Proceedings of the 2nd Annual
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Foreword

Nancy A. Van Wagoner,
Associate Vice-President,
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Welcome to the first Thompson Rivers University publication of undergraduate student research. This publication is from work presented during the 2nd Annual TRU Undergraduate Conference, held March 10, 2007, organized by a group of TRU Service Learning students under the supervision of Dr. Kelly-Anne Maddox: Chantal MacDonald, Wendy Engel, Alizée Bilbey and Kendra Staruiala. The papers represent the academic talent of the TRU student body, and cover a tremendous range from the creative arts to analytical chemistry and represent both the comprehensive and the interdisciplinary nature of TRU. These student researchers produced their original works while successfully engaging in their classroom education and for many of our students, part-time employment as well. They have worked very hard and took the initiative to pursue educational experiences beyond the classroom. They are to be congratulated.

I sincerely believe that every student should have the opportunity to engage in original research, scholarly activity and the production of creative works as part of their undergraduate experiences. Through the undergraduate research experience, our students generate new knowledge and ideas. They add to the body of knowledge that helps societies to advance. The process of this inquiry develops creative and critical thinking skills, intellectual confidence, and the independence, initiative and enterprise that fosters career success. Research, in all of its various formats, encourages students to ask questions and to be bold in their exploration of the unknown.

The papers included in this publication are also the product of the individual mentorship and coaching provided by TRU faculty members. This individual mentorship makes TRU special. The
one-on-one work these faculty members do with their students represents a tremendous commitment to providing students with exceptional undergraduate learning experiences. I thank and congratulate our faculty members on their commitment to their students and to the university.

Publication of research, scholarly activity and creative works requires setting editorial standards and peer review. I want to thank the editorial committee and all of the faculty members who took the time to review the papers, provide feedback to student researchers, and ensure that our first publications sets a high bar for editorial quality for the future. I particularly thank Bronwen Scott for all of her work in coordinating all aspects of this publication, being the chief editor and project designer, and taking the time to work with students so they understand the aspects of editorial quality and academic integrity that are essential to a publication.

Many people who have achieved greatness will attribute their greatness to a particular mentor or experience that encouraged them to think in a particular way or pursue a particular path with vigour and passion. With this journal we present the beginning of some very interesting and productive contributors to society. Please enjoy this publication.
Recline and Muse: Artefacts of Artistic Living

LANA GAGNON

Abstract
As a fourth-year Bachelor of Fine Arts student, I have spent the year developing a body of work. This paper includes a series of images (of my own and other artists’ works) with a description of the processes and theories behind one of my major projects, which is an art exhibition entitled “Recline and Muse: Artefacts of Artistic Living.”

The exhibition comes out of my curiosity towards two habits of human behaviour. First, I am interested in the act of collecting. I am especially interested in the objects that artists collect and how collections are often a source of inspiration for art, or perhaps an art in itself. Second, I am critiquing interpretive display and the tendency of western society to organize, categorize, and institutionalize collections of precious artefacts. I am challenging the traditional venues such as museums, galleries, even department stores, which dictate the importance of artefacts and the value of things.

As curator, I am gathering interesting collections from various artists. As artist, I am using these collections as my medium for creating compositions that provoke thought from the viewer. My role in the exhibition is to function between the positions of artist and curator.
At first glance, the gallery presents an assortment of display apparatus. A cluster of minimal white plinths at the entrance elevates several small and familiar decorative boxes into the illumination of the gallery’s lights. In the corner beyond the plinths, a rather heavy large dark cupboard bursts with fluffy vintage prom dresses on one side and kitschy-cute ceramic animal planters (containing plants) arranged on the shelves of its other side. Along the back of the gallery a humming, clicking slide projector sits between two retro chairs while projecting faded family portraits into a darkened nook. The corner farthest from the entrance shows a jumbled display of brightly coloured letter magnets clinging to the wall. Next to them a cluster of chrome kitchen appliances sits poised on top of tall white plinths. Visitors to the space, drawn in by curiosity, may wonder, “Is this really an art gallery?”

In my final year of the Bachelor of Fine Arts program at TRU, I have been researching and creating a body of artwork around ideas and themes related to the act of collecting. One of my major projects, an exhibition entitled “Recline and Muse: Artefacts of Artistic Living,” opened on March 22 of this year at the Arnica, Kamloops’ artist-run centre (one of a network of such centres across Canada that supports emerging and established contemporary artists).

My role in this exhibition is two-fold. As curator, I am interested in the objects that artists collect and how collections are often a source of inspiration for art, or may perhaps be a form of art in themselves. In my second role, as artist, I am using these collections as a medium that celebrates and critiques the tendency of western society to organize, categorize, and institutionalize cultural artefacts. I am challenging traditional venues such as museums, galleries, even department stores, which often dictate the importance of artefacts and the value of things around us. Ultimately, my goal is to push the boundaries between the positions of artist and curator while challenging the societal factors that determine the value of commodities. I would like to propose that, though unconventional, such an exhibition comes out of a well-established tradition of artists who call upon common objects in projects that range from individual sculptures to complex installations.
The notion of the “ready-made,” central to such a discussion, was coined in 1915 by Marcel Duchamp. By creating works of “anti-art” using found objects and then presenting them in galleries and museums, Duchamp and his colleagues in the “Dada” movement challenged notions of high art and its institutional traditions. Duchamp argued that an object could become art simply through an act of aesthetic selection on the part of an artist. “Fountain” is one of the most defining examples of the “ready-made.” In this work Duchamp laid a porcelain urinal flat on a plinth, signed it “R. Mutt,” and submitted it under that pseudonym to New York’s 1917 Armory exhibition. An accomplished painter at the time, Duchamp sought “to reduce the idea of aesthetic consideration to the choice of the mind, not to the ability or cleverness of the hand which [he] objected to in many paintings” (Taylor 73). Duchamp’s and the Dadaists’ gestures challenged the institutional authority of determining the value of art and gave the means of measuring value back to the intention of the artist.

The Dada movement provided a foundation for future generations of artists. Among the better known such artists, Andy Warhol drew upon commercial art processes to blatantly replicate products like Brillo boxes and Campbell’s Soup cans. The works of the 1960s and 1970s that are among the closest models for “Recline and Muse” include works by Warhol and such projects as Herbert Distel’s “Museum of Drawers,” a museum of modern art exhibited entirely within one tall multi-drawer cabinet. Each of the drawers contained 25 square compartments
(500 in all) in which artists, including Pablo Picasso, were invited to display miniature works of art. Distel walked the fine line between curator and creator of art with the conception of this miniature museum. In 1970 Andy Warhol created a work using the permanent collection of the Museum of Art in Providence, Rhode Island. Warhol chose to stuff the cupboard full of old shoes and parasols, rather than select from the finer artefacts of the museum storeroom. Warhol operated under the notion of displaying whole sets of objects regardless of condition or significance. Organizers of the event were concerned that Warhol was displaying “storage” rather than works of art. However, a sense of consolation was achieved by the simple idea that the work would be valid because it was created by Andy Warhol.

James Putnam, in his book *Art and Artefact: the Museum as Medium* considers Warhol’s exhibition the one that set the precedent for a tradition of artists invited by museums to curate shows (18).

Contemporary artist Barbara Bloom has created a number of works involving museum collections. In 1992, Bloom created “Never Odd or Even,” where she displayed artefacts, photographs and sculptures showing perfect symmetry, such as butterflies, conjoined twins, formal gardens and Nazi architecture. Bloom displayed many of the items “museum-style,” pinned in shallow box frames and set in a large wooden display case running through
the middle of Pittsburgh’s Carnegie Museum of Art.

In 1993, Ilya Kabakov designed an installation in the Museum van Hedendaagse Kunst in Germany. Kabakov and other artists were invited to create installations using the personal collections of local citizens. Donations were sought through a heavy advertisement campaign of posters and newspaper ads. With items such as toys and clothing, Kabakov created arrangements and installed them in glass cabinets throughout the museum’s gallery. Interestingly, Kabakov also created a display in an adjacent roped-off corridor area using the rejected items.

Currently, one can visit the Museum of Jurassic Technology in Los Angeles. This curious museum of wonder is considered by many to be a hybrid of art and museum practice. Its founder, David Wilson, plays an obscure role as its curator/creator. From street level it appears to present itself as an odd, yet unassuming establishment. Only its sign gives any clue to the wonderfully strange museum inside, where Wilson has assembled evocative installations, elaborate dioramas, interactive devices and audio/visual presentations. The total installation creates a sense of an authentic interpretive centre, yet it proposes questionable findings and slightly unbelievable phenomena. One such exhibit displays “the
horn of Mary Davis of Saughall,” an artefact based on the 17th-century legend of a woman with a horn. Putnam suggests that the Museum of Jurassic Technology shares “the early museum's possibilities to cross the boundaries between art and science, to stimulate thought, wonder, astonishment and fascination”(189).

Among all these artists (and many others), the museum work by Warhol was a defining influence upon my exhibition, “Recline and Muse.” I recalled his image of shoes and parasols stuffed in a cupboard when I created the composition using an old wardrobe, vintage prom dresses and animal planters. Like Warhol, I set out to display less precious artefacts, taking care not to glamourize them with gallery furniture. Instead, I contain them in a homely storage unit.

Just as Barbara Bloom has taken care to replicate a museum-like quality in the display of otherwise ordinary things, I maintain the use of museum furniture. In “Recline and Muse” two stacks of books sit poised under a tall glass cabinet. The glass creates a precious distance between the viewer and the books yet hints at the significance of the collection. Upon close examination the viewer discovers a feminine/feminist theme among the titles, such as home-making manuals from the 1950s and '60s.

As in Distel’s “Museum of Drawers,” I am also using miniature compartments to display small works. Amongst a collection of buttons I selected some unique individuals, some more precious than others, and displayed them in miniature, glass-covered, wall-mounted, wooden boxes. I filled a few larger glass boxes with clusters of buttons grouped by colour, shape, or quality and mounted these on the wall beneath the miniature boxes. The total arrangement draws viewers in and invites them to make associations between the sets.

Like Kabakov, Distel and Wilson, I am interested in the odd, invaluable, personal collections of individuals
rather than the historically significant collections of public institutions. More specifically, I am intrigued by the things that artists collect. I am curious about where they, and I, find our precious specimens. I am interested in why artist/collectors are drawn to odd, unlikely types of items. I also wonder who we think of as we gather these strange wares and how our collections affect or inform the art we make. Is the act of collecting an art in itself? In “Recline and Muse,” I am investigating these questions by creating contemplative arrangements with the artefacts that artists have harvested.

Works Cited

About the Author
After graduating from Kamloops Christian School in 1996, TRU Bachelor of Fine Arts student Lana Gagnon enrolled in biblical studies at the Canadian Bible College in Regina, Saskatchewan, remaining for a year. She then completed a university transfer diploma in fine arts at Red Deer College in Alberta before enrolling at TRU to complete a degree. While at TRU, Lana travelled to France and Spain, and founded the TRU Ceramics Club, of which she is president. She also served as vice-president of Arnica, an artist-run gallery in Kamloops, and volunteered with various children’s after-school, summer and sports programs. She graduates this June.
Synthesis of New Quaterphenyl Molecules

MELISSA REID

Abstract
New methodologies for synthesizing aromatic compounds interconnect the traditional aromatic directed lithiation reactions with Suzuki cross-coupling reactions. Reaction parameters were adapted to accommodate a sequence of simultaneous double ortho lithiation, ditrimethylsilylation, novel double ipso-borodesilylation and di-Suzuki cross-coupling reactions. The conditions described afford an efficient route to interesting quaterphenyl compounds (7) that would be difficult to attain following classical methods. Notably, the procedure optimized regiocontrolled introduction of two phenyl groups onto a double lithiated biphenyl molecule with better than anticipated yields (Scheme 2 and Scheme 3). The results hold potential for providing innovative and efficient routes to unique custom synthesized libraries of organic molecules that may be useful in future drug development and in the field of material science, such as the development of new liquid crystals, fluorescent markers, metal chelating ligands, and very recently, use as laser dyes for manipulating individual cells with micro-laser tweezers.

Introduction
Aromatic chemistry is an intellectually stimulating component of organic chemistry, involving the synthesis and reactivity of aromatic compounds. In the last three decades aromatic directed ortho metalation has become a significant tool for aromatic
Directed ortho metalation (DoM) reactions are a well-known and continually evolving technique for the organic syntheses of aromatic compounds. DoM technology is regarded as one of the most powerful weapons of an organic chemist for the syntheses of aromatic rings with complex substitution patterns. DoM uses regiocontrolled introduction of substituents onto an aromatic ring in order to acquire chain extensions and new functionalities. DoM requires the presence of a directed metalation group (DMG), an inductively withdrawing group that contains a heteroatom with a lone pair of electrons on the aromatic ring. In the presence of a strong alkyllithium base (secondary butyllithium [sec–BuLi]) the directing group “directs” replacement of a hydrogen atom with a lithium atom at the adjacent ortho or benzylic position. It is believed that the lithium bonds to the carbon closest to the directing group because the attacking species coordinates with the heteroatom (Figure 1).

![Figure 1. Directed Ortho Lithiation Reaction](image)

Once proton abstraction has occurred, the ortho-lithiated species is a reactive intermediate (nucleophilic anion) in which the stabilizing lithium metal is easily replaced by a variety of different electrophilic reagents (Figure 2). As a result, DoM reactions are able to achieve, under appropriate conditions, substituted aromatic rings that were difficult to attain following classical methods.

