

Undergraduate Lighting Design Curriculum and Pedagogy in Canada

by

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Master of Arts, Simon Fraser University, 2014

Bachelor of Fine Arts (Drama), University of Calgary, 2010

Diploma of Arts and Science in Technical Theatre Arts, Mount Royal College, 1992

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Abstract

The purpose of this research is to review the past and present pedagogy and curricula of theatre lighting design in Canada; the factors, values, ideas and theories that inform it; and to recommend an updated pedagogy and curriculum that reflects the trends of learning in higher education, and theatre performance in Canada in the twenty-first century. This review of and intervention in the curriculum and pedagogy of undergraduate lighting design in Canada has evolved out of a growing scenographic turn that recognizes that lighting design can and does perform independently from a theatre text. There has never been a wide-scale review of undergraduate lighting design education in Canada before this one. This research suggests that timeworn theatrical hierarchies and practices that limit equity and diversity in Canadian theatre exist in the dominant undergraduate lighting design pedagogy and curriculum; and that unchecked adherence to these systems stabilizes outdated yet persistent practices within the established institutions of university theatre departments and the professional industry.

An internet search conducted in October of 2016 and again in June of 2017 showed nineteen universities in Canada offering coursework with lighting design specific content. Each of these departments was contacted (in accordance with permission granted by the Human Research Ethics Board at the University of Victoria) and invited to contribute materials in the form of course outlines, syllabi and participate in interviews.

The institutions included in the survey have undergraduate degree granting status, are located in Canada and, offer either undergraduate course work specifically on lighting design *or* courses where lighting design is a stated component in a course. Interviewees were lighting design instructors either; currently or recently teaching at a Canadian university regardless of academic rank; or a lighting design instructor whose teaching practice has lapsed for a period of

more than eighteen months, but who has distinguished themselves as a key contributor to Canadian lighting design education.

This study concludes that the present curriculum and pedagogy are significantly unchanged since the 1980s and do not reflect current trends in higher education that are cognizant of the diversity of undergraduate students in Canada or new theories in curriculum and instruction that are student-centred and -directed. Recommendations include adopting scenoturgy as a pedagogy, and using aspects of connectivism in the curriculum such as blended and distributed learning practices to teach lighting design.

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List of Abbreviations

ADC	Associated Designers of Canada
ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
ASD	Autism Spectrum Disorder
AutoCAD	Proprietary name of CAD software developed by Autodesk in 1982
BBC	British Broadcasting Corporation
BFA	Bachelor of Fine Arts
CAD	Computer-Aided Design
CTLDDA	Canadian Theatre Lighting Design Digital Archive
CD-ROM	Compact disc read-only-material memory device
CDN	Canadian
CITT	Canadian Institute for Theatre Technology
CMS	Content Management System
CMU	Carnegie Mellon University
CV	Curriculum Vitae
DMX 512	Digital Multiplex, a standard for digital communication networks typically used to control stage lighting and effects
EDCI	Education Department of Curriculum and Instruction (UVic)
EDUC	Faculty of Education Course (SFU)
ETC	Proprietary name for Electronic Theatre Controls Brand
ENGL	English Department Course (UFV)
ERS	Ellipsoidal Reflector Spotlight
GDP	Gross Domestic Product

HDMI	High-definition Multi-media Interface
HTDC	<i>How to Disappear Completely</i> (Itai Erdal's one-man show)
IPSE	Inclusive Post-Secondary Education
LED	Light Emitting Diode
LEKO	Abbreviation of Lekolite (see glossary)
LMS	Learning Management System
LX	Lighting
MFA	Master of Fine Arts
MRC	Mount Royal College
NTS	National Theatre School of Canada
OISTAT	Organization of Scenographers, Theatre Architects and Technicians
PLN	Personalized Learning Network
PM	Production Manager
NAC	National Arts Centre of Canada
RDM	Remote Device Management
Rx	Roscolux (see glossary)
SFU	Simon Fraser University
SSHRC	Social Sciences and Humanities Research Council
SND	Sound
TD	Technical Director
THEA	Theatre Department Course
TWU	Trinity Western University
U of A	University of Alberta

U of C	University of Calgary
U of R	University of Regina
U of S	University of Saskatchewan
UBC	University of British Columbia
UCB	University of Cape Breton
UFV	University of the Fraser Valley
UK	United Kingdom
UNB	University of New Brunswick
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States of America
USITT	United States Institute for Theatre Technology
UVic	University of Victoria
#MeToo	A movement against sexual assault and sexual harassment that originated on social media platform Twitter

Glossary

Cinemoid	a discontinued brand name for a lighting gel or filter, originally produced in the 1960s by Strand Electric (UK). Characterized as being thicker and more durable than other gel filters.
Fresnel	a common instrument in theatre lighting which employs a Fresnel lens to create a wide, soft edged beam of light. Typically used as area wash, top and/or backlight.
LEKO	an abbreviation of Lekolite, a brand of ellipsoidal reflector spotlight (ERS) used in stage lighting. Other ERS instruments are commonly misidentified colloquially as LEKOs (all LEKOs are ERSs, not all ERSs are LEKOs).
Parcan	a sealed beam lighting instrument that consists of a lamp, reflector and lens.
Roscolux	plastic colour film filters and diffusers used in theatrical and film lighting instruments.
Scenoturgy	an emerging scenographic theory that combines aspects of scenography, dramaturgy and performance studies.
Shinbuster	a lighting fixture commonly associated with dance, also used in theatre. It is mounted on the ground and typically located in the wings where performers enter and exit the stage making it easy to ‘bust their shin’ in the instrument.

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Dedication

To Paul. To Eamon. To Mary.

For us.

Aim low. Achieve early. Change is bad.

Chapter 1: Introduction

The purpose of this study is to review of the curricular history of undergraduate lighting design education in Canada, including the factors, values, ideas and theories that influence and inform it and to recommend an updated pedagogy and curriculum that is reflective of the future direction of theatre and live performance in this country. This intervention in the curriculum and pedagogy of lighting design in Canada has evolved out of a growing scenographic turn that recognizes both the “capacity for scenography to operate independently from a theatre text” (McKinney and Palmer 1), and scenography as “visual dramaturgy” (Lehman 157).¹ Now that there is an established and active academic discourse on the role of scenography in contemporary performance,² there should be an accompanying paradigm shift in the ways that we teach the complex and unique artistic disciplines that comprise it. Scenographic disciplines, like all areas of study that are taught in university theatre/drama/performance departments in Canada, benefit from regular curricular assessment and reform. Curriculum should not be static, but always changing and adapting to the needs of the learners and of society. “This concept of curriculum

¹ While the scenographic turn is arguably most active in the UK and Europe, being especially evident in the Prague Quadrennial, it is gaining academic attention in Canada which is evident in the research being done by the Scenography Working Group at the Canadian Association of Theatre Research led by Natalie Rewa, Jacquy Taucar and Gabrielle Houle; recent Canadian doctoral dissertations, see Alexander Ferguson (2017); and publications focused on Canadian scenography, see Melissa Poll (2018); or by Canadian scenographic scholars, see Kathleen Irwin (2018), also see Natalie Rewa (2012); and extraordinary performances of scenography such as *Aura* (2019) in celebration of the 375th anniversary of the Notre Dame basilica in Montreal, see *Aura* (2019), and *Un-Interrupted: A Cinematic Spectacle* (2017) which projected images of the life-cycle of the silver sockeye salmon onto the underside of the Cambie Street Bridge in Vancouver. See *Un-Interrupted* (2017).

² An active scenographic turn is evident in the publication of two new major works *Expanded Scenography: An Introduction to Contemporary Performance Design* (2017), Bloomsbury edited by Joslin McKinney and Scott Palmer and the new *Routledge Guide to Scenography* (2018), edited by Arnold Aronson. These books focus on performances in the UK, the US and Europe and do not specifically address any Canadian performances.

reminds us that the conversation is always ongoing, never conclusive, always interrogative” (Leggo and Hasebe-Ludt xx). Lighting design, however, with its unique blend of tradition, technology and ephemerality combined with its role in live performance, can be an especially complex curricular challenge to address.

Scenographic research is oddly hampered by its own terminology. In the introduction for *Design and Scenography: Critical Perspectives on Canadian Theatre in English*, Natalie Rewa notes that the two terms, scenography and design are “yoked together” in their “distinctness and complementarity” (xi). Rewa, a leading voice in Canadian scenographic research, defines scenography as,

what comprises all the design categories—sets, costumes, lights and sound—modulating the focus of attention onto the spatial dynamics, the active presence of the performers in the given spaces, and the choices of materials which have entered the interpretative and creative vocabulary of the production. (xi)

Toward the latter half of the twentieth century, the term ‘scenography’ gained popularity in Europe and the UK, but its adoption in Canada adoption has been slow. It has also been slow in the US where, “graduate programs and conservatories tend to train designers in specific disciplines” (Aronson 1)”.³ In the Canadian scenographic community, identifying oneself as a ‘scenographer’ rather than a ‘designer’ can be met with confusion at the term, frowns of dismay or knowing looks of agreement. Those claiming ‘scenographer’ tend toward the academic while

³ In the United States, the United Scenic Artists, the professional union for designers, requires proficiency examinations in specific design categories for membership, see The United Scenic Artists methods of membership application <https://www.usa829.org/Membership-Info/How-to-Join>.

those claiming ‘designer’ lean more toward the professional realm (Brodie personal communication 2017, Rathbun personal communication 2017).

Asking a colleague in the industry how they personally identify—designer or scenographer—can reveal clues to their process, their training, or their teachers, and is unlikely to garner a single word response. In the preparation to be interviewed for this research, 2012 Siminovitch Prize⁴ winning lighting designer, Robert Thomson⁵ asked me via email, “In anticipation of our chat, how do you define: scenography and a scenographer?” I replied to him,

Great question... for me a scenographer can be anyone involved in the creation process on the production side, costume designer, prop builder, lighting tech... I think it's as much an attitude as a job description. Scenography I see as any purposely constructed or curated visual or auditory element of a performance.

Thomson’s response to this definition was, “Interesting...I like the idea of an attitude” (personal communication, 9 July 2018). I posit that a scenographic attitude promotes a less-hierarchical, more-holistic theatre-making process from an inclusive and agentive place. I argue that every person involved with a live performance, whether in the creation with it, or the active reception or interaction with it contributes a unique element to the complex message of live theatre performance. My position on scenography as an attitude is grounded in both my professional

⁴ The Siminovitch Prize recognizes excellence in Canadian theatre in the areas of playwriting, directing and design. Winners receive a prize worth \$100 000.000 (CDN), a portion of which is shared with a recognised protégé of their choice. Robert Thomson named two protégés in 2012; Jason Hand and Raha Javanfar.

⁵ Robert Thomson is one of Canada’s most accomplished lighting designers. His versatile designs are noted as precise, poetic, insightful, and dramaturgically impactful. He is the 2012 Siminovitch Prize winner and an Associate Professor of Lighting Design at Carnegie Mellon University. Thomson studied at Ryerson University and the New York Studio of Forum and Stage Design. His distinguished career has garnered national and international accolades. He has completed more than thirty designs at the Stratford Festival and spent twenty-four seasons at the Shaw Festival.

practice as a scenographer since 1992, and through my exposure to a wide range of theatre artists, theatre scholars, scholar-practitioners, training programs and their accompanying bodies of knowledge that I have happily and hungrily drawn on. Unlike the fore-mentioned predominant Canadian and US models that divide design and production roles into distinct categories, both my training and my practice has always been interdisciplinary. It would be as expected to find me covered in saw dust or paint, or at the top of a ladder with a light, or recording environmental noise for a soundscape, or in a wood or metal shop, or a shopping mall or flea market, or in front of my computer or a classroom of students. I have never wanted a career that was centered on a singular form of expression—so for me, scenographer was a term and an attitude I adopted early on.

I first encountered the term scenography as a student in 1992 while reading Darwin Reid Payne's book, *The Scenographic Imagination* which was the required text in the conservatory-model Technical Theatre Arts Program at Mount Royal College. In the preface to the book, Payne cites the following quote from Arthur Eddington's *The Nature of Physics*, "We often think that when we have completed the study of *one* we know all about *two*, because *two* is *one* and *one*. We forget that we still have to make a study of *and*" (Payne xiii).⁶ In my early twenties, fresh out of theatre school, I became further intrigued by the *and* as a member of the Loose Moose Theatre Company and witnessing Keith Johnstone's non-hierarchical approach to theatre-making. At the root of Johnstone's work and teaching about improvisation is the "yes. . .and" prompt. Accepting offers or ideas with a "yes" is a pivotal rule in improvisational theatre, without the "yes", the story is blocked and cannot move forward. In addition to the "yes" is the "and", which is essential because it leads to the unknown or unexplored. The *and* is the root of

⁶ Eddington's Italics.

creative improvisation and a critical part of my own practice. Arguably the aspect of the Loose Moose model that most informed my thinking as an emerging artist was that the “Snoggers” (Johnstone 19) are improvisers with extensive creative agency and the same responsibilities for what the company was putting onto the stage and into the world as the actor, or ticket taker or the bartender.⁷

With this attitude and responsibility in mind, it is important to enter into a performance practice in every scenographic role; be it a lighting designer, dresser, prop builder, scenic artist, carpenter, etc.– cognizant of what we as individual artists are contributing to that out-reaching message.⁸ I attempt to support that scenographic attitude through the application of *scenoturgy* in this proposed pedagogy and curriculum. *Scenoturgy* is an emerging creative pedagogy, developed from my own substantial professional theatre experience and the research for this dissertation. Scenoturgy is in many ways an extension of the *and*. Scenoturgy considers the active relationship between scenography, the space it occupies/creates/performs and the position of the attendant,⁹ text, actor etc. within those performative actions. Scenoturgy suggests a creation process that is always relational, no one in a production occupies a singular role such as “set designer” or “actor”. As an aggregate comprised of scenography, dramaturgy and performance studies; scenoturgy sets up a pedagogy of/for inquiry, analysis or creation in the form of ‘scenography/*and*’, ‘dramaturgy/*and*’, ‘performance studies/*and*’, it automatically

⁷ “Snogger” is Johnstone’s term for scenographers in an improvisation setting, see Johnstone 19.

⁸ In defining a working model of scenoturgy, I prefer Stephen Di Benedetto’s use of the word “attendant” over “spectator” or “audience”, “in the sense of one that has a contributory role in ceremony [. . .] fully engaged through body and mind simultaneously” (Di Benedetto 102, McKinney and Palmer 7). The words audience and spectator, have been marked as homogeneous and problematic for scenography as both risk “obscuring the multiple contingencies of subjective response, context, and environment” (Freshwater 5, McKinney and Palmer 7).

⁹ See page 68 of this paper for the explanation of my use of the word “attendant” over “audience” or “spectator”. Also see di Benedetto 2003.

assumes the position that none of these concepts exists in a vacuum, that they are enhanced and improved through the *and*. This concept is very much as work-in-progress and I offer it as such and keeping in mind that effective pedagogies and curriculums continue to evolve and change as they are tested and find their feet.

The approach to undergraduate lighting design education recommended in this dissertation encourages learning through a scenoturgic-pedagogy in a connectivist-curriculum. Connectivism is a theory first proposed by George Siemens and Stephen Downes (2005) that suggests a theoretical framework of interconnected nodes of knowledge as model for learning in the digital age. Both scenoturgy and connectivism in specific relation to lighting design will be further discussed later in this paper.

In reading this dissertation it is important to understand that scenography is an interdisciplinary art form and an umbrella term under which lighting design is one (important) factor. As a professional artist in this discipline for more than twenty-five years, it is my perspective that all lighting design operates as scenography, but not all scenography is lighting design. Therefore, in instances where the term scenography is used, it is because the implications of the statement can apply to scenography as a whole. Where lighting design is used it is in the specific context of lighting design.

Lighting design is now understood by many scholars to be a performative act and its performativity has been discussed as such by theatre and performance scholars for nearly twenty years (“Looking for Enlightened Lighting” 2001, “Looking into the Abyss” 2005, Essig 2007, Smith 2007, Palmer 2015, Graham 2016, McKinney and Palmer 2017). Whether or not there should be an accompanying curricular shift wherein students are taught to understand the influence of light in performance beyond simple illumination to “contribute independently to meaning in performance” (Graham 74) has not been investigated in Canada. This research

investigates the question; is there a teaching model that can best prepare twenty-first century students to be skilled technical specialists in their narrow disciplinary field (Rhodes 10) *and* support an updated approach to lighting design that can:

analyze the dominant discourse of stage lighting by considering the processes and practices, values and ideologies that are taught and naturalized in the training of lighting designers and technicians...[and] consider the taken for granted professional practices that are inscribed by these...together with the hierarchies of value they inculcate and the impact of all of these on Canadian audience's experience in the theatre. ("Looking for Enlightened Lighting" 5)

The dominant discourse in Anglo-Canadian theatre is a white male-dominated¹⁰ lighting design practice, pedagogy and curriculum that continue to privilege McCandless'¹¹ method that was established in the 1930s. Notable lighting designer, educator and scholar Linda Essig notes that in her own cursory research of undergraduate lighting design literature and education that there is a "significant devotion to a formulaic approach to lighting design an approach derived from McCandless' 1920s-era method" (63).¹² Based on dated pedagogical practices and curriculums,

¹⁰ According to a 2006 report by Rebecca Burton for Canada Council titled "Adding it Up: The Status of Women in Canadian Theatre", sixty-nine percent of lighting designers in Canada are male. A review of those listed by the Associated Designers of Canada (December 2017) shows only thirty-seven of 126 (twenty-nine percent) of its members who identify as lighting designers are women. Male instructors of lighting design in Canada outnumber female instructors by almost 2:1 (for the most recent listings see the Associated Designers of Canada website www.designers.ca/).

¹¹ For detailed information on Stanley McCandless lighting methods see McCandless 1932.

¹² Linda Essig's observation is based on undergraduate lighting programs in the United States, however the texts that she references are consistent with those in use in Canadian courses; Stanley McCandless *Glossary of Stage Lighting*, 1926, *A Method of Lighting the Stage*; Richard Pilbrow *The Lighting Art: The Aesthetics of Stage Lighting Design*, 1985; Warren Parker et al.

emerging designers may not consider the “active role of light in performance design” (Graham 73) or how marginalizing light within the present performance practices in Canada can limit other aspects of performance such as ethnic diversity on stage (“Looking for Enlightened Lighting” 2001, Berkofsky 2017) and gender equality backstage (Essig 2005, Burton 2006). For example, standardized approaches to the colouring of light for bare skin onstage are based on how Caucasian skin looks under coloured light. To illustrate this point further, it is not unusual to find Rosco Roscolux gel number 04, Bastard Amber as the warm toned gel option in a house hang or general lighting plot. Rosco describes Bastard Amber as “good where a tint of colour is needed. Excellent for natural skin tones.”¹³ Rx 04, as it is commonly known, produces a light amber colour with pinkish undertones that is in fact, very flattering to Caucasian skin – but there is an unwritten assumption and exclusion in the phrase “natural skin tones”. Bastard Amber is not necessarily the best general option for “all” skin tones.

Habitual stage lighting practices, if not contextualized for students, carry an assumption of correctness that operates as “hidden curriculum” (P. Jackson 1968)¹⁴, promoting outdated ideals. Rebecca Burton’s critical assessment, “Adding it Up: The Status of Women in Canadian Theatre” (2006) states that lighting is “a bastion of male influence, while costume design is dominated by women, excessively so; a distribution of roles that is likely due to traditional conceptions of prescribed gender roles” (30). Burton’s 2006 statistics show only thirty-one

Design and Stage Lighting, 1990; Richard Pilbrow, *Stage Lighting Design: The Art, the Craft, the Life* 1997; Jean Rosenthal and Lael Wertenbaker *The Magic of Light* 1972.

¹³ For Rosco’s description of Roscolux gel number 04, Bastard Amber see <http://ca.rosco.com/en/search?search=bastard%20amber>

¹⁴ Philip Jackson coined the term “hidden curriculum” to describe the beliefs and values that are taught to students implicitly rather than explicitly through a given curriculum followed or promoted by instructors or administrative practices in a department or institution, see P. Jackson 1968.

percent of lighting designers in Canada are women. The 2018 statistics represented by the Associated Designers of Canada listings shows no increase in that number and in fact a one percent decrease in the number of women in the discipline.¹⁵ In addition to the lack of gender diversity in lighting design in Canada, my research indicates that there are few people of colour teaching lighting design in Canada at this time. Timeworn theatrical hierarchies and practices exist in the dominant lighting design pedagogy and curriculum that may be contributing to these disparities. Adherence to these systems legitimizes and stabilizes outdated yet persistent views within the established institutions of theatre departments in the academy,¹⁶ and subsequently professional theatre practice (Goebbels 43), making advancement in this area a challenge.

Preparing students to practice lighting design from a place of creative agency—with an awareness of ideological assumptions that inform the practice—has the potential to transform theatrical performance in directions that are yet to be fully explored. This study positions itself by taking a progressive view of the performative role of lighting design and its potential effect on theatre-making, theatre research, and performance in Canada. In addition, there is a continuing wave of technological advancement in the field of lighting design, in both instrumentation and operation, transforming how designers and technicians interact with this ephemeral medium (Bennett 2010, O’Dwyer 2015, “Devices of Wonder” 2017, “Scenographic Space” 2017). The technologies that scenographers can utilize to communicate information to actors, spectators and each other now has the capability to respond – to convey information back to the scenographer or to other devices. This responsive communication can be purely operational such as a smart

¹⁵ See Lighting Designers on the Associated Designers of Canada website <https://www.designers.ca/find-a-designer>

¹⁶ See Ric Knowles, “Looking for Enlightened Lighting: The Discourse of Lighting Design, Training and Practice” pp. 5-10.

lighting technology that communicates its status to the control system through protocols like RDM (Remote Device Management). Conversely, the communication can be the creative agency of the technology such as Arne Eigenfeldt's "Musebots", which are independent, intelligent musical programs that create entire musical compositions in reaction to stimulus around them.¹⁷ Surprisingly, learning technologies are under-utilized in the present undergraduate lighting design curriculum. Indeed, an updated lighting design pedagogy and curriculum is necessary to keep pace with the current direction in the professional Canadian theatre performance industry and theatre education and research that is increasingly cognizant of racial, gender and cultural diversity; expanded notions of performance; and that is reactive to the pace of new and emerging performance technologies.

1.1 Study Context

The next ten to fifteen years will see a continuing significant shift in the technologies used in professional theatre lighting design and taught in university undergraduate programs as new theatres are built, or older ones renovated. Calls for environmental sustainability continue to drive the transition from incandescent/analogue lighting to LED/digital instrumentation and increasingly sophisticated control systems. The rapidly evolving technological control capabilities that accompany LED lighting instrumentation has the potential to restore some of human/light interface that was ostensibly lost in the transition from manually operated to digitally operated control systems. On the diminished human connection that accompanied

¹⁷ For more on Arne Eigenfeldt's research on "Musebots" see "Basking in Moments with Arne Eigenfeldt" SFU News. <https://www.sfu.ca/sfunews/stories/2017/basking-in-moments-with-arne-eigenfeldt.html>.

digitization, Michael J. Whitfield¹⁸ notes,

Here's one of the ironies of modern lighting, and that is this—you go back to the days of big resistance dimmers and handles and sub-handles, and the guys there would actually 'feel' the show, and you would get a really good board operator, and they would not count—one, two, three, four, five—they know what the count should 'feel' like for that cue, and if the show was really perky that night, they'd do it a little faster, and if it was dragging they'd slow it down—I miss that. (personal communication 25 May 2018)

New technologies that are touch sensitive, small, wireless, connected, reactive and importantly—affordable, can allow the control of lighting to happen from anywhere on the stage by anyone on the stage or conceivably in the audience or thousands of miles from the performance. The design possibilities stemming from simply decentralizing the physical location of the control system, or personalizing the control so it is in the hands or on the body of the actor are immense. These technologies can react to the human touch in similar ways to the old analogue systems, rather than being dependent on the prescribed, static coding in the earlier generations of digital lighting control.

However, shifts in technology do take time and money, so there will be a prolonged period of operating in both the old and new skills and knowledge paradigms, as was the case when control systems transitioned from strictly analogue to computerized options in the 1980s and early '90s. Thirty years ago, similar conversations and concerns were expressed by

¹⁸ Michael J. Whitfield is one of Canada's most versatile and beloved lighting designers. With close to fifty-years of experience designing nationally and internationally for theatre, opera and ballet. He was the Resident Lighting Designer at the Stratford Festival for more than twenty-five years where he designed more than one-hundred shows. In addition to his extensive, award winning professional career, Whitfield has taught at the University of Victoria, University of Windsor, University of Illinois, York University, Carnegie Mellon University, and the National Theatre School. He has mentored many of Canada's most influential lighting designers.

instructors faced with that transition in technology who were tasked with striking a balance between what students need to know now versus what they will need in ten years. (“Teaching in a World” 1999) In 1999 Beeb Salzer responded to a previous article of his own from 1989 in *Theatre Design and Technology*. The sentiment of that article remains relevant in 2018:

We do a convoluted dance in education. When universities had computer-controlled dimmers before professional theatres, we debated whether or not to resuscitate piano boxes so that students could gain experience with the equipment they would use after graduation. Today while universities are at the forefront of computer design, most campuses cannot afford the range of equipment that computers control in professional productions. (34)

Lighting designers have the potential to be the new theatre avant-garde, driving a turn in performance practice through lighting design with the help of a reformed approach to pedagogy and curriculum. Professional performance has embraced contemporary technologies like multimedia projections. Within university theatre departments, performance studies with its origins in sociology, anthropology and gender studies; and applied theatre motivated by education and social justice, gain popularity as sites of innovative, interdisciplinary research. In order to support and explore the progressive aesthetic, ideological and technological changes in theatre performance, it is necessary to teach emerging lighting designers how to exist and thrive within this evolving and transforming model. These emerging artists need to be able to straddle the old and the new while re-thinking what a new lighting design approach can be.

McKinney and Palmer suggest that due to the rapid expansion of interest in scenographic research since the turn of the millennium there has been little time to reflect on the defining characteristics of this discipline (1). Now that we are nearly two decades into the twenty-first century, the curriculum needs to catch up with the functional changes in the industry, progress in

scholarship and begin to teach to the new scenographic ideologies. The “contribution that scenography both within and beyond the theatre is making to contemporary performance” (1) is, in the eyes of this study, primed for exploration in the classrooms and studio spaces of the academy. There is a traceable restructuring of the acting and directing streams in recent years in the Canadian academy that reflect changing priorities and contemporary tastes in live theatre performance and performance research (Levin and Schweitzer 2017). While there are several factors at play in any departmental restructuring, including financial and administrative demands, the branding of restructured departments demonstrates contemporary trends. For instance, the use of the words “performing” or “creative” in the recent rebranding of departments is telling. The University of Calgary Department of Drama transformed into the School of Creative and Performing Arts (2013). The Dalhousie University music and theatre programs amalgamated into the Fountain School of Performing Arts (2014). Ryerson University Theatre School became The School of Performance (2016) (Levin and Schweitzer p. 9). The University of the Fraser Valley Department of Theatre is joining forces with Visual Arts to become the School of Creative Arts (2019) with similar changes in progress at other programs including the University of Waterloo (Houston, personal communication, 31 December 2017). Programming in the acting streams has evolved to include in-depth course work in applied theatre, performance studies, devised theatre and interdisciplinary collaboration (Freeman 253). These name changes reflect academic commitment to a focus in research and education for a significant amount of time to come. The naming of lighting design programs, likewise, should reflect the creative, social, and academic direction of this discipline for the foreseeable future. This study will; examine oral histories about lighting design education in Canada, analyze current lighting design course offerings, describe the current undergraduate lighting design education practice, and recommend strategies that might close the gaps between current program practice and the changing needs of theatre

departments and the profession.

1.2 Methodology

The research for this study uses a mixed-methods approach integrating qualitative and quantitative methods. Creswell and Plano Clark suggest (2007), “the educational researcher needs a large toolkit of methods and designs to address complex, interdisciplinary research problems” (323). This interdisciplinary research is no exception. The quantitative method has employed measurable “data gathered from individuals and trends assessed over large geographic regions” (“Educational Research” 2008; Creswell and Garrett 322). In this case there is measurable data in the form of course outlines and syllabi, public information available through university theatre department websites and archives. The large geographic region is Canada. The course outline material however is also dense qualitative data.

Creswell (2015) notes, “text data are dense data and it takes a long time to go through and make sense of them” (152). The provided course outlines are dense texts that contain both qualitative and quantitative data. The qualitative information includes information such as identifying factors of the instructor (e.g. degree accreditation, gender, academic rank) and students (e.g. pre-requisites for the course). The quantitative information includes measurable factors like student contact hours or course credits. The analysis of the course outlines considered the following categories of data found on the course outlines: delivery format, course structure, course length, materials and texts, assignments, assessment and proposed learning outcomes.¹⁹ In my initial review of the data I was looking for certain “emergent codes” which

¹⁹ Where more than one course outline was offered by an instructor, the 300-level outline was the one analyzed. The majority of course outlines offered for review are at the undergraduate 300-course level. At the 300-level the pre-requisites for course registration typically include

“may be specific words from participants’ own voices, or they may be concepts which you as a researcher may be sensitized to in the process of reading the literature in preparation for your research” (Elliot 2855). For example, both my masters and doctoral research have involved in-depth reading about assessment in post-secondary arts education. Through that reading, the word ‘criteria’ is one I have become particularly sensitized to as I often find it problematic in assessing learning in the arts. I noticed the word criteria being used across the data categories in this study in a variety of interpretations. According to Saldaña, “A code in qualitative inquiry is most often a work or short phrase that symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language-based or visual data” (4). In the course outlines provided, the word 'criteria' is present in the categories of assessment, assignment and learning outcomes—most often referring to attendance policy or the grade weighting of assignments in the course rather than defining the criteria by which the assignments would be evaluated. Other codes used were: design/designer, performance, paperwork, theory, scenography, technology, software, collaboration, role, create, live, collaborate and process.

The qualitative research methods used include narrative, auto-ethnography and case study. Narrative research is “understood as a spoken or written text giving an account of an event/action or series of events/actions, chronologically connected (Czarniawska 17 qtd. in “Qualitative Inquiry” 2007). In this research, the “narrative” comes from oral histories or written accounts shared by interviewees. Oral history research is an ethnographic methodology in qualitative research. It is based on a purposeful “gathering of personal reflections of events and their causes and effects” (“Qualitative Inquiry” 55) and may include the stories of a single

completion of an introductory level stagecraft or technical production skills course, although not all of the course outlines provided explicitly state this requirement.

individual or a group. The accounts are then analyzed for recurring themes, parallels or variations between versions. Narratives can subsequently be “re-storied”, organizing them into a framework that might be organized chronologically or following a plotline, that can illuminate links, connections or causes in the events and histories that are shared. (Qualitative Inquiry 2007)

In the case of this research, the oral histories are from members of the Canadian lighting design community who are educators and/or practitioners. Their accounts work to flesh out the quantitative data and to record details of a history that is often overlooked in the Canadian theatre history narrative. Their narratives were recorded, some through audio recording and some in writing. Those that were audio recorded were transcribed and coded, again through the application of ‘emergent codes’ or recurring themes.

A noted limitation of oral histories is subjectivity and ownership of a story. In this story, the history of Canadian theatre lighting design education; whose story is it to tell and in the selection of the histories shared, whose stories might be purposely or inadvertently omitted and how does that change the outcome? (Pinnegar and Daynes 2006). Through the selection process for participants there is curation at play.

This study also contains auto-ethnography in the form of my own lived experience as a student, teacher and practitioner of lighting design, as a member of a community of practice²⁰ and as a participant-observer²¹ of this community. While my purpose in this research is not to study myself, I realize that my positionality in the community complicates my thinking and that

²⁰ “Community of practice” is a learning theory first articulated by Jean Lave, and revisited by Etienne Wenger. A community of practice can be defined as groups of like-minded people who share interests or concerns who collaborate over an extended length of time to problem solve, develop strategies or construct knowledge. See Lave 1991 and Wenger 1998.

²¹ “Participant observation” is an ethnographic methodology. The ethnographer gathers information about a culture-sharing group primarily through observation while participating in the cultural setting of the subject. See Jorgenson 1989.

it is not possible to remove oneself from a story they have participated in. In this however I am cognizant that “interpretations are produced in cultural, historical, and personal contexts and are always shaped by the interpreter’s values” (Springer²² 178 qtd. in Denzin 32). I cannot un-know my own lived experience in lighting design education in Canada and cannot fully extricate that from how I interact with this research and thus I instead have aimed for

producing meaningful, accessible, and evocative research grounded in personal experience, research that [I hope will] sensitize the reader to issues of identity politics [at play in the undergraduate lighting design pedagogy and curriculum], to experiences shrouded in silence, and to forms of representation that deepen our capacity to empathize with people who are different from us. (Ellis and Bochner 2000; 2011)²³

Accordingly, I work to view my lived experience reflexively in analysis alongside the body of qualitative and quantitative data collected for this research.

The final method of qualitative research in this work is case study. “Case study research involves the study of an issue explored through one or more cases within a bounded system (i.e. a setting, a context)²⁴ (“Qualitative Inquiry” 73). The data for the single case in this study was collected as an oral history of a performance creation and supported with digitally document script and archived video of a performance event.

This study unfolds as follows. In **Chapter One** I introduce and present the context of the study, its impetus, methodology, the mixed-methods qualitative and quantitative approaches that are employed in this investigation into how the current curriculum and pedagogies have evolved.

²² The bibliographic information for “Springer 178, 1991” is not listed in the online version of Norman K. Denzin’s book *Interpretative Ethnography: Ethnographic Practices for the 21st Century*, however I found the citation to be exactly the point I sought to make.

²³ My parentheses.

²⁴ Denzin’s parentheses.

These are followed by the inclusion/exclusion criteria and research questions. The body of literature surrounding lighting design education, scenography and connectivism which has informed the research is described and analyzed in **Chapter Two**.

Chapter Three is a manifesto of sorts; the articulation of an emerging theory in creative pedagogy that I refer to as ‘scenoturgy’. I assert that scenoturgy is a pedagogy that could be employed in an updated lighting design curriculum (and possibly used across the theatre-making curriculum). I suggest that through scenoturgy we can flatten or diminish traditional theatre production hierarchies; de-centralize and de-stabilize outdated notions of theatre and scenography in performance. In Chapter Three, I offer a detailed sketch of how I define scenoturgy; the theories and attitudes that inform it, and how it may be applied as pedagogy in undergraduate lighting design education. At the conclusion of Chapter Three is a case-study of Itai Erdal’s *How to Disappear Completely*. This case-study is based on; a personal interview with Erdal, a reading of the show script, viewing archival video of a live performance of the show, and media reviews. Through the case-study I attempt to depict a successful working model of scenoturgy that may be used as classroom resource.

Chapter Four provides a brief history of Canadian lighting design education and training practices. In this chapter are excerpts of personal interviews with past and present Canadian theatre lighting educators. This is followed in **Chapter Five**, the curriculum review, with an analysis of past and present course outlines that serve to demonstrate how characteristics of the current undergraduate lighting design education in Canada have emerged and developed since the 1960s.

Chapter Six is where scenoturgy is applied in tandem with the theory of connectivism to conceptualize an updated undergraduate pedagogy and curriculum for Canadian lighting design in the twenty-first century. This chapter includes a proposed lighting design syllabus in a blended

and distributed learning model and suggested resources to support updated learning outcomes.

Chapter Seven concludes the study with recommendations for an updated approach to undergraduate lighting design education, the goals and contributions of this research and hopes for its future implementation.

In order to assess the present pedagogy and curriculum in undergraduate lighting design courses, it is important to understand how they have developed to this point. The data supporting the review process for this study has been compiled through a mixed-methods research approach which is detailed below.

Preliminary work for this research involved a literature review of scholarly journals, online archives or podcasts and print media sources with content on lighting design education in Canada. Initial research indicated that there were few on-point, print or web sources available. The literature review was extended to include relevant sources in the areas of performance studies, dramaturgy, Canadian theatre, K-12 arts education pedagogy and curriculum, distance and online learning, and archive theory. Field research on archival practices in lighting design took place at the National University of Ireland at Galway, The British Library in London, England and the MacPherson Library Archives at the University of Calgary.

A search of undergraduate-level theatre programs in English-speaking Canadian universities that offer courses with theatre-lighting content was conducted. An online search of degree-granting undergraduate theatre programs in Canada identified those included in the sample pool. The 'degree-granting' distinction ruled out many excellent lighting design training programs in Canada. Pre-professional programs such as the National Theatre School and The Banff Centre Theatre Internships were excluded. The primary reasons for excluding these programs from the research are differences in the academic expectations of both students and faculty for these programs. Students in undergraduate bachelor-degree programs must meet a

different set of pre-requisites for admission than those in pre-professional and college programs and are also required to complete course work outside of the theatre discipline. Qualifications of faculty members in the pre-professional and college programs also meet a set of qualifications that deviate from those employed in universities; specifically, the requirement of a graduate degree (this is not to suggest that all faculty members in the college or pre-professional programs do not hold graduate degrees, only that at most universities they are a minimum requirement for faculty employment). Notable college programs such as Sheridan College, Douglas College, and Studio 58 at Langara College, were also excluded for these reasons.

Once the sample pool of programs was established, instructors were invited via email to participate in this research by submitting their course outlines for review. Recent, relevant course outlines were received from: Simon Fraser University, University of British Columbia, University of Calgary, University of Saskatchewan, University of Regina, York University, Ryerson University, Concordia University, Queen's University, Memorial University, Cape Breton University, and the University of New Brunswick. Available archived lighting design course outlines from the 1980s and 1990s from the University of Calgary, University of Saskatchewan and the University of Alberta were also reviewed.²⁵

Interviews and email communications with past and present instructors and mentors involved in Canadian theatre or lighting design education were conducted in accordance with and under approval of the Human Research Ethics Board at the University of Victoria.²⁶ Those who contributed to this research through the submission of materials or via interview are: Gilbert

²⁵ For a complete list of universities reviewed for this research see Appendix A.

²⁶ Individual participant credentials are footnoted where appropriate.

Wechsler (National Theatre School - Retired), Tom Folsom²⁷, Michael J. Whitfield (University of Victoria), Robert Thomson (Siminovitch Prize winning lighting designer, Carnegie Mellon University), Sholem Dolgoy (Ryerson University), Dr. Jenn Stephenson (Queen's University), Carla Orosz (University of Saskatchewan), Douglas J. Rathbun (Mount Royal University - Retired), Renate Pohl (Memorial University), William Hales (University of Regina), Ian Garrett (York University), Susann Hudson (Acadia University), Patricia Flood (University of Guelph - Retired), Dr. Sheila Christie (Cape Breton University), Barry Hegland (Simon Fraser University - Retired) and Dr. Moira Day (University of Saskatchewan).

Of the twelve respondents, five agreed to and participated in either audio recorded informal interviews or email communication.²⁸ Those who submitted course outlines to the study were invited to respond to the following questions:²⁹

- What kind of skills preparation, academic training or artistic experience did you have prior to teaching?
- What background experience or event motivated you to teach?
- How prepared did you feel to teach lighting design?

²⁷ Tom Folsom is the Chairman of the Wally Russell Foundation. Wally Russell was awarded the Centennial Medal for his role in the design and construction of the National Arts Centre in Ottawa. He played a foundational role in the development of the technical theatre programs at the University of Toronto. He spent time as the General Manager of the National Ballet and as the President of Strand Century Canada. The foundation that was established in his name following his death in 1992 supports awards for achievement in stage lighting, internship and scholarship programs with the Los Angeles Music Centre Opera Company and the Canadian Opera Company. See <https://wallyrussellfund.org/>.

²⁸ Six participants agreed to audio or text recorded informal interviews; Jenn Stephenson, Carla Orosz, Michael J. Whitfield, Robert Thomson, Sholem Dolgoy and Douglas J. Rathbun. Gil Wechsler was also interviewed for this section but was contacted in response to information shared by the first six interviewees and not in the original call for participants.

²⁹ HREB Permission was granted for these interviews. Identifying information is removed where required or requested.

- What are the current practical and artistic challenges to teaching lighting design?

What do you perceive as the beliefs and attitudes toward teacher training for lighting design instructors?

Finally, an interview with lighting designer and theatre-maker Itai Erdal regarding the production *How to Disappear Completely*, took place in Vancouver, BC on 26 February 2018. Erdal also provided the unpublished script of the play and links to an online archival video of his performance at the Winnipeg Jewish Theatre in March of 2017.

1.3 Inclusion Criteria, Limitations and Exclusions

The selection of institutions and participants included in this lighting design education history and curriculum survey were included according to the following criteria. The institutions included in the survey have undergraduate degree granting status, as such the courses reviewed are either a core requirement or elective in the completion of a BFA or BA in theatre. The programs are located in Canada and are reflective of the current theatre practice in this country. The included samples offer either undergraduate course work specifically on lighting design *or* courses where lighting design is a stated component in a course. This study recognizes that some programs do not have the resources to offer lighting design specific courses, but that the content is actively included elsewhere in the curriculum. A target population for interviewees was chosen to include both emerging and long-term instructors. This encompassed lighting design instructors or professors either currently or recently teaching (within eighteen months of the date of the interview) at an accredited Canadian university regardless of academic rank; or a lighting design instructor or professor whose teaching practice has lapsed for a period of more than eighteen months, but who have distinguished themselves as a key contributor to Canadian lighting design

education.³⁰ Where more than one individual met this criteria at a given institution, the senior practitioner was invited to participate first. Where that individual agreed to participate, a second participant was not approached so as to have no more than one representative of a given program.

An internet search conducted in October of 2016 and again in June of 2017 showed nineteen universities in Canada offering coursework with lighting design specific content. As noted previously, lighting design instructors in each of these departments were contacted (in accordance with permission granted by the Human Research Ethics Board at the University of Victoria) and invited to contribute materials in the form of course outlines, syllabi, and participate in interviews. Of these nineteen departments, twelve (noted above) provided course outlines and written information (via email) about how the course outlines are put into practice.

1.4 Research Question

The purpose of this study is to review of the curricular history of undergraduate lighting design education in Canada, but the primary research question is this: **what is a twenty-first century approach to teaching undergraduate lighting design in Canadian universities?** This question led to the investigation of current pedagogies and curriculums in use, their evolution and adoption—based on the following secondary questions:

- What is the undergraduate lighting design discourse in Canada?
- What role is the present scenographic turn playing in lighting design education in Canada?

³⁰ The criteria for a distinguished, key contributor to Canadian lighting design education was; years of service in an accredited program (twenty-five years or more), position within a given theatre department (e.g. tenured faculty or department head), and noted awards or citations.

- What role should the present scenographic turn play in lighting design education in Canada?
- What has been written about lighting design education in Canada or elsewhere?
- What is the history of undergraduate lighting design education in Canada? When, where and why did it begin?
- Where is lighting design at the undergraduate level taught in Canada?
- How is lighting design taught at the undergraduate level in Canada?
- How has lighting design education changed or not changed since its introduction as an undergraduate course of study?
- Who are the lighting design educators? What are their qualifications to teach lighting design?
- How is undergraduate lighting design education connected to or reflective of the Canadian theatre industry?
- What are the learning needs of the undergraduate lighting design student in the twenty-first century?
- What type of curriculum theory could best support undergraduate lighting design education?
- Why type of pedagogy could best support undergraduate lighting design education and practice?
- What role can learning-technologies play in lighting design education in the twenty-first century?
- How might an updated lighting design curriculum support or instigate new directions in theatre performance or theatre-making in Canada?

The investigation of these questions has not been a linear process. Initial questions about lighting design education prompted exploration of current scenographic research, which prompted more questions about education, which prompted inquiry about curriculum, which prompted questions about learning technologies—and so on. More a following of one discovery to the next—more scavenger hunt than clear path.

Chapter 2: Literature Review

In preparation for this interdisciplinary research I conducted a series of distinct literature reviews. We are experiencing a scenographic turn wherein matters of scenography are being given unprecedented scholarly attention.³¹ For myself, I adopted the term scenographer many years ago because my practice is interdisciplinary and has never been limited to one production department and I argue it is more descriptive of the work that I do. Within my theatre practice I am also an educator, sharing my skills and knowledge in theatre and scenography with students—so I am often doing scenography while wearing my educator’s hat and considering the pedagogy of my work and the curriculums that inform my teaching.

Despite the scenographic turn, the body of literature that addresses the pedagogy and curriculum of any scenographic topics, including lighting design, at a post-secondary education level remains largely comprised of practical reference books on the technical knowledge necessary for the mechanics of the play production process (McCandless 1939; Gillette 1989; Howard 2002; Campbell 2008; Shelley 2013; among others). Within the scenographic turn, professional lighting design practice, pedagogy and curriculum in undergraduate lighting design, in English-speaking Canada, remain unexamined. Texts or journal articles that assess or theorize lighting design curriculum in any location are limited (Knowles 2001, Essig 2007, Tarantino

³¹ Evidence of this unprecedented attention to the scenographic turn is the release of two sizeable volumes, *Scenography Expanded: An Introduction to Contemporary Performance Design* (2017) McKinney and Palmer eds. and *The Routledge Companion to Scenography* (2018) ed. Arnold Aronson, which collectively add fifty-six new sources to scenography research in the last twenty-four months. The creation of the “Scenography Working Group” at the Canadian Association for Theatre Research in Canada in 2018 by Natalie Rewa, Jacquy Taucar and Gabrielle Houle with a three-year commitment to producing an updated Canadian publication on scenography (the last was Rewa’s 2009 *Design and Scenography: Critical Perspectives on Canadian Theatre in English*).

2007). As such, I have drawn on texts that present the current attitudes of the scenographic turn alongside those that examine contemporary approaches to post-secondary learning, particularly in the arts and though technology.

Where possible I have endeavored to find sources that are written by a Canadian or pertain to Canadian education or theatrical practice. Through the literature I have sought to support the following points of inquiry. What is scenography and specifically, how is lighting design understood and discussed within the contemporary praxis? Scenography has become the standard term in Europe and is gaining ground in the US, while in English-speaking Canada we continue to dither over a consistent term that identifies our practice.³² Arnold Aronson posits, “Perhaps it is the root word “scene” that sows confusion. It seems almost implicit that scen(ography) = scen(ery), but following that logic why didn’t related arts such as light, costume and sound develop analogous terminology?” (“Introduction” 3). My perspective on the use of the term scenography might be tied to early training in a conservatory program where specialization was discouraged.³³ I delight in Aronson’s note that the Oxford English Dictionary’s third definition of the word scenography, “delineates a roster of component elements: ‘scenery, costume, lighting, etc.’ Within that definition it may, in fact, be the “etc.” that is the most significant word” (“Introduction” 3). It is in fact the “etc.” that intrigues me.

Furthermore, I hold that the discussion of lighting design practice today is intrinsically tied to the bigger picture discourses of scenography, performance studies, dramaturgy, etc., which is what is making the current praxis so engaging. This leads to more questions such as; what is the

³² For an in-depth defence of the use of the term “scenography” over other options including “décor”, “design” or “scenery”, Arnold Aronson convincingly argues for its broad adoption. See Aronson 2018. pp. 1-15.

³³ This conservatory program was at Mount Royal College in Calgary Alberta and is discussed in more detail in Chapter Four.

relationship between scenography and performance studies? Between scenography and dramaturgy?

Because much of the scenographic literature in Canada is primary texts written in from traditional apprenticeship model, some of the fundamental questions that would support analysis of pedagogy are difficult to answer. For example; there is no history of lighting design education in Canada. Which means that tracking the changing demands and creative choices in teaching are not clear. Asking “what are the factors, values, ideas and theories that influence and inform lighting design education in Canada” is the starting point of even more questions; what are the pedagogy and curriculum challenges in the contemporary Canadian undergraduate university theatre department? What are the current trends in post-secondary instruction and curriculum development? Because, as noted elsewhere, these are a rarely examined topics in Canadian theatre scholarship and so there is a dependence on the comparables; what are others in related fields doing and experiencing? From these questions, I arrived at some primary sources that either directly or indirectly scaffold my thinking. I will address them in the order the topics unfold in this paper.

2.1 The Starting Place: Scenography

As mentioned in the Introduction, Payne’s *The Scenographic Imagination* was my very first jumping off point into understanding scenography as both an art form and a concept. Four scenographers in particular have interested me for many years and I re-visited their works in preparation for this research. Adolphe Appia, Edward Gordon-Craig and Josef Svoboda are the most commonly cited early scenographers. I have also included avant-garde composer John Cage, which I will explain.

