ... and primitive ritualistic audile-tactile sensorium” and Johan Huizinga’s feelings that humans need rhythm and harmony to “unfold in full richness” (McLuhan, 1962: 59; Huizinga, 1938/1956: 75). Videogame designers who pay attention to the visceral connections between aural text and emotion will see the advantage of using these techniques to enhance elements of gameplay, understandings, and meanings.

“The Machine of Rhythms” game is part of Augusto Boal’s series called “Listening to What We Hear.” In this game, an individual participant vocalizes a sound and simulates a movement as a part within a complex machine. Everybody else watches and listens and eventually all participants become integrated into this synchronized machine. They can use movements and sounds but no words. A possible variation that provokes interesting textural changes in aural landscapes is when the Joker group leader shifts the machine from being, for example, a love machine to being a hate machine. From my experience, these shifts in sound and emotion have profound visceral effects.

“The Song of the Mermaid,” a game played by David Diamond in Theatre for Living workshops, is also eerily effective as a tool to extract emotion from sound. This game starts with participants lying on the floor, breathing into the image of a personal struggle and capturing the feelings of the moment. The Joker then suggests that the emotion get turned into a sound without words, just a sound one can make with one’s breath. Diamond’s description of this is, “If there was only one way to express the emotion and it was by making a sound, this would be the sound to make” (Diamond, 2007a: 117). The game proceeds from there into the creation of scenarios based on these sounds as a symbol of the personal struggle. My experience with this was that the sounds produced through this technique strongly connected to a sensation of sacredness and communal rites. This is not a sensation to ignore if one is trying to create videogames that have, as Huizinga professes are essential to significant play, “feelings of tension, joy, and a consciousness that is ‘different’ than ‘ordinary’ life” (Huizinga, 1938/1956:28).

Emotional Text

Emotional text is a byproduct from the synergy of the feelings that transcend from the other sensual texts. Augusto Boal’s perspective is that emotion is important because of what it signifies. Emotion is what marks the difference between ‘dramatic action’ and mere physical activity. Put another way and in the context of social impact videogames, emotional text marks the difference between what we call “play” and the meaning that emerges as we move beyond just the fun and games. Emotional text is what enables activist art to become more tuned into the world around us, whether in the form of interactive theatre or videogames.

MAPPING AND MODELLING CHARACTERS AND RELATIONSHIPS

Even though not primarily an improviser, Stanislavski-inspired acting teacher Uta Hagen holds a key to mapping and modeling character attributes for use in digital games and interactive stories. Hagen strongly believed that stage actors should identify with the characters they play with feelings and circumstances from their own lives. By “playing in the moment” the actor can suspend all knowledge of what is to come, and hence be rendered vulnerable and open to surprises (Hagen, 1991: 134). This concept is akin to the

way story narrative should unfold in digital play spaces where webs of possibilities exist rather than pre-determined plotlines.

In her book *Challenge for the Actor*, Hagen mapped out essential steps of character analysis and here are a selection of this points that I feel carry over well into the domain of the game designer when it comes to creation of character backstory:

- Who am I? What is my present state of being? How do I perceive myself? What am I wearing?
- What are the circumstances? What time is it (year, season, day)? Where am I (city, neighbourhood, building, and room)? What surrounds me (immediate landscape, the weather, the objects around)? What are the immediate circumstances (what has just happened, what do I expect will happen later on)?
- What are my relationships (to circumstances, place, object and other people)?
- What do I want (overall and immediate needs and objectives)?
- What is my obstacle (what's in my way and how can I overcome)?
- What do I do to get what I want? How do I achieve my objective? What's my behaviour? What are my actions?

Game developer and interactive storyteller Chris Crawford says that taking good art in one medium and simply transferring it to another does not make good art but instead, an artist should strive to express content that is most “parallel to the grain of the medium” (Crawford, 2005). Hagen’s “internal” principles of character analysis clarify the practice of embodying an emotional memory of the character and letting that image in the body be reflected out. Thinking about character attributes from the “inside out” promises to result in a useful cross-over effect into the digital character realm, through the merger of Stanislavski/Hagen internal development technique with Crawford’s interactive storytelling personality modeling (Crawford, 2005: 182).

Incidentally, there is also an “external” technique, in the spirit of *Commedia dell’arte*, in which masks are used to physically manipulate an imaginative response in the body (Foreman 2003). Mask work is similar, in my mind, to the technique that video game artists currently use when creating and modeling a character’s external attributes in the computer, rendering the character from the “outside in” — sculpting a face or body

in a 3-D rendering software program. This is a valid creative approach in both theatre and in digital game character development but is not, by my way of thinking, complete enough to deliver a fully fleshed character who needs a backstory in order to be believable.

Moving to the issue of modeling character relationships, we see that Crawford's "verb-thinking" principles bear a striking resemblance to the theatrical principles of setting action objectives within "beats" in a conventional narrative dramatic scene. In Crawford's case, he uses arithmetic operatives to humanize personalities who are building interpersonal relationships (Crawford, 2005: 190). Relationship-building through mathematics is an interesting approach for character creation in the digital realm, and one that theatre artists might even try for fun. For example " $\text{Inclination}[\text{Retort}] = 5 \times \text{Anger}[\text{Actor}] \times \text{Affection}[\text{Actor, Insulter}] - 2$ " describes that an actor responds to an insult on the basis of the factors of, five times the affection the actor feels for the insulter, and half of the anger the actor feels as a result of the insult. Improvisational relationship-building status games such as Keith Johnstone's "status towers" as a way to supplement this formula (Johnstone, 1981: 70). In this exercise, actors are assembled into pecking orders. Someone begins with a low-status activity, and each person who enters the scene plays a step higher, or vice versa. Studying the result of these scenes may be useful in humanizing digital game personalities by deriving relational arithmetic operates, such as Crawford's. However, another use might be to subjectively absorb implicit knowledge about the characters' relationships directly by observing the status tower scenes or, better still, by participating in them.

A further example of the rapport between theatre and digital games is the improvisational motto of "Receiving, releasing, and returning without thinking" (Foreman, 2003). This both heralds and imbues the value of foregoing the sacredness of "the proper answer" and has a direct connection to Crawford's definition of interactivity as a cyclic process in which each agent, meaning character, alternately "listens, thinks, and responds." These adages release the idea that the worlds of digital games and non-digital games really do have similarities.



Although it is not my intention to elaborate these points at this time, other ways that creative gamaturgy, as drawn from dramaturgical practice, can inform visual text are through costumes, props and mise-en-scène, and decisions about light and colour. Ways that creative gamaturgy can inform the creation of well-rounded and believable characters include considerations of archetype, empathy, journey and arc, intention and motivation, point of view, and unity of voice. Ways that creative gamaturgy, as drawn from common dramaturgical practice, can help shape the structure of narrative are through its ability to inform and shape accretion and allusion, foreshadowing, diminishment and emphasis, metaphor, repetition, and stasis and intrusion as they relate to the showdown of conflict forces.

In the paper “Games are Art: Videogames as Theatrical Performance,” J.R. Parker notes that a main difference between theatre and storytelling is that “nonlinear narrative has been pretty rare until the advent of video games” and that “an important distinction between theatre and video games is the use of interaction in the game genre” (Parker, 2008). Interactive theatre and, significantly, Forum Theatre is that rarity of theatrical form where interaction is a crucial ingredient in the creative mode, as is *de rigueur* in most theatre settings, but also in the performance mode when the play hits the “stage.” In this chapter, I outlined ways that creative gamaturgy provides videogame designers with new practical models for game creation, and that creative gamaturgy, in that it is modeled from drama process dramaturgy, inherently enables a synergy of play and narrative.

In the next chapter I will propose ways that reflexive gamaturgy, as a function of thematic analysis, can provide new theoretical models through implementation of another set of texts: the critical tools of pretext, context, subtext, and intertext.

CHAPTER NINE: REFLEXIVE GAMATURGY, *PIPELINE PINBALL AND THE RALLYING CRY*

The Philosopher wishes to apply theatre to allow the spectator to adopt a standpoint. The Dramaturg puts himself at the Philosopher's disposal and promises to apply his knowledge and abilities to the reconstruction of the theatre into the theatre of the Philosopher.

— Bertold Brecht, *Der Messingkauf*

It is meaningful today to speak about games being culture because of their high — or at least rising — artistic qualities.

— Frans Mäyrä, *Introduction to Game Studies: Games in Culture*

Gamaturgy, as I define it, is a way of analyzing videogames by emulating dramaturgy and by dipping into the rich palette of dramatic art sensibilities. In the last chapter, I outlined ways that creative gamaturgy opens the door to sensuous realms of discovery, providing videogame designers with new functional models for game creation. In this chapter, I propose ways that reflexive gamaturgy, as a function of critical thinking, can provide novel ways of interpreting and uncovering thematic meanings in videogames through the implementation of, among other things, another set of multitexts: the critical resources of pretext, context, subtext, and intertext.

It's not to say that reflexive gamaturgy as a multitextual exploration cannot be applied in a creative process, but in this chapter, I specifically outline techniques of constructing meaning in a game studies context by opening the door for an influx of critical, historical, philosophical, pedagogical, and ideological materials into the theoretic process. Frans Mäyrä reminds us that it is incumbent upon us as games scholars to differentiate between structural gameplay analysis, which responds to the creative process of game design and therefore to the core gameplay, and thematic analysis of

games which speaks to a game's cultural character (Mäyrä 2008: 165). As a reflexive gamaturg and through thematic analysis, we can apply our knowledge and abilities to the reconstruction of videogames into the domains of culture, philosophy, and activism. My project here in this final chapter is to implement reflexive gamaturgy as a multitextual conceptual tool to thematically analyze *The Pipeline Pinball Energy Thrillride Game* with an aim of illuminating ways that firstly frame videogames as an exercise in problem solving, and secondly extract a pertinent philosophy and a new mandate for living.

REFLEXIVITY AND MULTITEXTUALITY

According to the educational research approach of Usher, reflexivity, like research, is a process of “finding out about the world” (Scott and Usher, 1996: 39). Reflexivity, however, also uncovers the way meanings are discursively constructed or, in other words, a way of passing a topic over a wide range of disciplines. It also foregrounds autobiographical “lived experience” within a flow of reason and philosophy, and is significant on an epistemic or knowledge-building level because it has the potential to switch focus from the individual to the communities within which the research and practice is located.

In this chapter, the multitextuality of reflexive gamaturgy is imposed, but not in a direct or obvious way. Instead, it is woven throughout, primarily as a way of provoking questions that lead to a construction of ideas through the application of philosophical and pedagogical perspectives. To clarify reflexive multitextuality, here is a brief description of its component texts:

Pretext: Rather than referring to subterfuge or evasion, as it is commonly defined, I am using pre-text, as described by Usher, as “that which is before the text” (Scott and Usher, 1996: 46). This coincides with Webster's Dictionary definition of “anything chosen as the subject of an argument, literary composition, or the like.” I have extended this into an exploration of the way history and past events function as a “pretext” for a videogame's theme or topic.

Context: As I describe it, context integrates this historical pretext with personal moral perspectives and values and also links in with current affairs and the global situation.

Subtext: Subtext is the political, economic, or environmental reality of what lies beneath the metaphors and allegories of a social issue game or other activist works of art.

Intertext: As Usher describes it, intertext is the “interlacings and resonances with other texts” (Usher 47). I have come to recognize that exploring a work intertextually is a powerful resource for combining autobiography with philosophy as way of recovering meanings and building understanding. It is also a powerful way of connecting history, current affairs, and social issue realities with community and the future, in other words, amalgamating the other texts into meta-cognitive ideological awareness.

PRETEXT AND THE RALLYING CRY

Someday, historians will mark the first two decades of this century as the dawn of a new energy era.

— Peter Tertzakian, *A Thousand Barrels a Second*

In *A Thousand Barrels a Second: The Coming Oil Break Point and the Challenges Facing an Energy Dependent World*, economist Peter Tertzakian points to fundamental historical precedents that have created entrenched pathways for world energy needs and the difficult-to-displace standards that limit the options available to us today. He traces the cyclical periods that we have endured throughout history and cites the decline of the whale oil industry as a foreshadowing of what we might expect in our new reality of crude oil dependency. Tertzankian frames this phenomenon as an energy evolution cycle that provokes a “break point” or a collection of events that leads to a realization that “the fuel we are relying on is disadvantaged, not just in a cyclical or seasonal sense but permanently” (Tertzakian, 2006: 146). With this in mind, and considering that the eventual resolution of any energy cycle is a rebalancing of forces, patterns emerge between our evolving energy needs of demand, volatile tensions and pressure in supply chains and factors that may ultimately provide incentives for innovation and change.

In terms of evolution and human behaviour, Howard Bloom sees these cyclical patterns of demand, supply, and eventual rebalancing mirrored in a process of memetic evolution and complex adaptive systems. He states that there are at least three major

stages: diversity generation, conformity enforcement, and resource shifting. One might accept Terra's objectives in *Spies in the Oilsands*, for example, as an extreme example of significant diversity generation, Tarzana's objective as massive conformity enforcement and the pinball game as a simulation of long overdue resource shifting. Len Bruton points out, following Bloom, that value- social- and cultural-memes can be very deeply held, sometimes for good reasons, and that these types of memes do not mutate easily. He says, "Clearly, conformity enforcement often involves conflicts of interest among the powerful and massive efforts to enforce conformity for that reason" (Bruton 2004).



Figure 50: The "Rallying Cry" from *The Pipeline Pinball Energy Thrill Ride Game*, as seen as screens from the design video.

As Tertzakian asserts, when a break point is reached in an energy cycle, and we realize the fuel we are relying on is permanently disadvantaged, as happened in the 19th century with whale oil and significantly but less dramatically in the 1970s energy crisis, we reach a realization that we have to make a significant change. Tertzakian calls this realization the "Rallying Cry." To my mind, this analysis parallels Bloom's description of resource shifters completing the "vertical leap" or synergy of problem-solving caused by the conflict between diversity generators and the conformity enforcers in a collective learning machine (Tertzakian, 2006: 146; Bloom, 2000: 47).

The Pipeline Pinball Energy Thrill Ride Game contains a rallying cry of this sort, exemplified by the game's voiceover sound effects, seen above in Figure 50 as conceptual screens from the design video. The pretext of Pipeline Pinball, as I dramatized in the introduction to this thesis, was a grade-school social studies paper about "The Tarsands" that I wrote back when the price of oil was \$2.79 a barrel. Etched in my memory is the time when my interview subject, Dr. William Gallup, scooped some partially refined bitumen from a bucket under his desk and lit it on fire in the palm of his hand. Since then,

I have seen Calgary grow in population almost ten-fold, have sold a house back to the bank in the 1980s for a dollar when energy prices plummeted, and have watched curiously from the window of my downtown office when the PanCanadian Petroleum signage changed to PanCanadian Energy. I am still puzzling over whether Gwyn Morgan, former President and CEO of PanCanadian, now Encana, sensed the coming breaking point when he praised *A Thousand Barrels a Second*. His dust-jacket testimonial reads “Peter Tertzakian’s analysis of world oil is a fascinating reminder that history often foretells the major turning points of the future.” Do so-called Energy Companies have a rallying cry written into future projections that will generate diversity toward a painless rebalancing of energy supplies? Or will the new world price of \$140 a barrel, teamed with shareholder pressure for profits at all costs, constitute a missed opportunity?

CONTEXT AND THE SCORING SYSTEM

*Man’s use of petroleum is a unique event in human history,
a unique event in biological history. It is non-repetitive, a blip in
the span of time.*

— M. King Hubbert, *Speech to the American Petroleum Industry, 1956*

To bring *Pipeline Pinball* into context with the contemporary world, the world price of oil is seen to have significant effect on the game’s various stages. As mentioned above, in the early 1970s and at a time when further and faster in our bigger, better gas guzzlers was *de rigueur*, the price of crude oil was \$2.70 per barrel, equivalent to about \$15 in 2008 prices. Oil prices waxed and waned between 1970 and 2004 due to wars, revolutions and embargoes, price controls, and OPEC quotas.

Pipeline Pinball was just a gleam in my eye at the start of the case study projects in 2004, world price per barrel of oil was climbing towards \$40 a barrel, a benchmark in terms of viability of extraction of the Alberta oilsands. At the time, the gamaturgical conflict and social issue had to do with a paradox of economic risk, as seen in Figure 51.

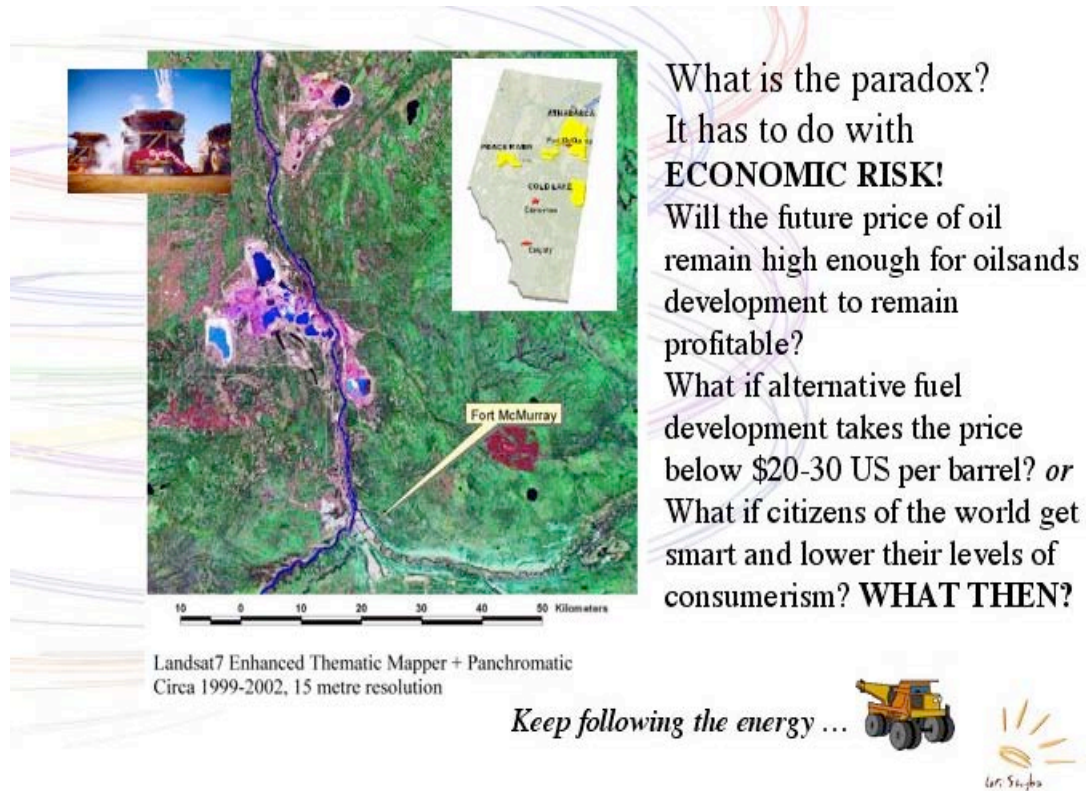


Figure 51: When the project started in 2004 and oil was skyrocketing to \$40 US a barrel, there was still a question of whether the oilsands would be economically viable if prices declined.

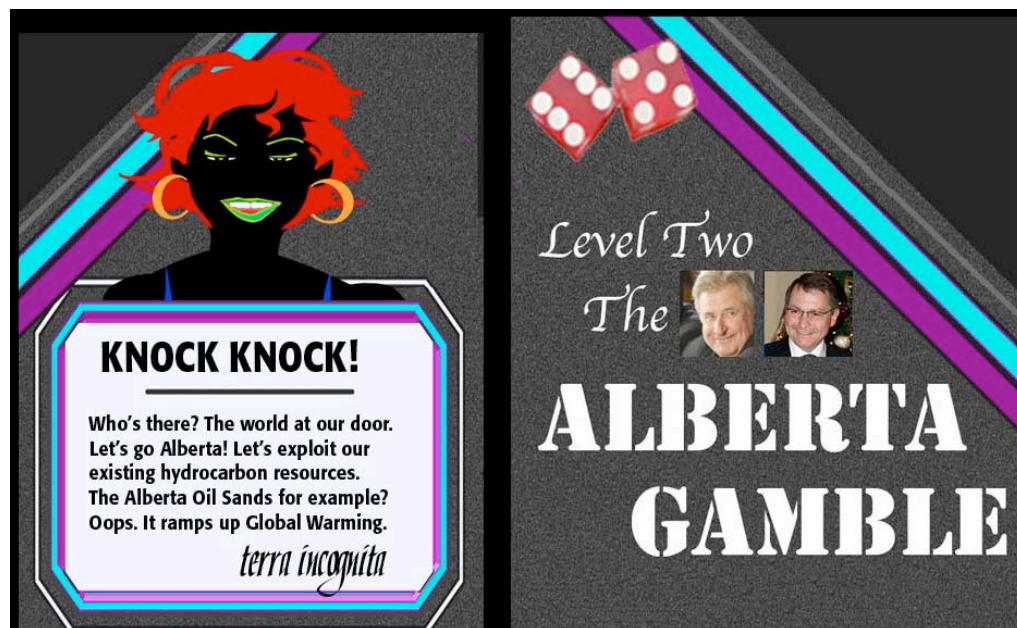


Figure 52: Pinball apron graphics displaying how, by 2007, economic risk was not the main conflict and the world was knocking even more loudly at our door.

By 2007, when the game was ready to hit the stage in *Spies in the Oilsands*, the price of oil had more than doubled, climbing toward \$80 a barrel and the Alberta Gamble was starting to be seen more as a game of chance with the environment than one of economic variables.

The scoring system of *Pipeline Pinball* abstracts the dynamics of economic and environmental risk and contextualizes it into the language of art and play. Given that both art and play are ways to “tune the world in around us” and “ways to bring meaning to ourselves and others,” how do the scoring systems distill and abstract meanings that bring about a clearer understanding of our world’s energy resources?



Figure 53: The Level One gametable and the interdependent scoring system of fossil fuel points versus alternative fuel points.



Figure 54: The Level Two gametable and the relational scoring system of world demand that automatically and inextricably tallies up carbon emission points.

Level One's dual and interdependent systems of fossil fuels versus alternative fuels gives us a chance to target either system, giving us a choice of taking a moral stand about whose side were on right from the onset. However, accidents and mistakes happen. We might not play well enough to get the energy ball into the pipeline chutes to even activate the alternative fuel targets. Do we give up on alternatives because gaining fossil fuels points is just so much easier? Or do we work at improving our skills?

