The House that Critical Thinking Built:
Blueprint for aporia

by

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Dedication

The pages of this thesis represent far more than the years of study that have led to this degree completion; more than the dozens of drafts and likely thousands of pages that have been written and rewritten; more than the interminable hours on my trusty laptop; more than the literal ton of books and articles carted to and from the library, rooted through in databases, and penned in the wee hours.

The paragraphs of this thesis represent far more than the endless litany of rousing debates, of the whys and whats and wheres and whos and whens; more than the countless conversations I have waxed and waned with you, you whose ears are always open, and whose tongues are always happy to wag along (even if in tune with a finger, I still appreciate it!).

The sentences of this thesis represent far more than their weight in gold for how much I have grown throughout this process (although how much value in trees that were killed in printing it even only a few times, I'm not sure!).

The words of this thesis represent far more than me; they also represent the potential that love and support can allow for one to achieve.

May each page, each paragraph, each sentence, each word, represent how enriched I feel to share this life with you. Thank you for your sympathetic ears, your unfailing eyes, your open minds - and your discerning hearts, your warm embraces, your swift kick (and the discretion to wield it) and, more than a shoulder, your constant leg up so that I might keep reaching.

'Til the next one!

Acknowledgements

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With the ink still wet on my honours degree in sociology from UNB, I embarked on a journey to the Mount (and up that darn hill!) to explore the concept of critical thinking. Through my grad studies, it is via my interactions at this campus that I have been given something of even greater value than the piece of parchment upon which my diploma is penned: I have been given a map, and a compass, to be able to navigate the terrain of the field of sociology in education.

Thank you for helping me continue to expand and fill in the fine details of my own map, and sharing your compass as I navigate my own path of inquiry. "Arriving at one goal is the starting point to another" (Dewey, 1997). I look forward to this being the first of many academic opportunities we engage in together!

Abstract

This research is a conceptual exploration of the vernacular that surrounds the concept of critical thinking. Metaphor is engaged as a primer, and through this imagery, the intellectual resources of critical thinking are explicated as tools of learning, understanding, and interpreting. Carrying the metaphor forward, these tools are wielded as applications for each of the respective fields of education, philosophy, and sociology. Social systems relating to epistemology and agency are examined relative to the interplay with quality of thinking critically. In efforts to apply the resources of critical thinking outlined, the tools will be wielded in an analysis of two notions of socially constructed aspects of self: age and sex.

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Introduction

The notion of critical thinking can be encapsulated by its resistance to a single, cursory, and universal definition, and articulated by contrasting it with what it is *not*: namely, what critical thinking challenges. This challenge can be understood relative to the quality of thinking that is the foundation of critical thinking. The issue remains with the differentiation between normative and descriptive definitions. Bailin (1998) references their philosophical constructs, following more closely with David Hume's (1739) call for a distinction between them, in contrast to the sociological paradigm of the social context of norms and mores:

> Descriptive conceptions tend to be psychological in origin, are framed in terms of cognitive skills, and focus on the mental processes involved in thinking. The process approach holds that being good at critical thinking is basically a matter of being proficient at certain mental processes… The principle problem with a descriptive account, however, is that it lacks a normative dimension. Critical thinking is, however, essentially and centrally a normative concept. It refers to good thinking. It is the quality of the thinking which distinguishes critical from uncritical thinking, and this quality is determined by the degree to which the thinking meets the relevant norms and criteria. It is, then, the adherence to certain norms and criteria which is the defining characteristic of critical thinking. An account of critical thinking in purely descriptive terms leaves out what is most central to critical thinking (Bailin, 1998).

How critical thinking as a concept can be engaged in this challenge leads to a consideration of what tools are recognized for their effectiveness. A metaphorical pursuit of 'the house that critical thinking built' makes use of current research in the field of the concept of critical thinking, and allows for the engagement of metaphor to act as a point of departure from which to be able to consider critical thinking in society. In applying the perspectives pursued by theorists in philosophy, education, and sociology, such as Bailin, Siegel, Freire, Dewey, Sharp, Derrida,

and others, to the metaphor I engage, the concept of critical thinking is engaged at an accessible level of commonsensical understanding in society.

As the first consideration, metaphor is employed to craft a more accessible approach to the concept of critical thinking and the resources that are considered to be its essence. Within this, I proceed to the methodology of this research endeavor as elucidated in relation to blueprints as sketches of an aporetic positioning, a problem-posing orientation of which the concept is elaborated upon herein. Oriented by a sociological paradigm that acknowledges the impact of social agents, I then 'wield the tools' that constitute aspects of critical thinking as described herein. The focus is placed on two of the most overt, yet often explicitly unaccounted for, elements of the socially constructed aspects of self: age and sex. The distinction between the concepts of age and life stages; and sex and gender, are teased out as the research moves forward. In this way, age and sex are the concrete definitions used as illustrative examples, and their social constructions are grounded upon these aspects.

Shifting perception in specifying the language used to consider social constructs functions to frame these two particular concepts; however, I seek to draw distinction between coining new terms and drawing connections between ideas. "Acquiring critical concepts is not essentially a matter of acquiring new terminology; rather, it is a matter of learning to make appropriate distinctions" (Bailin, Case, Coombs, and Daniels, 1999B, p.293). Predominantly, a foundational characteristic of criticality is the interconnectivity amongst the vernacular and these perceptions of self by society, considering society as individuals that together comprise a system (Harrington,

2005).   Understanding society as singular units functioning together (harmoniously and discordantly) sets the stage for appreciating the intricate nature of the balance between self and others. It also underscores the fundamental notion of stratification, which is applied to each of the concepts of age and sex. In order to orient these within critical thinking, I first reflexively locate the concept of critical thinking within this particular research project by engaging metaphor.

The House That Critical Thinking Built

> If it is possible to reach water by digging up the ground, if it is possible to
> decorate a house, if it possible to believe this or that truth, if is it possible to
> find shelter from cold and heat, if it is possible to alter the course of rivers
> and to build dams, if it is possible to change the world we have not created,
> that of nature, why not change the world of our own creation, that of culture,
> of history, of politics? (Freire, 2004, p.85).

Much of the descriptor language that is occupied with the concept of critical thinking is synonymous with language in the construction field.   "[M]etaphors are temporary language, often pictures, that help us move from the familiar to unfamiliar, from old to new ideas. They are useful tools for conveying complex ideas" (Judge, 1991). In keeping with the temporality of the metaphoric, we can prioritize the fluidity of knowledge. The metaphor employed in this thesis elucidates the concept of critical thinking so that it might become more readily accessible - and acceptable.   Within this statement, the research task can be understood: I seek to engage the accessibility afforded by the concept of metaphor to explore critical thinking exoterically. This is achieved in crafting the metaphor of a tool belt equipped with the resources of critical thinking, and then proceeding from that metaphor to wield these tools toward the social constructs of age and sex, coded as stages and gender.

There are key examples that capture the essence of the metaphor and its accessibility: the *tool belt* as disposition; *blueprint* as problem-posing methodology, and aporia; *trusses* as the triumvirate of strength within the disciplines of education, sociology, and philosophy; *materials* to consider the generalizability of critical thinking, and assess the quality of reasoning; *breaking ground* to prioritize the notion of *how* we think, not what; *location* as contextualization; *foundation* as the process of pursuing epistemology, autonomy, and agency; *measure twice, cut once* in reflection on the concept of judgment, and fallibilism as a necessary precondition for transformativity; *framing* as method to consider paradigms; *home is where the heart is* to conclude the metaphor, and direct the research forward. In combination with the ambiguity that constitutes critical thinking as a concept, the option to pursue a metaphorical development of the notion allows for it to be unpacked and made penetrable in a connective manner. Establishing this trope, the home builder's tool belt is compared to the figurative tool belt of a disposition toward critical thinking. The metaphor itself becomes an inceptive instrument in, and more importantly, *for* the tool belt.

Tool Belt

Conjure an image of a tool belt. The worn leather sags with the weight of all sorts and sods of tools, its pockets bulge from an assortment of nails, screws, tile spreaders, and a carpenter's pencil or three. A flurry of gyproc dust settles on the cinched belt that flexes and moves against the thin pile of plaid shirt that lies beneath.

The value of evoking this image is two-fold. In focusing attention on the figurative aspects of critical thinking, and relating them to another topic, a subject that is defined by its ambiguity takes on a more tangible quality. Second, in relying on the senses to tell us a story, we can mediate the relationship between using logic and rationality to inform our decisions, and be able to consider the role emotions play in this dynamic. "If we are able to recognize reason is an important tool in artistic expression, then we should be able to also recognize that emotions, intuition, and imagination are valuable tools to help us constructively think" (Thayer-Bacon, 2001, p.209). So, the value of conjuring metaphor lies in recognizing what the tools we need look like. **It is a first step in the process**. While the metaphor is considered a first step, and I engage this in the incremental development of house construction, it is important to consider the parameters of the metaphor. Critical thinking does not possess such a direct relation: "Another common misconception of critical thinking... is implied by those who characterize critical thinking as following step-by-step procedures" (Bailin, Case, Coombs, & Daniels, 1999, p.276).

Critical thinking is the tool belt in which is kept the necessary equipment for developing a reasoned perspective. As can be the case with developing any perspective, houses can be constructed without the use of a tool belt; however, its use can ease the process by providing access to a variety of tools for specific jobs at your fingertips. The specific tools that will be the most effective will vary according to the task at hand. More importantly, the tool will vary according to the discernment of the user. The notion of discernment, understood relative to the context of judgment, relates to directive thought processes. The act of thinking does possess strong or weak qualities, and assessing the caliber of thinking is an aspect of critical thinking

(Paul, 1993). Examining the content of thought and considering its value is a crucial part of thinking critically.