Appia (1862-1928) was a Swiss architect and scenographer whose theories on and practice of stage and lighting design transformed the modern theatre. Richard C. Beacham

translated Appia's *Texts on Theatre* into English which were published for the first time in 1993. Although Appia's influence is vastly recognized, the translation of his texts did not occur for decades after his death in 1928. The reason for this as cited in the preface of *Texts on Theatre* is that Appia thought and created in German, while writing in French and preserving his voice and aesthetic in translation has proven difficult. (xi) In his 1921 essay, "Theatrical Experience and Personal Investigations", Appia states, "Deep in my heart and before making any designs, I knew that for me production means the performer" (22). Influenced by the work of Richard Wagner, Appia viewed theatre and opera performance as a whole, *gesamtkunstwerk*, one unified performance with each element contributing to the narrative, emotion and environment. In his own era of theatrical realism, Appia's aesthetic was more complex and less illustrative than his contemporaries. He understood the interdependence of theatre artists and the scenographer's desire for creative agency.

Music was the major influence on Appia's staging aesthetic and he proposed the development of a *Wort-Tondrama* or word-tone-drama in which all of the separate elements of performance (music, text, acting, dance, lighting, set, costume) are synthesized in a "mutual subordination" (Rogers 468) wherein none takes dominance over another. In "Music and the Art of the Theatre" (1899), Appia proposed, "What the actor loses in freedom will be gained by the stage designer; and the setting, in giving up all pretense at scenic illusion, becomes an atmosphere in which the actor can be totally expressive" (27). Appia's aesthetic defined the entirety of the production as performative with the scenography on equal footing with the human performance of actors, dancers and musicians.

Appia's work is perhaps the best early example of how the intersection of scenography and performance involves embodied interaction. In 1906 Appia attended a demonstration of eurhythmics performed by students of Emile Jaques-Dalcroze. Appia, who had not yet met

Dalcroze wrote to him to share that Dalcroze's work as a teacher of dance and Appia's as a scenic artist were predicated on the same principle, "the exteriorization of music" (Rogers 470). Appia's writing on his extensive experimentation with staging and lighting practice in close connection with choreographers, dancers, musicians and actors is a plentiful source for examples of performative scenography.

While Appia advocated for an actor that was a depersonalized stage element, Edward Gordon Craig suggested he would replace the actor altogether with the *über-marionette*, a pliant puppet of a performer who acted exactly as directed. Gordon Craig feared that, by virtue of being human, actors had the ability to undermine the illusion of the performance of the scenographic elements of the production. In "The Actor and the Über-Marionette", Craig proposed,

Do away with the actor and you do away with the means by which a debased stage realism is produced and flourishes. No longer would there be a living figure to confuse us into connecting actuality and art; no longer a living figure in which the weaknesses and tremors of the flesh were perceptible. (50)

Craig's writing provides a view from the end of the scale that views the scenography as more important than the human performance; he privileges the scenography over the text. The unpredictability of the human element in performance is an intriguing idea for me in relation to my research.

Josef Svoboda has been internationally recognized as the godfather of modern scenography. Svoboda's development as a scenographer, architect and artist began in communist Czechoslovakia. Of the scenographers listed here, Svoboda is the only one to have worked in Canada, designing three shows in the late 1970s and early 1980s for the National Arts Centre. He also presented workshops in scenography at the University of Halifax and the Banff

Centre. Svoboda's *Lantern Magika* was staged the Czech pavilion at Expo '67 in Montreal.

(Eagan n.p.)

The Secrets of Theatrical Space: The Memoirs of Josef Svoboda was translated by M.J. Burian and published in 1993. Svoboda was adamant that scenography is performance.

Theatre is mainly in the performance; lovely sketches and renderings don't mean a thing, however impressive they may be; you can draw anything you like on a piece of paper but what's important is the actualization. True scenography is what happens when the curtain opens and can't be judged in any other way.

(Svoboda trans. Burian 150)

As a career-long advocate for scenography as performance, and an internationally acclaimed scenographer with ties to the Canadian theatre. It would be interesting to research the participants of his Canadian workshops to surmise if his direct influence carries through the network of our current designers.

Inclusion of the composer John Cage in this section on scenographers is due to his direct involvement with the visual staging aesthetics of the Merce Cunningham Dance Company. Cage and their un-paralleled style of performance creation. Like Appia before him, Cage was primarily influenced by music but was open to the performativity of all aspects of the performing arts. In collaboration with Cunningham, Cage chose the artists, lighting designers and costumers who would create the scenographic aspects of Cunningham's productions. Those artists included Robert Rauschenberg, Jasper Johns and Andy Warhol. Cage writes, "the activity of movement, sound and light, we believe is expressive, but what it expresses is determined by each one of you..." (95). This assertion that the individual artist voice that is transmitted through scenographic components and the openness to having those voices heard informs my thinking. Robert Rauschenberg in addition to choosing the lighting and designing the costumes, famously

designed his *combines*, sculptural pieces of art that Cunningham incorporated in the décor of many of his works. Rauschenberg, like so many scenographers, did not write about his work and according to his foundation website³⁴ preferred not to talk about it. However, John Cage wrote about Rauschenberg's work in his book *Silence*. In the essay, "On Robert Rauschenberg, Artist, and His Work", one of the more perplexing pieces, Cage notes,

By now we must have gotten the message. It couldn't have been more explicit. Do you understand this idea?: *Painting relates to both art and life. Neither can be made. (I try to act in the gap between the two)*. The nothingness in between is where for no reason at all every practical thing that one actually takes the time to do so stirs up the dregs that they're no longer sitting as we thought on the bottom. All you need to do is stretch canvas, make markings, and join. (105)³⁵

This particular selection instantly brings Schechner's *Performance Theory* to mind and connections I see between his thoughts on marking space to transform it to place as well as his ponderings about "the creases", which I address later. Close reading of Cage's essays and poems reveal what could be direct intersections of performance and scenography, or not - depending on how a reader chooses to interpret them. I choose to peel back some layers to see what can be uncovered as the work of Cage and his contemporaries also parallels the emergence of performance studies.

³⁴ See *Robert Rauschenberg Foundation* <https://www.rauschenbergfoundation.org/>

³⁵ Cage's Italics and parentheses.

Through serendipity,³⁶ the early stages of my research for this dissertation took me to the TaPRA³⁷ annual conference at Bristol University in England in 2016. This is a conference and research group that I would not have known about had I not been searching online for connections outside of my established community of practice that could expand my thinking in scenography.³⁸ At the conference, I met Dr. Joslin McKinney whose articles I had already begun to cite in my work.³⁹ Dr. McKinney kindly took an interest in my research and invited me to stay in contact with her. At that time, she and her research partner Scott Palmer were working on *Scenography Expanded: An Introduction to Contemporary Performance Design* (2017). I was gifted with the “Introduction” chapter prior to its publication. The introductory chapter served as a tremendous jumping off point and encouragement that more scholarly sources which “explore and propose overarching principles and concepts of “expanded” scenography that emerge from a re-structuring of theatrical scenography and the newer configurations of design and performance that arise from it” are forthcoming (McKinney and Palmer 2).

I subsequently reviewed *Scenography Expanded* (2017) for *TRiC/RTaC*, (vol. 39, no. 2 pp. 263-65) and have become very well acquainted with it. In particular, the chapter written by Kathleen Irwin provides some insight into the direction that scenography is leaning in Canada.

³⁶ Siemens 2005, discusses allowing for ‘serendipity’ to play a role in education. Serendipity is discussed in more depth in section 4.1 of this dissertation.

³⁷ TaPRA stands for Theatre and Performance Research Association.

³⁸ I was subsequently invited to publish the paper I presented at TaPRA 2016 in their associated journal, *The Blue Pages: The Society of British Designers*. The paper I presented and published is titled, “A Politics of National Identity: Developing a Canadian Theatre Lighting Design Digital Archive”.

³⁹ Articles by Joslin McKinney that I have cited in previous work include; McKinney, Joslin and Helen Iball. “Researching Scenography” in *Research Methods in Theatre and Performance*. Edited by Baz Kershaw and Helen Nicholson, Edinburgh University Press, 2011. pp. 111-36; and McKinney, Joslin. “Scenography, Spectacle and the Body of the Spectator”, *Performance Research*, vol. 18, no. 3, 2013, pp. 63-74.

Although Irwin's article does not address lighting design directly, or a Canadian performance, it does speak to a connection with another growing area of theatrical interest in Canada – applied theatre. Irwin's connection between applied theatre and scenography opens the door to further investigations in this rarely examined combination. "*Scenography Expanded* is divided into five sections that represent contemporary research concerns: Technological Space, Architectural Space, Agency, Audiences and Materials. Although these topics may feel overworked in other fields of theatre studies, discussion in the context of scenography is undeveloped" ("Scenography Expanded/TRiC" 263). Any of these five sections could be assigned reading in an undergraduate or graduate scenography course; they offer a variety of lenses through which to consider lighting design. I have included Kathleen Irwin's chapter "Scenographic Agency: A Showing-Doing and a Responsibility for Showing-Doing" as required reading in the suggested undergraduate lighting design curriculum in Chapter 4. Not only does it offer the opportunity to include an excellent, scholarly, female-Canadian scenographic voice to the course content, but it ties into concepts I explore through scenoturgy (discussed in Chapter 3) and the case study of *How to Disappear Completely*.

I also learned that Routledge was compiling a new text in its "Companion" series. *The Routledge Companion to Scenography* (2018) has also been an invaluable source in this research, although my access to it came later than I would have preferred. The book is divided into three sections, each of which has been useful: Scenographic Elements, Scenographic Theory and Criticism, and History and Practice. There are two chapters in the book that I found especially fruitful. Firstly, Chapter 32, Christopher Baugh's "Bertolt Brecht and Scenographic Dialogue" (411-20) helped to articulate my theory of scenoturgy. In this chapter, Baugh explores Brecht's development of a scenographic vocabulary and process for working collaboratively with three scenographers, Caspar Neher, Teo Otto and Karl von Appen. (Baugh 411) Of particular

importance to me, the chapter states, “Scenography happens in time, working in dialogue with the actors; the scenographic is an act of performance working in dialogue with the audience” (Baugh 415). Time and dialogue are critical factors to explore further in an updated undergraduate lighting design curriculum and pedagogy. Time, both in terms of when lighting is introduced into the playmaking process and performing creatively according to a production schedule. Dialogue, in terms of exploring lighting design as a multi-directional mode of communication and the creative agency and voice of the designer.

Secondly, Chapter 41, Arnold Aronson’s “Design in the United States and Canada” (527) further fed my frustration on the lack of Canadian scenographic content in journal articles and books. Aronson conflates the performance history of Canada and the US. This chapter does not even mention Canada in its introduction or address any Canadian content until halfway through the chapter at which point it implies the most noteworthy point of our scenographic history is the Guthrie-Moiseiwitsch designed stage at Stratford (Aronson 534). Aronson gathers the rest of his commentary on Canadian scenography into a single paragraph. Here Aronson makes fleeting comments on the work of Kathleen Irwin and Cameron Porteous. He does include a footnote that states,

The focus of this chapter is, admittedly, on US design, especially in the first half of the twentieth century. Prior to the 1950s Canadian theatre was largely dominated by touring or packaged productions from the US and UK. As designer Phillip Silver has noted, “Canadian stage design does not have an overt national ‘character’ or ‘look’” (Silver 134), although something similar might be said of US design. (545)

Aronson supports this claim with two citations from the *World Encyclopedia of Contemporary Theatre Volume 2: Americas*, one from Phillip Silver and the other from Gilbert David. Silver, however, also suggests in this cited entry, “Like many others, Canadians have been influenced

by contemporary European stage design, but those designers whose work seems most ‘scenographic’ have absorbed the lessons learned abroad and created their own distinct approach. . .” (Silver 136).

Rather than putting me off of the *Routledge Companion to Scenography*, Aronson’s chapter encouraged me to consider its content and the idea of a Canadian scenography aesthetic more deeply. While Aronson’s perspective on Canadian scenography is dated and not well-supported, the reality is that information about the history and aesthetics of scenography on the Canadian stage is lacking and this needs to be corrected. If Arnold Aronson’s primary source on Canadian scenography is a 1996 publication wherein the entirety of Canadian theatre history is covered in sixty-six pages, it is no wonder that instructors and students struggle to find adequate resources to support lighting design education at any level.

2.2 The Relationship between Performance Studies and Scenography

The first literature review focused on sources that implied a relationship between performance studies and scenography (Artaud 1938; Austin 1955; Goffman 1959, 1974; Schechner 1988). At this point in the literature review, the scope was widened from focusing only on lighting design outward to include all scenography in the hope that casting a wider net might yield more numerous, if slightly less specific results. The reason for looking at connections between performance studies and scenography come both from the scenographic turn, which views scenography from a more performative stance and that performance studies are increasingly present in theatre studies research. J.L. Austin’s *How to Do Things with Words* (1955) and Richard Schechner’s *Performance Theory* 1988 were instrumental in my theorizing of scenography specific terminology.

Based on lectures given at Oxford and Harvard universities in the 1950s, Austin’s influential work famously stated that words or utterances are performative and as such that to say

something, in many instances, is to do something. I hold that the converse must also be true and that to do something must also be to say something. It then follows that the act of 'do'-ing lighting design can be dialogic. Scenography can say or communicate something and therefore it is performative, and it should be examined as a part of the performance studies paradigm.

One of the most relevant connections between scenography and performance studies for this research comes from Richard Schechner. Schechner's description of "the creases" (157) was fundamental in framing my thoughts on scenoturgy and I discuss this in detail in Chapter Three. In his text, *Performance Theory* (1988), Schechner describes performance as a spectrum that moves from everyday happenings to ritual and art. Schechner makes specific connections between performance and particular scenographic elements. He acknowledges the importance of objects in relation to performance. Performing objects, such as props or décor, "are of extreme importance, often the focus of the whole activity. Sometimes [...] they are decisive in creating the symbolic reality" (11). Schechner also writes about the role of lighting for the stage and how it has evolved alongside performance and in response to the needs of the performance (195-196). The transformation of space into place and preparing space for performance is a recurring theme in his book. Preparing a space for performance, transforming it to act as a stand in for another location, another time, a space to be inhabited by and performed by actors or dancers is the act of scenography; the 'do'-ing of scenography. Transforming a performance space through with the addition, subtraction or purposeful alteration of light is a 'do'-ing of lighting design.

2.3 Archives and Canadian Content in the Lighting Design Curriculum

The second literature review focused on books, scholarly articles and government manuals that acknowledge or examine intersections, combinations or interpretations of archive theory with theatre performance, digitized data storage and retrieval technologies, pedagogical, practical and applied usages of the archive. The reason for this focus on archive was in the

interest of using digital archives as a way to correct a lack of Canadian content in the lighting design curriculum. The direct application explored, was the possibility of incorporating digitally archived knowledge such as oral histories and artifacts, like lighting plots from Canadian theatre, into the curriculum. An article that directly informed my thinking on how to implement the use of archives in a lighting design course was Mary Tarantino's "Beyond the Produced Design: Teaching Lighting Design Through Archival Research" (2007). In the article Tarantino is candid about errors and failed attempts to integrate the archive into teaching. The archives she uses are the physical archives of Tom Skelton's designs, not digitally accessible archives. None of the articles discuss the use of digitized online archives in lighting design or scenography courses.

The published Canadian sources that inform my thinking on curriculum and pedagogy in lighting design come from Rebecca Burton and Ric Knowles. Rebecca Burton's "Adding it Up: The Status of Women in Canadian Theatre" (2006) serves as a critical baseline for the health of the Canadian theatre industry in the first part of the twenty-first century. Particularly important to my work are Burton's "Recommendations for Future and Additional Areas of Study". In her recommendations Burton highlights the role that training and educational institutions must play in correcting inequities in the theatre industry. Burton lists her 2006 recommendations for training and educational institutions including a detailed analysis of the female student population at all levels of training in university and college programs. My research addresses some points on Burton's list including the gender distribution of faculty teaching undergraduate lighting design, and a curriculum review that acknowledges the effects of gender and racialized elements in the content. However, there remain many important points on Burton's list of recommendations (115) yet to be addressed. For example; investigating the gender and racialized distribution of faculty and staff members working at the nation's university/college theatre departments in general; examining the university and colleges' production seasons to assess the number and

quality of roles available to female students (and I would expand this to include design and production practicum assignments.)

Ric Knowles' "Looking for Enlightened Lighting: The Discourses of Lighting Design, Training and Practice" (2001) is the only source I have found that directly addresses the pedagogy and curriculum of lighting design in Canada. Written close to twenty-years ago (2001) for the *Canadian Theatre Review*, Knowles' assessment of the constraints to an updated approach to lighting design in Canada are unfortunately still on point. Knowles identifies a lack of Canadian textual content, traditional theatre industry hierarchies and notions of performance, adherence to timeworn production schedules, a lack of gender and racial diversity, outdated teaching strategies, instructor ego, and an unrelenting acceptance of the status-quo as factors. Each of the points made by Knowles helped to focus the direction of this research.

Heiner Goebbels' 2013 paper "Research or Craft: Nine Theses on Educating Future Performing Artists" helped to form the backbone of this research. In this article Goebbels asserts the following, which I see as a fundamental problem in theatre education in Canada, not limited to the undergraduate lighting design curriculum. Goebbels suggests,

All our existing schools in theatre and performance-related skills and craft—for actors, dancers, singers, musicians, directors, stage set and costume designers—are the result of an aesthetic convention developed over a long period of time. All educational institutions were founded with the sole intention of delivering new blood, trained personnel for the operative institutions to present, evening after evening, ballet, operas, concerts, plays and musicals. They are the result of an existing practice that is at least one-hundred years old [. . .] They were not conceived to renew or revise the aesthetic, much less consider questioning the structures and institutions, for which they are educating young aspirants.

(43)

In this article, Goebbels also identifies matters of time in the development of artistic skill and vision, disciplinary hierarchies, and outdated notions of performance as factors to be addressed in order to update the ways in which we train artists.

2.4 Connectivism and Scenography

During my doctoral studies, I have taught regularly at four universities: University of Victoria; Simon Fraser University; University of the Fraser Valley; and the University of British Columbia. I have taught a wide range of topics in scenography, theatre and education that have informed this research through professional practice.⁴⁰ The courses I have taught at the University of Victoria are online courses in the department of Curriculum and Instruction⁴¹ which led me to explore the theory of connectivism. George Siemens' work, "Connectivism: A Learning Theory for the Digital Age" (2005) made perfect sense to me as a twenty-first century approach to teaching lighting design: a discipline that from its very inception as an academic course of study looked outward into the professional community for knowledge creation and skills acquisition. Siemens defines his theory in the following way:

Connectivism is the integration of principles explored by chaos, network and complexity | and self-organization theories. Learning is a process that occurs within nebulous environments of shifting core elements—not entirely under the control of the individual. Learning (defined as actionable knowledge) can reside outside of ourselves (within an

⁴⁰ I have taught the following undergraduate courses during this study: EDCI 338 Personalized Learning and Social Media and EDCI 339 Distributed and Online Learning (UVic), EDUC 355 Theatre in an Educational Context, EDUC 457 Drama in Education (SFU), Drama: Forms and Ideas (UBC), THEA 101 Introduction to Theatre, THEA 291 Acting in a Complex Role, THEA 290 Acting Practicum, THEA 305 Theatre for Young Audiences, THEA 301/ENGL 365 History of Theatre and Drama 1914 to the Present, THEA 121 Stagecraft I and THEA 123 Stagecraft II.

⁴¹ EDCI 338 Personalized Learning and Social Media and EDCI 339 Distributed and Online Learning.

organization or a database) is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing. (n.p.)⁴²

Siemens theorizes about learning in the twenty-first century based on the premise that information development today is exponentially faster than it was forty years ago due to the advent of the Internet. Essentially, learning occurs through the development and creation of relational information networks. The transfer of knowledge is activated through a seeking of knowledge. This knowledge exists within specialized nodes or information sources. These sources could be anything; an individual, an organization, a book etc. “Connectivism asserts that knowledge and learning are distributive i.e. they are not located in any given place, but instead consist of networks of connections formed from experience and interactions between individuals, societies, organizations and technologies that link them” (Goldie 1066).

As such, educators must be proactive and strategic about their students approach knowledge and skills acquisition. Siemens suggests that chaos rests at the root of connectivism and that chaos, rather than existing simply as disorder, is actually a connection to ‘everything’. Connectivism’s outward reaching, interactive, dialogic, collaborative, thinking-together, and networked model parallels what good theatre education and creation should be.

There is criticism of Siemens’ connectivism (Goldie 2016; Duke 2013; Bell 2011; Kerr 2006; Kop and Hill 2007; among others), which mainly stems from scholarly disagreement over “whether it is a theory for learning or instructional theory or merely a pedagogical view” (Duke et al. 1). Additional criticism comes from “Connectivism’s claim to be a new theory for network theory [...] questioned by many as its underlying principles can be drawn from theories from the

⁴² Siemens’ parentheses.

traditional epistemological paradigms, particularly constructivist theories, which are still considered fit for purpose” (Goldie 1067). Despite these limitations, critics also agree that connectivism has “potential to provide a useful perspective as to how learning might occur in the digitally saturated, connected world we live in” (Goldie 1068).

To be perfectly honest, none of these debates or distinctions interest me. I am far more interested in what connectivism can ‘do’ for learners and educators. I have been fortunate to be contracted to deliver courses in the last four years that have allowed me to informally test connectivism for myself in a variety of content settings, both face-to-face and online. I have had the opportunity to, as we say in technical rehearsals, A/B this theory. I have repeated courses using and not using connectivism and have found it to be incredibly useful, particularly in courses with a high concentration of international students. My research on this is purely observational and I have not done an empirical analysis of student outcomes. However, from an instructional standpoint, I have a much clearer sense of my student’s strengths and weaknesses in relation to the course content and I can gauge this and react to it much more quickly than when I rely on traditional stand-and-deliver methods of teaching.

Siemens writes,

A network can simply be defined as connections between entities. Computer network, power grids, and social networks all function on the simple principle that people, groups, systems, notes, entities can be connected to create an integrated whole. Alterations within the network have ripple effects on the whole. (n.p.)

Further information on the application of connectivism comes from Siemens’ contemporary Stephen Downes. Downes is a Canadian philosopher whose work centers of online learning and new media applications. Downes’ writing is often in support, defense, or expansion of Siemens’ connectivism. In addition to his personal blog, he has peer-reviewed essays (2001;

2014), but seems to prefer open online self-publication.⁴³ He has a lengthy collection of essays, *Connectivism and Connected Knowledge* published on a wide array of topics related to connectivism and online learning such as human connection or student assessment. Downes' work is engaging because he wades into the criticism of connectivism and works to validate and debunk misconceptions of the theory through theoretical research and personal teaching experiences. In a computing metaphor Siemens is the alpha-test—the first phase of the development process; Downes is the beta-test, sometimes identified as the end-user test where the intended audience gives feedback in order to improve the product. There is something fundamentally appealing to me about the tech-speak of computer systems and networking and I see clear parallels between it and lighting design. They are both at once linear and multi-dimensional structures.

Throughout his lengthy collection of essays, what strikes me is Downes' attention to encouraging and facilitating creativity in a connectivist learning environment. He writes,

Maximally distributed creativity isn't about opening the channels of communication, at least, not directly. It is about each person having the potential to be a member of a receptive community, where there is a great deal of interactivity among the members of that community, and where the community, in turn, is a member of a wider community of communities. Each person thus is always heard by some, has the potential to be heard by all, and plays a role not only in the creation of new ideas, but also, as part of the community, in the evaluation and passing on of others' ideas. (121)

This perspective intrigues me because of the balance between the communication of an idea and

⁴³ See Downes <https://www.downes.ca/>

its reception. In this present age of championing individual voices, Downes is mindful that in doing so we must also champion the acts of receiving, listening and engaging. That an idea that is unreceived or unheard cannot reach its potential, that in receiving an idea—new ideas are born.

I see Siemens' connectivism in Schechner's concept of "creases". The creases are points of connection and overlap. Schechner refers to these as places of "instability and disturbance" (157) and to my thinking are the epicenter of Siemens' "ripples" or "chaos". Recommendations to alter the lighting design curriculum could have a ripple effect on other scenographic topics, theatre studies and the professional industry. Siemens colloquially cites Gleick's example of "the Butterfly Effect – the notion that a butterfly stirring the air today in Peking can transform storm systems next month in New York" (Gleick 8, qtd. in Siemens 2005). These ripples or a little touch of chaos could disrupt the hierarchies and inequities performed in Canadian theatre noted by Knowles and Burton. I see connectivity between J.L. Austin's *How to Do Things with Words*, and Kathleen Irwin's "showing-doing" (111) and the underlying message in both that there is power in words, actions, objects and places and to use any of these as communication through public performance comes with responsibilities. Siemens' interest in disrupting or re-imagining education models to better meet the needs of the twenty-first century learner is in line with Heiner Goebbels' interest in the same, although through different means. Both advocate for a student-centered approach to learning for the twenty-first century student. Rather than a rigid prescription of necessary sources, both argue for student-directed learning that is unbounded and exploratory. Siemens' connectivism works as a through-line for my theorizing an updated pedagogy and curriculum for undergraduate lighting design in English-speaking Canada.

While this section is not an exhaustive review of all of the literature I have read in conducting this research. What it attempts to do is illustrate the network of thought, and paths of

inquiry that have led to its completion. These are the essential nodes through which my further investigation connections were generated.

Chapter 3: Scenoturgy as an Undergraduate Lighting Design Pedagogy

3.1 Context

There is global recognition of the need for new models of learning for the twenty-first century. According to a working paper prepared for UNESCO⁴⁴, “Rethinking pedagogy for the twenty-first century is as crucial as identifying the new competencies that today’s learners need to develop” (Scott 1). An essential part of this research has been to articulate a pedagogy that supports an updated curriculum for twenty-first century undergraduate lighting design education. I propose my own emerging concept of scenoturgy as that pedagogy. This section will first describe what scenoturgy is; its purpose and its structure. Next, I outline how scenoturgy operates as a pedagogy well suited to undergraduate lighting design education, followed by a case study of Itai Erdal’s *How to Disappear Completely* as an example of how scenoturgy works in practice. Scholarly pedagogies that support specific curricula are a vital component of learning at every level. The overriding purpose of this research is to examine the undergraduate lighting design curriculum in English-speaking Canadian theatre programs and to make recommendations on how that curriculum might be updated to better serve current and future directions in Canadian theatre-making practice.

Defining a new pedagogy in the development of a curriculum is not new. It is however, not common in undergraduate lighting design education and other scenographic disciplines where instructors are often practicing artists contracted to teach rather than career educators with expertise in the art form.⁴⁵ Like many disciplines in this new millennium, lighting design pedagogies “have not adapted to address new challenges” (Scott 2) such as the rapid pace of

⁴⁴ For more detail on UNESCO’s study of twenty-first century education, see Scott 2015.

⁴⁵ This is discussed in more detail in the section “A Brief History of Lighting Design Education in Canada”.

technology, global focus on creativity and collaboration across industries, and how new strategies for learning continue to evolve. In lighting design education, collaboration should extend beyond the lighting class. Collaborative learning that flows into the costume, scenery and properties shops, into active discourse with playwrights, dramaturgs, technicians, actors and directors to promote lighting design that is integral rather than an additive component of theatre. Effective teaching and training methods are developed by educators who recognize a need to adapt to new ideologies and technologies and take proactive steps to regularly examine their practice. Successful teaching and learning methods are dependent on a current, effective pedagogy that informs and supports the curriculum.

3.2 Scenoturgy: Research Purpose

*There is a strange paradox in the attempt to position oneself
as an inhabitant of unclaimed territory,
for the gesture itself not only maps the territory, it stakes the claim.*

Shannon Jackson

In the Introduction to this dissertation, I referred to Chapter Three as a manifesto of sorts; the articulation of an emerging creative pedagogy that I refer to as scenoturgy. In this would-be manifesto, I assert that scenoturgy is a pedagogy that could be employed in an updated undergraduate lighting design curriculum (and possibly used across the theatre-making curriculum) that works to diminish or flatten traditional theatre production hierarchies; decentralize and de-stabilize outdated notions of scenography in performance. It is very much a work-in-progress and I offer it as such and keeping in mind that good strategies continue to evolve and change as they are tested and find their feet. In order to propose an updated curriculum for undergraduate lighting design I sought to establish clear terminology that communicates the attitude and direction of contemporary scenographic thinking. Terminology

coming out of the scenographic turn such as “visual dramaturgy” (Lehman 2006) and “expanded scenography” (McKinney and Palmer 2017) are two exemplars that are in current use, but each lacks a quality of inclusivity of all aspects of theatre production in cohort toward a singular outcome. Therefore I have developed the concept of scenoturgy as an interdisciplinary structure that is cognizant of the value of all performative variables (scenography, actor, attendant, text) in a singular live theatre performance. Scenoturgy operates as a pedagogy applicable for all roles in theatre-making and performance creation.

Patrice Pavis suggests that theatrical words and terminologies should be regularly questioned and examined. “Theatre is a fragile, ephemeral art that is particularly sensitive to what is in the air. It cannot be accounted for without from time to time questioning its foundations and reviewing the critical apparatus we use to describe it” (“Dictionary” ix). Within that theatrical fragility and ephemerality is scenography whose self-identifying terminology is slippery. Why would specific terminology matter to undergraduate lighting design curriculum and pedagogy? The French philosopher Etienne Bonnet de Condillac wrote “Every science requires a special language because every science has its own ideas” (1). Scenography is already a special language capable of expressing ideas well through visual and auditory semiotics. In the twenty-first century, the power of labels and factors of identity are “what is in the air”.

In 2018 society is asking “Who does the talking that matters”? Bonnie Marranca posits that terminologies currently in play in performance related research and education are determined by a small population with a narrow lens, “[t]here is a certain inbred nature of too much self-quoting and conference-generated scholarship and a small circle of just-the-right critical positions and perspectives and scholars quoted while leaving out necessary references of the recent past” (393). She further argues, “[t]here is often too much coverage in journals in the

USA, and abroad, of the same artists and subjects utilizing the same vocabularies” (394). Marranca’s argument can be explored through the table of contents in the two most recent scenography compilations: *Scenography Expanded: An Introduction to Contemporary Performance Design* (2017) and *The Routledge Companion to Scenography* (2018).⁴⁶ In present day Canada we are compelled to ask whose voice is represented by the vocabularies in play. Arnold Aronson is an example of a dominant white-male voice in mainstream scenography scholarship. Aronson effectively speaks first in both recently released scenography books: the “Foreword” of the first and the “Introduction” of the second. In both instances he is quite literally setting the vocabulary of the book and a tone for current attitudes in scholarship by defining the term scenography. However, matters of gender equality, at least in these new published works on scenography is improving. *Scenography Expanded...*, which is co-edited by a woman, Joslin McKinney, presents the female voice two-to-one; with ten female contributors and five male. Conversely, in the *Routledge Companion...* edited by Aronson, fifty-eight percent of the content is written by men. Christopher Baugh is featured twice. Swapping out just one of his chapters for a female scholar would have helped to balance the narrative even more.

Scenography functions with a combination of native and borrowed vocabularies, resulting in a flow of language in this discipline that is far from seamless. Within the community we dither back and forth over the distinction between terms like scenographer and designer. Pamela Howard’s book *What is Scenography*, dedicates four pages to forty-four expert responses to this question. This dissertation began with Robert Thomson asking me the same question, “how do you define scenography?”. In the Introduction to the *Routledge Companion to*

⁴⁶ Authors present in both publications are: Arnold Aronson, Christopher Baugh, Dorita M. Hannah, Thea Brejzek, Jane Collins, Stephen di Benedetto, Melissa Trimmingham, Joslin McKinney, and Scott Palmer

Scenography Aronson addresses this problem in a defence of using the word scenography in preference of the word design:

The title [of the book] was a contested subject. Should this be a “Companion to Theatre Design” or to “Stage Design,” or a “Companion to Scenography”? I have opted for the latter for reasons I will explain. On one level, the problem is essentially a linguistic one. Scenography and design have different connotations and are understood by different people in different contexts to mean different things [. . .] Considerations ranging from shifts in disciplinary thinking—theatre studies has been challenged by performance Western concepts of theatre—to economic models and modes of training, also play a role in nomenclature. (1)

Furthermore, we attempt to translate our specific scenographic vocabularies into theatre studies and performances studies language before we have consolidated the original meaning for ourselves. “Rather than allowing any one of our languages to achieve unchallenged supremacy, to congeal into a reductive reality, scenography can help reveal and deploy, through the interaction of several languages, the contingency that inheres within each and all of them” (Quigley 94). Scenoturgy operates as a collective language zone, a portmanteau which equally carries theatrical, performance and scenographic languages

A major part of the scenographic turn is the recognition of scenography as research. In order to fully participate in this turn it is helpful to formalize our lexicon, to “map our territory and stake the claim” (S. Jackson 85). For the scenographic to maintain and secure its new foothold, we need to begin to teach to the new attitudes. I argue that in order to do this properly we require some carefully updated, discipline specific terminology.

3.3 Scenoturgy Defined

Scenoturgy, is my own effort to carefully contribute to the development of specific vocabulary for critical practice in scenography. Scenography, as much as it is its own creative discipline, is inherently interdisciplinary. My emerging theory leverages that interdisciplinarity by networking aspects of scenography, dramaturgy and performance studies to be used in a more dialogic, less hierarchal approach to theatre-making. This new method pays attention to, and finds meaning in performance through the interplay of connections that exist between the scenographer, the text, the actor and the attendant. The purpose of scenoturgy is not a more critically aware spectator—there are already several scholars who have suggested methods to that end (Fischer-Lichte 1983, “L’Analyse” 1996, Prendergast 2008, Samer and Whittington 2017: among others). In defining a working model of scenoturgy, I prefer Stephen Di Benedetto’s use of the word “attendant” over “spectator” or “audience” “in the sense of one that has a contributory role in ceremony [. . .] fully engaged through body and mind simultaneously” (Di Benedetto 102, McKinney and Palmer 7). The words “audience” and “spectator” have been marked as homogeneous and problematic for scenography as both risk “obscuring the multiple contingencies of subjective response, context, and environment” (Freshwater 5, McKinney and Palmer 7). Scenoturgy suggests that all participants in the theatre-making process, whether in creation or performance are attendant to it. Thinking in connectivist terms, the theatre production model through a scenoturgic-lens is more of a connected web of nodes that communicate in all directions forward and back. Lighting is a node of information, sound is a node of information, text is a node, and so on. Scenoturgy moves theatre-making from a mode of top down, ‘director-down’ creative processes into one less hierarchal and more dialogically collaborative.

While scenoturgy could be seen as a kaleidoscope of too many lenses creating a fractured view of the whole, instead the three-pronged approach is mindful of States’ comment that “any

critical perspective is doomed to be too narrow” (6). Scenoturgy essentially opens the aperture of the creative lens to allow more information to enter and to form a more comprehensive or faceted outcome. As a pedagogy for undergraduate lighting design education, scenoturgy can help students to see the value and contribution of scenography for its role in the development of the theatre history canon. It can challenge theatrical hierarchies by shifting the locus of theatre-making away from its traditional position with the director or playwright. A small ripple or shift in approaching theatre-making can suggest new avenues for engaging with a performance paradigm that decentralizes, but does not seek to silence or diminish the text. In fact, through scenoturgy, theatre-makers may find new ways into working with canonical texts by approaching them through a different lens that places all aspects of the performance in conversation or (potential conflict!).

At the root of this emerging theory is an awakening in the scenographic community that scenography has “outgrown its function as a technical and illustrative support to dramatic literature” (McKinney and Palmer 2). The evidence of the scale of this awakening is perhaps best demonstrated by the renaming of The Prague Quadrennial the pre-eminent exhibition of performance design, scenography and theatre architecture from around the globe since 1967. The Prague Quadrennial (PQ) has demonstrated ongoing openness to evolution in the discipline, having changed its name periodically to reflect current trends in scenography. As of 2011, the name was changed to reflect the new dialogue of scenography and performance: The Prague Quadrennial for Performance Design and Space.⁴⁷ Natalie Rewa notes that the most recent name supports how “the performative has increasingly served to underpin critical discourse and artistic

⁴⁷ For more on the present direction of scenography research at the Prague Quadrennial, see “What is PQ?” <http://www.pq.cz/en/about-pq/what-is-pq>.

creation, the PQ has taken up these concerns in the work of scenographers and production designers, addressing the social and cultural aspects of performance and its materiality” (“The Prague Quadrennial” 132). The current name reflects the scenographic alignment with the sustained international academic interest in defining and analyzing work by/in its performative capacity. I would argue that the process of these recently acknowledged and evolving avenues of research and practice is best described as scenoturgy.

Scenoturgy rests at the interdisciplinary intersection of scenography, dramaturgy and performance studies; where each can either complicate or enhance the other. The convergence of these three nodes of theatrical inquiry and practice does not meet on the margins at the outside edges of live theatre production but rather in what Richard Schechner refers to as “the creases” (157).

Creases are not marginal, on the edge, but liminal, in between. They run through the actual and conceptual centres of society, like faults in the Earth’s crust. Creases are places to hide, but more importantly they signal areas of instability, disturbance, and potentially radical changes in the social topography. These changes are always “changes in direction,” that is, changes of something more than technique” (157).

These creases, these places of instability and disturbance operate like growth plates, areas of developing tissue and connection that determine the future length and shape of the bones in a mature skeleton or frame. In his brief commentary on creases, Schechner notes that the transformation that materializes in these liminal, in-between spaces, the “crease phenomena” is not instantaneous but occurs “step by step through infiltration and renovation” (157). Instability and disruption present a new environment for creativity to sprout, for discovery to occur over time. Scenoturgy, an active interdisciplinary application of each of these concepts in concert: scenography, dramaturgy and performance studies - exists within the creases. A scenoturgic

approach explores these creases by paying attention to, analyzing, finding and creating meaning in, and connectivity through the relationships and networks that exist between the scenographer/y, the text, the actor and the attendant.

Articulating a working definition of scenoturgy is complex as the triad of concepts that inform it are moving academic targets in and of themselves. There are of course parallels that can be drawn between scenoturgy and other methods of inquiry and creation. Two examples of these are performance analysis and *gesamtkunstwerk*. According to Philip Auslander, “performance analysis is understood to be specifically from the spectator’s point of view” (4), often a post-performance process whereas scenoturgy is not focused on post-performance reflection or analysis, but calls for reflection and investigation throughout the active creation process as engagement in a multiplicity of performance attendant/participant perspectives. Patrice Pavis suggests,

The form of these analyses and the discourse in which they are embedded are extremely diverse: spontaneous commentaries by spectators, specialized articles by print and audiovisual critics, questionnaires written up after a more or less lengthy period of reflection audio or audiovisual recordings, spoken or written description by conscientious semioticians of the operative sign systems, poetic or philosophical meditations triggered by the performance etc. (“L’Analyse” 4)

A performance analysis can be expressed in a variety of media or styles, but inevitably occurs post-performance. Performance analysis can address the creation of the work, but does so ‘in-post’; it primarily deals in outcomes. Scenoturgy, as I propose it, is ‘in-situ’; a pro-active and purposeful examination from other performance, production and attendant perspectives, that occur as an integral part of the creation process (keeping in mind that creation continues in performance after the rehearsal or development process). For example, in a performance analysis

of the public reaction to a performance, it would typically occur after the end of the performance—an actor or board operator might, given the opportunity, take this performance analysis into consideration, and alter their next performance. In scenoturgy, the actor or board operator reacts and adjusts their performance in the moment, in-situ, in direct response to attendant feedback. It is a creation, practice-based pedagogy.

Scenoturgy moves from the post-production, reactive work of performance analysis and into a proactive, in-process approach. Gay McAuley argues that a short-coming of performance analysis is that it does not require any direct or in-depth involvement with a performance. She argues that most performance analyses are written from a one-time viewing of a given performance and that,

the one-time spectator in the theatre does not engage very deeply with the performance experience before it begins to fade from his/her memory. Compared with the performance makers themselves, the one-time spectator has a relatively shallow perspective of the show. (3)

Arguably, McAuley's perspective is that of "the academic-practitioner gap that essentially pit[s] sides against each other, treating them as dichotomous" (Bartunek and Rynes 1181). All of this being said, I would counter that performance analysis can be an act of dramaturgy and therefore has a place within scenoturgy. To re-iterate, a primary goal of scenoturgy is to flatten hierarchies in theatre-making and production processes and increase dialogue thus bridging gaps, including the academic/practitioner gap, that might constrain creative outcomes in theatre. Cathy Turner and Synne Behrndt note,

Though we can use the terms 'performance analysis' and 'dramaturgy' more or less interchangeably, perhaps the former, with the roots of 'analysis' in the Greek word 'to unloose', implies a sense of unraveling the different strands of a work, while the latter

linked to the idea of ‘composition’, the bringing together of parts, implies an attempt view them in relation to each other”. (7)

Understood as an act of dramaturgy and linked to the idea of ‘composition’ I would argue that performance analysis is not disconnected from ‘scenoturgy’, but rather a potential ingredient in it. Within scenoturgy, performance analysis becomes performatively dialogic. Another ‘node’ of connection from which to build networks of knowledge.

Gesamtkunstwerk is most commonly translated as “total work of art” or “synthesis of arts” and attributed to Richard Wagner (Millington 232).⁴⁸ Wagner wrote about this totality in a work of art in his theoretical works *Die Kunst und die Religion* and *Das Kunstwerk der Zukunft* (1849) and *Oper und Drama* (1852).⁴⁹ Through *gesamtkunstwerk*, the aim is a synthesis of music, dance, fiction and gesture in what Wagner termed “versemelodie”. “In der Versmelodie verbindet sich nicht nur die Wortsprache mit der Tonsprache, sondern auch das von diesen beiden Organen ausgedrückte, nämlich das Ungegenwärtige mit dem Gegenwärtigen, der Gedanke mit der Empfindung” (*Oper und Drama* 338).⁵⁰ Wagner proposed to unite the arts presented onstage – music, dance, narrative and scenography.

Scenoturgy also calls for synthesis of the individual arts in theatre and performance. Much could be written and examined at this point about the connections between Wagner and scenoturgy, however there are critical differences that divide the two theories. Artistic agency is

⁴⁸ Palmer’s research suggests that Wagner used the term *gesamtkunstwerk* in his writings to describe his vision of a total artwork for the future and borrowed the term from German philosopher K.F.E. Trahdorff who first coined it in 1827.

⁴⁹ Translation: *Art and Religion* and *The Artwork of the Future* (1849), *Opera and Drama* (1952).

⁵⁰ Translation: “In the verse melody, not only the vocabulary of language is associated with the language of sound, but also that expressed by these two organs, namely the inconsequential with the present, the thought with the sensation” (“Opera and Drama” 338)

the first difference. Wagner's *gesamtkunstwerk* places the director firmly in the position of overarching creative control of the production. One way that he did this through this use of the "leitmotif" ("Oper und Drama"), a recurring acoustic theme that was linked to a specific character or situation. The leitmotifs, although designed to unify various creative elements, were still, under Wagner, a single creative voice. Scenoturgy, however, entreats the creative agency and responsibility of each artist – scenographers, playwrights, actors, directors – in the creation of the whole of the total art of the production. It demands artists be accountable for what they put out into the world through performance. Any application of Wagner's *gesamtkunstwerk* must be with an eye to his "social-aesthetic utopias" (Lajosi 44) and this is another similarity that could be drawn between the two concepts. However, because scenoturgy encourages accountability and voice of the individual artist within the whole of a performance it is vastly different from Wagner's social-utopia which was in truth segregating and exclusionary.

Both approaches, scenoturgy and *gesamtkunstwerk* advocate for a holistic production approach. However, the first considers role of the attendant and the other does not. Despite being holistic, *gesamtkunstwerk* remains inherently hierarchal, scenoturgy seeks to diminish hierarchies present in theatre-making. I posit that in demanding an equally agential accountability of all of those attending to a production, (this includes those traditionally referred to as the audience in addition to all of those involved in the creation and performance of the production) rather than supporting a single creative vision (often the director or playwright), that the outcome will be an improved diversity in the voices that are heard. Scenoturgy recognizes that the traditional 'director-down' methods of theatre-making stabilize and facilitate the continued hierarchal approach; it is not however 'anti-director'. I think of it more like music, specifically jazz versus classical performance. Neither form lacks structure, but the structures differ hierarchically. In jazz, each individual player has a responsibility to add their unique

interpretation and voice to the outcome of the musical composition; and is encouraged to vary this interpretation in subsequent performances in reaction to what is offered by the other musicians or attendants to the performance. In classical music, the expectation of how to play a piece of music is clearly noted on the score, and musical excellence is often measured in the meticulous execution of those notations on the page—the text. Jazz, however goes off-script and finds new ways to re-interpret the musical text (or no text) every time it is played. In each movement of a jazz performance, the role of director can be fluid and might change within a single performance. The guitarist leads, then the drummer, then piano—and so on. To many ears the result sounds chaotic or dissonant, but in essence, new networks of performative connectivism are created between the musicians each time they play.⁵¹

Circling back to lighting design curriculum, this idea of scenoturgy puts the students into a place of creative agency and opportunity to ‘say-something’. For example, teaching lighting design from a scenoturgic perspective might encourage students to design for a canonical text or from a conceptual place that begins with the light rather than the script. It might invite them to consider, what happens to how we understand *Hamlet*, if the lighting is always directing our gaze away from him and onto Ophelia? Or Laertes? If we effectively dim a dominant narrative, direct the attendant gaze elsewhere, what might that reveal? In a traditional approach, all of the elements of a production work in chorus together to tell a single story, to focus on the dominant narrative—what happens when instead of a single voice telling a unified story there are multiple

⁵¹ Jane W. Davidson suggests the concept of performativity has only been discussed by musicologists since 2012, “even though musicians deal with the competencies of performers as articulated and consolidated in repertoires, events and practices; in other words, performativities. As a form of expression not found in material culture, performativity in music demands that we explore what is embodied, and also brings to the fore the socio-cultural environments in which performances exist”. See Davidson pp. 179-88.

voices telling different perspectives of the same story? To further clarify how I anticipate the application of scenoturgy as a pedagogy, the following sections will discuss each of the three disciplines that inform scenoturgy in turn: scenography, dramaturgy and performance studies.

3.4 Scenoturgy and Scenography

*In the theatre light is brightness pretending to be other brightness,
a chair is pretending to be another chair, and so on.*

Bert. O States

Effective and meaningful scenography says something to the actor, the director and the attendant. It harmonizes with or interrupts the text. According to Aronson, “if the purpose of art [...] is to create something we cannot experience in our quotidian existence, then [...] the power and potential of scenography is to create previously unknown worlds” (14). In every work of scenographic composition, there is scenoturgic potential, which is variable and does not operate on a consistent level of influence. The concept of scenoturgic potential builds on work that has been done by other scholars (Werry 2014; Gross 2011; Sofer 2004; among others) that “refuses to consign props, costumes, set pieces and other theatrical objects to their ‘traditional’ roles as background or stage dressing and sees them instead as key players in all performances—as active agents performing alongside rather than behind or in service to human performers” (Schweitzer and Zerdy 6). Lighting design students should be implicitly taught the scenoturgic potential of agentive light in performance and ways to leverage that potential to connect with the attendants of the performance.

Scenoturgic potential can be conceptualized as the level of emotional or sensorial response that scenography can provoke so that the actor, attendant or adjacent scenography in

live performance retains agency. Not all scenography is embedded with deep meaning or serves any additional purpose beyond providing a background for actors to stand in front of while speaking. This kind of scenography is passive and lacks scenoturgic potential, it does not contribute much value to the performance as a whole. For example, consider a lighting design student who is taught only to illuminate the stage according to McCandless' method. This method for lighting the stage offers consistent (often flat), un-textured light across the stage, cool colour coming at a forty-five-degree angle from one side, warm colour coming in at forty-five degrees from another, some perfectly spaced front light with beam angles meticulously overlapped and aligned, etc. The student will have succeeded in lighting the stage. All of the action will be illuminated. However, the lighting will not be as articulate or meaningful as it could be. In this application, the light is purely functional, allowing the attendants of the performance to see (or not see) the action. It is a missed opportunity to say something by "showing-doing" (Irwin 111) something, through the light.

There is unfortunately no shortage of lighting, scenery or costume design where the only intent is to clothe, locate and illuminate the actor's performance of the narrative. This style of scenography is less communicative or connective – unmoving or unreactive to other scenographic elements, the actor or the attendant. Its scenoturgic potential is minimal, an opportunity for a connection that offers more information is missed.

Consideration of the scenoturgic potential of a given scenography as an active part of the creative process, can "[convey] manifold subject meanings" (Graham 74). This shift in thinking promotes the development of a final product that is more collaborative than one informed by traditional practices such as rigid production schedules that enforce "severe creative constraints" ("Looking for Enlightened Lighting" 6) and stabilize adherence to standardized methodologies. Active awareness of the performativity of scenography and its function as a node of connection

to the other performatives present in production should increase the overall scenoturgic potential of a show. Approaching lighting design as a way to inform, rather than simply illuminate a performance increases its scenoturgic potential.