Ironically, Level Two poses a more complex dilemma where the scoring system of global demand and carbon dioxide emissions are relationally and inextricably linked; as world demand increases, so does, by implication, global warming. No matter how skillfully one plays, rolling the energy ball around easily takes out world flag popup targets, satisfying the petroleum demands of major oil consuming countries. In the meantime and in a ritual of irresponsible behaviour, toxins are emitted into the environment as a non-variable cost of doing business. What is the lesson here? Intriguingly, as a "Joker" who could, if I so desired, reprogram the game, my solution would be to try breaking the dependency code of the scoring systems; literally program an algorithmic variation that might open discussion about better environmental safeguards without having to shut down production. After all, to paraphrase Premier Ed Stelmach feelings about the Alberta oilsands development, "We can just shut 'er down, folks."

In *Chris Crawford on Interactive Storytelling*, Crawford comments that scoring systems in games and sports "have always been constrained by the computational weaknesses of the people doing the scoring," and reminds us that well-designed scoring systems should provide strong motivations for players to behave in a manner consistent with their aesthetic goals (Crawford, 2005: 212). I disagree with this stance and believe that as artistic abstractions meant to construct meanings, serious social issue games should accommodate experimentation to try out the other "side" of the story. As with the Forum Theatre of Augusto Boal, taking this approach gives one a chance to jump in and become immersed in a narrative action that could eventually transfer into real-life solutions.

SUBTEXT, METAPHOR, AND HUMOUR

*Metaphor, in its broadest sense as translation, includes all symbolic languages
.... It includes all the Arts which represent — rather than reproduce — realities.
— Augusto Boal. The Aesthetics of the Oppressed*

Subtext, as I have described it for the purpose of reflexive gamaturgy, is the political, economic, or environmental reality of what lies beneath the metaphors and allegories of a social issue game or other activist work of art. *Pipeline Pinball* combines Augusto Boal's ideas of metaphor being a symbolic language with Fiske's and Hartley's semiotic framework that enables the unravelling of meaning, as I described in Chapter 4, the result is what Dietrich Dörner might observe as a case of computer technology allowing us to simulate complex situations that might help us develop a greater sensitivity to reality. In their book *Television Culture*, Fiske and Hartley illustrate the multileveled cultural codes of electronic media as being ways to observe signs of reality as they are encoded electronically into representations, and then organized and projected into ideological codes such as those of individualism, class, patriarchy, race, materialism, capitalism, and so on. These ideological codes assist in "producing a congruent and coherent set of meanings that constitute the common sense of a society" (Fiske and Hartley, 1987: 6).



Figure 55: Level One icons as metaphorical representation. Drawings, Rich Theroux.

As this relates to Level One of *Pipeline Pinball*, the nuclear icon on the bumper in Figure 55a signifies the reality of both a cost-effective way to heat the water to extract oil out of the bitumen in the oilsands, and a viable alternative energy fuel. Through an electronic encoding, it represents a means to score both alternative energy points and fossil fuel points; it is one of only two scoring devices to have dual status. In Figure 55b, the

Alberta Wild Rose bumper, a symbolic flower of Alberta, likewise allows for alternative points and fossil fuel points, representing the duality of popular opinion about what direction to follow on the issue. In Figure 55c, the pipeline action shot is represented along with an icon of a caribou, one of the animal species threatened by oilsands and pipeline development in the north. The combination of these icons form a directive for positive action, since there is, significantly, an innate bias towards the accumulation of alternative energy points. The final icon, that of Figure 55d, represents the reality of the question on many Albertans' minds: "We're Rich Now What?" The reality of the situation is that the oilsands could turn Alberta into another Saudi Arabia or Kuwait, with oil riches beyond compare. This question moves us into an ideological conundrum. As a foreshadowing of the intertextual concern of this study, the question is, "Is there a way to reap rewards and still work toward global wellbeing?"



Figure 56: Level Two icons as metaphorical representation.

As metaphor and representation relates to Level Two of *Pipeline Pinball*, strategically, in Figure 56a, the nuclear bumpers re-appear, only this time in juxtaposition with the graphic representation of the toxic tailings ponds. The reality is that if nuclear energy were used as an alternative to fossil fuels, the tailings ponds and the multitudes of associated environmental horrors would cease to grow, but if used as a cost-effective way to heat water to extract oil out of the bitumen in lieu of using natural gas, the tailings ponds would not be affected. The bumpers in Figures 56b and 56c indicate the escalating world demand points and associated carbon emissions associated with North American stock exchanges. In the final graphic, Figure 56d, OPEC, the Organization of Petroleum Exporting Countries, is shown to be a powerful factor in the reality of world energy consumption and distribution. This graphic is another foreshadowing of the intertextual

concern of this study in which the operative question is “How do world oil prices, as interconnected with other elements of the game, compound social problems?”

As is the case with *The Booze Cruise*, detailed in Chapter 4, an important concept of *Pipeline Pinball* is the power of humour as a tool of subversion. This helps bring meaning to Pipeline Pinball through the allegorical treatment of one subject under the guise of another. Consider, for example, the Level One voiceover that subverts social norms with assertive advice for the player to “Generate Energy Diversity,” or the absurdity of the overall gameplay in which non-strategic play brings faster rewards, albeit in fossil fuels, than playing strategically does. As the artist behind this work and a “Joker” in the sense of being the creative gamaturg, I imbued innate values and chose my “camp.” The directive to generate energy diversity was an abstraction of my views, from Howard Bloom, that we need to spawn variety in the energy landscape, and the irony of the gameplay scoring strategy is that in order to shift resources or implement change, we have to be willing to commit to the task, exercise intelligence and tact, and see the “big picture.” Overall the lack of diversity and the status quo mindset of massive conformity enforcement drive up fossil fuel points but, as Tertzakian puts it, “As the pressure builds, we will soon wake up to the realization that the age of cheap, clean, easy-to obtain energy is rapidly coming to an end” (Tertzakian, 2006: xii).

It is significant to remember that *Pipeline Pinball* was originally part of the dramatic action of fictional characters Larry and Tarzana killing time while getting intimate with each other in an oil wellsite spy shack. Their song which goes along with the action of the game allegorically represents their escape from the world of conventional oil drilling to the motherlode of the Alberta oilsands. To the tune of *Radar Love* they sing

Ball rounds to the top just let it go free, then down Alaska pipeline to MacKenzie
Take Alberta Clipper to Fort McMurray. Nice shot. Extra points. Look at me!
Up through the Cree land to the oozing bitumen.
Longer we hide up there, the more points we win.
We don’t need a drill bit at all.
We got a thing that’s called the Pipeline love.
We got a wave in the air. Pipeline love.

As mentioned in Chapter 4, activist art holds power to tune us into the world around us by spinning reality around into a metaphorical representation and then challenging us to bring meaning back through our own interpretation. Herein lies the secret at the finale of experiences such as *Pipeline Pinball* and other activist entertainments in which engagement in the construction and recovery of meaning is an active process, bubbling out foundational life skills and ideological values by flipping back the layers of irony.

INTERTEXT AND RE-EVALUATING THE GOOD LIFE

*If facts are the seeds that later produce knowledge and wisdom,
then the emotions and the impressions of the senses
are the fertile soil in which the seeds must grow.*

— Rachel Carson, *Silent Spring*

Exploring this work intertextuality through the interlacings and resonances with other texts has been a powerful resource for combining autobiography with philosophy in order to recover meanings and build understanding. It has been also a powerful way to connect history, current affairs, and social issue realities with community and with the future. Whether it is called an ideology, a philosophy, a metanarrative, or a mandate for the future, the rallying cry that emanates from the *Pipeline Pinball* phenomena brings into question our values about The Good Life. The energy of this exploration continues now through a final frolic of imagination, emotion, and impressions of the senses so that we can gain an understanding of, as Rachel Carson offers in the epigraph above, “the fertile soil in which the seeds must grow” (Carson, 1962).

There is a level of the *Pipeline Pinball* game that has not been made yet. It is called The Global Wellbeing level and has been brought about as a conceptual creation through conversation with audience and players in Calgary, Alberta, and at conferences around the world. On one occasion glimpses of this imaginary level of play came about as a poster presentation at the “Culture, Creativity, and Interaction Workshop,” part of “HCI Engage!” in London, U.K., in September, 2006.

I had just recently completed the *Pipeline Pinball* CCIT research performance, as described in Chapter 7, and a tertiary part of the conversation with that audience, (initiated, incidentally, by the participants themselves) was about what kind of gamplay

narrative and visual icons, graphics, bumpers should be represented in a “next level” of the game. From this Calgary audience I had mostly heard a wish-list of other alternative fuels, from ocean wave energy and algae farms, to French-fry ethanol and turkey dropping methane. However, the wish-list in London was profoundly different; as suggested by the participants at “HCI Engage!” in London, the pipeline chutes became metaphors for “Peace, Love, and Cooperation,” and the bumpers that formerly represented barrels of oil became “Greenpeace Activists in the Rainforests.” There was a gameboard area that was designated as “Primitive Simplicity” and a motto of “Closer, Not Faster” was offered as an alternative to the frantic achievement of fuel points, whether they were fossil fuel points or alternative fuel points.

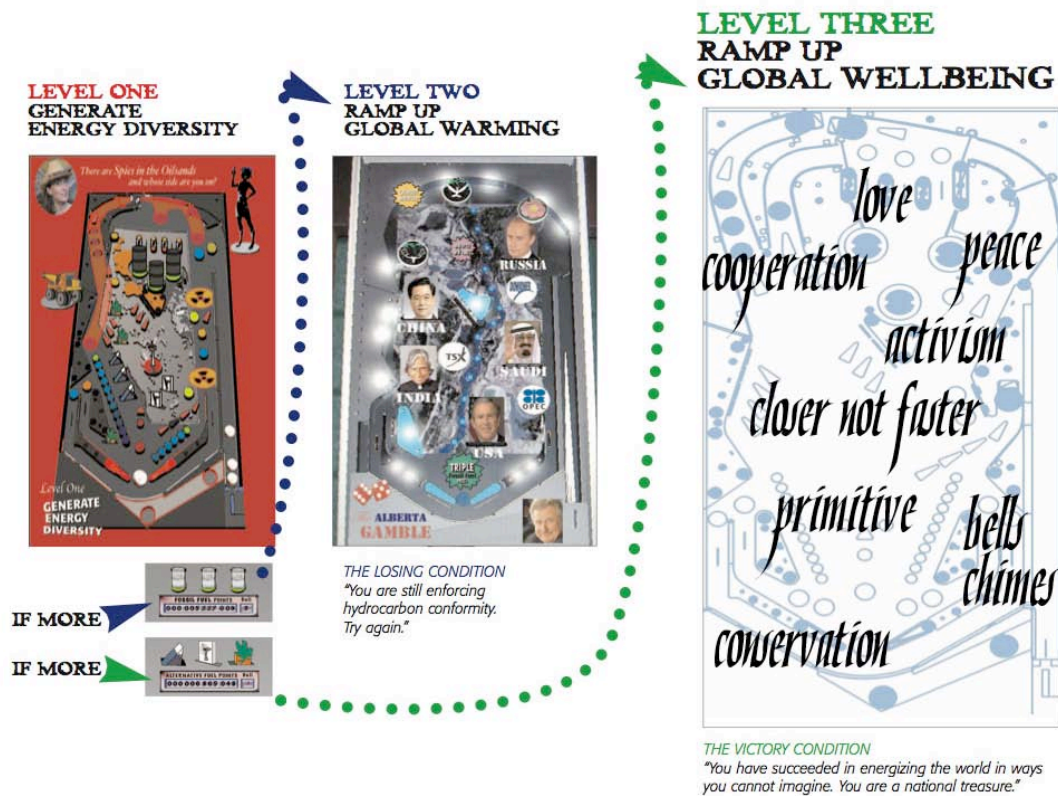


Figure 57: A detail from the poster presented at the Culture, Creativity and Interaction Workshop, HCI Engage! Conference, London, U.K.

At the CCIT presentation in April 2006, there had been a particularly enlightened and idealistic young participant, an artist who suggested that if there were a Level Three, it should be “an Alternative and Universal Energy game that is implied by a harmonious

mandala with beautiful chimes and tones rather than bells and buzzers. A beautiful new world; a Shangri-La.” The Londoners picked up on that idea upon my unraveling of the vision and imagined a gameplay scenario in which an energy ball would languish through icons representing a natural environment of greenery and soft harmonic sound; bringing messages of conservation and of discovering a balance towards global wellbeing. The intertext of this study became, once again, a creative process exploring the creative gamatugical texts of imagination, sound, image, and emotion.

Profoundly, this experience in London was the beginning of my personal re-examination of The Good Life in terms of my obligation to the environment and ways I might be activated to help bring safety and security to our world. These values are reflected in the environmental ethics of Rachel Carson, Al Gore, and David Suzuki. Earlier, these values were espoused by Aldo Leopold, who pictured humans as belonging to, rather than owning the biotic community and Arne Naess, who advocated forms of identification with the non-human world and ecofeminism (*Cambridge Dictionary of Philosophy*: 268).

Through this multitextual investigation, I have become convinced that an environmental philosophy that articulates a concern and privileges beliefs in the intrinsic value of the natural world will be a very important factor in guiding us into restructuring of our ideals of The Good Life. But a factor that will be equally influential, if not even more so, is the scoring system of the hypothetical Level 3 of Global Wellbeing in which the price per barrel of oil, and consequently the price per litre of petrol at the pump, automatically ramps up our reduction in consumerism, a rallying cry for “Closer Not Faster,” and a recognition of the benefits of a more primitive simplicity.



This chapter has applied the principles of multi-textual reflexive gamaturgy to bring clarity to *Pipeline Pinball* as a way that serious videogames can illuminate ideas about social justice ways, and as a way that games can be framed as an exercise in problem solving. By observing both the game and its underlying content in terms of pretext, context, subtext, and intertext, reflexive gamaturgy can be used to deliver new perspectives in the study of games.

Looking back now at Part Three, I come to realize that it is still about the underlying concepts informed by the auteurs and creative forces identified in Part One. Sacred play, ritual's liminal and liminoid phases, multi-modal realms of sensual and critical dramaturgy, and the artistic perspectives on complex problem solving in social-issue videogames all emerged as being valuable in the discoveries that came about in the techniques of gamaturgy and its ability to extract meanings from serious videogames. Critical here is an acknowledgement that there is a phenomenological affinity between play, embodiment, self-awareness, and confidence, and that affinity consequently assumes the form of an interaction.

The conclusion of this work will now aim to evaluate the extent to which my research questions have been answered in the substantive, theoretical, and methodological domains. It also includes a look to the future to see how these investigations can go beyond fun and games.

FINAL THOUGHTS AND BEYOND FUN AND GAMES

When I launched this journey of research, I did not set up exactly what I expected to find by creating “Art that Mouths Off” about the Alberta oilsands; I just knew that I was willing to take a leap of faith. Would there be something beyond the fun and games of it all besides popcorn to clean up from under the seats? Now that the time has come to express final thoughts, I am comfortable in asserting the claim that I have discovered ways that interactive theatre and serious videogames can enable us to better understand urgent social issues.

Pragmatically, I have made sense of all this by following the energy of the relationships between my values, the actions that resulted from my living with those values, and the consequences. In this thesis I reviewed my inspirational forces, explored the systems and imagination behind the research design, and immersed myself in details — sometimes in joy, sometimes in pain — about the Plays and Games that made up the case studies of this thesis. By maintaining a sense of humour and a spirit of adventure, I have managed to combine interactive theatre, serious videogames, and world energy resources into an array of meanings on several levels. Some meanings have come from reflecting on the extent to which I have achieved my methodological, substantive, and theoretical goals; other insights that have bubbled up lie beyond the fun and games.

METHODOLOGICAL CONTRIBUTIONS

Methodologically, my aim was to uncover knowledge-building models that would enable recovery of meaning from this interdisciplinary study, as art, as theory, and as methods for further discoveries.

- I found that sketching out a visual, temporal allegory called “Phronetic Pinball,” seen in Figure 17 of Chapter 4, was a way of staying free and fluid in imaginative thinking when creating and writing up this study, especially in the face of the

interdisciplinarity of the knowledge and the variety of source materials. I innovated this method of inquiry by combining three elements: Aristotelian *phronesis*, an intellectual activity akin to common sense; the beliefs of Stephen Nachmanovich about childlike play and creative expression; and pinball gameplay which I had been exploring as a creative activity.

- I found a technique that enabled me to work through the individual iterations of the case studies without setting up positivistic expectations. This model was called “Experiments in Puzzle Solving,” seen in figure 18 of Chapter 4, and was based on Dietrich Dörner’s theories of complex action organization, in combination with Thomas Kuhn’s “Puzzle Solving in Normal Science” and my own instincts about what I needed to do in order to recover meaning from artistic exploits.
- I found that the third model, an iterative design system called the “Experiential Cycle of Reflection and Understanding,” seen in figure 19 of Chapter 4, was the most vital part of recovering meanings because it gave me permission to see things differently. Based on Hans-Georg Gadamer’s hermeneutic cycle combined with Aristotelian principles of ethics and moral competence, this method also encompassed the pedagogy and practice of Augusto Boal’s Joker as a humorous but profoundly accurate mediator of collective wisdom.

The goal of this thesis being one of understanding was greatly influenced by these methods of inquiry design and their processes in the pursuit of knowledge. The interdisciplinarity of the inquiry fueled the synergies that extruded patterns of meanings. These led to methods for further discoveries, notably the new theory and techniques of multitextual creative and reflexive gamaturgy.

SUBSTANTIVE CONTRIBUTIONS

Substantively, my aim was to explore and document the process by which one can create entertainments that perform a particular task, and to analyze how that process can be affected by creative impulses introduced by an active audience. In this case the entertainments were *Spies* and *Pipeline Pinball*.

- Further to Boal and Freire on the theatre side, and Crawford and Gee on the videogame side, it is clear to me that traditional Forum Theatre at a live performance venue has a strong connection with serious videogame play as a medium to rehearse reality without the risks and dangers that participants might encounter in real life. These art forms are both well-positioned to bring us closer to conditions of safety in which safety is a freedom from physical or psychological danger, risk, or injury. They can also activate social change by virtue of player agency and the interactivity of non-linear story narrative.
- Key to the success of these synergies of live and digital games in performance mode is the retention of flexibility and the element of chance. Otherwise the interactivity is contrived and fraudulent. Gameplay with an active participating audience is key to the hybridity of this new art form.
- There are also synergies that exist between interactive theatre, (especially Forum Theatre) and videogames (especially social issue serious games) that allow these forms to share a performance stage. This synergy, when observed from the view of being an artistic “form” reinforces the assertion that they connect as both “Theatre in a Game,” and “Game in the Theatre.” When viewed as artistic “content” from a thematic perspective, a major factor is the common purpose of moral vision and social justice.
- As considerations of both form and content, the interconnections between Forum Theatre and social issue videogames can be attributed to the liminality of ritual, the spirit of fun and games, and, in many cases, humour as subversion. The improvisational drama motto of “receiving, releasing, and returning” also underlines the rapport; in creative mode and in player cognitive mode.
- I discovered that the research design method of Phronetic Pinball, influenced by the thoughts and teachings of Aristotle, Stanislavsky, Dörner, Gadamer and others, provides a valuable method of initiating emotional recall. This method provided positive guidance in transcribing the emotions of the case studies into words. As an innovation of method for interpretive inquiry, Phronetic Pinball could, in my opinion, be re-implemented into further work as an implicit, playful reality model for creativity for myself and for others. It could even be made into a playable serious game about imagination, freedom, and knowledge building.

- Iterative design, as a part of the “Experiential Cycle of Reflection and Understanding” can provide a safety net for artists who need to pick themselves up and dust themselves off for another attempt at a presumably failed attempt. This is something artists can take from science because in normal science, a failed experiment is a good reason to implement a re-evaluation and to try again.
- As for the effect of creative impulses introduced by an active audience, the dialogue that ensued after each round of case studies brought about profound iterative changes. Tied in with the ideas of Howard Bloom and Len Bruton about value- social- and cultural memes, conformity enforcement, diversity generating, and resource shifting, the reaction of the active audience is a big part of what takes this work beyond fun and games.

THEORETICAL CONTRIBUTIONS

My theoretical aims were to define significant ways that interactive, activist theatre might provide a new form of analysis for social issue games, to seek out patterns of interconnected ideas and attitudes, and to advance theories about how we might make sense of the complex problem of our world and its energy resources.

- I coined the word “gamaturgy” as a play on “dramaturgy.” I discovered that creative gamaturgy, from dramaturgy and ritual, is a way of creating experiential interactions and constructing meanings in the design and creation of videogames. As for the aim of finding a new form of thematic analysis for social issue games, I found reflexive gamaturgy is an effective way of recovering meanings from games as a multitextual analysis. These new resources for game-making and game studies are derived from theatre studies of Brecht, Artaud, Gambaro, Barba, Boal, educational and cognitive theory of Usher and Dörner, media studies of McLuhan, Fiske and Hartley, and game studies of Mäyrä, Crawford, Gee, and others.
- I found that drama games can be an effective way to plan plot escalations and branching opportunities in videogames, and especially role-playing games. They can also help us examine personal values and belief systems to discover the

strength of our ethical perspective and moral stance. These illuminations were helpful in formulating the techniques and methodology of creative gamaturgy.

- I found that social issue games, like other activist art, can tune us in to the world around us. In the realm of creative gamaturgy, we feel and we create. In the realm of reflexive gamaturgy, we reflect and we think critically. In both realms, we draw nutrient energy from politics, our personal philosophy, our values, ethics, and morality. Games can help define the things we believe in and can amplify our ethical consciousness by provoking us to take action.

As far as ways of advancing theories about how we might make sense of the complex problem of our world and its energy resources, that's where, in my estimation, this research adventure goes beyond fun and games.

THE MAGIC BULLET

Anyone, or any company, purporting to have a magic bullet today that solves all our energy problems (as rock oil did for whale oil) should be viewed with a high degree of skepticism.

— Peter Tertzakian, *A Thousand Barrels a Second*

In the introduction to this thesis, I described how I strode out on stage in a solo performance of *Spies in the Oilsands*, declared I was compelled to understand the issue of The Alberta Oilsands, and asked “Whose side am I on? Terra the eco-zealot? Or Tarzana the oil-slut?” The journey of this work, greatly influenced by an active audience in many guises, has made me realize that there are solutions to this that have emerged as glimmers of truth and flashes of insights and I knew then, as I know even better now, that what is at stake is what we know of as The Good Life.

In *A Thousand Barrels a Second*, written in 2006 when the world price of oil was \$70 a barrel, author Peter Tertzakian issued a warning, as seen in the epigraph above, that anyone claiming to have a magic bullet today that solves all our energy problems should be viewed with skepticism. Some may squint at me skeptically, but I believe that the magic bullet has been fired and is careening towards its monumental impact. The action of this hurling bullet is the scoring system of the Global Wellbeing level of *Pipeline*

Pinball, as described in Chapter 10, oil prices reaching twice the level of what they were in 2006, and a critical mass of both conformity enforcers and diversity generators who are poised to change the trends due to skyrocketing oil prices.