Blueprint for Aporia:
Methodology

<div align="center">
A problem well-put is half-solved
(Dewey, 1997, p.43).
</div>

The unifying notion of examining critical thinking relative to the process of socialization, and considering education as both an agent and a venue in this process, is an aporetic stance: seeking to continually return to a problem-posing perspective in a catalytic function to effect change. Socratic dialogue is a classic example of aporia: problematizing the process beyond basic inquiry to employing a position of questioning everything that surrounds the issue, even the process involved in questioning itself (Plato, 1992). Grappling with a concept that possesses no concrete definition is a prime example of the concept of critical thinking explicating itself. By refusing to ascribe to content resolved, such as in Freire's banking education (1970), learning about and employing the concept necessitates just that: learning about and employing the concept. The notion of aporia is further understood from the critical theory of Derrida, as later explored by Hongyu (1995). This principle considers aporia as a threshold: a problem-posing orientation without destination.

It is from this direction that I explore the methodological aspects of the research at hand. The methodology supporting this thesis derives from a consideration of the research that surrounds the concept of critical thinking. As this thesis takes a conceptual approach, the resources and

data are sourced from the works in a variety of disciplines and fields, particularly education,

philosophy, and sociology. This is further located within the education system as a microcosm of

society.   In considering method*ology* as a theory "to follow a rationale that justifies one's

selection of these particular methods for a given topic of study" (Harrington, 2005, p.5), the

aporetic stance finds a home within the problematizing metaphor for this methodological pursuit.

Elemental to this exploration within aporia is that conventional research projects meet their goals

by contributing a new perspective to the field in the form of a solution to the problem as

outlined.   This thesis instead pursues the notion of '*the* solution' to the problem not only as

illusory, but nonexistent:

> The aporias between self and other, identity and nonidentity, center and margin, conscious and unconscious, relationality and individuality, and commonality and differences make any hope for quick success and the permanent 'fix' of problems impossible. There is no formula that we can rely upon to 'cure' the diseases of racism, (hetero)sexism, classism, xenophobia, or other forms of social hatred. Although we as educators are institutionally granted the position of authority, we are situated in the social, political, and cultural construction of our own identities (Hongyu, 1995, p. 53).

This is not to say that Harrington's (2005) explication of methodology is not valid, and valuable.

That said, priority within this research is not in seeking a problem and subsequent solution, but to

locate itself firmly within the notion of problematizing the theories and concepts explored.

Trusses: the Triumvirate of Strength

> As for me, all I know is that I know nothing
> (Plato, 1992, p.3).

This thesis is an entirely conceptual pursuit. I orient the data from the works of others in various fields to consider the disciplines of education, philosophy, and sociology for their epistemologies toward learning, understanding, and interpreting, respectively. Rather than broadening the parameters of this research, engaging philosophy as a theoretical foundation from its etymological roots of 'love of knowledge' allows for the research to find purchase within the synergy crafted between the further fields of sociology and education, acting as a bridge between the disciplines and bodies of knowledge in order to direct the research toward the concept of critical thinking.

In this way, these three fields form the trusses of the research, both for reflexive solidification, and to underscore the interconnectivity of these fields. A space truss is defined in the construction world as "[a] three-dimensional framework used to span a rectangular area whereby the individual members are so interconnected that a truss effect is achieved to carry imposed loads to all… support sides" (Brooks, 1976, p.178). Simply put, imagine the shape of an inverted tetrahedron (an upside-down triangular pyramid). Each flat side of the shape represents one of the disciplines and its subsequent epistemic orientation I am examining (education/ learning; philosophy/understanding; sociology/interpreting). The synergy between critical thinking and construction is fortified; for it is within the interconnectivity of the individual approaches that the load it is meant to bear can be withstood.

"What understanding begins to do is make knowledge available for use, and that's the urgency, that's the push, that's the drive" (Lorde as cited in hooks, 2010, p.172).   In keeping with the premise of making the research accessible, I want to briefly explore the relationships between education and learning; philosophy and understanding; and sociology and interpreting.   The intention is not to drill down to the ground with these connections, but to contextualize their inclusion relative to the notion of critical thinking.   While each of the disciplines have deep relationship with each other, and also to each of the concepts I have selected, there is nonetheless a need for providing a framework to this research in underscoring how I position my perspective reflectively.   I review each in turn, and will then dial back to explore the notion of generalizability.

Education and learning exist somewhat synonymously, for both beneficial and detrimental reasons.   Placing them in parallel to each other, converging and diverging relationships are brought to the forefront.   "[A] major illusion on which the school system rests is that most learning is the result of teaching… Learning is the result of unhampered participations in a meaningful setting" (Illich, 1973, p.12/39). This can be understood relative to Freire's (1970) notion of banking education, which derides educators' and learners' dichotomous positioning, thus falsely separating these processes.   It is not to say that these roles do not have distinct and definable functions from one another; however, in positioning them against one another as fulfilling a socially defined role of teacher as authoritative information wielder, and student as passive receiver of information, an authentic learning opportunity is lost - for both teacher and student.   "The teacher is not in the school to impose certain ideas or to form certain habits in the

child, but is there as a member of the community to select the influences which shall affect the child and to assist him [sic] in properly responding to these influences" (Dewey, 1997 [1938], p. 9). As a 'member of the community', the educator shifts to a facilitatory function, allowing for the student to set a pace of exploration and interaction with the material the educator selects. In this way, the classroom becomes a Community of Inquiry, which will be explored via Margaret Ann Sharp's concept of being "free of the need always to be right" (Sharp, 1991, p.32).

Sharp (1991) conducts an examination of considering the Community of Inquiry as a precursor to the development of the skills that support democratic participation. I will proceed from the assertion that a Community of Inquiry "...is characterized by dialogue that is fashioned collaboratively out of the reasoned contribution of all participants" (1991, p.31). I highlight this particular phrase in order to emphasize the importance of dialogue within the Community of Inquiry; this passage also underscores the value of the reason-based communication of ideas by all members of the Community.

Sharp discusses the value of dialogue within the Community of Inquiry in a number of contexts. Encouraging discussions in the classroom has many merits, yet there remains a distinctive quality to dialogue, and the freedom mentioned above highlights the transformation from discussion to dialogue. For the purposes of this analysis, discussion will be used to refer to the *offering* of ideas, and dialogue will refer to the *exchange* of ideas. What may seem like semantics actually underpins the distinction between the ability to listen to another's ideas in such a way that it risks altering one's own beliefs, and merely waiting politely for your turn to

speak. "There is all the difference in the world between having something to say and having to say something" (Dewey, 1997, p.35). These listening skills are a key ingredient of a Community of Inquiry.

Within a Community of Inquiry, the ability to engage in equal consideration of each participant's perspective creates movement in the concrete quality of knowledge. In truly opening the self to the ideas of others, knowledge becomes a cumulative process rather than a static bank of information. Within the acknowledgement of all positions, the concept of understanding widens, and encourages the opportunity to reexamine one's own perceptions. Once interactions operate on this basis, the acceptance of the contingency of knowledge can be elucidated, for in order to be capable of truly listening to another's opinions, there must be a consideration for one's own opinion as malleable. It is during this transition that one of the conditions of a Community of Inquiry becomes tangible, and that the discussion transitions to dialogue.

In addition to the value of honing listening skills and acknowledging the fluidity of knowledge, the Community of Inquiry is invaluable in its circumvention of the 'right/wrong' dichotomy that can be prevalent in the education system. Standardized testing has become a common measure of information acquisition and retention (Freire, 2004). My intentions are not to conduct a critique of standardized testing. I address it to consider its question/response structure that directs students to an end in the learning process, rather than as an exploration of the process itself: of seeking and gaining learning, understanding, and interpreting these findings.

In efforts to relate theory to my own practice, I sifted through personal experience for a situation that highlighted the prioritization of the quest for knowledge rather than seeking 'correct' answers:

A few years ago, I hosted a day session for the medal recipients of a regional science fair. The participants were dozens of students from middle schools across the three districts in the area. Participation in the event was a day off regular classes for some, but as a result of this being a Professional Development Day (and consequently a day off regardless) for others, they were offered an incentive of extra credit for attending the event.

As I conducted an informal, interactive tour of the New Brunswick Museum with one group of students, I was impressed at how engaged they were with the materials and resources, and the level of insight that I witnessed as we toured various exhibits. There was a genuine interest in the information, and a great deal of honesty with respect to those exhibits that were less interactive than others. There were groans as we approached one exhibit in particular, that I had intended to skip over - I found it less than engaging as well! - and we had a great conversation about the reasons why some exhibits, and by extension some (school) subjects, are more or less exciting than others. Riding a great vibe, I returned to pick up the next batch of students with great anticipation. From the outset, this group dynamic was entirely different. Armed with notebooks and pens at the ready, each time I spoke, the students jotted down notes, only cursorily glancing at the exhibit before moving on to the next. There was little to no conversation with me or even amongst the students themselves, except for one student actually asking me to repeat my last sentence. Puzzled at the obvious difference in approach between the two groups, I halted the tour, and asked if they would not enjoy the experience more if we put away the notebooks and engaged with the exhibits. Expecting a measure of relief from them, instead I noted

hesitation and sideways glances at each other as their pens paused mid-air. After some probing, I was informed that this particular group's school had advised them that they would be eligible for extra credit if they were able to complete a multiple choice test they had been provided that reviewed the exhibits. The students had been instructed they were not permitted to ask me any of the questions on the test specifically, and had been told that if they did so, it would result in the student being exempt from the extra credit (I presume on an 'honours system' basis of students reporting back if they noted any others doing so, as the school had not discussed this with me).