![Figure 2. Electrophilic Substitution via SN2 Reaction](image)

Extensive research has established several conditions that appear to be significant in the DoM process. For a successful deprotonation
to occur, the DMG must exhibit properties of a good coordinating site as well as a poor electrophilic site.¹ Steric hindrance and charge deactivation are incorporated into the design of the DMG in order to survive the highly reactive alkyllithium base.¹ Possibility of the alkyllithium base reacting with the electrophilic component of the sterically demanding DMG is minimized using very cold temperatures (−78°C).¹ Complementary to the low temperature, an inert atmosphere with anhydrous reagents is required in DoM reactions to avoid neutralization of the alkyllithium base, which is extremely soluble in organic solvents due to the formation of lithium dimers and tetramers.¹ Aggregates are believed to form because of the polymeric nature of organolithium compounds.¹ Addition of basic solvents, such as tetrahydrofuran (THF), help to solvate the alkyllithium aggregates by an acid-base reaction.¹ Alkyl basicity is significantly increased using a bidentate ligand, tetramethylethylenediamine (TMEDA), to achieve further dissociation and effectively form monomers in solution (Figure 3).¹ These traditional DoM reaction conditions create a viable route, with accelerated reaction rates and increased product yields, to complex aromatic compounds and a platform for new discoveries in synthetic aromatic chemistry.¹

In the area of carbon-carbon bond formation processes, Suzuki cross-coupling methodologies can provide new extensions and opportunities in DoM-mediated construction of polysubstituted aromatic and heteroaromatic compounds.² The Suzuki cross-coupling reaction is a widely recognized procedure for catalytic aryl-aryl and -heteroaryl bond formations.³ There is a general catalytic cycle for the cross-coupling reaction of organometallics, involving oxidative addition, transmetalation and reductive elimination
sequences (Figure 4). Oxidative addition of an aryl halide to a palladium(0) complex affords a stable trans-palladium(II) complex. The relative reactivity of the coupling reaction is determined by the type of aryl halide, decreasing in the order of I > Br > Cl, and its proximity to the DMG. Transmetalation proceeds in situ at room temperature in an inert atmosphere, depending on reaction conditions, where organoboron compounds react selectively with aryl halides in the presence of a negatively charged base and DME. Finally, reductive elimination of the stereocontrolled coupling partners regenerates the palladium(0) and affords a biphenyl product. Prior to the Suzuki cross-coupling reaction, the organoboron compound is prepared via DoM silylation (to introduce the SiMe₃ group) and ipso-borodesilylation, followed by a hydrolytic workup. DoM and Suzuki cross-coupling symbiosis offer enormous utility and application in complex molecule synthesis to link aromatic rings together.

Figure 4. General Catalytic Cycle for Suzuki Cross-Coupling Reaction

In this study, the conceptual methodologies previously mentioned are used to attempt a sequence of simultaneous double ortho lithiation, di-trimethylysilylation, and novel double ipso-borodesilylation in conjunction with di-Suzuki cross-coupling reactions to afford new quaterphenyl compounds (7). The synthesis of this quaterphenyl compound would represent a significant addition to the examples of Suzuki cross-coupling applications and has the potential
for even further unique examples of directed lithiation reactions and Suzuki cross-couplings.

**Results and Discussion**

Slow reflux of the commercially available 4,4`-biphenyl dicarboxylic acid 1 in a solvent system [toluene and dimethylformamide (DMF)] with thionyl chloride (SOCl₂) resulted in the acid chloride intermediate 2 (Scheme 1). Further addition of triethylamine (NEt₃) and diisopropylamine [NH(iPr)₂] in THF was carried out at reflux to synthesize the desired amide 3. Di-tertiary amide biphenyl crystals 3 were obtained with a 77% yield after recrystallization from ethyl acetate/hexane (mp 202-205°C, Rf 0.35). Formation of the 4,4`-di-(N,N-diisopropylamide)biphenyl 3 was confirmed by proton NMR (Table 1 and Figure 6).

![Scheme 1. 4,4`-di-(N,N-diisopropylamide)biphenyl Synthesis](image)

The proton NMR spectrum of the 4,4`-di-(N,N-diisopropylamide) biphenyl 3 confirmed the replacement of the two hydroxyl groups for two diisopropylamide groups via the broad multiplets at 3.38-4.01 and 0.84-1.80 ppm, integrating for four and 24 protons respectively. The broad, overlapping signal is explained by hindered rotation of the amide C–N and para C–C bonds (from amide resonance) that created non-equivalent environments within each isopropyl group. The aromatic region integrated for approximately eight protons that illustrate the typical para-substituted pattern (two resolved “doublets”).
The amide biphenyl 3 was dissolved in THF and TMEDA, then dilithiated with sec–BuLi at –30°C (optimized conditions established by previous CUEF student)\(^4\). Five minutes later, the intermediate 4 was reacted in situ with chlorotrimethylsilane (TMS–Cl) to synthesize the desired product 5 (Scheme 2). Simultaneous double ortho-lithiation reactions produced the di-silylated compound 5 with an 81% yield after recrystallization from diethyl ether (mp 180-182°C, Rf 0.66). Formation of 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide)biphenyl (5) was confirmed by proton NMR (Table 2 and Figure 7).

Formation of the dilithiated intermediate 4 followed by nucleophilic attack on the proton-rich electrophile (TMS–Cl) was strongly supported by NMR spectroscopy. The proton NMR spectrum of the 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide) biphenyl 5 confirmed the addition of the two trimethylsilyl groups via the high field singlet integrating for approximately 18 protons (6 CH₃’s). The ortho-substituted biphenyl exhibited more complex proton signals due to the increased hindered rotation and steric crowding. The signals of the isopropyl groups are clearly resolved septets at 3.72-4.01 and 3.40-3.72 ppm (4 CH’s) and doublets at 1.39-1.77 and 1.04-1.39 ppm (8 CH₃’s). The aromatic region integrated 18 unique protons at 0.35 ppm that also illustrate the addition of the silyl groups.

Synthesis of the novel quaterphenyl compounds (7) (Scheme 3)
was designed to attempt a sequence of simultaneous double ortho lithiation, di-trimethylsilylation, novel double ipso-borodesilylation, followed by simultaneous di-Suzuki cross-coupling reactions. A number of reaction conditions, adapted from recent literature on the applications and experimental methods of cross-coupling, were evaluated to establish optimal conditions (Scheme 3). Boro-induced ipso-desilylation was achieved by adding the boron tribromide (BBr₃) dropwise into the solution of di-silylated compound 5. To ensure the formation of intermediate 6, the reaction mixture was stirred for two hours. Addition of sodium carbonate solution (Na₂CO₃), 1,2-dimethoxyethane (DME) and a bromobenzene compound with a tetrakis(triphenyl-phosphine)palladium(0) catalyst [Pd(PPh₃)₄] was carried out at reflux to produce the crude quaterphenyl compounds (7). The crude products were column chromatographed and characterized by NMR (Tables 3-6 and Figures 8-11). The novel quaterphenyl compounds (7) were isolated with excellent yields after simple extraction procedures.

Spectroscopy evidence for the formations of the desired quaterphenyl compounds (7) were very convincing. The proton NMR spectrum of the novel quaterphenyl compounds (7a) confirmed the intermediate attack on two equivalents of bromobenzene via the high field doublets integrating for approximately 24 protons (8 CH₃’s). Appearance of the four distinct doublets suggested that increased steric demand exists at the isopropyl groups from the bulky phenyl
groups. That is, the increased steric demand decreased rotation about the para C–C bonds (forcing the N,N-diisopropylamide groups away from the phenyl groups in a 2:1 ratio) and the amide C–N bonds (forcing one methyl group directly overtop the phenyl group). Non-equivalence of the two CH3’s off an isopropyl group indicated that the phenyl group must have been 90° to the biphenyl in order to shield the methyl group positioned directly above it upfield (0.36 ppm) via diamagnetic anisotropy (Figure 5). This same principle causes the aromatic region to become much more complex, integrating for approximately sixteen protons, again supporting the addition of the phenyl groups.

![Figure 5. Diamagnetic Anisotropy Shielding of Isopropyl Protons](image)

**Experimental**

4,4′-di-(N,N-diisopropylamide)biphenyl: White 4,4′-biphenyl dicarboxylic acid 1 (typically 10.0 g, 41.3 mmol) and translucent brown SOCl₂ (619 mmol, 45.2 mL) were combined in a 100 mL round-bottom flask. Colourless DMF (0.5 mL) was added to the white opaque mixture and heated to reflux overnight. The resulting dark yellow mixture was concentrated on the rotary evaporator. The residue was then re-dissolved in colourless toluene (3×100 mL) and again concentrated to yield the off-white acid chloride intermediate 2. The off-white crystals were then dissolved with THF (200 mL) in a 500 mL round-bottom flask. Under an inert atmosphere of nitrogen, a pressure-equalizing dropping funnel was used for the dropwise addition of the translucent brown NEt₃ (103 mmol, 14.4 mL) in THF (20 mL) over three minutes, and NH(iPr)₂ (103 mmol, 14.5 mL) in THF (20 mL) over twenty minutes. The brown opaque mixture was then heated to reflux for several hours. Deionized water (100 mL)
was added to the brown solution and the THF was removed by an aspirator vacuum. The aqueous residue was extracted with dichloromethane (3×100 mL) and the combined CH₂Cl₂ extracts were washed sequentially with: an acid wash with 1M HCl (100 mL), a water wash (100 mL), a saturated sodium bicarbonate wash (100 mL) and a saturated sodium chloride wash (100 mL). The brown organic layer was then dried with Na₂SO₄ and concentrated to get the glassy brown crude product. The crude product was column chromatographed using a 50% ethyl acetate/hexane mixture as an eluent. After crystallization with the two-solvent system, suction filtration isolated 10.4689 g (77%) of off-white powder. 4,4’-di-(N,N-diisopropylamide)biphenyl 3 was characterized with melting point (202-205°C), TLC (Rf 0.35) and proton NMR (Table 1 and Figure 6).

3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide)biphenyl:
Under an inert atmosphere of nitrogen, off-white 4,4’-di-(N,N-diisopropylamide)biphenyl 3 (typically 3.2686 g, 8 mmol) and fresh THF (100 mL) were combined in an oven-dried 250 mL round-bottom flask. The resulting pale yellow solution was cooled to −30°C in a methanol and liquid nitrogen bath. Syringe addition of the colourless TMEDA (32 mmol, 4.83 mL) and translucent brown

<table>
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<th>Integration</th>
<th>Multiplicity</th>
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<th>Structure</th>
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<tr>
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<td>23.88</td>
<td>Multiplet</td>
<td>Eight CH₂’s</td>
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<tr>
<td>3.7 ppm</td>
<td>3.95</td>
<td>Multiplet</td>
<td>Four N–C–H’s</td>
<td></td>
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<tr>
<td>7.3 ppm</td>
<td>8.17</td>
<td>Doublet</td>
<td>Two aromatic H’s</td>
<td></td>
</tr>
<tr>
<td>7.6 ppm</td>
<td></td>
<td>Doublet</td>
<td>Two aromatic H’s</td>
<td></td>
</tr>
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</table>

*CDCl₃, at 200 MHz, corresponding to Figure 6.
sec–BuLi (32 mmol, 22.4 mL) produced a white precipitate, assumed to be the di-lithiated intermediate 4. After five minutes (optimized conditions) the yellow TMS-Cl (48 mmol, 6.13 mL) electrophile was added dropwise. The dark green solution was then allowed to warm to room temperature and quenched with saturated ammonium chloride solution (20 mL). An aspirator vacuum removed the solvent and the aqueous residue was extracted with ethyl acetate (5×30 mL). Combined ethyl acetate extracts were washed with deionized water (50 mL) and saturated sodium chloride solution (2×50 mL). The brown organic layer was then dried with Na$_2$SO$_4$ and concentrated to get the glassy brown crude product. The crude product was column chromatographed using a 50% ethyl acetate/hexane mixture as an eluent. After recrystallization with the two-solvent system, suction filtration isolated 3.5792 g (81%) of pale-yellow powder. 3,3′-di-(trimethylsilyl)-4,4′-di-(N,N-diisopropylamide)biphenyl 5 was characterized with melting point (180-182°C), TLC (Rf 0.66) and proton NMR (Table 2 and Figure 7).
Table 2. $^1$H-NMR Spectral Analysis of 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide)biphenyl*

<table>
<thead>
<tr>
<th>Chemical Shift</th>
<th>Integration</th>
<th>Multiplicity</th>
<th>Assignment</th>
<th>Structure</th>
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<tr>
<td>0.4 ppm</td>
<td>15.26</td>
<td>Singlet</td>
<td>Six Si–CH$_3$’s</td>
<td></td>
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<tr>
<td>1.2 ppm</td>
<td>26.68</td>
<td>Doublet</td>
<td>Four CH$_3$’s</td>
<td></td>
</tr>
<tr>
<td>1.6 ppm</td>
<td></td>
<td>Doublet</td>
<td>Four CH$_3$’s</td>
<td></td>
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<tr>
<td>3.5 ppm</td>
<td>3.64</td>
<td>Septet</td>
<td>Two N–C–H’s</td>
<td></td>
</tr>
<tr>
<td>3.9 ppm</td>
<td></td>
<td>Septet</td>
<td>Two N–C–H’s</td>
<td></td>
</tr>
<tr>
<td>7.2 ppm</td>
<td></td>
<td>Singlet</td>
<td>Two aromatic H’s</td>
<td></td>
</tr>
<tr>
<td>7.5 ppm</td>
<td>6.42</td>
<td>Doublet</td>
<td>Two aromatic H’s</td>
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</tr>
<tr>
<td>7.8 ppm</td>
<td></td>
<td>Doublet</td>
<td>Two aromatic H’s</td>
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* CDCl$_3$, at 200 MHz, corresponds to Figure 7.