Through the course of this study I became personally convinced that an environmental philosophy articulating a concern and privileging beliefs in the value of the natural world is critical as a guide to restructuring our ideals about The Good Life and what it is to be “prosperous” in our lives. But a factor that I argue will be equally or more influential is seen in the scoring system of the hypothetical Global Wellbeing level of *Pipeline Pinball* in which the price per barrel of oil, and consequently the price per litre of petrol at the gas pump, dynamically reduces points in energy consumption. That scoring system is the magic bullet, reflecting the mandate of “Closer Not Faster” and a recognition of the benefits of a simpler existence. Why might this new way of living prevail? Because of our embracing lofty ideals in environmental ethics? Partly, perhaps, but far from entirely. Rather, I feel that this solution is the magic bullet because this scoring system based on oil prices dynamically reducing energy consumption parallels the reality currently hitting our global community as world oil prices are reaching \$130 US a barrel. The rally cry is that it hits home where it really counts — right in our pocketbooks. Whether on Terra’s side of tree hugging diversity generators or Tarzana’s side of redneck oil-worker conformity enforcers, The Good Life, as it relates to our prosperity, is poised for change. As a collective community, we cannot afford the energy costs associated with living in over-sized accommodations, driving farther and faster, and eating foods flown in from exotic lands, as we have come to feel is our birthright.

In the 1960s, Thomas Kuhn found that novelties of discoveries and anomalies within previous facts and theories can bring about paradigm shifts that introduce new ways of thinking. By harnessing the energy of these thoughts and visualizing the practical consequences of the Play and Games of this study, I assert that an impending paradigm shift is poised to make a fundamental change to the way The Good Life is lived. From the lessons of *Spies* and *Pinball* we need to change the amount of oil we use for gasoline; not only stopping the practice of idling our trucks but making a big push for hybrids and electrical cars. On a local level, we need to rethink mass distribution of consumer products; curtail flying in crates of oranges and building solar greenhouses. On a global

level, we need to work along with India, China, Brazil, and other developing countries to avoid the road we went down with our single energy dependence and our addiction to oil.

Why don't we make what we have last longer? If we can cut our daily oil use by at least 50 per cent, that could feasibly extend the use of oil throughout the century. The paradigm shift, as defined in an allegory in keeping with the spirit of this work, would occur in the celebratory moment when Peter Tertzakian could re-name an upcoming edition of his book about the challenges facing an energy dependent world, *Five Hundred Barrels a Second* ... or even less. *Two Hundred*, or even, *One Hundred Barrels a Second* might even more accurately reflect the other necessary part of the solution — a more holistic understanding of collective value systems and of the role of human life among all life systems. The arts, including interactive media and games, have an important role in achieving that understanding because arts practice can take technology and science into contexts that might not otherwise be visited.



In the 1920s, pragmatist John Dewey claimed the meaning of a proposed idea can be found in the practical consequences of its acceptance, and that impractical ideas should be rejected. Is it frivolous to think that the experience and beliefs that have come from this study can create a framework for action? Not if we are willing to find a new balance and rethink what it means to live The Good Life. As a philosophic expansion, that's what we can look forward to beyond the fun and games.

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All art and design, Lori Shyba, unless otherwise indicated.

SPIES IN THE OILPATCH

by Lori Shyba



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ALERT
This is
a work in
progress
and not
meant for
general
circulation

SPIES *in* *the* OILPATCH

by Lori Shyba



An "Interactive Performance Media" Cabaret

Version, April 2006



“Opening up possibilities between digital games and performative interaction.”

“Looking for a way to tune people in to what’s going on around us.”

SUMMARY

“SPIES IN THE OILPATCH”

An Interactive Performance Media Cabaret

Synopsis: Set in Japan, the Gulf of Finland, Northern B.C., and a Fort McMurray detox spa, *Spies in the Oilpatch* is the story of Terra Incognita, an amateur idealist who steals half-baked alternative energy secrets from oil company “fossil fools” in order to save the world. These fossil fools want to keep their secrets suppressed until they can exploit the Alberta Oilsands, so they conspire to kill her, but she kills them first. She is tormented by guilt so she confesses to her detox nurses and is dealt a series of public retribution from global courts.

Genre: Musical Comedy in the form of an Interactive Performance Media Cabaret. “Interactive Performance Media,” as it is defined it for this production, is a computer-mediated, hybrid art form that combines live performance (theatre) and screen delivered imaging and sound design (cinema), with interactive games, both live games and computer games.

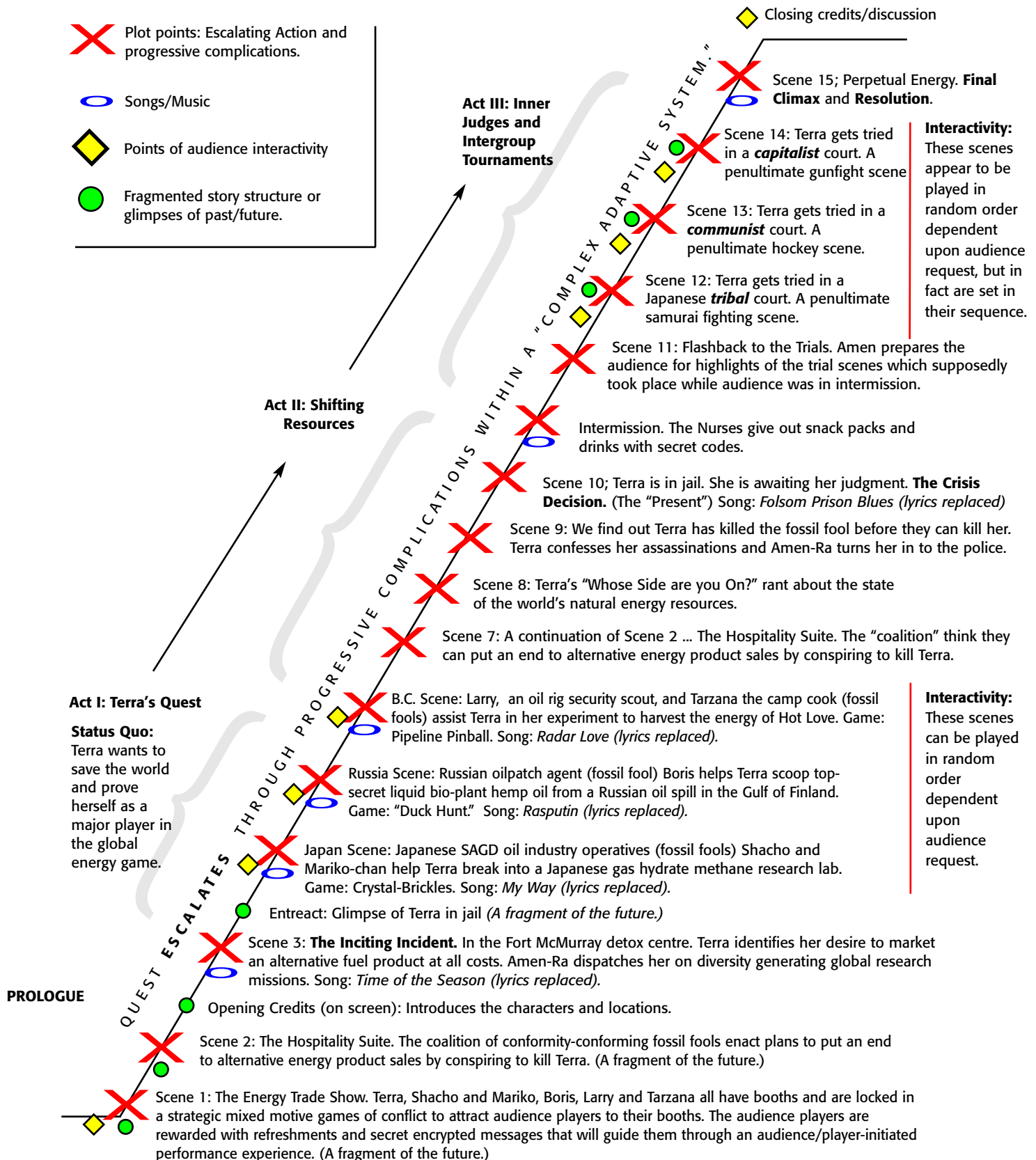
Research Objective: The aim of this PhD research in the Interdisciplinary Graduate Program at the University of Calgary is to experiment with innovative ways that computer-mediated theatre art and interactive games can lead us to better understand urgent social and political issues. *Spies in the Oilpatch* offers a humorous message that we can’t afford to ignore alternative energy development while we exploit existing world hydrocarbon resources, such as the Alberta Oilsands, to their inevitable depletion. Among the larger research goals of *Spies* is to experiment with ways that theatre art and games can activate a clearer understanding of important economic and cultural matters; specifically, this work concerns our world’s energy resources, the economics of energy consumption and politics of production.

Spies in its Other Forms: As well as being a theatre art event, *Spies in the Oilpatch* is being developed as stand-alone computer games including “The Pipeline Pinball Energy Thrill Ride,” and as sequences of plot nodules that spotlight “gameplays” in interactive virtual reality environments.

Contact: Lori Shyba, lori.shyba@shaw.ca

Spies in the Oilpatch

Escalating Action Plotline Schematic



CHARACTERS

TERRA INCOGNITA, *An vivacious alternative-energy zealot and recovering substance-abuse addict in her late 20s.*

Owner/operator of TERRA Fuel Energy Inc.

DR. AMEN-RA, *An Egyptian in his 50s with several personas; owner/operator of an upscale detox spa, and the Egyptian Sun God.*

MARIKO: *A Japanese woman in her late 20s. Works for a Japanese SAG-D bitumen extraction research lab that is secretly developing gas hydrate methane fuel. In the courtroom scenes, Mariko reappears as a samurai tribal judge streamed in on video from the afterlife.*

SHACHO-SAN: *A Japanese corporate president in his 50s, MARIKO's boss. Shacho does not speak English very well. In the courtroom scenes, Shacho reappears with Mariko as a samurai tribal judge streamed in on video from the afterlife.*

BORIS: *A Russian blackmarket-trained energy industry entrepreneur in his 30s. He wheels and deals in nuclear power, operates a spy vessel, and runs Russky Financial Banking service, secretly developing hemp oil biodiesel products. In the courtroom scenes, Shacho reappears as a socialist judge streamed in on video from the afterlife.*

LARRY FOSSO: *President of Rattlesnake Security, a oilpatch security company. He is in his 30s and reappears as a capitalist judge from the afterlife. He and TARZANA accidentally discover the power of Hot Love. In the courtroom scenes, Larry reappears as a capitalist judge screamed in on video from the afterlife.*

TARZANA: *LARRY's sidekick. A brash, take-charge camp cook in her 40s. In the courtroom scenes, Tarzana reappears as a capitalist judge screamed in on video from the afterlife.*

THREE DETOX NURSES, *male or female. They reappear as courtroom assistants/warriors and TERRA Fuel telemarketers. They also function as scene-change crew.*

THE SETTING

The locations are:

- An energy trade show and hospitality suite
- An Egyptian-themed upscale detox spa in Fort McMurray
- A Japanese hotspring research facility
- A Russian spy speedboat in the Gulf of Finland
- A spy shack at a drilling rig in Northern British Columbia
- A jail cell at Longview Lockup
- A courtroom that adjusts to three systems of justice

INTERACTIVE MEDIA

The action takes place in “screen space,” in the form of computer monitor screens and a projection screen, and in “live performance space.” The screen space, represents prophecies, dreams, memories, and offers entry points for audience interactivity including computer games. The “real space” includes scripted dramatic performance acting (the “play”), and audience involvement (as a “theme park,” “trade show,” or “game show”).

THE MUSIC

The music, as it is written into this script draft, is comprised of familiar tunes so that the reader can “sing along” to extract the cadence and rhythm, and, consequently, the meaning of the songs. If brought to the stage in live performance, these “hit tunes” could be substituted with original compositions.

Spies in the Oilpatch: The Interactive Performance Media Event

Scene One: House Opens in the Trade Show

As the house opens

The projection on the back scrim displays signage for the “2007 Energy Showcase.”

Within the live space, four trade-show booths are set up — MARIKO, BORIS, LARRY, and TERRA all have booths displaying their products.

TARZANA and SHACHO circulate among the incoming audience, writing out name tags and inviting them to attend the show free of charge. They’re encouraged to collect drink tickets for intermission from the booths and are given programs. Larry’s booth has most tickets to give out. Boris next, and Mariko has fewest.

SHACHO-SAN and MARIKO’s little booth, the Steam Assisted Gravity Drainage Consortium (SAG-D) contains factual information about SAG-D, the motto of which is “Penetrating oil bearing strata since 2005.” When spoken to, MARIKO politely provides more-or-less factual details about the company’s exploitive Oilsands ventures. Their booth has sembei crackers as give-always and drink tickets for intermission. The drink ticket has code on it that will affect events later in the show. When given a drink ticket, they’re told “I’m glad you’re on my side.” MARIKO steals little sips from a hidden martini.

LARRY and TARZANA’s booth for Rattlesnake Security contains information about the security systems gadgets Rattlesnake sells the motto of which is “The biggest bite for your buck.” When spoken to, LARRY has a prepared trade-show speech about more-or-less factual details about his company’s Oilsands security potential. He gives away little bags of chips and drink tickets for intermission. The drink ticket has code on it that will affect events later in the show. When given a drink ticket, they’re told “I’m glad you’re on my side.”

TERRA's booth is much bigger and classier than the other booths and is magnificent in comparison. She has a big computer monitor with a flashy video and is mixing non-alcoholic martinis that she calls "The Terra Fuel Solution." She is raffling a really great prize and her video is professionally produced with all the vast expense shots promised in the temporally fragmented scene one. It is played out to the tune of "Time of the Season." Dressed like a typical Calgary booth bunny in straw cowboy hat and revealing black tank top, she is friendly and full of confidence and spark and when spoken to, TERRA provides more-or-less factual details about TERRA Fuel's alternative energy's potential to save the world. She is drinking a big bottle of mineral water but she offers the audience "Peaceful Solution" martinis. She lets people know she's "on the wagon."

After a few minutes of milling around, TARZANA and SHACHO usher the audience to their seats and LARRY catches the eye of Mariko/Shacho, and Boris and signals them to follow him into the Schmooze Zone.

Houselights dim.

Scene Two: Conspiracy in the Hospitality Suite

As MARIKO and TARZANA usher the audience to their seats, lights come up in the “hospitality suite” a corner of the trade show floor where the fossil fools are gathering. We see MARIKO, BORIS, and LARRY hurrying into the space. We can still see TERRA in the trade show space bidding customers good-bye, turning off her video equipment, slowly dismantling her booth and polishing the martini glasses. As the audience moves into place, LARRY moves over to the bar and pours five whiskey shooters and lines them up. MARIKO apologetically puts down her martini, approaches LARRY and hands him her card.

LARRY: *(Looks at her card and passes one to her.)* Thank you for getting together with us, Mariko Yama ...

MARIKO: *(Takes his card and bows)* Mariko Yamakawa, Steam Assisted Gravity Drainage Laboratory, Japan. This is my company president Mr. Shacho.

SHACHO: *(Nods his head and grunts a greeting)* Cooperation is Japanese way. Boku wa?

LARRY: Larry Fosso. Rattlesnake Security. And this is Tarzana *(Hands out his card.)*

TARZANA lumbers back and rubs up against LARRY.

TARZANA: *(To Larry)* Bang on. Bargaining strength.

BORIS: *(Steps forward and trades cards with SHACHO and LARRY)* Boris Goofinoff, Russky Development Bank. Why you have called us here?

LARRY: *(Looking at his hand of cards)* Boris. Mariko. Shacho. We’ve been duped by that good fer nothin’ energy zealot and let’s face it, we have everything to lose.

Question for you all ... How do you feel about being ripped off by an amateur idealist? Humiliation?! In other words *(to THE OTHERS, slowly)* we’ll lose face if word gets out that we’ve exposed ... our secrets to Terra Incognita.

TARZANA: *(Backing up Larry)* More than “face” ... we’re loosing our ... *big payoffs* when she slices off a huge chunk of the energy pie!

SHACHO AND MARIKO: (*Gasping*) Arggh.

LARRY: Anyone else leak secrets to ... Terra Incognita?

BORIS: (*Growls*) Shliushka. That slut. She stole secrets from me too.

LARRY: It just gets worse, people. She's dangerous. She's exposed our soft little underbellies. She's gotta go.

(*Shouting to everyone*) Don't you see we've bungled this fucking thing? Did you see her customers at the show? She's stolen our secrets and she's going to put the whole bunch of us out of business.

I don't know about you but Rattlesnake Security is countin' on riding the gravy train up in the Alberta Oilsands for some time. People, whose side are you on?? We have to make her pay.

TARZANA *distributes the shooters.*

ALL: We have to make her pay. (*Freeze in tableau raising their shooter glasses*).

Opening Credits

The opening credits on the monitor screen resembles a James Bond graphic style, and shows a montage of oil and gas installations around the world, executive offices, a hotel.

Fade in, AMEN-RA's classy Egyptian-themed detox spa.

AMEN-RA in the inner spa, engaged in an activity of grooming the blue Egyptian wigs of the nurses. A mysterious light bathes the scene.

Juxtaposed with this, characters in the story are introduced amid their locations and are identified by character name and actor name.

The music, contained as a sound track on the film, is a bawdy Egyptian-sounding instrumental and vocal.

As the opening credits run on screen, the nurses, who double as stage crew, get the scene set for the detox spa.

Scene Three: The Manifesto

AMEN-RA steps forward and stands in a radiant light.

AMEN-RA: *(Slowly, to audience)* Much must happen before the light of perpetual energy falls into this story. *(Laughs)* Let me start from the beginning. *(An afterthought)* Oh. Where are my manners? Allow me to introduce myself. I am Amen-Ra. *(He steps back and points at his spa and Terra under the drier)* and this is where I welcome people to, shall we say, repair their bad habits?

Lights down on AMEN-RA and up on TERRA, an attractive woman in her late twenties who is seated in a styling chair salon under an Egyptian-designed drying helmet.

The monitor screen prints out "The Manifesto."

Annoying sound of the hair dryer. TERRA swivels in her chair to address the audience and she bangs her head.

Terra: *(Under her breath)* Ouch, damn. What a brutal way to dry out. *(Rubs her head and then shouts over the drier).* Detox. Ack, I'm just a little jittery from ... parties. Detox? ... might as well revise myself in style! That doctor? Amen Ra? Sexy, and he knows addictions. Not to mention that he's got the greatest gossip from famous clients. Here in Fort Mac we got energy company fossil fuel celebrities. *(pause)* Fossil fools if you ask me, Ha. Dr. Ra gets these fools blabbing away about who's diggin up what chunk of land, where the money's comin' from, the whole nine. But go figure *this* advice, just before Dr. Ra put me under this *(indicates drier)* device for my ... um ... recent little spirits habit? He fed me an idea that he said could make me famous. Told me, "Get out there and start an alternative energy company." Said "Terra Incognita," *(In exaggerated Egyptian accent)* "You think you're an addict? Think of the world! Then think of oil. ... Call your company Terra Fuel." *(Shrugs)* Then he gives me another shot in the arm, foils my head, pushes some buttons and voila here I sit. *(Swoons)* The man even knows hair.

Terra ... Fuel... Good name. But just what the hell ... is Terra Fuel? ... *(calls)* Oh, Dr. Ra. *(no response)* Trapped. *(indicating the drier hood)*. Follow the logic, girl. *(mumbling to herself remembering Amen-Ra's clue)* "Think of the world." Okay now oil. Trapped. Oh that's something I thought of. Addicted. The world is trapped. It's addicted ... to oil. That's it. Oil is the only energy game in town and we're addicts. The world's an addict, I'm an addict. Something in common. Start an alternative energy company. Got it.

Dr. Ra gets me over my dependencies... one after another *(shrugs)* I know. But the world? Say China ... India they're addicts too then, right? Those billions of people over there? They all want cars. Twenty million cars today, 100 million cars tomorrow. Where's that fossil fuel going to come from? Or God, don't mention the Yanks. We all know *(fingers making air quotes)* "the American Lifestyle is not negotiable." Glug Glug. Hear that? That's America consuming a quarter of the world's oil and they only have, like, two percent of the reserves. *(Snickers and picks up a newspaper)* Stats all over the news. Every day. "Today the world shoots up another 90 million barrels of oil", give or take a few million. And know what? Global demand of hydrocarbons, says here, expected to jump 69 percent in the next twenty years! *(Yells at Amen Ra knowing he won't hear)* Detox that Dr. Ra.

The screen, as if projecting AMEN-RA's mind, types out statistics about oil and gas increases.

And around the corner to save the day? Terra Fuel ... whatever that is. Gotta figure that out. *(Points back at newspaper)* "Why it Won't Work" Says Hydrogen more expensive than the natural

Citations may or may not appear on screen.

* "Left or Right, this energy crisis is real," Article by Victor Davis Hanson, Stanford University. *National Post*, May 4, 2005

** 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.

gas that goes into making it.” *** Hydrogen is da bomb — and not in a good way. (*Makes the sound of an explosion*). Gotta be something else. Sigh. I know I’m up to the big discovery. (*Hunches over to scribble in her notebook.*)

As TERRA is hunkered over her notebook, AMEN-RA emerges from his inner sanctum and majestically surveys TERRA at the dryer station — as if he is looking over a vast desert.

AMEN-RA: (*stirring a paste in a small bowl*) Ambition, desire. Wind the woman up and she’s off. Proudly ... unveiling ... an alternative energy ... zealot. (*Looks at his watch*) (*To audience*) She has two more minutes. Care to see my collection of memories while you wait?

On screen, a one-minute rock video style montage of AMEN-RA in his Egyptian god regalia initiating the birth of the universe, evolving life forms on the planet and then juxtaposed with modern-day shots of AMEN-RA grooming the Egyptian nurse-muses from the opening credits. AMEN-RA is then seen in his legal persona — in a court of law and legal industry symbols parade past and we see him arguing his case. We then see AMEN-RA cutting the hair of an Egyptian president’s wife, then trimming the hair of Pierre Trudeau, Peter Lougheed, and Ralph Klein. Ends with a blazing sun.

A low-frequency rumble and then the dryer bell dings.

Terra is just quietly sitting at the drier while AMEN-RA’s live story flashes by on screen. When the bell dings, the dryer stops whirring. and AMEN-RA turns his attention to TERRA. She is still looking down at her book. He puts down his small bowl, rubs the dryer helmet like a magic lantern and then, poof, like a magic genie, TERRA gushes to life.