I was caught between a rock and a hard place. I did not want to undermine their teachers by telling them to abandon the test, or put them in the position of not being eligible for extra credit by not getting the 'answers' they were seeking. My decision was to ask for a copy of the test, and turn it into a scavenger hunt of sorts. I took the questions of the test, formed a basic idea around each, and then assigned the students into groups to seek out information about each of the exhibit pieces that they needed to bring back and act out a two-minute sketch of the event in history. What fun we had, with notebooks becoming impromptu hats, and jackets thrown about shoulders as lab coats. The information came alive to the students, and as we sat around talking about the exhibit afterward, questions were flying around the circle - with an equal amount of responses coming from the other students as from me. It did take them a moment to accept this role in the beginning, as the first question that was asked about a certain historical figure was directed at me. Rather than replying with the answer, I told them that since Mr. Bell was sitting right there, why not ask him? When the student who had played the role of Alexander Graham Bell looked like a deer caught in the headlights, I simply asked him to remember what he had said earlier, and to speculate on why he might have chosen to do that. The exercise turned into a great debate about the merits of choosing to use one material or another, and the students had a very thorough discussion about the various options.

What a sight to see! The information now belonged to the students, and soon they were reviewing the test collaboratively, not in efforts to find out if the answer was A or C, but truly dialoguing about the information. Reality returned a little while later, and a student asked me if the fact that they were working on the information together meant that they would not be eligible for the extra credit. Bracing myself to hear the room fall silent, I was so pleased to hear someone say, "Who cares?", and they continued on with the activity, even making up some of their own games as we went through the rest of the tour.

Within this personal narrative, I found distinction between the type of education that seeking specific answers to static questions could lead to if not combined with a genuine sense of interest in the information itself. When we open ourselves up to be able to consider the pursuit of knowledge as a process rather than simply 'ticking off the boxes' of compulsory information gathering, learning moves away from finding 'right' answers to the discovery of new perspectives on the world. One of the greatest things I heard uttered that day was a student responding to their classmate's comment on something about an exhibit: "Hmm. I never thought about it that way before." It is that line that encapsulates the importance of sharing within the Community of Inquiry that I consider to be fundamental to the learning experience.

Proceeding from the philosophical orientation found in a Community of Inquiry, in a manner likened to education and learning, philosophy and understanding have a significant synonymity. The most impactful aspect of this dynamic is considering its aporetic stance: in seeking understanding not by pursuing the aspects that can be grasped and furthering them, but instead, seeking problematization in examining those beyond our reach. When understanding becomes a

tool as opposed to the finished product, in conjunction with acknowledging the importance of making the unknown the materials, quality understanding can be approached.

Finally, the sociological connection to interpretation makes clear the facet of reflexivity within research. In approaching learning and understanding, the processes are elucidated through the negotiations of perception and interpretation. This concept is further explored within the notions of subjectivity, objectivity, and relativism within the later 'Foundation' section of the metaphorical sketch, in the context of epistemology. Approaching the concept from various disciplines leads to a consideration of materials of construction, which relate to the metaphor via the generalizability of the concept of critical thinking, as considered by Siegel in "The Generalizability of Critical Thinking" (1991).

Materials

Considering the materials of construction and education, parallels can be made to the selection process of these constituents. At its most overt, we can contemplate whether a basic set of tools can perform the task at hand as readily as having specialized gadgets designed to perform specific duties. Similarly, critical thinking has been considered for the ability to understand and employ it across disciplines, as a subject-specific concept. Siegel's exploration of the generalizability of critical thinking first defines what constitutes 'critical thinking'. Elucidating the components of this concept, those being reason assessment and critical spirit, Siegel reviews two major components of the generalizability of critical thinking. By first highlighting the lack of this type of analysis with respect to both the generalizability of dimensions of reason

assessment (other than subject specificity), and then underscoring the component of the critical spirit as a whole. He contends that focusing on the skills of reason assessment rather than the concept of critical thinking obscures the generalizability of the critical spirit. Reasoning depends not on the field, but the evidence used to establish it. The epistemology underlying critical thinking centres around the basic notion that the inclusion of reason assessment as a process in critical thinking signifies that critical thinking is thereby guided by reason; as such, it requires justifying this reasoning. He contends that this is one of the elemental factors that has resulted in the vagueness of the generalizability of critical thinking.

The separate consideration of reason assessment and epistemology allows for this ambiguity to be teased out. Can the same be said for the critical spirit? Siegel believes so: "[p]eople who possess the critical spirit value good reasoning, and are disposed to believe, judge, and act on its basis. It is this genuine valuing, and the dispositions, attitudes, habits of mind, and character traits which go with it, which constitute the core of the critical spirit." (1991, p.26). To reiterate, by focusing on the overall consideration of critical thinking rather than to the application of a specific concept, the generalizability of critical thinking is elucidated.

It is this elucidation of the generalizability of critical thinking that is a significant factor to its full incorporation into the institution of education. Specificity does exist within the concept of critical thinking. A specialization within fields necessitates specification of concepts that goes beyond basic epistemic notions. This does not detract from the application of critical thinking across disciplines, subjects, fields, theories, and the like. While the notions of application

change, this disjuncture is created as a result of focusing on the skills of critical thinking rather than the resources. Within this distinction, I find purchase in supporting the advocacy of implementing critical thinking in the classroom. As already indicated, Siegel summarizes quite succinctly: "[i]t is this genuine valuing [of good reason]...which constitute the core of the critical spirit." (1991, p.26). Acknowledging this understanding of the fundamental component of critical thinking moves the argument into an arena of realistic implementation within academia at all levels of instruction, and thereby, its generalizability.

The implication of valuing good reason is a part of the argument. However realistic the implementation of an ideal is, there is an assumption that by fostering ideals they will be valued, and students will subsequently make use of them. This is particularly apt with respect to tolerance education, which can be further explored in the context of sexism. As a necessary condition of inclusionary education, knowledge of action that constitutes sexism is not sufficient to ensure that students will then engage in anti-sexist action, or even disengage from sexism. Acknowledging the existence of stratification is a condition to ensure tolerance that is necessary, but not sufficient practice. Furthermore, it is an unreasonable expectation that the knowledge imparted will engage students by demonstrating how something is considered prejudice and marginalizing. Arming them with the tools to be able to take action upon witnessing this type of event requires more than recognition of its occurrence:

> …[l]earning to think critically is a matter of coming to understand the principles, concepts, and criteria which constitute our critical practices and are inherent in our traditions of inquiry. It is important to note, however, that neither is this approach the same as the immersion approach. It does not assume that critical thinking will automatically result from an immersion in

subject matter, particularly if this is meant to refer to traditional school subjects (Bailin, 1998).

If what is being suggested - that the presentation of subject matter is an insufficiently assiduous method by which to engage students in transformative thought - what then can be said for the process of static knowledge transmission? For Paulo Freire, this process of the teacher-student relationship suffers from "narration sickness":

> Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which students patiently receive, memorize, and repeat. This is the "banking" concept of education, in which the scope of action allowed to the student extends only as far as receiving, filing, and storing the deposits. They do, it is true, have the opportunity to become collectors or cataloguers of the things they store. But in the last analysis, it is the people themselves who are filed away through the lack of creativity, transformation, and knowledge in this (at best) misguided system (1970, p.100).

When students are positioned in a passive context, and fulfill their designated role of 'student' by merely becoming holding vessels for information until they are called upon to regurgitate those facts intact for assessment, the educative process is subverted. This can easily allow for conjuring an image of the evil teacher, hairy warts and all, reinforcing the issue. If we presume that all educators do not maliciously cast students as underlings to do their bidding of obediently producing satisfactory results, we can instead conceive that this process is not the teachers' intention. If the problem of banking education's prevalence is not concomitant within the teacher as intent, these teachers are likewise reduced to performing their own roles as expected,

and are faring no better than the student in the learning process.[1]   What resource then becomes

the evil force that seeks to malign the education system?

In what he concedes to be an attempt at engendering a divisive position on conventional aspects

of education and the resources employed therein, Neil Postman (2005) calls for ridding our

classrooms of textbooks:

> Textbooks are concerned with presenting the facts of the case (whatever the case may be) as if there can be no disputing them, as if they are fixed and immutable. And still worse, there is usually no clue given as to who claimed these are the facts of the case, or how "it" discovered these facts (there being no he or she, or I or we). There is no sense of the frailty or ambiguity of human judgment, no hint of the possibilities of error. Knowledge is presented as a commodity to be acquired, not as a human struggle to understand, to overcome falsity, to stumble toward the truth. Textbooks, it seems to me, are enemies of education, instruments for promoting dogmatism and trivial learning.

Considering textbooks to be 'evil enemies of education' is phrased with the intention to generate

a reaction and to stimulate critical thought about a ubiquitous learning resource. Postman calls

for maintaining a tenuous - albeit closer - relationship with knowledge to be incorporated into

the classroom. By distancing ourselves from the information within the pages of textbooks, and

by framing it in a static, unchanging context, we no longer have a malleable relationship with

learning, and can fall prey to an authoritarian, teacher-centered banking education (Freire, 1970).

Postman's inflammatory technique is an attempt to compel critical thinking: for the reader to

consider their reaction to the suggestion as more important than the implementation of the

_____

[1] This focus is beyond the scope of this research task, but it is important to acknowledge that this does not account for the issues that arise for the individual agents within the system: teacher, student, and student teacher.

suggestion itself. The writer's intentions can differ vastly from the audience's interpretations, let alone their subsequent actions; however, this does not detract from the attempt the author puts forward. It is, in a sense, about capturing the essence of the concept - of *how* it is engaged, more than *what* is being engaged.