3.5 Scenoturgy and Dramaturgy

*'Dramaturgy' is to drama what 'poetics' is to poetry:
it denotes the essential nature of the categories that form
the basis of a drama and can be constructed in dramatic theory.*

Carl Dalhaus

Dramaturgy, like scenography, suffers from definitional uncertainty. Justin Blum notes, “to date no single definition of the role or set of practices has emerged and dramaturgs themselves have often resisted developing one as a matter of principle” (83). I suggest that the purposeful inclusion of dramaturgy as a fundamental factor in analysis, conception and creation of scenography is a necessary function of present-day theatre-making, and vice versa. Commonly recognized aspects of the dramaturg’s purpose include research for directors, designers and marketing, composing study guides “in short, locating fact-based knowledge and conveying it clearly to fellow artists and audiences” (Blum 84). These research and communication skills are equally invaluable to the scenographer but not always taught as a substantial step in the design process. Scenoturgy as the pedagogical approach in undergraduate lighting design education can correct this.

Scenoturgy is not “visual dramaturgy” (Lehman 93). Scenoturgy – as it considers the total work of scenographic composition in addition to and in concert with dramaturgy, is a more accurate term than visual dramaturgy. The term visual dramaturgy is dismissive of the other sensory aspects of scenography such as the auditory or tactile. “Visual dramaturgy” as defined by Lehman privileges the text rather than acknowledging that scenography “is a discipline that

has its own logic, its own distinctive rules” (Lotker and Gough 3) “The scenographic describes the performative process of inscribing meaning in both space and time: it is a mode of translating the abstract in aesthetic and sensory experiences” (Graham 74) It is unique from text as such operates and responds differently, which marks it as an important node of connection in theatre-making.

Scenoturgy could be compared with a “Brechtian dramaturgy” and in fact Brecht described much of what I see as a scenoturgic model,

The good scene designer (*bühnenbauer*)⁵² proceeds slowly and experimentally. A working hypothesis is based on a precise reading of the text, and substantial conversations with other members of the theatre, especially on the social aims of the play and concerns of the performance, are useful to him. He will test them constantly and revise them on the basis of rehearsals with the actors. . . This is how a good stage designer (*bühnenbauer*) works: now ahead of the actor, now behind him, always together with him. Step by step he builds up the performance area, just as experimentally as the actor. (Bertolt Brecht 443-4 qtd. in “Bertolt Brecht” 413)

A difference between scenoturgy and Brecht’s “scenographic dialogue” (“Bertolt Brecht” 411) lies in *verfremdungseffekt*. An integral part of Brecht’s dramatic theory involves alienating the audience, distancing the audience from the emotional effects of theatrical performance so they can respond intellectually rather than intuitively. Scenoturgy invites and encourages the

⁵² In his chapter “Bertolt Brecht and Scenographic Dialogue”, Christopher Baugh explains Brecht’s attempt to define the difference between a designer and a scenographer. Baugh notes “the distinction lay at the heart of Brecht and Neher’s understanding of scenography. The *bühnenbildner* (stage picture maker) proposes a harmoniously composed knowledge of the world, and offers an interpretation of the play’s topic and themes. Whereas the *bühnenbauer* (stage builder) creates and builds a scene as a component within the dramaturgy and should be considered as an act of performance” (413).

emotional response of the attendant as a fundamental part of the performance and scenographic practice.

Moving toward the third decade of the twenty-first century, rapid advances in new performance technologies create new creases and nodes for connection between scenography, dramaturgy and performance studies on a daily basis, filled with points of disruption and discomfort. The theatre is also increasingly in an era of the non-narrative performance, alternately a completely immersive experience, or one that is isolating and alienating. Canadian theatre revolutionary Robert Lepage, has expressed the current status well, “We are confronted with audiences whose narrative vocabulary has evolved... They can read stories backwards now, and jump cut, and can flash forward”.⁵³ Expressed in film editing terms, Lepage suggests that the audience are more actively making-meaning, or attending to it, rather than passively receiving it. Lepage’s observation could be interpreted as the evolution from a twentieth-century society that takes in information in a concrete, linear, sequential format to a twenty-first century society that interprets information as an ephemeral, unlimited, networked-web. As such there is call for a “new dramaturgy” (Romanska 5) that works for a new theatre in new times. Rewa surmises “The paradox of scenography in Canada (and elsewhere) is that the acute attention paid to design by producers is in inverse proportion to that found in reviews and criticism” and that the text-centric Canadian theatre tradition “marginalizes artists such as set, lighting, costume and sound designers by eliding performances with dramatic texts and largely ignores the visual and aural experience of spectating” (“Perspective on Scenography” 29). This marginalization of scenographic arts and artists in Canada is evident in the lack scenographic research or review

⁵³ Quoted in Craig Flemming, “CUI BONO” A Critique of the Conscripted Audience, and Performer, a Manifesto”. *HowlRound*, February 3, 2013. See www.howlround.com/cui-bono-a-critique-of-the-conscripted-audience-and-performance-a-manifesto.

articles in our primary theatre research journals, *Theatre Research in Canada (TRiC/RTaC)* and the *Canadian Theatre Review (CTR)*. The last volume of *CTR* that featured Canadian scenography as the theme was published in the Summer of 2001, Volume 107. An EBSCO search shows that *TRiC/RTaC* have published no articles about scenography in at least the last five years. The movement away from a text-centric culture to a digital culture might be the equalizing catalyst as reviews and criticism in the Internet age are no longer the exclusive realm of an elite group with printing privileges. Those wanting to engage in a scenographic discourse have more options available to do so through the multimedia applications of the Internet than through printed-text media. This is evident in “The Title Block”⁵⁴ podcasts which are recorded by a former lighting designer in support of the work and archiving oral histories of Canadian scenographers.

An answer to this paradox that Rewa notes, may lie in the application of scenoturgy as an aggregate of scenography, dramaturgy and performance studies. Approaching from a place of purposeful and applied connection, scenoturgy sets up theatre-making as a place of inquiry, analysis and creation in the form of ‘dramaturgy/*and*’, ‘performance studies/*and*’, ‘scenography/*and*’, it automatically assumes the position that none of these concepts exists in a vacuum, that they are enhanced and improved through the endless connective ‘*and*’. Adopting scenoturgy as a connectivist approach, invites the ‘*and*’. Scenoturgy as a creative pedagogy can work to help undergraduate student lighting designers connect with text, actor, attendant and performance context in order to increase the scenoturgic potential in their designs.

⁵⁴ “The Title Block” podcasts are discussed in more detail in Chapter 6. Also see <https://www.thetitleblock.com/about>

3.6 Scenoturgy and Performance Studies

... the rapid expansion of scenographic practice, especially since the millennium, has left little room for reflection on what its defining characteristics might be, and therefore what the particular contribution that scenography both within and beyond the theatre is making to contemporary performance.

Joslin McKinney & Scott Palmer

Under the umbrella of performance studies, scenography has been discussed in terms of its autonomy, “multi-sensorial and dynamic, responsive to and constitutive of dramatic action” (McKinney and Palmer 5). Performance studies and contemporary scenographic thinking are complementary ideologies that, among other things, recognize a “blurring of the boundaries between performance and audience” (McKinney and Palmer 1). Scenoturgy and performance studies agree that “objects are of extreme importance, often the focus of the whole activity... they are decisive in creating the symbolic reality” (Schechner 11). Lotker and Gogh state “We perform scenographies and they perform us” (3), suggesting that scenography is not only performance, but dialogue in a Bakhtinian sense.⁵⁵ Peter Brook famously stated, “I can take any empty space and call it a bare stage. A man walks across this empty space, whilst someone else is watching him, and that this is all that is needed for an act of theatre to be engaged” (7). However, from a scenoturgic perspective that decentralizes the actor as a focal point in performance, “the space performs even before the actor walks across it. The character of space is

⁵⁵ Bakhtinian dialogism suggests that meaning is relative to the relationship between two objects where reality is based on situational and social location. Bakhtin argued that individual experience (socio-cultural) informs the ideological context of the dialogue, therefore meaning-making and understanding are dependent on dialogue between social actors. For the sake of this argument on scenographic thinking, the social actor could be a human, scenographic or textual object. See Dentith 122-41.

the way it positions us and spaces our actions” (Lotker and Gough 4). Scenoturgy presumes that the act of ‘do’-ing scenography can say or communicate something in the same capacity as writing or reciting text, attending and responding to live stimuli, objects and materials. Therefore, scenography is performative and should be closely examined as a valued part of the performance on par with the text and the actor.

Scenography does not exist outside of its ‘do’-ing. The natural environment influences humans and how we interpret information, but for the sake of this argument, it is not intentional. The action within a given space is the intention. Dorita Hannah suggests, “because action in space has a reciprocal relationship with space in action our banal everyday environments can be perceived and utilized as continually fluctuating performances” (“Event-Space” 54). The intentionality of the act of scenography, the purposeful manipulation of an environment in order to evoke a human response makes it performative. A common notion of scenography is that it designs a setting to perform ‘in’, that scenography is a container for performance. However, scenoturgy prompts the investigation of how scenographies perform in provocation of or response to other parts of theatrical performance, how they act upon us and inspire us to act in response to them. Scenographies are not limited to the stage but are the manifestation of the difference between space and place. John Lutterbie notes that the “relationship between these two words (space and place)⁵⁶ can help us to understand the unstable relationship between performance and performativity; the differing perspectives of director, designer and actors and finally tell us something...” (123). Giving equal voice to these differing perspectives in theatre-making and live performance is a goal of scenoturgy. Space is the natural environment - undefined, unmarked, unperformed. Place is scenography – defined, remarkable, performative.

⁵⁶ Lutterbie’s parentheses.

Scenoturgy does not theorize outcomes based on “if” scenography is performative, because it is already understood to be so. Rather, scenoturgy seeks to activate the agency all of the elements of live theatre, with the implicit understanding that light performs, costumes perform, props perform—to define and more deeply explore a world of ideas, opinions and emotion through performance.

It is important to note here the ephemerality of scenoturgic function and potential is dependent on the “framing” of the object in a Goffman sense⁵⁷ – the invitation by the scenographer to the performer and the attendant to suspend their own previous experience with an object in order to engage with it in a manner prescribed or suggested by the scenographer. The scenographer activates the scenoturgic potential of the object. The “scenographic object” only exists in its intended interpretation or its performance for as long as the actor and attendant work together to bracket the intention. Scenography acts as a condenser in performance, concentrating the attention of the attendant on the effort of performance.

For the lighting design student, the consideration of how light can be a performing “object” and discourses about the “thingness” (Heidegger 1962) of objects can quickly complicate into rhetoric on “materialism”. As both educator and artist, my own preference is practice before theory. The reason may be simple, but makes sense to me. Great art—whether theatre, sculpture, paint, dance, etc.—exists in the world completely independent of theory. An individual can create a stunning painting knowing nothing of cubism or perspective drawing. Theory can enhance or inform artist practice, but in my experience, the intention to engage in a

⁵⁷ Erving Goffman’s theory of “framing” which is to bracket a particular event or ongoing action in a community or small society to identify that, which falls inside the frame as the focus of your attention. The general concept of “framing theory” suggests that how an event or performance is presented to an audience (the frame) will influence choices the audience makes about how to perceive and process information. See Goffman 1974.

creative act often precedes the explanation of the act or the phenomenon. I do not discount that creative acts can also be inspired by theory, only that I hold that creativity and artistic expression have an instinctual quality that is not dependent on learning theory before engaging in a practice. Again, this is a place where the act of theatre-making can run up against the academic/practitioner gap; and without delving into those debates, I do acknowledge that the object materiality of light has been eloquently and importantly explored by other scholars elsewhere (“Provocative Atmospheres” 2016; Hurley 2010; “Theatre, Performance and Technology” 2005). However, I suggest that theoretical discourse is better suited to graduate than undergraduate studies in lighting design. I would however encourage undergraduate students to draw on Schweitzer and Zerdy’s inquiry into “how light, as both an immaterial and material phenomenon makes (visible) material relationships. How does it direct human movement and work in tandem with environmental factors to shape our appearance and experience of the surrounding world?” (“Provocative Atmospheres” 4). The reason I would point students to this type of inquiry is because it is testable within the structure of an undergraduate lighting design class. Within a lighting lab scenario for example, students can use a physical lighting set-up to explore ways to direct human movement with light. These questions posed by Schweitzer and Levin about human and material connection can be explored well at an undergraduate level through a scenoturgic pedagogy.

3.7 Scenoturgy as a Pedagogy for Undergraduate Lighting Design Education

The scenoturgic pedagogy I am proposing supports learning for the twenty-first century theatre student who has a world view and experience that emphasizes “active and collaborative learning practices” (Barron et al. 8). Scenoturgy as pedagogy supports student-centered and inquiry-based learning. A scenoturgic pedagogy is interdisciplinary, inclusive, collaborative, de-

centralizes the dominant narrative, promotes re-thinking of traditional roles and hierarchies, requires reflective thought and action, emphasizes joint productivity, and recognizes the relationship between creativity and time. Again, these are not new ideas in education as a whole, but I argue that they are overlooked conditions in twenty-first century undergraduate lighting design curriculums in English-speaking Canada. Below is a brief expansion of each of these points followed by a detailed description of scenoturgy.

3.8 Interdisciplinary

A scenoturgic pedagogy emphasizes interdisciplinarity in theatre design or scenography. It supports the notion that creativity and innovation are not and should not be confined by medium, disciplinary or departmental lines. Theatre is an inherently interdisciplinary art form. According to Goebbels, “An important part of the education for theatre must consist of teaching and researching performing arts in the context of contemporary developments in their sister arts — music, visual arts, non-dramatic literature” (45).

Over time, particularly in English-speaking Canada theatre, production has developed into a segmented and siloed practice. “[M]ost texts used in the teaching of design in the English-speaking theatre reflect, reinforce or even celebrate this situation” (“Looking for Enlightened Lighting” 6). In part, this segregation is due to the establishment of labour unions, actor’s guilds and economically volatile entertainment and education markets (“Looking for Enlightened Lighting” 5-6). Strict departmental and hierarchal lines have been drawn in professional companies and universities that inhibit the practice of interdisciplinary creativity in Canadian theatre.

3.9 Inclusive

A scenoturgic pedagogy advocates for diversity of people and ideas in lighting design practice. It recognizes the traditional white-male dominance of lighting design in Canada and

seeks to dismantle power structures that have gendered and racialized participation and practice in the discipline. “Departments should specifically assess and revise curricula to reflect the contributions of women [and other marginalized groups] ...this will provide [all students] with greater opportunities for study and roles in production thus improving their knowledge and experience” (Burton 109).

3.10 Collaborative

Innovation and creativity are “deeply social, with most creative insights typically emerging in collaborative and creative cycles” (Scott 7). Effective collaboration is a skill that must be practiced and nurtured to develop competency. Students who are encouraged to collaborate creatively in the classroom and studio will be more inclined toward creative collaboration in a professional setting. “When Brecht advocated ‘separating the elements’ he imagined a theatre in which each element would be developed so that it could show its own artistic strength and power rather than remaining a useful illustrative accessory” (Goebbels 46). Balanced collaboration within the functioning theatre production model is dependent on disciplinary mastery. The development of mastery in lighting design comes through collaboration with all departments – rather than practicing and learning about lighting design as an isolated medium. “Collaborative learning embodies free thinking and even dissent, its end goal being to create new knowledge” (Scott 6).

3.11 Decentralizing the Dominant Narrative

The dominant theatrical narratives in Canada stem from a continued dependence on traditional and canonical approaches to theatre-making. Well-intentioned matters of increased Indigeneity, de-colonization and multi/interculturalism can be influenced for better or worse by functional realities like ticket sales and subscribers whose financial support and patronage

contributes to the experiential learning of on-campus productions possible.⁵⁸ ““Bums in seats.” It’s a phrase that can be heard echoing through the corridors of theatre organizations and university programs alike” (Alvarez 62). A scenoturgic pedagogy advocates for the creative agency of the individual scenographic artist in ways that can circumvent existing constraints by starting small and creating ripples and disruptions that can grow. By promoting an individual voice within a community-based outcome, Indigenous and intercultural stories might be better supported. Scenoturgy supports equal voice to all modes and cultures of storytelling in theatre-making because it supports the individual human artist within the machine of theatre-making. For lighting design this means that the canonized methods, like McCandless, that comprise the dominant lighting design narrative can be de-stabilized and re-contextualized for a twenty-first century audience. Linda Essig suggests a solution that still includes McCandless, who is historically significant, but to situate his approach in relation to developing an individual voice in lighting design. “[T]each students of its historical importance as the first modern codified methodology for stage lighting while simultaneously requesting that they not employ it in their own work in order to ensure that their work is, in fact, their own” (Essig 62).

3.12 Requires Reflective Thought and Action

Lighting design education is often centered on the ‘doing of’ lighting more so than the ‘thinking in’ lighting. By this I mean that students are spending time engaged with the technical functions of lighting design more than the sensory or affective functions. The practical skills gained in the ‘doing of’ lighting design are “traditionally considered ‘vocational’, not ‘creative’,

⁵⁸ See the “Theatre” section of the document “Overview of the History of Presenting in Canada” prepared by Inga Petri for Strategic Moves, particularly page 10.

suggesting an emphasis on learning specific specialized tasks that do not require knowledge of a wider context” (Malik 170). A scenoturgic pedagogy supports a ‘thinking in’ lighting design education path that encourages emerging lighting designers to imagine how light ‘acts on’ or communicates to a spectator, performer or adjacent scenographies. Maintaining lighting design curriculums that focus on the ‘doing’ in priority over or exclusion of the ‘thinking’, are “misleading of the creative input into performance making that everyone working on a production has” (Malik 164).

3.13 Promotes the Rethinking of Traditional Roles and Hierarchies in Theatre

A scenoturgic pedagogy opens up new avenues for theatrical creation by breaking down of hierarchies and structures that limit or silence creativity or innovation that originates outside of text. Lighting designer and educator Linda Essig notes,

A quick survey of the lighting literature [...] confirmed my impression that in many lighting design classrooms there was an almost slavish adherence to portraying lighting design as a secondary or tertiary design element that was little more than a service to the set designer and a means of seeing the actors (63).

A scenoturgic pedagogy in lighting design curriculum considers the role of the lighting designer and the lighting design in theatrical production and how that role shifts within the various structures of live Canadian theatre such as repertory, fringe, educational or regional theatres.

This differs from those productions that use allegedly “Brechtian” conventions in order to reveal the workings of the spectacle, or live art performances where a proportion of the technical apparatus — often sound desk or lighting console — is placed self-consciously on display (Rae 123).

For example, it supports the notion that the development of a new play or performance can begin from a concept about or reaction to light, rather than a traditional play text. This concept is explored in the case-study of Itai Erdal's *How to Disappear Completely* later in this dissertation.

3.14 Emphasizes Joint Productivity

In the scenoturgic model, creative work is motivated by active discourse between all participants in the performance – scenographers, actors, directors, spectators, writers, dramaturgs. A scenoturgic pedagogy promotes the idea that a more active and egalitarian exchange of ideas between all participants results in a more robust and well-rounded performance outcome. According to Jane Bennett, “These vital forces are properties of humans and nonhumans alike, and together generate an “effectivity” (24) capable of creating new occurrences whose trajectories are uncertain rather than purposive, and whose causality is “more emergent than efficient” (33) (qtd. in Rae 2015). Lighting design curriculum that emphasizes joint productivity advocates for the lighting designer to be allowed to receive, react and respond to what is being offered to them by the other participants in theatre-making.

3.15 Recognizes the Relationship Between Creativity and Time

A scenoturgic pedagogy is cognizant that time is a crucial component in creative work. Artist, composer and arts scholar Heiner Goebbels notes that,

Artistic development, the growth of taste and aesthetic criteria cannot be squeezed into three or four years. Instead of deciding on a major too early, there should be time to develop a personal, enlightened contemporary concept of performing arts before you have to decide whether to become an actor, or set designer or director.

(44)

A scenoturgic pedagogy is sensitive to the concept that time constraints imprint on our artistic work and that something as simple as adhering to a six-week production schedule or a thirteen-week semester leaves its mark.

The implementation of any new pedagogy or curriculum is not without challenges. In particular – any changes to pedagogy or curriculum in lighting design will have a ripple effect on the interdependent courses of a theatre department. Potentially radical changes in hiring, preparation and support of those in teaching roles might be necessary. Setting and assessment of learning outcomes must also shift to reflect pedagogical and curricular changes. As complex as adapting new methods can be there are real consequences in not recognizing the evolving landscape of higher education. The following case study of Itai Erdal's *How to Disappear Completely* will demonstrate scenoturgy as it can be applied in the in-process analysis and creation of theatre.

3.16 A Case Study of Scenoturgic Practice: Itai Erdal's *How to Disappear Completely*

The following is a case study of Israeli-Canadian lighting designer Itai Erdal's one-man show *How to Disappear Completely* (HTDC). The creative process for this show, as described by Erdal, can be defined as 'scenoturgic process'. I see this case study operating as a resource in an updated lighting design curriculum that offers something presently missing – a contemporary, Canadian, first person, oral, performance creation history wherein the focus is lighting design. After reading and discussing this case study, students could experiment with their own conceptions of storytelling through light, the dialogue that occurs between lighting and other components of the performance and ways of documenting and archiving an ephemeral practice like lighting.

This case study further advances undergraduate lighting design pedagogy and curriculum because as a resource, it can effectively circumvent the short-comings in the existing lighting design textbooks as identified by Ric Knowles. Knowles notes,

Most of these texts proceed to map the same hierarchies in the temporal terms onto rehearsal and production schedules that move from conceptual beginning involving a *creative* team of producers, directors and designers, through to drawings and embodiments on the part of theatrical *craftspeople*, before moving to the final stage, understood as technical application by the theatre's *working class*. The earlier in the process one's work is introduced, in this mapping, the more genuinely creative is one's contribution to the show. ("Looking for Enlightened Lighting" 5)⁵⁹

This case study fills several gaps. It gives students access to information about a commercially successful, Canadian performance that bypasses the standard, hierarchal production model. In this account, lighting design is not only brought into the creative process early, it is a central component in the development of the narrative. Erdal is shown as not only a lighting designer, but as a storyteller, a performer and a collaborator. The case study further illustrates the value of lighting design beyond the technological abilities of the equipment into the creative and expressive capacities.

Scenoturgy considers the gaze and response of the attendant in active discourse with the text, scenography and performer as part of the creation process and in performance. The role of the attendant in scenoturgy is fluid. This fluidity in practice of the scenoturgic process comes from the '*and*', is always present. An individual may be the lighting designer/*and* attendant to the performance of the actor, or the playwright/*and* attendant to the performativity of the set

⁵⁹ Knowles' Italics.

design or an actor/*and* attendant to work of the dramaturg. In the case of a spectator or audience member, in scenoturgy they are attendant/*and* because in a scenoturgic model they are not simply receiving the performance, they are responding to it (even if this is response is no response, or not engaging. . .this is a communication in and of itself that affects the performance as a whole). As a performance creation method, it works to de-centralize text and actor to give voice and creative agency to all participants in the production and performance.

Interwoven with the case study is an interview with Erdal that took place at his home in Vancouver, BC, on February 26, 2018. *HTDC* was chosen for this study because Itai Erdal self identifies as a lighting designer, not as an actor or playwright, despite having written and performed this acclaimed piece of theatre.⁶⁰ Excerpts from the interview are formatted as dialogue, which is interspersed throughout the analysis. The examination of this case study is based on several sources: the interview; viewed archival video of a performance of *How to Disappear Completely* produced by The Chop Theatre, which was recorded at the Winnipeg Jewish Theatre in March of 2017; and a reading the unpublished script provided by Erdal.

Erdal's work speaks to me because I also self-identify as a lighting designer, but also feel a strong desire to collaborate outside of a singular role within a production. In his own words:

ERDAL: Lighting I do all the time. Lighting, I love lighting, but that's what I do. You know, whereas performing is special of course because I don't get to do it as much, and writing is amazing and really what I love the most is the collaborative

⁶⁰ *How to Disappear Completely* was nominated for The Dora Mavor Moore Award for Best Touring Production in 2012, and the Jessie Richardson Award for Outstanding Lighting design in 2011. It has been remounted twenty-seven times in twenty-one cities. Erdal was also nominated for the Siminovitch Award for Theatre Design in 2006.

process. I love being in the room with super talented people and bouncing ideas and, I'm always amazed how, I don't think I'm great, I'm not a great writer, I'm not a great actor, I'm a REALLY good collaborator. That's the one thing I'm good at. I'm a good producer. I know how to create an environment where smart people can feel comfortable and it's truly a case of the sum is greater than the parts. You know, none of us could have written *How to Disappear Completely* by ourselves.

HTDC contains scenoturgically important elements other than light including projections and sound design but this case study focuses mainly on the relationships that exist between lighting, performer, writer and attendant in this production. As such, other scenographic components will only be discussed as needed for context.

How to Disappear Completely is dependent on Itai Erdal's ability to tell a story through scenoturgic light. Scenoturgic light can be described as the difference between the natural state of light and the guided or constructed state of light in performance and the attendant's notion of how light is encountered in real life compared with how it is encountered in performance. In this case the attendants include the multiple roles that Erdal himself as writer, performer and lighting designer in addition to the director, board operators, individuals who attend the performance, and so on. Each person that interacts with or is present in the space where the scenoturgic light exists is attendant to it.

ERDAL: People always ask me about how hard it was to go from being a lighting designer to being a performer and I say, it's not as hard as you think because as a lighting designer I always felt like a part of the storytelling. Like as designers we are all working with the director's vision and we are all trying to tell the story you know what I mean? Lighting is another way, if I focus you on one part of the stage, or if

I dim the lights in one part of the stage, that's exactly another way of telling the story as it is putting you in a period costume.

Erdal's performance takes place on a bare stage, with only the occasional non-descript stool for him to perch on. A rear projection screen hangs upstage-centre and is revealed or concealed as needed with drapes, manually operated by Erdal in full view of the attendants. He begins the performance by acknowledging the well-known anecdotal misconception, that in order for an actor to be heard they must be seen. This assertion is made in a blackout, with Erdal's voice being the primary performative element in that moment. In addition to addressing the anecdote, Erdal informs the attendants that he is not an actor, he is a man who planned to be a documentary filmmaker, but through a series of life choices became a theatre lighting designer instead. Still in darkness, he explains that lighting convention dictates a performer should be lit by at least two light sources at all times. One source - cool in colour, like a light blue and one warm in colour, like amber, from opposite directions at a forty-five-degree angle to the performer, preferably placed at ninety degrees from each other. This convention is part of McCandless' method for lighting the stage that has been a standard practice in Canada and the United States for more than eighty-five years.

Performing the operation of the lighting onstage from a hand held remote control, illuminating himself with the two instruments in the positions he has just described, Erdal continues on - explaining that although he is not an actor, he is known as a very good storyteller. This statement hints at what is to follow, oral storytelling in combination with scenographic storytelling through the medium of theatrical lighting. Erdal's oral narrative in cohort with the intentional sensorial manipulation of the physical environment with the clear purpose of establishing an interactive connection between performer, text, scenography and attendant

represents scenoturgic exchange. Scenoturgic exchange facilitates dialogue. Each component operates in direct relation and response to all of the other components.

We can think about traditional modes of theatre creation in the same light as Paulo Friere's "banking" concept of education and scenoturgic theatre creation as "dialogic".⁶¹ Traditional theatre may too often be one-sided and director-driven. Scenoturgy is dialogue. As a concept, it is well-suited to devised and new works because it considers and involves the attendant throughout the process. I suggest that *HTDC* was developed scenoturgically because it was workshopped and adapted several times based on attendant feedback and Erdal and his collaborators sat in more than one role in the production. For example, Erdal functioned as performer *and* lighting designer *and* writer *and* attendant to his colleague's ideas for adapting his documentary footage of his mother into a live performance. Jamie Long sat in the role of director *and* dramaturg *and* attendant to Erdal's narrative about his mother, and so on. The outcome is a touching, multifaceted, generative work. This performance analysis of Erdal's work would be a scenoturgic act if Erdal and/or his collaborators and/or another attendant to *How to Disappear Completely* were to performatively respond to or engage with it. In writing this analysis I function as attendant/*and*. I have engaged with and responded to the performance. If this analysis prompts a performative response connected to *HTDC*, it could become a part of the scenoturgic process of *HTDC*. If this analysis does not prompt a performative response, it remains a performance analysis. No less valuable, only different in application and outcome.

⁶¹ Freire's "Pedagogy of the Oppressed" is credited as an influence of Augusto Boal's "Theatre of the Oppressed", see Vittoria 2018, page 64. I would argue there are connections between the "Theatre of the Oppressed" and scenoturgy, specifically in comparison of Boal's articulation of the 'spect-actor', which is a dualistic role of spectator and actor and scenoturgy's plurality of the role of 'attendant' wherein all participants in the production operate as attendant/*and*. Boal's purpose in coining this term is to reincarnate the spectator into an active participant in the performative exchange. See Friere, Chapter One 2018 (Fiftieth anniversary edition).

How to Disappear Completely contains two central narratives: the first about the creative function of theatre lighting and the second is the illness and subsequent death of Erdal's mother Mery. Both of these narratives are communicated to the attendant through Erdal's lighting choices and oral storytelling that he uses in equal and complementary doses. When asked about how the play was developed, Erdal responded:

ERDAL: Oh, and it was her idea [meaning his mother], she said why don't you make a documentary and call it *Towards My Mother's Death*. She – it was her idea to make a film.

CAROLAN: And then how did it become...

ERDAL: A theatre show?

CAROLAN: A theatre show, slash lighting lecture.

ERDAL: Well, these are two different questions. It became a theatre show because, do you know Theatre Replacement?

CAROLAN: Yes.

ERDAL: So Maiko Yamamoto and James Long, every two years they used to do – they still do, this thing where they bring young artists from different disciplines and they teach them [for] two weeks and they do a showcase of what they did and they asked me one of those times because I showed them my footage of my Mum and the trailer for this documentary that was never made, but I had the trailer made, and they said, "can we use your material and we'll do a thing called 'In Loving Memory Of' and you're going to tell everyone the story of what happened with your Mum, and then we're gonna work it for two weeks and then show it". So, at the end of the two weeks to give the audience context, they put me onstage, in an armchair, and a lamp and a big TV and I showed some footage of my mother to

the audience, but it was all in Hebrew, so I translated it, and while translating I would start commenting on her, and it was like I was having a conversation with my dead mother. And all the people there who came in to see the young people doing the thing said that that was the most memorable thing for them from the night and that's when the idea to make a show was like, "oh, I could be onstage with my dead mother", and that's how we came up the idea to make a show.

THEN then whole lighting thing was Jamie's idea because he kept thinking we needed a container to the show, like why am I onstage? I'm not an actor, and I also I think he also wanted to protect me, and that's why at the very beginning of the show I say, "I am not an actor" because I think it was important for him that the audience knows that this is a non-actor here.

CAROLAN: Right.

Without speaking with James Long, about why he may have felt it was important for the audience to know that Erdal is a lighting designer and not an actor I can only speculate. I suspect that he had a sense that the narrative and ethos of this story changes if Erdal is perceived as an actor. The lighting lecture aspect of the performance would lose some of its appeal, which comes from the authenticity of Erdal working to both distance himself from and connect himself to the loss of his mother through the creative act of lighting design.

ERDAL: And so if I'm not an actor why am I here? I know lights, I love lights, I can talk about lights for hours and so the conceit was that we will have this beginning of a lighting lecture and then when we did the workshops for it and we invited people to see it, everybody was blown away by the lights and they kept asking for more and more lighting stuff, and that was just a direct response from the audience,

because all these metaphors started happening that we never intended. Like Jamie would just ask me “What’s your favourite lamp?” and I said “Oh, a Parcan”, and he said “Why?” and I said, “Because its durable and stubborn and spills all over the place, you can leave it out in the rain... most people think of them as rock’n roll lights, but I think it’s the prettiest light of all theatrical instruments”.

Whatever. I wrote that at home as an ode to a Parcan and when I wrote it I just wanted to show how it goes yellow and yellow and more and more orange as it dims, but when I did it, people thought about the life leaving my mother’s body and it became a metaphor for death... But I never planned that. I never planned any of the lighting things, it’s just an organic thing that happens when you mix and when you work in a collaborative process over several workshops you find out what’s good, you find out what people like, what sticks. And then I think that is the reason the show has done as well as it has, is the whole lighting thing, because it’s such a unique – you know, thing. You know, no lighting designer has ever been onstage and performed with footage of his dead mother. It’s just a unique thing.

In this excerpt of the interview, Erdal shares two key pieces of information that contribute to the scenoturgic understanding of *HTDC*, these are ‘translation’ and ‘response’. The use of lighting and organically emergent visual metaphors aid in the translation of the Hebrew dialogue in the video recordings for the attendants. The lighting metaphors aid the scenoturgic exchange between actor, text, scenographer and attendant. The attendant response within the creative process is also important to note; because the piece was workshopped live, the performance was

able to develop and refine in response to attendant reaction – also facilitating the scenoturgic exchange.

The workshop process, which in this case is applied scenoturgy, was arguably essential in the success of the lighting in *HTDC*. In the Anglo-Canadian theatre industry, the standard production schedule allows only a matter of days for the lighting design to be hanged, focused, cued and finalized for performance. The tightness and predictability of this practice rarely allows space for true creative collaboration to take place between the lighting designer and the other designers, director and actors, “lighting designers work within what, in Canada, is usually a two week to six-week rehearsal period that renders impractical any incorporation...of lighting into the rehearsal process *as* process or any attempt to allow the design for a show to evolve alongside its other components” (“Looking” 5). The lighting design is often developed with the designer in veritable isolation from the rest of the production process. During the interview, Erdal commented on how this outdated production practice works to limit the creative agency of the lighting designer:

ERDAL: Lighting is the only discipline that has to be creative under pressure. We cannot work unless we have the lights of the theatre, so I can prepare as much as I want in the rehearsal hall, but it’s not going to help. I need to be onstage with the set, with the director or without in order to do my work - that is the difference between lighting design... and that is often why people bring us later to the table because all of the other things, logistically have to be figured out far in advance right?

 The set has to be built month before often [sic], or weeks before, and so everything else is forced to be early, whereas we have to be creative under pressure – so we do it in the theatre. Now of course I always prefer to be ... and

most set designers that I work with many times, they know that the show will be better if they talk to me early, and if I'm incorporated into the design, absolutely those are the best shows I've done, are ones that have considered me early. And the smart directors do that... the smart directors make sure all the designers are talking early, and the smart set designers want to talk to the lighting designers early because they know that their sets will look better. You know? I've always got along with my set designers because I liked the set separately so some light will always fall on the set if you are able to bring up the set by itself, it's great for transitions, pre-sets, post, just it's great to be able to bring up different things, just to balance things, so it's very important to light the set separately, and because I do that a lot of times set designers talk to me early and we try to incorporate the lighting as much as possible into the design. Now. Production managers don't think like that. And theatres don't... and so, you always have to go against the grain and you know often be considered a pain in the ass...

CAROLAN: [laughs]

ERDAL: ... as I am often considered, because I fight a month in advance to have more levels time for instance. I recently did a show at the Gatewayⁱ, "Christmas Carol", and the fee was fantastic, the budget was fantastic, but I had four hours of levels, and it's an *enormous* show! . . . and I was like, how can I do my work in four hours-time? I ended up giving away half of my budget in order to buy eight more [hours] of levels time. And I finished with twelve, but I did that negotiation months in advance because I already know, that if you don't give me enough time I can't do the best work. And so, you have to, yeah fight the system a little bit and

manipulate the system to make sure you get what you need in order to do your work

In the opening of the play, Erdal exposes the long-established and codified theatre performance practices present in his initial lighting instrument choices. Erdal addresses the use of particular instruments, positioning and the materialities of light that many attendants may not be aware that they are responding to. Attendants recognize, either consciously or subconsciously, specific types of theatre light signifying how and where they should be directing their attention, for example the dimming of the house lights at the start of a performance focuses the attendant gaze on the stage. Beginning from the most standardized and ubiquitous of lighting practices; McCandless' theory, the first two instruments illuminated on the stage are front lights at forty-five degree angles, one cool, one warm. From the outset Erdal rejects these, because while they fulfill the basic function of illuminating the performer and making them visible, they lack meaning or what I have described previously as scenoturgic potential.

ERDAL: ... you don't need front lights, you DO NOT need front any front lights, so, I am with you about abolishing "McCandless". Even though it is the safe way to do things.

Dimming these uninspired lighting choices, Erdal brings up a single shinbuster, stage left and stands in the beam of light to instruct the audience about why it is a much more interesting and evocative lighting position – highlighting and sculpting the entire body, casting long shadows, rather than focusing on the actor's face. The light from a shinbuster obstructs and is obstructed by action that takes place around it, like a dancer running offstage into the wings. The shinbuster is a more performative light than those placed overhead on lighting pipes at forty-five degree

angles because of the possible intersection with or disruption of other action on the stage due to its proximity to the movement of the actor. In the play Erdal explains that if he had the choice of only one light for a show, he would choose a shinbuster. Through a basic demonstration of three lighting instruments presented in the first four minutes of the play, the attendant is exposed to three different ways to think about light; a) McCandless' method, b) passive light or light that exists only to illuminate, and c) to light with meaning or scenoturgic potential. This primary knowledge base allows the attendant to view the lighting choices made by Erdal in the duration of the show from a participatory rather than passive position. The attendants are now actively aware that the lighting designer is directly communicating meaning to them, they are in scenoturgic exchange with the designer. Arguably this small piece of information about lighting practice will change how they interpret theatre lighting in future experiences with live performance.

Erdal's choice to stand in a single beam of side light to discuss his life as a single man, an immigrant living in Canada is a poignant scenoturgic choice, because that solo light conveys meaning and concisely represents him—solitary, interesting—off to one side or apart from the norm—and revealing narratives on the stage. Erdal, as the actor is in active scenoturgic exchange with the light source. The action of the narrative informs the choice and style of light source, the light source responds to the needs of the narrative. Erdal tells the attendants, that despite societal convention for a man his age, he has no partner, just as this single light, despite theatrical convention, has no partner. Erdal, as the lighting designer is choosing to tell the story of the single man through a single light. In terms of scenoturgic analysis of the opening sequence of this production analyzing how the scenography is working with the text, the performer and the attendants to communicate information or evoke emotion, Erdal is quite literally informing the attendants that a lighting designer manipulates the performance environment using only light.

The lighting designer provokes or invites a response by altering the materiality of that light either through placement, shape, colour or intensity. Theatre lighting is codified and indicates to the attendant what they should pay attention to.

ERDAL: And I think it explains why I'm there, it's a metaphor for a million things, and then everybody said, oh the name of the show *How to Disappear Completely*, it's a Radiohead song that I loved that I used to play for my Mum and it's about dying.⁶² But then people think, oh how do you show someone disappearing onstage, but I do. I do disappear onstage. You don't see me anymore. Everyone said you should have named it *How Not to Disappear Completely*, because as long as you keep doing the show your mother doesn't disappear. So, the title started having ALL these meanings, that again, I never planned – but that is beauty of creating theatre, is that all these happy accidents happen. And all these things evolve. And I gotta say, all these things we should give more credit to my director Jamie Long and Anita Roschon who dramaturged it. I think they were aware as we started working about all these things I wasn't aware. So as much as I wrote the play, I wrote every word in it – they MADE the play out of my words. They took my words, they changed the order of the play on me until opening night – literally. On opening night, they changed the order of the play on me...

The excerpt above speaks to the collaborative exchange between performance, scenography and dramaturgy – the fundamental components of scenoturgy. With Erdal as the actor, playwright, lighting designer and videographer those performative textual and

⁶² Radiohead. "How to Disappear Completely". *Kid A*. Parlephone Capitol Records. 2000.

scenographic elements were innately connected through his individual, internal creative agency. However, a necessary ingredient to the successful application of those components in telling the story was the dramaturgy and, importantly, a dramaturgical approach that was not static. The dramaturgy of this play was performative and dynamic – engaging with and sculpting the piece through to opening, responding in ongoing scenoturgic exchange with actor, text, scenography and attendants.

Erdal moves in and out of sharing the story of his mother’s journey through illness as he moves in and out of various qualities of light. He directly addresses the how a lighting designer can be logical or illogical in performance. The designer can choose for a light to be representative of another source of light, for example a squared off beam of light from an overhead instrument could be indicative of a skylight – artificial light performing real light. “Or because the illogic of placing a scene in a square of light to begin with makes you [the spectator]⁶³ think that I am going to say something really important” (Erdal 5:43), the designer can make a choice purely for the visual appearance of it, or because the light evokes an emotion. Erdal proceeds to stand in a squared off beam of light, which he has already communicated to the attendants means that he has something important to say. As it happens, this square of light and hard edges is something of an Erdal trademark that he uses repeatedly in his design work -- a lighting language that he repeats;

ERDAL: I had a period where I was really into, everything was hard edged. And you know, geometrical shapes, I was really... it’s like I’ve had different times in life I’ve had different colours that I’ve loved, and then I felt like I’m overdoing certain colour,

⁶³ My parenthesis.

which is like, I had this time where I was just like so interested in all these geometrical shapes. All the time.

Repeating of themes and motifs is a behaviour many artists share, and it could be argued that McCandless' method also evolved out of the discovery that placing certain instruments in the same positions was an effective motif. Erdal notes however, an awareness that a lighting designer can become dependent on colour choices or focus choices that are appealing to them as individuals, but may not necessarily best serve the needs of the performance. The recurring motif of the square beam of light in *HTDC* is effective because its meaning is made explicit to the attendants and Erdal is consistent in its application.

The square beam of light, tells the attendants when Erdal the storyteller has something important to say throughout the play and becomes the place where Erdal is increasingly emotionally vulnerable onstage. When the square beam appears, the attendants know that the stakes of the narrative are going to intensify. For instance, when Erdal shares the incident of receiving a phone call from Israel that his mother was ill, diagnosed with lung cancer and given nine months to live, he does so within the confines of the square. He shares that he flew immediately to Jerusalem to be with his mother, to document the last moments he has with her on film. He records her decline as the cancer takes her hair, limits her mobility and cognition. She is determined not to suffer and as a result he, as her son, had critical decisions to make. Moving out of his square of light, Erdal steps out of the intensity of this profound life experience. He informs the audience that as the lighting designer he controls the pace of the show – he can control environments and time. At this point it becomes clear that Erdal's role as a lighting designer is a metaphor for his role as an attendant to his mother's illness and death and his desire to slow time, control that environment and the final outcomes.

ERDAL: And the lighting thing was sort of – started as just a container, as a device of why I am [sic] on stage and then like I said it became a metaphor that makes the show unique. And then also me running the lights from the stage. At the beginning of the show I am in control of everything and I am the wizard that can show you things, and then I don't run it anymore... and then I don't remember my Mother's face in the rave, and then she doesn't remember me, and then the lights don't go the way that I asked for them in the rave, and then my Mum dies! And I don't have any control anymore. So, it became, like it had so many themes that the lighting thing fit right into it, including the ones of who is in control of this show. Is it me? Is it the stage manager? Is it the audience?

The question of control in a live theatre performance is one that helps in understanding the scenoturgic approach. Ideally, the balance of control in a live performance shifts organically to and from all of the participants as dictated by the demands of scenoturgic exchange which is an agreed upon reciprocity—offer/engage/respond. Scenoturgic exchange demands a moment of engagement to occur between the offer and response. The offer must be caught and held before a response is given. I see this like the difference between playing catch with an object like a ball or a Frisbee and playing tennis or badminton. With 'catch' the receiver holds the object for a moment, and positions or realigns oneself for the return throw or response. Without the 'catch' we are simply batting the offering back toward where it came from without a moment to breathe and 'be' with it before sending our response. (Unless you are Roger Federer or Serena Williams, the opportunity to catch and align before the throw means it is more likely you will hit your intended target than immediate redirection of an object in motion!)

Around the halfway point of the show, the attendants see Erdal turn his video camera on himself allowing his mother to interview him about what he thinks his future will be. In this instant Erdal again changes his role within the performance process. Like all of the previous moments when film footage is projected in the show, he places himself slightly in front of the screen to translate and respond. He sits on his stool lit by a single, open white top front light. It is a purposefully unflattering lighting choice. At this point in the narrative of *HTDC*, Erdal the actor/storyteller is literally no longer in control of the lighting, this action has been taken over by a board operator offstage. He has lost control over the lighting, just as he has no real control over his mother's decline. After engaging with the film footage of his younger self being questioned in this unflattering light, he explains to the attendants that this light choice "flattens me out, it's so obvious, typical, predictable". Prior to this scene, Erdal shares that he has been actively searching for a woman to share his life since his mother died and he recently parted from his high school sweetheart. He describes the kind of partner he is seeking, [in case she is in the room], admitting that he smothers all of the women he becomes involved with in his love. Returning to how he has lit himself for this scene he suggests that he should have lit himself with a strong warm wash from the back and "a little bit of shins, where you can leave the face in shadow and shave off a few years, not to mention making you glow and more mysterious" (Erdal). With his observations, he is again communicating to the attendants how the lighting can alter their perception of him. Through one lighting choice the actor can appear predictable and obvious or another choice can make the actor seem warmer, more mysterious or younger.

Stepping back from the heavier sentiment of the previous scene and reclaiming control of himself and the lighting, Erdal moves on to demonstrate how he would light the various individual characters of his family that he has introduced in the play if they were onstage with him. His sister, Ayana, operates in his narrative as the occasional foil to his strategy for coping

with his mother's death. For Ayana, he would use the high front light, that he is not fond of, not because she is two-dimensional, but because it would soften her hard edges. In one of his rare references to the role of colour in light he notes that he would use the gel "Surprise Pink"⁶⁴ in the light because its lavender tones would bring out her bright red lipstick and hide the shadows under her eyes that are the result of her staying up too late at night. For his stepfather Pedro, he would begin with a low front light to create unease for the attendants [which he demonstrates by bringing one of his shinbusters to centre stage and tilting up toward his own face, distorting it with shadows], but he would follow that with a slow shift to warm top front light in apricot or chocolate "so that at the end of the cue you really like him".⁶⁵ "For my mother" states Erdal,

I would probably light my Mum with a cold diagonal back light, I would want to throw shadows down stage left to make her look powerful and mysterious. It's a light I use when I want to give off a feeling of something religious or holy. It's also good in this case because it would help hide her suffering, you would obscure her face that had changed so much from the beginning of the disease. Her fatigue, her eyes, the facial hair and swelling from all the cortisone... (37:00)

The lighting lecture style that is more prevalent at the beginning of the play has created the platform for the attendants to engage more deeply with Erdal's descriptions of his family via lighting. The scenoturgic exchange has been strengthened because Erdal has awakened the attendants to the idea that light can perform character so by this point in the play it is easier for the attendant to imagine a cold diagonal back light representing someone's mother.

⁶⁴ "Surprise Pink" is #51 in the Roscolux line of light filters, the surprise is that although the gel is pink in colour, the light that is projected through it is lavender.

⁶⁵ Apricot #317 and Chocolate #99 are Roscolux gel colours.

How to Disappear Completely, Itai Erdal's experience of losing his beloved mother to lung cancer is unique because of the hybridity of Erdal's role of lighting designer *and* storyteller. A review in *The Globe and Mail* stated, "What could have been a dark show is driven by light. The professional insights of Erdal, who at times operates the lighting from the stage, are used to great effect to illuminate his story" (Lederman 2011).

Theatre is the most ephemeral of all theatre arts and I am a lighting designer, I work with the most temporary element in the theatre. The work that I do is diffused immediately or fades away slowly, snaps out and is gone. There is no set or costumes or lines rolling around in someone's head. What you see shining on me here will be gone as soon as I press this button [Erdal presses the button, the lights fade to black replaced once again with a single shinbuster]⁶⁶ that was a light cue, it's a new cue every time the lights change. This show has seventy-nine lighting cues and we are currently at 21.5, but it goes quickly from here so you don't have to worry about it..." (26:18)

Typically, lighting designers do not appear onstage, but in this performance, Erdal does.

Reviewer Christopher Hoile notes, "Erdal's discussion of lighting and its effects is fascinating in itself and theatregoers who have never paid much attention to the artistry behind lighting design will gain a new appreciation for it from his show" (2012). Hoile's response echoes Lepage's observation that the audience of the twenty-first century has an evolved narrative vocabulary. They are interacting with live performance from a more technologically urbane perspective. Twenty-first century audiences are accustomed a world of digital entertainment that responds to cues from the user, or moves at a faster pace than in previous generations. Erdal's show can serve as a case study for a modern, scenoturgic approach to theatre where the lighting design is a

⁶⁶ My parentheses.

performer as much as Erdal himself, and where both are interactive with the attendants. In performances like *How to Disappear Completely* the scenography, in this case lighting, is “no longer limited to decorative or metonymic functions but now sits at the center of interactive networks...at once a tool, a system, a process and a generative organism for understanding the complex environment in which we live” (Aronson 19). The prevalent theatrical model has the lighting designer interacting with the creative process at or near the end of the production period. There is little to no opportunity for lighting designers to collaborate with other scenographers, performers, writers or directors which limits how much of their ‘voice’ or vision is present in the outcome. A scenoturgic approach to lighting design education can de-stabilize this existing artistic practice and challenge the “prevailing view” (Goebbels 43) of lighting design training and application which remains firmly rooted the mid-twentieth century standard.