TERRA: Ding, I’m done. (*Pops out from under the hairdryer and holds out her arms*) Cool, no shakes. Good as new. Dr. Ra, let’s blue sky Terra Fuel’s video teaser.

Goes to an old Zombies tune ... opens with nature scenes, pristine, serene. We could shoot right up here in Fort Mac -- well out there ... past the tarpits.

TERRA slowly rises and starts waltzing around the salon, singing to the tune of It's the Time of the Season. After each "Ahhhh" AMEN-RA peels foil off TERRA's hair. The hair under the foil is bright gold.

Do do do do do Ahhh Vistas

Do do do do do Ahhh Mountains

Do do do do do Ahhh Bison?

Do do do do do Ahhh (Checking her notebook)

It's the time, fossils fuels, stop polluting our earth.

Introducing Terra Fuel. We put an end to smelly air.

The screen, as if it is reflecting AMEN-RA's thoughts, starts providing random words in a humourous, sing-along bouncing ball style.

"Save us from the crisis." "Alternatives." "Peaceful Solution."

AMEN-RA: *(Orchestrating the screen messages) And save us from destruction?*

TERRA: *Al-ter-na-tives.*

AMEN-RA: *The Detox Solution?*

TERRA: *It's the time, Ter-ra Fu-el stops polluting..*

As TERRA sings, AMEN-RA waltzes her over to the styling chair. They keep singing Do do ... Ahhh.

Well?

AMEN-RA: Sensational. *(to audience)* This is a start.

They lock arms and look each other in the eye. She plops down in the chair and AMEN-RA goes back to get his bowl of beauty potion.

TERRA: *(To the Audience)* Now just to manoeuvre Dr. Ra into helping me figure out ... What the hell is Terra Fuel?

(To AMEN-RA) Oh, Dr. Ra?

AMEN-RA: Hmmmmmm? (*Massages potion into her hair*)

TERRA: Dr. Ra, have you been, um, (*blurts it out*) you know, drying out any famous energy industry fossil fools lately? They're telling you things? Alternative energy research secrets for example?

AMEN-RA puts down his bowl of potion, smiles, leans back his head and opens his eyes wide.

Maybe they gossip about their research secrets when ... when they're, well, under the influence? Dr. Ra?

AMEN-RA continues his massaging, molding and styling her hair into an Egyptian style and colour —a golden Cleopatra wig like the nurses'.

(*Shouts*) Stop holding out on me. Terra Fuel's ready to announce answers to world energy needs and I have nothing ... Whose side are you on?! Why else would they be calling themselves "Energy" companies if they weren't already coming up with viable options? Immaculate intelligence? Goddammit.

AMEN-RA: (*slowly*) Dangerous Terra-tory. Big money buys major firepower. Think about it. Major firepower.

Terra: (*Italian "fuck-you" arm movement*) Firepower this you conformity-enforcing fossil fools! (*Starts convulsing*)

AMEN-RA: You're getting over-excited. (*Presses his fingers into her scalp to calm her*) Yes I have your immaculate intelligence.

Low frequency rumbling sound

TERRA goes into a funny frozen sphinx-like trance with her eyes closed, chin up, and her hands like little paws in front of her chest. AMEN-RA presses his fingers into her scalp as if he is trying to channel his thoughts into her mind.

AMEN-RA ceremoniously presents her with a slim black briefcase with a golden ankh, the Egyptian symbol of enduring life. It looks like a fat powerbook with the ankh glowing like the apple. He performs a little spell on it.

TERRA: (*Opening her eyes and seeing the briefcase*)

Ohhhh!

She opens the briefcase and we hear the Whirly cosmic ding sound effect when TERRA opens the briefcase. (This is a recurring sound motif whenever TERRA opens the briefcase or uses the lipstick and we get a sense that it somehow connects TERRA to AMEN-RA.. There is a pinkish glow from within)

Ahhh.

Inside are her instructions, which we also see on screen,

Russky Development Bank!? Nippon Onsen SAG-D?!

Rattlesnake Security!!??

AMEN-RA nods wisely. He touches up her hairstyle. TERRA closes the briefcase and AMEN-RA hands her a mirror.

I ... I feel so, well ... *(checks out her hairdo)* intrigued. *(Puts down mirror)* My mission. Three tough rounds of international espionage. Wheels up!

AMEN-RA pulls a giant phallic-looking lipstick out of the spy case along with a scroll.

AMEN-RA: Wait. *(Hands her a lipstick and the scroll)* First you must state this manifesto. Clearly.

TERRA *(Holding the big lipstick like a microphone in one hand and the scroll in the other.)*

Testing One. One Two. *She clears her throat.*

Terra Fuel will save us from the crisis and ... and Energize the future ahead and ... and detox the earth from *(pause and smiles at Amen-Ra)* hydrocarbon addiction! The world is about to meet its saviour and it's me! *(Holds out her hands. No tremble)* Here I come, it's not too late.

Amen-Ra takes another lipstick from the spycase and holds it up to Terra's lipstick with a flourish and they start to glow and spark.

AMEN-RA: Our destiny is sealed. Terra, you understand liberating intelligence is risky? You'll have to stay on task. There will be... temptations.

TERRA: I can resist, Dr. Ra. Your insider information. The energy companies' research secrets. You, me, liberating ... research ... from fossil ... fools.

(Holding the lipstick like a microphone) Terra Fuel has a product. We put an end to smelly air.

AMEN-RA: *(Humming)* Catchy. Catchy.

TERRA tucks the lipstick into her spy case. AMEN-RA hums/sings a phrase and flourishes the finale of TERRA's hairstyle.

Do do do do do Ahhh

As the singsong game is going on, the nurses, doubling as crew, clear away the Egyptian detox spa set and stand by for instructions to rearrange the pieces for whatever scene the audience chooses to see next.

AMEN-RA: We need another verse? Play along here Terra *(to audience)* you too, we have a sales campaign to spearhead.

AMEN-RA slowly spins around and gestures at the screen with bouncing ball words. AMEN-RA turns to the audience for wordplay ideas — ideas they may come up with on their own or that they see on the monitor screen, and sings to the tune of It's the Time of the Season. AMEN-RA acknowledges the audience but TERRA does not.

AMEN-RA: *It's your earth. She's your mama. She is feeling pain.*

TERRA: *Terra Fuel has a product. To energize the future ahead.*

AMEN-RA: *We're running out of oil.*

TERRA: *Order now.*

AMEN-RA: *Alternative Fuel.*

BOTH *It's the time, Ter-ra Fu-el offers options.*

TERRA fades away.

AMEN-RA: There are turning points along the road to perpetual energy. Surprise! *(Laughs, closes his eyes and covers his ears.)* But this is your insight, not mine. *(Backs away into dark shadows out of view of the screen with his hands clamped over his ears.)*

La, la, (He sings to prevent hearing TERRA's plea from the future.)

Transition to:

Extro to Scene One - Interscene Turning Point in Virtual Space

On the monitor screen, title declares “Quantum FFWD. Three Weeks Later. The Longview Lockup.” TERRA is in jail, looking a mess, her booth bunny hat and blue hair askew. She fades in and out on screen. This is a glimpse of Scene 9 “The Longview Lockup,” after TERRA has been arrested for her assassinations.

TERRA: (partly voiceover, partly seen) ... What am I going to do? I trusted you ... your immaculate intelligence... How could I have been so wrong? Whose side are you on? Nono ... I’m in such a shitload of trouble. I’ve fallen off the wagon. I - could - not - re-sist ...

Fade out

Inter-scene Turning Point in Real Space

AMEN-RA: (Steps forward again, takes his hands off his ears and laughs.) Back from the future? Don’t tell me, don’t tell me what happens! In the here and now, our hero is ready to seek out her solution. Where shall we send her to collect her first immaculate intelligence? Japan’s Onsen SAG-D? Russky’s Development Bank? Rattlesnake Security, Northern B.C.?

As AMEN-RA is addressing the audience, the performers TERRA, SHACHO, MARIKO, BORIS, LARRY, and TARZANA appear from offstage and stand in a neutral, avatar-like position while the projection monitor rotates aspects of the characters’ attributes like their Location, Power, Weapons, Hobbies, Politics and the like. A costume rack is also wheeled out for TERRA to choose her next appropriate costume.

AMEN-RA then polls the audience about where TERRA should set out first. The secret global locations might be de-coded from the back of the trade show raffle tickets or might be audience free choice. As soon as a quick consensus is reached, the set is quickly configured to suit the scene. The performers get into place, TERRA changes costume and scene four plays out in Japan, Russia, or British Columbia.

A variation of this same ritual plays out between scenes four and five.

"Russia Scene" Oil Spill in Gulf of Finland

Monitor types out "The Russian Oil Spill."

As the lights come up, we see TERRA and BORIS in sailor costumes roaring across the waves in the cockpit of BORIS's speed boat. On the side is written in pseudo-Cyrillic, "Russky Energy Enterprises." BORIS is standing at the pilot's wheel and TERRA is seated beside him. They have binoculars slung around their necks.

Sound of boat skipping across the waves and opening clapping and bars of Boney M's song "Rasputin."

The monitor screen throughout this scene displays a nautical of a Global Positioning System navigation radar. At the beginning of the scene, it sweeps about a five kilometer area that shows no other movement.

The projection screen throughout displays the open seas and skies.

TERRA: *(Thrilled)* It feels so good to be on the water.

BORIS: *(Laughs huge).* Terra. My dahlink. You won't regret h-h-hooking up with me. Black-market trained capitalist can find you everything you need. Watches? Gucci? Software? Nuclear power? Fast big money? Spy taxi service to oilspill. No problem.

TERRA: *(To audience)* A spy ... I knew it.

BORIS: *I am a Russian man who likes to wheel and deal*

TERRA: *(standing)* I have bought your goods and they really are a steal

BORIS: *We used to work hush hush when commies ran the show*

TERRA: *But in Russia now you are going with the flow.*

BORIS: *I can get you out to the oilspill*

Russian tanker sinking fast

Five hundred tonnes of fuel oil

Hull has burst at last.

Rasputin music fades replaced by delicate sound of projected GPS radar blip. BORIS slows the vessel down and both BORIS and TERRA hold their binoculars up to their eyes.

Tinny radio broadcast of the hockey game comes across the short wave radio. End moments when Russia loses. This foreshadows the upcoming socialist justice system courtroom scene.

BORIS: *(Turning in the short wave radio)* While we wait. Listen. Here is h-h-hockey game. Russia must beat ... Ooh penalty. Bad, bad Finland referee. Bad call...Another chance. Shoot .Shoot. No-o-o-o. Listen ... whistling. They hate that bastard referee.

TERRA: Whee hoo. Canada! Yes! *(In mock Russian accent)* Russians go home no more h-h-hockey. *(laughs)* Can you see tanker now? *(Clears her throat and goes back to her normal voice)* Boris, can you see the tanker yet?

BORIS: *(Annoyed)* Nyet. Have not made visuals. Canada team stupid lucky. *(beat)* Terra, how you did find out about this oilspill? You know my company Russky Development Bank financed this venture?

TERRA ignores his question, puts her binoculars down, and quickly walks over to check out the GPS radar.

On the monitor screen, the GPS system bleeps a point of activity that gives the location of the sinking tanker.

TERRA: Look. Could this be it?

BORIS: Da. Close, very close. *(Looks down and gestures at the water below).* Here is oil arriving now.

TERRA looks down at the water and looks back at BORIS with a look of concern.

This is not, maybe not, the exact oil you are looking for, Terra. I will tell you about something. You know what it is experimental ...

On the monitor screen, the GPS system bleeps points of activity that simulate the affect of seabirds erratically flying over the area.

On the projection screen, we see shadows of birds flying erratically.

Suddenly there's a squawk of birds that sounds like giggles and the projection of a bird flying over in an erratic pattern. Then a few more birds giggling and squawking. The GPS system shows the erratic flight of the birds as objects on the projection.

TERRA: This is crazy. Look at the shore, Boris. Those birds out there covered in goo. But look. They're pecking away at their feathers, can birds lick? "preening" I guess and my god, they're acting bloody ... intoxicated. Can birds giggle?

Another barrage of birds fly over erratically with squawks that sound like Rasputin's chorus of Hey-Hey-Hey. The GPS tracks these activities. This fades out.

What gives here? I thought oiled seabirds suffered painful horrid death of hypothermia and digestive trauma. These are the happiest goddamn birds I've ever seen.

BORIS: Like I say before, you know what it is experimental batch of top-secret bio-plant oil financed by my Russky Development Bank. Terra, you do not see this! How you did find out ...

TERRA: What's that smell? Sweet. Smells like ... Man, it smells like
TERRA holds her fingers up as if smoking a joint. She takes a big breath and stops herself holding her nose.

(To herself) I must resist this temptation! (Mocking Boris' Russian accent)

BORIS: I tell you secret because you ... interesting to me, Terra. This spill? Five hundred tonnes of bio-diesel fuel made from hemp plant. You know what it is hemp plant?

TERRA: Yeah. Sure. Pot plants without the THC stoner drug.

BORIS: Da. Problem is this special fuel only works in combustion engine if THC is left inside. Fault of scientists. This research

we must, how you say, squash. We must clean this spill and destroy evidence and ... You did not see! You do not see this!

TERRA: Absolutely. I did not see. I do not see this. I see nothing.
(beat) Say, Boris. I'm starving. Do you have anything to eat on board this speedy little spy vessel?

BORIS nods and goes off to the galley side of the boat and cuts off two big chunks of garlic sausage and pours a shot of vodka in a glass Russian teacup. While he is doing this, he speaks these words in a way compatible with the spoken section of the Rasputin song.

While he is speak singing, TERRA secretly opens her spy case and pulls out the glowing lipstick.

Lipstick plays the Whirly cosmic ding spy theme like a ring tone.

Boris : (Sing/speaking to himself) *But we have to snuff the science and suppress this diversity before it it becomes known to more and more people.*

(Downs his vodka.)

Because the demands to be a conformist in the Alberta Oilsands beckens me louder and louder.

TERRA: Dr. Ra. Come in. Day One (or two or three depending how the audience has decided to order the scenes) Oil Spill. Gulf of Finland. Between St. Petersburg, Russia and Helsinki.
Liberating the energy of hemp oil. Do you copy? The peaceful solution. Immaculate intelligence. Terra Fuel! Let's take it to market! Over and out.

She puts back the lipstick and pulls out a golden ladle and a small vial. As she reaches over the side of the boat to liberate a sample of hemp oil, BORIS spins around and holds a big chunk of garlic sausage aloft.

TERRA: (Nearly caught in the act of stealing his secret)
My the Baltic water is refreshing today.

TERRA hides the ladle down the back of her shirt and fingers her hair. She smiles and reaches out to accept the sausage from BORIS. Another barrage of birds fly over, squawking with the sound of Rasputin's chorus of Hey-Hey-Hey. They poop in BORIS eyes.

BORIS: Eto ptichee gavno glaza slizit.

(Trans., This bird poop is stinging my eyes.)

As BORIS is rubbing his eyes, TERRA dips the garlic sausage into the oily water. She pulls it out, dripping with a oily fluid about the viscosity of maple syrup. She furtively captures some of the oily goo into the vial and puts the vial back in the spy case. Just as BORIS clears his eyes, she bites into the bottom of the still-dripping sausage.

TERRA: You drive me wild when you speak Russian.

TERRA smiles fetchingly, stands up and offers the oily end of the sausage to BORIS. As he takes a big bite of sausage, the birds fly wildly.

BORIS: *(Revelling in TERRA's attention)* Mmmmm. Spacibo, dahlink.

Hey, let's see if this hemp oil works to power diesel engine.

BORIS leans out over the side of the boat, scoops up a sample of the oil in his tea cup, and pours it in the engine. He revs the engine and it blows out a plume of sweet-smelling white smoke. The birds overhead break into full song, Hey-Hey-Hey Hey-Hey-Hey.

Terra and BORIS:

RA RA THC Run this engine to capacity

This hemp smoke floats out over the Gulf.

RA RA THC Mind altering Helsinki

They smell it all and say "I feel fine"

Birds slow down into a random pattern.

BORIS: Get back at Finland for bad referee. *(Laughs)*

Oh, those birds. We must destroy this evidence. How about this?

(Hands her a toy rifle.)

The monitor screen becomes a full-blown shooting ducks game interface.

Know how to play this game? (*Hands toy rifles to audience*).

The projection screen goes to black so as not to compete with the visuals on the monitor screen.

BORIS grabs a rifle himself, slowly spins around and gestures at the screen with the GPS and erratic duck signals. They aim their rifles and shoot down the ducks from the sky as they ding, like the drier bell, on the GPS projection.

Dead ducks fall from the sky.

Blackout

"Japan Scene" The Energy of Singing Crystals

As the lights come up, we see a split stage space. In the area on stage left, we see TERRA and MARIKO in Japanese cotton kimono and slippers entering a Japanese hotspring bath. On the other side, stage right, we see SHACHO amid his chemistry set of bubbling test tubes. On both sides of the stage, steam rises as if coming from a fissure in the earth.

On SHACHO's monitor screen is an anime samurai sword fight, a foreshadow of the Japanese court scene, and on the projection screen are slowly revolving gas hydrate methane crystals with little yellow carbon centres.

We hear tinkling music emanating from SHACHO's crystals. It's Sakura, Sakura.

MARIKO: *(Disrobes and gets her wooden bucket and small towel out of a wooden cubbyhole)* Terra-san, your questions were answered on our Onsen SAG-D Steam Assisted Gravity Drainage research facility tour? I'm sorry you could not bring your video camera but we are behind, um how do you say in English ... a security blanket?

TERRA: You mean a firewall! *(Laughs, puts her spy case in a cubby, disrobes and gets her bathing supplies)* Don't worry, I'll keep your secrets. Whose side do you think I'm on? *(laughs)*

The women get into the steaming onsen bath. As this is going on, we see SHACHO tuning into the fact that they're on the other side of the wall. He pulls out an elegant little stepladder and elevates himself up to a private peephole and looks in at them

Most interesting that your hot spring steam is such a good incubator of efficient Oilsands bitumen extraction. Steam is good for so many things. Recovering Alberta Oilsands bitumen. Relaxing bath if maybe a bit stinky *(laughs)*. Powerful stinky chemicals aren't they. What are they? Where do they come from? *(Pulls up her Egyptian hair to keep it from getting wet.)*

MARIKO: Minerals come free in hot steam from under volcanoes to cure illness and restore energy. Some chemicals, very interesting to my boss, come from freezing core samples from 300 meters beneath the ocean floor. *(Giggles)* None are good for hair. *(Both women giggle and MARIKO places a geisha style pin in TERRA's hair)*

TERRA quickly looks up in the direction of the peephole and smiles and winks at the audience.

TERRA: *(To audience)* Spies, Just as I thought. *(To MARIKO)* Say, who is your boss around here Mariko-chan? Someone who clearly understands efficient recovery systems and in-situ reservoir stimulation.

MARIKO: *(giggles)* Our company president is Shacho-san. He is very good at reservoir stimulation.

When he hears his name, SHACHO climbs down from his ladder, puts it away, and goes back to his chemistry set. At the same time, MARIKO gets up out of the hot tub, places a little stool in front of the peephole and looks in from her side.

(Giggles) Shacho-san is in his chemistry laboratory. He likes to work on his hobbies. Would you care to ...

TERRA: Hobbies?

MARIKO: Besides commercializing the Alberta Oilsands, Shacho-san makes frozen methane crystals ... sing.

TERRA: No way! Crystal meth? Lead us not into temptation!

MARIKO: No. No. *(Laughs)* Different. Not crystal meth. Methane crystals. This singing carbon alternative fuel makes beautiful music for karaoke and other games.

SHACHO pours a new combination of steaming chemicals into high pressure beaker contraption.

The anime fight on SHACHO's monitor turns to dancing crystals. The song changes to Sukiyaki and the yellow carbon centres open their mouths like PacMan to sing the song.

TERRA: *(To audience)* Alternative Fuel!!?? Ah, Gas hydrate methane crystals. Singing?

MARIKO: Come. *(Stepping out of the bath.)* Shacho-san will explain.

*The women towel themselves off and put on their robes.
MARIKO slides open a tiny door and they kneel their way
into SHACHO's secret laboratory.*

MARIKO: *(Bowing low and uttering a string of honourifics)*
O negai shimas, Shacho-sama. Sumi masen. Taday ima.

SHACHO: Okaeri nasai. Mariko-chan. You have brought Terra with you I see.

TERRA: *(To MARIKO)* Now I see what you mean by singing.

*TERRA marches up to SHACHO and shakes his hand. MARIKO
rises up out of her bow and starts slowly spinning and
singing with the crystals to Japanese version of Sukiyaki.*

ue o muite arukou

namida ga kobore naiyouni

TERRA: Shacho, I've heard so much about you and your hobbies. I love kary-oki. *(Sings, spins, and flirts with SHACHO to the tune of Sukiyaki.)*

A spy in Japan, I need you so

How much you'll never really know

*SHACHO applauds TERRA's singing and turns around to
pour new chemicals into the his high pressure apparatus.*

*The song changes from Sukiyaki to Paul Anka's My Way,
and the crystal dance changes and bouncing ball words
appear on the screen.*

SHACHO: *(To audience)* Do you know this one? It's Methane Hydrate? *(Steps forward as if up to a mike. MARIKO sings harmony).*

A gas molecule trapped within a cage of frozen water.

Carbon One, 2-3-4-5 from swampy fermentation process.

Co2 , H2S, and stable isotopes I'm certain.

Microbially reduced. It's methane Hy-drates.

The women and the audience applaud. SHACHO goes back to his pressurized apparatus.

The monitor and projection go to a screen saver with the chemical compound breakdown of methane hydrate.

TERRA: *(Peeking up at the screen and then in at SHACHO's high pressure beaker.)* It makes for a cute little song and dance number but can this alternative fuel fly an airplane?

SHACHO: You see my steam pressurized apparatus? High combustion point makes this very pure fuel. Like high octane.

SHACHO dips a long spoon into the beaker, extracts a freezing cone of ice, puts it into a little frying pan and pulls out a long match.

The energy poof is now to come.

SHACHO lights the pan and a huge bomb of pyro explodes onto their faces.

TERRA: *(Coughing and laughing)* Major firepower, Shacho-san. *(Gives him a sweet variation of the Italian fuck you arm signal and a big smile. To audience).* Immaculate intelligence. The chemical formula. *(Wipes her face and sees the black soot).* This can't be good for a girl's complexion. Excuse me for a moment. Keep that up on screen will ya.

TERRA rushes back to the onsen side of the stage, opens her spy kit, and takes out the glowing lipstick. Whirly cosmic ding sound effect.

Day Two. SAGD hot spring research facility Japan. Closer to salvation from the crisis and ... and to energize the future ahead.