Breaking Ground

Although aesthetically significant, in the grand scheme of house building the overall step-by-step process is not affected by the choice to erect a Dutch, Georgian, or American colonial. Similarly, critical thinking is not so much about *what* you think, but *how* you think (Shor, 1992; Kida, 2006). Building a home – or embarking on an exploration of a formalized concept with centuries of history – engages in likewise significance of forethought. Breaking ground on a house may appear to be the first stage of building as it is a significant milestone in the process; however, there are many phases of planning that must be undertaken before the excavator digs into soil. What can be considered the 'breaking ground' moment of critical thinking is also not so clearly delineated as the initial stage of thinking critically. This is not a shortfall of critical thinking; it instead highlights that the concept has a variety of uses by which it is constituted. For example, the notion of critical thinking as 'skill', in the context of performativity, functions to underscore the banality of approaching the concept from this perspective. Subsequently, it conversely demonstrates the prioritization of an orientation and action of disposition:

> ...critical thinking is not promoted simply through the repetition of ` skills'
> of thinking, but rather by developing the relevant knowledge, commitments
> and strategies and, above all, by coming to understand what criteria and
> standards are relevant. Repetition does indeed have some role to play, but
> only if it takes place in the context of the development of such knowledge,
> criteria, commitments and strategies… [S]kill in critical thinking cannot be

separated from understanding the nature and purpose of the task one is attempting to accomplish. (Bailin et. al, 1999, p.280).

Although you can practice digging a hole with an excavator, this repetitiveness may not necessarily account for an understanding of the physics behind how this occurs. This is significant in that without knowing where, when, and why it is appropriate to direct the digging, the technique itself serves little purpose. By trial and error, you may be successful in selecting the best location for excavation. Without appreciating that the house location must be fundamentally sound - not only to give you the best view from the master bedroom, but to also avoid the stream that runs through that area - the action becomes circumstantial rather than directed and facilitatory.

> Just as one can learn to speak and write correctly without being able to state the standards of good language use, so too can one learn to think critically without being able to state the standards of critical thinking. What is crucial to thinking critically is being able to act in the way the principles prescribe and being able to recognize when one's own and others' thinking fulfill the relevant standards (Bailin et al., 1999B, p.292).

Harnessing the opportunity that this affords, the distinction between critical thinking as resource rather than skill comes to the forefront. Bailin's (1998) 'intellectual resources' are synonymous with the notion of the tools in the metaphorical tool belt. By interpreting these as understandings, I find purchase with a contextual relationship in the field of philosophy as relating to the critical spirit:

> An additional difficulty with the identification of critical thinking solely with skills to the exclusion of knowledge and attitudes is that it fails to recognize the central role played by attitudes in thinking critically. Critical thinking involves more than the ability to engage in good thinking. It also involves the willingness or disposition to do so (Bailin et al., 1999B, p. 272).

Striking the balance of reason assessment and critical spirit, the distinction between access to

resources and use of skills is underscored in a relationship framed by context:

> It may well be that we need both infusion and special courses in critical
> thinking.   What is essential is that appropriate habits of mind and
> appropriate use of intellectual resources are exemplified for students, and
> that they are given guided practice in critical thinking in appropriately rich
> contexts (Bailin et al., 1999B, p.299).

Highlighting the importance of context orients the research in a manner that finds purchase in

locating the research perspective, leading to a pursuit in the housing world vernacular of

'location, location, location'.

Location, Location, Location

In the choice of where to build a house, location can be one of the single most important factors

for long-term satisfaction. Similarly, when considering critical thinking, one must orient oneself

reflexively before applying the resources of the concept toward an issue.   Critical thinking

approaches require an acknowledgement of epistemological orientations within the pursuit as a

whole.   Much like how proximity to good schools, traffic noise, or the unkempt neighbour's

lawn with the yappy dog are considered in choosing a plot of land for a home, without

understanding that the directives of the pursuit are to consider attitudes, principles, or strategies,

criticality is impalpable. A recurring theme within this research is the notion of context, as noted

by Bailin:

> Critical thinking always takes place in response to a particular task,
> question, problematic situation or challenge (including solving problems,
> resolving dilemmas, evaluating theories, conducting inquiries, interpreting

works, and making life decisions) and such challenges always arise in particular contexts. Dealing with these challenges in a critical way involves drawing on a complex array of understandings (what colleagues and I have termed intellectual resources), the particular resources needed for any challenge depending on the specific context (Bailin, 1998).

In efforts to embrace an emancipatory, authenticating educative process (Noddings, 1984), the two ultimate criteria of critical thinking: reason assessment and critical spirit (Siegel, 1998), must be equally valued as necessary conditions. Baxter Magolda (1992) considers the lack of quality judgment (when it occurs) to be a stage in the process as opposed to a fallacy within it. "[I]n the excitement over independent thinking, the idea of judging some perspectives as better or worse is overlooked' (Baxter Magolda 1992, p.55). Baxter Magolda (1992) sketches out the four stages of knowing into what I consider a tiered, liminal learning process, valuable for how they highlight the relationship of quality and judgment to knowledge. In the first stage, the *state of absolute knowing*, knowledge is something to be acquired; if this cannot be achieved, it is because the 'right' information is inaccessible to the learner (placing 'fault' on the learner for not receiving information properly). In the second, *transitional stage*, knowledge must be understood and then acquired; maintaining the initial structure of absolutism, but embracing uncertainty of knowledge as an initial problem in this process. Moving through the transitional, learners can become *independent(ly) knowing*. This stage is considered the "[e]mbryonic form of contextual knowing" (p.54): appreciating the autonomy of the learning process, and considering all knowledge as uncertain. However, a lack of prioritizing two of the benchmarks of my research endeavor: quality of reasoning and judgment, results in its inchoateness. In the final stage, *contextual knowing*, critical thinking can be elucidated.

Contextual knowing allows for the construction of knowledge to be prioritized, but is also considered for its quality and contribution. It moves beyond appreciating that individuals have opinions to be shared, to considering these contributions and their derivations. This stage combines several resources from the tool belt, as it represents the culmination of the process into the tangible manifestation of critical thinking. The tools in the tool belt may also work in conjunction, functioning in this way to link these stages of knowing into considering ways of knowing (epistemology).

Foundation

Bourdieu's (2005) notion of habitus is considered relative to the acceptance and ubiquity of the term critical thinking in society, and how that pervasiveness has both facilitated and hindered its growth. "[A]n adequate science of society must construct theories which contain within themselves a theory of the gap between theory and practice" (Bourdieu, 2005, p.70). The notion of the science of society leads us to the consideration of epistemology of research in accordance with Daly (2007). Epistemology, constituting realities and the ways of knowing:

> ...is the source that ultimately gives direction to the path of inquiry. The second level of the cascade is to consider the way that scientific paradigms steer the course of the flow. Third, assumptions and concepts from theories give direction to the movement of ideas. At the fourth level, methodology outlines the procedural assumptions as they are determined by epistemology, paradigms, and theory… The stream ultimately spills into a collected pool that we can think of as the data that come together as a result of this process (Daly, 2007, p.22).

To liken this to our metaphor, it is akin to examining the decision to choose between slab, crawlspace, or basement foundation. There are a number of factors that go into the process of selection; however, in order to be positioned to select the most appropriate foundation, the

factors must be prioritized. The best approach to prioritization in this manner is to acknowledge their impact on the decision process. "We cannot question or shake traditional ethical and political claims without at the same time drawing upon these traditional claims" (Bernstein as found in Hongyu, 2005, p. 47).

In choosing a type of foundation, the basement foundation may be the most desirable to access the home's substructures and utilities. Conceiving of making use of every inch of potential space and carving out a palatial laundry room may seem like a dream concept. However, if building in a designated flood zone, digging subterranean is likely not the best option for a place to dry your clothes. Similarly, while we seek to encourage students to engage in critical thinking as a part of their thinking processes, both in and out of the classroom, students' abilities to do so are impacted by the socializing agents to which they are exposed (conceivably both positively and negatively). What needs to be encouraged in students is to perceive access to agency. As with Postman, in placing students in a context that 'forces' the need to consider their relationship with textbooks, they can assert their own identity relative to them. "Society… is based… on the pursuit of one's interests versus the interests of everyone else" (Adorno, 1966, radio recording).

Autonomy is a term frequently considered regarding the notion of critical thinking. 'Autonomous critical thinker' is a redundancy, for thought without self-actualization is not critical thinking; the tipping point of critical thinking being the *active* engagement of reason assessment and critical spirit. This involves an acknowledgement of the orientation of self relative to the information being considered. Although critical thinking exists within a threshold,

which one can be more firmly within than without, it nonetheless can be distinctly determined if one is thinking critically, or not sufficiently engaged in critical thought. It is remiss to make this claim without supporting notions of the criteria by which to consider this, and to discuss at length; however, my own perspective considers a combination of concepts that divide critical thinking into an epistemology and a disposition (in keeping with as already discussed with Siegel, 1991).

Although it may seem rudimentary to explain why a foundation is required on a home, value lies in posing the question, and orienting one's self to the research in a position of disequilibrium. Within this disequilibrium, the assumptions that comprise the framework of our interpretations can be elucidated. By questioning these ideologies, the reasoning component of thinking can be considered for its quality.

> The critical thinker must acquire good judgement in determining what critical thinking principles require in particular contexts. The primary resource for acquiring such judgement is access to examples of how each principle applies in a wide variety of contexts (Bailin et al., 1999B, p.298).

Measure Twice, Cut Once

The English proverb and good carpenter's mantra of 'measure twice, cut once' fits quite well in consideration of critical thinking dispositions. Bailin, Case, Coombs, and Daniels (1999B) consider the attributes of critical thinking to be: attitude of mind; principle of standard of critical thinking; and strategy or heuristic model. "The difficult task is to recognize that a new idea deserves consideration, and to be willing to entertain it seriously, at the moment when we ourselves are strongly inclined to favour a view with which it conflicts" (Hare, 2003, p.3). He

continues, "Not being ready to recognize the possibility of such a fault in ourselves, we are not sufficiently alive to the forces that bring about closed-mindedness" (p.5). This is not to say that judgment itself does not have a place: eventually, the carpenter must make a cut – so too must the thinker actively engage. "But prejudice and judgment are two very different human possibilities; indeed, the more we proliferate prejudices, free from the scrutiny of that discernment we aim to evade, the less capable we are, over time, of making judgments… in line with Kant's insistence that '[e]xamples are the go-cart of judgments'" (Elshtain, 1994, p.394). Judgment is assessing the situation from as many possible angles as reasonable, and then passing this position based on the consideration that seems most appropriate. "Just as a skilled craftsman is able and disposed to capably employ a variety of tools in the doing of his [sic] work, an individual who is skilled at thinking has the ability and inclination to adeptly make use of a number of cognitive moves in doing the work of judging." (Yos, 2004, p.11). How these abilities and inclinations function in relation to belief systems is also a significant dynamic of a catalytic judgment process.