Figure 7.
1H - NMR Spectra of 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide)biphenyl
Novel Quaterphenyl Compound 7a: Under an inert atmosphere of nitrogen, pale-yellow 3,3′-di-(trimethylsilyl)-4,4′-di-(N,N-diisopropylamido)biphenyl 5 (typically 0.1000 g, 0.18 mmol) and anhydrous CH$_2$Cl$_2$ (2 mL) were combined in an oven-dried 10 mL round-bottom flask at 0°C, yielding a yellow solution. Syringe addition of the translucent brown BBr$_3$ (0.43 mmol, 0.43 mL) produced a white precipitate, assumed to be the ortho substituted boron dibromide intermediate 6. After stirring for two hours (optimized conditions) the yellow opaque mixture was concentrated by an aspirator vacuum. Utilizing the Pd(PPh$_3$)$_4$ catalyst (6 mol %, 0.0125 g), a glove bag with an inert atmosphere of nitrogen was required. Syringe addition of the degassed 2M sodium carbonate solution (1 mL), degassed DME (4 mL) and degassed bromobenzene (0.3610 mmol, 38 µL) produced a yellow opaque mixture that was heated to reflux overnight. The pale-brown solution was quenched with deionized water (50 mL) and extracted with ethyl acetate (3×50 mL). Combined ethyl acetate extracts were then dried with Na$_2$SO$_4$ and concentrated to get the glassy brown crude quaterphenyl product 7a in 99% yield. The crude product was then column chromatographed using 50% ethyl acetate/ hexane mixture as an eluent (Rf 0.55), recrystallized from isopropanol (mp 272-275°C) and characterized with proton NMR (Table 3 and Figure 8).

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<thead>
<tr>
<th>Chemical Shift</th>
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<th>Multiplicity</th>
<th>Assignment</th>
<th>Structure</th>
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<td>1.30 ppm</td>
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<td>Four CH$_2$’s</td>
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<td>7.31 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H’s</td>
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<tr>
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<td>Singlet</td>
<td>Two aromatic H’s</td>
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<td>Multiplet</td>
<td>Ten aromatic H’s</td>
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*CDCl$_3$, at 200 MHz, corresponds to Figure 8*
Novel Quaterphenyl Compound 7b: Under an inert atmosphere of nitrogen, pale-yellow 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide) biphenyl 5 (typically 0.1000 g, 0.18 mmol) and anhydrous CH$_2$Cl$_2$ (2 mL) were combined in an oven-dried 10 mL round-bottom flask at 0°C, yielding a yellow solution. Syringe addition of the translucent brown BBr$_3$ (0.43 mmol, 0.43 mL) produced a white precipitate, assumed to be the ortho substituted boron dibromide intermediate 6. After stirring for two hours (optimized conditions) the yellow opaque mixture was concentrated by an aspirator vacuum. Utilizing the Pd(PPh$_3$)$_4$ catalyst (6 mol%, 0.0125 g), a glove bag with an inert atmosphere of nitrogen was required. Syringe addition of the degassed 2M sodium carbonate solution (1 mL), degassed DME (4 mL) and degassed bromotoluene (0.412 mmol, 52 µL) produced a yellow opaque mixture that was heated to reflux overnight. The pale-brown solution was quenched with deionized water (50 mL) and extracted with ethyl acetate (3×50 mL). Combined ethyl acetate
extracts were then dried with \( \text{Na}_2\text{SO}_4 \) and concentrated to get the glassy brown crude quaterphenyl product 7b in 96% yield. The crude product was then column chromatographed using 50% ethyl acetate/hexane mixture as an eluent (Rf 0.53) and characterized with proton NMR (Table 4 and Figure 9).

**Table 4. \(^1\text{H}-\text{NMR Spectral Analysis of Novel Quaterphenyl 7b}\)**

<table>
<thead>
<tr>
<th>Chemical Shift</th>
<th>Integration</th>
<th>Multiplicity</th>
<th>Assignment</th>
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<td>0.38 ppm</td>
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<td>0.92 ppm</td>
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<td>1.32 ppm</td>
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<td>Doublet</td>
<td>Four CH(_3)'s</td>
<td></td>
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<tr>
<td>1.57 ppm</td>
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<td>Doublet</td>
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<tr>
<td>2.39 ppm</td>
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<td>Six aromatic H's</td>
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<td>3.16-3.35 ppm</td>
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<td>3.40-3.61 ppm</td>
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<td>7.18 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H's</td>
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<td>7.23 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H's</td>
<td></td>
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<td>7.38 ppm</td>
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<td>Singlet</td>
<td>One aromatic H</td>
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</tr>
<tr>
<td>7.41 ppm</td>
<td>15.31</td>
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<td>7.52 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H's</td>
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<tr>
<td>7.61 ppm</td>
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<td>Doublet</td>
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<tr>
<td>7.64 ppm</td>
<td></td>
<td>Doublet</td>
<td>Two aromatic H's</td>
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*\(^{13}\text{C}-\text{NMR Spectral Analysis of Novel Quaterphenyl 7b}\)*

Novel Quaterphenyl Compound (7c): Under an inert atmosphere of nitrogen, pale-yellow 3,3’-di-(trimethylsilyl)-4,4’-di-(N,N-diisopropylamide) biphenyl 5 (typically 0.1000 g, 0.18 mmol) and anhydrous \( \text{CH}_2\text{Cl}_2 \) (2 mL) were combined in an oven-dried 10 mL round-bottom flask at 0°C, yielding a yellow solution. Syringe addition of the translucent brown BBr\(_3\) (0.43 mmol, 0.43 mL) produced a white precipitate, assumed to be the ortho substituted boron dibromide.
intermediate 6. After stirring for two hours (optimized conditions) the yellow opaque mixture was concentrated by an aspirator vacuum. Utilizing the Pd(PPh₃)₄ catalyst (6 mol %, 0.0125 g), a glove bag with an inert atmosphere of nitrogen was required. Syringe addition of the degassed 2M sodium carbonate solution (1 mL), degassed DME (4 mL) and degassed bromoanisole (0.384 mmol, 48 µL) produced a yellow opaque mixture that was heated to reflux overnight. The pale-brown solution was quenched with deionized water (50 mL) and extracted with ethyl acetate (3×50 mL). Combined ethyl acetate extracts were then dried with Na₂SO₄ and concentrated to get the glassy brown crude quaterphenyl product 7c in 98% yield. The crude product was then column chromatographed using 50% ethyl acetate/hexane mixture as an eluent (Rf 0.33) and characterized with proton NMR (Table 5 and Figure 10).

Novel Quaterphenyl Compound (7d): Under an inert atmosphere of nitrogen, pale-yellow 3,3'-di-(trimethylsilyl)-4,4'-di-(N,N-
Table 5. $^1$H-NMR Spectral Analysis of Novel Quaterphenyl 7c

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<th>Multiplicity</th>
<th>Assignment</th>
<th>Structure</th>
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<td>Doublet</td>
<td>Four CH$_3$'s</td>
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<td>1.54 ppm</td>
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<td>3.41-3.58 ppm</td>
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<tr>
<td>6.90 ppm</td>
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<td>Two aromatic H's</td>
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</tr>
<tr>
<td>6.96 ppm</td>
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<td>7.19 ppm</td>
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<td>Singlet</td>
<td>One aromatic H</td>
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<tr>
<td>7.41 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H's</td>
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<tr>
<td>7.48 ppm</td>
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<td>Two aromatic H's</td>
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<tr>
<td>7.60 ppm</td>
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<td>7.65 ppm</td>
<td></td>
<td>Doublet</td>
<td>Two aromatic H's</td>
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*CDCl$_3$, at 200 MHz, corresponds to Figure 10.

Figure 10. $^1$H - NMR Spectra of Novel Quaterphenyl 7c
diisopropylamide) biphenyl 5 (typically 0.1000 g, 0.18 mmol) and anhydrous CH₂Cl₂ (2 mL) were combined in an oven-dried 10 mL round-bottom flask at 0°C, yielding a yellow solution. Syringe addition of the translucent brown BBr₃ (0.43 mmol, 0.43 mL) produced a white precipitate, assumed to be the ortho substituted boron dibromide intermediate 6. After stirring for two hours (optimized conditions) the yellow opaque mixture was concentrated by an aspirator vacuum. Utilizing the Pd(PPh₃)₄ catalyst (6 mol %, 0.0125 g), a glove bag with an inert atmosphere of nitrogen was required. Syringe addition of the degassed 2M sodium carbonate solution (1 mL), degassed DME (4 mL) and degassed bromobenzonitrile (0.430 mmol, 0.0830 g) produced a yellow opaque mixture that was heated to reflux overnight. The pale-brown solution was quenched with deionized water (50 mL) and extracted with ethyl acetate (3×50 mL). Combined ethyl acetate extracts were then dried with Na₂SO₄ and concentrated to get the glassy brown crude quaterphenyl product 7d in 97% yield. The crude product was then column chromatographed using 50% ethyl acetate/ hexane mixture as an eluent (Rf 0.24) and characterized with proton NMR (Table 6 and Figure 11).

Figure 11. 1H - NMR Spectra of Novel Quaterphenyl 7d
Conclusion
The ten-month research project culminated in developing conditions that afford an efficient route to interesting quaterphenyl compounds (7) by new extensions of Suzuki cross-coupling and DoM-mediated regioselective synthetic methodologies. The project demonstrated a sequence of simultaneous double ortho lithiation, di-trimethylsilylation, and novel double ipso-borodesilylation in conjunction with di-Suzuki cross-coupling reactions by employing parts of well-established techniques for the organic syntheses of aromatic compounds. Primarily, the procedure optimized regiocontrolled introduction of two phenyl groups with various substituents onto a double lithiated biphenyl molecule with better than anticipated yields (Scheme 3). The results hold potential for providing innovative and efficient routes to unique custom-synthesized libraries of organic molecules that may be useful in

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<td>Four CH₃'s</td>
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<td>3.21-3.35 ppm</td>
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<td>Septet</td>
<td>Two N–C–H's</td>
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<td>3.42-3.57 ppm</td>
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<td>Septet</td>
<td>Two N–C–H's</td>
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<td>Doublet</td>
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<td>Singlet</td>
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<td>14.43</td>
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<td>7.73 ppm</td>
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<td>Doublet</td>
<td>Two aromatic H's</td>
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* CDCl₃, at 200 MHz, corresponds to Figure 11.
future drug development and in the field of material science, such as the development of new liquid crystals, fluorescent markers, metal chelating ligands, and very recently, use as laser dyes for manipulating individual cells with micro-laser tweezers. Further investigation is in progress, exploring this potential with respect to many diverse coupling partners and method development for unsymmetrical cross-coupling and thereby synthesis of unsymmetrical quaterphenyl compounds (Scheme 4).

Scheme 4. Synthetic Strategy to Attempt Unsymmetrical Quaterphenyl Synthesis

List of Abbreviations
DoM directed ortho metalation
DMG directed metalation group
sec–BuLi secondary–butyllithium
THF tetrahydrofuran
TMEDA tetramethylethlenediamine
DMF dimethylformamide
SOCl\textsubscript{2} thionyl chloride
NEt\textsubscript{3} triethylamine
NH(iPr)\textsubscript{2} diisopropylamine
TMS–Cl chlorotrimethylsilane
CH\textsubscript{2}Cl\textsubscript{2} dichloromethane
BBBr\textsubscript{3} boron tribromide
NaCO\textsubscript{3} sodium carbonate
DME 1,2-dimethoxyethane
Pd(PPh\textsubscript{3})\textsubscript{4} tetraakis(triphenyl-phosphine)palladium(0)
NMR nuclear magnetic resonance
mp melting point
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Scheme 4. Synthetic Strategy to Attempt Unsymmetrical Quaterphenyl Synthesis
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Works Cited

About the Author

Melissa Reid is a fourth-year chemical biology student who came to TRU after graduating from Westsyde Secondary in Kamloops, BC, in 2003. She has received many awards for scholarship and athletics, and in addition to her studies, she has volunteered with the Cariboo-Mainline Science Fair, Kamloops Wildlife Park, Kamloops Minor Hockey Association, Kamloops Youth Soccer Association, Amnesty International, and the Canadian Cancer Society. After she graduates with her bachelor’s degree this spring, she plans to pursue graduate studies in pharmacology or a research area.
Building Fragments: Successive Linguistic Failures in James Joyce’s *A Portrait of the Artist as a Young Man*

AARON S. McLEAN

Abstract
The narrator’s use of the third person forces the reader to witness Stephen’s world as he sees it. The reader is a witness, and indeed a participant, in the failure of the language to which Stephen clings. In fact, the more Stephen attaches labels and definitions to things he perceives, the more fragmented and confusing his world becomes. What makes this view interesting is that the narrator acts as a function of Stephen’s own mind; any breakdown in language is due to Stephen’s own incapability, not the narrator’s. The fragmentation of events throughout the text represents Stephen’s memories, which are inconsistent and fallible. Thus, it falls upon the reader to recall specific past events and then interpret them in later contexts. The fragmentation of language succeeds in showing Stephen’s failure at self-definition, because it is his own fragmented language and memory. Any failure of language is therefore due to Stephen’s own reasoning and his inability to “tell the tale.”
The modernist influence is strongly felt in James Joyce’s *Portrait of an Artist as a Young Man*. The fragmentation of narrative and the third-person view create a work that requires its reader to take an active role in its reading. Specifically, the reader must recognize Stephen’s battle to use and understand language. His transition from a literal to a metaphoric mode of thinking and analyzing his world is vital to the reader’s understanding of him, as well as the text as a whole. Readers must recognize that past events, which may have seemed insignificant at the time of reading, are vital to Stephen’s later perception of and interaction with the world. This building fragmentation throughout the text comes to a peak in chapter two when Stephen must again redefine himself as an individual entity separate from his father or any other being. He must also redefine reality, as he perceives it, whether through language or metaphor. The art of Joyce’s writing is in his ability to involve the reader in Stephen’s journey. The language matures as Stephen does while successfully portraying his inability to define himself.