Dr. Ra. Come in. Day One *(or two or three depending how the audience has decided to order the scenes)* SAGD hot spring research facility Japan. Liberating the energy of singing gas

hydrate methane crystals. Do you copy? The peaceful solution. Immaculate intelligence. Terra Fuel! Let's take it to market! Over and out.

While this is going on, MARIKO and SHACHO dance briefly to the dancing crystals rendition of My Way. They then make their way back to the chemistry set and together they admire glowing test tubes of colour fluid. The methane chemical formula swirls on a screen saver.

TERRA rushes back into the laboratory with her lipstick and a little mirror tucked into the sleeve of her yukata. She pulls out the glowing lipstick looks at the screen and starts dictating the chemical reaction formula.

TERRA: Stable isoto ...

MARIKO and SHACHO turn to look at her.

TERRA: *(Laugh nervously, clears her throat and holds the mirror up to paint her face with the lipstick)* Major firepower sucked all the colour out of my cheeks.

MARIKO and SHACHO turn back to their chemistry set. TERRA takes the lipstick, rolls up her yukata sleeve and writes the formula along the inside of her arm.

The screensaver turns back into a revolving hydrate crystal.

MARIKO: *(Turning back to TERRA)* There, now Terra-chan. You will see the methane crystals at work according to Shacho's real vision.

TERRA: *(Quickly rolling down her sleeve.)* Steam Assisted Gravity Drainage research results?

MARIKO and SHACHO wave a typical Japanese "no" sign.

TERRA: *(Pulls her lipstick back out.)* Gas Hydrate Methane Fuel firepower test results?

MARIKO and SHACHO "no" and together they pour coloured fluid into a beaker, it froths and foams and the screen image turns from the methane hydrate crystal into

a PacMan game. The methane ball turns into the PacMan and SHACHO, TERRA, and MARIKO turn into the ghosts.

The music pulsed by the methane balls is a music box style rendition of the PacMan game.

SHACHO and MARIKO pick up game console and TERRA sings to the last line of My Way.

TERRA: (Exposing the scribble on her arm to the audience.)

Microbially reduced. It's methane Hy-drates.

Blackout

Scene Six: The Energy of Hot Love

This scene is set at an oil and gas lease in Northern B.C. The projection on the back screen show a drilling rig in action and the low, dull thud and metallic squeal is the drillbit pounding into the earth.

Sawing logs in the well site shack is LARRY, a greedy security scout, whose job it is to spy on the activities of competing oil companies. He is abruptly woken up by chatter from his massive console of electronic eavesdropping equipment. He hopes it will be cell phone conversations leaking useful information about what wells are successful.

Larry spins dials in an attempt to get a steady audio signal.

MALE VOICE OVER INTERCOM: *(static as LARRY fiddles with the dial)*
Tripping the bit back in ... *(static)* H2S free gas. *(static)*

LARRY: Holy Christ, make my day man.

MALE VOICE OVER INTERCOM: *(static as LARRY fiddles with the dial)*
Oil spots in the drilling mud. *(static)* ... Run into hole? ...
(static) ... Getting good results ... call you back in two hours
(static).

LARRY: *(throwing a fit)* What's the point of spending a fortune on this spy shit if it's going to do *(yells)* nothing but continually fuck up.

LARRY throws a fit and spins more dials. TERRA's audio crackles to life.

TERRA OVER INTERCOM: *(static)* Mount the wind turbine on the rig crown? *(static)* yup rotor's dying to get out of the box. *(static)* ... firepower? I can handle it...*(static)*.

LARRY turns down the audio signal and we hear the rumble of a big diesel engine sputtering to a stop outside the shack. Then a truck door slams. TARZANA the camp cook bursts into the shack carrying a big paper shopping bag. She takes off her hardhat, stomps her big boots, slips them off and unloads sandwiches wrapped in aluminum.

TARZANA: (*Passes a sandwich to LARRY.*) Lucky breakfast is still hot fer ya. Truck's been actin' up from all the ruts on this godforsaken lease. (*Flirting*) Trick is to her in shape fer the trip to Fort Mac.

LARRY: (*Spinning his chair around to unwrap the sandwich.*) You got it Tarzana. Oil fields are nothin' compared to the Oilpatch.
They laugh.

TARZANA: Ah aha ah! (*Beats her chest and yells like Tarzan.*)

TERRA OVER INTERCOM: (*static, then clearly. She is singing to the tune of It's the Time of the Season*) ... *Terra Fuel has a product (static) To energize the future ahead (static).*

TARZANA: Sounds like that dipstick geology broad is sendin' out singsong codes er somethin'. Know why you can't hear her worth shit? There's cat tracks all over yer roof. Antenna's all over hell's half acre up there.

LARRY: Gotta be that goddamn cougar again. (*Gets up, takes off his ballcap and puts on his coat, boots, and hardhat.*) Tarzana, come help me get my antenna rigged up right.

They clomp out of the shack and we hear the big boots up on the shack roof as they rig up the antennas. Suddenly TERRA's conversation with DR. RA comes in loud and clear.

The monitor leaps into brilliantly coloured peaks and valleys.

TERRA OVER INTERCOM: (*Singing clearly*) *It's the time, fos-sil fu-el stops polluting. (laughs and speaks)* Catchy jingle eh? Bear with me on this experiment, Dr. Ra. I found the perfect lab rats. Over.

AMEN-RA OVER INTERCOM: (*faintly*) Terra, Terra, Terra Incognita. God knows the world is counting on you to, (*sings*) "Save us from destruction." Do you copy? (*laughs*)

TERRA OVER INTERCOM: (*under the action of Larry and Tarzana entering the shack*) Not a breath of wind -- good day to test the wind energy of hot love. Over and out.

TARZANA: *(Listening to the end of TERRA's conversation)* Clear as a bell. Told ya so.

Phone rings. TARZANA picks it up.

TARZANA: Rattlesnake Security.

TERRA OVER INTERCOM: Larry Fosso there?

LARRY lurches towards a dial to turn down the incoming audio signal.

We hear intense audio feedback. The monitor picture flattens out and the screen dims.

TARZANA: *(Hands LARRY the phone.)* Fer you, you sleezy rattle-er.

While LARRY is talking on the phone to TERRA, TARZANA sits down at the table and yanks the trash bucket up onto the table top. She rifles through it, pulls out discarded sandwich wrappers and finds a torn half of a scratchy lottery ticket. Roots around, finds the other torn half and puts them together.

LARRY: Yeah? *(to TERRA on the phone)* Sure. *(listens)* Yup. Tarzana. Dropped off breakfast. *(pause)* Yeah sure. *(pause)* Sounds important. *(pause)* I need to ... *(pause)* I need to .. *(Takes a bit of his sandwich)* Mmmm. Mmmm. Listen. I gotta talk to you too. There a sandwich here. *(listens)* BLT.

TARZANA: *(Holding up scraps of paper)* Yukon Gold, Loser. Hmm Blackjack. 19, 19, 18, Nuther loser. What do you expect from BC Lotto?

She throws the tickets back in the trash and roots around, finding what she was looking for, discarded tomato slices. She waves them at LARRY triumphantly. They have obviously been through this before.

Larry and TARZANA: What do you think? Tomatoes grow on trees?

LARRY: Jesus Christ, Tarzana, you're such a bottom feeder.

LARRY smacks TARZANA on the butt and she flirts back with a jab to his jaw.

Clean up eh? Terra's comin' over and ... put away your claws.

TARZANA: (*Hissing.*) SSSSS.

LARRY: Like it er not, she's probably the sharpest shovel in the shed around here. Wants to drop something off.

They work together to scoop the garbage up off the table. Sound of boots at the door, TERRA knocks, lets herself in, takes off her hardhat and steps out of her boots. She is carrying her spy case.

TERRA: Larry. Tarzana! Nice to see you! (*They motion an offer of a sandwich and Terra pokes it.*) Still hot. Right on. Got coffee?

LARRY goes over to the coffee maker and pours TERRA a cup. TERRA takes a bite of sandwich.

LARRY: (*Mumbles as he passes her the coffee and sidles back to Tarzana*) Terra. You gotta stop making them singsong calls on unsecured lines ...

TERRA: (*Takes the cup and ignores what he's mumbling but notices the flirting between Larry and Tarzana*) Hey I know you guys are hot ... with computers and all ...

TERRA cracks open her spy case and pulls out a shiny DVD disk and holds it up.

Here's the disk of computer games I've been working on. This'll help you pass time ... together. I'll be leaving now. (*Hands Tarzana the disk.*) Use this.

She takes a big slug of coffee, pulls a face, and hands the cup back to LARRY.

Whoa. Rocket fuel you bad boy. This'll have me climbin' the rig walls all right. Have fun you two.

TERRA picks up the scratchy scraps.

TERRA: Gaming problem? Been there done that too. I try to avoid the temptation. (*Laughs*)

Puts on her boots and hardhat, picks up her spycase and heads out the door.

LARRY AND TARZANA: See ya later.

TARZANA: (*To LARRY*) Feel like tryin' out her games?

LARRY: Sure. Yeah, here. Gimme. (*TARZANA hands him the box of games. They make eye contact and cough and look away.*)

While this is going on, we see TERRA sneak quickly around to her "spy post" — the fourth wall of the shack under the imaginary window. She pulls her headphones back out of the case, puts them on and as she raises the antenna, we hear the heartbeats recommence.

LARRY: (*Holding up the disk case*). Look, here's one called Sim Drilling Lease. Hmmm. Says. "Buy land. Drill. Gain subsoil power and points. Hire terrorist commune wackos to blow up the competition." Fuck, sounds like Weebo Ludwig. Here's another one "Stand Up for Canada." Wild west law-makin' game packed with family values. Objective? Uncover secrets of ... aahhh says "requires video connections with Ottawa." Who wants that?...

TARZANA: (*Grabbing the box*). Here. I like this one. The Pipeline Pinball Energy Thrill Ride Game. Says "Generate Energy Diversity with this wild ride through Oilsands exploitation." Cool. Rewards in price per barrel. Obstacles?

LARRY nods and takes the package.

LARRY: Environmental and Aboriginal by the looks of it.

TARZANA: Hey there's some video trailer here. PR here by your sharp little shovel about game design Ah hell, let's take a look.

They put the disk in the machine and a segment of the Pipeline Pinball Energy Thrill Game Trailer plays on the screen monitor with Terra as pitch person for the game. While the trailer is running, Tarzana and Larry laugh and nudge each other.

On Screen is a.. MONTAGE OF PHOTOS OF PIPELINE WORKERS and welders

SUPERIMPOSED TEXT reads "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."

NARRATOR ON SCREEN: “*The Pipeline Pinball Energy Thrill Ride Game*”

TERRA ON SCREEN: 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.

LARRY: Fast forward.

TARZANA: (*While the video fast forwards*) Fossil Fuels and Alternative Fuels. As if we don’t know whose side we’re on. (*Points at Terra on screen*) There’s yer sharpey alright. (*Video plays nomally.*)

They listen to the video to the point of the “Enemy Spies” sequence.

NARRATOR ON SCREEN: Generate Energy Diversity

TERRA ON SCREEN: 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 ON SCREEN: Shift Your Resources

TERRA ON SCREEN: Once the three pipeline chutes have been activated, the three alternative energy target holes light up. These represent bio-fuel hemp crops, wind generators, and geo-thermal gas hydrate methane reserves.

NARRATOR ON SCREEN: The Alberta Oilsands

TERRA ON SCREEN: Once the balls are locked, this opens up the MacKenzie Valley Pipeline and the Alberta Oilsands. The player needs to plunge the energy ball down through the pipeline and then back up through the loop and into the Oilsands target hole. Once the energy ball travels through the loop, the global energy markets open and five clients appear as popup targets.

NARRATOR ON SCREEN: Build it and They Will Come

TERRA ON SCREEN: Knocking down the clients lights up the nuclear target hole. The player needs to lock the energy ball into the nuclear hole. Now, three pop-up enemy spies show up in place of the global markets.

LARRY: I heard enough. Here. You drive.

LARRY spins his office chair around to his computer and gets TARZANA to sit down at the keyboard. LARRY leans up against the back of the chair and looks over her shoulder.

The monitor blazes into pinball action. The interface is a map of Alberta with Pipelines and Oilsands dominating the game board. Music track is the song Radar Love.

TARZANA: Never done this before.

As it loads the sound track throbs the intro to Radar Love.

GAME VOICEOVER : The Pipeline Pinball Energy Thrill Ride Game.

The monitor shows the Fossil Fuel and Alternative Energy Points structure.

Larry: Time it right, “spacebar” to get your ball going. Hit the space bar Tarzana. Try again. Space bar. Ready ... space.

Music fades out.

TARZANA groans because she can't get the ball out of the entry shoot. LARRY breaks away from the back of the chair to pace around the room.

LARRY: (Sits down and commands keyboard). Here, let me! (A siren sounds).

TARZANA rounds to the back of the chair and leans up against it.

GAME VOICEOVER: Generate energy diversity!

LARRY: (*Say-singing, to the tune of Radar Love.*)

Ball rounds to the top just let it go free. (Music break)

Then down Alaska pipeline to Mackenzie. (Music break)

Take Alberta Clipper to Fort McMurray. (Music break)

Nice shot, extra points, look at me. (Music break and siren)

LARRY AND TARZANA: (*together*)

Up through the Cree land to the oozing bitumen.

Longer we hide up there, the more points we win.

TARZANA: *We don't need drill bit at all.*

BOTH: *We got a thing that's called the pipeline love*

We got a wave in the air.

The pipeline love.

Music in background throbs Do Da Do Da Do Da Do Daaaa.

GAME VOICEOVER: *Shift Your Resources*

LARRY continues his gameplaying description as free-form prose.

LARRY: *Alternative Energy targets open.*

TARZANA: *What the point in that?*

LARRY: *See these windmills? Knock em out.*

TARZANA: *There. There. Nailed it!*

Sirens scream and gameboard shows TILT.

LARRY: *FUCK, Tarzana. Ya tilted!*

TARZANA: *Did I do something wrong?*

At the spy post, TERRA unpacks a big blade out of a long box.

We then see TERRA, on the projection screen and in fast motion, climbing up the drilling rig with the blade and then mounting it up at the top of the rig. The blade is not rotating at first. She climbs down.

LARRY: Nudging too early in the game is not a good plan, Tarzana.

TARZANA: Alternative energy threw me off my game.

Turns back to the computer. The throb kicks in.

LARRY: Okay. Spacebar to start. See? Rounding the top ... The Oilsands target!!

GAME VOICEOVER: The Alberta Oilsands

TARZANA: One and a half trillion barrels of bitumen and it's all ours.

LARRY: Big Oil. High Stakes. What a gamble. Whoa!

As TARZANA joins in on the huffs and actions of the nudge, papers in the room start flapping around more briskly. The blade on the drill rig starts slowly rotating.

The wind picks up in the room, blowing papers around and ruffling their hair. Over the next section of pinball activity, the wind picks up, blowing around the shack.

*Hold on be still now cuz we've got a Bonus Ball.
Two balls in play now and we ain't gonna stall.*

TARZANA: *Get in on the Oilsands now!*

BOTH: *We got a thing that's called the pipeline love
We got a wave in the air.*

LARRY AND TARZANA: *(Thrilled)* High score! A 7-figure deal in the oilsands! *They leap up, embrace and kiss.*

GAME VOICEOVER : You are still enforcing hydrocarbon conformity.
Try again.

By now a big wind is blowing in the shack and the blade on the drilling rig speeds up its rotation.

TERRA gazes up with glee at the spinning blade and walks back into the room, unseen by the lovers, and pulls out her PDA.

TERRA: Dr. Ra? Success. Turbine's whirling. *(Looks over at LARRY and TARZANA making out.)* It's bad-ass typhoon time boys and

girls. Let's get this wind energy of hot love to market! Do you copy?
The peaceful solution. Immaculate intelligence. Terra Fuel!

*TERRA snaps her PDA and steps over to the keyboard controls
for the pinball game. LARRY and TARZANA continue to make out.*

This game is going my way this time.

*TERRA puts a ball into action animals light up on screen and the
alternative energy thrill points escalate.*

GAME VOICEOVER : You have succeeded in energizing the world in ways
you cannot imagine. You are a national treasure.

Blackout

Scene Seven: Back in the Hospitality Suite

AMEN-RA steps forward and stands in a radiant light. Lights come as he did at the opening of scene three. He pulls out his lipstick PDA and flips it open.

TERRA OVER THE PDA: Let's get this to market! Do you copy? The peaceful solution. Immaculate intelligence. Terra Fuel!

AMEN-RA: Copy this.(Looks around.) (Laughs)

While AMEN-RA is speaking, the nurses set up the scene for a continuation of Scene Two's action in the Hospitality Suite.

We've seen Terra travel to the far corners of the world to liberate alternative energy secrets from fossil fools. We've seen her working a trade show crowd, peddling her fuels — what a zealous booth bunny. Here we go again ... look familiar?

As Amen-Ra talks, lights slowly come up on the Hospitality Suite and we see the same physical tableau of players Larry, Tarzana, Mariko, Shacho, and Boris in the freeze position previously "saved." After a few seconds, Larry breaks the freeze by looking down at his hand of cards.

LARRY: Boris. Shacho. We've been duped by Terra Incognita and let's face it, we have a lot to lose.

Question for you all ... How do you feel about being ripped off by an amateur idealist? Humiliation?! In other words (*to THE OTHERS, slowly*) we'll lose face if word gets out that we've exposed ... our secrets to Terra Incognita.

SHACHO AND MARIKO: (*Gasping*) Arggh.

LARRY: Anyone else leak few secrets to the ... insidious booth bunny?

BORIS: (*Growls*) Shliushka. That slut. Terra Incognita stole secrets from ... us?

At this point we see TERRA walk by the door of the hospitality suite with her black "gadget" spy case. She

hears her name and it stops her cold. She immediately hides behind the door jam, clearly working hard to hear what they're saying.

LARRY: It just gets worse, people. She's dangerous. She's exposed our soft little underbellies. She's gotta go.

(Shouting to everyone) Don't you see we've bungled this fucking thing? Did you see her customers at the show? She's stolen our secrets and she's going to put the whole fucking bunch of us out of business.

I don't know about you but Rattlesnake Security is countin' on riding the gravy train up in the Alberta Oilsands for some time. People, whose side are you on?? We have to make her pay.

TARZANA distributes the shooters.

ALL: We have to make her pay. *(Freeze momentarily).*

BORIS: You're right, some people are better off dead than alive.
Hemp oil is our patent and ...

LARRY: It's *your* secret and *your* right to preserve that cozy nest egg, it's *your* property. *Your* right to suppress it if you want! Ripped off!

MARIKO: She is her own worst enemy. *(To Shacho)* Gas hydrate methane is ...

LARRY: *Your* secret. *Your* nest egg for the future. *Your* right to suppress it if you want! Ripped right off!

BORIS: You're right. We've all been swindled and whose fault is it.
That immoral Terra Incognita.

MARIKO: When she plays dirty, we play dirty back.

TERRA has been assembling a gadget from her briefcase that looks like a variation of the headsets she used to monitor LARRY and TARZANA's heartbeats.

LARRY: We'll ... so you see how we have to put an end to this terrible chain of events. Outraged?

BORIS, MARIKO, TARZANA, SHACHO: Outraged!

BORIS: It's no good punishing her in any other way.

TERRA puts her ear up against the door.

ALL: We have to kill her!

We hear these words echo as if we're hearing it amplified in TERRA's headset. She reels around, picks up Mariko's abandoned martini and knocks it back.

LARRY: That's it. Consensus. The deal is sealed. Tarzana, we have to knock this broad off. You know what to do.

TARZANA seductively reaches into his pocket for her keys, holds them up and shakes them.

Blackout.

Scene Eight: Terra's Rant

Projection of an enormous pickup truck with huge chrome grill and antennas that shoots overpowering shafts of headlights. We hear its big diesel engine idling and it's a cranked up version of TARZANA's truck from the BC Scene.

We see TERRA on an absolutely bare stage except for the projection of the pickup truck. TERRA, finds the spotlight of the headlines and stands, frozen like a deer in the headlights ... but swaying slightly as if a little drunk.

TERRA: *(In a state of shock)* A conspiracy of fossil fools want ... me ... dead! Conformity enforcers who suppress their awesome alternative energy research. Wretched sorrow to them that I end-run their plans and market Terra Fuel just as they get their big fat chance to exploit their ... precious ... Alberta Oilsands.

Gaining vocal strength and momentum.

Sorrow to them that the most immaculate goddamn intelligence in the whole godforsaken world has fallen into ... my hands ... the hands of a diversity generator. And now they want me dead.

Think about it people! What percentage of the population gains from high oil prices? Do *you*? Look at the price at the pump. Do you accept these high oil prices? Whose side are *you* on?

(In a rage) Sorrow to us that the world is lusting after our billions, maybe trillions of barrels of oil that have been trapped in geological time under our very soil in the ... Oilsands? Guess what those fossil fools want to hear? That yes, you're on *their* side. That yes it's okay that we satisfy the energy lust of the industrial world by turning Northern Alberta into a pit the size of Scotland without thinking of the long-term consequences. Well hell, if we're going to stay stuck in this old world economy, might as well make those tarpits into a goddamn amusement park of easy money and greed — an Oilsands circus of Japanese Gravity Steamers, Russian wanna-be capitalists, and small-time oil company side-show freaks, not to mention Uncle Sam standing in the middle of it all.

Taking on the persona of a ringleader with an American accent.

Ladies and gentlemen in ring number one we have the SAG-D Japanese Gravity Steamers. Step right up. How will they feed their frenzy for tarsand riches? Steam takes water, lots of water. Experience the thrills as they rob the Athabasca River. Dropped water levels? — one foot, two feet? Place your bets.

(In her own voice) License to kill! Addicted to bloodlust.

The projection screen spews steamy visuals. Sound of pressurized steam.

She mimics a steaming inferno of death to infer the fantasy killing of MARIKO and Shacho in a chamber of high temperature pressurized steam.

I'll do it my way. Liberation! Terra Fuel takes orders for gas hydrate methane fuel. *(To audience)* There are Spies in the Oilsands and whose side are you on?

(American accent) Ring number two? We have the Russians who let Joseph Stalin and those corrupt commies run their country for far too long. Russians — the new slut of OPEC. They missed out on making big money for the last eighty years so now they're practicing their blackmarket expertise at being good capitalists. Step right up ladies and gentlemen. How will the Russians feed their frenzy for Alberta oilsand now? Interest rate runups! High inflation! Collapse the global economy?

(In her own voice) License to kill! Addicted to bloodlust.

She mimes the preparation of a death scene of an overdose to infer the fantasy killing of BORIS with drug injections.