Framing

Paradigms provide more specific information that allows us to situate ourselves in a set of belief systems: "[W]hen we share knowledge that requires listeners to shift their paradigms there is almost always a letting go that is difficult and painful" (hooks, 2010, p.138). As with any 'rigorous' research (and I use the term 'rigorous' specifically in a nod to earlier discussions of quality and judgment), critical thinking must be grounded in appropriate context. Framing one's perspective allows for a deeper understanding, and thereby for the notion to be better conveyed.

How we frame critical thinking with respect to whatever notion we are encountering is to be receptive to the pursuit of genuine inquiry, and to strive to discover alternatives to options that are presented. There are several reinterpretations of the notion of critical thinking that strive to underscore this aspect of creativity (Bailin, 2004) and constructiveness (Thayer-Bacon, 2004). In keeping with crafting our metaphor, framing up a house is the step following pouring the foundation, and is that to which all other aspects of the house are attached and built upon. As such, its significance to the process must be readily considered. The choice of materials, the careful execution of each and every step, all function as crucial processes in the project. Cutting the studs to the wrong dimensions by mere millimeters may not seem detrimental in the immediate situation; however, this may eventually cause the complete collapse of the entire framework. Such as with the critical thinking process, should a situation not be recalled for the context under which it was considered, the perceptions that result may create a false basis for perspective. Beyond this concern, in considering the context of the knowledge framework, the uncertainty that is a part of the stages of knowing and the knowledge process itself can continue to be prioritized.

Home Is Where The Heart Is:
Proceeding from the Metaphor

> "I define[d] love as a combination of care, commitment, knowledge, responsibility, respect, and trust... when we teach with love, combining care, commitment, knowledge, responsibility, respect, and trust, we are often able to enter the classroom and go straight to the heart of the matter" (hooks, 2010, p. 159).

There is a significant difference between a house and a home. Such also is the distinction between thinking and critical thinking. While the construct of a house has a denotative reference that is generally accepted, a home is a highly individualized notion, and varies across perspectives. Siegel's (1991) categorization of the concept of critical thinking into reason assessment (epistemology), and critical spirit (disposition), are necessary conditions of being able to engage in activity that can be considered criticality. Individual interpretation of what constitutes a home will make it so, much as how differing perspectives can arise from a critical stance. What is important is not attaining a particularly defined standpoint, but an engagement in the type of reasoning and disposition that allows for critical thinking to be elucidated. How these are manifested varies from situation to situation; however, the underlying tone to grasp is one of ensuring that it continually problematizes the normalized aspects of the institutions that surround us (school, peers, media, family), and seeks out opportunities to question the commonsensical notions of the world around us.

> I have described what I want for my child as an academic house built on a
> strong foundation of self-knowledge but with many windows and doors that
> look out onto the rest of the world (Delpit, 2006, p.229).

An aspect within this metaphor is *home is where the heart is*; critical thinking is the method by which to (re)consider everything we encounter. The concept refers to what some know as the "engine of our critical practices" (Bailin, 1998), disposition (Siegel, 1992), others as an essence (Postman, 2005), and still others as a tool (Okes, 2002). Critical thinking is singularly none, and all, of these things. As the sum of its parts, critical thinking is also metaphorical for a house itself, one in which the door is always open.

As affirming as the openness of that consideration appears, the notion of open-mindedness can also be carried to an extreme, corresponding with the aphorism 'If you're too open-minded, your brains will fall out'. Prioritizing critical thinking within education can be understood relative to its importance within society. As such, the concept of society (Habermas, 1979) as a structure must be examined. The interplay between social dynamics of age (coded as stages) and sex (coded as gender) is examined in the context of how critical thinking can be employed to negotiate this dynamic, in elucidating both distinctions, and considering reciprocal connections. In the former, the context of their distinctions is deliberated: age considered for the relationship with notions of child protectionism and indoctrination (Callan, 2001); and gender, which possesses the most diametrical of '-isms': feminism, and how these concepts dovetail into a consideration of queer temporalities (hooks, 2010). In the latter, their connectivity can be considered with the concept of standards and judgment, and how they can be employed as a tool for discernment, not prejudice (Kant, 1914; Elshtain, 2004).

> For what is at stake is the capacity to make judgments as an ethical issue of the gravest sort, and along with it, the discernment of what it means to judge well. In other words, we need a clear sense of why judging is important and what is involved in the activity of judging, and we need a way to distinguish between rash judging-not judging well-and the kind of judging that lies at the heart of what it means to be a self-respecting human subject in a community of other equally self-respecting subjects…   But prejudice and judgment are two very different human possibilities; indeed, the more we proliferate prejudices, free from the scrutiny of that discernment we aim to evade, the less capable we are, over time, of making judgments (Elshtain, 2004, p. 197).

She continues:

> [Within] the pedagogical enterprise, one of the most important… suppositions being that students are capable of weighing alternatives with a

generosity of spirit and quality of discernment that makes their subsequent judgments at least plausible if not unassailable (Elshtain, 2004, p. 198).

Arendt (1954) links the processes of action and thinking with judging, by considering the mental process of judging as dependent on communication. According to her, in order for the capacity to judge to remain tangible, personal judgment must be tested against the judgements of others, lest we lose our sensus communis (literally, 'common sense').

Drawing the divergence between judgment and prejudice is not merely a matter of semantics. The interdependence of judgment and communication, and understanding the ramifications of language being value-laden (Chomsky, 2000) is a significant undercurrent of this thesis:

> But identity is a precise conception, and no word, in ordinary speech, stands for anything precise. Ordinary speech does not distinguish between identity and close similarity. A word always applies, not only to one particular, but to a group of associated particulars, which are not recognized as multiple in common thought or speech. Thus primitive memory, when it judges that "this occurred," is vague, but not false (Russell, 2011).

The power dynamic associated with social concepts (and the individuals that comprise them) exerts itself as a primary force in society. In considering the education system as a microcosm of society: "It [school] gets a chance to be a miniature community, an embryonic society" (Dewey, 1997, p.13). The implication is that these identifiers and how individuals are positioned relative to them possesses influence on the educative process. Stated more succinctly, how members of the education system locate *themselves and others* relative to these socially constructed parameters can be considered.

Reflecting that these locators largely determine social identification, I begin to tease out the presence or lack of critical thinking within our social interactions. Orienting oneself paradigmatically contextualizes the educative process in considering the social agents that shape us. There is a dualistic notion to the approach, for we must consider how, in turn, we perceive those forces that shape us. It is thereby possible to draw connections about the dualistic approach I take within this research. At this juncture, the paradoxical interaction of thinking critically about critical thinking comes to the forefront. Approaching critical thinking as a concept, critical thinking as an action is engaged. Expanding from the metacognitive notions of 'thinking about thinking', there is a teleological aspect to this mode of thinking that calls for scrutiny. Kuhn (1999) considers this metacognitive approach to be central to critical thinking. This underscores the notion of epistemology explored within my research, which exists as an undercurrent to the research; however, in order to avoid potential recursiveness, I focus on the scope of reflexivity and the need for a paradigmatic consideration within all research, an endeavor that particularly prioritizes critical thinking (Postman, 1995).

This returns us to the connotations associated with 'critical', finding origin in 'kritikos', Greek for judgment or discernment. The negativity that is often construed as an '-ism', designates it as a damaging force that is detrimental to agentic development. An '-ism' can be understood as a chiefly derogatory term representing an idea or principle that in being definitive, excludes. This will be further oriented within the exploration of gender stratification. The concept (and movement) of feminism can be framed as an '-ism' by considering how the hegemonic practices of patriarchy have used the term as a divisive barrier between the sexes. Once perspective is

engaged schismatically, the resulting deleterious interactions are a challenge to engage as a catalyst for effecting change. Ultimately, this can be considered as a prime example of the debate between judgment and prejudice.

Wielding the Tools

The discourse surrounding critical thinking is oriented toward considering two key socially constructed aspects of self: age and sex. Each of these elements is extrapolated so that their relationship with each other, and with the resources described within the metaphorical tool belt of criticality, can be perceived. The final point is one that is carried throughout the text, in considering the metacognitive 'thinking about thinking' that must be used to constantly orient the research. This orientation must occur reflexively. To situate self within the process, and to appreciate that critical thinking itself must transpire in order to explore its facets:

> A genuinely reflective sociology must constantly guard itself against this epistemocentrism, or this "ethnocentrism of the scientist", which consists in ignoring everything that the analyst injects into his [sic] perception of the object by virtue of the fact that he is placed outside of the object, that he observes it from afar and from above (Bourdieu, 2005, p.69).

A major undercurrent to the thesis focuses on grappling with distinctions in terminology, and the convergence and divergence between these two schools of thought, which elucidates the notion of critical theory. This relationship explores, but is not limited to, the notion of praxis and its interconnecting relationship to theory and practice. This is contextualized with respect to the notion of the interplay between theory arising from practice, and vice versa. Considering practice without theory is to ignore that it has already informed it, and in many ways of which

we are not aware. "Theory is a resource" (Giroux, 1983). It is not about the debate between the

two directives, but about locating the research within this knowledge:

> ...[T]he sociologist who studies the American school system, for instance,
> has a "use" for schools that has little in common with those of a father
> seeking to find a good school for his daughter. The upshot of this is not that
> theoretic knowledge is worth nothing but that we must know its limits and
> accompany all scientific accounts with an account of the limits and
> limitations of scientific accounts: theoretical knowledge owes a number of
> its most essential properties to the fact that the conditions under which it is
> produced are not that out of practice. In other words, an adequate science of
> society must construct theories which contain within themselves a theory of
> the gap between theory and practice (Bourdieu, 2005, p. 70).