Joyce uses much of Stephen’s experience to expose the reader to the arbitrary nature of language, and it is here that the influence of the modernist style of writing is felt. The events and experiences of Stephen’s life to which Joyce’s narrator expose the reader seem trivial and unimportant: that is, until more text has been read. The narrative of *Portrait of an Artist as a Young Man* is further confused by the narrator’s use of the third person, which forces the reader to witness Stephen’s world as he sees it, without omniscient insight into the events and characters that might otherwise illuminate Stephen’s learning process. Readers are thus witnesses to, and participants in, the failure of language each time Stephen tries to connect himself to the world he observes. In chapter one Stephen writes in his personal definition in a geography text:

Stephen Dedalus  
Class of Elements  
Clongowes Wood College  
Sallins  
County Kildare
Ireland
Europe
The World
The Universe (255)

This definition will be repeated, altered and repeated again multiple times throughout *Portrait of the Artist as a Young Man*. At the approximate age of ten Stephen has found that he can define his position by place names. But he recognizes a problem with this definition almost immediately. What comes after “The Universe”? The answer he decides upon is “God.” Unaware of the fragile nature of language, however, and therefore comfortable with his assertions thus far, he decides that “God remained always the same God and God’s real name was God” (256). This is a safe, simple and easy answer for a young boy and Stephen finds this type of reasoning especially tiring, so he leaves the question at that: Stephen defined under God. This is the reader’s first experience with Stephen’s logocentrism: his belief that words represent some fundamental understanding of reality. But defining himself, let alone God, will be more difficult than he could ever imagine.

It is important to discuss the mythology and connotations connected with Stephen’s last name. Daedalus was a skilled artist and craftsman who was said to have invented images. His son, Icarus, however, has often come to represent the romantic artist who follows in the footsteps of the classical artist and defies the aesthetic conventions of his time. Despite his name, Stephen never lives up to the image of his father and instead goes off in search of the aesthetic alone. Interestingly, after the entry for “logocentric” in the *Oxford English Dictionary* is the noun “logodaedalist,” which refers to a person skilled in using words. Along with the myth of Daedalus and Icarus, this adds another level of irony to Stephen’s last name, considering his obvious lack of skill with poetry. No doubt Joyce was also aware of all of these connections.

Stephen’s initial attempts at poetry begin to separate him from his belief that words are an absolute. The death of Parnell had forced Stephen to consider death, and with that, God. Now, while trying
to write a romantic poem, he recalls his earlier struggle with things indefinable, and again: “…his brain had then refused to grapple with the theme and, desisting, he had covered the page with names and addresses of certain of his classmates”(317). Again there is a repetition of names: his retreat from a world of metaphor brought on by his persistent logocentrism. Though the poem is feeble, it does show Stephen moving from a world of literally defined perception into one that can be defined by metaphor. Except, in this case, we see him going far into a world of pure metaphor that has no meaning whatsoever. Instead of trying to compare the mundane to the magnificent with a metaphysical poetic connection, Stephen ignores “all these elements which he deemed common and insignificant” and focuses only on “some undefined sorrow”(318). He is thinking in abstract terms but has yet to find a way to connect the two worlds of metaphor and metonymy together.

He repeats names of people and places in the vain hope that the reality he sees is somehow connected to words. In the next fragment of attempted self-definition he recognizes that the words he is trying to attach himself to are nothing but names:

I am Stephen Dedalus. I am walking beside my father whose name is Simon Dedalus. We are in Cork, in Ireland. Cork is a city. Our room is in the Victoria Hotel. Victoria and Stephen and Simon. Simon and Stephen and Victoria. Names. (343)

He begins with his name and his father’s, then those of the city and hotel he is in. He repeats them a second time, then he stops. He realizes that there is no direct connection between reality and language. As his memories fade, so does his association with words:

The memory of his childhood suddenly grew dim. He tried to call forth some of its vivid moments but could not. He recalled only names: Dante, Parnell, Clane, Clongowes... . Then he had been sent away from home to a college. In the college he had made his first communion and eaten ‘slim jim’ out of his cricket cap and watched the firelight leaping and dancing on the wall of a little bedroom in the infirmary and dreamed of being dead, of mass being said
for him by the rector in a black and gold cope, of being buried then in the graveyard of the community off the main avenue of limes. But he had not died then. Parnell had died. There had been no mass for the dead and no procession. He had not died but he had faded out like a film in the sun. He had been lost or had wandered out of existence for he no longer existed. How strange to think of him passing out of existence in such a way, not by death but by fading out in the sun or by being lost and forgotten somewhere in the universe! It was strange to see his small body appear again for a moment: a little boy in a grey belted suit. His hands were tucked in his side-pockets and his trousers were tucked in at the knees by elastic bands. (343)

Instead of having a solid idea about death he sees himself fading away without the notice of anyone else, “not by death but by fading out in the sun or by being lost and forgotten somewhere in the universe!” Here the transition of language, from a literal sense to a metaphorical sense, is complete. He no longer dies in the sorrowful eyes of the world but fades away “like a film in the sun.” He is now able to understand the abstract concept of death through an unrelated and unconnected image that he can appreciate. Language, as the last bastion of his connection to reality, now disconnected from meaning, leaves Stephen feeling disconnected from the world. In chapter three the reader will see him connect to religion, but for now he is totally detached.

Joyce’s narrator’s use of language in these passages follows Stephen’s changing understanding of his world. The metonymy of chapter one is slowly replaced by metaphor as Stephen is forced to rework his views on indefinable subjects. Stephen once thought in simple literal terms, that his reality was rooted to definable recognizable elements. Now, however, he recognizes that reality is as arbitrary as the language he uses to define his reality. The narrative voice shows us this transition from metonymic to metaphoric with Stephen’s views on his own death and existence. Stephen once thought of his death as “mass being said for him by the rector in a black and gold cope, of being buried then in the little graveyard off the
main avenue of limes”(343). Clearly, his interpretation of death was absolute. The language is metonymic and realistic. Through these many fragments the reader can see the narrator revealing Stephen’s recognition of the arbitrary nature of not just language but emotion, memory and experience. He now views his death as fading out “like a film in the sun.” His dependence on the metonymic to describe the unreal is replaced by an ability to think in metaphorical terms.

However, Stephen’s dawning maturity does not mean he will immediately succeed in his goal of self-definition. The fact that Stephen’s thoughts return to a very literal vision of himself as “a little boy in a grey belted suit”(344), shows the reader that he has not managed to move out of a purely metonymic point of view. This is not to say that he cannot think in metaphorical terms; rather, he cannot reconcile the two binary opposites. Hence, the narrator shows Stephen moving out of the normal world for a paragraph but quickly brings him back to reality.

A modernist thinker may note many aspects related to this passage. The reference to film, still relatively uncommon at the turn of the twentieth century, shows the invasion of modern technology on traditional lifestyle; it is a parallel to Icarus, a symbol of a new generation rejecting the ways of the past. Another possible interpretation that goes along with the fragmentation throughout Portrait of an Artist as a Young Man is that of the negative as a template for duplication. The reader has, after all, seen this vision of Stephen’s death, as well as his repeated attempts to define himself, repeated throughout the text. Even more interesting is the notion of film fading, since it is the negative of film that fades. As “his childhood suddenly grew dim”(343), so does his understanding of himself. Perhaps, like the film, readers are witnesses to Stephen’s negative memories fading away. A host of other images abound, including the absurd and dream-like quality of a fading, black-and-white, inverted, and rapidly disappearing image. Such a disconcerting but commonly appreciated image is an excellent way for a reader to understand Stephen’s state of mind, even if Stephen may not yet appreciate these specific qualities himself. In any case, Stephen is trying to redefine
himself; like the true modernist hero, he tries but never quite succeeds in his quest. The narrator has repeated this theme over and over again: Stephen trying to reach a metaphorical self-definition and continually falling back on the metonymic.

To say that the language of Portrait of the Artist as a Young Man fails assumes that the language used is outside Stephen’s experience. The reader must remember that the narrative voice is only a third-person view from inside Stephen’s own mind; the narrator serves only to reveal the recollection and interpretation of events through Stephen’s memories. The language is Stephen’s no matter how disconnected from him it may appear. The breakdown, then, is not due to the narrator’s inability to communicate Stephen’s thoughts or ideas. The narrator is not trying to reveal great secrets about the sublime, an epiphany or any other intangible human element. Rather, as a function of Stephen’s own mind, the narrator shows the internal breakdown of Stephen’s thoughts: his reasoning and his fantasy, and his vain attempts to define himself in a world he cannot understand.

Readers see truth through Stephen’s eyes only and any failure of language is therefore due to his own reasoning and his inability to “tell the tale.” The language succeeds in showing Stephen’s failure at self-definition because it is his own language. Thus, any fragmentation or linguistic failure is due to Stephen’s own fallible recollection, reasoning and inability to tell his own tale. The fragmentation throughout Portrait of the Artist as a Young Man is vitally important because it forces the reader to recall specific past events in the narrative and to recognize the importance of these past events as crucial to Stephen’s understanding of himself.

Works Cited
About the Author
Aaron McLean is a fourth-year Arts student who came to TRU from Reynolds Secondary School in Victoria, BC. An exemplary scholar with diverse interests, Aaron plays guitar, hikes, cycles and has a keen interest in aviation; he was a volunteer for seven years with the BC Aviation Museum. He won a Canada Millennium scholarship to continue his studies, and his article reproduced in this volume won a 2007 TRU book award. After he receives his Bachelor of Arts degree this spring, he plans to continue his exploration of the written word through graduate studies in critical theory.
My Three Homes

Camilla Tommervik

Artist Statement

The past nine years of my life I have spent searching for a home. Through nine different cities in nine different homes, I have struggled to find a place where I feel that I belong. The images in the photographic series, My Three Homes, speak of my family’s expulsion from the U.S, which has created a feeling of dislocation and nomadic lifestyle. In this series, I explore a sense of home and homelessness in three different countries, three different landscapes, and three different cultures.

This series, My Three Homes, represents the three countries in which we have been traveling since we were married in 1997. The San Francisco Bay Area, where we were married and started
out, and which to this day I still consider my home, is the first of the homes. The second is Norway, my husband’s homeland, where we were told to go in order to apply for U.S status. The third home is Canada, which we chose in order to be closer to my family which resides in the United States, especially my ailing father.

The images from the Bay Area all have a circular or window-like shape to them; this tunnel-vision approach gives the images a dream-like feeling that for me brings to mind a sense of the past. The images from Norway evoke a feeling of longing and melancholy. They remind me of the loneliness and isolated feeling of being stuck somewhere that makes you feel empty, and just longing to be anywhere else. The images from my third home, here in Kamloops, depict my everyday life with my family, and the everyday rituals as a mother and wife. In this part of the series I have used a large mirror in all of my photographs to represent the fragmentation of my sense of self and as a device to locate myself in my unsettled life.
Together these three homes represent who I am as a person today, as well as the nomadic lifestyle that my family and I continue to lead, never knowing where we will be in a year’s time, but yet still navigating outside the U.S, and continuing to search for a place to call home.

Main influences in my work range from the classic photographers like Robert Frank, Alfred Stieglitz, Walker Evans, Cartier Bresson, Diane Arbus, to the more modern contemporary photographers such as Lee Friedlander, Sally Mann, and Sandra Semchuk. They capture, in the most beautiful way, the simplicity of a storefront or reflection caught in a window. They can make the simplest of things come to life with full emotion. One of the biggest and most personal influences in my photography is Ernie Kroeger. I have worked with Ernie, a photography instructor at TRU, and a practicing photographic artist, for the past four years. He has taught me everything I know about photography. He has been a big influence on me personally and educationally. He has taught me to technically strive for the best possible quality I can achieve. It is his voice I hear in the back of my head as I am printing in the darkroom, as to whether the printing quality is good enough or not.
All of my images I have been working with up to this point I have photographed and developed myself. And they are all printed on fibre-based paper. For me, my passion is really in the process of developing the images. I love the excitement of watching the image slowly appear in the developer, and the rewarding feeling I get from a successful photograph.

About the Artist

Camilla Tommervik is in her fourth year of a Bachelor of Fine Arts degree. Originally from Oakland, California, she graduated from Del Oro High School in Walnut Creek in 1993. Camilla has traveled extensively throughout Europe, living with her husband in Norway for five years. In addition to her coursework, she has volunteered with the TRU Fine Arts department related to show preparation and removal, and documentation. After graduation, she plans to continue to build her body of photographic work, and to find employment related to her field of study.
How MMORPGs Affect Social Structures and Individuals
Massively Multi-User Online Role-Playing Games: A Structural Functional and Symbolic Interactionist View

TORREY OWEN

Abstract
The author of this abridged history of video games and of MMORPGs addresses the newly emerging Massively Multi-Player Online Role Playing Games, with the objective to analyze their manifest and latent functions and examine how these functions impacted individuals, relationships and North American society. Part of the analysis was also to address motivations of ‘why’ people chose to play, and what happens when they become addicted to MMORPGs.

Introduction
Video games and home gaming systems are in a constant state of evolution and development. In the ’seventies and early ’eighties companies such as Atari, Mattel, and Coleco fought to dominate the video game industry. As pioneers, these companies produced games that were simple and entertaining, with titles like “Pong,” “Frogger,” and “PacMan” being very popular. As the ’eighties progressed, there erupted a demand for higher quality games and gaming systems. New companies joined the competition, and names like Nintendo and Sega became permanently added to the ever-growing video game lexicon. Games offered by Nintendo and Sega ranged from adventure- and sleuth-based all the way to sport- and racecar-oriented. As the ’eighties became the early ’nineties and the early ’nineties became the mid and late ’nineties, video games and gaming consoles continued to change as well. By the year 2000, video games no longer bore much
resemblance to their predecessors. Video games were now turning into virtual realities, with powerful consoles available on the market. But video games were given a new twist when, with the onset of the new millennium, a new type of video game began dominating, a structure of game known as MMORPG (massively multiplayer online role-playing game), like “EverQuest,” “Dark Age of Camelot,” “Ultima Online,” “Star Wars Galaxies,” and “World of Warcraft.” These games are played on home computers using a keyboard, mouse, and headset as powerful interface tools. People immerse deeply into the virtual world of gaming, creating both friends and enemies, and becoming heroes and legends. Players immerse themselves so deeply into the game, in fact, that it can become the only world in which some want to live.