I'll do it my way. Liberation! Terra Fuel takes orders for Hemp oil bioplant fuel. *(To audience)* There are Spies in the Oilsands and whose side are you on?

(American accent) Ring number three? We have two security shmoees who just want to follow the herd of conformists to the Oilsands pay dirt and keep their emerging feelings for each

other hush-hush. How will they keep their electricity for each other under wraps now that we know they're full of Hot Love? Step right up.

(In her own voice) License to kill! Addicted to bloodlust.

She mimics a scene of a big cougar clawing them to death.

Pressurized flo-o-o-o-w ... My way! Liberation. Terra Fuels takes orders for the electrical energies of hot love. *(To audience)* There are Spies in the Oilsands and whose side are you on?

Growing increasingly manic and insane as the sound of the huge diesel truck gets louder. TERRA shields her eyes from the light that is getting brighter.

What do you tell a seven-year-old who says she wants to be a hydrocarbon geologist like her dad? Sorry kid, Dad sucked those conventional wells dry, but *(quietly, maternally)* you can always go drive a truck for the conformity enforcers in the tarpit circus. You know who you might find up there, eh? Uncle Sam who won't have to invade Sahara anymore to "promote democratic ideals" when he can exploit a sure thing right here in Canada.

Mark my words. Sahara, won't give up that easily.

Music swoops in — a tango beat that brings with it the sexy lighting and awesome subwoof pounding percussion of a brothel as if it were attached to a drilling rig at the spinning end of the cosmic realm.

Belts out a line to the tune of Jealousy.

This frenzy that tortures me is inverted morality. (change)

Music falls into the background.

Why should we all compete for oil — a shrinking resource? Why should the same thing we're making money on be the thing that's ... killing us? See the irony. What don't they get about it? Accept Terra Fuels, prices come down. Accept Terra

Fuels, reduce hydrocarbon dependencies. *(Softly to audience)*
And now they want me dead. *(Whipping back into a frenzy)*

Can you blame the? Look around! A hundred and twenty
billion dollars of development on the books around here and ...
what ... if ... oil... prices ... Crash??

*Whirly cosmic theme then a ding. The sound of the huge truck
engine revving then drowns out the music. TERRA is shocked out
of her reverie.*

(Back to her manic insanity.) Woe as this circus eventually
pulls down its shameful tent of exploitation and we join what's
left of the crippled ... world ... ecosystem. With no safety net.
Arrggghhhh. *(Appealing to the audience.)*

The sound of a phone rings from her briefcase.

My customers. I have energy orders to fill!

(She screams) Dr. Ra.

*TERRA hits the floor and rolls out of the way as the diesel
truck projection rolls across the stage.*

Blackout

Scene Nine: Unwinding the Zealot

Music in background is erotic-sounding Egyptian music

*This scene is set in the interior of AMEN-RA's detox centre
TERRA furtively enters the spa looking like a wounded
animal. Her golden wig is all askew and her clothes are
torn and stained with blood. She has a big office phone
under her arm and the cords trail behind her.*

AMEN-RA: Terra. You're days late for your appointment. What's going on? I was ready to sound the alarms.

TERRA: *(Mumbling maniacally)* My orders. I must fill my orders.

AMEN-RA: What are you hooked on now?

*TERRA looks around the salon and out the door to make
sure no one is following her. She crawls under a styling
chair.*

TERRA: *(Ignoring his question)* I have to plug my phone in here, and take orders. I won't bother anyone if I just set up right here, Dr. Ra?. I promise. Please? Dr. Ra!!!

*She dives into the corner under the styling chair, plugs in
her phone and it immediately rings.*

TERRA: *(Suddenly bright and cheery)* Terra Fuel. Yes. Put my messages through.

*As she raptly listens to her messages, she alternates
writing down her orders with chewing her nails and
writhing on the floor like a rabid dog, snarling, laughing
uncontrollably, and weeping. AMEN-RA slowly approaches
her.*

AMEN-RA: Terra. My Terra Incognita. Must unwind ... this ... manic ... zealot.

TERRA: *(Snarls at him)* Shutup. Can't you see I'm taking orders.
(Quickly scribbles and leaps to her feet) Important new clients
.Many nations... *(Runs around the room)*. Must fill my orders.
(Points at the phone on the floor.) Just answer "Terra Fuel" and
take messages, will ya? Might help to turn your music down ...

AMEN-RA blocks her way out the door, TERRA backs off back toward her phone.

AMEN-RA: Terra, are you still dealing in a peaceful solution?

TERRA: What are you talking about? Yes, yes, of course.

AMEN-RA: I believe you are giving me false information.

AMEN-RA reaches out to TERRA, and she falls into a swoon in his arms. AMEN-RA sets her upright on her feet and she responds by slowly and robotically spinning in front of him. He strips off her bloody, torn clothing down to her underwear and she continues slowly spinning.

AMEN-RA: *(To the nurses)*. Procure the truth, my Nurses.

As the nurses enter the room, the scene changes from that of an Egyptian-themed detox spa to that of a turbo charged vertical suntanning booth.

The nurses remove TERRA's wig, put little sun-tanning goggles on her and as the purification ritual of unwinding the zealot begins, the detox centre turns into a metaphorical vertical suntanning booth. The nurses anoint her with sweet-smelling lotions to initiate the release of her conscience. They then symbolically raise laser tubes that simulate tanning booth UV bulbs. TERRA slowly rotates like a turkey on a spit and the nurses circle the other direction in a ritualistic suntanning session.

The purification rights prompt the flow of TERRA's confessional memories and the projection screen and monitor screen synchronize their integrated visuals to display the release of her memories of the assassinations of the fossil fools.

In this scene the dialogue is minimal and the narrative is taken over by screen visuals, lighting effects and spatial movement and dance choreography.

The nurses dance in sensuous and erotic fashion, possibly bellydancing, with the intention to break down TERRA's inhibitions and resistance to the truth.

The musical background accompanying the projection and monitor screen displays of the oilpatch assassinations is a gentle Satie-like piano piece providing dramatic irony to the violence of the crimes.

The first assassination memory film is an homage to the visual style of Akira Kurosawa, specifically Rashoman. The gist of the one-minute film montage is SHACHO and MARIKO being killed by a powerful influx of poison steam + pacman in the Japanese SAG-D laboratory.

TERRA: Yes. I murdered them. Don't you see, I had a .. license to kill ... (goes into a spellbound trance).

Segues to the second short (one-minute) film that is an homage to the style of Sergei Eisenstein's Battleship Potemkin. The gist of the one-minute film montage is BORIS being killed by duck hunters as he runs up and down a metaphorical staircase on a marine vessel.

TERRA: Yes. I murdered him. It had to be ... (goes into a spellbound trance).

This film segues to the third short (one-minute) film that an homage to the visual mise en scene and editing style of Sergio Leone's Il Buono, Il Brutto, Il Cattivo. (The Good the Bad and the Ugly). The gist of the one-minute film montage is LARRY and TARZANA being killed by a bombardment of giant pinballs

TERRA: Yes. I murdered them. Before they killed me ... (goes into a spellbound trance).

Lights come up on AMEN-RA who has been sitting quietly in the beauty salon. Just as TERRA is expelling the last of her cinematic memories, we see AMEN-RA open the drawer that contain's TERRA's lipstick PDA. dryer bell dings the Whirly cosmic ding Theme. He holds it high and it plays the Manifesto that she recited in scene three.

TERRA'S VOICE OVER THE PDA: Testing One. One Two. Terra Fuel will save us from the crisis and ... and Energize the future ahead and ... and detox the earth from hydrocarbon addiction! The world is about to meet its saviour and it's me! It's not too

late.

AMEN-RA shakes his head in disbelief. Suddenly TERRA Fuel's telephone rings. It rings but at first he ignores it. He walks over to the phone and picks it up but slams it back down to disconnect the caller. He then dials three quick buttons that we recognize as "911."

AMEN-RA: Police? Come to my spa immediately. There is a murderer in our midst. A reprobate, hooked on bloodlust, a Terra-rist. She has been unfaithful to her peaceful solution.

The Nurses, dressed now as police, immediately respond, enter the Temple of Erotica and take TERRA away, kicking and screaming." The moment she is gone, the phone rings again and this time AMEN-RA answers it.

AMEN-RA: Good afternoon. Terra Fuel. Can you hold for a moment please?

While AMEN-RA is deliberating about whether to continue his call, we hear TERRA Fuel's jingle on the hold machine.

Government of Sri Lanka? You'd like to order ... wait let me get a pen and paper ... a million barrels of Hemp biodiesel oil, a million barrels of gas hydrate methane, and 40,000 hours of Hot Love? A village devested? Women, men and children? Wait ... what's your number? I'll have to get back to you.

AMEN-RA slowly puts the phone down, mouth wide open. Gasps and puts his face into his hands.

AMEN-RA: What have I done?

Blackout

Scene Ten: Camp Cowgirl

TERRA is in the Longview Lockup, a prison for women also known as Camp Cowgirl. She is wearing a tattered version of her booth-bunny hat and is sitting at a table waiting for a visitor. A security camera is aimed at her.

On the monitor screen, we see TERRA under scrutiny of the security camera. We see an image of her fading in and out on screen, like the screen image that opened scene one.

TERRA: (partly voiceover, partly seen) ... How could I have been so wrong? No ...no I - could - not - re-sist ...

The following lines are sung/talked to the words of Johnny's Cash's Folsom Prison Blues.

AMEN-RA: (Walking towards her with a pile of papers in his hand)
Terra, I ...

TERRA: (Singing at him furiously)
*I'm sweatin' out a crisis. You fuck, you turned me in,
I thought you were an ally. You ain't even a friend.
I'm stuck in Longview Lockup, Terra Fuel's orders die.
Yeah, I killed those fossil fools, but don't deserve to fry.*
(Talking)

Dr. Ra, I need you. What am I going to do? I trusted you ...
your immaculate intelligence... How could I have been so
wrong?

AMEN-RA: (Trying to show her the papers) Terra, I ...

TERRA: Who the hell's side are you on? I'm in such a shitload of
trouble. I've fallen off the wagon. (Singing)
*At risk is Oilsands hydrocarbon exploitation.
Big money for the winners, nada for the rest
Americans, Germans, Russians, Japanese, Canucks.
Pretty soon you Arabs, will be shit out of luck.*

Make it up to me, apologize. If not for yourself, you rat, then for the good of the earth. Terra Fuel don't need a doctor. It needs your free lawyering, now.

(Singing in a higher key)

Hot sex is full of Hot Love to revolve those turbine props

The steps of southern Finland are suited for hemp crops

Japan has the weather to drill methane tubes

Defend me on these charges, energy for all to use.

(Talking)

So what have you got to say for yourself? Speak, man. Have you at least been answering the goddamn phone?

AMEN-RA: Terra ... This is what I've been trying to tell you!

He thumps the roll of papers on the desk and the music stops abruptly.

Can I talk now? Are you ready to shut up and listen to me for a change?

AMEN-RA fans the papers out in front of her, revealing the PDA lipstick recorder. A low-frequency rumble and then a dryer bell dings the Whirly cosmic ding Theme.

I don't know if I have a better way to show you, Terra ...

TERRA: *(cutting him off)* You expect me to believe you now? If it was only true. Trust you? Not trust you? ... You could

AMEN-RA: Remember ... the Peaceful Solution

AMEN-RA picks up the lipstick PDA and waves it in front of her face.

TERRA: This *is* the peaceful solution, asshole! Don't you get it? So what if I knocked off a couple of fossil fools? Remember ... firepower this? *(makes Italian fuck-you gesture)* What a dilemma.

AMEN-RA: *(Sighs)* The peaceful solution. Look, your orders from the last few days. *(Points at the sheets of paper)* An Angolan baby

food factory, a California go-cart rally track, the Nunuvut Board of Education — all these people sick of high prices. And here's the one that slapped me in the face when I turned you in, the Government of Sri Lanka ...

TERRA: (*Covering her ears*) Trust you? Not trust you. Trust you? Not trust you. Opportunity ... or danger? (*Yelling*) Why should I give you a second chance?

AMEN-RA: Because (*points at the papers and then turns to her*) ... I can keep you away from temptation. I have a better way to show you.

AMEN-RA approaches TERRA, takes off her cowboy hat and touches her hair. A heavenly illuminating light radiates into the jail cell. A golden light that looks like the tanning bulb emanations from scene seven.

And, because ... I believe in you.

TERRA: You'll defend me on these murder charges and we'll put energy back into the hands of all nations, not just only the oil companies?

AMEN-RA: Terra Fuel's orders have not died. Far from it. It's sinking in with the world that the Oilsands are just a bandaid, Terra, like you say. We're running out of hydrocarbons. The future is in alternative energy. I am on your side. The nurses, besides catching you if you fall off the wagon again will set up a state-of-the-art Terra Fuel telemarketing order system.

As he raises her onto a little pedestal and gazes into her eyes, an illuminating sunlight transforms her into a peaceful reverie. Her eyes are closed, chin is up, and her hands are like little paws in front of her chest.

Saddle up, my sphinx-like cowgirl. We have to save the world.

AMEN-RA stands in front of TERRA and she falls onto his back.

(*To the audience*) The jury is now out.

He carries her away.

Blackout

Intermission: A Warp in Time

During the intermission. The Nurses stay in character and circulate among the audience, passing out drinks and snack packs in exchange for tickets given out in scene one. They also congratulate audience members for having voted in certain ways, even though these scenes have not been played out yet.

Since Larry handed out the greatest number of drink tickets, there are more snack packs with a rattlesnake on it than any others. Since Boris handed out the next greatest number, there are more snack packs with hemp leaves than with Mariko's samurai picture snacks.

Nurse #1 says to individuals or groups of audience members, (something like) "You sure were kamikaze jury members to go along with that Samurai slaughter. So Tokogawa Shogunate of you. I had no idea you were such an aficionado of the arresting arts of the samurai. Congratulations for participating and showing whose side you're on." Here's a snack pack.

Nurse #2 says to individuals or groups of audience members, (something like) "It was smart to let her off in that socialist shoot out. So Karl Marx of you. I had no idea you were so so keen to contribute to the destruction of bourgeois society. Congratulations for participating and showing whose side you're on."

Nurse #3 says to individuals or groups of audience members, (something like) "You were wise to make her do her time in that capitalist shoot out. So Ayn Rand of you. I had no idea you went along with productive achievement as being a person's noblest activity. Congratulations for participating and showing whose side you're on."

When challenged or questioned about what they mean, the Nurses break away with, "Excuse me, I have a few things to do and then I need to get back to the phones. The orders are really pouring in."

Scene Eleven: Flashback to the Trials

On the monitor screen as the audience comes back into the space... Much in the way we saw TERRA fading in and out on screen at the end of scene three, we now see shadowy figures appearing on screen who we can tell are the assassinated fossil fools. They are now re-designated as Judges from Beyond the Grave.

MARIKO's hair is wet and her face is burnt as if she has been steamed to death. SHACHO's face occasionally drifts in, burnt and wet as well. She dabs SHACHO's brow.

BORIS is covered in oozy black tar as if he has been smothered by an oilspill.

LARRY's face is torn and bloody as if he has been ripped up by a cougar. TARZANA's face occasionally drifts in, torn as well. They kiss.

Each inner judge in turn: (partly voiceover, partly seen) ... Believe me ... I cannot tell a lie.

The projection screen shows a slide show of the Nurses, as telemarketers, taking orders for Terra Fuel. The slides refresh about every five seconds.

In the intermission, the set was changed to a abstract kind of courtroom and we hear opening bars of The Guess Who's It's Too Late, She's Come Undone. AMEN-RA, just as in scene three, is mixing a bowl of potion. He puts it down and talks to the audience.

AMEN-RA: *(Laughing and sadly)* Back from the past? While you were away, trials took place and, well, now we know whose side you're on. Terra Incognita will accept her punishment pursuant to the laws of the deciding court, as it is deemed fit.

Ladies and gentlemen of the jury. You heard the case of Terra Incognita . The leading facts, as they appeared upon the transcript of the proceedings, are as follows:

She killed five people, conformity enforcing fossil fools who came in her way. She stole their alternative energy secrets

which they were suppressing whilst they exploited the Alberta Oilsands. This is the truth of the matter in the pursuit of justice.

The accused pleaded that she has acted in this way to guarantee the well being of the earth; You the jury made decisions within the systems of justice under which she was tried. The Tokugawa Shogun samurai system, the Marxist communist system, and the Randian capitalist system. Care to unwind the tableaux and see the recent trial highlights, flashback style?

Scene Twelve: Samurai Tribal Justice

On the screen monitor, Mariko and Shacho show up in their battered and bruised condition. They are streamed in live so as to enable a live interaction with Terra and the samurai.

AMEN-RA: *(Continuing his flashback commentary).* As if we could forget, here are the judges of our samurai trial, Mariko and Shacho, streamed in from an afterlife beyond the grave. Dead by the hand of Terra Incognita.

In live space, a setup of the END TABLEAU of this scene.

.MARIKO AND SHACHO: Broo Haaaaaaa Ha

As AMEN-RA sings recites the summary, Terra, along with the masked samurai fighters (two of the Nurse actors) disassemble from the tableau and hover, computer-game like in a looping attack setup mode.

AMEN-RA: *(In the tone of a sports commentator)* Now, here's a summary of weapons, tactics, techniques used during the first round of this trial. In this first replay, we see Terra barely surviving against the jutte iron truncheon, sasumata wooden spear fork and yori-bo wooden staff. The yori-bo samurai doubled the offensive output of Terra and her hand-to-hand attack mode. Let's take a look at the replay.

Shacho and Mariko are in a loop of wicked laughter on the monitor.

The Nurses' telemarketing slide show continues its progress on the projection screen.

Terra and the samurai opponents battle out gruesome sets of parries and strikes -- the samurai using wooden staffs and Terra using her bare hands. Terra is clearly being out fought.

There is no dialogue in this fight, simply blood curdling laments and screams from Terra and victory cries from the samurai. Terra gets pinned to the ground by the samurai and the action freezes.

As you'll remember, Terra looked disjointed as early as the first round. These young samurai are learnin' how to win in this

tribal environment.

SAMURAI: High ya. Ooof. Oooof. Yeeeeeee!

TERRA: I'm gettin' my ass kicked here.

MARIKO AND SHACHO: Broo Haaaaaaa (*part of laugh loop*)

Terra and the samurai stand up and reposition themselves in the computer-game like looping attack setup mode. Only this time Terra has a long katana sword and the samurai have sasumata spear forks.

AMEN RA: Now we can't believe she's ready to throw in the towel just yet. Just because the whole trial is being dominated by the samurai ...

SAMURAI: High ya. Ooof. Oooof. Yeeeeeee!

TERRA: Why take this you ...

MARIKO AND SHACHO: Broo Haaaaaaa (*part of laugh loop*)

Terra and the samurai opponents battle it out again with sword parries and strikes. Terra gets in one strike and is then once again out fought.

AMEN-RA: Here we see Terra light up for an instant, but they're back at her crisply. It can't be fun for her.

SAMURAI: High ya. Ooof. Oooof. Yeeeeeee!

TERRA: I'm gettin' killed here ...

MARIKO AND SHACHO: Broo Haaaaaaa (*part of laugh loop*)

*Terra takes strike after strike and finally she is pinned to the ground, attacked, and killed. The scene freezes in **END TABLEAU**.*

AMEN RA: The validity of this samurai system was a big question mark coming in. This is no good -- it's right in front of us people. She has no training for this whatsoever and where's the justice? Rewind.

The last choreography gets re-enacted in reverse sequence right back to the looping attack mode.

(*As the rewind action is taking place*). Let me speak for Terra.

Downright unacceptable. (*Gestures toward Terra.*) We can't just kill her off and leave her senselessly dying in a pool of her own blood. Let's consider this a warmup trial and scrap this option. Members of the jury? If you have a samurai picture on the back of your snack pack, stand up and be recognized for your wise judgment in calling this a complete mistrial.

Amen-Ra leads a round of applause for the jury. The samurai fighters bow and disappear into a backstage area. Terra groggily gets up and dusts herself off.

On screen, we see Mariko and Shacho pounding on the screen trying to get out to finish Terra off. They are furious. They then fade away.

(*Quietly and sadly to the audience*). That's when I received the first installment in a string of bad news that I had to break to Terra.

(*To Terra*) Bad news about the gas hydrate methane fuel. It's been blowing test flights right out of the sky. Terra, we have to withdraw the energies of singing crystals from market.

A Nurse, taking orders on the projection screen, slumps over her phones.

And that's when she said to me ...

TERRA: Dr. Ra, it's lucky we still have the energies of bio-diesel hemp oil and the energies of Hot Love. Let's not get discouraged. We have orders to fill!

AMEN-RA: And then she turned to the nurses in her classy, peppy way and said.

TERRA: (*To the two remaining Nurses*) Nurses, you'll have substitute that half-baked methane product. We all make mistakes but we can't be blowing jetplanes out of the sky either! Remember, we still have two peaceful solutions.

We hear the phones ring.

Now answer those phones.

AMEN-RA: (*Directly to the audience*) Members of the jury. How many of you have Larry and Tarzana's rattlesnake on the back of your snack pack? (*counts and says the number*). How many of you have Boris's hemp leaf. (*counts and says the number*).

Majority rules. Can I assume you'd like to see flashbacks of Terra's communist trial first?

Scene Twelve: Communist Justice

On the screen monitor, Boris now shows up in his battered and bruised condition. He is streamed in live so as to enable a live interaction with Terra and the samurai.

AMEN-RA: As if we could forget, here's Boris — streamed in live from beyond the grave. Dead by the hand of Terra Incognita.

In live space, a setup of the "END TABLEAU" of this scene.

We had some questions about Boris's politics. "Now, Boris Goofinoff, we are about to try Terra in a Communist court system. Are you not, "Black-market trained capitalist. How can you be judge of this communist court?" And he said:

BORIS: I am, what they say, freeze dried communist. When my enemy is in hot water, my commie juices start to flow. Old habits, they die hard. Maybe that hateful Terra Incognita remembers ... "Whee hoo. Canada! ... Russians go home no more h-h-hockey?"

Terra and the masked goalie (a Nurse actor) disassemble from the tableau.

Set up this courtroom for shootout. We'll see who wins now.

Amen-Ra: Here's a replay of the action..goin' in Terra is up 4-0.

As this is being said, a masked goal-tender brings out a goal and two sticks, drops the puck and Terra and the goalie go into a computer-game like looping hockey setup mode.

Boris looms out from the monitor.

Amen-Ra whistles a few lines from It Was Too Late.

The two remaining Nurses' telemarketing slide show continues its progress on the projection screen.

Terra skates around in front of the net. The goal tender mocks the movement of a computer-generated character and is useless against her swift action.

Boris: Why you did illegally obtain material happiness of my hemp bio-diesel fuel?