The employment of rhetoric and figures of speech grasps and sews together a variety of aspects

that resonate with the concept of critical thinking in this research. The power of language and

the ability to wield it as both weapon and tool relate to the facets of critical thinking in and of

themselves. It is also within the process of learning to distinguish between its uses as a tool (to

what directive is it wielded?) that we must grapple with notions of authority, ultimately relating

back to the educative process. The exploration of 'the house that critical thinking built' has been

engaged to consider the tools of thinking critically. From this foundation, we move beyond the

initial orientation that a metaphorical pursuit affords. While metaphor allows for description, the

next section is constituted by analysis with these tools. This centres itself within the relationship

with two of the more overt aspects of identity that are mediated by socialization, age and sex.

The instruments within the tool belt are only as effective as the hand that wields them. Although

the concepts themselves possess an intrinsic value, unless these tools are engaged in 'building' an

application toward issues, they serve little function.

These tools can indeed serve a variety of functions, and their scope is not limited to the analysis I have approached here. In setting parameters and identifying concepts that are significant factors in considering the education system as a microcosm of society, I seek to push beyond the theoretical and 'put these tools to work'. In this way, the overlapping aspects of these concepts can be examined individually without isolating them to a point of losing their context in relationship to one another.

At this stage of the research at hand, the prioritization of reflexivity within research directives comes to the forefront, emphasizing the aporetic stance within this particular research project as I apply the metaphor. The problematization of the concepts herein allow for me to take this opportunity, in the application of the these tools, to engage the research within a Community of Inquiry of my colleagues in academia, before proceeding to then direct the research toward the educators and students it most significantly impacts. This research itself, while being completed to its fullest, is still in a perpetual state of flux: a potentially unending source of opportunities to examine the aspects of this metaphor, and analyze through an application of social constructs. At this stage of the research, the concept is best served from being directed beyond its metaphorical perspective, and into a more directed analysis. To reiterate, while still remaining conceptual, this shift makes accessible - and acceptable - the concepts of critical thinking, and to direct these tools toward two social constructs.

In a directed attempt to engage with the material, the tools are wielded toward two socially constructed aspects of self. Within Hacking's (2000) parameters, a social constructs is satisfied

by one of two criteria: the inevitability of a construct; or its present indetermination relative to the nature of things. Social constructivism, understood as arising from an epistemological position relating to notions of power and meaning, finds synthesis of a variety of concepts explored in this thesis. Arnold and Burke (1991) identify fourteen categories of socially constructed aspects of self: age, race, class, gender, sex, sexual orientation, religion, family status, education, ability, language, ethnic group, geographic region as origin, and geographic region as residence. In selecting two of these fourteen categories to examine and wield the tools of critical thinking, I have opted for age and sex, which are coded within this research (as a reflection of their perception in society) as stages and gender, respectively. To be clear with my intention (and cheekily relate back to the metaphor), it is not to dig down to the ground in this examination of these two concepts, but to make use of the process to highlight critical thinking in considering these socially constructed aspects of self as acutely taken for granted constructs of society.

Age and sex possess a static character in society, such that they can be considered as two aspects of self that are predetermined without influence from outside factors. In utero, individual age and sex can be classified and quantified; yet, how these quantifications are determined cross-culturally and cross-temporally varies (Chang, 2008). Categorization leads to a consideration of what is being defined not only within the confines of the construct, but equally as significant by what is defined as existing without. The elements of society are understood in a consideration of not merely what proportion is normalized, but by what (and who) exist in contexts defined by their lack of ascription to those characteristics that defined (and confine) the self. The labeling

process of prioritizing a conceptualization of 'what is' is commensurate with considering 'what is not' as also inherently possessing value.

Compounded with the distinction between self-perception and social perception, an inevitable, predetermined category does not appear to be quite so unilateral. In choosing to examine two of the fourteen power structures of social construction, I seek to underscore that problematizing these concepts in this fashion extends to all structures. In this way, the fundamental notions of critical thinking as defined above, reason assessment and disposition, can be not only elucidated in action, but can be considered for their application across the other power structures, and furthered beyond categorization and pursued as an aporetic stance as opposed to a particularized query.

The first construct toward which I wield the tools is the concept of age, engaging the resources of critical thinking toward the concepts of indoctrination, protectionism, fallibilism, and authority. These concepts find commonality in their relationships with age as determining an individual's agentic properties relative to their life stage. Location within particular stages is engaged under the guise of guardianship and protection; however, it is these concepts that function to perpetuate normative standards and maintain power structures. Coding individuals within stages constrains, positioning perception - of self and others - within a limited range of capability. Gennep's (1961) transitions between stages does acknowledge the linearity with which we approach the aging process and views the social transitions as rites of passage that must be moved through in order to become socialized into one's new role. This concept fails to consider the control

wielded within the determination of age, stage, and readiness to transition and the acceptability of this movement. How these roles are established and maintained can be considered from the social agent of the education system, particularly with respect to the concept of indoctrination.

The Apple of My 'I': Indoctrination

In keeping with the tradition of the Frankfurt School under Horkheimer's (1976) direction, critical social theory begins with an examination of authority, its counterpart of subjection, and the contextual dynamic that exists between individuals in such positions. As considered by the relationship of education and learning; philosophy and understanding; sociology and interpreting, "… the dualism of thought and being, understanding and perception, is second nature to the scientist" (Horkheimer, 1976, p.197). Giving a nod toward the underpinnings of critical thinking that are found in the critical social theory paradigm, this exploration is oriented toward the notion of indoctrination. A consideration of the climate surrounding some aspects of indoctrination as a product of the education system, it is a contemplation of indoctrination as a requisite of that system. It also relates to the notion of child protectionism, in that individuals under the age of consent (as a socially determined rite of passage) are denied the autonomy that is an essential aspect of critical thinking under the guise of shielding them from potential harm.

Indoctrination is a value-laden word that has taken on pejorative connotations in a coercive context; the method by which we become socialized into the world, and adopt much of who and what we characterize ourselves to be. "Far from it being the case that 'teaching' excludes 'indoctrination', there is a necessary or conceptual relationship between them" (Peterson, 2007,

p. 47).   The notion of indoctrination necessitates considering the paradigms from which it is

construed.   What is the priority within scrutinizing an educative process for undertones of

indoctrination is in seeking out whether information is being disseminated as static, irrefutable

knowledge, and the damage this can wield.   This is not to say that good intentions negate the

detrimental effects of indoctrination.   We, as humans, are pattern-seeking individuals.   It is what

has permitted our evolutionary survival and propagation, for we can distinguish between a

shadow on the horizon as a bush blowing in the breeze, or as a predator on the prowl.   As we

have progressed (another value-laden term) to more complex communicative processes, this

notion extends itself into interpersonal relationships.   The aphorism "like seeks like" is never

more true than when dealing with those we care about, and hope to see ourselves reflected in.

This is not (entirely) narcissistically based: we hold our own perceptions and values for a reason

(regardless of the source and quality of that reasoning), and thereby find logic in wanting to

share these values with others.   Others, however, call into question the ability for a minor to

ascribe to a particular value system at all:

> Just as feminists wince when they hear 'he' rather than 'he or she', or 'man'
> rather than 'human', I want everybody to flinch whenever we hear a phrase
> such as 'Catholic child' or 'Muslim child'. Speak of a 'child of Catholic
> parents' if you like; but if you hear anybody speak of a 'Catholic child', stop
> them and politely point out that children are too young to know where they
> stand on such issues, just as they are too young to know where they stand on
> economics or politics. You can't say it too often. I'll say it again. That is not
> a Muslim child, but a child of Muslim parents. That child is too young to
> know whether it is a Muslim or not. There is no such thing as a Muslim
> child. There is no such thing as a Christian child (Dawkins, 2006, p.3).

The call for the 'preservation' of the innocence of children does not sufficiently acknowledge

how inhibitive these actions are.   The protective nature equally acts like a straightjacket, not

allowing for children to be harmed - or liberated. In approaching education in this way as well, the student waits for the educator to direct actions, relying upon the submissiveness that has been expected of them because of their age and lack of experience. It is when knowledge is imparted in this context that the notion of adult as educator determines all course of action for child as innocent; subsequently, the child learns to wait for the teacher to tell them what to do. Even the notion of action and consequence reinforces this structure, supporting the teacher's claim to absolute control, and correctedness. There is little room left for problematizing knowledge, or considering a fallibilistic position.

Adopting and adhering to an aporetic position towards all forms of information, the student needs to be equipped with both the disposition and epistemology towards this information, regardless of its source. "…[T]he idea that education is a means that can be used to bring about certain ends, has many different faces" (Biesta, 2001, p.385). He continues this into a discussion of the tendency to make educative learning tactics into 'techniques': "After all, to make education into a technique requires an erasure of plurality, diversity, and difference. It requires an erasure, in other words, of what makes education difficult" (p.499). In this context, the disposition oriented toward thinking critically becomes priority.

Its prioritization arises from striking a balance between conceiving of an educative process with an approachability that not only acknowledges difference, but underscores it. Indoctrinating perspectives regard difference as a threat, and resist its inclusion. Young (1984) considers three

major perspectives in defining indoctrination: resisting absolutist claims against reasoning; fallibilism; and, social power structures. He elaborates upon others' views:

> There is a tendency to agree that indoctrination involves views not based on rational assessment but some hold that it is a matter of a teacher's intention to promote such views, others that it is a matter of teaching method, others that it is a matter of presenting controversial content as if it were unproblematic and still others that it is a matter of actually achieving the outcome that a student comes to hold a view in a manner not 'open to rational assessment' (p.220).