Chapter 4: A Brief (and Incomplete) Genealogical History of Undergraduate

Lighting Design Education in Canada

At the outset of this section it is important to acknowledge my own positioning in relation to this study. I identify as a scenographer/theatre educator. My main interest in theatre lies in scenography, and stage lighting was my entry point into the theatre profession. At some point, early in my theatre training a lighting designer told me a joke that has always stuck in my memory. It was about the evolution of theatre along the lines of the *Book of Genesis*. It began; on the first day God created the theatre, but in the theatre, there was nothing. The space was cold and dark. There were no actors, there were no playwrights, there were no directors, no costumes or music. Empty nothingness. On the second day, God created lighting designers – and there was still nothing – but you could see it! That little piece of humour has stayed with me, because in the lighting design community we consistently reference the genesis of our own practice in relation to those who came before or mentored us. The history of the Anglo-Canadian community of lighting design is largely an oral one. Ask a lighting designer who taught them or who influenced them and they will ‘talk your ear off’. I can trace my own lighting design genealogy in ‘Genesis-esque-style’ through some of the names in this chapter. . . *In the beginning there was Wechsler, Wechsler begat Whitfield and Thomson who begat Rathbun who begat Carolan, who begat Carroll, Wilkinson, Smith, Paulich, Schwesinger, and so on.*⁶⁷ We can map our history through

⁶⁷ Here I name former students of my own. Jesse Carroll and Heidi Wilkinson were among my very first students at Douglas College in 1994. Carroll and I subsequently worked together at the University of Calgary; he is now with the Calgary Philharmonic Orchestra. Heidi Wilkinson is an award-winning set and props designer in Vancouver and faculty at in the Bachelor of Performing Arts program Capilano University. David C. Smith and Derek Paulich were my students and assistants during their BFA and MFA degrees at the University of Calgary. Smith works regularly as a set and lighting designer and is the Production Manager and an instructor in the Theatre Department at the University of Lethbridge. Paulich is the Head of Properties at Alberta Theatre Projects and a sessional instructor at the University of Calgary. Leon

our teachers and mentors—and do. However, as a group we are woefully bad at maintaining and nurturing institutional memory in a concrete, consistent and accessible format. Despite jokes about our genesis, we, particularly in Canada, have done a poor job of documenting lighting design practice and education. Long-time lighting designer and educator Douglas J. Rathbun⁶⁸ suggests that this is an “insidious problem in the theatre business in Canada that becomes a problem for education as well...our theatre business has no institutional memory” (personal communication, 4 May 2018). To that end, the following section is a brief history of lighting design education in English-speaking Canada. I begin with my own history which is part of the story, followed by institutional and oral histories that inform genealogies across the Canadian theatre lighting narrative.

Schwesinger was my student and assistant while completing a BFA in at the University of Calgary. He returned to complete an MFA and is now a freelance designer and the Technical Director at Thompson Rivers University.

⁶⁸ Douglas J. Rathbun is a Canadian lighting designer and was instrumental in creating the Technical Theatre Arts Program at Mount Royal College (now Mount Royal University) in Calgary, Alberta. He served there as the Department Head of the Conservatory of Theatre, Speech, Music and Performance from 1994-2005 and again from 2013-14. The Technical Theatre Arts Program was a liberal-arts based, conservatory style training program for lighting, sound, scenery, properties, scenic art, costumes, production management, technical direction and stage management that ran from 1990-2014 and was closely linked with the Banff Centre for Performing Arts and Shakespeare in the Park. Despite being a well-respected department with healthy enrollment numbers, all of the theatre programming was discontinued at the newly established Mount Royal University in a controversial set of budget cuts initiated by the Conservative Government in Alberta in 2013. For more on these budget cuts see <http://www.calgaryherald.com/news/alberta/arts+programs+fill+budget+shortfall/8251501/story.html>. Rathbun worked to establish CITT (Canadian Institute for Theatre Technology) an offshoot of USITT (United States Institute for Theatre Technology) which is also the Canadian base for OISTAT (The International Organisation of Scenographers, Theatre Architects and Technicians). He served as the second president of CITT from 1994-97 for which he was awarded the Dieter Penzhorn Memorial Prize in 2017.

My theatre education began in a liberal-arts based conservatory program at Mount Royal College in Calgary, in an intensive technical-theatre arts stream⁶⁹ followed by a BFA Drama⁷⁰ in design. My subsequent experiences with both college and university theatre departments, as a student, instructor and guest artist have led me to realize the liberal-arts based conservatory program at Mount Royal College was unique. I did not choose the program based on any knowledge of other programs or standards. It was closest to home. As a conservatory program the emphasis was on the creative and practical aspects of theatre production and nurturing strong ties to the professional industry. The faculty at the time, led by Lynn Dufort⁷¹, had close ties to the Banff Centre, the Southern Alberta Jubilee Auditorium, Alberta Theatre Projects, Shakespeare in the Park and F&D Scene Changes, which became extensions of our classrooms and theatre spaces. The program was designed for students pursuing a career in professional theatre.

As a liberal-arts based conservatory there were also high academic expectations. Students were required to carry a heavy load of theatre courses in conjunction with courses across the humanities and social sciences. Students in the technical stream were required to take acting, voice and dance training. Students in the performance stream were required to take technical courses. All students took theatre history covering the Greeks to modern-day. Professional

⁶⁹ In 1990 the Mount Royal College Conservatory of Theatre and Speech (Calgary, Alberta), entered its second year of offering a two-year Diploma of Arts and Sciences in Technical Theatre with an available double major in Lighting/Sound Design, and Set/Properties Design which I completed in 1992.

⁷⁰ I completed a Bachelor of Fine Arts Drama (Design), University of Calgary, Department of Theatre in 2010.

⁷¹ Lynn Dufort was the Chair of the Mount Royal College Department of Theatre, Speech and Music performance from 1986 to 1995. She founded *Shakespeare in the Park* in Calgary and was awarded the Harry and Martha Cohen Award in 2007 for her long standing contributions to the theatre and arts community in Calgary.

development such as networking and grant-writing rounded out the curriculum. The liberal arts-requirements, in my opinion, offset the disciplinary tunnel-vision that might develop from singular focus on the art form and made it possible to easily transition into the third or in some cases fourth year of a BFA program. In many ways it resembled what an MFA design student might undertake in terms of coursework. Students were also required to participate in two mainstage performance or production roles per semester. It was well-rounded, jam-packed, intense, exhausting, and foundational to my thinking about subsequent theatre education models I have experienced.

My first professional gig after finishing at Mount Royal College (MRC) was as the Assistant to the Lighting Designer for the first Canadian tour of *Phantom of the Opera*. It was an opportunity that was made possible due to Dufort and Rathbun's commitment to making industry connections for the students. For example, the set was built at F&D Scene changes in Calgary, and so Dufort and Rathbun negotiated the Wright Theatre at MRC as a fit-up space for the massive draperies for the show. In exchange, the students were given work as stagehands to assist with the fit-up. Students were given access to the load-in at the Southern Alberta Jubilee Auditorium which allowed time to meet the people responsible for hiring the crew that would tour across the country with the show. A new theatre space at MRC – The Nickle Theatre, was opened that same year. Rathbun campaigned for a state-of-the-art lighting system for the new space, which at the time, was one of the only fully computer-operated control desks in Calgary. I was the first person trained to use it, and it just happened to be similar to the system used for *Phantom of the Opera*. I was hired because I knew how to operate it and would not need to be trained.

As many theatre artists do, I made the crossover into theatre education as a way to stabilize my income (Anderson and Risner 1). When I began to teach lighting and sound in a technical theatre

program at a community college, as is typical for college instructors, I had no formal training as an instructor and had not yet completed my undergraduate degree.⁷² Like many who come to undergraduate teaching as a professional practitioner of a discipline, my pedagogy involved mimicking the teachers that I had found engaging as a student. On this phenomenon Michele Pagen notes, “Most faculty are reluctant to discuss teaching in terms of an academic discipline possibly because they feel that their own academic preparation was lacking in this area” (223). As I became more invested in continuing as a theatre educator as part of my professional work, I wanted to improve my teaching practice. This led me to complete a Master of Arts degree in Arts Education⁷³ and subsequently this doctoral study. My personal views on the principles of learning, practicing and teaching a creative art form in a post-secondary setting have been shaped by more than twenty-five years of career experience in the professional theatre and as a theatre educator.⁷⁴ These views have been further informed by my continued studies in both theatre and education.

4.1 In the Beginning There Was Light

Recorded stage lighting history in Canada, although generally lacking, can be traced back to the days of gaslight in the theatres. We know for example, that Thomas C. Scott was “the gas engineer in charge of the fixtures that lit the stage of the Grand Opera House” in Toronto for

⁷² I first taught in the Stagecraft Department at Douglas College from 1994-98 and then at Mount Royal College in the Conservatory of Theatre and Speech from 1998-99.

⁷³ I completed a Master of Arts Degree in Arts Education at Simon Fraser University in the Faculty of Education (2014).

⁷⁴ I have accumulated over two-hundred theatre credits, (not including road house productions which would bring that number closer to four hundred), since beginning my career in 1990. 2018 credits include; faculty director of Herman Voaden’s *Rocks: A Play of Northern Ontario* produced at the University of the Fraser Valley, lighting design for *Oh What a Beautiful Morning*, produced at the Russian Hall by Fight With a Stick, and lighting design for *Dance at the Vancouver Playhouse*, produced by Arts Umbrella.

more than thirty years, including 1887-1898. (Rodger n.p.) Douglas Rodger notes in the “History of IATSE Local 58” that the Grand Opera House was the first performance venue in Toronto to have gas stage light installed. The information, however, is piecemeal and difficult to find. The history of Canadian lighting designers is not taught in university theatre programs. In most courses of study, theatre included, learning the history of the discipline is considered an important part of the training. The historical part of lighting that might be present in the curriculum is the technological story. Evolution from daylight to candles, candles to gaslight and so on. Details and dates about the invention of resistance dimmers and the tungsten halogen lightbulb. What is noticeably absent is the human story. A semester might feature a single lecture on Adolphe Appia or Josef Svoboda, but what of the Canadian lighting design narrative?

In this section are the voices of seven Canadian lighting designers/instructors who graciously agreed to be interviewed for this study.⁷⁵ The first to be interviewed was Douglas J. Rathbun. Rathbun is a long-time mentor and friend. He chose to be interviewed from Calgary via the ‘chat’ option on Facebook, a forum where we communicate on a regular basis. This particular conversation took place on 4 May 2018. Sholem Dolgoy’s⁷⁶ official interview

⁷⁵ I anticipate that the recordings from these interviews will be archived in the Canadian Theatre Lighting Digital Archive that I plan to develop as part of my ongoing research in Canadian theatre lighting education. See section 4.6.6. “The Need for a Canadian Lighting Design Digital Archive”.

⁷⁶ Sholem Dolgoy is graduate of the National Theatre School, and has been a lighting designer in Canada for over forty years. While primarily a lighting designer in theatre, dance, opera, corporate, exhibit and display, he has experience in many areas of production. He had staff or guest positions at diverse organizations including the National Ballet of Canada, Danish National Ballet, the Shaw Festival, Toronto Free Theatre, and Vancouver Opera. For the Associated Designers of Canada, he helped create the Standards and Working Practices for design communication. Dolgoy is an Associate Professor and has taught lighting design at Ryerson School of Performance since 1980. Dolgoy’s MA thesis at York University’s Interdisciplinary Studies was titled “Forging a Professional Community: The Evolution of the Institutions of English Canadian Theatre – 1955 to 1979”. The research was a catalyst to expand the teaching of arts management at Ryerson. <https://ryersonperformance.ca/about/people/sholem-dolgoy>

occurred via telephone call from Toronto on 10 May 2018, and was audio recorded.⁷⁷ Sholem has also corresponded about this study on several occasions through email. Michael J. Whitfield spoke with me from his home on Salt Spring Island (25 May 2018). In an extensive, and very funny telephone conversation which was also audio recorded, Michael shared his wealth of experience in lighting design in Canada. After some sleuthing I was able to connect with the legendary Gilbert Wechsler who agreed to be interviewed via email. His interview responses are dated 26 July 2018. I am deeply honoured by his participation. Robert Thomson was an amusing interview via Skype from his residence in Montreal on 9 July 2018. His interview was also audio recorded. Carla Orosz and I spoke on 20 July 2018, via telephone call from Saskatoon that was also audio recorded.⁷⁸ Robert and Carla have also communicated with me via email to respond to follow up questions or for clarification. The final interviewee, was Jenn Stephenson.⁷⁹ Stephenson had provided course outlines, directed me to sources and generously provided hard-to-find scholarly articles in her capacity as the Editor-in-Chief of the *Canadian Theatre Review*. We spoke casually about this research at both the CATR Conferences at Queen's University in 2018 and at the University of British Columbia in 2019. The official interview was recorded via telephone from Kingston, Ontario on 18 June 2019. Throughout this section, quotes that come

⁷⁷ The interviews for this section with Sholem Dolgoy, Michael J. Whitfield, Robert Thomson Carla Orosz and Jenn Stephenson were all audio recorded with their consent.

⁷⁸ Carla Orosz is an Associate Professor/Associate Department Head in the Department of Drama at the University of Saskatchewan. She holds a BFA in Theatre Design from the University of Saskatchewan and an MFA in Theatre Design from the University of Victoria where she studied with and was mentored by Michael J. Whitfield

⁷⁹ Dr. Jenn Stephenson is an Associate Dean in the Faculty of Arts and Sciences at Queen's University. She is an award-winning theatre scholar and lighting designer. She is also the Editor-in-Chief of the *Canadian Theatre Review*. Her lighting designs have been seen at the Grand Theatre and the Stratford Festival. Her scholarly research areas of interest include; meta-theatricality, autobiographical performance, "theatre of the real" and performativity in fictional worlds.

directly from the official interview sessions are cited only with the speaker's surname at the start of the quote, like a play text. This side-step of the standard citation convention is purely for the purpose of de-cluttering the text and pulling their experiences to the forefront in this section.

Where the information shared comes from a communication other than the interview, it is cited as "personal communication" followed by the date of the communication. The format of the "personal communication" is either email or telephone. The process of speaking with these members of the lighting design community was immensely enjoyable and useful and I am grateful for their participation and generosity.

Lighting design as we practice it today did not start in Canada until the early 1950s. Prior to this, lighting choices were made by the theatrical master electrician (ME) in consultation with the director. A question as seemingly simple as "who was Canada's first lighting designer?" proves a difficult one for even our most senior community members to answer. In response to this question, Michael J. Whitfield responded,

WHITFIELD: Who is the first Canadian lighting designer? Oooh – um. I think, ok, this is an interesting question because you know, the old formula of lighting used to be often the stage designer or set designer, the director and the stage manager—that used to be the example at Stratford—that was the way that shows often got lit because there was no lighting designer per se, and in the back of my mind, and I can't remember, there was somebody who came into Stratford near the beginning, but working in the Avon Theatre who was, I think, the genuine deal. A lighting designer. And I think he might have also been connected to the National Ballet, but traditionally, even at the Met, it wasn't until Gil [Wechsler] was employed in about 1978 as a resident lighting designer that they had a lighting designer at the

Met. It was all done by the director, set designer and some kind of über head electrician.

Oh, I'm forgetting a chap in Winnipeg who was early on, oh and the ballet, the Winnipeg Ballet. But it was really in the late '60s, early '70s that the people called lighting designers really emerged. I mean you think Jo Mielziner was basically his own lighting designer, because he worked with Klieg and they designed special lamps for him and all kinds of things, but it certainly went well back there. We didn't have—you know, I'm thinking of Hart House Theatre. I don't remember, I worked there fairly early on—'57 to '64, before that I don't remember ever seeing a lighting designer type credit there.

Written documentation about the look and intention of stage light in early Canadian theatre is also limited, but information prior to the 1950s can be determined from some early twentieth century plays. Herman Voaden for example, included detailed descriptions of lighting colour and intensity in scripts like *Symphony: A Drama of Motion and Light for a New Theatre* (1930) and *Rocks: A Play of Northern Ontario* (1932).⁸⁰ The staging requirements that Voaden states for "Symphony" include an "ample and well-equipped stage with exceptional lighting facilities" (Voaden and Warrenner 3). The stage notation in the opening scene of "Rocks" reads, "*The light on MARY dims to 2/8. The amber above and upstage is dimmed out. The red*

⁸⁰ Herman Voaden (1903-1991) was a Canadian playwright born in London, Ontario. An admirer of the work of Edward Gordon Craig and Adolphe Appia, lighting is a prominent component in his best-known works including *Symphony*. He was educated at Queen's University and spent time at Yale University. He was the Head of the English Department of the Central High School of Commerce in Toronto. A dedicated arts lobbyist, Voaden headed the Canadian Arts Council (1945-48), the Canadian Conference of the Arts (1966-68) and the Canadian Guild of Crafts (1968-70). He was made a Member of the Order of Canada in 1974 in recognition of his contribution to the performing arts.

cyclorama lights are lowered to 6/8, the blue and green to 2/8, making a mauve-purple glow”.

To some readers these plentiful lighting notes throughout the text might be a cumbersome nuisance—to a lighting designer, they are like finding a lost recipe for a favourite dish.

Voaden’s understanding of the role of light as a character in performance was influenced by his interest in the work of Edward Gordon Craig and Adolphe Appia. Voaden was ahead of his time in Canada “attempt[ing] to do for drama in the 1930s what the Group of Seven did for painting” (“Drama” n.p.). His progressive attitude toward lighting had the potential to influence the style of Canadian theatre. Voaden’s particular kind of performative perspective was overshadowed in early Canadian lighting practice by the rapidly evolving technology.

The beginning of stage lighting as a course of academic study in Canada is not well documented. It emerged in support of play producing theatre programs. The theatre department at the University of Saskatchewan is recognized as the oldest in Canada. According to historian and professor Dr. Moira Day, lighting became part of their curriculum early on.

We [the University of Saskatchewan] have taught some form of technical or design course right from the start of the department. Between 1945 to 1964, we taught a Theatre Art and Craft course, adding an Advanced Theatre Art and Craft course from 1951-52 on. I’m pretty sure that some form of lighting and lighting design training would have been taught as part of those courses, because the student production teams would have needed it when they worked on the mainstage shows. (personal communication, August 17, 2018)

While lighting as a practical necessity of performance has been a part of theatre education in Canadian universities since the mid-1940s as suggested by Day, a discipline specific pedagogy and curriculum for design has not. “Back when I was a tiny little designer there were no places to go in Canada to learn anything but technology. Remember, Niagara College Theatre Centre was

the FIRST technical theatre school (other than the National) in Canada” (Rathbun).⁸¹ Lighting design as specific program of post-secondary study in Canada began in the 1960s. One of the first programs was at The National Theatre School of Canada (NTS). NTS was opened in 1960 by Michel Saint-Denis, “To meet the needs of Canada’s theatre . . . [to] train its own artists and workers” (ENT-NTS.ca). The Production Program of technical and design courses at NTS launched in 1961. Program graduate Sholem Dolgoy’s account of its educational value is less than glowing.

DOLGOY: First of all, at that point, the theatre school had no pedagogy and jumping back and forth in time, after graduating I was working with Joel Miller who ended up being the director of the acting program for a period of time. And I complained about how there was no pedagogy and he said, “Oh it’s all in Michel Saint-Denis’ book, there is a whole book”. And so, a number of years later I read it. So, Michel Saint-Denis was invited as the leading educator in Western theatre or I think one of the leading educators, and was invited by the committee who was putting the National Theatre School together to start the training part of the school—arrived, didn’t stay long, de-camped to Julliard, probably paid him more money. And he had a book that was a manifesto on teaching theatre. So, a couple of years later I read it. Lots and lots about the training of actors and I think two paragraphs at most about the training of production people. And the only thing he talked about was the ‘central project’, which was a theoretical project that was supposed to help people understand stuff. Zero pedagogy. Zero anything.

⁸¹ Rathbun’s capitals and parentheses.

Throughout the 1960s a number of Canadian universities including the University of Alberta at Calgary⁸², The University of Victoria and the University of Toronto embarked upon courses of study in the technical theatre arts. Michael J. Whitfield was a student in the first theatre course offered at the University of Victoria in 1963. He shared,

WHITFIELD: It was literally the very first ever theatre course offered [at the University of

Victoria] and the great thing about it was because this was sort of a program that was developing even as I was in the midst of it, the opportunities were endless.

But I was a chemistry major, and I joke about it now, and I still think the reason I got into lighting was because they looked at me and said, “Oh you understand this technical stuff”.

The University of Toronto also launched a Theatre Technology Department in 1961. Wally Russell, who is among those cited by the interviewees as a mentor of lighting designers in the 1950s and ‘60s, played a large part in its development. Russell held degrees in Mathematics and Sciences from the University of Toronto which transformed into a career in the performing arts, specifically lighting technology. Russell passed away in 1992, but his colleague Tom Folsom shared the following information from the Wally Russell Foundation,

Born and raised in Toronto, Canada, Wally succumbed to the siren song of the theatre at a very early age. During the nights and weekends of his teen-age years he could usually be found directing and executing the lighting and technical aspects of local theatrical and entertainment productions. A love of astronomy and physics led to degrees in

Mathematics and Science from the University of Toronto and an early career in teaching

⁸² The University of Calgary was a branch of the University of Alberta until 1966 at which time it was made an autonomous institution.

at East York Collegiate in order to allow himself to devote his evenings to the performing arts. He then moved on to establish a theatre technology department in which he taught at the Edward Johnson Building Theatre of the University of Toronto. (personal communication, June 22, 2018)

Like many pioneers of lighting design programs, Russell's primary focus was the technology. He left the education side of lighting not long after starting the program at the University of Toronto. Russell moved onto positions as a theatre equipment consultant and the President of Strand-Century Lighting, first in Canada and then in the United States.

According to graduates like Sholem Dolgoy and Douglas J. Rathbun, the existence of programs like NTS and the Niagara College Theatre Centre provided needed opportunities for students who were interested in the technical side of theatre. The information shared by the interviewees indicates that the lighting design curriculums across Canada leaned toward the technological rather than the creative or performative. From an instructional standpoint, interviewees also describe an independent study situation. On this point, Whitfield shared

WHITFIELD: I don't recall ever having a theatre course in lighting, it was sort of loosely 'here is what's involved and off you go and good luck', but I did just about everything that one could do in the backstage operations, stage management and sound, but I was somewhat self-taught. But I was referencing things like Pilbrow's⁸³ book on lighting and so on. So, I had actually lit an entire season at the University of Victoria. So, when I went to Villanova [as a graduate student] one of the reasons they asked me to go was they wanted someone who could light shows.

Robert Thomson notes a similar experience,

⁸³ Richard Pilbrow. *Stage Lighting*, Studio Vista, 1970.

THOMSON: I started at Ryerson. I did a year as a, what they called at the time a “special design student” and that would have been a two or three-year program, I can’t quite remember. We kind of got to pick and choose what we were studying in terms of our area, so I could choose to be a lighting student. But it quickly became apparent that I knew nothing and the people I was studying with knew less than me. So, I was pretty frustrated.

Rathbun was nearly ten years after Whitfield in his lighting education. When asked who taught him lighting design he responded,

RATHBUN: I did. Really. I took technical theatre at Niagara College Theatre Centre and was taught by a couple of instructors on lighting technology. One was Al Anderson (since passed) who was a fixture in theatre technology in the late ‘60s early ‘70s. Was the TD at Shaw in the early ‘70s and went on to be TD/PM at Waterloo U in the ‘80s... But that was just the technology. While I was still in college, I was sought out to do lighting design at the Sudbury Theatre Centre and did a full season of designs there while in my second year. So, I learned by the seat of my pants and through osmosis from designers like Robert Thomson.

The recurring narrative is that the curriculum in the early lighting design programs covered the mechanics of lighting design, but not the aesthetics or best professional practices. The physical skills associated with hanging, focusing, and circuiting lights was hands-on experiential, often self-directed learning in the lighting programs. The aesthetics were secondary to the practical concerns and often learned outside of the university, through volunteer or internship opportunities. Whitfield agrees,

WHITFIELD: Fifty years ago the teaching of lighting design was a lot more geared to mechanics than it is now or than it can be now, because it had to be.

Whitfield further explained that from the 1950s and well into the 1990s, lighting design was a heavily math dependent practice. Into the late 1990s, student designers were required to learn mathematical equations for calculating beam sections, voltage loads, pipe and arbor weights. This was my experience. We studied and applied Ohm's Law and Pythagorean Theorem. Lighting design was the realm of the mechanically inclined. Many lighting designers of a certain age know how to bypass the fuse in a lighting board using the foil from a cigarette box or chewing gum wrapper in order to get through a show. Those, like Whitfield, Thomson and Rathbun who attended the first lighting design courses may have learned some critical technology in school, but their creative practice came from being thrown into the proverbial fire of professional gigs and mentorship by established lighting designers.

Interviewees who were trained in the 1960s and 1970s identified the same individuals as fundamental influences in their education as professional lighting designers. The examples given describe critical mentorship outside of the university programs. The names of respected professional designers with a proclivity for mentorship arose repeatedly in our conversations – Gil Wechsler, Al Anderson, Wally Russell, and Tom Skelton. Interviewees recounted mentorship experiences at the Stratford Festival, The Canadian Opera Company and the Shaw Festival, touring shows and festivals. These accounts reveal that the university programs were pedagogically subsidized by the professional industry. “I think probably the companies that could afford to hire assistants played as big a part in the sort of training of lighting designers in Canada as the actual formal schools did” (Whitfield).

Mentorship of student designers by professionals in lighting design played, and continues to play a key role in the development of new talent in Canada. Current artist/instructors like Thomson note an ongoing commitment to mentorship outside of the university,

THOMSON: I've been very committed to the idea of training young designers or less

experienced designers—however you want to express that. And I’ve been involved in helping a lot of other lighting designers who’ve been through. And you know at Stratford too. Fourteen years at Stratford, not that I was officially the head of design, although there was talk of that—I’ve certainly worked with a lot of folks there. And then Kevin Lamotte⁸⁴ took over from me and has continued to do the same thing, training young designers.

One of those young designers trained by Whitfield and mentored by Lamotte was Jenn Stephenson. Stephenson’s path, to lighting design, like her teacher Whitfield, was not a straight line. Stephenson began with an extra-curricular interest in theatre while pursuing an undergraduate degree in political science at Western Ontario University. She completed an MFA in design at the University of Victoria but does not have any formal undergraduate training in theatre. Rather her introductory training came exclusively from more senior students doing community.

STEPHENSON: I started doing design as a student just based on this very very informal peer training. The other thing that happened at that that time as part of my training was, because I was at Western, we were very closely associated with the Grand Theatre in London, and the Grand Theatre is an ‘A’ house⁸⁵ and because it was very close to

⁸⁴ Kevin Lamotte is a Siminovitch Award nominated Canadian lighting designer. He is the Director of Lighting for the Shaw Festival and close associations with the National Ballet of Canada and Soulpepper Theatre. He works regularly across the country and is a member of the Associated Designers of Canada. He trained in the theatre program at Niagara College and the New York Studio and Forum of Stage Design.

⁸⁵ An ‘A’ house is a producing theatre that has a resident company and produces its own show season in house. A ‘B’ house is a receiving theatre or a roadhouse that provides theatre and some technical and front of house staff. Some venues are classified as both, producing their own shows, but also renting out the facilities to outside productions.

Stratford we had a lot of Stratford actors and directors at the Grand in the winter. So the caliber of theatre being done at the Grand was very high and I started hanging around. I remember being a second year student watching Michael Whitfield focus and then they needed someone—the lighting designer, Jock Munro⁸⁶ was double booked and so they brought me in to draft his plot while he was in rehearsal for something else and then I did more and more of that kind of thing, ad hoc assistant lighting designer. I worked for Kevin Fraser⁸⁷, Jock Munro, Michael Whitfield—all at the Grand as a student just hanging about. Then after I graduated with my BA in Political Science I went to Banff, summer of '93 as an assistant lighting intern. I worked with Kevin Lamotte and spent eight weeks hanging with Kevin which was amazing! So Kevin was another of my teachers, again in a very one-on-one kind of way. Then I went from Banff to UVic and did an MFA in lighting design. That was the first time I was ever in a lighting class.

Renowned among the earliest mentors is Gil (Gilbert) Wechsler. Mr. Wechsler, now in his eighties, generously agreed to be interviewed via email for this study. Wechsler studied theatre at Rensselaer Polytechnic Institute (1958-61), New York University (1964) and completed an MFA at the Yale University School of Drama in 1967. He is acknowledged by Whitfield, Dolgoy, Rathbun and Thomson as an important mentor of young designers across Canada at the Canadian Opera Company, The National Ballet, Stratford Festival, Theatre Calgary and The Banff Centre among other locations. “Getting in with Gil was my

⁸⁶ Jock Munro is a Canadian lighting designer and an original member of the National Arts Centre English Theatre Company. He has worked in a variety of roles at the NAC including as a stagehand, consultant and artist-in-residence. He has worked extensively throughout regional theatre in Canada. He is a National Theatre School graduate.

⁸⁷ Kevin Fraser is a prolific Canadian lighting designer with over five-hundred designs to his credit. 2017 marked his thirtieth anniversary at the Stratford Festival and his work has been seen across the country in most of the regional theatres. He is a graduate of Ryerson Theatre School.

breakthrough” (Whitfield). When asked about the role of mentorship in his own training Mr. Wechsler suggested that it was critical to his success. Citing a ‘who’s who’, dream list of influences, he shared,

WECHSLER: One is inclined initially to think of a mentor as an older more experienced person guiding a younger novice. And in that instance, it would be Jo Mielziner. I was hired as his assistant while I was still in the graduate program at Yale. Jo said that it took an enormous amount of talent to be successful in the theatre but that it also and equally it took luck. And that when you found yourself in that lucky situation you had to give it two-hundred percent. That is the way you propel yourself forward. When Jo died in 1976 he was working on writing a book about the importance of collaborating in the theatre. Here you get the definition of mentor as an equal skilled and trusted advisor. And that includes the A list of all of the creative people I've had the pleasure of working with over my career; Desmond Heeley, Franco Zeffereilli, John Pierre Ponelle, Sonya Frizelle to name a few. Because I agree with Mr. Mielziner that creativity in the theater is a collaboration and so each new group of artists you are working with offers the potential for a mentor.

Mr. Wechsler noted that a strong mentor models the work ethic necessary for success in the professional theatre,

WECHSLER: The importance of working successfully with a diverse group of people, managing a group of people, having good people skills.

The notion that this primary skillset comes from mentorship rather than classroom curriculum was echoed by all of those interviewed. Dolgoy recalls,

DOLGOY: I hung out and watched Gil Wechsler work at Stratford. I had a job as a third lighting assistant, I think in the spring of '71. And then I got a slightly better offer in Toronto to be the apprentice lighting designer for the Canadian Opera Company for their season, and I called Gil and he said, "Always better to do something more meaningful than not meaningful". But I watched him, in terms of methodology, I watched him cueing I think two shows. And I was the assistant to Wally Russell who was very big in Strand Lighting and moving, helping them into the new micro-processor world. He was definitely a first-generation lighting designer in Canada, and I would watch him stare between Cinemoid forty-one and forty-five, I think it was for ages.

The shared anecdotes about the earlier courses of the 1960s and 70s and then into the early 1990s show a continued dependence on mentors and follow similar plot-lines; a student attending an emerging lighting design program; frustration with a curriculum focused only on the mechanics of the discipline or with no set curriculum at all; summer jobs with festivals like Stratford and Shaw; and/or meeting a professional lighting designer and learning the creative design processes through observing and shadowing the artist; and through those relationships making the connection between the technical skills and the creative process. Whitfield reports that in the early 1970s teaching opportunities for lighting designers surged with the growing number of theatre departments.

WHITFIELD: The opportunities to teach were incredible, being in the States especially, there were various publications that were sort of university systems looking for employees and the thing was that the idea of going out and trying to break into the industry was the obvious option, but the idea of being able to actually go out and teach and by that time share a reasonable background in lighting was everywhere,

and in Canada at the time because everybody was then starting out and creating theatre departments and everyone was grabbing people like myself who had a degree, who had some experience and so on and it was a logical step.

To further understand the first courses and the perceived pedagogical and curricular shortcomings I return to Moira Day's comment that training in lighting stems from the necessities of play production, "the student production teams would have needed it when they worked on the mainstage shows" (personal communication, 17 August 2018). Interviewees agree that the impetus for courses in lighting design was to service on-campus play production. As such, and I would argue that this is a prevailing issue today, the courses were not designed or delivered to the same level of academic rigor as other university courses. Dolgoy shared this example from his experience at the National Theatre School.

DOLGOY: I was appalled. They didn't know how to teach. There was no teaching, and so I knew nothing about theatre, but I knew about teaching and I knew that they weren't teaching particularly well.⁸⁸ It was essentially a model of "Oh, we're doing shows and we're training actors, I guess we need that production stuff so we'd better have some people to do that and they I guess they'd better be students". So, we nominally had classes but we were essentially there as labour to produce the shows.

Rathbun also notes,

RATHBUN: It is unfortunate but it happens all the time. I think it is a cultural thing. . . theatre education culture. . . starting in high school with teachers being acting school students with no tech . . . coming into a school with lights and sound and needing

⁸⁸ Both of Sholem Dolgoy's parents were teachers.

a “tech” . . . so they bring on a stream with “tech” and hand it to the best-boy geek in the senior class. . . same with college/conservatory. . . college program needs tech support so create a tech stream and get those students to do your tech work while being “taught” by the staff member TD. Insidious.

On this Orosz shares,

OROSZ: I notice it just watching at my children’s school how we regard the actors compared to the students who are doing the tech, I think it starts at a lower level than we think.

A pedagogy where one course of study, in this case lighting, exists only to support another, such as acting, is problematic and has become systemic. Carla Orosz, an Assistant Professor and the Associate Department Chair at the University of Saskatchewan acknowledges that these attitudes are still in play,

OROSZ: I pray for the day that people are taught that the director and designers are co-creators, which in my undergrad training is not how I was taught. I was taught that the director is at the top, and it wasn’t until going to UVic and seeing how it could be where we could be collaborators. Here in Saskatoon we are always a little bit behind and I saw that in the city here when I came back and now I was like, Oh no no no, I have just as equal a voice as you do.

Given the frustrations expressed by interviewees about the early lighting design courses, it is not surprising that some attempted to address perceived pedagogical and curricular shortcomings when they—the students—became the instructors. On correcting some of these curricular gaps, Rathbun recalls that he made a point of bringing his own mentors into the classroom,

RATHBUN: Robert [Thomson] was the head of lighting design at Shaw while I was teaching

at Niagara and I spent a summer shadowing him and then brought him in to my classes. Wonderful guy. I was so frustrated as a student and having to learn by making AWFUL mistakes in front of audiences at PRO theatres. . . that I was adamant that my students would get SOME of the process. . . I remember asking Rob [Thomson] to speak to my class about the creative part of lighting design. . . what happens between reading the script the first time and putting your pencil down. . . you know what he said? He said "I percolate" and I had an hour to fill in the class. I "expanded" Rob's "percolate" to an entire half course eventually.⁸⁹ I forgot to mention Jeffrey Dallas⁹⁰ who was the co-head of lighting design with Rob Thomson at Shaw the summer of 1984 when I spent the summer shadowing them both. Jeff was a big influence on me and my design and my curriculum. Colourful guy. He passed in 1989.

A reason that the first courses were lacking, as suggested by the interviewees, was that those instructing did not know how to teach. This is not an extraordinary detail since lighting design courses were new curricular territory. Some interviewees report that they did not fare much better in their own early attempts at teaching as the second generation of instructors in lighting design. On the question of preparedness or qualification to teach lighting design at a university, the responses are mixed, falling on the side of less prepared. Robert Thomson first co-

⁸⁹ Rathbun's capitals.

⁹⁰ Jeffrey Dallas was Canadian lighting designer and former Head of Lighting Design at the Shaw Festival. He designed the lighting for more than two-hundred shows and has been named as a mentor and friend by some of the interviewees. The American-born designer tragically died of AIDS on 25 September 1989 at the age of 42. The Shaw Festival established the Jeffrey Dallas Lighting Assistantship in his memory. Some of his design work is archived at the University of Guelph. In addition to the Shaw Festival, Dallas worked across Canada at Theatre Passe Muraille, Tarragon Theatre, Alberta Theatre Projects, Edmonton Opera, Pacific Opera and the Vancouver Playhouse.

taught with Sholem Dolgoy at Ryerson, but shared that his early experiences were not encouraging.

THOMSON: I knew that I didn't really know enough to be teaching so I didn't want to be a part of that...most of my teaching has been, you know, I taught some tech students at Sheridan, guest speaker gigs and more regular teaching. And when I came to Montreal I started to do some teaching at NTS, but not much. Part of my problem is of course, here's the declaration, I don't have a degree because I never really studied at a place that was a degree granting one. I've been given Broadway equivalence in the U.S. for my career here at Carnegie Mellon University and they've acknowledged that I would have an equivalent of an undergrad degree in terms of being able to apply [for graduate studies], but most Canadian universities wouldn't look at me.

The interviewees are split on what drew them to teaching. Some, like Dolgoy and Orosz were inspired to teach early in their careers, for some like Whitfield it was an opportunity offered and taken—for some like Stephenson, Thomson and Rathbun, it was a stop-gap gig that developed into more.

STEPHENSON: I went to Memorial [university], which was my first real teaching experience as a professor. I think partly because I had nothing else to do. I was filling a gap. I had graduated from UVic that spring, then I was in Stratford in the summer of '95 and I knew that I was going back to Stratford in February of '96. I had four months to kill and so when Memorial offered me the contract, I went. It's funny to think back—they were offering a tenure-track position, but I was like twelve

years-old! No, really I was twenty-three and I didn't want that. I was going back to Stratford.

Orosz, who planned to teach as part of her practice describes a deliberate strategy of learning to teach through observation. She relied on a solid foundation of mentors on her path to teaching lighting design, beginning with Stephen Wade at the University of Saskatoon as an undergraduate and then as an MFA student at the University of Victoria. Knowing that her career plan was to teach, her way into becoming an educator was to purposely observe her own teacher's methods.

OROSZ: Once I got to UVic I told Allan [Stitchbury]⁹¹ that I wanted to sit in every class that I can because I just want to see how people teach. I want to know how to give information the best that I can. . .which kept me really busy just trying to go to every class that I could at UVic whether it was a theatre history class or one of Mary's [Kerr]⁹² aesthetics classes, or the props class or costume history, which then I taught a couple of costume history classes just because I had that background from studying fashion design. So now I have this desire – I love to

⁹¹ Allan Stitchbury is a Professor Emeritus at the Department of Theatre at the University of Victoria. He holds a BFA from the University of Alberta. He is a set, lighting and costume designer for theatre and opera. His work has been seen across Canada in regional theatre and at both the Shaw and Stratford Festivals and internationally. Stitchbury is a past president of the Associated Designers of Canada and former Commissioner General for the Canadian exhibition at the Prague Quadrennial.

⁹² Mary Kerr is an award winning Canadian set and costume designer and Professor in the Department of Theatre at the University of Victoria. Her distinguished career has taken her across Canada and abroad designing for theatre, opera, television and film. She is featured in Natalie Rewa's *Scenography in Canada*. In 2011 Kerr was awarded the Doctor of Canon Law, Honoris Causa at St. John's College, University of Manitoba, and Winnipeg.

learn. I don't have – I get told by my own faculty that I don't have that drive where I can't wait to climb to the top. . . I kind of couldn't care less, I just like to see the student's success and when my design students call and say "I just got a call from Stratford Theatre", I'm like "THAT'S AWESOME!"

Orosz came to theatre through the fashion industry, having been a teenage fashion model in her hometown of Saskatoon. She completed a program in fashion design and merchandising at Lethbridge Community College which subsequently led her to undergraduate studies in theatre.

OROSZ: I think I always wanted to teach. I took two years of acting and it was Stephen Wade⁹³ who said "what are you doing? You're a designer Carla. The way you think and – you need to quit playing with those people and start doing what you're supposed to do. So then I started studying with him and I spent a year doing that and I thought, I can teach this so much better the way that I think it could be done and I was like, I'm going to be a teacher. I can work in the theatre and I can teach it . . . I started talking to classmates about what we wished the course could be and I remember sitting in our administrator's office in year three after entering into the design stuff and she said "well, what are you going to do with your future?" because I was a mature student but the time and I said, "You

⁹³ Stephen Wade teaches a range of production and design courses at the University of Saskatoon. He holds an MFA from the University of Alberta. He is active as the resident set and lighting designer at the university, but is also active in the professional theatre including Persephone Theatre and fourteen seasons with The Shakespeare Theatre on the Saskatchewan Festival. Wade is a member of the Associated Designers of Canada and the Canadian Institute for Theatre Technology.

know, I think I'm going to have this job, and she laughed at me like "what?" and |
now I do!"

The option to do both theatre *and* teach as a path instead of theatre or teach was also noted by Jenn Stephenson.

STEPHENSON: When I got hired at Queen's I thought of myself at the time, and still do think of myself as an academic. I wrote a philosophical thesis—phenomenology. But what I discovered, the job posting at Queen's said, 'teach theory and dramatic literature *and* practical expertise in design. Basically the job said 'Jenn Stephenson'—and so that was an *and* that got me hired and even now, it's the funniest thing. I will position myself in terms of my scholarly output and guaranteed one of my colleagues will say 'and Jenn is a lighting designer'.

Most of the interviewees shared that teaching lighting design offered a stable personal life that can be difficult to manage in the professional theatre. Whitfield notes that a teaching position offered an opportunity to be in the same city with his wife, Susan Benson;⁹⁴ who has also had a significant visual art and theatre design career and greatly impacted Canadian theatre in her own right. Motherhood played a key role for Orosz and Stephenson in choosing the academic theatre path over professional theatre path due to the more predictable schedule and less travel (also a factor that played a role in my own path), and marriage and parenthood were a draw to teaching

⁹⁴ Susan Benson, born in Kent, England, is a Canadian painter and stage designer. Her talent as a painter informs her design for the theatre, ballet and opera. She was elected to the Royal Academy of Arts in 1986 and her work has been featured in the Portrait Gallery of Canada, The National Arts Centre, and the Canadian Museum of Civilization.

for Rathbun who is married to Canadian playwright and author Winn Bray.⁹⁵

Regardless of their path into teaching, the interviewees agree that teaching lighting design can be a complicated task. Whitfield affirms that lighting design is a subject that is inherently difficult to teach,

WHITFIELD: Lighting is so bloody hard to teach in one sense because it's ephemeral and in the other sense I think that the best thing a teacher can have to offer students is that combination of you know, learned expertise, but also the experience. Because if somebody says, "I got a problem with my director, blah, blah, blah", I can say "Yeah I had that problem with so and so and here's how we worked it out".

Rather than sort of saying, "Oh you might want to read the Pilbrow book and see if you can figure it out".

The ideal combination of a solid grounding in professional practice and the skills to break down knowledge and communicate it in teachable components is not a given. Overall, the interviewee consensus is that the ideal lighting design instructor is an individual with significant professional experience *and* a natural talent for teaching. The consensus also recognizes that this combination is difficult to find.

RATHUBUN: The academics usually don't have a clue. . . unless they've been attracted from the profession to a university. . . like Michael [Whitfield]. I would hang on Michael's every word and usually . . . like Rob [Thomson]. . . the pros have no

⁹⁵ Winn Bray is a Canadian playwright based in Calgary. Her plays have been performed at Mount Royal College, Lunchbox Theatre, The Brave New Plays Festival. Her most recent play *That Men May Fly* is a history of the World War II Number Seven Special Flying Training School in Fort MacLeod, Alberta. It was commissioned and premiered at the Empress Theatre in Fort MacLeod in 2013.

idea how to teach or explain” (Rathbun).

Thomson shares that finding one’s way as an instructor of lighting design can be further complicated by a lack of collegiality in the academic theatre versus professional theatre.

THOMSON: Unlike lighting designers, I find that teachers are crap at sharing with each other.

The idea of somebody taking over a course that you were doing for a couple of years, and leaving anything more than a syllabus? Not a chance. It is so tight—and yet if I had a house position I was passing on to somebody else I’d give them everything. I’d want them to have what I have and then help them to be fully empowered to do something different.

Stephenson shares that when you teach lighting design, but do not teach it consistently from year to year, keeping up with the new technologies is a challenge.

STEPHENSON: I did the lighting design for one of our majors in the fall which was fun and I still know how to do that. But, there is a lot that I don’t know now about the new technology because I do [design] so rarely, so I can teach the core principles, but I’m losing my touch with the tech. There are so many things that I just don’t know because I don’t touch them. I don’t the lighting board. I’m trusting the board op to interpret what I’m saying. I don’t know ‘press this key, then that key’ which I used to, but I don’t know. It’s funny.

The interviewees all indicated that employment is the goal that they have for their students and that it is important that the students come away knowing something about actually working in the industry. On this Orosz shares,

OROSZ: I spend a day going through Equity and IATSE and CTA agreements and the business of ‘I want you all employed’ and I want them to understand what it means when they are signing a contract, what you should bring to an IATSE call and what’s expected of them.

In all of the oral histories shared, mentorship is the recurring theme. This mentorship, is presented as a critical part of the learning and the transition into a professional theatre career. Mentorship is presented in a variety of forms; peer teaching/learning where junior students learn from more senior students, on-campus mentorship by instructors who maintain professional relationships outside of the university, and mentorship of students by and in the professional industry. It is a model that has persevered from the earliest programs and arguably continues in all of these forms in lighting design education today.

4.2 The Nodes: Noted Lighting Design Departments in Canadian Universities

This study makes use of oral histories as a method to gather qualitative data from the lighting design community of practice (Lave and Wenger 1999) in order to piece together a portion of our collective history in education and training. This is a twentieth-century approach to a mostly twentieth century-story. Layering connectivism with oral histories provides a bridge into twenty-first century methods of knowledge construction. Like oral histories, connectivism can be a method for storytelling. (Llewellyn et al. 2016) Through Siemens’ model of connectivism, information is shared between individuals for the purpose of distributed learning. Oral histories fulfill a similar function—the primary difference that I see is that one is perceived as a fundamentally analogue process and the other as purely digital. To consider that there is a disconnect between oral histories and connectivism is a missed opportunity to marry two useful historical research tools that when combined can create “a generative repository for [. . .]

historical narratives” (Gallagher and Wallace 49). As a digital pedagogy for learning, at its root, connectivism is also a multimedia mode “for conducting and disseminating oral history” (Anderson and Hamilton 142). Furthermore, connectivism can operate as a tool for analyzing non-digital, yet interconnected networks of learning. Stephen Downes describes this as “non-web connectivism” (“Connectivism and Connective Knowledge” 132), he uses the assembly line as an analogy,

The assembly line can and should be considered a primitive form of connectivism. It embodies knowledge required to build a complex piece of machinery, like a car. No individual member of the assembly line knows everything about the product. And it is based on a mechanism of communication, partly symbolic (through instructions and messages) and partly mechanical (as the cars move through the line). (132)⁹⁶

Downes makes the important concession however, that what truly makes a knowledge network connectivist in structure is that it can “adapt and learn” (132).

In this section I suggest that undergraduate lighting design education in Canada is essentially a non-web connectivist structure that is best imagined beginning with Downes’ model of a “community of communities” network within which are nodes of undergraduate lighting design education in Canada. Downes proposes,

Nodes are highly connected in clusters. A cluster is defined simply within a set of nodes with multiple mutual connections. Nodes also connect—on a less frequent basis—to nodes outside of the cluster. Indeed (to take this a step further) nodes typically belong to multiple clusters. They may be more or less connected to some clusters. (121)⁹⁷

⁹⁶ Downes’ parentheses.

⁹⁷ Downes’ parentheses.

Downes also discusses the existence of the “supernode” (120) which is capable of handling more connections than other nodes. I suggest that in addition to the “supernode” is the “persistent node”, one that has existed longer or otherwise proven to be more influential than the other nodes. This section identifies ‘persistent nodes’ in Canadian undergraduate lighting design education.