Note: This scene can be also be played as an audience and/or nurse-actor enabled improv that reassembles the scene back into the opening tableau.

Amen-Ra: Looks ahead for an opening.

Terra: (*Skates around with the puck.*) Because through organized collectivism and violent revolution ... (*Shoots the puck*)

Amen-Ra: The goalie holds his ground. She pounces on the rebound

Terra: (*Skating*) ... destruction creates a better political, economic, and social organization against bourgeoisie. (*Shoots the puck*)

Amen-Ra: Sucks up. Scores!

Terra: (*Slurpy suckup sounds*) ... Shuuuuueeee.

Amen-Ra: Here's another highlight from period two. Terra has the puck and continues to suck up.

Boris: How will your struggle to free alternative fuels end in triumph of universal Socialism?

Terra: The proletariat takes up the struggle ...

Amen-Ra: Tries to centre it banks it off the side of the net.

Terra: ... against capitalists who defraud the proletariat.

Amen-Ra: Sucking up. She shoots ...

Terra: ... highest moral rule contributes to destruction of bourgeois society. (*Sucking up*) Shuuuuueeee. Energy for the people.

The scene freezes in END TABLEAU.

Amen-Ra: She scores. Smart unselfish play by Terra Incognita.

Boris: (*Crying*) I hate her. Shliushka. But I must love her -- such perfect communism. Energy for the people. Shliushka, nyet.

Amen-Ra: A victory for all to see. and now the verdict.

Boris: My jury delivers justice. The accused is acquitted. For being good communist, she must not be punished. But still hate ... (*Boris fades off screen*).

Terra: Nice move Boris. But what happened to your verve, your spirit? Communism and apathy. I cannot accept this. (*Sighs*)

Amen-Ra: Members of this jury? If you have a hemp leaf picture on the back of your snack pack, stand up and be recognized for

your judgment in freeing Terra Incognita.

Amen-Ra leads a round of applause for the jury. The goalie slinks off and disappears into a backstage area. Terra approaches Amen-Ra.

AMEN-RA: And this is when she said:

TERRA: My conscience has caught up with me. I can't accept this verdict. Go free for the death of five people? I was not being truthful. I sucked up. Busted. You know I was just sucking up with all that proletariat crap. I'm not just some apathetic lefty. Isn't there a system that will find the proper judgement for my crimes?

(Quietly and sadly to the audience). I nodded to her. Are you sure you don't want to just walk away to freedom? She was adamant she wanted another trial. I suggested the Ayn Rand way. Capitalist objectivism. And she agreed.

A whirly, cosmic sound.

That's when I had to break the next piece of bad news to Terra.

(To Terra) Bad news about the hemp bio-diesel fuel. The THC cannot be extracted and entire populations of our cities would be permanently stoned.

A second Nurse, taking orders on the projection screen, slumps over her phones.

And that's when she said to me ...

TERRA: Amen-Ra, We still have the energies of Hot Love. Let's not get discouraged. We have orders to fill!

Amen-Ra: And then she turned to the remaining nurse in her best cheerleading voice and said...

Terra: *(To the remaining Nurse)* Nurse, you'll have substitute that half-baked hemp oil product. We all make mistakes but we can't be stoning the whole world! Remember, we still have a peaceful solution. Answer those phones.

We hear the phones ring.

And now onto my appeal for justice.

Scene Thirteen: Capitalist Justice

On the screen monitor, Larry and Tarzana now show up in battered and bruised condition.

AMEN-RA: Now, I think you're getting the hang of this. Of course, we see Larry and Tarzana streaming from beyond the grave with the worst kind of grudge against Terra. After all, she did kill them.

Will Larry and Tarzana let her off like Boris did? What a soft touch he was for all things communist. Will she get off scot free again?

In live space, a setup of the "END TABLEAU" of this scene.

In advance, let's thank the jury for your fine decision making. Members of this jury? If you have a kissing couple on the back of your snack pack, stand up and be recognized for your participation in this classically strategic Ayn Randian Capitalist trial. Let's watch.

Terra and the masked gunmen (Nurse actors) disassemble from the tableau and stand in a shoot-out triangle.

TERRA: Just don't make me fake a suck up job this time. Truth, honour, morality will be my motto. *(To herself)* Truth, honour, morality. *(Hears the phones ring and snarls to the Nurses)* Just keep answering those damn phones!

Larry and Tarzana loom out from the monitor.

Amen-Ra whistles a few lines from It Was Too Late.

The remaining Nurse's telemarketing slide show continues its progress on the projection screen.

Terra furtively looks back and forth between the masked gunfighters. They mock the movement of computer-generated characters.

Terra: Well, here we go again.

Larry: *(To a gunfighter)* Go ahead. You ask the questions.

Note: This scene can be also be played as an audience and/or nurse-actor enabled improv that reassembles the scene back into the opening tableau.

A Good the Bad and The Ugly-ish whistle as if coming from the whirly cosmic thing. The gunfighter just stares back

TARZANA: Shit, okay, I'll interrogate. You know that under capitalism, a strictly limited government protects each person's rights to life, liberty, and property. How could you have initiated force against anyone else?

AMEN-RA: Terra weighs her strategy.

TERRA: *(Slowly goes for her gun.)* Because I am a hero who builds businesses, invents technologies ... okay steals technologies ...

The gunslinger shoots at Terra but she is too fast. she shoots him in the leg and down he goes. He crawls off set. There is only one gunfighter left.

AMEN-RA: Good pressure now by Terra.

TERRA: *(pulling up her britches and eyeing the other gunslinger.)* A hero who creates my own individual ideas, depending on my own talent to reach my goal. *(Shoots the other gunfighter.)*

AMEN-RA: She shoots ... Another gunfighter down for the count.

LARRY: She's good alright. What was that that Boris called her ... Sliushka?

AMEN-RA: Here's another quick highlight to show you Terra's strategy.

Terra is seen leaning down to help gunfighter two.

LARRY AND TARZANA: *(To Terra.)* Time to fire at you with both barrels you second rate amateur idealist. You stole our technology, you killed us and have left us to languish in purgatory. How do you explain yourself out of this?

AMEN-RA: Terra fights with her emotions to remain clear-headed and truthful.

*Suddenly Terra holds her gun to the head of the fallen gunfighter two. **END TABLEAU.***

TERRA: Hold it right where you are or I'll. *(Lets her gunfighter*

hostage go and then says to Larry and Tarzana on screen) Ah what's the use? Just throw the book at me. I can take it.

AMEN-RA: And now the verdict.

LARRY: You know it. Go to jail. *(Terra looks humiliated.)* Camp Cowgirl is calling you...

TERRA: No!! *(Collects herself)* Can I keep marketing Terra Fuel?

TARZANA: Sure.*(Laughs)* Wink wink nudge nudge. And weekend privileges, Iced Capuccinos, no problem. But you'll need protection and I hope you'll consider ...

LARRY: Rattlesnake Security — the biggest bite for your buck.

TARZANA: You'll be surprised at how much you can buy your way out of.

LARRY AND TARZANA: Ooooh, our palms needs greasing right now.

AMEN-RA: And this is when Terra said:

TERRA: No!! It's still not fair justice. I can't accept this verdict. This greedy capitalism system sounds more like even more of a suck up than those commies. I'm not some wingnut neo-con. There has got to be some system that will find the proper judgement for my crimes!

LARRY AND TARZANA: You ingrate. It still doesn't make us any less dead! You hateful bitch. *(They fade away)*

The final Nurse, taking orders on the projection screen, slumps lifelessly over the phone.

AMEN-RA: I didn't even need to tell Terra what that meant.

TERRA: No!!

A whirly, cosmic sound.

Terra puts her hands over her head in shame and humiliation.

Blackout.

Scene Fifteen: Perpetual Energy

As the scene changes from the courtroom back to the Detox Spa, we hear opening bars of The Guess Who's It's Too Late, She's Come Undone. AMEN-RA is mixing a bowl of potion.

AMEN-RA: All caught up. As I promised you will now see the light of perpetual energy fall into this story.

He puts down the potion and hums/sings along.

Too many trials. And not enough truth.

Too much carnage. And not enough propriety.

(Hums the next line.) It's too late she's gone too far. She's lost the sun ...

Ma'at. A bonus system of justice. Ancient Egyptian codes where life forces face immortality. Ma'at where, in our story, the real finally integrates with the virtual. Harmony. Balance. Justice. Order. Peace. Propriety. Truth. *(beat)* Reciprocity. Reciprocity. *(To Terra)* Can you finally face getting back what you've given, my sphinx-like cowgirl?

Lights come up on TERRA who is in sitting sphinx-like in her usual styling chair but looking pensive and tired. AMEN-RA takes TERRA's hair and she springs to life. Her spy case and her booth bunny cowgirl hat are at her side.

AMEN-RA: How much do you want off?

TERRA: Wait a second. I have to spend all day, every fucking day in jail. Terra Fuel is a bust, nothing to market. The world's addiction to hydrocarbons still has us up the creek with no paddle. And you want to ... groom me?

AMEN-RA: A half inch?

AMEN-RA calmly takes a smidge off her hair.

TERRA: *It's too late.*

I've gone too far. It ain't no fun.

I've come undone.

Listen, we could start an all-new business plan. So what if the world runs out of oil. How about saving the ... ah ... fuck, I don't know ... whales? Dr. Ra, I took a risk and failed. Terra Fuel is such a bust. Immaculate intelligence ... half-baked.

The three nurses, who are hunched lifelessly over their telemarketing phones, now in real space, breathe a huge sigh and return to lifelessness. AMEN-RA calmly takes a smidge off TERRA's hair. He goes to pick up the bowl of potion and TERRA counters by picking up her booth bunny hat and slamming it down on her head to prevent Amen-Ra from moulding her hair and thus her consciousness. A whirly cosmic sound comes from her spy case which is set down at her feet.

Terra Fuel customers ... (screams) It's not too late!

TERRA freezes and one of the nurses comes back to life from her position slumped over the phone. She stands and grabs a set of binoculars and holds them up to her eyes.

AMEN-RA: *You didn't know what you were headed for*

And when you found what you were headed for

(Hums the next line) It was too late.

TERRA unfreezes. Another nurse comes to life, stands, and holds binoculars up to her eyes.

Terra Incognita. Live up to your Manifesto. Save us from the crisis Energize the future ahead and ... and detox the earth from hydrocarbon addiction! You're facing your final trial. Follow the light of perpetual energy. It's not too late.

The last nurse comes back to life, stands, and holds up binoculars.

The nurses take on roles of co-pilots of a space ship and begin tuning in a universe of adventure beyond our world.

On the projection screen, a star field appears.

On the monitor screen, we see the shadowy figures of the fossil fools.

AMEN-RA seats himself ceremoniously in another styling chair and the salon becomes a space ship in a game of global energy salvation.

AMEN-RA: (Spinning dials on an imaginary control panel) Justice cannot exist without taking a risk on truth, balance, and compassion. Reciprocity cannot exist without the diversity of balance and order.

TERRA: Where ... where are we? The real space, life on earth. (looks and points down). Aaah (gasps) The virtual space, the future, the past, life after ... (points ahead and up)

On the projection screen, the star field blazes by.

On the monitor screen the fossil fools loom out at TERRA.

At the same time, MARIKO, SHACHO, BORIS, LARRY, and TARZANA enter the real space like zombie avatars.

Oh my god, the conformity enforcing fossil fools. (arrgh).

SHACHO and TARZANA tie up AMEN-RA and tape his mouth. While they have him pinned down, they also make up his eyes Egyptian style. The others circle TERRA zombie-style and twirl their chains.

THE NURSES continue to pilot the ship through rough skies.

MARIKO: Sacrifice this insidious diversity generator. She will pay.

BORIS: Shliushka.

MARIKO: Shliushka. Huh! The amateur idealist.

LARRY: Must die. Ma'at or not. She pays with her life.

FOSSIL FOOLS: She must die. License to kill.

The zombie fossil fools, Mariko, Larry, and Boris, circle her and grab her, kicking and screaming.

TERRA: Amen-Ra. Can we rewind this justice system too? Arrgh.

The fossil fools manage to pin TERRA down to a sacrificial slab -- a combination Christian crucifix and Egyptian walk sideways torture rack.

TERRA: This really isn't a game this time? *(To the fossil fools)* Hey guys. I was just funnin' ya. There's lots of life in you yet. *(Laughs)* Exploit the world's energy resources. Oilsands? I don't really see a problem.*(Arrgh)* You know I'm on your side *(Arrgh)*

The fossil fools remove her cowgirl hat and position her head into the Egyptian-style drying helmet. They also paint her eyes exaggerated Egyptian style. With a roar they raise the slab to become a dias that has her standing sideways on the Egyptian style crucifix.

Fossils, forgive me. You know what you do. ...

As she is rising up, TERRA looks down at the earth below. An illumination of perpetual energy, similar to that of the nurses' turbo-charged vertical tanning booth in scene nine, blazes back up at her.

Wait. Wait. Look below. Light. The light!!! There it is!!! Dr. Ra. Can you see?

Cosmic whirly sound.

Arggh. Terra Fuel customers. Don't worry. It's not too late. *(She cries in pain from her sacrificial wounds.)*

AMEN-RA: Hrmmmmffff. *(His mouth is tied up and can't speak.)*

Seeing their great leader in trouble, the nurses leap into the fray, grabbing TERRA's spy case, taking out various weapons to fight the fossil fools. They loosen AMEN-RA from his bindings and neutralize MARIKO, LARRY AND BORIS by aiming the glowing lipstick PDA at them like a stun gun.

(To the nurses) Nurses take your places. She's about to glimpse the brilliant future. Prepare for the inevitable.

The Nurses work their way over to align themselves with the fossil fools who are about to carry out the sacrifice.

TERRA: *(Ecstatically)* The light! Dr. Ra. Explain. What's going on. What are these lights? It's the glittering desert. It is isn't it?

An illumination of perpetual energy shines from below.

It's the glittering desert of perpetual energy and they're harvesting the energy of ... the Sun!!

Look. Down there. Grids of solar reflectors as far as the eye can see. .My god, it's ...No! it's the Sahara (*gasp*) Egypt... and Saudi Arabia... and Libya. The Middle East (*gasps*) dominates again. No!!! It's back to being hostages of Sahara. Arggh

The fossil fools and the nurses tighten the bindings on TERRA. She groans in pain.

(*Noticing the nurses*) Just whose side are you on?

Suddenly, on the monitor screen, we see TERRA fading in and out on screen, like the screen image that opened scene one and reoccurred in scene ten.

The fossil fools begin to merge with her image on screen. Like Terra, they are now in both virtual and real space at the same time.

Amen-ra, I trusted you ... your immaculate intelligence... We're all in a shitload of trouble again.

AMEN-RA: (*Ascending up to the sacrificial dias*) We're not. It's different this time, Terra.

On the projection screen, the star field blazes by. A whooshy sound effect.

AMEN-RA: You must accept this sacrifice. (*Terra still struggles*) You are still saving the world! (*TERRA stops struggling and finally listens*) The perpetual power of the sun will benefit all in the world. This power will be for all to share once the oil runs out. So says I.

TERRA: Who are you to say that?

AMEN-RA: Amen-Ra. Sun God and Deus ex Machina of the court of Ma'at. *TERRA mimes a Greco/Roman machine that allows AMEN-RA to ascend to the the sacrificial dias* . The gift of the sun. Equilibrium. Reciprocity in perpetuity. Say a final goodbye to the siege mentality that arouses us to create enemies Say

goodbye to Spies in the Oilsands. Welcome Harmony. Balance. Justice. Order. Peace. Propriety. Truth. (beat) Reciprocity. Reciprocity of our Perpetual Energy. Our Sun. But you must accept this sacrifice.

AMEN-RA and completes his Deus ex Machine ascent to the the sacrificial dias. He positions himself sideways, ancient Egypt style and takes hold of TERRA's hand. The fossil fools and the nurses team up in their happy groupings, LARRY and BIGTARZANA, MARIKO and SHACHO, and BORIS -- each with a nurse who transforms and freezes them with an Amen-Ra-like magic genie effect.

TERRA: (Slowly) I know now you're on my side. I accept this sacrifice. (Faltering) No. I lie. I'm hooked again. On life. Call me an addict. I want to live. Aaargh. (Convulses)

Amen-Ra presses his fingers into her scalp.

(Recovering her senses) My dark moment has passed. I see the world flickering back to life. I now know the winning formula. You, me, liberating energy from the sun. The sun has the power and Sahara will share in this strategic game of global salvation within the virtues of Ma'at. Reciprocity.

An illumination of perpetual energy blazes from below.

Look. Another glittering desert of perpetual energy —It's already working ... in the Australian outback. Grids of solar reflectors as far as the eye can see. .

A whooshy sound effect.

My god, now ... it's the Gobi. China!

A whooshy sound effect.

Now the Mojave ... Even, even

A whooshy sound effect.

The Alberta Oilsands. Look. (Then sadly) Just as I thought. A scar of exploitation the size of Prince Edward Island. (Excitedly) But look all around. Amen-Ra! Solar grids as far as the eye can

see. It's true. We will have fuel to peddle when the oil reserves are all gone. It's not too late.

On the projection screen, the star field stops and twinkles. A whooshy sound effect.

FOSSIL FOOLS AND NURSES: The world will have peace, harmony, and reciprocity?

TERRA AND AMEN-RA: Yes (*slump*)

FOSSIL FOOLS AND NURSES: The energy of the sun will move us toward a united world vision of propriety and order??

TERRA AND AMEN-RA: Yes (*slump*)

FOSSIL FOOLS AND NURSES: We will loosen the shackles of hydrocarbon addition?

TERRA AND AMEN-RA: Yes (*slump*)

ALL: We've found the sun

Smoke, Fire, Wind all begin their energizing special effects accompanying TERRA and AMEN-RA into the afterlife.

On the screen monitor, AMEN-RA begins to appear in screen space. We see TERRA and AMEN-RA as if they are fading in and out of the afterlife — integrating real space and virtual space

Instrumental flute solo part of It's Too Late.

All: *It's not too late. We've worked too hard.*

We've found the sun. We've ...

The nurses' phones start ringing.

Come ...

They run back to their phones

Un- ...

THE NURSES TOGETHER: Terra Fuel. Solar Power for all. May I take your order?

D-o-n-e.

TERRA and AMEN-RA's chains loosen and they slump their final slump. TERRA winks on screen and turns to kiss AMEN-RA.

Blackout

Credits

On the screen monitor, we see the fossil fools, the Nurses, and finally TERRA and Amen Ra as if they are fading in and out of the afterlife — integrating once and for all, the real space and virtual space.

END

SPIES IN THE OILSANDS: WHOSE SIDE ARE YOU ON?

As Performed at the Calgary One-Act Play Festival, March 9, 2007

Preshow: Songs about Alberta.

Joker: We are the Gamer Players. What we are presenting for you is not traditional theatre. It's interactive theatre based on Forum Theatre and what we're going to do is pose a question. We don't have the answer, nor do we espouse an answer. We're exploring an issue that is pertinent to Alberta right now and we'd like to have a dialogue with you to see if we can find a path to go on. We hope you will play with us and indulge this experiment. We're going to present this a couple of times and when you watch it this first time, just watch it with critical thought and places maybe where the whole story isn't coming out. Maybe there are some other perspectives that need to be heard?

Video begins. Timecode: 00. Truck rumble sfx.

AJ: (*Tapping at the keyboard.*) Man, I'm not getting an image anywhere. She's not going to like this. Okay, AJ, Breathe. And go for a walk. (*Looks out window*) Yes, go for a walk out there which is just mud and shit. Not like the coast. What am I doing here? (*looks at the screen*) Damn. I'm getting something. Something's coming in. It's all over the place, there's no focus. (*Reaches for a book*) Like my instructor always said, if you don't know what's going on, read the manual. (*Reads book*). Long-eared owls. (*Looks at cover*) Birds of the bo-real forest. (*Reaches for another book*) Coordinates seem right. (*Hollers*) Hey, Tarzana. Tarzana could you come here for a second? The coordinates are all over the map.

Tarzana: (*To offstage buddies*) Don't forget you guys, you owe me money on that Oilers pool. Yeah, see you later. I gotta help out this new kid. He's pretty green. (*Walks to the door, stamps her boots. Turnstakes a drag of her cigarette.*)

Tarzana: I love the smell of bitumen in the morning.

Tarzana: Geez AJ. I thought you knew how to work this system. What did they teach you at NAIT? You're all over hell's half acre out here...Yer bird's way all over the fuckin' place.

AJ: Bird? What do you mean?

Tarzana: The satellite. With the camera on it for taking pictures? Nudge her alittle further south. Ah, yes, the paydirt. The Alberta Oilsands. The engine that drives our economy.

AJ: It's still a little fuzzy. What are we taking these shots for anyway?

Tarzana: For the boss's annual report cover. We need a sexy smokestack picture. 100% Emissions free. Makes the shareholders feel all warm and fuzzy. Investors too. There's \$110 billion of development on the books around here and somebody's gotta pay for it. You know? Our Boss made \$6.5 billion profit last year.

AJ: 6.5 billion dollars? That's a lot of jobs..

Tarzana: You bet. Let's see, if you lined 6.5 billion in hundred dollar bills end to end, they'd stretch all the way to heaven. Well at least from here to fucking Timbuktu ... and back. And that's the Alberta Advantage.

AJ: We should form a republic. *(Looks at screen)* Look, we're getting a fairly good shot here. What's this? A little lake? Not far from here?

Tarzana: Oh yeah, a lake eh? Right. *(Laughs)* That's a tailin' pond. You jump in that and your balls will melt right off your body. That's the water they use to boil the oil out of the bitumen. I hear the Circle 8 in Fort Mac has a new hot tub. Wanna try it out?

(Restart the video)

We need to come in lower.

AJ: It's so, what, smokey.

Tarzana: Ignore the smoke. It's the cost of doing business.

AJ: Okay. Nice clean target coming into range. Clean as a whistle. What're chances of that!?!??

Tarzana: Holy shit, Boss'll love it. That's the smokestack we're looking for. Oh, oh oh oh

AJ: Yes yes yes. Getting closer ...

Together: Yes. Tighter. Yeah.

HIGH FIVE IMAGE.

TOGETHER: AHHHHH. The money shot.

Pause Video Timecode 01:50

Tarzana sits, rolls the chair back. Rolls a smoke.

Terra enters, crosses the room

Terra: Tarzana, oh my god, you're leaving your truck running. How many times have I told you to turn your truck off??

Tarzana: Where did you come from?

Terra: You know what that's doing to the environment? Besides, it's illegal to leave your truck idling.