MMORPG History
As with all human creations, MMORPGs have a beginning. Due to the relatively recent introduction of video games into North American society, MMORPG history is one that can be fairly accurately mapped. In 1979, at the University of Essex, Richard Bartle and Roy Trubshaw designed what would come to be known as the earliest digital ancestor of MMORPGs (Dourish, P. 1998). What they constructed was a text-based online role-playing game platform known as Multi-User Dungeons (MUDs). These early MUDs typically ran on private servers, usually at a university and often without the knowledge of the system administrator. Game competition was similar to role-playing games such as Dungeons & Dragons; players would type commands into a parser and gain experience through entering dungeons, fighting monsters, and acquiring bounty.

As time moved on, MUDs went through many programming transformations, eventually evolving into what is now known as MMORPGs. MMORPGs are games in which people use avatars, or created individual personalities and forms, to interact with the environment and other people within an artificially created virtual reality. The game is played in real time and all graphics are three-dimensional. The players communicate with each other using text-
message chat, animated gestures and expressions, as well as the recently introduced real-time verbal speech using microphones and headsets (Yee, N. 2006). The worlds existing within these games are vast and often updated. When creating avatars, users of MMORPGs are given much freedom in terms of choosing their character’s gender, species, and physical features.

**Players and Motivation**

An in-depth survey was undertaken by Stanford graduate student Nicholas Yee (2006) between 2000 and 2003. The survey comprised 30,000 questionnaires administered to players of the most popular MMORPGs at the time: “EverQuest,” “Dark Age of Camelot,” “Ultima Online,” and “Star Wars Galaxies.” Yee found that the average age of players was just over 26 years and the average playing time per week was just below 23 hours, with eight per cent of users spending 40 hours per week or more in these environments. Yee’s survey also found that the motivation of players differed a great deal related to factors described as relationship, manipulation, immersion, escapism, and achievement.

Users who score high on the “Manipulation” factor, for instance, enjoy deceiving, scamming, taunting, and dominating other users. Users who score high on the “Immersion” factor enjoy being in a fantasy world as well as being “someone else.” They enjoy the story-telling aspect of these worlds and enjoy creating avatars with histories that extend and tie in with the stories and lore of the world. The “Escapism” factor measures how much a user is using the virtual worlds to temporarily avoid, forget and escape from real-life stress and problems. And finally, the “Achievement” factor measures the desire to become powerful in the context of the virtual environment through the achievement of goals and accumulation of items that confer power (Yee, N. 2006).

Responses to the questionnaires brought to light other intriguing information pertaining to the motivation factors of men as opposed to women. Yee’s findings suggested that males within the game tended to be goal and achievement oriented, whereas to a large extent
women found allure in being part of, and forming, relationships, while also immersing themselves in a fantasy world (Yee, N. 2006).

**Emotional Investment**

Within MMORPGs, players develop relationships with other players, and people within the game become friends with other people to the degree that 39 per cent of male respondents and 53 per cent of female respondents felt their “virtual world” friendships were as important, if not more so, than their “material world” friends. In this virtual world some of the relationships remain purely platonic, while others become romantic (Yee, N. 2006). J.B. Walther, a communications researcher, has developed ideas concerning ‘hyperpersonal effects’ of computer-mediated communication (CMC). Walther suggests that the way in which people communicate online allows them to be intimate, intense, and emotionally salient due to the methods in which communications occur (Walther, J. 1996; Yee, N. 2006). These forms of communication methods can be easily observed in MMORPGs.

First, the communication channel allows senders to optimize their self-presentation because interactants do not have to respond in real-time. Second, the receiver forms an impression of the sender by inflating the few pieces of information that the sender has optimized. Third, participants can reallocate cognitive resources typically used to maintain socially acceptable non-verbal gestures in face-to-face interactions and focus on the structure and content of the message itself, which comes across as more personal and articulate. Finally, as interactants respond to personal messages with equally personal and intimate messages, the idealized impressions and more personal interactions intensify through reciprocity. The cumulative effect is that the interaction becomes more intimate and positive (Yee, N. pp. 16).

Another factor argued to contribute to the development of virtual friendships and strong bonds is that players in the game team up to go on “quests” and “missions” together. When partaking in these events, players must trust each other, work together, and share a common goal; through this, bonding occurs and friendships develop (Yee, N. 2006).

To succeed in “EverQuest,” players need to form relationships
with people they can trust, and the game does a wonderful job of forcing people into this situation. Conversely, “real life” rarely offers this opportunity, as technological advances mean we have little reliance on others and individuals are rarely thrown into life-or-death situations [male, 29] (Yee, N. pp. 16).

The world that exists within MMORPGs is one in which people are drawn together; they must work together, and they must develop relationships with each other. The ideas of death, camaraderie, risk and self-sacrifice all play a strong role in encouraging the development of relationships, both platonic and romantic, within the game. MMORPGs offer a unique opportunity to ask questions about the communities that form within the games, rather than just focusing on individual interactions.

Addiction
Perhaps one of the most original definitions of addiction is that of Ramtha/JZ Knight (2004) from the movie What the Bleep do We Know? Addiction is the feeling of a chemical rush that is cascaded through the body through a whole assortment of glands and through the spinal fluid – a feeling that some would call a sexual fantasy (Ramtha/JZ Knight, 2004).

According to Wikipedia, video game addiction is a proposed form of psychological addiction composed of a compulsive use of computer and video games, most notably MMORPGs, and is related to Internet addiction disorder. Though there is still great debate as to whether one can become addicted to a video game, there are people who report that their friends and loved ones have been “sucked into” a game, suddenly becoming self-isolating, preferring to play the game instead of actual personal contact, and focusing almost entirely on the game instead of real-life events.

Kids are skipping school to play (Oakland Tribune, 2005), lovers are leaving their spouses over MMORPGs (Reynold, C. 2006), and students are allowing their grades to drop to all-time lows so they can devote as much time as possible to a video game (Farrell, E. 2005). In the late 1990s, MMORPGs had less than a million subscribers
worldwide; in 2006, over 13 million people had subscribed, with 6.5 million playing “World of Warcraft” (WoW) (Khazan, O. 2006). The signs of MMORPG addiction are very similar to those of alcoholism or any other dependency: tolerance, withdrawal, lying, or covering up, among others.

Many companies that manufacture MMORPGs employ psychologists to analyze games and suggest how to design them in a manner so people are more easily able to play for long stretches of time (Khazan, O. 2006). “Blizzard,” for instance, has two full-time in-house composers to create seductive soundtracks for the game (Yee, N. 2006). The evidence thus suggests that companies know or want to know how to make the games as addictive and pleasurable as possible.

Like with other dependencies, when people become addicted to a MMORPG, it is not only the individuals themselves who are affected, but all of the people around them. Sherry Myrow, a Torontonian tired of sleeping alone, watching television and being ignored while her husband played WoW, decided to take action by creating an online support group for people who lose their spouses to video games, entitled gamerwidow.com. The service is open to people whose loved ones fall victim to any video game, although it is MMORPGs that seem to pose the biggest problem (Reynolds, C. 2006).

Gamerwidow.com allows people to talk about their own personal experiences of loved ones becoming addicted, with comments made ranging from comical, “The last time we had sex was when the server went down (Reynolds, C. 2006),” to very serious and sad:

We were always surrounded by people. Now, he never leaves the computer. He lost his job, gained 60 lb. and refuses to waste game time brushing his teeth or showering. He screamed in frustration because he didn’t win anything after 12 hours on a raid. This formerly sweet man knocked me to the floor because I flipped the breaker switch to tell him I was leaving. (Reynolds, C. 2006).

Myrow’s web page illustrates romantic relationships that can be torn apart by a video game, but this is only one example of the effects of MMORPG addiction.
MMORPG Addiction & Education

University and college professors are also concerned that they are losing their students (Farrell, E. 2005). Mathew Small, a student at Saint Anselm College in New Hampshire, was a hard-working student with a 4.0 grade-point average and many good friends. Mathew became addicted to WoW, and over the course of six months devoted 1,008 hours (42 days) to the game. During this period, Mathew in his own words spoke of how he would hand in papers that were embarrassing, of how many of his close friends he had lost, and how his grades plummeted to unacceptable levels. Mathew, upon realizing he had played 1,008 hours, experienced what addicts call a “moment of clarity.” He then chose to quit playing WoW, but after two months away from the game, still felt as if the game was drawing him back (Farrell, E. 2005).

The American College Health Association’s 2004 National College Health Assessment found in a survey of 47,000 students that 13 per cent of students felt recreational computer use had significantly hindered their performance at school (Farrell, E. 2005). Another 15 per cent blamed depression, and 8 per cent stated alcohol usage caused them to produce poor work.

The survey revealed that many students have difficulty realizing they have developed, or are developing, an addiction problem; as well, many surveyed did not think they needed help to deal with such a problem. For example, a seminar in Stony Brook for online addiction hosted by a Mr. Mastroianni was designed to help students who were falling victim to Internet addiction, including overuse of MMORPGs. Not one student showed up (Farrell, E. 2005).

In China, MMORPG use has become such a problem that the Chinese government introduced legislation restricting players to a maximum of three hours a day. The Chinese government introduced tactics to combat on-line addiction by instituting a system so that if players play past the three hour mark, they are no longer able to progress within the game. In this case, China hopes to help individuals wean themselves away from virtual gaming (Yee, N. 2006).
Romantic Partners and Family Members

Though MMORPGs are games in which players use a single avatar to explore the world, they also play together, and many people choose to ally with their romantic partners or family members. Yee’s (2006) survey found 15.8 per cent of males and 59.8 per cent of females that play do so together with either a family member or romantic partner.

Many of the romantic couples who play together acknowledge playing MMORPGs together aids in identifying personality differences. Couples in Yee’s (2006) survey also claimed that playing together worked to strengthen and shape their relationship.

“I would say rather than having learned something new about him, it was more like it emphasized differences between us that I already knew about. He is very patient; I am very impulsive, etc. And these differences are a lot more apparent in a game situation” [Female, 27, dating] (Yee, N. pp19).

“Our relationship has definitely been enhanced. We’re better now at working together towards goals. And we both really enjoy growing, learning and adventuring together. It’s exciting to be involved in each other’s triumphs” [Female, 29, married] (Yee, N. pp.19).

Much insight is revealed through comments by parents regarding how venturing into the game alongside their children affects relationships as well as how their views of their children are changed. By playing MMORPGs with their children, parents have an opportunity to observe their children in social situations; an opportunity many parents do not have in the material world.

“I learned my son is a very good strategist. I knew that to a degree before, but it has been eye opening to watch him lead a group. I did not know he had these skills” [Female, 49] (Yee, N. pp20).

Other parents found that playing MMORPGs alongside their children allowed them to redefine what they viewed as the traditional parent-child roles. Through MMORPGs, parents felt they were able to shape, structure, and forge new bonds with their children (Yee, N. 2006).

“I think it has enhanced our relationship; we both treat each other more like equals and partners in our private life. It is much easier to
talk to her now and I have found her talking to me about much more of her life and ideas” [female,40] (Yee, N. pp. 20).

Role Exploration
One of the particularly interesting aspects of MMORPGs is that the avatar a player creates does not have to reflect who he or she is in the material world: a player is able to be of a different sex, a different height, even a different species. With these options, many players elect to create characters who are very different from themselves; in so doing, many players get a glimpse into what it would be like to someone else (Yee, N. 2006).

When I play my male character, other male members of the party will listen to me better, take me more seriously. In my male form I could give orders and have them listened to, where as a female, my characters aren’t always taken quite as seriously. Also, where my female characters were given many gifts by random players when they were young, I didn’t see it happening with my males, which I didn’t mind at all. I’ve enjoyed the higher level of ‘respect’ for my abilities that seems to come with playing in a male body. [female, 22] (Yee, N. pp. 21)

Comments such as the above suggest that MMORPGs may one day give researchers an opportunity to study sex and gender in many different ways.

Manifest and Latent Functions
The manifest functions of MMORPGs are fairly identifiable: they provide entertainment for members of society, and the games sell, thus generating profit for the companies producing them. Yet at the same time, MMORPGs generate an enormous amount of latent functions. Due to the large amount of technology required to develop the games, computer programming advances, hardware advances, and society benefits from the great amount of technical knowledge being developed. The games become agents for individuals in developing leadership skills, social skills, and computer skills, while players meet potential mates, make new friends, and learn about
other cultures. In fact, not only do people learn about other cultures, they develop new “virtual” cultures that have within them their own sets of norms, mores and folkways.

Other latent functions of MMORPGs stretch into academic fields such as psychology and sociology, for these virtual worlds allow researchers to study individuals, groups, and societies from a new vantage point. One of the very interesting aspects of studying these “virtual” cultures is that the “Hawthorn effect” can be removed from the equation. Researchers are able to track the progress of avatars without having their presence known, which opens many doors into attempting to spot examples of human benevolence or malevolence.

Conclusion
Though many latent functions of MMORPGs can be viewed as positive, dysfunctions become evident as well. Players become “addicted” to the game; when this happens there is a wave of cause and effect that ripples through society. The individuals themselves may become reclusive; not desiring to partake in any other aspect of life, they lose their jobs, and their friends, and their families suffer. If an individual’s professional life is affected by MMORPG addiction, his or her employer will be affected as well. If an individual’s social life is affected by MMORPGs, the friends of the individual will also be affected. Perhaps the social structure that suffers the greatest damage due to MMORPG addiction is the family of the individual. The family may be forced to watch as one of its members is transformed through addiction. The family itself may be put in the situation of having to support one of its members who is no longer a productive member of society. In so doing, the individual may be regarded as a burden on the family as well as on society itself.