In *Connectivism: A Learning Theory*. . . Siemens writes,

[T]he placing of value on certain nodes over others is a reality. Nodes that successfully acquire greater profile will be more successful at acquiring additional connections. . . Nodes (can be fields, ideas, communities) that specialize and gain recognition for their expertise have greater chances of recognition, thus resulting in cross-pollination of learning communities. (n.p.)⁹⁸

By the mid 1980s lighting design developed a foothold in the undergraduate programs of Canadian university theatre departments with specific schools emerging as persistent nodes for the disciplinary specialty. In an online connectivist learning environment, each node is generated by a human content creator – this may be a student or a teacher. In each of these universities is a key-educator who is fundamentally the originating content creator of the lighting curriculum. The content they create in their respective programs is informed by their own experience in lighting design in Canada and as educators and either direct or indirect feedback from students. At this time, there are four universities which could be classified as persistent nodes for lighting design knowledge construction in English-speaking Canada. These persistent nodes share some common traits. All four have been anchored by a consistent instructor since at least 1986. All four offer undergraduate courses and graduate studies in theatre design. These lighting design

⁹⁸ Siemens’ parentheses.

instructors and their associated schools are; Lee Livingstone (MFA)—The University of Alberta, Sholem Dolgoy (MA)—Ryerson University, Robert Gardiner (MFA)—The University of British Columbia, and Michael J. Whitfield (MFA)—The University of Victoria. Livingstone and Whitfield are both graduates of the programs with which they are most closely associated. Dolgoy, Gardiner and Livingstone have all served in leadership positions within their respective departments.

The purpose of focusing on these four instructors and schools is that they form a large portion of the present-day connected network in English-speaking Canada of lighting designers, and lighting design educators. Having been the persistent nodes in lighting design at their associated institutions for more than thirty years suggests that they have significantly influenced the “community of lighting design communities”; as such there are established methods and approaches being used in the industry and taught throughout Canada that can be directly traced through the networks back to these schools, much like one can trace a genealogy. Moving outward from the persistent nodes are networked connections to other schools and theatre companies. For example, from the persistent node of Ryerson are student links to Stratford and the Canadian Opera Company. These two networks are supported through alumni ties to the company that nurture apprenticeships and mentoring opportunities. Similar networked links exist from the University of Victoria to Stratford through Michael J. Whitfield who has been designing at Stratford since 1974 and who has supported the mentorship there of students like Jenn Stephenson. Stephenson is also networked through the Banff Centre where she mentored under Kevin Lamotte is then linked to the Shaw Festival; she then goes on to become a newer, well-connected node for lighting design at Queen’s University, which creates a potential new generation of student nodes creating a national web of a connected lighting design community. Or, in what would be a classic, digital connectivist example, we have Michael Kruse who

originates from the Ryerson persistent node, but through his podcast “The Title Block” is effectively creating an influential, non-academic based node. “The Title Block” is becoming an incredibly important connection that links a significant number of Canadian scenographers, university, college and professional programs and theatre companies.

4.3 Lee Livingstone – The University of Alberta

The University of Alberta (U of A) is home to lighting design educator Lee Livingstone.⁹⁹ There she completed both her BFA (1971) and MFA (1973) in Theatre Design. The majority of her teaching career has been at U of A save for 1973-75 when she taught at the University of San Jose. She began as a sessional faculty member at U of A in 1975. Livingstone is an anomaly in lighting design education in Canada where the majority of the professoriate is male. While correlation is not causation, I believe that gender is a contributing factor in Livingstone’s significant influence on lighting design in Canada. Of the one-hundred and thirty-nine people listed as lighting designers by the Associated Designers of Canada, thirty-eight are women. Of the thirty-eight women, thirteen listed their alma-mater. Ten of those thirteen named U of A (compared to one each from UBC, Ryerson and UVic). These ten women are students of Lee Livingstone. She has the highest number of former students on the ADC lighting design list citing their alma mater overall.¹⁰⁰ The ADC can also be identified a “cluster”, which can be simply defined as “a set of nodes with multiple mutual connections” (“Connectivism and

⁹⁹ Lee Livingstone was invited to participate in this research. Despite several attempts at contact, no response was received.

¹⁰⁰ Each of the universities that I have identified as ‘persistent nodes’, are listed as the alma mater of currently represented lighting design members of the Associated Designers of Canada as follows: University of Alberta (14), University of British Columbia (8), Ryerson University (6), University of Victoria (3).

Connective Knowledge 121”). While these numbers are anecdotal and have not been researched further, they do show institutional loyalty and in that regard, are quite telling.

Livingstone’s legacy is alive and well in Canada’s academic theatre. Her former students currently teaching across Canada¹⁰¹ also outnumber those of her persistent node peers. This is only a present-day snapshot of Livingstone’s reach in the theatre community. While her own design practice outside of the university is firmly located in Edmonton and Calgary, forty-five years-worth of her students can be found working in professional theatre in every province.

There is very little written about Livingstone and seemingly nothing written by her either, which is a shame given the breadth of her teaching influence on Canadian theatre. She is featured on a 1997 CD-ROM, presenting the design section of a project developed for the Open University BBC’s Multimedia Shakespeare Research Project. An article written about this project includes a very brief section about Livingstone’s recorded masterclass on the basics of stage light. The article shares the following quote from Livingstone that perhaps provides a glimpse of her personality. “A designer can neutralize a character if she wants to; actors have to be friendly to designers” (Livingstone quoted by Goodman et al., 36). Interestingly she is something of an enigma among her cohort. Those interviewed do not know her well or at all, “I just know the name” (Dolgoy).

¹⁰¹ Students of Lee Livingstone currently teaching in Canadian universities include: Robin Ayles (Grant McEwan University), April Viczko and John Scott Reid (University of Calgary), Renate Pohl (Memorial University), Patrick duWors (University of Victoria), Snezana Pesic (University of Toronto), and Roger Schultz (University of Lethbridge).

4.4 Sholem Dolgoy – Ryerson University

Ryerson University is the most persistent node for lighting design in central English-speaking Canada outside of the National Theatre School. York University and the University of Toronto also have strong programs, but based on consistency of instruction, program longevity and student success, Ryerson appears to top the list in Ontario. The Ryerson School of Performance (previously the School of Theatre) has long established ties with The Stratford Festival, The Shaw Festival and the Canadian Opera Company, each a “cluster” in their own right. Sholem Dolgoy has taught lighting design there since 1980. Ryerson’s School of Performance bills itself as “Canada’s premiere university-based conservatory program for acting, dance and technical production” (<https://ryersonperformance.ca/about/message-chair>). I asked Dolgoy if there is a particular school that he sees as “*the*” node. His answer was diplomatic,

I don’t know if I can objectively answer that question because I’ve lived in my own little universe. Alan Brodie assisted me—as an example of someone from Vancouver. Ian Arnold, both had huge skills. Obviously, there is good training in Vancouver. I’ve seen designers across the country. When I was in Edmonton . . . you know, there is good skill across the country I think. I feel that I’m in the top tier. . . that’s what I feel. (Dolgoy)

I pressed Dolgoy for some further clarification, asking who he sees as his contemporaries on that top tier. He replied,

For teaching? I don’t know. I’ve been thinking about that actually. I haven’t really connected with people, I know that. I have a picture that Robert Gardiner teaches lighting, but I’m not one hundred percent certain. He and I have chatted. I thought at one point I might do my MA out there. I know the people at York, Peter McKinnon, but he stopped teaching lighting when he stopped doing lighting because he thought that was

inappropriate. Liz Asselstine, Paul Court. And I've bumped into some people at CITT¹⁰², but I haven't gone out of my way to network and that's probably not a good thing.

(Dolgoy)

I agree with Dolgoy's suggestion that a lack of networking between schools and instructors is "probably not a good thing". Aside from the geographic distances between the nodes, (which may have been a constraint prior to mass adoption of email in the 1990s), silo-ing of departments is not beneficial for pedagogical and curricular growth. This lack of networking or a blocked network does not facilitate growth outside of the "Ryerson cluster" for example, and can limit what the other "communities in the community" can learn from them.

4.5 Robert Gardiner – The University of British Columbia

Robert Gardiner has been teaching at the University of British Columbia since 1986. He is an American with degrees from the California State Sacramento (BFA) and the University of Washington (MFA). More than his 'node anchor' peers, Gardiner has excelled at obtaining funding to support his on-campus scenographic research. He has been funded by high profile granting bodies including three grants from Social Sciences Humanities Research Council of Canada (SSHRC), the BC Innovation Fund, BC Arts Council, and Canada Council for the Arts. Like his teaching peers, Gardiner has as long list of truly accomplished lighting designers to his credit including Siminovitch-nominated Alan Brodie.¹⁰³

¹⁰² Canadian Institute for Theatre Technology.

¹⁰³ Alan Brodie (MFA) is a lighting designer, shortlisted for the Siminovitch Prize (2012). Brodie resides in Vancouver, BC. He has worked across Canada and internationally since 1989, receiving numerous awards and rave reviews for his work. He has taught lighting periodically at various schools including UBC, Langara College (Studio 58), The Banff Centre and the National Theatre School. He holds a BFA from the UBC Department of Theatre and Film in design and completed an MFA in directing at the University of Victoria in 2016.

On paper, Gardiner's career has been more traditionally research-oriented than his peers.¹⁰⁴ For scenographers, research can be the double-edged sword of a stable academic position. The presentation of our research is often the live production performance. Although this is evolving, some university tenure committees do/did not view design for on-campus production in the same light as off-campus work.¹⁰⁵ The result of this attitude was that some scenography instructors are/were compelled to take design contracts off-campus leaving the instruction of some courses in the hands of graduate student teaching assistants, nodes with potentially less influence. This was my experience as a UBC Theatre Department undergrad in 1993. I had come from an intensive conservatory experience at Mount Royal College looking to fine tune my skills under the tutelage of a Whitfield or a Gardiner only to be instructed by a teaching assistant who had fewer skills and less experience than I had. I was essentially in the same position of my predecessors, being taught by someone ill-equipped to teach what I desperately wanted to learn. Out of frustration I left UBC. A few years ago, I recounted my experience to Gardiner over coffee. He confided that I had arrived at UBC during a departmental low-point further punctuated by another tenure-track professor who was determined that his legacy would be transitioning Canadian theatre design practice to the metric-system. He failed.

Gardiner has played a large role in developing the West Coast as a node for lighting design education and indeed a very strong, well-rounded production stream at both the undergraduate and graduate levels. UBC has been essential in nurturing the theatre and film

¹⁰⁴ A review of the curricula vitarum of the four instructors of the 'persistent node' programs indicates Robert Gardiner's career has included significantly more funded scholarly-research than that of his 'node' peers.

¹⁰⁵ I have been the chair of the working group to establish a system of peer-review for on-campus production through the Canadian Association of Theatre Research since 2016 and a member of this group since 2013.

communities in Vancouver and British Columbia at large. Working both sides of the forty-ninth parallel, Gardiner is decidedly ‘West Coast’ with credits stretching north along the seaboard from Sacramento, California. Like his persistent node peers, he also has former students teaching various aspects of lighting including David Vivian at Brock University and Susann Hudson at Acadia University.

4.6 Michael J. Whitfield – The University of Victoria

Michael J. Whitfield is the senior statesmen of lighting design in Canada. While his node anchor peers have gone the tenured professor route, Whitfield has remained adjunct, by choice. This makes his particular persistent node, The University of Victoria, unique. He is unencumbered by the constraints of a tenured position. A free agent. Strong and continuing ties to a multitude of “clusters” in the professional community that are leveraged to prop-up and support the emerging careers of his students are the hallmark of Whitfield’s decades long influence. He shared,

If I were running a department, a theatre department and I could lure somebody into a program to teach who was, you know active ‘out there’, that’s where I’d be inclined to go, specifically with lighting... I don’t fully understand the departments that would say ‘we want a PhD in lighting to come into the program’ as opposed to say a good solid MA or MFA plus five years of experience. (personal communication, 25 May 2018)

Any university would be lucky to count Whitfield in their tenured ranks, but the professional theatre has had the stronger pull. Natalie Rewa comments that Whitfield’s lighting design is “Initially conceived outside the conventions of lighting design—that is, eschewing highly individualized lighting design for each show” (“Introduction: Critical Perspectives” xvii). Whitfield has forged his own individual path in both professional and academic theatre.

I asked Whitfield about his own students and he rattled off a list of some of Canada's best-known lighting designers including Bonnie Beecher, Harry Frehner and Jenn Stephenson. The education and professional sides of the equation have greatly benefitted from his influence. His success and longevity in theatre is well-earned. He is fondly noted as a professional mentor, an excellent in-class teacher, and one of the most pleasant people in Canadian theatre to work with or learn from.

It is important to note that these four instructors have navigated three substantial technological transitions since they began teaching lighting design. The first major transition was from analogue control systems to computerized control and DMX 512. Second is the transition from manual drafting of lighting plots to computer-aided drafting (CAD). The third is the ongoing transition from analogue incandescent instruments to LED digital lighting fixtures. Salzer notes "As a teacher, I view budget constraints as a minor consideration compared to the aesthetic paradigm shifts created by computer design" (148). I will not discuss the technology or function of any of these transitions here, but I bring them up for two reasons. Firstly, to tie back to my previous observation that advances in technology have been and remain a driving determinant in lighting design curriculum and pedagogy. Secondly, that lighting design education has evolved in ways that were difficult to imagine when it first took hold in Canada in the 1960s.

In the beginning, there was the brush and the pencil. For hundreds of years, from the Renaissance to the 1960s, design ideas were communicated by two-dimensional drawings. For thirty years from the 1960s to 1990s, model making became popular. Now we are in the age of the computer, a time when changes seem to happen by the minute. Keeping up and learning new techniques can be a full-time job. It was not always so. ("Teaching Design in a World" 146)

The only certainty is that theatre technology will continue to evolve and this evolution affects how we teach students to create, interpret and experience live performance. Paul Court expressed the complication in bringing new technology into scenography very well,

The challenge of introducing new technology into an art form is to master the technology to such an extent that it becomes an artistic tool rather than an intrusive technological artefact. Directors, designers and technicians must all reach a level of fluency before the technology can really serve the show. If this level of proficiency is not reached, the show is likely to be about the technology and the audience will go home whistling the latest digital projector. (42)

The continuous demand to develop that technological fluency to a level that one can effectively teach it is a real challenge in lighting design education. In order to keep pace with the ever-evolving technology it is necessary to continue to evaluate not only who is teaching lighting design but also; what they teach, why they teach it, the efficacy of their teaching, and how successfully the students can apply what has been taught.

4.7 The Institutions and the Instructors

Fifty-three colleges and universities in Canada were reviewed to see what course they offered in drama or theatre topics including lighting design.¹⁰⁶ Of these fifty-three, twenty-seven offer courses with some level of lighting design content.¹⁰⁷ This content may be solely focused on lighting design or may integrate lighting design with other scenographic practices such as sound, projections or scenery. Of the twenty-seven, academic calendar listed courses, five have

¹⁰⁶ See Appendix A: List of Canadian Undergraduate Universities Reviewed Regarding Undergraduate Courses in Theatre, Performance or Lighting Design

¹⁰⁷ See Appendix B: List of Canadian Universities Offering Undergraduate Course Content in Lighting Design According to Online Course Calendars (as of January 2018)

not been taught regularly for five or more years although they remain listed in the academic calendars.¹⁰⁸

Qualitative data gathered as part of the curriculum review for this study has revealed some important data about the present corps of lighting design instructors in English-speaking Canada. This data is extracted from the instructor contact information of the course outlines and on the websites for the departments reviewed in this study. The undergraduate lighting design instructors typically fall into one or two of three categories that I have identified and named: theorist/specialist, practicing artist, and generalist. For the sake of this review, the ‘theorist/specialist’s focus is the academic theatre, the majority of their lighting design knowledge and experience is theoretical or limited to a practice within the university, this person typically holds an MFA, occasionally a PhD. The ‘practicing artist’ is an individual with an active and significant professional design career outside of the university who teaches on a contract or sessional basis, this person may have either a BFA or MFA. The ‘generalist’ is a part-time or full-time staff member of the theatre department who takes on occasional teaching duties either as a sessional or as part of their employment contract, this person typically has a minimum of five years of professional experience and/or a BFA.¹⁰⁹ From the data available at the time of this review, the academic ranking of the present corps of lighting design instructors in Canada are distributed as follows; thirteen sessional, five tenure-track, and six tenured. The sessional faculty fall primarily under practicing artist and generalist categories. All of the instructors

¹⁰⁸ Five universities calendars listing lighting design courses (2018) that are inactive are: Queen’s University, Trinity Western University, Mount Allison University, and Redeemer University College.

¹⁰⁹ The data that supports my classifications in this section was drawn from the review of lighting design programs in Canada and the staff and faculty information available in the online biographies of the lighting design instructors posted by the various departments and posted course details. See Appendices A, B, and C.

holding undergraduate degrees are sessional. Five of the sessional instructors are also the technical director or production manager in the theatre departments in which they teach. Five of the six tenured professors hold an MFA, three of these represent the persistent nodes, the exception is Michael J. Whitfield who has not pursued a tenured position.

That more than half of the instructors currently teaching lighting design are sessional or part-time instructors is also in line with the current academic climate at Canadian universities. A 2018 report by the Canadian Centre for Policy Alternatives estimates “more than half of all faculty appointments in Canada are contract appointments” (5). This prevalent hiring structure in Canadian universities also stabilizes outdated hierarchies that arguably resonate in the lighting design classroom. Marginalization within their own departments in terms of job stability, research funding, and the ability to influence change within their departments – potentially impacts what and how lighting design instructors teach. This report further notes,

When instructors are only informed a few weeks — and in some cases, only a day or two — before the semester begins that they will be teaching a course, it is difficult for them to ensure that course material is up-to-date and that all necessary resources, such as textbooks, are in place for students. And when research is something that contract faculty have to pursue on their own, with limited time and little to no institutional support or funding, it can require many hours of uncompensated labour for them to remain current in their field. (Pasma and Shaker10)

My study recognizes that those teaching under the practicing-artist category may not want a permanent faculty position, and in this situation agrees that the classification of “precarious employment” (8) does not apply in every example. However, the numbers presented in this study

are in line with the statistics on sessional versus tenure track hiring across the academy in Canada.¹¹⁰

4.8 Instructor Demographics

The majority of lighting design instructors in Canada are Caucasian males. While race, gender and ethnicity are not a specific focus of this study it is worth mentioning that all of the respondents are Caucasian. Most hold graduate degrees in design from Canadian universities.¹¹¹ Undergraduate lighting design is primarily taught by tenure track or tenured professors; 2017/18 statistics show only one sessional instructor. It is important to note here how the gender balance is represented by the voices represented in this study. While efforts were made to provide a balanced gender representation, the reality is that the ratio of male to female instructors of lighting design in Canada exceeds 2:1.¹¹² The voices most represented by respondents to this study are those of white men aged fifty-five and over.¹¹³ The elder women of the lighting design education community, notably Lee Livingstone and Andrea Lundy (National Theatre School) did not respond to requests for information or interview. The majority of the women represented are in their mid-forties or younger. Absented voices in current curriculums include people with disabilities, speakers of other languages, diverse ethnicities, Indigenous communities, non-binary genders, or other factors of personal identity. There are connections made in the oral histories shared in this study to the instruction and mentorship that has taken place outside of the universities. There is a great deal of important mentoring and instruction that takes place in the established companies such as The Stratford Festival and The Shaw Festival and the lesser

¹¹⁰ See Pasma and Shaker 2018.

¹¹¹ See Appendix C.

¹¹² This ratio is even more pronounced in the gender representation of lighting designers listed with the Associated Designers of Canada. Only 33.4% of those listed are female.

¹¹³ Eight Caucasian-men over fifty-five years of age participated in this study.

acknowledged but no less-influential regional roadhouses across the country; these are closely connected to the learning settings examined in this research. However, I contend that these pedagogical models are extensive and should be examined in a stand-alone study.

4.9 Gender Disparity in Lighting Design and Lighting Design Education in Canada

The gender disparity in Canadian lighting design was a topic that came up organically in the interview process for this research. It was not singled out as a factor to investigate, but has appeared through both qualitative and quantitative data as a conspicuous part of the discourse. Statistically speaking, the gender disparity in lighting design in Canada is documented (Burton 2006; Beer 2016; Coles et al 2018). The causality of the imbalance has not been explicitly studied, but it should be. In addition to the inequity evidenced by Rebecca Burton's 2006 review of the status women in Canadian theatre, Ainslee Beer conducted and wrote, "A Gender-Based Analysis of Theatre Awards in Canada from 1992 to 2015" (2016). Beer's report reveals that across Canada, sixty-eight percent of the awards for lighting design from 1992-2015 were awarded to men; eighty-three men recognized and only thirty-five women. On the outcome of her study, Beer notes

This study reveals that the theatre awards in Canada are highly gendered by profession, | prestige and the type of theatre. This is especially so with respect to directors, playwrights and designers. Furthermore, the largest and highest profile awards (with the exception of the Siminovitch Prize) are most often given to men, while awards for small, independent theatres tend to be more equitable. (4)

Beer's report also highlights the other areas in Canadian theatre that are highly gendered, like costume design, where the opposite imbalance is evident with seventy-five percent of the awards going to women.

Three of the interviewees chose to comment on the gender disparity in lighting design in the academy. Sholem Dolgoy commented that he was struggling with my suggestion that professional Canadian lighting design and lighting design education are patriarchal. The following is his view on that notion.

I feel quite strongly, I haven't decided how I feel about the idea, central thesis of the patriarchy [as a factor on lighting design practice in Canada], all that stuff. I think I'm really uncomfortable with that. I think that lighting has, is a crossroads of the yin and the yang of who we are as human beings, male and female as the perfect synthesis of engineering technology and art. And I think that it's—we see a lot of diversity of people, men and women, sexual preference all that kind of stuff. I've thought a lot about the maleness of it. It's interesting. So, the Ryerson School of Performance, formerly the Ryerson Theatre School, when I first started teaching was probably seventy-five percent male and twenty-five percent women and now it's flipped over.¹¹⁴ We are practically like the dance program now where my god if you've got a 'Y' chromosome—YAY! And so, when I look at my large classes I see a lot of women, because we are in Toronto I see a lot of diverse community. When I looked at last year's upper level class it was one-third women and two-thirds men. So, I don't think it's anything from a bias on my part in terms of how I'm teaching, because I feel that I am, largely because of my feminist mother, completely gender neutral for all that kind of stuff. And so, is there something about the technology part that some women can't get an affinity for?

¹¹⁴ The Ryerson School of Performance website faculty page shows six women and seven men as of December 2018. See <https://ryersonperformance.ca/about/people>

Dolgoy's perspective on my suggestion that lighting design in Canada is patriarchal surprised me; because from my perspective as a female lighting designer in the generation following Dolgoy it has been painfully apparent to me. However, as a tenured, male occupant of a persistent node and self-admittedly insular within that node, it is likely that Dolgoy has not had to consider this issue to the same extent that I have. I was not surprised by Carla Orosz's perception of lighting as a 'male' department, and the gendering of jobs, specifically in a technical theatre context. "This is a topic that my eleven-year-old daughter is adamant about, which is so great to see, there is nothing that I've done to talk to her about that, but I think that she has witnessed me sitting in what society would say is a man's role" (Orosz). As women and generational peers, Orosz and I come to the issue of gender disparity in lighting design from the same side of the conversation. Dolgoy's discomfort at the suggestion of a patriarchy is expected as he is arguably part of that structure. His suggestion that perhaps technology, and not men, might be the root of the gender disparity in the discipline is also a troubling, but not surprising side-step of the issue. "Research has detailed a variety of ways in which women lag behind men in the ownership of technology and the development of technological skills" (Dixon et al. 992). And while I do not share Dolgoy's suggestion that technology is what is holding women back from equality in the field of lighting design, I do agree that there is a complicated relationship between the genders and the access to or adoption of technology from an early age that could be a factor.

Rob Thomson responded to a comment that I made to him about the difficulty I experienced in getting women to participate in this research and that there are fewer women teaching lighting design than men.

Women who teach. . . interesting. . . yeah. I'm hyperconscious about it [gender balance] as is my colleague in Pittsburgh—Cindy Lamar, whose been the head of lighting at

CMU¹¹⁵ for likely thirty years and was a solo teacher there. . .I mean very accomplished, similar background to mine, lots of dance and theatre. You know we spend time trying to make sure we are attracting a balance of women as well as men to our program, we don't quite get to where we should be. It's always tricky. (Thomson)

The gender-imbalance in the lighting design professoriate could contribute to the gender imbalance in the industry; and, the gender imbalance in the lighting design industry could be linked to a gender imbalance in the lighting design professoriate. There are no definitive studies on gender specific to lighting design education. However, studies in STEM related fields, which are also prone to significant gender imbalances that may or may not be related to technology, argue that there is

theory and evidence [to] suggest that female instructors may be instrumental in encouraging women to enroll and excel in subjects in which they feel underrepresented. Female students may avoid male-dominated fields due to biases against women and that the presence of female faculty may mitigate these effects. (Bettinger and Long 152)

As noted above, because there has been no formal research to date, it is difficult to ascertain where in the cycle the problem originates. “Are enough female design students applying to train? Are the technical professions suitably open for them to start their career?” (Cabanas n.p.). As in other industries with non-regular work schedules, women in lighting design may face different challenges than their male colleagues,

That elusive parenting/work balance is a problem that women face across many industries and is not specific to theatre or theatre design. But there are parts of this industry that add to these challenges and could affect women either maintaining their career or returning to

¹¹⁵ Carnegie Mellon University.

work after a maternity break. Many designers are freelance, so there is no structured maternity leave or pay, and the flexibility needed can be hard to achieve with evening rehearsals, travel and touring. (Cabanas n.p)

This was certainly part of my own narrative as a young female Canadian lighting designer who was also a new parent in the 1990s, when six-weeks was considered a good maternity leave. I absolutely saw my male colleagues, with and without children, advance faster and further in the industry, and this prompted me toward the stability of teaching. However, the parenting/work balance for female academics has traditionally also been a constraint to gender parity in the workplace (Maxwell et al. 2018; Ahmad 2017; Savigny 2014; Baker 2008; among others).

The lack of women working as lighting designers and lighting design instructors in 2018 belies an early history with a strong female narrative. Jean Rosenthal is often credited as being the first to function in the distinct capacity we now label as lighting designer. Rosenthal “didn’t just create the profession, she also advanced its technology and structure by adding deeply coloured washes of back and side light to the designer’s vocabulary and organizing how dance was lit” (Greenberg n.p.). Dancer and actor Loie Fuller held patents for stage lighting equipment that she developed, “including the chemical compounds for creating colour gel and the use of salts in luminescent lighting” (Greenberg n.p.). Rosenthal and Fuller were both Americans, and the American narrative of women in lighting design is relatively well-known because it is directly tied to the Broadway stages. In Canada, the women’s story is not well-known, as was evidenced by my conversations with designers like Whitfield, Dolgoy and Thomson. Their accounts of Canadian lighting design in the 1960s, 70s and 80s almost exclusively featured men.

The topic of unequal representation of the sexes in Canadian theatre is one that comes up at semi-regular intervals, (Fratlicelli 1982, Burton 2006, Hanson and Esler 2016, MacArthur

2016, Beer 2018) arousing umbrage and attention only to peter out with little after effect. On this phenomenon Louise H. Forsyth wrote,

Canada now has a tradition going back more than thirty years of impressive reports documenting the inequitable situation throughout its theatre establishment and its theatre departments. . .and it brings our knowledge up to date on the obstacles standing in the way of full career opportunities in theatre for women. In doing so [the reports highlight] the discouraging fact that progress has not been made in any significant way through these many decades. (78)

These periodic reports tend to focus primarily on artistic directors, directors and playwrights (Fratlicelli 1982, Macarthur 2016, Coles et al. 2018, Beer 2018). Burton's report is by far the most comprehensive representation to date of the gender disparity across the various departments in Canada's theatre industry. However, even within Burton's report, matters of equity in production and design garnered less than two-pages worth of analysis in a one hundred and fifteen-page document. "Indeed, given the persistent and deep-seated inequities embedded in the Canadian theatre industry, informed, coordinated and varied responses are required if change is to occur" (Macarthur 12).

I suggest that the transformation toward gender equity in Canadian theatre needs to start in the universities and that scenoturgy can aid the process. Scenoturgy works to flatten hierarchies in theatre production by increasing and encouraging an equally collaborative dialogue between all of the theatre-makers in the production process. According to Burton, in the Canadian theatre hierarchy, "key positions of creativity and authority are primarily male dominated" (ii), because of this, the male voice has priority. By flattening these hierarchies through the implementation of scenoturgy, it may enable the female voices to have more agency and authority. The gender imbalance between departments, for example, more women in the

costume department and more men in lighting or sound, becomes irrelevant when each voice has equal power. Burton notes that, “women outnumber men in the industry overall and are employed at ninety-three percent of the companies, compared to eighty-four percent of the theatres that employ men” (iii). Based purely on the employment numbers, women should have more equal creative representation on the Canadian stage, but arguably, the prevailing hierarchal model prevents this from happening.

A recent example of how the current professional industry continues to play a part in the gender imbalance comes from social media. A high-profile lighting design colleague recently posted a photograph on Facebook of a new lighting equipment demonstration hosted by Bard on the Beach in Vancouver in October of 2018. Viewing the picture, I commented that there appeared to be an absence of women at the event. I asked my colleague if my observation was correct. His response was that out of the twenty-two attendees, there was only one woman. My question was subsequently removed from his social media thread.¹¹⁶ My experience is unfortunately not unique. Lighting designer and Tony Award nominee Jane Cox tells a similar story.

Cox received an introductory email from Christie Lites Rentals, an entertainment stage lighting and rigging supplier, inviting forty-two lighting designers to meet the people who sell the gear. Of the forty-two recipients, two were women. Cox noted that the email

¹¹⁶ In an update to this anecdote, another lighting design colleague who knew of my frustration with how this event was handled took steps to correct the gender imbalance for a follow-up event also hosted by Bard on the Beach. My colleague responded to the email invitation to attend the second event from Bard on the Beach with a response that they were forwarding the invitation to other lighting designers in the region and forwarded the invitation to a number of female lighting designers on the email. (26 February 2019)

was addressed to designers considered to “wield the most purchasing power” (qtd. in Greenberg n.p.).

The exact reasons for the gender imbalance in undergraduate lighting design education are unanswered and worthy of further examination. What is known is throughout education paradigms, is students who can relate to their teachers through gender, race, language or other factors of identity tend to perform better in their studies and experience greater success in their chosen field. (Bettinger and Long 2005; Rask and Bailey 2002; Neumark and Gardecki 1998; Canes and Harvey 1995; among others). It is reasonable to assume that this is the same for undergraduate lighting design students and that as such, efforts should be made not only for greater gender parity but for greater diversity in general. Based on the numbers of female to males represented in the Associated Designers of Canada and the employment statistics reported over the years by Fraticelli 1982, Burton 2006, Hanson and Esler 2016, Macarthur 2016, and Beer 2018 it is reasonable to assume that similar factors are at play in the college diploma and pre-professional programs; all of these are feeding the professional industry. The colleges and pre-professional programs in addition to the membership demographics of the Canadian Institute for Theatre Technology (CITT) and IATSE should be further studied to confirm these trends.

Chapter 5: The Curriculum Review

The overriding purpose of this research is to recommend an updated pedagogy and curricular approach to undergraduate lighting design in English-speaking Canada that may serve as a resource to instructors. To do this it is necessary to identify areas of future potential by examining current and past practices. While there are a handful of articles specifically about lighting design curriculum (“Looking for Enlightened Lighting” 2001, Essig 2007, Tarantino 2007), there is no evidence to date that a wide scale curriculum review has been conducted in Canada. Understanding how and why the current curriculum is structured as it is, requires knowledge of how undergraduate lighting design education in Canadian universities has evolved. This knowledge base includes factors like long standing theatre department traditions and protocols, faculty structures, professional industry needs and who the core instructors and faculty are. In this review, the word “instructor” is used in reference to any individual teaching lighting design regardless of academic rank i.e. sessional, adjunct or tenured etc. Distinctions in academic rank are noted where relevant.

5.1 The Data

Information regarding lighting design course outlines for this study has been generously provided by Michael J. Whitfield (UVic), Robert Gardiner (UBC), Barry Hegland (SFU), Kate Muchmore Woo (Trinity), Carla Orosz (U of S), William Hales (U of R), Ian Garrett (York), Sholem Dolgoy (Ryerson), Jenn Stephenson (Queen’s), Eric Mongerson (Concordia), Susann Hudson (Acadia), Renate Pohl (Memorial), Sheila Christie (UCB), and Mike Johnston (UNB). The Canadian lighting design community is small, and there are a number of individuals who have participated in this study that I do know personally, which can inform my interpretation or

analysis of their course outlines.¹¹⁷ As such, I have endeavored to keep this in mind when coding the data in the outlines. The UFV course outlines were available to me as a sessional faculty member of that Theatre Department where I have regularly taught since 2016. Additional current and past course outlines were available through the library archives at the University of Calgary¹¹⁸, University of Alberta and the University of Saskatchewan. To reiterate, these are not all of the undergraduate lighting design courses in English-speaking Canada, only the ones whose instructors responded to the invitation to participate in this research. So, while the study presents the data from a reasonably sized sample pool in relation to the number of courses currently offered, it is not definitive. It is also important to note here that while the information in the course outlines is useful, it only reveals the intended curriculum. Course outlines can provide some insight into hidden and null curriculums (P. Jackson 1968) but do not necessarily reveal a given instructor's pedagogical approach.

5.2 Course Format

The majority of the outlines provided are for lighting design specific courses. UVic, UBC, U of C, U of A, York, Ryerson, U of R and Concordia offer both introductory and more advanced courses while Simon Fraser offers only one lighting design specific course. (Queen's has a lighting design specific course listed in its calendar, but according to Jenn Stephenson it has not been offered for some time due to a lack of demand and/or sufficient

¹¹⁷ The participants who submitted course outlines for review in this section with whom I have a previous professional or personal connection are: Robert Gardiner, Barry Hegland, Sholem Dolgoy, Jenn Stephenson, and Sheila Christie. Those whose publicly archived outlines reviewed for this study, with whom I have a previous professional or personal connection are Douglas T. McCullough, Gavin Semple, J. James Andrews and Scott Reid.

¹¹⁸ Lighting design course outlines from the University of Calgary Department of Drama used by Douglas McCullough, Gavin Semple, J. James Andrews and Scott Reid, beginning in 1979 up to and including 2017 are available through the University of Calgary Library Archives.

staffing to run it. TWU also has a lighting design specific course listed in its calendar but Kate Muchmore Woo reports that it has been at least five years since it was active).

The following table shows the format of lighting design courses that information has been provided for:

Table 1:

A Sample of Formats of Lighting Design Courses in Canadian Undergraduate Programs (2018)

University	Dedicated LX Design Course	LX Design as part of a larger course	LX Design as Independent Study/Practicum	LX Design Course in a University Calendar but Currently Inactive
University of Victoria	X		X	
University of British Columbia	X		X	
Simon Fraser University	X			
University of the Fraser Valley		X		
Trinity Western University				X
University of Calgary	X		X	
University of Alberta	X		X	
University of Saskatchewan		X		
University of Regina	X		X	
York University	X			
Ryerson University	X			
Queen's University		X		X
Concordia University	X			
University of Cape Breton		X		

Acadia University			X	
University of New Brunswick		X		
Memorial University		X		

Of the dedicated lighting design courses on offer, the delivery method is a traditional mix of lecture and lab. Only one course outline notes the use of an LMS or CMS¹¹⁹ (CBU) and only for scheduling of assignment deadlines. Only one course outline (UBC) notes any resources for students with disabilities. Most courses are a single semester long with the exception of York which is set over two terms. The courses that are lighting design specific are fairly consistent in terms of assessed core content. The following shows the standard core content in lighting design specific courses according to data available in the course outlines.

Table 2:
 A Sample of Standard Core Content in 300-Level Lighting Design Courses**
 in Canada (2018)

University	Script Analysis	Plot and paperwork	Vector-works/CAD	History or Research	Attendance or Participation	Colour Theory	Live Theatre Critique
University of British Columbia	X	X		X	X	X	X (optional)
Simon Fraser University		X		X	X		
University of Calgary	X	X				X	X
University of Regina	X		X		X		

¹¹⁹ LMS stands for learning management system. CMS stands for content management system. Blackboard is the most used LMS platform for universities in Canada. Moodle and Canvas are also regularly used. See <https://mfeldstein.com/state-higher-ed-lms-market-us-canada-fall-2017-edition/>

York University	X	X	X		X		X
Concordia University	X	X	X	X	X	X	

** At the 300-level the pre-requisites for course registration typically include completion of an introductory 100 or 200-level stagecraft or technical production skills course, although not all of the course outlines provided explicitly state this requirement.

The courses where lighting is combined with other aspects of scenography (LX design as part of a larger course) present the following lighting content:

Table 3:

A Sample of Lighting Content Distribution in Courses in Non-Lighting Design Specific Courses in Undergraduate Programs in Canada (2018)

University	Script Analysis	Plot and paperwork	Vector-works/CAD	History or Research	Attendance or Participation	Colour Theory	Live Theatre Critique
University of the Fraser Valley	X	X		X	X		
University Saskatchewan		X			X		
Queen's University	X	X					
University of Cape Breton	X				X		
Acadia University	**See below						
University New Brunswick		X	X (WYSIWYG)	X		X	
Memorial University		X				X	

** Acadia University teaches lighting design on an “as needed or desired” basis to support their *Minifest* – a small festival of one act plays. A professional lighting designer is hired to support the festival and mentor students. Senior students with demonstrated ability work as crew heads and assist designers according to their own interest.

Courses where lighting design is combined with other aspects of scenography consistently emphasize the same primary learning objectives as the lighting design specific courses. The mechanics of developing a lighting design (plot and paperwork) and attendance are emphasized in the curriculum.

Also of note, three of the non-lighting design specific courses are co-taught by a combination of faculty and technical staff members. Co-teaching can facilitate peer mentoring and learning for instructors, provide a diversity of disciplinary perspectives for students, and model how to negotiate creative and collaborative relationships (Lock et al. 25). While Plank notes that co-teaching can be “messy” as it “moves beyond the familiar and predictable and creates an environment of uncertainty, dialogue, and discovery” (3), this is exactly why co-teaching might be a great fit for theatre education. Production of live theatre performance requires a “co-everything” attitude—collaboration, coexistence, cooperation—so, co-teaching of theatre topics is a natural pedagogical approach.

5.3 Assignments and Assessment

The manner in which assessment is weighted as demonstrated in the course outlines gives some indication of how specific learning outcomes are valued by the individual instructor. Not all of the outlines provided include a grading rubric. The following table shows how grading is weighted in the outlines for a lighting design specific course with a grading rubric:

Table 4:

A Sample of Grade Distribution in 300-Level Lighting Design Courses in Canada (2018)

University	Script Analysis	Plot and paperwork	Design Project	History or Research	Attendance or Participation	Colour Theory	Live Theatre Critique
University of British Columbia	15%	25%	35%	5%	10%		10% (optional)
University of Calgary		20%	40%		20% in class projects	15%	5%
University of Regina	15%		4 projects * worth 85% cumulative		*states that attendance is required but no grade is attached to this		
York University			3 projects ** worth 55% cumulative	5—20%	*assesses projects up to 25% on professionalism		5% (optional)

Concordia	10%		40%	15%	25%		
University							

* Painting breakdown (15%), cueing project (30%), video analysis (10%), Vectorworks (30%)

** Projects are weighted 2 @ 20%, 1 @ 15% and include script analysis (20%), concept statement (10%), preliminary design (30%), rough design (40%).

The rubrics provided indicate that most of the learning assessment comes from project work. The projects include various combinations of practical design process with lighting paperwork (light plot, cue sheets, schedules, magic sheets etc.) representing the largest percentage of the project grades up to seventy-percent in some examples. The least emphasized area of assessment is script analysis and research, including viewing and analysis of live professional theatre productions. The quantitative data is consistent with the anecdotal evidence given by the interviewees that in the curriculum, the mechanics of lighting design are emphasized over the aesthetic function. Only two outlines acknowledge the development of aesthetic or creative practice as a learning outcome. It is unclear from the outlines what kind of feedback is given to students on the major design projects. The components of the ‘Design Project’ where noted, include design renderings, drafting (mechanical or digital) of a light plot, magic sheets, and preliminary cue synopses. These are presumably scaffolded by the assignments on script analysis, colour theory, historical research or attendance at a live theatre performance which would inform how students would approach the development of their own lighting design project. Furthermore, only two course outlines note the attendance of live theatre as a requirement or assignment, which is arguably an important tool in studying or experiencing the aesthetics of lighting design in action.

5.4 Proposed Learning Outcomes

Clearly stated learning outcomes have become standard information on course outlines at many universities. Students can become frustrated when learning outcomes and grading rubrics

are not in sync. According to Wolf and Stevens, the challenge “is to create a rubric that makes clear what is valued in the performance or product—without constraining or diminishing them” (13). For instance, the learning outcomes on the University of Calgary course outline, (which is one of the better examples of learning outcomes in the samples as it clearly articulates what students should be able to do by the end of the course and how these competencies connect to specific assignments or tasks), states “students will examine and critique the work of professional designers and study how that might inform their own process”. This learning outcome is the third entry in a bulleted list of outcomes which may suggest to students that it is the third most important thing that they will learn in the course. However, the grade attached to seeing and analyzing a live performance is only five percent of the final grade. There is a disconnect between the appointed grade value and the inferred learning outcomes. Additionally, when there are no learning outcomes stated on a course outline, students may have difficulty in understanding if they are meeting the requirements of the course or what the instructor expects of their creative or academic performance. Again, a lack of clear learning outcomes may be due to carryover of course outlines from one instructor to the next over a number of years. A lack of specificity might also be a consequence of instructors with disciplinary expertise in lighting design, but no expertise in curriculum delivery or course design.

Few of the course outlines contained detailed or any stated learning outcomes. The available learning outcomes for lighting design specific courses are presented as follows:

Table 5:

A Sample of Specified Learning Outcomes by University in 300-level Lighting Design Specific Courses in Canada (2018)

University	Stated Learning Outcomes
University of British Columbia	At the conclusion of this course students should know how to safely and correctly install conventional stage lights, design a simple set of lighting

	cues, and do the graphic documentation for a simple lighting design for live performance.
University of Calgary	<ul style="list-style-type: none"> • Through in-class projects and assignments, students will demonstrate a basic level of understanding of theory of lighting design and what a professional designer would need to communicate with a director, technical director, production staff and actors. • Students will examine and critique the work of professional designers and study how that might inform their own process. • Students will demonstrate the ability to be proficient in developing a lighting design and with class presentations students will develop the ability to communicate their ideas to a group and to accept criticism as well as adapt to criticism. • Students will develop the ability to develop a process from text analysis completing a lighting design. • Successful students will be able to: Produce a lighting plot and accompanying paperwork, have an understanding of colour in light, analyze a text from the standpoint of lighting design, produce a lighting design.
York University	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Generate and read technical drawings and documentation for lighting, sound and/or video in service of executing a design in one or more of those fields. • Interpret dramatic text and other source material into design concepts. • Conceptualize design ideas based on diverse source materials. • Defend their design concepts. • Analyze, compare and contrast design ideas and their suitability in a production. • Evaluate lighting, sound and/or video equipment for use in their designs.
Concordia University	The goal of this course is to introduce students to some of the technology and techniques available to execute lighting design ideas. In addition, communication and realization of design ideas will be practiced in a collaborative environment.

Every course outline makes some acknowledgement of expectations for regular attendance or participation. Where a specific percentage is attributed to this expectation, there is no clearly stated mode of assessing attendance and participation (e.g. missed classes are worth a five percent deduction). Even the course outlines that do not have a grading rubric do state that attendance and participation are a key aspect of grade assessment for the course but do not stipulate how that assessment might be applied. While student attendance is often a policy set by the universities, it also functions as hidden curriculum in a lighting design course. In my article “An Informal Assessment of Twenty-First Century Skills Developed through Hidden Curriculum

in Theatre Studies” I note,

Students learn to meet high expectations of accountability, delivering an expected amount of quality work, on time (tech work, dress rehearsals, opening night) while modeling expectations for a positive work ethic (e.g. preparedness, punctuality). Operating within a business model based on production schedules and concrete timelines provides opportunities similar to co-op placements or residencies. (81)

5.5 Materials and Texts

The assigned texts in lighting design courses can also tell us a great deal about how the instructor might approach their teaching. For example, if an instructor has the Richard Pilbrow book *Stage Lighting Design: The Art, the Craft, the Life* (1997, 2008) they may focus more on the creativity or aesthetics of lighting design while an instructor including J. Michael Gillette’s *Designing with Light* (1989) may be more focused on the mechanics. Some instructors have required texts for their courses, some have suggested reading while others have no text at all. As noted above, only two outlines acknowledge the development of aesthetic or creative practice as a learning outcomes. Those courses where the focus is on the aesthetics, one lists no texts, the other lists texts five text, three of which lean more toward the aesthetics than the mechanical. The following table shows the most popular texts that are in use currently according to the course outlines. The books are represented on the table by the corresponding number in this list:

1. McCandless, Stanley. *A Method for Lighting the Stage* (1939).
2. Campbell, Drew. *Technical Theatre for Non-Technical People* (2008).
3. J. Michael Gillette, *Theatrical Design and Production* (any edition).
4. USITT Symbols Guide
5. Parker et al., *Scene Design and Stage Lighting* (any edition).

6. Carter, Paul. *Backstage Handbook: An Illustrated Almanac of Technical Information* (any edition).
7. Moran, Nick. *Performance Lighting Design: How to Light for the Stage, Concerts and Live Events* (2007).
8. Pilbrow, Richard. *Stage Lighting Design: The Art, the Craft, the Life* (any edition).
9. Keller, Max. *Light Fantastic: The Art and Design of Stage Lighting* (1999).
10. Shelley, Steven Louis. *A Practical Guide to Stage Lighting* (2013).
11. *Associated Designers of Canada Standards and Working Procedures for Designers in the Live Performing Arts Industry in Canada* (any edition).

All of these books were written by men; none of them were written by a Canadian. Campbell attempts to address the gender imbalance in technical theatre roles with the inclusion of a statement about the use of pronouns in his book. On page xii of *Technical Theatre for Non-Technical People* he notes that in an attempt to not gender any one department that he simply alternates his use of ‘he’ or ‘she’ throughout the book. Which may be true, however, his lighting designer example is still male and the costume designer is still female. None of the course outlines reviewed indicate the use of resource materials that are not text-based and the majority of these books are only available in print. The exclusive use of text-based resources and no video or audio sources, limits the accessibility of the course for students who may benefit from other resource options due to learning preference, language issues or other factors in learning. Also, a lack of Canadian resources could indicate to students that Canada does not have its own distinct lighting design history or practice, reinforcing dependency on American or British sources.

Table 6:

A Sample of the Most Popular Text Books Currently Used in 300-Level Lighting Design Courses in Canada (2018)

University	Required Text	Recommended Text	No text*
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University of Victoria	8		
University of British Columbia		1,5,8,9,11	
Simon Fraser University			X
University of the Fraser Valley		3	
University of Calgary		3,6	
University of Saskatchewan		1,6	
University of Regina			X
York University			X
Concordia University	5	7,8,9,10	
University of Cape Breton		2,3	
University of New Brunswick	5		
Memorial University	1,4		

*X indicates that the instructor has stated that they will not use a specific text but will provide some assigned reading.

The results of this review of the texts in use are unsurprising. They reveal that the oldest and most established books and authors remain popular in the curriculum. McCandless' *A Method for Lighting the Stage* has been a standard since it was first published in 1932. It is a text that I asked all of the interviewees about and is one that instructors either firmly believe remains relevant (Rathbun) and those who assert that it never was (Whitfield). *Scene Design and Stage Lighting* is also a staple. (I have both the 5th and 6th editions on my own bookshelf). It is now in its 10th edition, last updated in 2014 and readily accessible as a free book online. This digital access alone should make it to the 'recommended' section on any course outline. The book is now listed as being authored by R. Craig Wolf and Dick Block following the death of Wilford Oren Parker at age ninety-five in 2007, however the aesthetic of the text remains unaltered. The

third well represented book in the curriculum belongs to Richard Pilbrow. Pilbrow's first book *Stage Lighting* (1970) was mentioned repeatedly by interviewees (Whitfield, Wechsler, Rathbun and Thomson) as a favoured resource. His follow up book, *Stage Lighting Design: The Art, the Craft, the Life* first published in 1991 and then updated in 2008 includes all of the theory and practical information that made his first book so popular with the addition of interviews with fourteen other designers and images. None of the course outlines list articles from periodicals or scholarly journals as text-based resources for learning.

5.6 Time

Time, or lack thereof, has been noted by the interviewees as a primary area of concern in the delivery of the curriculum and attainment of learning outcomes. The following shows the weekly hours of instruction noted in each course outline (lighting design specific) and whether it occurs in a single block of time or not and the course credit.