Tarzana: (*Smokes*) Know what the matter is with you environmentalists? You're cramping our style around here. Standin in the way of progress. Scientists say ... Glaciers? Gettin thicker, not melting. National Post says there are more polar bears than ever. Weather fucks up every couple a hundred years, nothin we can do about it. Yeah yeah. The environment. (*spins in the chair.*) bla bla bla bla bla bla bla.

AJ and Terra stare at Tarzana for a few moments.

(*Tarzana bizzies herself smoking.*)

AJ.: Hi, my name is AJ.

(*Shakes hands with Terra*)

You're the cook, eh?

Terra: Yeah. I'm the cook. So, you're new here hey?

AJ: Yeah, well I've been here a couple of weeks, but still learning the ropes.

AJ: Yeah there's this book about birds of the Bo-real forest.

Terra: (*Grabs the book*) Yup, that's it. Take a look at it?

AJ: Well I had a look at the owl section. You know what? These birds used to live out there. (*Points at window.*) You look out there, there's nothing. There's no forest. They're ripping down the forest so they can make all their oil and gas and all of their money. You know I actually marked all the pages of the birds that don't actually live here anymore. You know that? I think you should read a little more about it. (*Slams the book into his chest*) Take the book.

AJ: Yeah sure. I'll take a look...

Tarzana: (*To AJ*) You hungry? (*To Terra*) You bring us sandwiches for us?

Terra: Dream on. I'm the cook, not the waitress.

Tarzana: Come on let's go get lunch.

AJ: Your truck or mine?

Tarzana: Take min, she's all warmed up. See, lucky I kept her runnin'. Way easier on the ignition.

Terra: Drive??!! Nonnonono, you're not taking the truck. The kitchen is 50 metres away.

Tarzana: Grab yer boots. Get in the fucking truck.

Terra: Get out of that truck. Get out of that fucking truck right now.

Tarzana and AJ get in the truck. Terra blocks their way. Truck revving sfx.

Terra: I can't believe this. *(Starts singing Koombaya)*.

AJ: Geez Tarzana you're going to run her over??!!

Tarzana: Nah, she always gets out of the way every time.

AJ: You're not going to drive over her are you?

Tarzana: Ah. She gets out of the way every time.

Terra: I will bring you your sandwiches.

Tarzana: Easy on the tofu, cookie.

Terra: *(Stomping off)* I have to do everything around here. Bring sandwiches, Save the environment.

(AJ and Tarzana get out of the truck)

AJ goes in and Tarzana stays at the door of the shack.

Tarzana: I'm just goin to finish my butt.

AJ: I'll go grab my chew.

Tarzana: Come on back out and enjoy the scenery.

AJ: Hey Tarzana. Have you seen my chew?

Tarzana: Box under the desk I think.

AJ: *(Pulls an old milk container out of a hockey bag)* Aaah stinks!

Tarzana grinds out her cigarette and goes back in the shack.

Tarzana: Last guy musta left it. Get rid of it. *(Throws it out the door.)*

AJ: Yucck. *(Grimaces)*

Tarzana: What?! It's made of oil. It'll go back to the earth.

(AJ takes out an old orange and plops it on the desk.)

Tarzana: Here's my old hat!

AJ: *(Pulls the game out)* Software. Maybe I can use it to control the bird.

Start Video 01:50

Tarzana Pulls out a water bottle and uncaps it smells it.

Tarzana: Cleaverly disguised ... *(smells)* Just as I thought. *(Drinks)* Skreetch. The guy was a Newfie, alright. Naughty naughty, this is a dry camp. *(Hands it to AJ)*

AJ: *(Takes a swig)* *That's * why Fort Mac is such a piss up all the time.

Oh shit. The bird. The bird. *(He lunges back to the computer.)*

Tarzana: Don't panic. Come for a lesson. Ther's the Bow River. Boss's bird homed us in to Calgary head office. Back her up, swing her north. Northern Alberta. Here's Fort Mac.

AJ: This looks like Google Earth.

Tarzana. Where do you think Google gets their pictures? Let her hover. Here are the original projects. Suncor has been here since 1967. They're on both sides of the river. Got all the water they need. Here's Syncrude. Biggest mine in the world. Petro-Canada's here too. Up river now. Here we are. Here's us. Boss wants to put in nuclear plants around here. Nice and clean, especially now that the kaboom factor is under control. Neighbours? Global energy giants. Encana's down south a bit but here Shell, Canadian Natural Resources, Esso, Husky, JapanCanada ...

AJ: The Americans here?

Tarzana: American money, Chinese, German, Korean ... But, you're right, Uncle Sam in the middle of it all.

AJ:I heard there's as much oil here as in all of Saudi Arabia.

Tarzana: Easy. Difference is, costs those Saudi's like 50 cents a barrel to get their oil out of the ground. Costs us like almost 50 bucks. Lord have mercy if prices fall.

(Looks at screen) We're flying in surprisingly low now. Does this look familiar?

AJ: World's biggest trucks out to haul the world's stinkiest paydirt. What's that green pipeline?

Tarzana: No clue.

AJ: There's our shack. There's my truck. There's yours.

Tarzana: Hey Butch and Super Dave. He owes me money.

AJ: Look, there's Terra coming back with lunch

Tarzana: Hmmm!

Stop Video:

Terra stomps in with a wicker basket and takes off her boots and hardhat.

Terra: All right, I brought you your lunch. Here ya go. Couple of sandwiches. There ya are AJ. Tarzana, here. Now I'm sure you don't really care but I actually travelled up to Spirit River to get these eggs to make egg salad sandwiches. That's right. I buy everything within a hundred kilometres of where I actually live. It's true. Yup.

(Terra reaches down, picks up the orange off the desk and thrusts it in AJ's face?)

What's this?

AJ:.. An Orange.

Terra: *(To Tarzana)* What's this?

Tarzana: Orange?

Terra: Yeah. An orange. It's probably your orange, eh? You feel you need some oranges up here in the Alberta oilsands, right? You know what's going on right now in California? It's freezing. Then it's boiling then it's freezing then it's boiling. But you feel you need to fly a whole cart of oranges up here. You know how much fuel is used to get this fuckin' orange to you so you can eat your sweet orange? It's killing the environment and that is why we don't eat oranges!

(AJ and Tarzana look at her stunned. Terra plunks down a container of nuts.)

Here's your fuckin' nuts too.

Tarzana: (*Wadding up a paper bag and throwing it on the ground*). Wind the girl up and off she goes.

Terra: (*Picking up the bag*). Reduce. Reuse. Recycle.

(*Terra reaches down, picks up the game package off the desk and thrusts it in Tarzana's face?*)

What's this?

Tarzana: Software.

Terra: (*To AJ*) What's this?

AJ: Software?

Terra: Figures. You don't know. I'll just take it with me here. I'll get out of your way. You can do your important work.

AJ: Hey, wait a second. We found that in the bag here. That's ...

Tarzana: You get back here. That's our software.

Terra: This is not your software. It's mine and it's a computer game.

AJ: A game??

Terra: A game, you wouldn't get it. (*Packing up to leave*)

AJ: Why don't you show us and we can decide that for ourselves.

Terra: You know what? It think it's a little too complicated for you.

AJ: Come on show us. We like games.

Tarzana: Yeah, yeah. I like games ...

Terra: You wanna try it?

AJ: Yeah, I'll try your game.

Terra: (*Thrusting the game at AJ*). You can install my software.

AJ: Okay. Where do I stick it? In the hole dumbass.

Terra: Okay get rid of that Tarzana. Get rid of that shit on the screen. Hurry up we don't have all day.

Terra: All right out of the way. Out of the way. Here let me show you how this works.
(*Bumps Tarzana out of the chair.*)

(*Loads game Play Table F8 a bunch of times, F5, F7. Play game 5-1-Enter.*)

Terra: Okay this is called The Pipeline Pinball Energy Thrill Ride Game. Load up level number one The Alberta Gamble. Now while this is loading up, you'll see everyone who is interested in the oilsands is on the pinball game. Oilthirsty USA Russia Canada China India, they're all there. It's like any other pinball game you try to get points, right? These points? World demand and CO2 emissions.

AJ: Are they linked up.

Terra: Well yeah. As world demand goes up, CO2 emissions go up. But CO2 emissions, as you'll notice, will go up way faster. And that is exactly what is contributing to our climate change. There you see that. We're getting these points. We're getting these points. Pretty predictable eh?

AJ: Sorry but yeah, it's kinda boring.

Terra: Yeah, it's kinda boring. But, if you get to level 2, this is where it gets really interesting. Generate Energy Diversity. This is where you can actually open up alternative energy targets. Then you can get all these alternative energy points. You know, renewable resources.

AJ: Renewable resources. What's that?

Terra: You don't know what renewable resources are!?

AJ: Well, my libido is a renewable energy.

Terra: (*Stands up*) Yeah, you think you're so funny. (*pause*)

Terra: You know, renewal resources. Like solar power, you get energy from waves, it's energy that doesn't emit crap into the air that's heating up our world and killing us all. It's people who leave their trucks idling and all the gas is coming out and the CO2 emissions are coming out and the sea levels rise and people who live on islands have to leave there islands because they're going to drown. Vancouver Island is not going to exist in 20 years. AND THAT IS WHY WE DO NOT DRIVE TRUCKS! (*pause*)

Terra: I ride a BIKE!

AJ: *(Hands her the ice tea bottle)* Screech?

(In the meantime Tarzana taps away at the level two game.)

Terra: *(Takes a drink and loooks at the bottle)* Ahh. Ethanol. Ethanol. We should be using ethanol. But no, no, that won't make us any money.

AJ: So, if you don't like what's going on all around us, then why are you up here?

TERRA: I'm here to save people. Do you want to be saved?

AJ: Do you do it missionary style?

TERRA: I'm here to save people.

AJ: Do you do it missionary style?

Terra: All right come over here, Come over here. Look out the window. What do you see?

AJ: Well, Mud.

Terra: Back there. What are those tall things?

AJ: The stacks.

Terra: Yeah. The smokestacks. What's coming out of it.

AJ: Well, Smoke.

Terra: Where's that smoke going?

AJ: To the sky?

Terra: It doesn't disappear. It stays right here. It stays in our atmosphere. And it's contributing to so much crap. And then eventually you won't be able to have kids, you're not going to be able to live on this land. You know what I'm going to do? I'm going to go up into the forest, I'm going to live on a farm and I'm going to plant my own fruits and vegetables. I'm going to harvest my own land. I'm going to eat my own fruits and vegetables. I'm going to tread so lightly on this earth, no one will ever even know I existed. Yeah. *(To AJ)* Do you want to harvest my land with me? Do you want to eat my fruits? You know what? we don't need to keep raping Mother Earth.

Tarzana looks at them.

AJ: I've got hemp lip balm ...

TERRA: That's a start.

TARZANA: (*Holds up money, To AJ*) Hey AJ. Double or nothin yur paycheck I can whoop your ass at this game. I've got it figured out.

AJ: Yeah, Sign me up, I'm all for that. I mean, double or nothing, you serious? Why, cash I make outta this I can pay off my SUV and maybe put a down payment on a place. Maybe even ship some money back home to my parents. Yeah cool. (*To Terra*) All right, Granola girl. Show me how to play the game. It's your game after all.

Terra: Sure I'll show you how to play the game, I'll show you how to get all the alternative energy points.

TARZANA: Granola girl don't have a clue. Don't have a clue. See what you have to do ... You got fossil fuel points and you got alternative energy points. The idea is that you don't want to get your ball up into this green pipeline shoot or you open the stupid alternative energy targets. And you don't want that. You want to score fossil fuel points in the Oilsands.

TERRA: You want to get your balls up into that green pipeline because then those alternative energy targets open up. It's a little harder to begin with but it's worth it in the long run.

TERRA: Get it up! Get it in the pipeline!

TARZANA: Get it in the oilsands hole. Trillions of barrels and it's all ours!

AJ: Oh my balls are all everywhere. Get in the hole baby get in the hole. Yes! Yes! Well, whose side am I on here?

Terra; Well, Sustainability.

Tarzana: Progress.

Terra: Sustainability

Tarzana: Progress.

Terra: Sustainability

TERRA AND TARZANA: Whose side are you on??

END



April 19, 20, and 21, 2006, 12:00 noon
 Calgary Centre for Innovative Technology (CCIT)
 iCentre, Schulich School of Engineering
 University of Calgary, Alberta, Canada



Artist's Statement

The purpose of my practice-based PhD study, “Computer-Mediated Theatre in Interactive Game Environments,” is to experiment with a synthesis of theatre art, computer technology, and environmental science to develop interactive game environments that engage participants, both creative artists and audiences, in observable experiences. Using a qualitative research paradigm, original artifacts and events are being created and evaluated in order to find patterns of interconnected ideas and attitudes about urgent social and political issues; notably in the case of “The Pipeline Pinball Energy Thrill Ride Game” and *Spies in the Oil Sands*, our world and its energy resources.

Additional interrogations that are being used as a basis for the research are: a) What is the process by which improvisational and activist theatre might be combined with computer technologies to create innovative interactive media art? b) How can these artifacts and events bring awareness to audience participants about social, political, environmental, and moral issues, and c) How might the participants follow up? It is my hope that these questions will turn into glimmers of meaning with the assistance of audience responses to the work here at the iCentre. Don't be shy. Let me know what you think.

A great deal of energy has gone into this research to date. I would like to thank my supervisor, Dr. J.R. Parker and my committee members Professor Kathleen Foreman, Dr. Len Bruton, and Dr. Richard Levy for their guidance. I would like to also thank the brilliant cast and crew of the performances at the University of Lethbridge and now at the University of Calgary, and last but not least, my family for their inspiration and support through these sometimes zany explorations.

– Namaste. Lori Shyba



Lori gratefully acknowledges the support of The Alberta Foundation for the Arts; The University of Calgary, Special Project Grant Committee, The CCIT iCentre, the Interdisciplinary Graduate Program and The Petroleum History Society Graduate Scholarship; The University of Lethbridge; Foreign Affairs Canada, Research and Conference Fund; The University of Technology, Sydney, Australia; and EMMEDIA Production Society.

"The Pipeline Pinball Energy Thrill Ride Game"

A performance reading of "The Drilling Rig" scene from
Spies in the Oil Sands

— CAST AND CREW —

The Calgary iCentre Performance Reading

Larry Fosso:	Douglas MacArthur
Tarzana:	Gail Hanrahan
Terra Incognita:	Lori Shyba
Amen-Ra and Male voice:	Mike Unrau
Game Voiceover:	Collin Ward MacDonald
Stage Directions:	Sam Al-Saber

Sound and Tech:	Fiona Jamieson
Video/Game Design:	Lori Shyba
Game Art:	Rich Theroux
Game Programming:	Andrew Stagg
Documentary Video:	Austin Andrews
Lunches:	Eat With Relish

Special thanks to Robert Day, Pavol Federl, Tingge Wang, and Georgia Hasapes at the CCIT iCentre. Also to Clem Martini and Paul Lawnikanis for script development, Jamie Zebedee and Paul Andrews for photography, Christopher Leathley for the Future Pinball Software Engine, and All India Radio for music.

After the reading you are invited to play "The Pipeline Pinball Energy Thrill Ride Game"; Level One, "Generate Energy Diversity," and Level Two, "The Alberta Gamble."

Lunch will be served outside the lab/theatre after the performance. You are also invited to stay for a demonstration of the stereoscopic 3-D capabilities of the CCIT iCentre.

Feed Me Back with Responses

1. What did you like about this event? *or put another way;*

What did you notice and find interesting? Maybe it was the game? or the theatre art? or the technology, or the social issue? or something else? or;

What connected for you?

2. What did you find challenging?

3. What were your very first impressions?

Think about these things and let me know in person, or talk to the camera, or pass it back, or you can email:

Emails can go to **lori.shyba@ucalgary.ca**





SPIES in the **OILSANDS** whose side are **YOU** on?



**BALLS
PLAYED**



ALTERNATIVE FUEL POINTS



FOSSIL FUEL POINTS



**AN INTERACTIVE LIVE DIGITAL PERFORMANCE PIECE.
WILL YOU CHOOSE TO GO GREEN?
OR WILL YOU CHOOSE THE BLACK GOLD?**

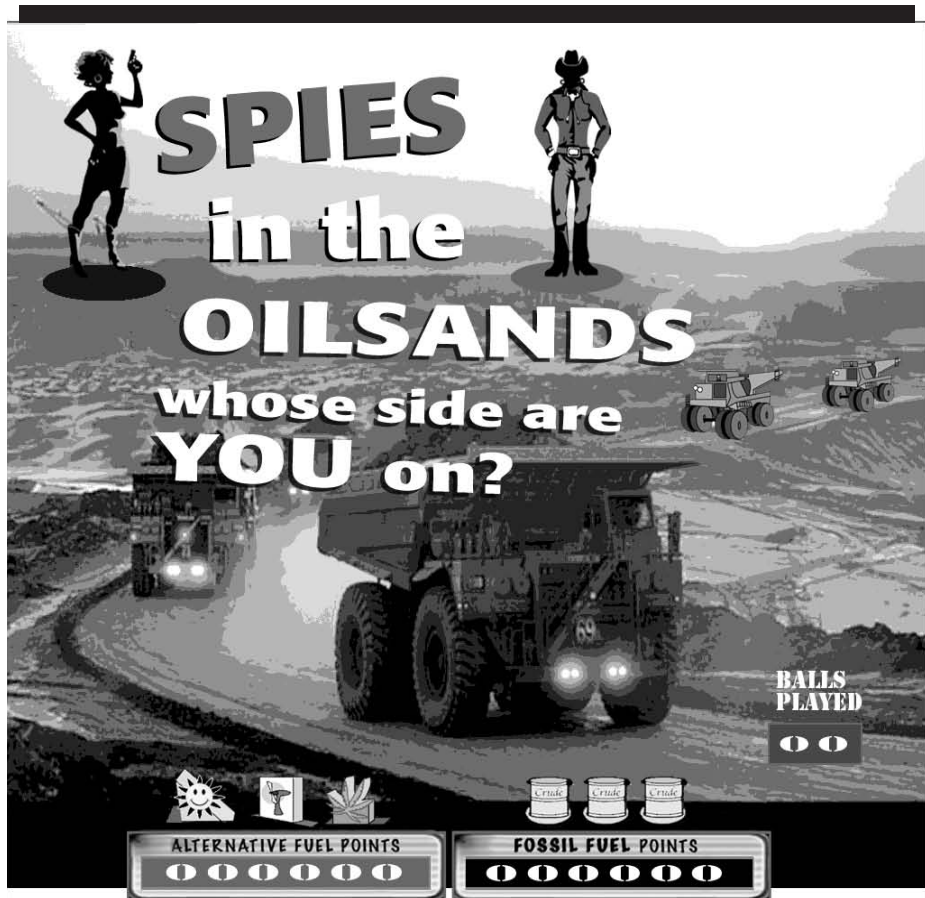
**PUMPHOUSE THEATRE. ONE-ACT PLAY FESTIVAL
FRIDAY MARCH 9, 2007, 7:30 P.M.**

**DIRECTED AND MUSED BY MARIETTE SLUYTER
STARRING THE GAMER PLAYERS
LINDSAY RUTH HUNT, LORI SHYBA, MIKE UNRAU**



**EXPERIENCE THE PLAY
PLAY THE PIPELINE PINBALL ENERGY THRILL RIDE GAME
DECIDE WHOSE SIDE YOU'RE ON**

Wiki info? <http://spies.pbwiki.com>



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**IMPROVISED THEN WRITTEN DOWN
BY LORI SHYBA AND THE GAMER PLAYERS
DIRECTED AND JOKED BY MARIETTE SLUYTER**



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DECIDE WHOSE SIDE YOU'RE ON**

Artists' Statements

Director's Statement

In pondering this huge question of economic development and environmentalism I am constantly torn.... I use my car to get around as I cannot negotiate my life without it and yet I insist on driving an Echo as it is the easiest on the environment and dream of a day that I can ride my bike everywhere (a day when I have the time to ride my bike to a meeting in the northeast and then to my second meeting in the southwest and get home to let the dogs out to pee in the middle of it). I am trying to eat within a hundred miles of my home but am afraid I am getting scurvy this winter. How do we negotiate this issue and still continue to move forward? I don't know and I don't pretend to, but this is the great opportunity within art, story and theatre. We hope to pose the question and maybe within this great collective of experience, ideas, and wisdom that is here in the room tonight we can beat through the brush in order to find a path towards understanding.

— Mariette Sluyter

Researcher's Statement

Yes, the rumour is true. This production is part of my PhD studies at the University of Calgary — could doctoral work be more fun? I'm looking at ways that live and digital interactive theatre and games can help us understand urgent social issues. This production *Spies in the Oilsands* begs the question ... fossil fools or alternative energy zealots, whose side are you on? On one hand we have Tarzana who champions the traditional Alberta line of Big Oil and Easy Money; on the other is Terra who is sure Kyoto is the ticket. Caught in the middle is A.J. Fosso weighing the odds between the economy and the environment and not knowing who or what to believe. This moral conundrum comes to a head when we play — live on stage for the first time — “The Pipeline Pinball Energy Thrill Ride Game,” the serious computer game that pits fossil fuel points against alternative fuel. How will the spy characters choose to play? And how will you, our audience-spies choose when it's your turn?

— Lori Shyba



Lori Shyba and The Game Players gratefully acknowledge the support of
The Alberta Foundation for the Arts;
The University of Calgary, Faculty of Graduate Studies, Interdisciplinary Graduate Program, Department of Drama, Digital Media Lab, and The Petroleum History Society Graduate Scholarship.

Spies in the Oilsands

Whose Side Are You On?

The Calgary One-Act Play Festival Edition

— THE GAMER PLAYERS —

Mariette Sluyter

The Muse

Mike Unrau

A.J. Fosso

Lori Shyba

Tarzana

Lindsay Ruth Hunt

Terra

Sound and Lights:

Nooshin Esmaeili

Camera Operation:

Sean Lynch

Game Art:

Lori Shyba, Rich Theroux

Game Programming:

Andrew Stagg, Lori Shyba, Sean Lynch

Multimedia Design:

Lori Shyba

Special thanks to Paul Lawnikanis, Janne Hickson, Kathleen Foreman, Lana Skaug, Bob Bott, Jim Parker, Hugh Tyneman, Brian Tadlewski, and especially Christopher Leathley for the Future Pinball Design Software. Thanks also to Google Earth for images, the Pembina Institute, Canadian Actors' Equity, and Golden Earring karaoke.



You can download the Pipeline Pinball Energy Thrill Ride Game from www.sundialmedia.com. Play to win! Play to figure things out! Play to kill time! Maybe you'll get a sense of whose side you're on?

REFERENCES

Web-Based References for your browsing pleasure are available on the sidebar of our production wiki at:

<http://spies.pbwiki.com>.



*The Gamer Players may be available for bookings if
humourous subversion is your silver bullet.*