MMORPGs can be hindering as well as beneficial for society. Researchers are given a whole new world to study, and players are given a whole new world to explore, yet at the same time the question arises of whether players gain more from choosing to live through a computer generated world, or from living within the world we define as real.
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About the Author
Torrey Owen is a second-year arts student who grew up in Williams Lake, BC, graduating from Anne Stevenson Secondary School there in 2001. Now attending TRU’s Williams Lake campus, he was president of the student council there this year. He plans to major in sociology and continue his education past the bachelor degree level, with the eventual goal of teaching at a university. He has never played a MMORPG.
The Arctic

Paula Wild

Abstract
O Canada!...
The True North strong and free,...

Canadians love the north; we believe ourselves a northern people. “Standing on guard” may be a little bit of a misnomer, though, because since the 1980s we have axed the budget for military machinery several times. Maybe we don’t want to guard our homeland. Maybe we do not think anyone would want all that frozen and barren land and ice. After all, Britain did not want particularly want it. In 1870, the HBC, acting on behalf of the British monarch, transferred title of most of the sub-arctic and some arctic lands to Canada. Britain ‘gave’ the remaining arctic possessions to Canada in 1880, including Baffin Island. Maybe a lot of Canadians are just not well informed, and do not know the implications of melting polar ice, and how that could affect our home territory. Most Canadians have never even seen “The True North.” Can we in fact call ourselves a northern people? Would the people of Yellowknife call those of us that live along the southern border of Canada northerners? I suspect they call us southerners. I would also posit that the bulk of the population of Canada probably does not know exactly what it means to protect our true north. What do we need to protect it from? Who wants to go up there anyway?

Former Prime Minister Brian Mulroney had an idea:
The arctic is going to be the great, magnificent dimension of Canada’s future for hundreds of years. Our sovereignty over it, and our capacity to exploit it in an environmentally sensitive way, are going to be extraordinarily important for all Canadians, for our future as a people. Canadians, new Canadians, will be seeking the new frontier there.⁴

Eyes are focused on the far north of Canada as the next great frontier, shipping route and resource basin. Canada has a largely unguarded shore that has many other nation-states interested. We need to protect it. There are several issues that affect the problem of Canada asserting sovereignty over its northern border. Will we “stand on guard” for the freedom of the north? The present government has pledged that we will, but after years neglect of our limited armed forces, how will we guard our “true north”?

**The Geography**

Canada’s territorial north has a population of about 93,000 people covering four million square kilometres, or about 2.5 humans for every 100 square kilometres. The terrain is varied, with barren plains, ice-covered islands and arctic seas to the east and north. Cold governs the north, where winters are long with subzero temperatures. The arctic climatic zone is characterized by very short summers with mostly autumn-like weather interspersed with a few warm days and some freezing temperatures and snow flurries. Weather patterns are characterized by dry cold weather originating over the ice-covered Arctic Ocean where the average summer temperature is less than 10 degrees C. In the arctic, there is extensive, very thick ice cover known as polar pack ice. It drifts in a clockwise direction in the Beaufort Sea, and to get through it, ships need to have ice breaking capabilities.⁵

**Climate Change**

Global climate change is probably the most likely explanation for the increase of melting sea ice. With temperatures rising worldwide, the average temperature is higher now than it was in the last century, and the effects in the arctic are happening at nearly twice the rate of
the rest of the world. There has been a three percent decline in the amount of arctic ice over each of the last three decades: some say as much as a twenty per cent decrease in the last 30 years. Scientists have documented a decrease in the thickness of the permanent ice pack. Some findings indicate that the ice is half of what it was only 50 years ago, which is a loss of 34,000 square km. of ice per year. Scientists predict that there will not be any sea ice left in the summer by the end of this century, while others think it could be as soon as ten years from now, allowing for the passage of commercial vessels in the summer months. Typically, the pack ice melts during June and refreezes by late September. Longer periods of open water allow for ships to traverse the area for longer periods of time. The shipping season is currently short, so in order for commercial shipping to take place, more warming must occur, as to be viable, shipping needs a regular and dependable season. By contrast, the Northern Sea Route (the arctic waters of Russia) is expected to be clear of sea ice before the Northwest Passage. If this occurs, there would be competition in attracting shippers.

Disputes
It could be said that Scandinavians have as much right to the far north as Canadians. They were exploring the north between 1880 and 1902, during which time Norwegian Otto Sverdrup discovered several large islands west of Ellesmere Island which were unknown to the Canadian government. In 1906, Norway’s Roald Amundsen managed to complete the journey through the Northwest Passage, further raising questions about Canada’s claim to the north. In 1931, the Canadian government ended the dispute over the islands that Sverdrup claimed for Norway by paying him $67,000 for the records of his voyage.

Hans Island is a tiny 1.3 km piece of rock located in the (very) far north (see map 1). It can be found between Ellesmere Island and the Danish territory of Greenland. There is nothing there except rock and ice. However, this little island represents Canadian sovereignty. Many other issues in the arctic are more important than “who owns Hans Island?” but if Hans Island is a small dispute, it sets a precedent...
for other disagreements. In 2003, the Danish military raised its flag on Hans Island, sparking the current argument. To counter, in 2005, the Canadian defence minister of the time, Bill Graham, flew to Hans Island in order to declare Canadian sovereignty over the tiny parcel of land. In August 2006, Denmark again tried to lay claim to tiny Hans Island, hoping to procure the riches of the oil, natural gas, and other resources potentially located there in the ground under the ice and surrounding waters.

In the Beaufort Sea, Canada has a disagreement with the United States. Apparently, the maritime border between the Yukon and Alaska has never been ratified. That leaves 21,360 square kilometres of area thought to be rich in natural resources in dispute. The Americans believe that their land rights continue onto the continental shelf where they could drill into the shelf under Canadian waters.

**Shipping**

The thought that there could be a safe and navigable route through the Northwest Passage within the next ten years is discomfiting to many Canadians. Such a route could clip as much as eleven thousand kilometres off of a single Asia- Europe trip formerly using the Suez Canal route and could shave two weeks off of a London - Tokyo trip. But in order for this to happen, shipping companies need stability. Right now, ice levels vary so dramatically from year to year that it is impossible for companies to plan. In addition, the passage is dotted with floes of multi-year ice, which are like granite if hit, making it far too dangerous for the average shipping company, even if it had specialized vessels. By the end of this century, some of these problems may have resolved themselves, at which point Canada would like to be ready to cash in on the possibility of charging transit fees for passage.

The financial appeal of the Northwest Passage route was examined by Emmanuel Guy, who, when he compared the northern route versus the southern route, using costs that were identical for the charter, fuel, and transit fees, and keeping speed as a constant, concluded that the Northwest Passage would be $590,000 less expensive to use. Guy then assessed the route using an ice-worthy ship which is scarcer,
and therefore more costly to charter. He also accounted for a slower speed to counter the danger of floe ice, added a transit fee based on the proposed Northern Sea Route fee, and came out with a figure $1.191 million more. The economic potential for the route could be very attractive to foreign powers (namely Russia and the U.S.), which could challenge Canada's sovereignty in the north. Presently, however, Canada is in a very poor position to assert sovereignty.

Canadian Position
In 1909, a representative sent by the Canadian government on an arctic expedition to the far north to claim ownership of the entire arctic archipelago erected a simple cairn on Melville Island. In 1940, the R.C.M.P. schooner *St. Roch* repeated Amundsen's journey in order to re-assert Canada's claims to the north. Then, during the Cold War in the 1950s, the U.S. and Canada set up a joint initiative of patrolling and defending the north. Canada's position is that the waters of the high arctic are "historical internal waters," with no right of passage for other countries. This position is based on the fact that the Inuit have travelled and lived on the ice of the Northwest Passage for thousands of years. In addition, it is not like
other waterways because it is frozen and impassable for most of the year. Rounding out Canada’s argument is that an international strait is used for international shipping, and this strait is currently not used internationally. In 1969, when the American oil tanker “Manhattan” asked Canada’s permission and assistance (and received both) to cross the Northwest Passage, the U.S. informed Canada that it would also be sending a Coast Guard ship to assist. Canada’s response was polite; it increased its territorial seas from three to twelve miles, making the two entrances to the passage territorial waters, meaning that permission must be sought to enter the passage. Then, in 1970, Canada enacted the Arctic Water Pollution Prevention Act (AWPPA), creating a 100-mile zone around the islands of which Canadians claimed the right to regulate shipping. In addition, Canada designated that “innocent passage” (meaning submarines must traverse on the surface) also includes environmental issues such as ballast dumping. The U.S. rejected AWPPA on the grounds “that no state had the right to extend jurisdiction over the high seas,” and that it was unusual to base authority on environmental issues. It was the environmental issues that motivated the Inuit. They have participated in making AWPPA regulations into some of the strictest arctic shipping regulations in the world today, even though participation is voluntary. Elizabeth Elliot-Meisel made a good point when she said, “It is one thing to claim authority and have it be recognized as legitimate, and another to maintain the power and the means to protect and enforce the claim.”

International Position and the Military
Canada has made it clear that the waters of the Northwest Passage are internal waters. The Americans and the Europeans claim it is a strait, used for international navigation. The distinction between these two claims is that if they are Canadian internal waters, then Canada can control the types of vessels that enter and the kinds of activities in which they engage, and charge them for the use of the Passage. If, though, the passage is international, then there would be relatively few restrictions, and potentially more likelihood of pollution.
U.S. believes that by accepting Canada’s position, that acceptance will affect other waterways through which they might want to pass. The issue for Americans is the freedom of passage through straits around the world for oil tankers and the U.S. Navy. Americans are presently more focused on homeland security than having naval capacity in the far reaches of the world, and it is in their interest to have Canada look after the arctic waters. In October 2006, a member of the U.S. Congress implied American understanding that the waters of the Northwest Passage are to be treated as internal waters of Canada. Contradicting evidence states that the American ambassador to Canada asserted in the same month that the Bush administration’s stand is that the passage is an international waterway, and American vessels should not have to obtain Canada’s permission to enter. It is likely that Canada and the U.S. will co-operate on matters of the arctic, and Elliot-Meisel argues that now is the time for a bilateral agreement that settles the recognition of Canadian sovereignty and fulfills the Americans’ need for continental security. It seems that the Canada-U.S. Arctic agreement negotiated by former Prime Minister Mulroney and the former President Reagan did not go far enough. The agreement was in response to the 1985 transit of the American icebreaker *Polar Sea* that had notified Canada of its passage through the Arctic waters, for which Canada gave permission. At the time, the media and public were outraged that the Americans did not seek permission, and viewed the passage as a threat to Canada’s sovereignty. Subsequently, it is alleged that American, British and Russian submarines have made undetected underwater passages without Canadian permission.

The post-World War II Canadian Navy was the third largest in the world, but peace-time operations focused on the Pacific and Atlantic oceans, as it was feared that government emphasis on arctic sovereignty protection would hinder North American defence programs such as NATO, in which Canada was a leader. Canada did not have an ice breaker nor enough personnel to effectively patrol the north, so the Americans carried out high-arctic missions with a Canadian observer on board. Officials thought that collaboration
like this could impede Canadian sovereignty and that Canada should unilaterally carry out projects in the north. In 1954, Canada’s naval research vessel, Labrador sailed through the passage, making Canadians proud. However, not long after, the Labrador was decommissioned due to budget constraints. The fact remained that during the Cold War era, the navy thought it best to concentrate on working against a known enemy instead of a perceived threat in the arctic.

It appears that the government has had good intentions toward increasing a Canadian presence in the arctic. For instance, in 1987 the Conservative government pledged money for increased presence and monitoring systems that fell prey to federal budget cuts. Canada still does not have any naval vessels in the north. Current Canadian Prime Minister Stephen Harper promised in his 2006 election speech that his government would allocate $5.3 billion over five years to beef up the Canadian military with three ice breakers, a series of underwater listening posts and increased aerial surveillance. But he has not yet moved on these issues. According to The Globe and Mail, the U.S. has no objections to the prime minister’s arctic plans. Increased military presence in the arctic has so far been small but successful, with the Army reserve unit, the “Canadian Rangers” making a 4,500-kilometre snowmobile trip over the arctic waters of the Northwest Passage in March 2006 on a mission called ‘Nunalivu’ meaning “land that is ours.” At the same time, a foreign affairs memo reminded officials that if something were to happen at Hans Island, Canadians have no ability to travel that far north using surface vehicles. In March 2007 a more ambitious Operation Nunalivut has been taking place. Twenty-four soldiers and Canadian Rangers started an 8,000 kilometre journey on March 24, intending to split into three groups and circumnavigate Ellesmere Island. Their job is to establish Canadian sovereignty and “evaluate the terrain and infrastructure of the High Arctic... so that rescue officials will be prepared for the eventuality of a crash... due to increasing commercial air traffic over the region.”

The U.S. Navy views the sea ice zones as “a serious concern of nations bordering on” these zones due to the “threat from submarine-
launched land attack missiles.” For example, the Navy believes that an enemy submarine could use the cover of the ice before and after an attack in the Beaufort Sea, where the U.S. has oil reserves in Prudhoe Bay. In fact, Russia has already been practicing war manoeuvres under the ice at the North Pole, sending “dummy” warheads toward its own territory. The U.S. has a goal to develop a submarine for use in shallow waters under the ice to ensure their dominance in shallow waters, and to restore surveillance capabilities in the ice zones.