Table 7:

A Sample of Contact Hours in 300-Level Undergraduate Lighting Design Courses in Canada (2018)

University	Hours of Instruction per week	Single Block (Y/N)	Course Credits	Total Contact Hours
University of Victoria	3	Y	1.5	39
University of British Columbia	3	Y	3	39
Simon Fraser University	3	Y	3	39
University of Calgary	4	Y, (2 hour lec 2-hour lab)	3	52
University of Regina	2.5	N (2 blocks @ 1 hr 15 min ea.)	Not listed	32.5
York University	Not listed (start times only)	N (2 blocks)	3	n/a
Ryerson University	3	N (2 hours lec, 1 hour lab)	*	39
Concordia University	4	Y (2 hour lec, 2- hour lab)	3	52

*Ryerson's course credit system differs from the norm and does not translate.

Some outlines indicate required additional lab or theatre time outside of regularly scheduled class times. This additional time may be a few hours to attend a live production or upwards of six additional hours of scheduled group work time.

5.7 A Comparison of Past and Present Course Outlines

Thanks to the course outlines archived by the libraries at the University of Calgary and The University of Saskatchewan it was possible to compare past and present curriculums. The departmental archives at U of C, are an exceptionally rich source for course outlines from the entire department from the late 1960s to the present. The fond of lighting design courses has examples ranging from 100-200 level introductory courses to the 600-level graduate courses. The following table shows a comparison of lighting design curriculums at the 300-level from the University of Calgary from 1981/82, 1983, 1990, 1992/93, 1997 & 2018.

Table 8:

A Sample Comparison of 300-Level Lighting Design Courses by Graded Assignment at the University of Calgary (1981-2018)

U of Calgary Dept. of Drama	Script Analysis	Plot and paperwork	Design Project	History or Research	Attend or Participate	Practicum	Other	Text*
1981/82	5%	30%	20%		25%	20%		1,2
1983	15%		30%		40%	20%	10% quiz	2,3,4,5
1990			80%				2 quiz @ 10% ea.	2,3,4,5
1992/93		45%	20%	5%		15%	15% quiz	1,2,4,5,
1997			40%		15%		25% sketchbook 2 quiz @ 10% ea.	2,3,4,5,6
2018		20%	40%		20%		5% live perf. review, 15% colour theory	

*Texts correspond to the following: (1) Richard Pilbrow, *Stage Lighting*; (2) Parker et al., *Scene Design and Stage Lighting*; (3) William F. Bellman, *Lighting the Stage: Art and Practice*; (4) Stanley McCandless, *A Syllabus of Stage Lighting*, (5) Frederick Bentham, *The Art of Stage Lighting*, (6) J. Michael Gillette, *Designing with Light*

This very basic comparison shows that script analysis and research have consistently been emphasized less than class participation and attendance for more than thirty-five years. Only two courses include any research on past or present professional lighting designers and in both cases this research is only worth five percent of the final grade. The primary methods for teaching lighting design have and continue to rely on the mechanics of the plot, generating paperwork and theorized designs. Consistently absent across the decades is exposure to the professional theatre through attending live performance, or through assistant or internships as a mode for learning about and understanding lighting in performance. While this table only shows the comparison of the courses at the University of Calgary, the results read the same when compared with the majority of the outlines currently in use. One primary difference is the use of a standardized quiz in the 1980s and 90s. Only one current course notes a final exam.

The course outlines in the University of Calgary archives were written by J. James Andrews, Douglas T. McCullough and Gavin Semple. I worked alongside these men in the University of Calgary Department of Drama from 2004-2010. I know them well and count them as treasured friends as well as colleagues from whom I learned a great deal. This is an important point to observe in this section. As I mentioned at the start of this analysis of the course outlines, the information in them is limited to the intended curriculum in a given term. Information that is not knowable from the outlines are factors like department and institutional politics, interpersonal work relationships and the personal life circumstances of instructors. As a department-insider, a participant-observer, I can read the University of Calgary course outlines and with some certainty understand why the grading rubric for 1990 looks very different from those before and after it. I know that a department wide change in the structure of the technical courses in the late 1990s is a cause for the percentage for the participation grade to drop from a

high of forty percent in the 1980s to only fifteen percent in the 1990s. If I did not have names printed on the tops of the outlines, I would still know the identity of the individuals who wrote them based on what is emphasized and what is not. With this in mind, there are extenuating conditions and unknown variables attached to all of the course outlines.

The course outlines are a great resource as they quantitatively support the qualitative information given by the interviewees that the primary focus in the Canadian lighting design curriculum are the mechanical and technical processes of the art form. Professionalism is being promoted through class attendance and participation but there is little exposure to the professional industry in the curriculum. Also lacking are the disciplinary history and research aspects of design work. There is also no indication of emphasis on creative agency or the performativity of light. Modes of assessment remain unchanged since the early 1980s as do modes of delivery. No courses mention updated approaches to teaching and learning such as a distributed learning model or helping students to develop their own personal learning network (PLN) in lighting design.¹²⁰ The primary texts and resources in use have also not changed in any significant way other than edition updates since the 1980s.

5.8 The Current Curriculum and Pedagogy: Shortcomings and Challenges

The following sections attempt to detail some shortcomings in and challenges to the current curriculum and pedagogy in lighting design. Trending topics in Canadian undergraduate education include; learner diversity, international students, Indigenization and de-colonization, physical and mental disability, student mental wellness and university teacher training. As a

¹²⁰ A Personalized Learning Network or PLN is a network of people and resources that support ongoing individualized learning. In the twenty-first century, this style of networking and resources are typically located in online web-based environments utilizing social media and content management systems like YouTube and Pinterest.

participant-observer as a sessional faculty member in four universities in since 2015, during the course of this research¹²¹, I am increasingly aware of how these topics are informing undergraduate teaching and learning. Despite their close geographic proximity, these four universities have distinct and diverse populations which have offered a varied scope of students, differing departmental and administrative structures in the province of British Columbia to consider. Here I attempt to contextualize and anticipate how these might play out in an undergraduate lighting design course.

5.9 Student Populations and Learner Diversity

Is learner diversity a consideration in the current lighting design curriculum? Learner diversity is a key concern in curriculum and pedagogy in the academy in 2018. (Greer 2019; Good et al, 2008; Spencer et al, 2007; Locks et al 2008; among others) As previously noted, lighting design in Canada is a white, male dominated industry. It is also a primarily able-bodied discipline. It is an academic discipline that is demonstrably lacking diversity among its instructors. These points beg the following questions: What role has the lack of diversity in the lighting design professoriate and curriculum played in the lack of diversity in Canadian lighting design overall? (Burton 2006) What is the hidden or null curriculum (P. Jackson 1968, “An Informal Assessment” 2018) in lighting design that might affect a lack of diversity in the classroom and professional industry? An Internet search provided no recent statistics on factors of individual identity and numbers of students registered in post-secondary scenography or production and design courses in Canada.

¹²¹ University of Victoria, University of British Columbia, University of the Fraser Valley and Simon Fraser University.

While some of the submitted course outlines indicate that there are learner support systems in place that are operated by the university, there is little acknowledgment of learner differentiation in the course outlines. For example, in terms of resource materials (all list materials are text-based), and most of the text sources listed are written by Caucasian men. The option to submit work in oral presentation or non-textual format are not overtly stated. Course activities noted carry an assumption of able-bodied students; for example, lighting instrument hanging or ladder-based tasks.

5.10 International Students and Lighting Design

Do international students register in undergraduate courses in lighting design? There are no current statistics on the number of international students registered in Canadian Theatre departments, let alone lighting design. The last article published about international students in Canadian theatre design programs was written by Ron Fedoruk at UBC in 1997. More than twenty years ago he noted,

Too much emphasis on Western or English literature will be an increasing problem in a global education system. Students from other countries are naturally going to treat English a little differently than we do, and more importantly students with other languages are going to bring with them a different dramaturgy. We have to acknowledge the value of that experience. We have to be able to give an international student credit for what s/he already knows, and we have to be able to recognize that alternative literature may be just as relevant to a Design program. (44)

A lack of available and current discourse on this topic is not surprising. Betty Leask suggests that studies about the internationalisation of higher education curriculums are rare. She defines the internationalisation of curriculum as “the incorporation of an international and intercultural

dimension into the content of the curriculum as well as the teaching and learning arrangements and support services of a program of study” (81). These are not easy outcomes to achieve and less so for instructors who may be experts in their disciplinary field of practice, but not trained educators.

The influx of international students into Canadian universities in general is at an all-time high. According to Statistics Canada’s most recent published numbers from 2014, eleven percent of our undergraduate students are international. While there are no available statistics for theatre specifically, there are numbers under the combined category of “visual and performing arts, and communication technologies” (Statcan.gc.ca). Statistics Canada reports that the number of international students in this category, in Canada, in 2015/16 was 34, 653. By 2016/17, this number had climbed to 42, 609.¹²² A report titled “International Students in BC’s Education Systems” (2018) suggests that in 2016/17 1,303 international undergraduate students were registered in visual and performing arts programs in this province. Depending on the province and faculty, forty-six to seventy percent of international students are from Asian countries.¹²³ The highest proportion of international students are in British Columbia (17.6%), New Brunswick (16%) and Nova Scotia (15.3%). International students are big business in Canada. “Canada recognizes the impact international education has on the economy. Recent reports indicate that international students contributed \$12.8 billion to Canada’s GDP in 2016. This figure represents a twenty-two per cent increase over 2015” (Katem, n.p.). While the majority of

¹²² For the full report of international student enrolments in Canada, see “Table 1: Enrolments in Canadian universities and colleges, by field of study, 2015/16 and 2016/17. <https://www150.statcan.gc.ca/n1/daily-quotidien/181128/t001c-eng.htm>

¹²³ The Asian countries represented in the Statistics Canada 2014 Study are: China, Saudi Arabia, India, Republic of Korea, Pakistan, Hong Kong, and Malaysia.

international undergraduate students are registered in business, management and public administration (19%) there are also noticeable increases in the fine arts.

What does this trend in internationalization of our classrooms mean for lighting design instructors in Canadian universities? There are several questions that arise here. For example, what additional training, if any, should be expected of lighting design instructors (or theatre instructors in general) who teach undergraduate international students in Canadian universities? What support and training systems exist for faculty who are new to the instruction of international students their courses? How do we understand the dominance of Western-paradigms in lighting design practice and education and how do we work to both challenge and apply them? This dissertation for example, and its recommendation to approach lighting design education through a scenoturgic approach is one way that we can work to understand and challenge the dominant Western-paradigms in our practice. A critical question posed by Leaske and Bridge that is extremely relevant to lighting design curriculum is “To what extent will the focus of the curriculum at a programme level be on performativity in an industry/workplace setting and to what extent will it be on the human qualities of being and identity in tomorrow’s world?” (96). Recommendations for a new curriculum that is culturally inclusive must consider this question.

The challenges of the internationalized classroom do not end with language literacy, course content and comprehension. There are intercultural differences in classroom behaviour, participation, teacher/student communication and student interaction that can create complex or frustrating situations to navigate for both students and instructors. These factors can also inadvertently affect assessment outcomes because our Canadian ideal of the ‘perfect student’ might not match expectations elsewhere. For example, in Canada, the vocal, interactive and participatory student is perceived as engaged and interested. Theatre courses in particular tend to

be informal and conversational in tone. Murray and McConachy argue that participation is a cultural act. “Although the notion of “participation” is frequently used in educational contexts, the meaning of this term is by no means universal, nor are the ways that willingness to participate are expected to be communicated to teachers and peers” (255). In some other countries students are discouraged from speaking out or expressing divergent opinions. International students may think addressing professors by their first name to be disrespectful, however this is common practice in Canadian theatre and performance departments. Students from countries where societal and belief systems are in contradiction with those in Canada may experience difficulty with situations such as female instructors, working collaboratively with fellow students of a differing gender or non-binary gender or of a different faith. In my own experience I have observed culturally specific gender roles also come into play for example, where a strength dependent lighting specific task such as climbing a ladder with heavy equipment is viewed as a ‘male-task’ while less physical work such as paper-work management is seen as a ‘female-task’. Appropriately navigating these differences with students can prove to be challenging.

As noted above, the highest ratio of international students in Canada (17.6%) are located in British Columbia. 1,303 of these students are in visual and performing arts. Again, according to numbers available through Statistics Canada, the number of international students rose rapidly from 36, 822 in 1992, to 87, 798 in 2008, to 353, 000 in 2018. ¹²⁴ I can report that no additional training on how to adapt any of my courses for international students has been directly offered to

¹²⁴ See “A Changing Portrait of International Students in Canadian Universities. <https://www150.statcan.gc.ca/n1/pub/81-004-x/2010006/article/11405-eng.htm>

me as a sessional instructor,¹²⁵ at any of the four universities I have taught at in the last five years.¹²⁶ All four have robust international student recruitment programs.

5.11 Indigenizing/De-colonizing the Curriculum and Non-western Theatre Practice

How/what do our teaching and performance spaces in undergraduate lighting design education communicate? Again this is an area of theatre education that is loaded with hidden and null curriculums (P. Jackson 1968). Black box and proscenium theatres are Eurocentric performance containers and the architecture within which most undergraduate theatre lighting design occurs. These are also the performance spaces in which the majority of on-campus productions and professional productions are presented in Canada. These performance spaces could be seen as incompatible with current concerns of Indigeneity, de-colonization and multi/interculturalism. Truth and Reconciliation and matters of de-colonization top the agenda, (at least publicly), in the education and theatre communities in Canada. Reconciliation and de-colonization efforts seem to take one step forward and two steps back.¹²⁷

Educators in Canada are faced with the double-edged mandated agendas of multiculturalism and indigenization—often at a loss for how to incorporate both when some see discourses of multiculturalism undermining indigenous sovereignty (St. Denis 2011). Verna St. Denis writes, “undermining Aboriginal sovereignty occurs through a number of processes and practices. Multiculturalism helps to erase, diminish, trivialize and deflect from acknowledging

¹²⁵ My academic rank is relevant in this example as recent data shows 53.6 percent of all faculty appointments in Canada are contract appointments. See Pasma and Shafer 2018.

¹²⁶ The four universities I have taught at since 2014 are: University of Victoria, University of British Columbia, Simon Fraser University, and the University of the Fraser Valley.

¹²⁷ See Batchelor et al. 2019.

Aboriginal sovereignty and the need to redress Aboriginal rights” (309). While positive steps, such as Jovanni Sy’s successful introduction of Chinese language programming at the Gateway Theatre in Richmond BC¹²⁸ are celebrated, there are just as many failures such as Robert Lepage’s much maligned and canceled production *SLĀV*.¹²⁹

If we add site-specific or non-Western modes of performance, the current lighting design curriculum reveals itself to be woefully inadequate. The present lighting design curriculum is very much “inside-the-box” whereas the new directions in Canadian theatre appear to be slowly transitioning to favour new performance and content paradigms. Our lighting design curriculum, which is so intrinsically tied to technology and Western theatre tradition and canon, does not lend itself easily to change. In order for lighting design in Canada to progress we need to begin to think beyond LEDs and computers. Lighting design can benefit from the present enthusiasm for applied, devised and/or site-specific works in Canada. “Designing immersive work opens up a huge range of possibilities. There are no rules and no expectations—you don’t have to use a Leko or a Fresnel. Anything that lights up is fair game to help tell the story” (Robin 28).

5.12 Disabilities and Undergraduate Lighting Design Curriculum

Do disabled or differently-abled students register in lighting design courses? As an instructor who has taught a number of these students I can assert that yes, they do. A 2009 Canadian Council report titled “Assessment of Inclusive Post-Secondary Education for Young Adults with Developmental Disabilities” states “[i]nclusive post-secondary education (IPSE) is

¹²⁸ For more on Jovanni Sy and Gateway Theatre see “How to Bring Theatre to an Increasingly Multicultural Canada”, *The Globe and Mail*, 25 April 2014.

<https://www.theglobeandmail.com/arts/theatre-and-performance/nestruck-on-theatre/how-to-bring-theatre-to-an-increasingly-multicultural-canada/article18216394/>

¹²⁹ For more on the cancellation of Robert Lepage’s production *SLĀV* see “Robert Lepage Says Decision to Cancel *SLĀV* a Blow to Artistic Freedom”, *The Globe and Mail*, 6 July 2018.

relatively new and sparsely researched” (4).¹³⁰ There are scholarly articles about using theatre methods to teach K-12 students with exceptionalities like anxiety, ADD/ADHD or on the autism spectrum and the inclusion of children with physical disabilities in theatre as either performer or spectator (Mason et al. 2004, Hvozdkova 2011). However, I was unable to locate any Canadian study or article that addresses professional training for careers in technical theatre disciplines that are purposefully inclusive of students with physical or cognitive exceptionalities. This question covers an expansive range of undergraduate students as such both physical and cognitive differences should be considered separately.

5.12.1 Physical Diversity

What constraints exist for undergraduate lighting design students who may have mobility or other physical challenges? Inclusive education in post-secondary education has focused on on-stage performance, rather than scenographic topics like lighting design. Overall, based on the course outlines submitted for this study, the lighting curriculum in Canada is not currently inclusive of physical disabilities in the student population. Depending on the institution this may be due to unsuitable infrastructure or oversight. In their article on inclusive performance training in the UK, Kathy Dacre and Alex Bulmer observed that “there was perhaps an absence of disabled student training relevant particularly to technical courses” (136). Kirsty Johnston’s 2016 book *Disability Theatre and Modern Drama, Recasting Modernism* notes that the Fei and Milton Wong Experimental Theatre which is home to the Simon Fraser University School for

¹³⁰ Judith Mosoff, Joe Greenholtz and Tamara Hurtado clarify the use of the term “developmental disability” in this report refers to a “wide range of labels, conditions or diagnoses where a person has a mental impairment discerned early in life that affects cognitive functioning, generally” (4). See Mosoff et al. 2009.

Contemporary Arts, “is extremely accessible. It’s been built with the mandate that any person with a disability can do any job—including hanging a light” (74).¹³¹ Barry Hegland, who retired from the School for Contemporary Arts in April of 2018 after thirty-one years as a Senior Lecturer in lighting concurs,

The Wong theatre (and all of the other performance spaces) relies heavily on motorized personnel lifts for crews to do much of the work. The Wong also has two levels of perimeter gallery, and in fact someone who is wheelchair bound could conceivably work on tech on this tech ledge and on the stage area in any of the performance spaces. Since the School owns at least one two-person scissor lift a partly able person in a wheelchair might be able to utilize such a machine, though there would likely need to be a ramp to get into the lift. More than anything I think the limitations of any space can be partly trumped by someone who really wants to challenge their own (and a space’s) limitations. In the Wong access to the moving gantries (a large part of the technical facility in that space) is difficult even for fully abled students as one has to climb through railings and attach fall arrests devices to work on those bridges. (personal communication, 18 October 2018)

While infrastructure that supports accessibility for disabled students is a critical aspect of this curricular gap, the SFU examples given by Johnston and Hegland perhaps suggest that this is not the only hurdle. I would argue that the larger hurdle is not accessibility, but attitude and willingness to adapt. Hegland also shared,

¹³¹ Disability-in-theatre scholar, Kirsty Johnston quotes Canadian disability theatre performer James Sanders. See Johnston 74.

At the old SFU theatre and studio space we had one quadriplegic student, [name redacted], who was quite eager to challenge such limitations. Since there was no elevator in the old SFU Theatre he would have classmates (and faculty, at times) carry him from one level to another so that he could carry out some tech duties during his program.

(personal communication, October 18, 2018)

Dacre and Bulmer further suggest that accepting students with exceptionalities necessitates instructional and infrastructure modifications. They argue for an updated approach “along the lines of, ‘If we accept this applicant on the basis of their talent then what do we need to do to make the course accessible?’” (137). Hegland’s anecdote about his quadriplegic former student¹³² perhaps demonstrates an ideal solution, where a theatre department as a community – faculty and students – support the learning. Physical limitations are one area where the active use of computer technology in lighting design is beneficial. The transition from manual drafting to computer aided drafting as well as computerized control has opened up lighting design to students with mobility or other physical challenges.

The questions that remain though are how is this community support approach fostered and supported? What resources exist to assist university professors or instructors, experts in their discipline, but not necessarily trained to teach or accommodate students with special needs? How are matters of the assumed physical barriers in addition to process and assessment managed? Again, because more than half of all lighting design instructors are sessional or contract faculty, they may not have access to the professional development training that may aid in solving these

¹³² See <https://www.canada.ca/en/public-health/services/diseases/autism-spectrum-disorder-asd.html> for the full report. Last updated 29 August 2018.

issues.

5.12.2 Students with Cognitive Exceptionalities

What kinds of cognitive exceptionalities are present in the undergraduate lighting design student population? In the last twenty years, I have taught a handful of students with physical disabilities in my classroom or theatre spaces. I have adapted my curriculum as needed for blind students and students with restricted mobility. It is only in the last five years that I have knowingly taught students on the autism spectrum, in part because student learning support services now regularly contact me to inform me of students with learning needs. They do not however, ask how or if I am prepared to navigate or support those needs. I have been offered links to instructor resources, but there is no follow up to ensure that I have accessed the links or know how to implement the information they might contain. It is important to note that due the neuro-diversity of students on the autism spectrum it can be challenging to pre-determine if there are parts of the lighting design curriculum which have the potential to negatively trigger sensory reactions. For example, sudden loud noises or confined and dark spaces could be problematic. Because it can be challenging to anticipate a reaction or how that reaction may manifest, this unknown can create potential physical risks not only to the student who is not neuro-typical, but to their classmates and/or the instructor.

Reports indicate that the rise of post-secondary students with cognitive exceptionalities like those with an Autism Spectrum Diagnosis (ASD) has greatly increased in the last ten years. The Public Health Agency of Canada released the first ever National Autism Spectrum Disorder (ASD) Statistics report on 29 March 2018. The report estimates that one in sixty-six children ages five to seventeen has an ASD diagnosis. Of the one in sixty-six, male children are four times more likely to diagnosed on the spectrum than female children. More than half (fifty-six

percent) were diagnosed before age six. This study does not intend to identify causality for the increase in these diagnoses since the 1990s only to recognize that in previous generations, students with these exceptionalities often did not receive the educational support needed in their early years that facilitated the transition to university or college level studies in early adulthood. Improvements in K-12 educational approaches to cognitive challenges have necessitated improvements in undergraduate programs, which I would suggest, based on my own experiences, are only starting to catch up to student need.

Lighting design curriculum could be either very rewarding or exceedingly frustrating depending on the unique characteristics of each ASD individual. While “they often possess gifts, such as a keen memory for details in a specific topic, they also face a number of ASD-associated challenges” (Anderson and Butt 3029). Mental health concerns stemming from ASD related anxiety and executive function, which are described as “working memory, planning, flexibility, and organization, in the service of problem solving and behavioural regulation” could be obstacles to success in a lighting design course (Anderson and Butt 3030). The detail oriented and methodical planning of lighting design may be a great fit for an ASD student, however the tendency for schedules and details to change rapidly in production may be more challenging than they would for a neurotypical student. Again, this study claims no expertise on this topic beyond identifying a gap. According to statistics from the US thirty-six percent of young adults with an Autism Spectrum Diagnosis attempt college. (Roux et. al 2015). Assuming that this number will increase, more research is required to support students and faculty. Again the sessional or contract status of the instructors and subsequent access or lack of access to professional development this is potentially problematic.

5.13 Student Mental Health and Wellness

What personal mental health and wellness challenges might impact student learning or success in an undergraduate lighting design course? According to a study of five Canadian colleges and universities, post-secondary students are “at high risk for developing mental health issues, conditions that may affect their ability to think and feel” (Giamos et al. 121).

Furthermore, data from six institutions in Ontario estimated “more than eight percent of the students felt overwhelmed and exhausted and the four percent of the students had a psychiatric condition” (Giamos et al. 121). Interviewees for this study commented that there are challenges in adapting pedagogy and curriculum in lighting design to meet the rising mental health concerns demonstrated by students on Canadian campuses.

Instructors who are experts in lighting design but not trained as educators are ill-equipped to manage the minefield of emotional or psychological triggers that may exist in a given classroom today. Primary challenges expressed by interviewees center on how to prepare students for a high-stress, emotionally charged, often unpredictable work environment without being able to put them under similar stressors in training. In the wake of #MeToo and reports of systemic misconduct in companies like Soulpepper¹³³ and Theatre Junction¹³⁴, university theatre departments are responding with “safe spaces” and “not in our space” policies. Some faculty are concerned that the policies might impede the curriculum. Others are more willing to adapt. Rob Thomson notes,

¹³³ For more information on the Soulpepper Theatre scandal see “A Quiet End to Theatre’s First Brush with #MeToo”. *The Globe and Mail*, 2 August 2018.

¹³⁴ For more information on the Theatre Junction scandal see “High Drama at Calgary’s Theatre Junction Includes Internal Strife, ‘Toxic’ Workplace, Deficits and a Lawsuit”. CBC News, 23 July 2018 <https://www.cbc.ca/news/canada/calgary/calgary-theatre-junction-grand-financial-trouble-layoffs-1.4754990>

what we are seeing in undergrads is they seem to be a little bit more-needy, and needing clarity and believing that what they've done is good. And you know, our job is to instruct them. Not in that crazed 'everything you do is shit' thing, breaking you down to build you up. . . I think most of our people are pretty positive but at the same time give truthful reactions to things. (Thomson)

5.14 Toward an Updated Undergraduate Lighting Design Curriculum

How might awareness of the current variety of challenges facing undergraduates and the current pedagogy and curriculum inform any recommendations for an updated curriculum and pedagogy in undergraduate lighting design? The inquiry into Canada's undergraduate lighting design education history and the current pedagogy, curriculum and professional practice have identified both strengths and weaknesses in the present system. Through the many hours of conversation with the interviewees it was revealed that Canadian lighting design has a fascinating and unique oral history that ought to be recorded, now—while the more senior members are still with us to share their experiences. It was also revealed that, as with most historical narratives, the women and people of colour are either absented or overlooked. Furthermore, there is interest in moving forward to preserve this important part of Canadian theatre history within the community.

Lighting design in Canada has apparently always been and continues to be a bastion of the privileged white-male (Burton 30). Despite reports and inquiries into inequalities in the theatre industry, written at regular intervals—for decades—the numbers of women working in and teaching lighting design in Canada are pathetically unchanging. One might ask does it matter if undergraduate lighting design education is not gender or racially-diverse? The short answer is “of course”. Any time one group is given unchecked privilege or access over another, the

outcome is a silencing of voices, ideas and perspectives. Lighting design is no different. What we risk communicating to the theatre students, artists, patrons and society in general, when we consistently place men or only white people in a position of power, like a that of a professor, in favour of another is that their opinions and creativity are more-worthy of our attention. As noted in Siemens' connectivism, seemingly small details can have large ramifications. While it may be difficult to make any quick significant changes to the corp. of undergraduate lighting design instructors due to mitigating factors like tenure, it is possible to change the narrative and practice of Canadian lighting design through a more inclusive curriculum that gives students the opportunity to see themselves as lighting designers by seeing others like them in those kinds of positions. The place to initiate this industry-wide change is in the universities, colleges and the pre-professional programs like the National Theatre School and The Banff Centre. This is possible when we extend the learning outside the walls of the classrooms and labs via technology to access a diversity of practitioners and resources.¹³⁵ “[T]eachers who are committed to instructing from diverse, global, and interdisciplinary perspectives are too often hampered by geographic or space restrictions in their schools and classrooms. The good news however is that advancements in technology have made overcoming these limitations easier” (Journell and Dressman 110).

It is also evident, given the information shared by the interviewees, that there are strong institutional nodes of education supporting undergraduate learning in lighting design in Canada, however, these are operating in semi-isolation. The information carries out of these nodes via students to create new networks and new nodes—but the full potential is arguably untapped.

¹³⁵ I discuss how I extend learning outside of the walls of my classroom through the “Talk to Me” sessions on page 221 of this paper.

Despite the digital connectivity of the 2000s, communication and collaboration between the large and small theatre lighting programs is lacking. Additionally, there is territorialism at work. As noted by Thomson, individuals are failing to be collegial with fellow lighting design instructors within the academy despite a willingness to collaborate and share information in the professional theatre sphere. Lighting design instructors, and arguably instructors in all areas of scenography, need to nurture better modes of interaction and networking in order to keep pace with the rapidly evolving technology.

Mentorship is recognized as a fundamentally important piece of lighting design education. Interviewees discussed how their own learning in a professional mentorship scenario was invaluable and that they continue to act as mentors in their own professional practice or seek out mentors for their students. There are departments with internship relationships with companies. For example, the UBC Department of Theatre and Film has internship arrangements with Bard on the Beach. There is staff or faculty cross-over between the two organizations that facilitates this valuable learning setting for UBC students. The Metcalf Foundation provides grants of up to \$32, 000 for internship training placements in the performing arts, including lighting design. The mandate of the grants is to strengthen the performing arts by supporting professional development opportunities and “provide individuals with more knowledge, better skills, broader work experience, and useful contacts—all of which make them a stronger professional contribution to the performing arts” (Metcalf Foundation). While the grants are not only for university students or recent graduates, students from theatre programs at Ryerson, McGill, and Queen’s universities are current interns at the Stratford Festival through this funding. (Metcalf funding is available to applicants across the country but they must be planning

a career in Ontario).¹³⁶ Conversation with the interviewees for this study suggests mentorship and internship opportunities are closely connected with the instructors and dependent on their personal connections to the professional industry.

Peer teaching, where senior students mentor junior students in production practicums, is also a traditional aspect of lighting design education that continues to be a well utilized training tool. Opportunities for lighting design students to be mentored by professionals outside of the university mirror the benefits of medical residencies, internships in law and teaching practicums in education. The majority of respondents expressed a desire for partnerships between the academy and the industry to facilitate this process. Again, in lieu of these options, technology can assist in filling some of these gaps. Through the “Talk to Me” sessions in the proposed curriculum, some of the information that students could gain from working professionals is made accessible to them. Through the forum posts, students have the opportunities to mentor each other and facilitate peer learning and knowledge acquisition.

Significant changes in student demographics, notions of contemporary performance and societal thinking dictate that lighting design technologies cannot remain the singular focus and driving force of the undergraduate curriculum. To that end, theoretical expertise and some professional career experience in lighting design are no longer adequate qualifications to teach in a post-secondary theatre department. As the senior instructors in the nodes begin to retire from the academy, research and publishing expectations for tenure-track positions, and degree inflation in hiring are changing the landscape of what the professoriate will look like within the next five to ten years. An individual with an undergraduate degree, hired in the 1980s could

¹³⁶ See Metcalf Foundation Performing Arts Internships <https://metcalffoundation.com/our-programs/performing-arts-interns/>.

conceivably be given tenure (e.g. Allan Stichbury and Mary Kerr at UVic). Now it is unlikely that an individual, even with an outstanding professional portfolio could do that that, as noted by Rob Thomson. Despite his status as one of Canada's most accomplished lighting designers, his lack of a graduate degree means "most Canadian universities wouldn't look at me". A review of the most recent tenure-track postings with a focus on design or production at the University of Calgary (2016), Grant McEwan University (2017), Simon Fraser University (2017 & 2019), and Ryerson University (2019) stipulate MFA or PhD, evidence of research or publication as requirements.

Expectations of teaching skills in higher education are also rapidly advancing to meet the needs of a student population that is; progressively international; differently abled either physically or cognitively; and/or managing mental health challenges associated but not limited to matters of personal identity, academic expectation, internationalization, and global digitization. Instructors can benefit in universities with faculty development centres that "address higher education faculty member's general lack of formal education about teaching and instructional design" however, there remains a "large number of faculty members [who] fall back on the assumption that all students should learn the way they themselves were taught [and] there is little incentive to change or add to their instructional repertoire" (Tobin and Behling 34).

The next section will discuss the concept of scenoturgy and its usefulness as a creative pedagogy that can work in tandem with connectivism to flatten hierarchies, de-centralize and destabilize the existing practices that could constrain future landscapes of undergraduate lighting design education. Following that, a sample 300-level lighting design curriculum will be proposed that can begin to address some of the identified shortcomings of the existing curriculum while leveraging the strengths.

Chapter 6: **Re-thinking Undergraduate Lighting Design Curriculums**

This study has reviewed the curricular history of undergraduate lighting design in Canada to recommend an updated pedagogy and curriculum that is reflective of the future direction of theatre and live performance in this country. Lighting design in Canada is a blend of tradition, technology, and creative ephemerality with its own distinct history. Its role in live performance along with the factors, values, ideas and theories that influence and inform it make it a challenging curriculum to refresh. This intervention in the undergraduate curriculum and pedagogy hopes to signal the start of a paradigm shift in the ways that we teach lighting design in university theatre/drama/performance departments.

Six main areas of concern for updated learning outcomes in an undergraduate lighting design curriculum have been identified through the review of current course outlines and interviews with instructors. The six areas, in no particular order, are related to: time and its relationship to productivity and creative agency; mentorship; apprenticeship; Canadian content; skills relevant to collaboration and finally, the performativity of light. To recap, an appropriate pedagogy, as established through the application of scenoturgy is interdisciplinary, inclusive, and collaborative. It de-centralizes the dominant narrative, and promotes re-thinking of traditional roles and hierarchies. An updated pedagogy requires reflective thought and action, through which the emphasis is joint productivity. Finally, a scenoturgic approach recognizes the relationship between time and creativity. The following section makes a connection between these desired areas of focus, a scenography supporting pedagogy and a current theory of learning that is well-suited to a new lighting design curriculum.

6.1 A Learning Theory for Undergraduate Lighting Design: Connectivism

An updated undergraduate lighting design curriculum is best supported by learning theories that resemble and can thus respond to contemporary structures of the theatre-making industry. One such learning theory is connectivism (Siemens 2005). This section will not enter into an in-depth analysis or critique of this theory, rather it will outline why its principles are a relevant scheme for developing an updated undergraduate curriculum in lighting design. From the outset, the pedagogy of the scenoturgic approach and the curricular theory of connectivism share some fundamental values: a focus on active and productive discourse; the strengths of networks and communities; rethinking of normative ways of working, decentralizing or defusing outdated power structures and hierarchies; the importance of agency and taking action.

This study has identified that lighting technology is a primary factor in undergraduate lighting design education, but that technologies for learning are under-utilized. As such it makes sense that a learning theory that is “used to facilitate learning, [...] to increasingly wired students” (Foroughi 11) is a reasonable place to begin to construct a new curriculum. Lighting design uses technology as a tool and medium of the art form, it makes sense therefore to also use technology to facilitate learning. The theory of connectivism, (Siemens 2005), is intended as a framework for online and distance education, but is “a useful and appropriate guide for learning in the ever-evolving digital age” (Foroughi 14). Connectivism’s major principles make it compatible with lighting design education because theatre production is a long-standing model of complex networking. According to Siemens, “Connectivism is the integration of principles explored by chaos, network and complexity, and self-organization principles” (7). These principles are:

- Learning and knowledge rest in a diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.

- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known.
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas and concepts is a core skill.
- Currency (accurate, up to date knowledge) is the intent of all connectivist learning activities.
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision. (7)

As with any type of change within a bureaucratic institution like a university or tradition-based art form like theatre, there are limitations and constraints that may prevent the implementation of connectivism to undergraduate lighting design instruction. Stephen Downes, a contemporary of Siemens, suggests that the arguments against the use of connectivism in a traditional learning environment like a university are circular. Downes argues,

They defend the current practice by the current practice. Yes, we know that in schools and universities, students are led through a formalized and designed instructional process. We understand that some students prefer it that way, that some academics are more comfortable with the format, that most institutions require the practice. But none of this proves that the current practice is ‘better’ than what is being described and demonstrated [in connectivism]. (n.p.)

A learning design that leaves room for serendipity or emergent curriculum can be challenging to assess within current learning outcome indicators. A curriculum that is structured in a connectivist model demands that the instructor be open to learning technologies and taking the

time to regularly consider their content delivery modes and update them as necessary.

“Connectivism stresses that two important skills that contribute to learning are the ability to seek out current information, and the ability to filter secondary and extraneous information” (Kop and Hill n.p.). This student-directed approach requires students who may have come up through a traditional education model to learn a new process of knowledge acquisition and for the instructor to cede control as the sole locus of knowledge.

6.2 Connectivism and Lighting Design

The following section outlines how the theory of connectivism is an excellent scaffold for new lighting design curriculum when examined point by point.

Learning and knowledge rest in a diversity of opinions.

Theatre creation, particularly in a scenoturgic format, where many voices are present in the product, is an aggregate of differing opinions that must reach consensus in order to move toward a shared goal. Because it is an interdisciplinary practice, theatre is dependent on individuals who individually hold knowledge about the various aspects of production to be able to consolidate their collective talents and skills into a single work. Writers, scenographers, directors, attendants - are all fragments of the whole. Twenty-first century lighting design learners in Canada should be presented with a variety of perspectives on the role of light in performance, lighting technologies, creative practice and performance across cultures etc. Students today have unprecedented access to information about new technologies and practice in other countries through the Internet. (An obstacle that exists currently is a lack of access to previous works by Canadian lighting designers. This will be discussed further in ‘Suggested Resources to Support the Curriculum’.)

Learning is a process of connecting specialized nodes or information sources.

As mentioned previously, the present lighting design curriculum is traceable to the persistent nodes. The persistent nodes are not only the four universities listed and their instructors noted previously, but also the entrenched practices and the organizations that stabilize them. The community network of practice in a given location (city, university, industry etc.) is a primary source of that content. There are strengths and benefits to this. The current lighting design curriculum, that feeds off of long-established, foundational practices tend to draw on experiential learning which “has long been considered the best teacher of knowledge. Since we cannot experience everything, other people’s experiences, and hence other people, become the surrogate for knowledge” (K. Stephenson n.p.). However, these foundational practices, that functioned well in the analogue realm of the twentieth-century, have become what Siemens refers to as “weak ties”.

Weak ties are links and bridges that allow short connections between information. Our small world networks are generally populated with people whose interests and knowledge are similar to ours. Finding a new job, as an example, often occurs through weak ties.

This principle [connectivism] has great merit in the notion of serendipity, innovation and creativity. Connections between disparate ideas and fields can create new innovations.

(n.p.)

The application of connectivism in the lighting design curriculum extends the acquisition of knowledge beyond the traditional classroom and studio approaches in lighting design to create new ways of ‘thinking-in’ and about light. Connectivism can help to mitigate the silo-ing of the persistent nodes and encourages knowledge acquisition that is further reaching and learner directed.

An ideal undergraduate lighting curriculum has been described as one that includes formal instruction from a qualified individual, opportunities to be mentored or serve as an

apprentice outside of the academy and for peer collaboration. Additionally, there is a need for improved networks of communication between persistent and newer institutional and industry nodes which can be easily merged through the use of digital technologies.

When it comes to learning via technology, twenty-first century students often self-teach and do not wait for formal instruction to be provided or offered (Prenkys 2001). There is very little about lighting design that cannot be learned through content management systems (CMS) like YouTube. Abbas Foroughi notes that in the present state of Web 3.0¹³⁷, students are able to “pursue a limitless number of new sources of information and make connections with experts in the field of interest, as well as peers who are exploring this topic” (16). An updated lighting design curriculum should leverage this unprecedented access to information blended with mentoring and apprenticeship within the professional community.

Learning may reside in non-human appliances.

Lighting design is an increasingly digital/human performative interaction. As such, students and instructors of lighting design must be open to how teaching, learning and performance are informed by digital technologies (including learning technologies such as the Internet and lighting specific technology such as instruments and control desks). The proliferation of devices that are web-enabled and network connected with an eye on Web 3.0 means the performativity of artificial intelligence continues to evolve. The undergraduate lighting design curriculum will need regular assessment against that evolution to ensure it is keeping pace. To this end instructors should also apply connectivism and the development and

¹³⁷ Web 3.0 is understood as the present fundamental shift involving how websites are created and how people interact with them.

use of a PLN (Personalized Learning Network)¹³⁸ to facilitate their own ongoing professional development.

Capacity to know more is more critical than what is currently known.

In articulating connectivism, George Siemens noted,

Learners as little as forty years ago would complete required schooling and enter a career that would often last a lifetime. Information development was slow. The life of knowledge was measured in decades. Today, these foundational principles have been altered. Knowledge is growing exponentially. In many fields, the life of knowledge is now measured in months and years. (1)

While the biggest changes in lighting design: computerized control, computer assisted drafting and LED light occurred over a span of four decades, it is foreseeable that ground-breaking changes could occur in as little as five to ten years. A career path in twenty-first-century lighting design will require students to be lifelong, self-directed learners. Instructors also need to be active, self-directed, life-long learners. Self-directed learning is a developed skill. This capacity to ‘know now’ and ‘then know more’ can be expressed as knowledge/*and*—evoking the understanding that lighting design training is not a finite process.

Nurturing and maintaining connections is needed to facilitate continual learning.

The twenty-first-century student is well versed in finding information online by the time they reach university. Scenography has historically made and utilized connections between theatre and other disciplines such as visual art, architecture and engineering. Understanding the

value in current interdisciplinary technological connections in theatre and performance and seeking out new ones is a core skill that is essential for the twenty-first century student.

Some studies suggest that the group known as “Generation Y” or the “Millennials”, born between 1981 and 2000 (depending on the source) lack or have underdeveloped interpersonal skills. (Gibson and Sodemen 2011; Tulgan 2015). These are often described as ‘soft skills’ and according to Vera Jacobson-Lundeberg can be defined as “a cluster of personality traits; social graces; and facility with language, friendliness, and optimism” (84). Jacobson-Lundberg (2016) further suggests that intentionally taught interpersonal skills are of particular benefit to socio-economically disadvantaged, international or otherwise disenfranchised students. Effective, ongoing, and professional networking within a community of practice is a learned skill. Without these skills students may experience difficulty in finding or maintaining employment in professional theatre.¹³⁹ Competent and creative collaboration within the rehearsal and production process has been identified as a critical learning outcome for an updated undergraduate lighting design curriculum. A lighting design curriculum that is predicated by a scenoturgic pedagogy can facilitate the development of these soft skill competencies. As a pedagogy that is rooted in collaborative dialogue, students are supported in the practice of respectful negotiation, non-hierarchal production models and personal agency. Interviewees for this study have expressed that guidance in developing person-to-person communication and collaboration skills were a missing part of their own training and remain an under-recognized skill in undergraduate lighting design education.

Ability to see connections between fields, ideas and concepts is a core skill.

¹³⁹ For more on twenty-first century skills that come from studying various aspects of theatre in a liberal arts program, see Carolan “An Informal Review” 80-82.

In a scenoturgic model, the connections or relationships that exist between lighting design and all of the other aspects of theatre creation and performance are recognized as a fundamental factor in contemporary theatre. A student lighting designer should be taught to seek out and investigate the connections between their work and the production as a whole and their role in those relationships. The review of the course outlines submitted for this study did not indicate if this is a standard practice within the current pedagogy and curriculum being used. Part of the learning process in lighting design should involve inquiry into or discovery of new connections. Connectivism actively promotes this practice not only for the duration of the course but as a sustained practice for ongoing professional development beyond the classroom.

Specific and focused development of a network of information connections involves a shift in how undergraduate lighting design is taught, moving beyond technical skills into a richer, agential practice. This is a move away from a teacher-centered model, which is prevalent in the course outlines reviewed, toward a student-directed model for learning. “Students will spend less time gathering and integrating knowledge and more time on higher level thinking—synthesizing information, constructing new knowledge and applying what they learn” (Foroughi 17, Ohler 2008). To this end, lower level courses and pre-requisites that fully cover the mechanical aspects of lighting, for example how to hang and focus a light, are necessary.

Currency (accurate, up to date knowledge) is the intent of all connectivist learning activities.

As an industry and academic discipline, lighting design has always been and will conceivably continue to be driven by technology. Therefore, it is important that twenty-first century lighting design students learn to hone their generational inclination toward digital sources of information to “develop digital literacy skill” that includes “critical discrimination and management of online information” (Foroughi 18, Ingle 2012). Like other research-based disciplines, undergraduate lighting design students will need instruction on how to be discerning

users of quality online sources. Consequently, instructors will need to develop and maintain knowledge of up-to-date and reliable repositories of lighting design data. The course outlines reviewed do not indicate specific learning strategies for, or learning outcomes related to the development of digital literacy skills specific to lighting design practice, such as accessing digitally archived information or networking with a community of practitioners or researchers through online forums.

Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Never before has the “meaning of incoming information” and a “lens of shifting reality” been more debated in the collective conscience of Canadian society. Gathering, application, and dissemination of information, particularly through performance, is a fraught enterprise. A scenoturgic approach, which advocates for each individual involved in a performance to be accountable for what is put out into the world speaks to this current global climate. Students must be taught that the decisions they make about what they choose to put on stage follows them and impacts others. This does not mean that they should be taught to self-censor rather to actively decide from an informed position how to express themselves. Additionally, students need to be taught that even the most considered performance decisions could be perceived differently from one moment to the next in our hyper-connected world. While this skill set is not a clearly defined learning outcome in the course outlines reviewed for this research it may be present in the hidden curriculum or be encouraged by individual instructors as necessary.

6.3 A Proposed Undergraduate Lighting Design Curriculum

Through interviews and a review of current course outlines, the strengths and the weaknesses in the current Canadian lighting design curriculum have become clearer. Current curriculums are consistent in addressing the mechanical processes of working with an existing script, instrumentation, paperwork, safety and industry-specific software like Vectorworks™. Shortcomings that were revealed by the review of the current outlines that were generously shared for review in support of this research include overlooking the unique qualities of a time-based art form; matters of diversity in performance; interpersonal skills; professional development (outside of regular class attendance), non-traditional notions of performance or site-specific performance; the general and Canadian specific histories of lighting design; and the agency of the artist. This is not to suggest that all of these elements are absent from every curriculum currently in use or that there are not instructors addressing some of these matters in their teaching. The recommendations of this study are not intended to dismiss or discount the decades of effective lighting design instruction in Canada, but to refresh and revitalize it.

Time, has been proposed as a primary consideration in a new curriculum. Time to explore the functionality and performativity of light in and as performance. Time for concepts to percolate in student's minds before they have to be put into practice. Time for lighting designers to be included and present in the rehearsal process. Time for students to learn in the classroom and in apprenticeship. Finding and facilitating extra time within the academy however, is a major constraint to any significant structural changes to the curriculum. At most, two semesters, a mere twenty-six weeks, might be the best that instructors and students can hope for. With this in mind and acknowledging the limitations of a standard thirteen-week semester, I propose that specific pre-requisite courses are needed. Firstly, one that covers the basics of stage lighting including; how to identify, hang, focus and cable a lighting instrument; how to read lighting paperwork; and

basic control desk operation. Secondly, training in computer aided drafting software applications such as Vectorworks™ or AutoCAD™ needs to happen in a separate course (Computer Aided Drafting for Scenography for example). The complexity and computing power in these programs is under-realized when treated as an ‘add-on’ in a design course. To return to Paul Court’s assertion (2007), we must learn to master technology at a high level of understanding before we use it as an artistic tool, or else it is never truly incorporated seamlessly into the process. At the very least - a demonstrated understanding and moderate competency with the software is needed before using it in a creative application. Removing CAD training content from lighting design courses would also facilitate its removal from set and costume design courses allowing for more in-depth exploration of design concepts in those disciplines. Student learning is better scaffolded when this training is front-loaded in a 100 or 200-level course with design happening at the 300 and 400-level. If the basic mechanical skills are taught first, then upper level students can apply these skills more readily as tools in realizing and expressing their ideas. While this may seem like ‘asking for too much time’, skill sets in ‘voice’ and ‘movement’ are commonly separated out of ‘acting’ to allow more time for these complex skills to be explored and developed. Removing these two components from a lighting design course can free-up time to focus on the dialogue and performance of design rather than mechanics and technology.

The next way to add time to the learning process is to introduce course elements that are both synchronous and asynchronous in a blended learning approach. There is no available research on teaching scenographic topics using a blended learning strategy, but there are precedents for teaching dramatic literature and visual arts in this way. According to Lesley Hawkes and Glen Thomas, “Blended learning is the use of online tools and resources blended with more conventional methods of teaching but it is also approaching teaching in a different way . . . extend[ing] beyond merely taking up new technologies and incorporat[ing] a

reconceptualization of the curricula and learning environments” (84). By opening up lighting design education to teaching technologies we open the door to new pathways for learning.

Resistance to blended learning in the arts has been acknowledged in the research. Alice Bajardi et al. write,

We observed in the field of art education, in [. . .] educational institutions like museums, universities and schools a dichotomy is still present. Indeed, there is a part of art educators who defend the tradition with its methodologies and tools, in contrast to others that consider the use of technological tools and e-learning methodology as a viable and positive alternative to traditional educational models, because they improve communication skills and increases the motivation to learn and participate directly in the knowledge construction. (17)

In addition to adding participatory learning time to the term, I suggest that an updated lighting design curriculum must include some aspects of blended and online learning as a strategy for students to become active participants in developing their own process and body of knowledge.