Educators themselves do not learn with intent for mastery in each and every subject they teach; in light of the lack of the ascendancy they possess in any particular subject matter, this could lead to a teacher becoming authoritarian as opposed to authoritative. The ability for an educator to encourage students to embrace their lack of knowledge can end at the teacher extending this to themselves. By maintaining authority and control over the classroom structure and its components, educators may trivialize any notion they may impart about relinquishing adherence to a static model of education; furthermore, they also lose out on those opportunities. For Arendt (1954), this problem constituted as a separation of pedagogy from material. The importance of allowing students to actualize autonomously must also consider how this can be executed, and if the removal of all vestiges of authority in place of a critical thinking that prioritizes equity, in an ethical and moral execution, is even truly desired:

> To bring ethics and morality into the schools in an educationally legitimate way, administrators and teachers must think critically about what to emphasize and what to avoid. Intellectually discriminating minds and morally refined sensibilities must be in charge of both initial curriculum design and its subsequent classroom implementation (Paul, 1993, p.12).

"Intellectually discriminating minds" - the ambiguity of this phrase is precisely the issue of grappling with critical thinking. The issue with the lack of a single, definitive denotation of

critical thinking stems from the desire to provide educative practices in a format that allows for assessment. Concise definitions are not themselves the issue. It is the reliance upon and expectation of information to be delivered in this format that is being called to attention. Its lack of pre-packaged definition is analogous to the need to seek beyond a simple response and consider the source of the information and their agenda. A 250-character definition of critical thinking is antithetical to its definition. The conceptualization of critical thinking must move beyond question/answer format of education and into a more exploratory position.

The question and answer format of the classroom leaves little opportunity for students to actively engage in a dialogue in the classroom:

> There is a continuum that runs from cultivating in students a healthy desire to know, through instilling certain cultural and intellectual tastes, to taking advantage of their openmindedness by feeding them the ideological catchphrases that rest like foam atop our considered opinions. It's easy to slide along that continuum, as the line separating education from indoctrination is poorly defined (Paul, 1993, p.14).

The tacit assumptions in which we engage position us along this continuum. This is not to say that in order to move farther along the continuum one must assess everything that is encountered ad nauseum: "...we cannot question everything at once, and the horizon of the taken-for-granted provides a necessary halting place at which the journey of our questioning can be halted, preventing a continual regress of fundamental questioning, radical doubt and skepticism [sic]" (Peterson, 2007, p.301).

The potential argument of relativism is central to Kember's (2001) construction of critical thinking: 'Critical and creative thinking is only possible if relativism is recognized'. In this way, the malleability and fluidity of concept of critical thinking can be considered an attribute rather than a necessary shortcoming. The application of relativism, however, does possess a limit to its value, as with Peterson's (2007) consideration of continual regress. The relativism Kember (2001) calls for is with recognition, not reliance. The temporality afforded by the aporetic stance is demonstrated within the notion of 'queer', and its connections to (gender) performativity. Considering aspects of sociality that falls outside of convention can also serve to highlight what is considered to be the norm, and how this is established and perpetually maintained.

There is no 'I' in Team, but there sure is in Time: Queer Temporalities

> [C]hildren and... everybody - all need both windows and mirrors in their lives: mirrors through which you can see yourself and windows through which you can see the world. And minority children have not had mirrors. That has placed them at a disadvantage. If you want to call white children majority children - [they] have had *only* mirrors. That has placed them at a disadvantage also... [b]ecause they live on a planet that is more window than mirror. And they have tended to believe that the planet is a planet like them or people who wish to be like them. And it's not necessarily so (Holladay & Clifton, 2007, interview, para.1).

Clifton's words resonate with respect to perceptions of difference. It is equally pertinent to consider the perspectives of the dominant as it is of the marginalized in order to grasp a comprehensive conception of the issues. For example, in dissecting the word feminism for its 'ism', we must also consider the 'femin' portion of the word, which acknowledges that gender disparity disproportionately oppresses females. In a sea of 'isms', the word feminism has

become a point of reference for a concept that even those who ascribe to it differ upon its meaning. Similar to the term critical thinking, the root of the problem with the lack of definition is that notions of oppression defined and examined without contextual reference to the other systemic forces at work fail to recognize the aspects of power and dominance that function to perpetuate the oppression. Isolating the 'female problem' positions people in a within - or without - dichotomy. Even males identifying as feminists leaves the social construction of the identity as vague and easily manipulated for its lack of clarity. It is in this way that the notion of feminism distinguishes itself from other issues of social construction. Someone that fights for racial equity does not identify as a racist, for the term itself is construed as derogatory. Nor does this person necessarily identify as a member of the minority group. Without having a commonality in the frame of reference that exists for these power relationships, the underlying importance of the equity that is being strived for gets lost in an argument over semantics. The concomitant term that I employ is genderism, such that it can be understood to consider gender as an inevitability (in keeping with Harking's 2000 notion of social constructivism).

This paradigmatic shift from feminism to genderism highlights a focus on equity across social categories to prioritize the systemic forces that oppress. In giving the oppressed the same foundation upon which to stand as a referential point, we can then be oriented toward dismantling current structures, and continuing construction on what has already begun thanks to feminism. It is important to acknowledge that we need not reinvent the wheel with every generation. Although reactionary norms flare with each generation coming into its own stage of dominance, and the pendulum of compensatory action will continue to swing, being able to

disassociate the wisdom of the past generations from the generation itself must occur for movements to be fluid and progressive.

Employing value-laden language calls for finding a vernacular that makes accessible these concepts so that the priority can be placed on problematizing the concept, not the term of reference. When the systems of oppression can engage in circumlocution with the jargon game, the fundamental issues are only ostensibly considered. Orienting oneself within the research by considering the vernacular that surrounds it is a method by which to begin developing a comprehensive perspective of the topic. It is in the spirit of problematizing something as taken for granted as language designations that I turn now to consider the process of sex and gender determination.

At the turn of the 19th century, hundreds of science articles were written about sex determination (Chang, 2008). These ultimately created three research approaches that determine how individuals are considered to be one sex or the other: the externalist approach, which ascribes sex determination to external conditions that act on the individual in the course of its development; the internalist approach, focused on factors within the individual, maintaining that sex is determined in the egg and manifests itself in morphological and physiological differences within the cytoplasm of nucleus; and finally, the hereditarian approach, which regards various inherited "determinants" as basic to sex determination. To elucidate the notions that relate to sex determination for this research, I employ Ah-King and Nylin's perspective as found in "Sex in an Evolutionary Perspective: Just another reaction norm" (2010). They state: "The sex of

individuals is determined by genetic sex determination, often with heteromorphic sex chromosomes, as in birds, mammals, and most lizards and snakes" (2010, p.237). It is important to acknowledge that another common reference is sex and gender 'assignment': a label that is determined by someone in a position of authority to categorize another. Ah-King and Nylin (2010), arising from an evolutionary theory perspective, consider sex determination as "any other plastic trait - as a reaction norm" (p.235). They continue:

> It is a paradox that all biologists are aware of variation in sex determination, sex change and alternative reproductive strategies, and still we continue to present this variation in terms of a two-sex norm and the deviations from this norm as *alternatives* and sex role-*reversals*… Considering sex as a reaction norm provides a gender-neutral way of modeling biological sex and sex-linked traits, in the sense that such sex attributes are not seen as pre-determined aspects of the sexes but as the outcome of genetic and environmental influences during ontogenetic development (Ah-King & Nylin, 2010, p.247).

The significance of considering "a gender-neutral way of modeling biological sex" (p.247) follows with an epistemology that views biological sex, sexual orientation, and gender identification as distinct, orthogonal categories; however, in social constructivism, these are distinctly intertwined. The etymology of 'orthogonal', meaning 'right angled' indicates that while they sit at angles to each other, the terms do not overlap. Whether this means that it can be said that they have no reciprocal impact or not means another thing entirely. This relates to considering how we can separate out the various aspects of socially constructed notions of self. It is easier to find correlation between some aspects than others. One can more easily identify markers that class has had any impact on one's geographical location; however, can the same be so clearly said for language?

> [S]exual differences are not expected to generally fall into neat, discrete, pre-determined classes. Instead, we would expect most characters to overlap between the sexes, even when there are statistically significant differences (Ah-King and Nylin, 2010, p.246).

Similarly, one's ranking within these aspects of dominance can also allow for some aspects to be more pronounced than others. Being a wealthy black female can seem in some circumstances to outweigh being a poor white male; despite the latter having more 'boxes ticked' on the power scale, the access to resources in the form of wealth can tip those scales. These approaches extend beyond the scope of this research task; however, the importance is considering the impact of these considerations on how we perceive self, and others.

How these perceptions are reiterated and reaffirmed over time solidifies their plasticity until they become taken for granted aspects of society. Bourdieu's concept of habitus (2005) as explored relative to epistemology in the 'Foundations' metaphor section illustrates this concept. The solidification of any socially constructed notion calls for a disruption, a reflective judgment position on how these positions have come to be, and how they influence our perceptions. This is made more evident with concepts like age and sex, where we perceive these aspects to be static, predetermined concepts: "What we call sex-roles in animals is thus not a dichotomy, but a continuum of behaviours connected to competition and mate choice" (Ah-King and Nylin, 2010, p.244). By these stipulations, the relationship that is sustained between sex and sexuality is ubiquitous in society[2], as underscored by the above correlation with evolutionary theory: valuing sex and gender constructs for their contributions to heteronormative matrix.