Conclusion
What is evident is that Canada’s armed forces currently lack resources and personnel to effectively monitor the vast region to the north and cannot even act as a deterrent to any ships that may attempt to go through the passage. It has been argued that Canada must prepare for challenges from such other nations as the U.S., Russia, and Denmark, which would possibly like to exploit resources in the fragile north, and recent history has shown us that the U.S. will use force if it deems it necessary. Former Prime Minister Mulroney said that current Prime Minister Harper has a clear view and definite agenda regarding the north, and that he also understands that an excellent relationship with the U.S. President is always in Canada’s best interest. It is not yet evident that the current prime minister will follow through on his commitments to the military any more than previous leaders have (see appendix 1). Do Canadians want to guard their “true north”? I speculate that if Canadians understand what is at stake, they will certainly back the current government’s budget, and stand behind their prime minister. The beautiful, barren north is an area worth protecting, not only for the potential resources that may be hidden underground, but also to guard the traditional way of life of Canadians who have lived there for millennia and to maintain sovereignty over Canadian territory.

Appendix 1
According to Yukon Liberal MP Larry Bagnell, the Harper government has withdrawn support for the three new ice breakers needed to patrol the north. This causes some northerners concern as they know that with open water ways
come increased numbers of ships. Just how big a deal is it to have these ships wandering through Canadian territory? Illegal immigrants have already landed in the north.  

Who is to say that more won’t come? Bagnell also states that there are no search and rescue planes north of 60 degrees latitude, which could be problematic if there was to be a large-scale emergency situation in the north. In February 2007, there was an emergency when hunter Bill Wolki was adrift at sea north of Paulatuk in the Northwest Territories. It took more than six hours before a Canadian Forces plane from Winnipeg reached this remote area, only to drop off two Canadian forces technicians into perilous conditions, and have all three of them spend the next 12 hours awaiting rescue. More Canadian military presence in the north would likely reduce the duration of incidents like this and would also contribute to demonstrating Canada’s sovereignty in the north.

Notes
12. ibid.
14. ibid.
21. Winterhoff. op.cit. 8.
22. Leung. op.cit. 49-53.
23. ibid.
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About the Author
Paula Wild is a third-year student enrolled in TRU’s Bachelor of Arts degree program. A mature student who balances school and a home life with her husband and two children, Paula also holds a diploma in outdoor recreation management and has lived and worked in Switzerland and Australia. After she finishes her arts degree, Paula plans to enter TRU’s Bachelor of Education degree program. Upon completing that program, she hopes to return to her home town of Pemberton to teach.
Spain’s Islamic Past

CHANTAL MACDONALD

Artist Statement

During two semesters of my undergraduate degree, I studied at the University of Granada’s Centre for Modern Languages in the south of Spain. The last stronghold of an Islamic Empire, Granada is rich with history from nearly eight centuries of Islamic rule. While studying Spain’s past, I was inspired to travel to Morocco so that I could gain a better appreciation of a living Islamic society.

In December of 2006, I travelled alone to Morocco for six days to explore the culture and document my experiences in both black-and-white and digital colour photography. After crossing the Strait of Gibraltar, I traveled to the beautiful town of Chefchaouen, followed by Fez, where I was invited to live with a Moroccan family. Overwhelmed by the hospitality of the citizens and the richness of the culture, I felt the need to share with my Canadian peers what I had learned and experienced overseas.

Upon my return to TRU, I presented an essay entitled “When Islam Ruled Western Europe: Spain’s Islamic Past,” at TRU’s Undergraduate Conference. The presentation examined the birth and spread of Islam, from Mecca to the Iberian Peninsula, highlighting the Islamic legacy of Spain. To conclude, I referred to my voyage to Morocco, and emphasized the need for cultural awareness.

The objective of my photography is to expose the audience to a foreign culture and landscape. I want to catalyze curiosity in the viewer so that they may take the time to investigate a culture and religion often criticized and misunderstood in the media. As members of a multicultural society, Canadians should be culturally aware in order to overcome ignorance.
My photography is principally influenced by the artwork of contemporary photographer, Sebastião Salgado. The Brazilian photojournalist has traveled around the world documenting working conditions in underdeveloped nations, the plight of homeless children, as well as human migrations due to poverty, war and famine. I truly admire Salgado’s work as he produces exquisitely beautiful images while maintaining journalistic integrity by exposing social injustices.

I was fortunate to meet and work with Salgado in 2002, while working with the Aperture Foundation during a six-month internship in New York City. Salgado was holding an exhibition entitled “The End of Polio: A Global Effort to End A Disease,” in association with the United Nations Children’s Fund, the World Health Organization and Rotary International. Using Salgado’s images, The Global Polio Eradication Initiative raised funds for the purchase of polio vaccines for children in impoverished nations. It was Salgado’s campaign that inspired me to study anthropology, which coupled with photography, may be used as an effective tool for social change.

Since being inspired by Salgado, I have traveled to four continents to study, work, volunteer, and document my cultural experiences. During an anthropological field school in East-Central Europe, I spent time living with a Roma family and examined the effects of Westernization on Europe’s minorities. I later attended a Belizean field school where I stayed with a Mayan woman and considered how natural resource management and protection enables cultural continuity. Following Belize, I traveled to Guatemala to volunteer with child workers, children forced to work due to extreme poverty.

Through these international experiences I learned of the importance to be culturally and socially aware as there are many injustices in the world which must be exposed and resolved. My photographs from Morocco are unique in that they portray a culture and religion often misunderstood and misrepresented due to the current political climate. Through my images and lecture on Islam, I invite the audience to join me as an observer of a distant land, illustrating that this foreign culture is accessible and worthy of our understanding.
Chantal MacDonald “Chefchaouen, Morocco” 2006
About the Artist

Chantal MacDonald is currently completing the final year of a Bachelor of Arts degree and is considering combining her interest in culture and passion for photography with graduate studies in visual anthropology. After graduating from high school in 2000, Chantal completed an internship in Manhattan with the Aperture foundation as both the Burden Gallery and Traveling Exhibitions intern. She speaks three languages and has travelled to 16 countries, including TRU field schools in East Central Europe and Belize, and has volunteered with a number of children’s organizations, most recently in Guatemala with the Centro Educativo de Desarrollo (Centre for Education and Development).
The Form and Function of Capitalism in Quebec-Montreal and The Barbarian Invasions

MICHELLE PAQUIN

Abstract
Modernity, globalization and capitalism are all inextricably linked. There are many definitions for each of these terms, depending on the perspectives in which they are considered. However, for the purpose of this essay, modernity will be referred to as the era after the fall of the Berlin Wall in 1989, an idea taken from a book called *The World Is Flat* by American journalist Tom Friedman. The fall of the Berlin Wall symbolically ended the era of the Communist state and began the era of modernization in technology and liberal democracy. Simply defined, globalization resulted from advanced forms of technology which allowed unrestricted global access. Some may describe capitalism as the result of the corporate and political elite, using efficient global communication to create a free and global economic market. In this system, external demands became more important than national affairs. It is this last point that will be emphasized in this essay. It is the intention of this analysis to show how the presence of capitalism, as portrayed in the films Québec-Montreal and The Barbarian Invasions, challenges national unity in Quebec.

Globalization perpetuates the physical mobilization of a society. In Denys Arcand’s *The Barbarian Invasions*, we see Québécois characters dispersed around the world. Remy’s daughter Sylvaine is on a yacht in the middle of the ocean. When Remy’s son contacts all of his friends before he dies, they are all in different cities or regions.
In Ricardo Trogi’s film Québec-Montreal, everyone is traveling. Pierre is traveling for his job, as is Michel Gauvin, who has homes in Quebec and Montreal; JP, Rob and Jeff are traveling to Cuba. We see the geographic influence that globalization has; everyone is somewhere away from home. We can see how this simple fact can challenge Quebec unity. The ability of people to move means that there is less investment in one place. Hence, the foundation of traditional rural Quebec society, as portrayed in earlier films like Mon Oncle Antoine, has changed. Current Quebec directors like Denys Arcand and Ricardo Trogi have to address these changes in Quebec society. Quebec is no longer a congealed society run by the iron fist of religion; it is a capitalist society run by individuals.

Sébastien is perhaps the best example of a capitalist in the free and global market. The first shots that we see in the film are of him in what looks like a corporate call centre, illustrated by a montage of simultaneous global deal making via modern technology. He receives a call from his mother, informing him of his father’s cancer. This presents the first capitalist challenge on Quebec society; Sébastien’s career takes him away from Quebec; as a businessman he must follow the investors around the world. The second challenge presented in this scene is that commitments abroad have obviously been more important that his family in Quebec; he no longer recognizes Montreal as home. When he receives a call from his friend in Baltimore after returning to Canada, he does not say that he is home, as many would say if they had returned to the place they were raised. He simply says that he is in Montreal, as if it were any other city, and, to him, it is. In Mary Alemany-Galway’s article on postmodernism and globalization in new Québécois cinema, she explains the phenomenon of people like Sébastien in regard to identity: “Those who have forgotten seem to be the new generation who, with the freedom of the world at their command, find it difficult to care much about a Québécois identity that they take for granted.” She also notes that the enactment of Bill 101, the law privileging Quebec as a French province, has increased the degree to which many take Québécois identity for granted.

This leads into the next point: capitalism threatens language
and culture. It may be the achievement of Bill 101 that has led to complacency of the Québécois in maintaining their culture. However, it is more likely that in this era of globalization, along with countries like Japan and Germany leading the way in technology, western countries like the United States and Britain controlling the capital. It is because of this that many cultures have assimilated themselves into western culture. In both *The Barbarian Invasions* and *Québec-Montreal*, English is the language of business. This is portrayed when Michel Gauvin answers his phone in French and English; in case it is a business call, he uses his Anglo identity, “Mike Gauvin.” This scene supports the prevalence of foreign influence in the daily lives of individuals in a capitalist society. Sébastien makes all his work-related calls in English, even if he is speaking to someone from a non-English-speaking country. English is portrayed as a necessary spoke in the wheel of capital communication.

However, the technology used to relay English around the world imposes a greater threat to traditional Quebec unity. Thomas Friedman explains in his book, *The World is Flat*, that after the fall of the Berlin Wall in 1989, ending the era of the communist state, capital democracy took off and the capital elite in the world mobilized communications technology to achieve economic goals. He explains that the fall of the Berlin Wall on 11/9/89 unleashed forces that ultimately liberated all the captive peoples of the Soviet Empire. But it actually did much more. It tipped the balance of power across the world toward those advocating democratic, consensual, free-market-orientate governance, and away from those advocating authoritarian rule with centrally planned economies (49).

We can see how relevant his explanation is in Quebec society, particularly regarding the world shifting away from societies dominated by authority. In Quebec prior to the Quiet Revolution, the Catholic Church ruled society. However, with the rise of capitalism, Quebec, along with the rest of the modern world, shifted to a more liberal democratic system.

Religion is nearly absent in the two films being considered. This is an element that greatly contrasts with earlier Quebec films such
as Leopold Z and Mon Oncle Antoine. In Québec-Montreal religion is a non-existent theme, while in The Barbarian Invasions, it is much depreciated. When Gaelle goes to the church, we see layers of dust disguising the once-recognizable monuments of dominant Roman Catholic religion. Gaelle realizes that they have no value on the global market; the pieces that were of value were already sold off. The only importance they represent is to the priest who speaks with nostalgia of the days when the pews in Quebec churches were full. However, in 1966 during the Quiet Revolution, the churches became empty and the statues of Mary and Joseph were stored away in the basement. This scene is very symbolic of the shift in Quebec culture during the Quiet Revolution. Like people in the rest of Canada, the Québécois began looking outside the walls of the church, and began to question their morals.

The moral conflict between capitalists and non-capitalists in Quebec society is perhaps the most significant determining factor in threatening national unity in Quebec. It has been theorized that humans have always had needs, and technology has satisfied those needs. Jean Baudrillard presents an explanation in his book The Consumer Society that can account for the individual motivation behind capitalist activity. He provides a fictional story that accounts for what has happened in the modern world:

Once upon a time there was a man who lived in Scarcity. After many adventures and a long journey through Economic Science, he met the Affluent Society. They married and had lots of needs. The beauty of the economic man, as A.N. Whitehead remarked, ‘was that we knew exactly what he was after.’ That human fossil of the Golden Age, born, in the modern era, from the happy union of Human Nature and Human Rights, is endowed with a heightened sense of formal rationality, which leads him to; 1 seek his own happiness without the slightest hesitation; 2 prefer objects which will provide him with the greatest satisfactions. (69)

The two groups, capitalists (who can fulfill their material needs) and non-capitalists, therefore do not share the same values. We can see Michel Gauvin’s character in Québec-Montreal as someone who
seeks his own happiness without the slightest hesitation. As he tells Pierre when they stop, he loves his wife, and she is the best mother he knows, but his other women provide him with things that his wife cannot, and he sees no reason not to “have it all.” An income for a capitalist like Michel Gauvin is not limited by unions or regulations; he has the potential to continually prosper in the free market economy. He translates the nature of his career into his personal life; in regard to experiences and women he never limits himself in such a global and accessible market. Since the majority of people cannot be rich and powerful like Sébastien or Michel Gauvin, the minority of persons use their values to set the momentum of the majority (though their economic dominance) even though the majority does not share the same values. For example, someone like Sébastien would rather pay for private health care than pay taxes into a system that benefits all. Therefore, people like Sébastien and Michel Gauvin cause fragmentation in Quebec society because they represent a non-communal set of values.