Diversity, has also been recognized as fundamental shortcoming in the current Canadian lighting design pedagogy and curriculum. While the physical male to female ratios of the professoriate and professional industry are unlikely to be corrected any time soon, active steps should be taken to diversify within the curriculum. These steps can include a diverse balance of authors in course materials, for example using a course pack with curated sources that reflect a variety of voices, rather than a single source. Guest speakers and artists who represent marginalized groups in lighting design can bring an added level of diversity into the classroom setting. Encouraging students to research a wide representation of lighting designers: female, male, non-binary, Caucasian, people of colour and international approaches to light in performance. Encouraging students to support and promote equality in the theatre industry with

their bodies and wallets. By this I mean patronizing companies who support diversity in hiring, programming, attendees etc.

Assessment in all areas of theatre education is a complicated process – further amplified, arguably, by instructors who are not trained educators. Laura Salazar posits, “A central danger in evaluating student progress in theatre lies in the temptation to evaluate on the technical and concrete and to ignore or devalue the creative and artistic aspects” (n.p.). While Salazar’s comments are pointed at evaluation in acting streams, they are arguably more poignant when applied to coursework in scenographic topics. Review of the assessment breakdown in the course outlines submitted for this study are in agreement with Salazar’s observation. There are no articles about how to assess learning in lighting design. Again, drawing comparisons with assessment in acting, “methods and language used in the Western [...] training is somewhat standard (they are understood systemically and used across the discipline)¹⁴⁰ instruction of the most common methods is—almost exclusively—personality driven and idiosyncratic” (Mello 92).

6.4 A Proposed Syllabus

The following is a detailed syllabus for a proposed lighting design course at the undergraduate 300-level. The syllabus is based on incoming students having the pre-requisites mentioned previously: some basic CAD training and an introductory stagecraft or production practicum involving lighting. The assignments are explained in more detail that would normally be included in a syllabus. Each assignment also has a corresponding assessment rubric that can be found in the Appendix D. The weekly module schedule includes assigned viewing, listening

¹⁴⁰ Mello’s parentheses.

or reading assignments—these are only suggested sources. Additional potential sources are noted in section 4.6 “Resources to Support a New Curriculum and Pedagogy”. Throughout the syllabus are shaded text boxes that contain my rationale on how these recommendations might enhance, support or reform existing practices or where further explanation may be useful. This course is designed to work within the existing university theatre course timetable structures in Canada as any radical changes to those are improbable at this time. As appealing as theorizing a utopian ideal of what an undergraduate lighting design curriculum, and theatre education as a whole, could be; the purpose of this research is to make recommendations that can be feasibly implemented now. Following the syllabus is a summary of how this proposed syllabus expands on the current curriculum.

Course: Lighting Design for Theatre (300-level)

Duration: 13 weeks (4 contact hours per week)

Prerequisites: Introduction to CAD or Vectorworks, Introduction to Stagecraft, Scenography or Lighting.

Course weight: 3 credits

Calendar Description

This course provides learners with an opportunity to theorize, develop, communicate and realize a basic lighting design for theatre. Students will develop their own lighting design process through direct experience with current lighting design practice and practitioners, technology, examination and critique of past and present professional practice, application of lighting design software, and text analysis. The development of lighting design skills will be further explored through the student’s connection to the work, the theatre community, the community-at-large,

and to each other through learning and practice.

Mode of Instruction

This course is delivered through a blended and distributed learning model. Instruction

Rationale

Blended and distributed learning methods are gaining popularity in twenty-first century teaching methods in higher education. (Siemens 2005; Downes 2008; Irvine 2009; Irvine et al. 2011; among others) While the use of a learning management system like Moodle or Blackboard does require some training for the instructor, having a single, accessible, online container for the course can serve multiple outcomes. An online site offers students a way to be connected to course materials and classmates outside of scheduled class or lab time. The online site can serve as a repository for sharing resources and ideas.

The majority of the course outlines reviewed for this research do not indicate what mode of instruction will facilitate the learning. Clearly stating the mode of instruction can help students to identify where potential constraints relative to their own style of learning may exist with ample time to negotiate alternatives or accommodations.

will take place: face-to-face in a discussion and lab setting, AND via online discussion forum, Skype, video, podcast or slide show with narration. Each module of instruction is supported by a number of online asynchronous activities and viewings/readings/audio. Students are additionally supported via a variety of communication tools including: the course LMS site, email, video communication, and other multimedia files available on or linked from the course website. Students will develop a PLN (personalized learning network) to enhance their lighting design study and practice.

Inclusivity Statement

The fundamental purpose of theatre is to reflect the world back at itself. As such, matters of diversity, equity and inclusion should be at the forefront of the creative and academic work that we undertake in this course. All students should feel safe communicating their thoughts and opinions with the freedom to take risks, experiment and push the creative boundaries of this

course. Whenever possible and appropriate, the requirements of the course will be adapted to work toward achieving equity and enhancing diversity.

Rationale

An inclusivity statement that is part of the official course syllabus signals to the students what they can expect in terms of a safe and respectful learning experience from the instructor and the students in the class. It is a small gesture that can have a large impact in the promotion of positive attitudes toward and adoption of inclusionary practices. (Jacquart and Wright 2017)

Learning outcomes

At the end of this course students should be able to:

- Demonstrate an understanding of the role of the assistant lighting designer, lighting designer and lighting design in a live performance.
- Understand basic design elements such as colour, texture, intensity or tempo and how they are used to communicate through lighting design.
- Demonstrate an understanding of the basic mechanical processes of lighting design, including the lighting plot and accompanying paperwork.
- Demonstrate the necessary interpersonal skills for effective communication with other designers, director, production teams and performers.
- Describe a scenoturgic approach to lighting design.
- Differentiate the creative and practical application of various lighting instruments.
- Demonstrate a range of research methods used to develop and conceptualize a lighting design. (text analysis, historical research, visual research, interview etc.).
- Create a basic lighting design for live performance.
- Effectively communicate and defend aesthetic and technological choices in lighting design.
- Create a PLN (personalized learning network) of lighting design resources.

Rationale

In alignment with the current paradigm shift in higher education away from a traditional teacher-centered approach to knowledge acquisition and assessment, clearly stated learning outcomes can facilitate a model wherein the learning is the result of a student-centered approach. Proposed learning outcomes allow students to actively participate in the development of competencies because there are transparent and attainable goals defined at the outset of the course (Tam 2012). Additionally, proposed learning outcomes can assist in establishing a common model or teaching to an industry standard. (Gosling & Moon 2001) Within a course that uses a blended-learning model, teaching-technologies such as learning management systems, can aid in assessment when implemented in the development of digital documents such as an e-portfolio or PLN. Like a traditional paper portfolio where students assemble examples of their work as it progresses throughout the term, an e-portfolio can be a place where students can self-assess where they began and where they have progressed to ... the emphasis is on what students can actually “do” at the end of the course (Tam 25). A well-developed PLN demonstrates that students know how to network, problem-solve, and source specific information independently and collectively to achieve the completion of a task or goal. In a lighting design course, clearly defined learning outcomes might be seen as a constraint to creativity, leaving little room for emerging curriculum to occur (Bagnall 1994). However, I propose used in tandem with a blended learning model that emphasizes distributed learning methods, that there are opportunities for serendipity and unplanned discovery to occur.

Course Format

This course uses blended and distributed learning methods. All students are expected to complete any reading or viewing assignments prior to the corresponding class discussion and lab. Students are required to do designated assignments online outside of class time. Students will be required to make their own arrangements for attending two professional live performances.

Textbook / Reading/Viewing/Listening List¹⁴¹

¹⁴¹ See section 4.6 for a detailed list of resources to support this syllabus.

There is no required textbook for this class. This course will draw on a variety of traditional and non-traditional mediums as learning resources. All assigned readings, podcasts and videos for each module will be linked into the LMS.

Talk to Me¹⁴²

In class on weeks 2, 4, 6 and 8, we will meet and talk with a practicing lighting designer via Skype. Students will be expected to prepare for the “Talk to Me” session by researching the scheduled lighting designer online and submitting one well-prepared question to ask them about their work or career path in lighting design. Suggested questions will be pre-approved before each session begins. Given the unpredictable nature of these sessions, it is possible that there will not be time to address every question.¹⁴³

Rationale

Adhering to a singular reference text as a learning resource or only textual resources is an outdated teaching practice that does not support the differentiated learning styles of the twenty-first century undergraduate student. A blending learning environment is ideal for the inclusion of a variety of resources materials that allow students multimodal pathways to engage with course content. “By simply recognizing that no two students learn in the same way and taking that recognition into account when designing, teaching, and assessing interactions, faculty members and designers give students a greater likelihood of coming away from courses having actually learned something” (Tobin and Behling 42).

¹⁴² See section 4.6.1 for a detailed explanation of the “Talk to Me” sessions.

¹⁴³ Students are required to do some preliminary research about the scheduled lighting designer in order to be able to actively participate in the online “Talk to Me” conversation. Questions are submitted to the guest, by the instructor, a minimum of forty-eight hours in advance in order to allow them to vet any that may be unsuitable due to complexity or content.

Assignment Assessment Breakdown: Four Assignments (4) x 25% each = 100%

Assignment #1: Developing a Personalized Learning Network for Lighting Design

Create a PLN (personalized learning network) of lighting design resources. Demonstrate research methods used to develop and conceptualize a lighting design. (text analysis, historical research, visual research).

Assignment #2: The Role of the Lighting Designer and Light in Performance

Demonstrate an understanding of the role of the lighting designer and lighting design in a live performance. Understand basic design elements such as colour, texture, intensity or tempo and how they are used to communicate through lighting design.

Assignment #3: The Assistant Lighting Designer

Act as the Assistant Lighting Designer to successfully complete job specific tasks. Demonstrate an understanding of the basic mechanical processes of lighting design (lighting plot and accompanying paperwork). Differentiate the creative and practical application of various lighting instruments. Demonstrate effective interpersonal skills.

Assignment #4: Being the Lighting Designer

Act as the Lighting Designer to successfully complete job specific tasks. Create a basic lighting design for live performance. Effectively communicate and defend aesthetic and technological choices in lighting design.

Rationale

Each of the assignments scaffolds the next, giving the students the opportunity to first acquire the requisite knowledge and then apply it before moving onto the next task. The students begin by learning how to actively participate in the acquisition of necessary knowledge, followed by defining the tasks and disciplinary scope that are being researched and mastered. Moving on, students begin to apply the concepts and skills that they are acquiring in a graduated fashion, as they would in the real world, functioning first in an assisting role and progressing to the role as the primary lighting designer on the project.

Detailed Assignment Descriptions

Assignment #1: Developing a Personalized Learning Network for Lighting Design

Learning Outcome: Students will create a PLN (personalized learning network) of lighting design resources, and understand the purpose and use of a PLN.

Task:

What is a PLN and why should you have one? A PLN is an online, networked community of practice that can support and challenge your learning and skill development. It is a place where you can find information, test your ideas, find new ideas and get feedback from others in lighting design or theatre or any field or activity that interests you. A PLN operates like a massive, multi-tentacled network that helps you to find information or problem solve. It opens you up to more content and perspectives than you can access if you were to simply try to gather information on your own. A PLN can give you access to more people's experience than a traditional learning environment so that you can learn from it. These people may be in this class or they may be in another university, or a professional theatre company in Canada or anywhere in the world. A PLN moves you from being a passive recipient of information about lighting design to playing an active role in deepening your knowledge base and expanding your thinking.

A PLN allows you not only to gather knowledge but to share what you know, sources and ideas with your community of practice. When the course ends, your PLN will be a way for you to continue to develop ideas, learn about new technologies and make connections to the theatre lighting community.

Your PLN will be a network of information about or for:

1. The professional lighting design community.
2. Lighting design students.
3. Research resources for lighting design (such as archives, trade shows, blogs or historical sources etc.).
4. Visual resources (visual art, photography, film, etc.)
5. Employment in the entertainment industry (links to associations like ADC or CITT etc.)

The grade for your PLN is formative. Each section is worth 5% each. There is a total of five (5) posts required worth 5% each totaling 20% of your final grade (due dates are in the weekly syllabus schedule).

1. For each of the five categories listed above you will find three online sources.
2. You will share these sources in the online forum for this course on the University LMS.

For each post, you will provide a link to each of your three (min.) sources, a screen shot of the home page of the source and a 100-200-word assessment of their usefulness. ****Try not to repeat a source – this means if you or someone else in the class has already posted it, attempt to find another one. If you must repeat a source, attempt to describe its usefulness in ways not already suggested by your classmates.**

For each of the five categories you will respond to the posts of two of your classmates.

Do not simply agree with what has been written and compliment the post, critically engage with it. Avoid responding to the same classmates all the time – mix it up! (keep the comments positive in tone, but critical and constructive in purpose). In these posts, you are demonstrating your engagement with the reading and video materials, the ongoing online class discussion and activities, plus giving you the opportunity to practice your skills communicating ideas and concepts about lighting design. Your responses to your classmates should offer the following:

- A statement about their post that made you want to respond to it.
- A point of inquiry that it suggests to you.
- Possible sources for more information related to what they have posted about.

Forum posts are intended to share your learning and help everyone make as many connections as possible to benefit your practice. Posts are intended to be thinking in public, so it is also acceptable to critique a source. This work will include finding, analyzing, and assessing resources such as videos, articles, blogs, archives and readings, which you will post in the course discussion area. Your assessments should be well-written and professional, with proper spelling and grammar, any additional sources properly cited, no point form, colloquialisms commonly referred to as “slang”. Responses can be written in the first person.

Rationale

I often replace a formal essay with structured online discussion forums. To date I have successfully used this process in a blended learning environment more than fifteen times for the following courses: *Theatre in an Education Context*, *Drama in Education*, *Theatre for Young Audiences*, *Theatre History (Greeks to the Restoration)* and *Introduction to Theatre*. I also use it regularly to teach in a fully online environment in two courses, *Personalized Learning and Social Media*, and *Distributed and Online Learning*. The forum format I use is an adaptation of a learning strategy I learned from Dr. Lynn Fels at Simon Fraser University. In my experience, the learning outcomes exceed those of a formal essay and from a grading perspective are not any more time consuming:

- Students actively participate in generating a resource base for the course topic and develop skills to support lifelong, self-directed learning.
- Over the semester students will formulate opinions and write critically about a requisite number of sources.
- Students usually write more than the minimum required word count on a given topic in the semester. Forum post lengths and topics can be altered to suit the level and content of the course.
- Because the assessment is formative, student writing and comprehension typically improves measurably over the term.
- Because the writing is essentially ‘bootstrapped’ over the semester, students are less resistant, present higher quality work and more of it, and are less likely to burnout in that course by midterm.
- The online forum can serve as the research portion of design work as students can use the process to research in a collaborative and cooperative fashion.
- Because students are engaging critically and constructively with each other outside of class, and developing working relationships, the class discussion and activities have more time to evolve and become more fruitful.
- Online forums are a method of de-centralizing the locus of learning and create a more inclusive discourse.
- Online forums function as an example of distributed learning through connectivism.

An additional benefit to the use of online forums and encouraging students to develop their own PLN is that they can tailor the content to their own specific needs and interests. For instance, when researching the professional lighting design community, students can be encouraged to find lighting designers who positively reflect their own identities back at them. Furthermore, when students bring their research back to the forum to disseminate to the group, the diversity of the information should be wider than that presented by a single instructor.

A final note on the use of PLNs. Anyone who teaches in any subject area should have a PLN. Your PLN, once it begins to take shape, feeds new information and data to you based on the networks and connections you make. The PLN that I now have based on the research for this study feeds me up-to-date information on curriculum and pedagogy in higher education, career opportunities for me and my students, it connects me to other instructors in other universities throughout the world, connects me with other graduate students, gives me information about new technologies in scenography and in education and much more. The resources available to me through a PLN are exponentially more than if I depend only on myself for knowledge acquisition.

Detailed Description of Assignment #2: The Role of the Lighting Designer and Light in Performance

Learning Outcome: Students will demonstrate an understanding of the scenoturgic role of the lighting designer and lighting design in a live performance; understand basic design elements such as colour, texture, intensity or tempo; and how they are used to communicate through lighting design.

Task:

In theatre, designers need to be able to communicate their ideas both verbally and visually to directors, actors and other designers. Through this assignment, students will begin to develop these communication skills. Students will attend a minimum of two live performances in order to assess the role that the lighting designer and design has played in the following:

- Enriching or diminishing the set design, costume design, sound design etc.
- Succeeds or fails to further the narrative of the performance.
- Engages the attendants or creates a constraint to engagement.
- Works with or against the humans in performance.
- Consider how basic design elements such as colour, texture, intensity or tempo and how they are used in the circumstances listed above to communicate through lighting design.

In order complete this assignment you will need to view at least two (not more than four) live performances. Performance choices must be pre-approved by the instructor. The performances can be theatre, dance, opera or performance art, preference will be given to those produced by professional companies and must make sense as comparables. Students will use a combination of writing and images to communicate their understanding of the role of the lighting

design and lighting design by contrasting and comparing the live work that they have attended. Students will present their research in class. The format of the presentation is open to interpretation but must include the following elements:

- A brief assessment of the performance including; what about the play mattered? What was important, what is the work it is attempting to do? How did the performance as a whole engage or fail to engage you? What concepts from this course can you apply to the performances?
- A discussion of the role of the lighting designers and design in these productions.
- Visuals that help to communicate your thoughts. These CANNOT be photographs from the performance, but could include things like magazine clippings or artwork that evokes a similar tone, colour, texture etc. to what was present in the performances you attended.

The assignment is due by the end of Module 8.

Rationale

“Everyone who has attended much theatre knows that things happen on stage of which you would never be aware of simply from reading a drama text” (Fortier vii). Attending live theatre is a critical part of lighting design education. Of the course outlines reviewed for this research, only a few included attending live performance as part of the current curriculum. Attending the live theatre is field research. One performance is, in my opinion, the minimum requirement for this level of lighting design education. Two performances invite comparison, analysis and discourse. While writing lengthy academic papers about lighting design may not be the best use of the undergraduate lighting student’s time, they do need to learn how to communicate the ideas and concepts surrounding lighting design in written, oral, and visual mediums. A performance review of a lighting performance that is only presented through text, would not be a sufficient learning assessment. Lighting design students need opportunities to practice communicating their findings and ideas in writing, verbally and visually. Through this assignment, students are essentially doing a close reading of a lighting design – viewing it to determine the work it does to communicate with all of those who interact with it in performance. This assignment encourages students to use live theatre as a primary source for research. Photographs are a woefully inadequate source for viewing examples of stage light. Students need to see lighting in a live performance setting in order to begin to understand the scope of its effect—using a critical eye, and paying attention to the work that it does.

McKinney and Iball (2011) suggest that performative writing is a primary skill for scenographers. They draw on Peggy Phelan’s assertion that performative writing is “enacting the affective force of the performance again” (11). The idea is that in writing about the scenography, “draws on the researcher’s responses to the multiple dimensions of the event” (31). The ability to translate aspects of a live performance through multi-modal methods, to be able to accurately describe, either verbally or in writing or a combination thereof, is another way to de-centralize and break down hierarchies in learning. If a student can do this effectively, it is not necessary to have seen the show to assess the work. The majority of interactions with information about lighting design is in the past tense, long after the performance has closed. Learning to effectively and affectively communicate about an ephemeral art is valuable.

To present their research findings in class, students need to find ways to talk, write and think about an ephemeral medium. Keeping the format of the presentations open to interpretation encourages students to play to their own strengths. The grading rubric for the assignment allows for student’s strengths to carry weight, for example a student who is very good at communicating ideas through visuals, but lacks confidence speaking in front of people or vice versa will see their strengths balance out areas that require more work. Students are given timely feedback so that they can work on specific skills such as organizing their written work more effectively for the next assignments.

Assignment #3: The Assistant Lighting Designer

Learning Outcomes: Students will demonstrate an understanding of the basic mechanical processes of lighting design (lighting plot and accompanying paperwork); and differentiate the creative and practical application of various lighting instruments.

Task:

Students will assume the role of the Assistant Lighting Designer. The Instructor will function as the Lighting Designer. The student will be assigned an existing lighting plot for which they will:

- read the script.
- generate an instrument schedule and magic sheet.
- prepare floor plans, cue sheets & tracking sheets.
- students will suggest two alternate instruments for use based the supplied lighting inventory and make the necessary updates on the lighting plot.
- the lighting plot will be divided into sections for which students will lead the hang and focus session.
- prepare an accurate sketch of all lamps as focused.

Assignment #4 : Being the Lighting Designer

Learning Outcomes: Students will create a basic lighting design for live performance and effectively communicate and defend aesthetic and technological choices in their lighting design.

Task:

Using the skills that students have been building (creating a lighting design PLN, understanding the role of the lighting designer and lighting design in live performance,

communicating concepts and ideas about lighting, the mechanics of documenting and installing a lighting design), students will create their own basic design. Students will be working as the lighting designer the instructor will be working as the director. Students will need to meet specific deadlines and meet with the instructor at scheduled points in the design process.

- Students will be assigned a short one-act play to read and analyze for lighting. (cue synopsis, storyboard)
- Students will be assigned a set inventory of fixtures.
- Students will be provided with a basic floorplan of the set.
- Students will meet with the instructor (in the role of the director) to discuss their thoughts and a basic concept.
- Using CAD (Vectorworks™) students will draft a basic lighting plot.
- Students will create a magic sheet and instrument schedule.
- Students will hang and focus a selected portion of their plot (classmates will serve as crew for each other).
- Students will set levels and record three cues with the Instructor (in the role of the director) (classmates will serve as board operators and stage managers for each other).

Rationale

In essence, assignments three and four are an extended role-play exercise; in these assignments students learn the skills associated with the roles of the Assistant Lighting Designer and the Lighting Designer. These are the explicit learning outcomes. Students also encounter the hidden curriculum of functioning in other production roles and attendants in support of each other's learning. Approaching this learning through role-play is a useful method as many who transition into the professional industry will mostly likely do so beginning as an assistant. The role of the assistant lighting designer is not overtly addressed in the course outlines reviewed for this research. Role-play as a teaching and learning method is something I implement regularly when teaching *Drama in Education* and *Education in a Theatre Context*. It is a well-documented method (Prendergast et al. 2013, Snyder-Young 2011, Fels et al. 2008, Conrad 2007, Tarlington et al. 1995, Johnstone 1979; among others) that has been embraced in a range of disciplines from medicine to law to education and sports. While role-play is also seen in acting and applied theatre contexts, (see authors noted above) in my experience it is not regularly employed in the teaching of scenographic or production topics. Role-play differs from a production practicum assignment in that it can be fully experimental, whereas a production practicum assignment has a concrete end goal that is high stakes, in that many people are affected by the outcome. Role-playing of lighting design as a process or scenario with various "characters" for example the director and the board operator, allows and invites performative inquiry into this learning. Learning through mentorship or apprenticeship has been identified as an important aspect of lighting design training. Not all programs or instructors have relationships with their local companies or designers with whom they can arrange apprenticeships or internships for their students. Role-play can aid in addressing that gap.

There is a tremendous benefit in working with an established lighting designer's work before attempting your own design. In needing to work within a pre-existing design students step directly into the role of the assistant. The time new students require to generate a fully realized, complex lighting plot would not allow for them to practice these skills more than once. Being able to accurately read and derive information from a lighting plot is a critical skill set for a new designer. Being able to take direction from the lighting designer to record changes and translate the lighting plot from paper to the physical grid is an invaluable learning experience. Some of these skills take more time for individual students to develop. A student who is adept at CAD might not have good time management skills. The assessment rubric helps to balance out student's strengths and weaknesses and indicates clear areas of mastery or those needing improvement.

The Module Schedule

Rationale

Within the blended learning model for this course is the use of an online learning management system (LMS) such as Moodle or Blackboard. On the LMS is all of the links to the course learning materials, detailed assignment descriptions and the weekly module objectives. With the weekly schedule and online access to course materials from the first day of class, students who are motivated to have the option to work ahead and complete certain aspects of the work as they prefer. For example, Assignment #1: Developing a PLN can be done at a somewhat individualized pace. The assignment begins on the first day with a series of internal completion dates for each of the five forums, however there is nothing to prevent students from completing this assignment ahead of the final due date. Students also have the ability to backtrack and review materials as needed, accurately predict workloads and manage workloads for the term. With the option of an online discussion forum, students can reach out to each other outside of class time to seek assistance, collaborate with or mentor each other.

Module One: The Lighting Designer and Design in Live Theatre Performance

Module Objectives: by the end of this module students should be able to,

- Describe the role of the lighting designer.
- Comprehend the role of light in live performance.
- Describe the concept of ‘scenoturgy’ and how it can be applied to lighting design.
- Describe and explain the parts of a lighting design (light plot, magic sheet, instrument schedules, cue sheets).

In Class:

- Review of the course outline.
- Learning Management Systems.
- Review the basic operations of CAD or Vectorworks.

Out of Class Tasks:

1. Assigned Reading: (to be read prior to Module 2)

Carolan, Claire. (2018) A Case Study of Scenoturgic Practice: Itai Erdal's *How to Disappear Completely* (PDF on the LMS)

2. Assigned Reading. Irwin, Kathleen (2017). Scenographic Agency: A Showing-Doing and a Responsibility for Showing-Doing. In *Scenography Expanded: An Introduction to Contemporary Performance Design*. pp. 111-24. (PDF on the LMS)
 3. Research the guest lighting designer scheduled for the "Talk to Me" session in week 2. Prepare a meaningful question to ask regarding their work or career path as a lighting designer. Submit your question in the online "question bank" section of the course LMS.
-

Module Two: Personal Learning Networks and Lighting Design

Module Objectives: by the end of this module students should be able to,

- Define the difference between formal and informal learning.
- Identify how personal learning networks facilitate learning and creativity.
- Begin to create their own PLN for lighting design.
- Analyze a script for lighting.
- Read a lighting plot.

In Class:

- "Talk to Me" Session One.
- Discussion of 'scenoturgy' and how we can use it in lighting design.
- Explore the concept of storyboarding.
- Explore how to create a scene synopsis.
- Discuss aspects of the lighting design community in Canada.

Out of Class Tasks:

1. Assigned Viewing: (to be completed before Module 3)

"Working in the Theatre: Associate Lighting Designer", *American Theatre Wing*. 18 October 2013. <https://www.youtube.com/watch?v=y2RKUHmCL6w>
2. Assigned Viewing. "Working in the Theatre: Lighting Design", *American Theatre Wing*.

7 December 2016.

<https://www.youtube.com/watch?v=wqMYsjHU5rU>.

3. Assigned Listening (to be listened to prior to Module 3)

The Titleblock Podcasts – Michael J. Whitfield. <https://www.thetitleblock.com>

4. Forum Post #1: Due at the end of Module 3

This post and your responses are worth 5% of your final grade. There are three parts to this Forum post:

Part #1:

Using a search engine (Google) find three online sources about the *professional lighting design community*. These might be discussion forums, professional associations (ADC, CITT etc.), podcasts, videos etc.

Part #2:

- a) Post a link to each of the three sources that you have found.
- b) If someone has already posted a source, try to find another source or provide an analysis that differs from your classmate's. (Forum posts are time stamped).
- c) Post a screenshot of the home page of each source.
- d) Explain why this source might be useful to a lighting designer or someone who wants to learn about lighting design.

Part #3:

Read and respond to the posts of two of your classmates. Check out one of the links that they have suggested and share your thoughts on it with them.

Module 3: The Basic Design Elements in a Lighting Design

Module Objectives: by the end of this module students should be able to,

- Understand basic design elements such as colour, texture, intensity or tempo and how they are used to communicate through lighting design.
- Describe what it means to create a scene synopsis and storyboard.
- Discuss aspects of the lighting design community in Canada.

In Class:

- Explore the concept of storyboarding.
- Explore how to create a scene synopsis.
- Discuss aspects of the lighting design community in Canada.
- Forum Post #1 Due

Out of Class Tasks:

1. Assigned Reading: (to be completed prior to Module 4)

Carolan, Claire. "Beverly Emmons: Composing Light for Merce", *Musicological Expressions*. PDF on LMS

2. Assigned Listening (to be completed prior to Module 4)The Titleblock Podcasts - Bonnie Beecher. <https://www.thetitleblock.com/episodes/2015/12/22/episode-23-bonnie-beecher?rq=andrea>

3. Forum Post #2: (Due at the end of Module 5)

This post and your responses are worth 5% of your final grade. There are three parts to this Forum post:

Part #1:

Using a search engine (Google) find three online sources about the *online sources for lighting design students*. These might be discussion forums, professional associations (ADC, CITT etc.), podcasts, videos etc.

Part #2:

- a. Post a link to each of the three sources that you have found.
- b. If someone has already posted a source, try to find another source or provide an analysis that differs from your classmate's. (Forum posts are time stamped).
- c. Post a screenshot of the home page of each source.
- d. Explain why this source might be useful to a lighting designer or someone who wants to learn about lighting design.

Part #3:

Read and respond to the posts of two of your classmates. Check out one of the links that they have suggested and share your thoughts on it with them.

5. Research the guest lighting designer scheduled for the "Talk to Me" session in week 2. Prepare a meaningful question to ask regarding their work or career path as a lighting designer. Submit your question in the online "question bank" section of the course LMS.

Module 4: The Lighting Plot and Paperwork

Module Objectives: by the end of this module students should be able to,

- Read a lighting plot.
- Describe the paperwork that accompanies a lighting design (magic sheets, instrument schedules, cue sheets etc.)
- Make simple changes in a pre-existing CAD or Vectorworks drawing.

In class:

- “Talk to Me” Session Two.
- Students will begin work on Assignment #3. (See details above). Assignment #3 will be completed by Module 9.

Out of class tasks:

1. Assigned reading: (to be completed before Module 5). Pilbrow, Richard. “Chapter 11 – Oil Lamp to Laser”, *Stage Lighting Design: The Art, the Craft, the Life*. (2008). PDF on LMS.

Module 5: A History of Lighting Technology

Module Objectives: by the end of this module students should be able to,

- Describe a variety of lighting instruments, their application and basic qualities.
- Discuss some key points in lighting design history.
- Discuss how historical research can inform or influence lighting design.
- Discuss different methods of research for lighting design.

In class:

- Students will continue to work on Assignment #3.
- Forum post #2 due.

Out of class tasks:

1. Forum Post #3: (Due at the end of Module 7)

This post and your responses are worth 5% of your final grade. There are three parts to this Forum post:

Part #1:

Using a search engine (Google) find three online sources about the *online sources for lighting design*. These might be discussion forums, professional associations (ADC, CITT etc.), podcasts, videos etc.

Part #2:

- a. Post a link to each of the three sources that you have found.
- b. If someone has already posted a source, try to find another source or provide an analysis that differs from your classmate's. (Forum posts are time stamped).
- c. Post a screenshot of the home page of each source.
- d. Explain why this source might be useful to a lighting designer or someone who wants to learn about lighting design.

Part #3:

Read and respond to the posts of two of your classmates. Check out one of the links that they have suggested and share your thoughts on it with them.

2. Research the guest lighting designer scheduled for the "Talk to Me" session in week 4.

Prepare a meaningful question to ask regarding their work or career path as a lighting designer. Submit your question in the online "question bank" section of the course LMS.

Module 6: Lighting Lab

Module Objectives: by the end of this module students should be able to,

- Differentiate the creative and practical application of various lighting instruments.

In class:

- "Talk to Me" Session Three.
- Students will experiment with a variety of lighting instruments and control desk operation.
- Students will continue to work on Assignment #3.
- Discuss out of class "ETC Visualizer Activity".

Out of Class Tasks:

1. Students will log into the ETC website to explore the online training tutorials including the options for working with a visualizer.

ETC Eos-Family Learning Series¹⁴⁴ <https://www.etcconnect.com/EosFamilyVideos/Level-1/>

Module 7: Preparing for Assignment #4, Being the Lighting Designer

Module Objectives: by the end of this module students should be able to,

- Log in and navigate the ETC Eos-Family Learning Series.
- Use the visualizer to set, record, recall and play a virtual cue.

In class:

- Students will continue to work on Assignment #3.
- The class will discuss the details of Assignment #4.
- Forum Post #3 Due.

Out of class tasks:

1. Assigned listening: (to be completed before Module 8)

Title Block Podcast – Alan Brodie.

<https://www.thetitleblock.com/episodes/2018/2/13/45-alan-brodie>

2. Forum Post #4: (Due at the end of Module 9)

This post and your responses are worth 5% of your final grade. There are three parts to this Forum post:

Part #1:

Using a search engine (Google) find three online sources about the *online research sources for lighting design*. These might be discussion forums, professional associations (ADC, CITT etc.), podcasts, videos etc.

¹⁴⁴ The inclusion of the ETC Eos-Family branded stage lighting visualizer and online tutorials should not be seen as advertising or promotion of a specific brand of equipment or software, it is simply a suggested option based on commonly used equipment in western Canada.

Part #2:

- a. Post a link to each of the three sources that you have found.
- b. If someone has already posted a source, try to find another source or provide an analysis that differs from your classmate's. (Forum posts are time stamped).
- c. Post a screenshot of the home page of each source.
- d. Explain why this source might be useful to a lighting designer or someone who wants to learn about lighting design.

Part #3:

Read and respond to the posts of two of your classmates. Check out one of the links that they have suggested and share your thoughts on it with them.

3. Research the guest lighting designer scheduled for the “Talk to Me” session in week 8.

Prepare a meaningful question to ask regarding their work or career path as a lighting designer. Submit your question in the online “question bank” section of the course LMS.

Module 8: Script Analysis, Cue Synopsis/Storyboard

Module Objectives: by the end of this module students should be able to,

- Begin work on Assignment #4.

In class:

- “Talk to Me” Session Four.
- Students will complete Assignment #3.

Out of class tasks:

1. Students will use the scheduling function in the LMS to plan for their Director/Designer meeting in Module 9.

Module 9: Assignment #4 Continued – Lighting Plots and Paperwork

Module Objectives: by the end of this module students should be able to,

- Complete a script analysis for Assignment #4.

- Present cue synopsis or storyboard in meeting with the Instructor/Director.

In class:

- Students will work on Assignment #4.
- Forum post #4 due.

Out of class tasks:

1. Forum Post #4: (Due at the end of Module 9)

This post and your responses are worth 5% of your final grade. There are three parts to this Forum post:

Part #1:

Using a search engine (Google) find three online sources about the *online sources about employment in lighting design*. These might be discussion forums, professional associations (ADC, CITT etc.), podcasts, videos etc.

Part #2:

- a. Post a link to each of the three sources that you have found.
- b. If someone has already posted a source, try to find another source or provide an analysis that differs from your classmate's. (Forum posts are time stamped).
- c. Post a screenshot of the home page of each source.
- d. Explain why this source might be useful to a lighting designer or someone who wants to learn about lighting design.

Part #3:

Read and respond to the posts of two of your classmates. Check out one of the links that they have suggested and share your thoughts on it with them.

2. Students will use the scheduling function in the LMS to plan for their crewing and stage management schedule for meeting in Module 10.

Module 10: Lighting Design – Hang and Focus

Module Objectives: by the end of this module students should be able to,

- Explain the steps in preparing for levels and cueing.

- Explain the level and cue setting process including paperwork and requisite interpersonal skills.

In class:

- Students will continue to work on Assignment #4.
 - Lighting Plot and Paperwork should be near to complete.
 - Students will coordinate crewing and stage management arrangements for Assignment #4.
 - Students who are prepared may begin to hang their plot if it has been approved by the instructor/director.
-

Module 11: Assignment #4 - Hang and Focus continued

Module objectives: by the end of this module students should be able to,

- Lead a crew in the hang and focus of their lighting plot.

In class:

- Student lighting designers and crews will hang and focus the completed lighting plots.

Out of class task:

1. Students will use the scheduling function in the LMS to plan for their crewing and stage management schedule for meeting in Module 10.
-

Modules 12 and 13: Assignment #4 Levels and Cueing Sessions

Module objectives: by the end of this module students should be able to,

- Act as the lighting designer in a levels and cueing session.
- Act as the stage manager in a levels and cueing session.
- Act as the board operator in a levels and cueing session.

In class:

1. Student lighting designers, board operators and stage managers will rotate positions was each student works with the instructor/director to set levels and cues in allotted timeslots.
-

6.5 Summary of Recommendations in the Proposed Syllabus

This section highlights how the recommended changes and adaptations in the preceding proposed curriculum differ from the current lighting design curriculum. As noted in the “Introduction” to this dissertation, I communicated to Rob Thomson that I see scenography as an attitude as much as a practice. That attitude is approaching theatre-making from the perspective that every single piece of the puzzle has value and that every person within a production attends to the communicating of a message. As such there is a responsibility to enter into these practices in whatever role; as a lighting designer, attendant, director – cognizant of what we as individuals are contributing to that out-reaching message. Through the use of connectivism and scenoturgy in this proposed curriculum I attempt to support that attitude. This lighting design curriculum encourages students to adopt an attitude of connection to the work, the theatre community, the community-at-large, and to each other through learning and practice. I have implemented a number of these strategies successfully in other courses, but to date have not had the opportunity to put this particular curriculum into action for lighting design.

The primary difference between this proposed curriculum and those that were reviewed for this research is the implementing of learning technologies to facilitate a blended learning model. The implementation of the basic learning technologies suggested for this curriculum extends the learning beyond the walls of the conventional classroom or lab, facilitates networking, and diversifies the modes of learning made available to students. The blended model also facilitates distributed learning through connectivism wherein students are finding relevant

information and bringing it back to share with the group. This distributed learning practice exponentially increases the possibility of serendipitous discovery and creativity (Siemens 2005, Downes 2008, Tobin et al. 2018).

This style of learning is also recognized as a Universal Design for Learning (UDL), which has been a popular model in K-12 education since the 1990s (Tobin et al. 23) but has only gained traction in higher education in Canada since 2014. “Promoting universal design at universities is challenging and complex. Instructors are experts in their discipline, not necessarily teaching methodology. There is a host of competing demands on faculty members’ time and attention” (Gorham and Roberts n.p.). Given that this lack of teaching readiness is also a consistent narrative among those interviewed for this research, it makes sense that these strategies are not being presently leveraged in undergraduate lighting design education in Canada. This syllabus can function as a model for instructors looking for ways to bring some of these tools into their own lighting design courses.

In this proposed curriculum, blended learning and connectivism are present in the student development of their own PLN and in sharing that information through the online forum of the LMS. They are also present in the “Talk to Me” sessions wherein students are required to undertake some preliminary research that is shared with the group, again in an online forum. Their research is then applied and tested through the experience of speaking to a professional lighting designer, via a technological medium. The interactive and web-linked online course shell in the LMS gives students a level of agency in the pacing of their own learning. There are opportunities within the model for the motivated student to work ahead and the student needing added to support to access both their peers and the instructor in a predictable format.

Another way in which this curriculum differs from those reviewed for this research is in the use of clearly stated and repeated learning outcomes. In the beginning of the course outline

the learning outcomes for the entire term are set. Following that, each module also has specific learning outcomes matched to them. These module-based outcomes reflect those listed for a full-course, which can help students understand how they fit into the big picture. This procedure is more transparent to the student allowing them to make connections between the course materials and assignments; and they can more readily gauge their own progress.

Less apparent in the structure of the course learning outcomes are some points of hidden curriculum. With the entirety of the course laid out and accessible to the student, the instructor is inviting them to take responsibility and control, pacing their interaction with the material to suit their own needs (where possible within a still rigid thirteen-week term). There are certain tasks that cannot be completed without the student taking the lead on it, for example if the student does not use the online scheduler to book time for hang and focus or for cueing, then they could miss out on time for these. The instructor can of course follow along and monitor which students have or have not booked a time and intervene, but the agency to develop those leadership skills is with the student.

There is a time “crunch” purposely built into the course. Around Module Seven there are several converging due dates. This is quite intentional and meant to mimic the production process. In the professional theatre industry, the production schedule sets the pace of work. If we follow it and things go smoothly we get to opening night with limited stress. If we ignore or fail to meet set deadlines and opportunities to complete tasks in advance, then the stress level increases. While it may seem unethical to purposely stress a student, there are pedagogically sound reasons for doing so. The entertainment industry as a whole is a fast-paced environment prone to rapid-change requiring workers and artists to develop skills in adaptability and resilience. I do not suggest that the traditional theatre norms of “lack of routine, insufficient sleep, alcohol use . . . and undue stress” (Junten n.p.) should be reinforced, but I do suggest that

these outcomes might be better mitigated if theatre students are taught time management, adaptability and resiliency as part of their theatre training – rather than pretending that these conditions does not exist outside of the university. While a more-gentle approach is possibly more in line with current trends in student health and wellness, in my opinion, it does not adequately prepare an individual for a career in professional theatre. McAllister and McKinnon suggest,

Within the educational context, evidence suggests that resilience can be improved through the provision of relevant and practical protective factors, such as an educational setting that is caring and student-centered, has positive and high expectations and provides a positive learning environment, is placed within a strong, supportive, social community, and offers peer relationships. Conversely, educational experiences that are transmissive may prepare students inadequately, giving them little know-how for workplace survival and rendering them vulnerable to future stress. (374)

As such I am not suggesting a stressful situation for the sake of stress, what I am suggesting is a purposeful and lower-stakes setting in which to test and practice responses to stress.

Scenoturgy as a creative pedagogy is in play in this curriculum in several places. The case study of Itai Erdal's *How to Disappear Completely* is required reading and discussed in the first two weeks of class in order to introduce the process as a methodology to be used throughout the term. Students will discuss the *HTDC* case study in comparison with a standard production schedule in order to determine if there is an ideal or alternate point of entry for lighting design into the creative process, what hierarchies exist, which of those might be necessary or which could be re-imagined. This is further supported by the role-play aspect of assignments three and four. In these assignments, the students take turns playing the role of assistant lighting designer and lighting designer and in other production roles (e.g. board operator, stage manager, crew,

actor). Within the role-play structure, students can actively implement the */and* that is proposed by the scenoturgic process. When fulfilling a position that responds to the assistant lighting designer or lighting designer, the students become more informed about how effectively they may or may not be communicating through their own lighting choices and their actions in the creation process.

Although the term ‘role-play’, may be off-putting to some lighting design instructors who envision this as a class-activity better suited to an acting class, the reality is that this pedagogical approach to learning lighting is already taking place in many of the courses reviewed for this research. In courses where students are ‘stepping-into-role’ as the board operator, lighting crew, lighting designer, working for and with each other in the learning of lighting design, they are using role-play. These situations are low-stakes settings in which the students can practice these roles in practical, inquiry-based learning.

Parts of the current curriculum that remain are absolutely critical to learning lighting design. These include the physical practice of hanging and focusing a light, verbally communicating how a light is to be focused, learning to efficiently and creatively navigate the performative and communicative exchange between director, designer, operator and performer that takes place in levels and cueing. Understanding the mechanics and physics of light and how it behaves in performance. The industry standards of communicating a lighting design through codified documentation is a fundamental part of lighting design education that cannot and should not be excluded from the curriculum. The development of all of these competencies however can be enhanced through a blended learning model as described above.

6.6 Next Steps

Subsequent courses at the 400-Level could continue to build on the skills in this proposed 300-Level course. The PLN developed will continue to grow and students might be encouraged

to reach out into the lighting design community to find apprentice or entry-level opportunities. Students could also connect with a potential mentor and begin to foster a relationship with the professional community. Students might also be encouraged to take the skills they have developed to partner with fellow theatre and stagecraft students to devise new works that include the lighting designer from the outset of the project rather than in the traditional model listed here. Again, the model above is designed to work within the existing theatre department structures, but once the students master the basic rules they should be encouraged to creatively break them. Furthermore, interdisciplinary classes that bring scenographers, directors, playwrights, dancers, musicians, and visual artists together to collaboratively create over a semester should be encouraged as an upper-level course to be offered.

6.7 Resources to Support a New Curriculum and Pedagogy

As demonstrated in the proposed syllabus above, an updated lighting design curriculum can benefit from a blended learning model. In blended learning, instruction occurs in a traditional face-to-face classroom format supplemented by asynchronous online learning activity. In this model, students can move away from dependence on physical text books as sources and access an array of multimedia sources. This is not to suggest that text books are no longer of value, only that learning from a singular source and a singular medium is limiting. The following is a preliminary list of suggested non-textual sources for use in undergraduate lighting design courses.

6.8 Talk to Me

In the fall of 2016, I taught *Theatre 101, An Introduction to Theatre* at the University of Fraser Valley (UFV). Due to an in-progress, physical move of the Theatre Department from Chilliwack to Abbotsford, it was necessary for the class to be scheduled on a Monday. Theatre 101 at UFV is normally structured around four or five field trips into nearby Vancouver to attend

live professional performances. Vancouver has a more robust professional theatre community than the Fraser Valley, and therefore more options for curating a diverse set of performances for the class to attend. Scheduling the course on a Monday, the traditional “dark” day for theatre, severely limited the available show options for the class. Still wanting the students to have access to the professional community, I called upon my theatre community of practice for assistance.

Due to the geographic location of the small city of Abbotsford, which is approximately ninety kilometers outside of Vancouver, it can be challenging to arrange for guest speakers to visit a class. Wanting to expose my students to as many theatre artists as possible without overly-imposing on my theatre colleagues, I decided that the app, Skype, may be the answer to my problem. Using Facebook, I sent an invitation to my theatre friends and colleagues asking for volunteers to ‘Skype-in’ to the class to talk about their work and to let the class interview them. Using Skype, volunteers only needed to commit to a thirty-to-sixty-minute time slot within the scheduled three-hour class time. No travel time was necessary. I called these the “Talk to Me” sessions. The response to the call for volunteers exceeded the class time I had available for the exercise. Using the very basic set up of; my laptop connected via HDMI to the projection screen in the class; and a Skype connection, through the university’s Wi-Fi we were able to digitally connect, live, to members of the Canadian theatre and film community.

The student response was incredibly positive and noted in the course evaluations as an engaging learning exercise. Student learning is further activated in this exercise through the preparation step. Students are required to undertake some preliminary research on the guest in order to be able to engage in a constructive discourse in the allotted time. Students are required to post their research-based questions prior to the sessions so that the instructor and guest are able to vet potentially problematic queries or identify a rich line of discussion in advance. Some students arranged further contact with the volunteer guest speakers beyond the class time. “Talk

to Me” is a tool that I have continued to use in subsequent sessions of Theatre 101 and other courses when scheduling with guest speakers from the community is a challenge.¹⁴⁵ The “Talk to Me” sessions are an example of how basic and user-friendly digital technologies can be inexpensively employed in broadening the student’s in-class experiential learning.

6.9 The Title Block Podcasts

“The Title Block”, is an online podcast archive of audio recordings of Canadian theatre designers discussing their history and their craft. “The Title Block” podcasts were initiated by former lighting designer Michael Kruse in 2014. To date Kruse has recorded and archived over fifty recordings (as of 23 February 2019) with set, costume and sound designers, production and technical directors – more than twenty-five of the interviews feature lighting designers.¹⁴⁶ The list of interviewees is diverse in terms of gender and includes emerging, mid-career, and celebrated Canadian theatre artists. Kruse’s collection is an example of the kind of dynamic resources that Canadian lighting design and instructors can use to explore the history and fabric of our current lighting design community. My main criticism of the site lies in how its content access is formatted. There is a list of episodes but it requires scrolling all the way through from

¹⁴⁵ The theatre artists who agreed to the “Talk to Me” exercise for Theatre 101 at UFV in the fall of 2016 were: Alan Brodie (lighting designer), Dean Goodine (Oscar nominated properties master), Darren Wilkie (international Disney theme-parks design team), Niesa Silzer (Equity stage manager), Patrick Pennefather (sound designer and technology artist), Katrina Dunn (director/producer), Ayla Stephen (actor/comedian/playwright/arts administrator), Meg Braem (playwright), Kayla Popp (production assistant in film and television), Alan Van Sprang (actor), and Amanda Fox (designer/entrepreneur).

¹⁴⁶ Canadian lighting designers featured on *The Title Block* podcast interviews with Michael Kruse include (to date): Andrea Lundy, Ian Garrett, Rachel Forbes, Jareth Li, Martha Mann, David Degrow, Simon Rossiter, Bretta Gerecke, Kaitlin Hickey, Steve Lucas, Bonnie Beecher, Sholem Dolgoy, Scott Spidell, Eric Mongerson, Ben Chiasson, Beth Kates, Allan Stitchbury, Alan Brodie, Kevin Lamotte, Michelle Ramsay, Siobhan Sleath, Glenn Davidson, Kevin Fraser and Michael J. Whitfield.

the most recent to the oldest in order to see all of the content that is available. A simple click and select option to access each interview would make the site more user friendly. A second critique is the length of the interviews. Some are excessively long. A very useful feature of the site however, are cross-reference links attached to every interview. Kruse has inserted hyperlinks for references made by the interviewee about companies, schools, specific productions, other designers or directors. There are a handful of brief artist portfolios that can be accessed for some of the designers, however a substantial archive of visual images including lighting plots and magic sheets would make this a truly cutting-edge resource. It is worth mentioning that Kruse is funding his site through ‘Patreon’. Patreon is a company that facilitates crowd-funding for content creators, like Kruse, to get paid for their work. Supporters of the site can voluntarily pledge money toward the development of content. Kruse averages a donation of sixty dollars per episode.¹⁴⁷

6.10 The Legends Library

The Theatre Museum of Canada has produced a series of video recorded interviews with Canadian theatre artists. There are a handful of designers included in this collection including Michael J. Whitfield, Susan Benson, Cameron Porteous, Cynthia McLennan, Desmond Heely and Michael Levine. The interviews are over ten years old, but still a worthwhile watch for anyone interested in the history of Canadian scenography.¹⁴⁸

¹⁴⁷ For more on Michael Kruse and Patreon, see <https://www.patreon.com/thetitleblockpodcast>.