Karl Marx explains the theory of production and how it influences the character of a person, which applies to the characters in both the films. In their book *The Material Basis of Morality*, Karl Marx and Friedrich Engels explain,

...it is a definite form of activity of these individuals, a definite form of expressing their life, a definite mode of life on their part. As individuals express their life, so they are. What they are, therefore, coincides with their production, both with what they produce and how they produce. The nature of individuals thus depends on the material conditions determining their production... (42)

This can be related to the way in which individuals and machines have merged identities. When Sébastien loses his laptop in his father’s room, he blames him and says, “What am I going to do? I had fifty emails on that thing!” Basically, his livelihood and therefore his life are documented on his computer. In *Québec-Montreal*, throughout Pierre and Michel’s trip, Michel is constantly answering his phone. His phone allows him to be accessible at all times. It also allows...
him to save time (by having multiple lines) and multi-task his life. These qualities are also reflected in his personal life, as in the case of his mistresses, as he says, “it is work inventing excuses.” Sébastien’s character is the same; during intimate scenes he is interrupted by his phone, which is on at all times. Perhaps the most heart-wrenching example of technology interrupting real life is the scene where he is sitting outside at the lake with Nathalie while his father is dying and his phone rings. In an act of revolt Nathalie throws the phone in the fire, and for the first time the audience can relax, because for a short time Sébastien has become human again. We can see that he had become a machine. Capitalists, like technology, operate to serve the same purposes; they operate at an efficiently fast pace, and they are always accessible. They are always multi-tasking and using their broad connections to fulfill their every need. Since they operate as capitalist machines, they see everything else as a commodity.

When the public administrator of the hospital tells Sébastien that he cannot buy his way out of the Quebec Health Care System, he is not affected by moral discourse, but rather mechanically pushes the money in front of her and tells her that it will be updated every week, to ensure her loyalty. This is an example of how capitalism challenges the universal health care program in Quebec.

As Pat and Hugh Armstrong explain, The Health Care Plan was created by Tommy Douglas to unite all Canadians of different classes and protect their well being by providing free medical service: “Tommy made sure the scheme was public and compulsory, in spite of the doctors’ strong resistance. Every resident had to belong and every resident had the right to necessary medical care”(18). As mentioned previously, one of the first actions that Sébastien makes when he arrives at the hospital is to compromise the Quebec health care plan by paying for his father to be relocated and given special treatment. By paying for his father to be relocated and given special treatment, Sébastien represents the corporate-private sectors who are buying Quebec out of its universal health care plan. However, with this occurring in Quebec, national filmmakers like Denys Arcand and Ricardo Trogi glorify the effects of capitalism.
With all the threats that capitalism has on Quebec nationalism in these films, perhaps its greatest threat is that those benefiting from the capitalist system are also portrayed as the most successful in life, both professionally and personally. In Québec-Montreal, Michel Gauvin is the only character that does not end up disheartened and helpless. He is successful in his career, as symbolized by his $2800 phone system in his new SUV. Even though Gauvin is not living a morally acceptable life because of his infidelity, he seems like the happiest character in the film. In truly hedonistic capitalistic fashion, he manages to find time to have multiple mistresses. He is the master of his destiny, while all the other characters are left to chance. Rob and JP end up stranded on the side of the road, Pierre as well. Alain ends up going home in a police car and Katherine in a tow truck. In Sébastien’s case, Denys Arcand portrays him as the saviour. He made the last days of his father’s life tolerable, even happy. He brought in all of the people his father cared about. He accessed illegal drugs for his father to numb the pain. He provided high-tech medical services so that his father would not have to wait for the insufficient Quebec health care system. He also brought his father and everyone else out to the lake, the place his father enjoyed the most. Aside from his savior status in the film, he enjoys a genuinely happy relationship with his wife Galle, presumably showing that, “money can buy happiness.”

Although capitalism is glorified on the surface, a more careful viewing of the films will show that the directors actually illustrate how happiness can exist outside of finances. This subtext is supported by many examples, including the lake scenes in The Barbarian Invasions where the characters are most content without their materialist commodities. However, is difficult for a nation to maintain its unity when there are capitalistic forces pulling it apart, and on the surface, those capitalist individuals are portrayed as the ideal in film and media. How then can Quebec maintain its cultural unity?

It was easier when one religion and a common language bound everyone together; now there is nothing that holds any two people together. Post-modernity, globalization and capitalism have all fragmented communal Quebec society. The answer does not lie
in regression, but perhaps a balance between the importance of foreign and domestic affairs. Perhaps the answer also lies in maintaining what is threatened, but still left, and can be taught by past generations. Even though the values of Remy’s generation (pre-globalization) conflict with those Sébastien’s, it is possible for the two to come together, as the two characters did in the last days of Remy’s life. Part of Quebec’s beauty lies in its modernity, however, the traditional morals that once united the people of Quebec should not have to be compromised altogether by the new morals of the capitalist elite.

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About the Author
Michelle Paquin came to TRU after graduating from John Peterson Secondary in Kamloops in 2002. As well as full-time university studies, she’s travelled to Brazil, Cuba, Mexico and Argentina. Now completing the final year of her Bachelor of Journalism degree program, she hopes to combine her love of travel and her interest in journalism in a career as a travel journalist.
A Categorically Marginalized Canadian Society: Effects of Ethnic Labels on Behaviour

TAYLOR-JANE BUSH

Abstract
I will discuss how the Residential School system of British Columbia has marginalized individuals based upon their ethnicity and culture. Residential schools are a prime example of social marginalization within the elementary educational institutions of Canada. The effects of the marginalization process are argued to include deviant and rebellious behaviours(s) that have demonstrable results. The topic of ethically stratifying a ‘race’ is discussed demonstrating how individuals behave when classified by skin colour. Thus, negatively categorizing ethnic groups has had the real potential for instilling negative effects upon Canadian society, and how the country functions as a whole. Such outcomes of classification have included racist policies such as the Indian Act (1876), and the significant loss of cultural practices and identity. This process of assimilation has led to social-political conflict between the white (European) majority and Aboriginal communities. This was attributed to resentment and unfair treatment of individuals from an Aboriginal culture.

Aboriginals and First Nations of Canada have been increasingly marginalized throughout history. The only aspect that has changed thus far is the fact that discriminatory policies have been implemented by the federal government in subtler ways. Although policies such as the Indian Act (1867) and the Canadian Residential School experience have drastically altered Aboriginal customs,
life, and values, they continue to be forgotten and even in some instances, denied, as racist policies whatsoever (Roy, 22). Such policies and events as mentioned above have contributed to the loss of identity and culture, leaving inevitable long-term negative effects in current Canadian society. Of particular interest is the fact that with marginalization of Aboriginals comes categorizing of all Canadian society, leading citizens to believe and therefore be taught that equality is no more than an “ideal.”

The basis of this research was grounded in the assumption and therefore the question: How has the act of marginalization been implemented by the Canadian residential school system in British Columbia? First, it must be recognized that these educational institutions were established with deeply embedded racist intention. Residential schools were built to assimilate and/or integrate Aboriginal culture and peoples into white “mainstream” society (Indian, 1). The schools dictated a “Christian ideal” that was met with brutality if conformity wasn’t maintained (Miller, 1).

Canadian residential school experiences have been regarded by many as “Legalized kidnapping by the government” (Miller, 2). This is supported by the age (usually five or six) that Aboriginal children were taken from their homes, corresponding with segregation from siblings once they were within the school’s vicinities (Miller, 1). As mentioned previously, Christianity was a means to replace existing spiritual beliefs and the new identities Aboriginal children were given (as well as names) reflected this. The children’s clothes were burned once they were at the schools and severe punishment in the form of sexual and physical abuse of students who tried to escape was often justified by missionaries, who also used attempted escapees as examples of the humiliation others would face for similar transgressions. Girls particularly were often further abused due to their perceived sexual proclivity (Miller, 2). In other words, girls were more likely (in the eyes of the missionaries) to commit sexual acts. In this sense, the missionaries believed themselves to be the “protectors of morality” and the morality of the residential school itself. Gender discrimination is also apparent in the Indian
Act. This will become obvious as Bill C-31(S.12); a component of the Indian Act, is examined.

The Indian Act was originally implemented in 1867 (the year of Canadian Confederation). It excluded people and groups who were not considered to be “pure Indian.” This assumption and association made it difficult for Aboriginals, especially those with “mixed blood,” to identify with white culture or their own. An example of a group that experienced discrimination through this Act was the Métis (Lawrence, 6).

This obvious discrimination not only rallied against a nation, but also upon the laws which Canadian society was built. Bill C-31 is a good example of how not everyone in particular was “equal before the law” - especially not women (Lawrence, 2). Bill C-31 was included in Section 12 of the Indian Act. It referred to any Aboriginal woman that married outside of her culture. In response to intermarriage, the federal government revoked any status Indian rights from these women, leaving them dislocated from both “mainstream” and Aboriginal culture. In the future, this denied the possibility of their grandchildren receiving status, since once status was lost or “given up,” it could not be regained. This remained a formal policy until 1985 when the Indian Act was finally amended. Although this decreased outright and blatant prejudice against Aboriginal women, it did not guarantee that Canadian institutions would not incorporate subtler amounts of discrimination through court proceedings and corresponding verdicts (Lawrence, 5).

An example of a stereotypical and discriminatory policy is demonstrated by the judicial decision rendered by Winnipeg Child and Family Services v. G. Mrs. G was an Aboriginal woman who had four children and was currently pregnant with another. She had suffered from a long history of solvent abuse (inhalants) and asked for treatment when she discovered her pregnancy (Roy, 5). She was denied access to treatment due to her poor history of drug abuse and the limited space available in the facility. Winnipeg Child Services found out about the continued substance abuse and removed all four of Mrs. G's children, leaving her devastated and ashamed. The judge in
the case failed to recognize Mrs. G’s Aboriginal heritage in rendering a verdict. He viewed her circumstance as irrelevant and noted that it was generally viewed that way in most proceedings (Roy, 4). Although this may be true to some extent, it should be recognized that culture, especially one that has been consistently marginalized, should be at least considered, if not a determinant of many family circumstances. These types of proceedings have further categorized not only the First Nations culture, but further stereotyped Aboriginal women as “bad mothers” (Roy, 22).

Stereotypical attitudes described above have not only contributed to further use and abuse of such substances as solvents, but also encouraged, alcoholism, deviant behaviour, and a never-ending conflict between two nations (Roy, 7).

Substance and alcohol abuse are not only visible problems amongst Aboriginal groups, but problems that continue to define the Aboriginal culture in negative ways. Canadian society however, fails to recognize that problems such as these are not only a product of negative definitions, but the policies of assimilation and colonialization as well. These two very weak determinants within Canadian society have contributed to a loss of Aboriginal heritage (cultural identity), self identity, and spoken language (which was forbidden in residential schools) (Roy, 10). These three manifest functions, which many would hope were latent in intention, have contributed to many forms of deviant and criminal behaviours such as substance and alcohol use, abuse, and corresponding violence. For example, a large majority of criminal convictions in BC involve people of Aboriginal descent. Negative associations relating to Aboriginal culture and existence may also be blamed for or attributed to the high rate of suicide among Aboriginals: triple the national average (Gehl, 3). With this astounding rate of self-destructive behaviour, especially increasing among Aboriginal youth, the federal and provincial governments of Canada must resolve conflict between the white majority and First Nations communities to find solutions to decrease these alarming rates of suicide and also the frequency of deviant and/or criminal activity.

Canadian policies such as the Indian Act and the Canadian
residential schools have damaged Native heritage in an unforeseen way: degradation of national identity. Thus, conflicting attitudes against those who implemented these policies against First Nations people are inevitable. It is also necessary to keep in mind that these policies were often implemented by rich, white men, with resultant racist slurs and stereotyping which continue through present-day interactions. It should also be noted that these attitudes are likely to occur until an effective solution to the oppressive past can be suggested and integrated into the lives of both Aboriginal and white culture. Although solutions are not the easiest thing to propose and implement, two suggestions have arisen during an in-depth look at negative effects and impacts resulting from the *Indian Act* and Canadian residential schools.

The consideration of culture, whether it be in judicial or drug-treatment facilities, is vital to reaching an understanding between two very frustrated nations (Roy, 22). As seen in *Winnipeg Family Services v. G*, it is quite apparent that substance abuse requires a detailed look at the deeper issue, rather than the mere title of drug abuser. This will ensure that facilities are appropriate to the individual, not just those who are considered “mainstream” by the Canadian federal government. One key solution to treating First Nations can be found through acknowledging and understanding what Canadian policies did to brutally destabilize a culture. By analyzing the aftermath and the totality of policies such as the Canadian residential school and the *Indian Act*, members of society (especially mainstream), can get a better sense of what constitutes discrimination and learn how to avoid similar mistakes in the future.

The initial outcome of residential schooling was dislocation and abuse. The original intent was to integrate, however this is irrelevant when it is discovered that 90 per cent of cases following the dismantling of residential schools reported sexual, emotional, and physical abuse (Indian, 2). This has greatly affected self-esteem and therefore, as seen with many people across cultures, has resulted in substance abuse. The substantial use of alcohol and narcotics has resulted in an ever-increasing national average of suicide among Aboriginal communities,
which in turn can only lead to one thing: conflict (Gehl, 3).

Policies implemented by Canadian residential schools have affected Aboriginal communities substantially. Since there are currently 80,000 (or 12 per cent of the Canadian population) alive today that were involved in these experiences, there is still much animosity felt, for it is hard to believe that a human being can ever be fully compensated for such a horrific experience implemented by the government they were supposed to trust (Indian, 1). Thus, it is not far-fetched to determine that Canadian residential schools and the Indian Act polices have disrupted First Nations culture and the functioning of Canadian society as a pluralist whole. The fire of stereotypical attitudes has been constantly fueled by racist individuals and resentment, which has led to social conflict within Canadian society regarding the limitations of equality and race. Most of all, however, these attitudes challenge and refute the basic idea of a pluralistic nation, which is what Canadian nationalists claim Canada to be. After examining only one culture, two polices, and two nations, it is not only apparent that the model of pluralism is incorrect, but the notion of equality as well.

Works Cited


About the Author

Taylor-Jane Bush is a second-year student at TRU’s Williams Lake campus who entered arts studies after graduating from Columneetza Secondary School in 2006. Following in the footsteps of her great-grandmother, a widely published poet, Taylor-Jane counts among her academic awards a first prize in a high school poetry contest. She plans to take a double major in political science and English, and after graduation with a Bachelor of Arts degree, to pursue graduate studies in law, particularly in the field of human rights.