¹⁴⁸ For more on “The Legends Library”, see <https://theatremuseum.ca/legend-library/>.

6.11 Digital Lighting Design Archives from Other Countries

Currently, there are five digital archives of theatre lighting design data. Two American, one Irish, one English, and one South African. The Irish archive is not accessible outside of the National University of Ireland Galway at this time, however they will send PDF files via email on request.

The two American archives, instigated by Beverly Emmons are quite comprehensive, containing a balance of male and female designers of note from Broadway, opera and dance. There are technical drawings, assorted ephemera and a handful of interviews. It is, as viewed through my Canadian lens, a very American archive. Focused on the big names . . . Fischer, Rosenthal, Skelton etc. with well-scanned documents in an accessible platform. The level of influence of its creator is evident. Emmons herself is a Tony Award nominated designer who has held high-level positions in powerful arts organizations like the Lincoln Centre in New York. She has the personal influence and professional connections necessary to compile high profile archives with one housed in one of the world's most famous civic libraries, the New York Public Library, and the other sponsored through private and corporate funding.

Emmons' two archives, have been compiled and organized by a lighting designer for lighting designers or students of lighting design. With items like magic sheets, instrument invoices and personal communications between designers and directors, the archives provide lighting production information that has previously been difficult to access.

The archives of the Abbey Theatre and the Gate Theatre have been digitized and are held by the National University of Ireland at Galway in the Republic of Ireland. At this time, the Abbey Theatre digital archives are only accessible on campus at NUI Galway and of the archives noted in this list are the only ones that are not accessible online, which poses the question of – why not? Why digitize, and not make them accessible outside of Ireland? What are the politics of

this decision? I visited this archive in August of 2016 as part of this research. I spoke with Aisling Keane, an archivist on the Abbey Theatre digitization project, and she explained that the Abbey Theatre is very conscious of maintaining control of the access to the archive and limiting that access outside of Ireland. The cost of digitization, maintenance and continuance of the Abbey Theatre archives are carried by the National University of Ireland.

The South African archive, at this time is the smallest and most ethnographic of the archives. It contains a handful of technical documents including plots and schedules. It houses the work of five designers who have been chosen for their contribution to South African lighting design. They are all male and over sixty years of age. The centerpiece of this archive is the interviews, oral histories of the designers, recorded and accessible on the site.

Like Canada, much of South Africa's early theatre history was born from replicating European theatre. "In South Africa, as in many other parts of colonial Africa, the establishment of European hegemonic discourses in literature and drama was closely tied up with the establishment of colonial mission stations" (Sirayi and Seda 132). The development of the theatre culture in both countries bear similarities and hegemonies that have emerged out of colonialism and invite further investigation. The ability to compare and contrast their scenographic practices with ours is useful.

6.12 The Need for a Canadian Lighting Design Digital Archive

A Canadian theatre lighting design digital archive (CTLDDA) would bring the study of lighting design in line with the current trends in higher education where learning is facilitated through individualized research in online environments. It would also support research trends in scenography studies, theatre studies, and performance studies, that are more concentrated on how an aesthetic is constructed rather than examining the show as a completed product. The existing American, British, Irish and South African archives provide a model for; planning and

management of the project; necessary equipment; data management and protection; staffing; digital asset management; metadata; intellectual property; digitization process; user experience and access; and scholarly engagement with the archive (Bradley and Keane 35-44). The existing archives compile technical drawings, personal communications, popular media such as playbills and ephemera in a digitized, user-friendly platform. There is a practical, academic and pedagogic need for Canadian designers, researchers and students of theatre to have access to the Canadian canon of lighting design work. Unlike text-based art forms, scenography, particularly lighting design, resists documentation due to its ephemerality. Our understanding of this ephemerality and what characterizes a digital archive can shape how this aspect of Canadian theatre performance might be further developed and preserved. (Esling 30)

Archiving of historically important lighting design is an underdeveloped field of research in Canadian theatre and performance studies and a missing element of the theatre history canon. Our technical textbooks continue to feature McCandless, Pilbrow and Parker, but reveal little to our students about the Canadian aesthetic or our contributions to scenography. Mary Tarantino suggested that “For the lighting designer as practitioner and scholar, the study of a comprehensive design collection deeply enhances one’s understanding of the extraordinary body of work over an artist’s lifetime” (2007). Such an archive would offer a new way of learning and knowing in higher education, (one of Canada’s future challenges identified by SSHRC). It is a feasible and timely initiative to develop a national lighting design archive.

6.13 The American Theatre Wing: Working in the Theatre

It can be difficult to call on colleagues in the professional industry on a regular basis to come to class and talk about their work in the theatre. This is especially true if your theatre department is located rurally or not in close proximity to theatres or shop spaces. The American

Theatre Wing has a series of forty-two videos that are available on YouTube titled “In the Wings”. These videos are relatively recent, most recorded in 2013. There are interviews with the people who work in every imaginable capacity behind the scenes and are less than ten minutes each in length. They also have a series of thirty videos entitled “The Guide to Theatre Careers” in the Theatre. These are longer interviews, about one hour each. In the videos established artists explain their particular discipline and what it takes to be successful on that path. These videos are from 2000 and 2001, but remain a valuable source for students. A fantastic feature of these video recorded interviews is that they present a diverse range of people working in the theatre industry and include careers and jobs that students may not have known exist or considered for themselves as a career path.

Chapter 7: Conclusion

The purpose of this research has been to review the curricular history and pedagogy of undergraduate lighting design for theatre in university theatre programs in Canada in order to recommend an updated pedagogy and curriculum that is reflective of and can support the future direction of theatre-making and live performance in this country. The factors, values, ideas and theories that influence and inform current undergraduate lighting design curriculum have been investigated using a mixed-methods approach.

The factors and values that support the current curriculum are hard to definitively pin down because of the variety of ways that those are being performed in the collective-curriculum. There is a varied assemblage of factors and values in each sample. Where the value is technological competency over creative agency, then one could argue that value system is well-supported. If the value system is, as Heiner Goebbels suggests, to simply train up “new blood” (43) to serve the needs of outdated institutions and notions of performance—then arguably that value system is also, for better or worse, being met. If the value system continues to be one grounded in tradition and the existing conditions, can we ever move to a Canadian lighting practice capable of what Ric Knowles describes? Knowles advocates for a Canadian lighting design pedagogy that disregard[s] the hegemonies of professional training, processes and traditions and [finds]

ways of using light to illuminate not only naturalistically conceived characters and action or moments of visual pleasure in spectacle but also the mechanisms through which human and social “character”, subjectivity, “action” and ways of being in the world are

constructed and produced—as they are in the theatre—by ideologically coded systems and technologies of representation. (9)¹⁴⁹

I do not mean to suggest in this research that all value systems housed in tradition are wrong or need to be changed. The appeal of live theatre rests in so much of its ritual and custom.

Discerning where within those structures of tradition the true value lies is a fraught discourse that cannot evolve overnight.

I surmise that *the idea* or primary purpose for undergraduate lighting design curriculum, as it presently exists, is to do as Goebbels presumes: to support the technical needs of an art form that continues to privilege hierarchal, often exclusionary practices that have “developed over a long period of time” (43) In the academy, we are prone to teaching to a traditional theatre-making model that promotes and stabilizes outdated gender roles, hierarchal separation of technician/designer, actor/director and a top-down approach to creation practice. This is partly due to a lack of progressive teacher-training for instructors in an undergraduate education setting. Some theatre departments continue to require students to meet a pre-requisite of filling production roles or front-of-house positions in order to become eligible for ‘stage time’. I am in favour of all students participating in all roles, actor, technician, designer etc., but not when one role is seen as a reward and the other as a pre-condition.

Traditional theatre hierarchies are further stabilized in the academy in Canadian theatre departments that consistently value designers over technicians as instructors.¹⁵⁰ This valuing is

¹⁴⁹ Knowles’ scare quotes.

¹⁵⁰ Positions do not come available often, however a review of the job postings from recent openings at Ryerson University (2019), Simon Fraser University (2018 & 2019) and the University of the Fraser Valley (2014) which list the position as tenure track in production and design, express that the preference is a candidate that identifies as ‘designer’ despite the described positions involving instruction in production processes.

demonstrated in the hiring of scenographic faculty comprised of career designers over career technicians. This practice assumes that a scenographic artist who identifies as a designer rather than a technician is more knowledgeable about theatre design regardless of training, education level, or years of experience. This is a false dichotomy. In my more than twenty-five years as a professional scenographer and technician in Canada I have worked alongside a great number of talented technicians who hold the same graduate degrees as designers, but either prefer to work as technicians because that particular creative act is more appealing to them, or are more-able to find stable employment as a technician. An excellent board operator may be actively involved in theatre-making for hundreds of performances in the same amount of time that a designer may only be involved in a handful, because there is less demand for designers than technicians. A designer may conceive a beautiful concept for a performance, the technicians are more-often-than-not the ones who problem solve and realize that design. That contribution is undervalued in undergraduate theatre education in Canada, the undervaluing is demonstrated through hiring practices. Goebbels suggests, and I agree, “If we want to prepare for ways of working that are less hierarchal, we should neither encourage the students to develop a huge ego nor make them practice the division of labour as we learned it from recognized institutions and have copied into today’s curricula” (45). I believe that approaching and theatre-making and teaching theatre-making from a scenoturgic perspective can help to flatten those hierarchies that privilege the voice and creative agency of designers and directors over the technicians and actors in the future.

Within the scenoturgic model is space to further explore the other terminologies that might constrain change or progress away from a traditional, hierarchal theatre model. There are hierarchal and commodified assumptions that exist in the named ‘roles’ in theatre-making such as director, designer, technician. Removing or re-imagining how hierarchal labels inform the creative process where the *and* is at play can set up a “truly distributed creative system”

(“Connectivism and Connected Knowledge” 118). If we can re-imagine a new container for the creative form, we can also re-imagine the structures that work to support and fill the container.

As we see in the Itai Erdal case study *How to Disappear Completely*, there is fertile land to be explored in the scenoturgic creases and in the *and*. We should be training to the *and*. My own suggestions for updating the pedagogy and curriculum have been structured to fit within the existing undergraduate training model. This is a decision that I wrestled with, because in a perfect scenario I would prefer to see the current hierarchal, semestered and segmented structure abandoned and reimaged. However, I also recognize that sort of radical change is unlikely to occur and that it was better and more productive in this instance to seek strategies for improvement within the given circumstances. So for the time-being the recommendations fall within a scenoturgic compromise of ‘the status quo/*and*’ with hope for more radical change in the future.

A fundamental factor of consideration in the current and any recommended curriculum must be *the instructors* and their relationships with:

- their own training in lighting and in education,
- the professional lighting design industry,
- the theatre departments they teach in,
- the identity and needs of undergraduate theatre students in Canada,
- and evolving theatre lighting technology.

I pointed to a lack of diversity in the gender, race and age of instructors as also playing a role in the hidden curriculum of lighting design. These factors are evident in the demographic of lighting designers currently working in Canadian theatre which also lacks diversity.

A question that remains un-examined, but warrants in-depth exploration at a later date is this: Do graduate theatre programs where graduate students are employed as teaching assistants

mitigate some of the teacher training shortcomings in technical theatre courses, including lighting design? Theatre departments in Canada utilize teaching assistants in differing capacities. In some institutions teaching assistants are used only for grading and teaching an occasional lecture on their personal research area. At other schools teaching assistants carry teaching loads almost equivalent to that of a sessional instructor. If we are learning to teach from observing and imitating instructors who have not been taught to teach well—what is the lesson?

Michele Pagen’s 2004 article “Preparing Future Teachers of Theatre: Pedagogical Issues and Current Practice” examined the formal preparation of doctoral students to teach in theatre departments but did not include MFA students in her study. MFA is the terminal degree for theatre design and the most common accreditation for a lighting design instructor. Overall, Pagen surmised that most graduate theatre programs are failing to prepare students for future teaching positions. In her article, she poses some questions that are relevant for theatre departments where any of the students registered as graduate students, MA/MFA/PhD, might be on the professoriate path. These questions include “is one course or a yearlong program devoted to teaching a specific theatre course enough to address pedagogical issues faced by future theatre faculty?” (229). Pagen further suggests that in terms of the development of theatre pedagogy, “All programs must include such courses if we are to redefine the professoriate for the future” (229).

Pagen’s article is fourteen years old. I could not find a more recent examination of instructor preparation for undergraduate theatre instruction, particularly any aspect of scenography. Pagen brings forth some still salient questions about the need for better training of instructors in higher education which has altered significantly in the last fourteen years. Indeed, this landscape has been drastically altered several times since the 1960s. For example, in 1989, when Beeb Salzer and his colleagues struggled to navigate the swiftly changing technological landscape of computerized lighting control it became a necessary part of their curriculum to

teach basic computing skills to university students. First, they had to learn computing themselves. Now, it is far more likely that our students are entering undergraduate studies with well-developed computer skills and a more natural propensity toward all things digital.¹⁵¹ The increased demand and expectations for things like educational accommodation for learning and behavioural differences, or cultural and social sensitivity, suggest that now, more than ever before, some kind of formal training on how to teach is a must for all instructors. For better or worse disciplinary expertise is no longer enough.

The students and their needs and expectations for undergraduate training in lighting design. As discussed in Chapter Two, speaking broadly, twenty-first century students have a wide range of, and higher expectations from their post-secondary learning environment than the twentieth century student did based on the high number of international students, increased awareness of learning, physical and cognitive differences, integrated technologies and so on. It is reasonable to assume that these factors are also at play in the lighting design classroom.

The lighting technology and training geared toward technological competencies have always been, and remain the driving influence in lighting design curriculum. The options available to access and implement lighting design technologies using apps and shareware in Web 3.0 platforms such as tablets and smartphones is game changing in terms of the type of non-hierarchical, light-inspired and informed performance that can be explored and investigated in a classroom or lab setting.

The teaching technologies such as learning management systems that have been widely adopted across other disciplines to support connected, blended, distributed and online learning models have not been adequately explored as a method for updating the undergraduate lighting

¹⁵¹ See Prensky 1-6.

design curriculum and, arguably, the curriculum of theatre departments in general. Now is the time to assess the design and development of scenography and theatre learning settings that disrupt traditional learning platforms and styles through the consideration of performative technologies including augmented reality, virtual reality, gaming and interactive archives – because the accessibility and lowering cost of these technologies is making their wide implementation in learning feasible. The adoption of teaching technologies can also diversify learning strategies for the wide range of students represented in the undergraduate population.

The content and course materials that are available. The inaccessibility and lack of Canadian content in the form of either oral histories, archived design documents or texts written by Canadians are reasons why our content remains dependent on US and UK sources.

The universities and their hiring practices, inflexible educational models, funding, archaic hierarchies, dependence on international student dollars, and undervaluing of the arts.

The professional theatre industry and their hiring practices. A gender imbalance of 2:1 in professional lighting design comes down to training practices and job opportunities. The academy and the industry together are creating an environment where these unequal numbers have been allowed to remain stable for decades. (Burton 2006)

The attendants sustain the practice and behaviour of the professional industry with their patronage. If the attendants are not calling for change—the change will not come.

The theories that inform the current curriculum are relatively unchanged since Stanley McCandless wrote “A Method of Lighting the Stage” in 1932, and dependence on the lighting design canon of McCandless, Pilbrow, Parker et al., and Gillette hold steady but the change is coming. Thanks to new perspectives on “expanded scenography” (McKinney and Palmer 2017), the discourse is slowly changing. Thanks to twenty-first century learners and Web 3.0 our

approach to knowledge acquisition and dissemination is evolving rapidly. I hope that my own theory of scenoturgy will play some role in the progression from light as simply a tool of illumination to one of dialogue.

7.1 Recommendations

The recommendations in developing an updated pedagogy and curriculum for lighting design that come out of this research are:

- 1) The integration of scenoturgy as a pedagogy in undergraduate lighting design to support the twenty-first century directions of theatre in Canada which are more gender balanced, culturally diverse, considerate of factors of personal identity and ability and open to alternative notions of performance.
- 2) The integration of connectivism as a learning theory to support an updated undergraduate curriculum in lighting design that is responsive to the needs of twenty-first century students and instructors.
- 3) Active steps toward diversifying the pool of instructors in lighting design so that it is more reflective of the Canadian community as a whole.
- 4) Increased connection between the instructors and students in undergraduate lighting design including the persistent-nodes and other nodes for undergraduate lighting design, opportunities for mentorship and networking with the professional industry.
- 5) Facilitate teacher training specific to teaching and learning undergraduate lighting design (and all scenographic disciplines) in the twenty-first century for sessional, tenure-track and tenured instructors with disciplinary expertise but no formal teaching education.

- 6) Adoption of blended learning methods and/or use of learning technologies to augment traditional modes of learning, facilitate diversity in learning and de-centralize the locus of knowledge in undergraduate lighting design courses.
- 7) Clear articulation of learning outcomes, cogent rubrics, constructive feedback and differentiated learning assessments for undergraduate lighting design courses.
- 8) The use of personal learning networks (PLN) by students and instructors in undergraduate lighting design to encourage continuous and networked learning throughout the coursework and after course completion.
- 9) Decentralizing dominant narratives in Canadian theatre and production hierarchies through inclusion of non-traditional notions of performance and non-western performance styles in undergraduate lighting design education and practice.
- 10) Focus on the collection and preservation of Canadian lighting design (and other scenographic) content in the form of performance histories, oral histories, drawings, objects, audio recordings, photographs and film in physical and digital archives
- 11) On-going nurturing and reassessment of learning environments for undergraduate lighting design that are supportive of and adaptable to factors of personal identity, physical ability and mental wellbeing.

7.2 Goals and Contribution

The stated goal of this research has been to recommend an updated pedagogy and curriculum for lighting design at the undergraduate level that is informed by a review of past and present practice. As shared by Rob Thomson and all of the interviewees, it can be challenging to get information and direction on how to teach lighting design. Knowing how to “be” a lighting designer is not the same skill set as how to “teach others to be” lighting designers. If nothing

else, I hope that this research can assist other instructors with portions of the “how to”, whether that is through articulating learning outcomes or formatting a rubric that is useful for the instructor and the student.

In starting this research, I suspected that overall, the lighting design curriculum in Canada had not significantly evolved since I was a student in the early 1990s. I am somewhat disheartened to find that my suspicions were correct, but heartened that many of my colleagues are keen for change.

So often, as my career has taken me from one theatre department to the next I have heard the claim “we don’t teach technicians” or “this is not a design program” and yet in almost every theatre department in Canada courses in scenography, technical skills or design are offered. Many of these courses exist to service on-campus play production, as suggested by Moira Day and Michael J. Whitfield, but students may not see them that way. The unstated or hidden goal of this research is to encourage an examination of all undergraduate scenographic courses in Canada to make them as relevant, useful and inspiring to our students as possible. An undergraduate student who chooses to take lighting design as part of their Bachelor of Fine Arts degree in Drama may want to pursue a career in design and with the course offered “not to train designers” as their only access to design training. As part of a less-hierarchical theatre environment, the role that language and terminology play toward that goal and continuing with my concept of the scenographic *and*; is the reconsideration of lighting along labour lines. Rather than compartmentalizing lighting, (or any scenographic department for that matter) into designers and technicians, I advocate for the composite lighting artist who is both technician and designer—technician/*and*/designer.

Every course offered should be servicing the needs of the student at the highest possible level and if it is offered over an extended period of time, it demands review and updating.

I contend that the recommendations made in this research invite an important discourse on the need for a twenty-first century pedagogy and curriculum in lighting design and the under researched field of scenographic education. It addresses a gap in scenography, theatre and education studies research, and contributes positively to the historical documentation of lighting design in Canada.

7.3 Limitations

There are obvious limitations to this research. It was not possible to interview every instructor or review every course outline since the first courses appeared in Canadian Universities in the mid-twentieth century. There are current instructors who did not respond to invitations to participate or communicated that they did not want to participate, as is their absolute choice. The information and data that was submitted provides a reasonable sampling based on the number of programs in Canada, from which we can draw plausible conclusions. The scope of the study was further narrowed by focusing on courses at the 300-Level. This was a best attempt at attaining consistency across the samples. A conspicuous limitation is the male-to-female ratio of the interviewees in Chapter Four “A Brief History of Lighting Design Education in Canada”. Several invitations to participate in those interviews were extended but unfortunately not accepted. I am extremely grateful to all of the women and men who added their voices to this through sharing their course outlines and providing detailed information via email about how their courses function. So, while it may look like the female voice is under-represented in this research, course outlines and other relevant data was provided by Renate Pohl (Memorial University), Sheila Christie (Cape Breton University), Susann Hudson (Acadia University), Jenn Stephenson (Queen’s University), Pat Flood (University of Guelph), Kate Muchmore Woo (Trinity Western University), Carla Orosz and Moira Day (University of

Saskatchewan). The direction of this research was also inspired by a conversation I had with Beverly Emmons in 2015 about establishing digital lighting design databases.

Another limitation of the research lies in the current lighting student voice. It was an active decision not to interview current students for this research. Although the present education paradigm is possibly hyper-reactive to the concept of student agency, student voice can also be problematic. It is important to recognize that, “the umbrella of student voices hides a diverse and complex alliance of reform agendas” (Arnot and Reay 2007). A 2002 study on *Pupil Consultation* in the UK (2002) explored the value of student consultation in the improvement of teaching and learning practice. What they found was that rather than ‘student voice’ it was more analytically useful to focus on “*pedagogic voice* which engages with the power relations which create voices” (312). According to this concept there are benefits to shifting the analysis onto the “voices *created* by the pedagogies, rather than the voices needed to change the pedagogy” (312). This study has focused on the voices that have been created by the historical and current undergraduate lighting design pedagogy and curriculums and from that has identified what voices are effectively being marginalized through it. There was a reasonable amount of quantitative data that provided information about the pedagogic voice of the current curriculum and how it serves or does not serve the needs of students. For example, the lower numbers of women and people of colour, or differently-abled persons currently represented in the professional Canadian theatre community are indicators that the undergraduate curriculums might be ineffective in promoting, supporting or encouraging these populations to pursue lighting design as a career. Interviewing students about pedagogy and curriculum they are currently engaged with creates a power-over dynamic which can skew results and has the potential to adversely impact a vulnerable group. Most of the people interviewed in this study have been lighting design students in Canada. Their post-education reflections are useful as they

have moved out from under the power-over student/teacher relationship. In 1990, Basil Bernstein suggested that while students are still engaged in a course of study that they are “yet to be voiced” (30), that an analysis of a learning setting is better understood in reflection rather than in action. It is my assertion that comparing the information in the interviews and the course outlines with current trends in the professional theatre and undergraduate student needs in Canada work for this pedagogy and curriculum assessment.

Regionality is a limitation of this work. Again, Chapter 4 “A Brief History of Lighting Design Education” is arguably an Ontario-centric history. Again, dependency on available interviewees does alter the narratives that are shared. It is my sincere hope that more of these oral histories can be documented and shared to provide a more comprehensive overview of this part of Canadian theatre history.

Finally, the space that I occupy in this lighting design and theatre education community and as a researcher of this community is also a limitation. My own story is a small part of the Canadian lighting design history, but I know that traces of my own practice carry on in theatre companies across Canada where my former students work, and the K-12, college and university classrooms where they teach. To the best of my ability I have worked to maintain objectivity and academic distance from the work.

7.4 Future Directions

An ongoing review of the pedagogy and curriculum of other scenographic topics of study at both the undergraduate and graduate level in Canadian universities is recommended. A comprehensive method of assessment to ascertain teaching preparedness of instructors who have disciplinary expertise but no formal teacher training is also recommended. Ongoing teacher training that aids with the integrating of new models for teaching in higher education

and learning technologies is needed to keep pace with the needs of the twenty-first century student. Artifacts of the Canadian scenographic history need to be archived in a manner that makes them accessible to students, instructors, practitioners and researchers. Private efforts like “The Title Block Podcasts” need to be supported by the community and utilized as part of the curriculum.

In the course of this research I have also spoken with a number of colleagues across the country who work in smaller theatre programs that do not have the human resources to offer coursework in undergraduate lighting design, but often rely on students to perform these roles for on-campus productions. I think that the proposed curriculum in this dissertation could function as an online education course with either a remotely-located supervisor or under the combined supervision of a faculty or technical staff member with basic lighting knowledge and skills. I am looking for opportunities to pilot this proposed curriculum in both a traditional theatre program and online setting in the near future.

Further research is needed in the areas of gender and racial representation in Canadian theatre practice as identified by Rebecca Burton’s comprehensive 2006 study; but in addition to the research an action-plan for change is required. The problem of activating lasting change is evident in the number of times that this problem has been studied since the 1980s (Fratlicelli 1982, Burton 2006, Hanson and Esler 2016, Macarthur 2016, Beer 2018). The increased frequency of these reports since 2006 seems to indicate an increased momentum toward reform.

My hope for the near future is that lighting design instructors and anyone teaching scenographic topics in Canada will emphasize the tremendous capacity to communicate and facilitate change that resides in these complex art forms of scenography.

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Appendices

Appendix A List of Canadian Undergraduate Universities Reviewed

Regarding Undergraduate Courses in Theatre, Performance or Lighting Design

1. Kwantlen Polytechnic University
2. Thompson Rivers University
3. Trinity Western University
4. University of British Columbia
5. Capilano University
6. University of Northern British Columbia
7. University of British Columbia Okanogan
8. University of the Fraser Valley
9. University of Victoria
10. Vancouver Island University
11. Athabasca University
12. University of Lethbridge
13. University of Calgary
14. University of Alberta
15. St. Mary's University (Alberta)
16. Ambrose University
17. The King's University
18. University of Alberta Augustana
19. University of Regina
20. University of Saskatchewan

21. Brandon University
22. University of Winnipeg
23. University of Manitoba
24. Brock University
25. Booth University College
26. Queen's University
27. Redeemer University College
28. University of Guelph
29. University of Ottawa
30. University of Toronto Drama Centre
31. University of Toronto Scarborough
32. University of Toronto Mississauga
33. University of Waterloo
34. University of Western Ontario
35. York University
36. Ryerson University
37. Lakehead University
38. McMaster University
39. University of Waterloo
40. Wilfred Laurier University
41. Bishop's University
42. King's University
43. McGill University
44. Concordia University

45. St. Thomas University
46. Memorial University
47. St. Francis Xavier University
48. University of Moncton
49. St. Mary's University (Nova Scotia)
50. Cape Breton University
51. Acadia University
52. Prince Edward Island University
53. Crandall University

**Appendix B List of Canadian Universities Offering Undergraduate Course
Content in Lighting Design According to Online Course Calendars (as of
January 2018)**

1. University of British Columbia
2. University of Victoria
3. University of the Fraser Valley
4. Trinity Western University
5. Thompson Rivers University
6. University of Lethbridge
7. University of Calgary
8. University of Alberta
9. Grant McEwan University
10. University of Regina
11. University of Saskatchewan
12. Bishop's University
13. York University
14. Ryerson University
15. University of Toronto
16. University of Toronto Scarborough
17. University of Ottawa
18. University of Windsor
19. Queen's University
20. McGill University
21. Concordia University

22. Cape Breton University
23. Dalhousie University
24. Acadia University
25. Mount Allison University
26. University of New Brunswick
27. Memorial University

Appendix C Degree Status and Academic Rank of Respondents (as of January 2018)

Name and Affiliated University	Listed Accreditation	Academic Rank
Robert Gardiner (UBC)	MFA (Washington)	Tenured Professor
Barry Hegland (SFU)	MFA (Urbana/Champaign Illinois)	Senior Lecturer
Michael J. Whitfield (UVic)	MA (Villanova), PhD ABD (Illinois)	Adjunct Professor
William Hales (U of R)	MFA (Calgary)	Tenured Professor/Department Head
Carla Orosz (U of S)	MFA (Victoria)	Assistant Professor/Associate Department Head (Design)
Ian Garrett (York)	MFA (Cal Arts)	Assistant Professor
Sholem Dolgoy (Ryerson)	MA (York)	Associate Professor
Eric Mongerson (Concordia)	(no degree listed)	Professor Emeritus
Sheila Christie (UCB)	PhD (Alberta)	Associate Professor
Jenn Stephenson (Queen's)	MFA (UVic), PhD (Toronto)	Associate Dean
Susann Hudson (Acadia)	MFA (UBC)	Technical Director/Lecturer
Mike Johnston (UNB)	BA (UNB)	Technical Director/Lecturer
Renate Pohl (Memorial)	MFA (Alberta)	Assistant Professor
Douglas J. Rathbun (MRU)	BFA (Brock)	Department Head (retired)
Robert Thomson	(no degree)	Associate Professor
Gilbert Wechsler	MFA (Yale)	Lecturer (retired)

Appendix D Grading Rubrics

A Sample Grading Rubric for Forum Posts in a Proposed 300-Level Lighting Design Course

Forum post:

5	4-3	3-2	1	0
Exceptional	Proficient	Adequate	Poor	Missed
<p>Post demonstrates an in-depth assessment of the source material and personalization of the content, concept or usefulness. Viewpoints or interpretations are insightful and well-articulated. Clear and detailed examples sources are provided. Sources, such as links, videos, articles or archives offer superior enrichment and elaboration of the topic. Post facilitates learning, discussion and collaboration. The post goes beyond the criteria to facilitate additional learning.</p>	<p>Post demonstrates a general assessment or personalization of the content, concept or its usefulness. Viewpoints and interpretations of the source are supported and well-articulated. Appropriate sources or links are provided as applicable. Sources show understanding of the category. Forum post facilitates some basic enrichment of or elaboration of the topic. The post meets the criteria of the assignment and offers enough insight to facilitate learning.</p>	<p>Post demonstrates a minimal effort in sourcing information in support of the topic or concept. Viewpoints and interpretations are unsupported or simply summaries of the points. Examples, where applicable, are not provided. Forum post facilitates little enrichment of the topic or category. The forum post meets only the minimum requirements of the assignment.</p>	<p>Post demonstrates a lack of effort in sourcing information in support of the topic or concept. Viewpoints or interpretations are missing, inappropriate or unsupported. Examples where applicable are not provided. Response facilitates little to no elaboration or enrichment of the topic.</p>	<p>No forum post</p>

A Sample Grading Rubric for Classmate Responses to Forum Posts in a Proposed 300-Level Lighting Design Course

Forum response:

5	4-3	2-1	0
Exceptional	Proficient	Poor	0
Response demonstrates and engagement with the offered sources, extends and offers meaningful discussion by building on previous posts, provides new insights in the discussion, fosters exploration and discussion of the topic. Insightful questions or comments or additional resources are offered the bring new perspectives and insight to the content. Suggestions and outside sources to support enriched learning are provided.	Response elaborates on forum posts with further comment or observation. Offers some insight into the discussion offering some enrichment through minimal elaboration. Questions or comments are offered.	Response is of shallow contribution (e.g. only compliments the post), does not offer a specific interpretation or point of view. Does not enrich or bring additional perspective to the discussion.	No response

A Sample Grading Rubric for Lighting Analysis of Live Performance in a Proposed 300-Level

Lighting Design Course

	Exceptional 5	Proficient 4	Adequate 3-2	Poor 1-0
Explanation of Ideas/Information	All suggested points of inquiry are addressed with specific detail, makes connections to course material or discussion.	Some suggested points of inquiry are addressed in some detail. Makes an attempt to connect to course material or discussion.	Addresses 3 or less of the suggested points of inquiry. Viewpoints lack detail or insight. Makes no connection to class discussion or course material.	Does not address the suggested points of inquiry, focuses too much on elements other than the lighting (e.g. telling the entire plotline, but does not specifically address lighting design)
Written	Written work is free of formatting, grammatical or spelling errors. Work is well organized and logical. Contains language that is clear and professional in tone. Cites additional sources in MLA format.	2-3 errors of any type. Work is organized. Contains language that is professional. May cite an additional source.	5 or more errors of any kind. Work lacks organization, does not follow any sort of logical order. Language is overly informal or lacks specificity.	Majority of the section is incomplete. Poorly written, fails to clearly communicate information about the lighting in the performances. Excessive errors, too informal or slang. Point form.
Visual	Exceptionally creative and communicative visuals. Shows originality of thought. Reflects points being presented.	Work has some visual appeal, meets the assignment expectations with some creativity. Needs some additional visual data.	Minimal effort to communicate through visuals. Images are predictable or do not serve to enhance the communication of the points being presented.	Significant difficulties communicating ideas visually or a lack of visual examples.
Oral	Presentation is professional, confident, easy to follow, practiced, appropriate pacing, clearly spoken	2-3 errors of any type. Presentation is well prepared, but overly dependent on notes. Speech may be either too slow	Minimal preparation or preparedness for oral presentation. Communication is vague or confusing. Unclear speech	Unprepared to speak with clarity or in detail.

		or too soft.	(Um, ah, mumbling etc.)	
Discussion	Student is knowledgeable about their own project and able to respond to questions about their presentation in a detailed and articulate manner and defend their presentation choices. Discussion demonstrates a solid understanding of the complexities of the role of the lighting designer and design in performance.	Student shows a good understanding of their own work and can respond to questions with some clarity. Discussion demonstrates a good understanding of the role of the lighting designer and design in performance but does not go beyond basic functions.	Student may be able to answer basic questions about their work, but cannot speak to it in detail or respond to complex questions. Is unclear on the role of the lighting designer or the design in performance.	Unable to actively and effectively engage in a discussion about their work. Does not understand the role of the lighting designer or design in performance.

A Sample Grading Rubric for Lighting Design Assistant Assignment in a Proposed 300-Level Lighting Design Course

Assignment #3 Grading Rubric

	Exceptional 5	Proficient 4	Adequate 3-2	Poor 1-0
Instrument Schedule and Magic Sheet, Floor Plans, Cue Sheets and Tracking Sheets	All paperwork is completed with specific detail, and a high level of accuracy before the due date.	The paperwork is complete, one or two missing details or errors by the due date.	The paperwork is in progress. Some items may be fully complete; others are partially complete. Some errors or lacking detail.	The paperwork is insufficient or not completed. Theatre is a time dependent art form. As such paperwork submitted after the due date will be marked as a "0".
Updated Light Plot	The changes requested by the lighting designer (instructor) are	The changes requested by the lighting designer (instructor) are	The updates are in progress (at least 75% complete and	The lighting plot has not been updated.

	done correctly and before the due date.	complete. There may be minor errors. Submitted on the due date.	correct) but not 100% complete.	
Hang and Focus Session	The student has prepared in detail to lead their section of the hang and focus. They arrive early to get set up, the fully understand how the instruments are to be hung and focused and are able to communicate this to their crew in an efficient and professional manner. They are able to complete their hang and focus in the assigned time.	The student is prepared for the hang and focus. They understand how and where instruments are to be hung but may struggle to communicate focus notes effectively to the crew. They are professional in manner. They are able to complete most of their hang and focus, with only one or two instruments incomplete in the assigned time.	The student is on time for the hang and focus and has done some preparation. They may struggle to translate the information on the lighting plot to the physical grid. They may need assistance in communicating with the crew. The student cannot hang and focus the required lights in the required time.	The student is not prepared to participate as the lead in hang or focus.
Focus Sketch	The student has prepared an accurate and clear sketch of each focused light in their section that is well labeled and logical.	The student has sketched most of the focused lights in their section in an accurate and clear manner. Some details need clarification. 1 or 2 instruments have been missed.	The student has sketched some of the focused lights in their section.	The student has completed no sketches.
Attitude and professionalism	The student is attentive to the assignment, asks questions in a timely manner and when they require clarification. Does not make assumptions about the lighting design. The student behaves in a professional manner toward the work and their classmates and completes assigned tasks to	The student is attentive to the assignment and asks questions when requiring more information. The student may be late or have unexcused absences from lab times more than once or twice.	The student has a good attitude but is not punctual or is absent more than three times without cause. The student does not seek help in a timely manner or at all.	The student demonstrates a poor attitude toward the assignment, is frequently late or absent.

	the best of their ability.			
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A Sample Grading Rubric for a Lighting Design Assignment in a Proposed 300-Level Lighting Design Course

Assignment #4 Grading Rubric

	Exceptional 5	Proficient 4	Adequate 3-2	Poor 1-0
Concept Package: Script Analysis, Cue Synopsis/Storyboard	The student has prepared all of the required elements in detail to meet with the Instructor/Director to present their concept. They arrive early, they are able to articulately communicate their viewpoint and provide visual examples to further the Director's understanding. They have a complete and concise analysis of the script with cue synopsis and basic storyboard prepared. They are efficient and professional manner. The concept is ready before the deadline. Student is prepared to move onto next steps.	The student is prepared to meet with the Director. They understand the play and have some good ideas but might struggle to communicate the concept to the Director. They are professional in manner. They are able to complete most of their concept package by the deadline with only one or two tasks to incomplete or revise before moving on to the next steps	The student is on partially prepared. One or more portions of the concept are complete or near completion preparation. They may struggle to communicate their concept to the Director. communicating with the crew. The student may need more assistance and support to move on to the next steps.	The student is not prepared. Has made little progress on the assignment. The student may need additional instruction or to improve effort in order to meet the minimum requirements of the assignment.

Light Plot Instrument Schedule and Magic Sheet, Floor Plans, Cue Sheets and Tracking Sheets	All paperwork is completed with specific detail, and a high level of accuracy before the due date. The student is prepared to move on to the next steps.	The paperwork is complete, one or two missing details or errors by the due date. Lighting plot and/or paperwork may require minor revisions before next steps.	The paperwork is in progress. Some items may be fully complete; others are partially complete. Some errors or lacking detail. Major revisions are required before the next steps.	The paperwork is insufficient or not completed. The student is required to resubmit the paperwork to a satisfactory level by an agreed date or will not be permitted to continue on to the next steps of the assignment.
Hang and Focus Session	The student has prepared in detail to lead their section of the hang and focus. They arrive early to get set up, they fully understand how the instruments are to be hung and focused and are able to communicate this to their crew in an efficient and professional manner. They are able to complete their hang and focus in the assigned time.	The student is prepared for the hang and focus. They understand how and where instruments are to be hung but may struggle to communicate focus notes effectively to the crew. They are professional in manner. They are able to complete most of their hang and focus, with only one or two instruments incomplete in the assigned time.	The student is on time for the hang and focus and has done some preparation. They may struggle to translate the information on the lighting plot to the physical grid. They may need assistance in communicating with the crew. The student cannot hang and focus the required lights in the required time.	The student is not prepared to participate as the lead in hang or focus. The student's paperwork is incomplete and their design will not be hanged.
Levels and Cueing	The student is well prepared for the cueing session with the director. The student communicates their instructions clearly and efficiently to the board operator and SM. The student takes logical notes of any changes. The student is capable of reaching consensus with the director on the cue set in the	The student is prepared for the cueing session with the director. The student can communicate their instructions board operator and SM. The student takes some notes of any changes. The student is capable of reaching consensus with the director on the cue set but may not set all of the necessary cues in	The student is not well prepared for the cueing session with the director. The student struggles to communicate their instructions clearly and efficiently to the board operator and SM. The student takes no notes. The student cannot reach consensus with the director on the cue set or	The student has not prepared for the level and cueing session. The session cannot be completed.

	allotted time.	the time allotted.	complete the necessary cues in the allotted time.	
Attitude and professionalism	The student is attentive to the assignment, asks questions in a timely manner and when they require clarification. Does not make assumptions about the lighting design. The student behaves in a professional manner toward the work and their classmates and completes assigned tasks to the best of their ability.	The student is attentive to the assignment and asks questions when requiring more information. The student may be late or have unexcused absences from lab times more than once or twice.	The student has a good attitude but is not punctual or is absent more than three times without cause. The student does not seek help in a timely manner or at all.	The student demonstrates a poor attitude toward the assignment, is frequently late or absent.

Appendix E Email Invitation to Participate

Recruitment materials: Email invitation to participate

Dear [Artist/Educator Name],

Claire Carolan, an interdisciplinary doctoral candidate at the University of Victoria would like to invite you to participate in her dissertation research project. The dissertation is tentatively titled *Lighting Design Curriculum and Pedagogy in Canada*.

The purpose of this study is to review of the curricular history of lighting design Canada; the factors, values, ideas and theories that influence and inform it and to recommend an updated pedagogy and curriculum that is reflective of the future direction of theatre and live performance in this country. There is a recently established and active academic discourse on the role of scenography in contemporary performance, as such there should be an accompanying paradigm shift in the ways that we teach the complex and unique artistic disciplines, like lighting design, that define it. Lighting design is now understood to be a performative act. Moving away from lighting design training that only prepares students to be skilled technical specialists in their narrow field an updated approach can teach students to question the adherence to and promotion of timeworn theatrical hierarchies that exist in the dominant lighting design pedagogy and curriculum that legitimize and stabilize outdated yet persistent views on presentations of race, gender, sexuality etc. in the theatre within the established institutions of theatre departments in the academy and subsequently professional theatre practice making advancement a challenge.

This intervention in the curriculum and pedagogy of lighting design in Canada has evolved out of a growing scenographic turn that recognizes the “capacity for scenography to operate independently from a theatre text” (McKinney and Palmer 1) as “visual dramaturgy” (Lehman 157). In addition to a progressive view of the performative role of lighting design and its potential effect on theatre research and performance in Canada, is a continuing wave of technological advancement in the field, in both instrumentation and operation, transforming how designers and technicians interact with this ephemeral medium.

Please consider this opportunity to participate. Your participation in the project, should you agree, will involve the following:

1. Scheduling an interview with Claire Carolan between February 1 and August 2018. Interviews will be scheduled at your convenience at a location to be arranged or via Skype. Interviews will be approximately 60-90 mins in length and will be recorded.
2. Reviewing, signing and returning the informed consent form or providing verbal consent.
3. The interview will be informal in format regarding your practice as a lighting designer/scenographer and/or educator. The interviewer will provide prompt questions to which you will be asked to respond.

How to accept this invitation:

Thank you for considering this invitation. Once again, you have been selected to participate due to your expertise that will significantly add to this research study. If you are able to participate, please read the attached participant consent form as I will go over it and ask you to sign it or provide verbal consent before your interview. If you are not able to participate, please reply to this message and let me know so that I may seek other practitioners.

Kind regards,

Claire

Claire Carolan
Interdisciplinary PhD Candidate, Theatre/Curriculum & Instruction
University of Victoria
Email:
Phone:

Works Cited

McKinney, Joslin and Scott Palmer, editors. *Scenography Expanded: An Introduction to Contemporary Performance Design*. Bloomsbury Methuen Drama, 2017.
Lehmann, Hans-Thies. *Postdramatic Theatre*. Translated by Karen Jürs-Munby, Routledge Taylor & Francis Group, 2006.



Lighting Design Curriculum and Pedagogy in Canada

You are invited to participate in a study entitled *Lighting Design Curriculum and Pedagogy in Canada*

that is being conducted by Claire Carolan

Claire Carolan is an interdisciplinary doctoral candidate in the departments of Theatre and Curriculum & Instruction at the University of Victoria and you may contact her if you have further questions by email at xxxxxxxx or telephone at (xxx) xxx-xxxx.

As a doctoral student, I am required to conduct research as part of the requirements for a degree in PhD Interdisciplinary Studies. It is being conducted under the co- supervision of Dr. Allana Lindgren (Theatre) and Dr. Monica Prendergast (Curriculum & Instruction). You may contact my supervisors at (xxx)-xxx-xxxx (Dr. Lindgren) or (xxx) xxx-xxxx (Dr. Prendergast).

Purpose and Objectives

The purpose of this research project is to review the curricular history of lighting design in Canada; the factors, values, ideas and theories that inform it and to recommend an updated pedagogy and curriculum that is reflective of the future direction of theatre and live performance in Canada.

Importance of this Research

Research of this type is important because there is a recently established and active academic discourse on the role of scenography in contemporary performance and as such there should be an accompanying paradigm shift in the ways that we teach the complex and unique artistic disciplines, like lighting design, that define it. Lighting design is now understood to be a performative act. Moving away from lighting design training that only prepares students to be technical specialists in their narrow field, an updated approach can teach students to question the adherence to and promotion of timeworn theatrical hierarchies that exist in the dominant lighting design pedagogy and curriculum that legitimize and stabilize outdated yet persistent views on presentations of race, gender, sexuality etc. in the theatre within the established institutions of theatre departments in the academy and subsequently professional theatre practice making advancement a challenge.

Participants Selection

You are being asked to participate in this study because of your expertise and professional practice in the Canadian theatre industry.

Verbal or Signed Consent

If your interview for this research takes place in person you will be asked to read and sign this consent form. If this interview takes place over Skype or telephone, you will be emailed the consent form for your review prior to the interview and asked to provide verbal consent before proceeding with any interview questions.

What is involved

If you consent to voluntarily participate in this research, your participation will include 1) Reviewing, signing and returning the informed consent form. 2) Scheduling an interview with Claire Carolan between February 1 and April 1, 2018 at your convenience at a location to be arranged or via Skype. Interviews will be approximately 60-90minutes in length and will be recorded. 3) the interview will be informal in format, the interviewer (Claire Carolan) will ask you prompt questions regarding your practice to which you will be asked to respond.

Inconvenience

Participation in this study may cause some inconvenience to you, including the amount of time it takes to attend the interview and review of any of your data that is used in the final dissertation.

Risks

There are no known or anticipated risks to you by participating in this research.

Benefits

The potential benefits of your participation in this research include professional development and the opportunity to share your expertise and insights on this topic. The benefit to the state of knowledge lie in better understanding how to implement curricular changes in lighting design through consultation with theatre industry professionals and educators.

Compensation

There is no compensation offered for participation in this study.

Voluntary Participation

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data may be withdrawn up to 30 days following the interview date. After 30 days, it will be impossible to remove the data from the study.

Anonymity

In terms of protecting your anonymity, any data provided that is directly related to theatre shows that have been produced by you for public presentation or curriculum that has been developed by you for use at a public academic institution, generated for consumption by students will not be protected by anonymity. Any data provided that is not directly related to theatre shows that have been produced by you for public presentation or curriculum that has been developed by you for use at a public academic institution will not be used.

Confidentiality

Your confidentiality and the confidentiality of the data any data provided that is not directly related to theatre shows that have been produced by you for public presentation or curriculum that has been developed by you for use at a public academic institution will be stored on a password protected computer hard drive in a secure, private office.

Dissemination of Results

It is anticipated that the results of this study will be shared with others in the following ways 1) dissertation presentation and, 2) presentation at scholarly meetings.

Disposal of Data

Data from this study will be disposed of 24 months from the date of successful defense of the dissertation.

Contacts

Individuals that may be contacted regarding this study include those listed at the top of this form: Claire Carolan (researcher), Dr. Allana Lindgren (co-supervisor) or Dr. Monica Prendergast (co-supervisor).

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in this research project.

_____ *Name of Participant* _____ *Signature* _____ *Date*

I consent to be identified by name / credited in the results of the study: _____ (Participant to provide initials)

I consent to have my responses attributed to me by name in the results: _____ (Participant to provide initials)

On request copy of this consent form will be left with or sent to you via regular post, and a copy will be kept by the researcher.

Appendix G



Office of Research Services | Human Research Ethics Board
Administrative Services Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

Certificate of Renewed Approval

Claire Carolan

ETHICS PROTOCOL NUMBER: 18-027

Minimal Risk Review - Delegated

PRINCIPAL INVESTIGATOR: UVic STATUS: UVic DEPARTMENT

Ph.D. Student

SUPERVISOR: **Dr. Allana Lindgren**

INTD

ORIGINAL APPROVAL DATE:

RENEWED ON:

APPROVAL EXPIRY DATE:

05-Feb-18

10-Jan-19

04-Feb-20

PROJECT TITLE: RESEARCH TEAM MEMBER

DECLARED PROJECT FUNDING:

Lighting Design Curriculum and Pedagogy in Canada

Co-Supervisor: Dr. Monica Prendergast, UVic

None

CONDITIONS OF APPROVAL

This Certificate of Approval is valid for the above term provided there is no change in the

protocol.

Modifications

To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.

Renewals

Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.

Project Closures

When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.

Certification

This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.

Dr. Rachael Scarth Associate Vice-President Research Operations

Certificate Issued On: 10-Jan-19

18-027 Carolan, Claire

ⁱ Richmond, BC