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[2] To reiterate the point, society is a term of reference to the overarching perspective of developed western nations, primarily American and Canadian. In the interests of clarity, this research uses Canada as a frame of reference.

Heteronormativity, defined within Warner's (1991) conceptualization of queer theory, queries (and queers) the positioning of heterosexuality as the wonted (and wanted) characteristic of society. In placing heterosexuality as the normative interaction of society and the subsequent expectations, actions are delimited within particularized notions. Furthermore, these actions are further perpetuated as assumptive behaviour by this positioning. In othering everything that falls outside of these carefully constructed parameters, even those that meet the technical qualifications of 'heterosexual' can still push boundaries. This leaves a very large margin of 'error' for falling into queer time, and a very small margin for doing 'straight' right.

Cavanagh's (2007) use of the notions of 'time' (queer and heteronormative), leads to an examination of the concept of queer temporalities for its explication of aporia. Acknowledging the purposiveness with which we live our lives draws connections to the directivity of aporia. Problematizing something that is taken for granted as the concept of time is embracing the ethos of aporia. The examination of the concept will be grounded in a roundtable discussion between scholars in the field of queer theory: Carolyn Dinshaw, Lee Edelman, Roderick A. Ferguson, Carla Freccero, Elizabeth Freeman, Judith Halberstam, Annamarie Jagose, Christopher Nealon, Nguyen Tan Hoang, who engaged in a three-month email discussion of the theoretical aspects of queer temporalities. The quotations seem somewhat fragmented, in the context of them being snippets from several typed conversations. While the citations provided here are much longer than would be conventionally used for referencing, I have preserved the sections in order to highlight the open flow of the discussion that sketches out the notion.

> But what if time's collapse into history is symptomatic, not historical? What if framing
> this conversation in terms of a "turn toward time" preemptively reinforces the consensus

that bathes the petrified river of history in the illusion of constant fluency? What if that very framing repeats the structuring of social reality that establishes heteronormativity as the guardian of temporal (re)production? …[T]he logic of repetition, associated with the death drive, though projectively mapped onto those read as queers, informs as well the insistence on history and on reproductive futurism that's posited over and against them...The universality proclaimed by queerness lies in identifying the subject with just this repetitive performance of a death drive, with what's, quite literally, unbecoming, and so in exploding the subject of knowledge immured in stone by the "turn toward time" (Edelman, p.181).

The assertion of the universality proclaimed by queerness speaks to the ability to reframe the contexts of what used to be considered 'sexual minorities' to find a theoretical basis for interpretation in queer theory, and by extension, a positioning via queer temporalities. By locating sexual practice within the drive to historicize, the notion of futurity within history is made clear.

Queer time for me is the dark nightclub, the perverse turn away from the narrative coherence of adolescence – early adulthood – marriage – reproduction – child rearing – retirement – death, the embrace of late childhood in place of early adulthood or immaturity in place of responsibility. It is a theory of queerness as a way of being in the world and a critique of the careful social scripts that usher even the most queer among us through major markers of individual development and into normativity. Queer time, in that it shifts our attentions away from discrete bodies performing their desires, offers an alternative framework for the theorization of disqualified and anticanonical knowledges of queer practices (Halberstam, p.182).

It is in locating queerness within the dimensional analysis of time that the essence of non-normative behaviour can be contextualized. In providing a metaphor of a dark nightclub to act as an allusive manifestation of queer time, Halberstam allows for the intrigue that still surrounds queerness to be elucidated. By refocusing the attention on time as opposed to the sexual act itself, queer makes a space for itself that distances it from sexual connotation, while still attributing its commonality to the sex act itself. Cavanagh (2007) refers to Halberstam's notion of queer time as a "term for those specific models of temporality that emerge within

postmodernism and once one leaves temporal frames of bourgeoisie reproduction and family,

longevity, risk/safety, and inheritance" (p.126).

> Among many paths that delineate "queer time," two of the most generative for me
> include (1) retracing a young person's secretive and circuitous routes to queer culture
> (through music, art, literature, popular culture) and (2) revisiting the various scenes of
> queer pedagogy (not only in the classroom and library but also in the park, street, bar,
> basement, kitchen, chat room, bedroom) (Tan Hoang, p.183).

Continuing with a use of the dimensional analysis of queer, and providing locations to join queer

time and queer space, Tan Hoang speaks to queer's ubiquitousness.

> And that queer time by resisting reproductive futurity, as Lee Edelman calls it, or telos
> itself.   Not all nonlinear chronological imaginings can be recuperated as queer
> (Freccero, p.187).

As mentioned, while queer temporalities may seek distance from the act of sex to engage in

theorizing that does not surround intercourse, there remains nonetheless a thread leading back to

sexuality that sews together meaning about queer time. By taking a position of being defined as

what it *not* heteronormative time, queer time reaches a broad spectrum of perspectives and

paradigms.

> Implicit in much of this is Foucault's suggestion that homosexuality is a way of
> inaugurating, creating, proliferating, shifting social relations. In this sense, might
> homosexuality (let's call it queerness) itself be a form of future-making, of re-creating
> the social, though perversely enough, not in the name of the future? (Freeman, p.187).

Queer uses of time and space are carved out in opposition to the institution of the traditional

family, and the reproductive futurity that preserves and perpetuates it. Creating an alternative to

the conventional nuclear family construct, 'queers' are able to imagine futures that defy the

expectations of what is constituted as a chronological, cyclical nature of life: birth, marriage,

reproduction, death. By understanding the role of the formation of a community outside of the convention, the lack of belonging of some that is highlighted by the creation of a community of like-minded people is made ever more clear. The unsustainable aspect of this impossible future only makes this point all the more poignant. Regardless of these notions, we are really merely distracting ourselves from the fact that we live our lives teleologically, no matter how much we may struggle against the clock.

Scrutinizing the notions of 'queer' calls attention to what queer exists diametrically against. I direct this to patriarchal notions of society as a means by which to examine interdependence of social constructs, particularly relative to gender roles (with roles understood for both active and passive parameters).

Patriarchy Has No Gender (hooks, 2010, p. 170)

> Males as a group have and do benefit the most from patriarchy, from the assumption that they are superior to females and should rule over us. But those benefits have come with a price. In return for all the goodies men receive from patriarchy, they are required to dominate women, to exploit and oppress us, using violence if they must to keep patriarchy intact. Most men find it difficult to be patriarchs. Most men are disturbed by hatred and fear of women, by male violence against women, even the men who perpetuate this violence. But they fear letting go of the benefits. They are not certain what will happen to the world they know most intimately if patriarchy changes. So they find it easier to passively support male domination even when they know in their mind and hearts that it is wrong...And I believe that if they knew more about feminism they would no longer fear it, for they would find in feminist movement the hope of their own release from the bondage of patriarchy (hooks, 2000, p. ix).

hooks states that it is for these men, and "for all of us" (p.ix) that she penned *Feminism is for Everybody: Passionate Politics*. Recognizing the dominant influence of patriarchy, and by

extension, capitalism and white supremacy, she seeks to open the floodgates and allow consideration of the frameworks within which we all construct our discursive space. hooks (2000) discusses the discomfort with which men assume a role in patriarchy. It is also vital to acknowledge the women that assume their likewise designated roles within patriarchy. This functions to perpetuate the system by submitting to antiquated notions of gender roles, or by adopting a paradigm of power feminism to take on the active role of domination themselves.

It is under this guise of feminism that capitalism and patriarchy have most successfully co-opted feminist movements for their own gains, seeking to muddle the issue by developing separatist ideologies that misdirect the battle to occur between women over issues of class and race, forcing them to 'choose' between their partners and families over their new 'sisterhood'[3]. In consideration of this reference to materialist and historical basis of patriarchy, Weiner (1994) acknowledges that capitalism was founded upon the patriarchal division of labour. I think the credit goes beyond the mere foundations of the concept: the interconnectedness of patriarchy and capitalism are symbiotically perpetuated. "There is no single source of oppression" (Weiner, 1994, p.61); however, that the control of resources acts as a 'home' for these foundations speaks powerfully for their relationship.

By controlling people's access to resources, patriarchy wields a mighty fist, and that fist is connected to a man's arm; however, we often fail to see the women that support that arm,

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[3] One cannot discuss the division of labour inherent in patriarchy from its capitalistic underpinnings without Karl Marx. For the purposes of this thesis not becoming a lengthy treatise in Marxist ideology, I will focus this exchange instead more directly on the feminist perspective within notions of patriarchy. Suffice it to consider this both nod to Marxism's contribution to the concept, and as my disclaimer of not wanting to take it up here. I feel compelled to include Marx and capitalism if only to indicate that I will not discuss them in detail to refute Weiner's (1994) claim that patriarchy is analytically independent from capitalism and other modes of production, which I do not take to be the case.

dutifully starching and ironing the shirt in which the arm is encased (to permit the imagery).

Within this understanding of the societal enforcements of patriarchal notions of power, we can all

be implicated in the perpetuation of this dominance. It is through socialization that gender roles

are established and maintained; I reject any explicitly biological defence for patriarchy (Fausto-

Sterling, 2003). The primary agents of socialization: family, peers, and media as institutions,

work in tandem to sustain the status constructs. This notion also allows for the active

participation in patriarchal notions to be examined more thoroughly, for few people - women and

men alike - act with the intention of overt subjugation; however, this only further prioritizes our

need to more thoroughly examine our actions for notions of perpetuation.

While a more thorough examination of theoretical underpinnings of patriarchy is seen in second-

wave feminism (Weiner, 1994), the construction of women as inferior was examined decades

before by Simone de Beauvoir in her French text *La Deuxième Sexe* (1949). Sloppily translated

into English shortly thereafter, *The Second Sex* (1949/1989ed.) it nonetheless articulates many of

the issues that spoke to the gender roles functioning as a cog in the patriarchal wheel. Within the

text, de Beauvoir asserts that neither men nor women may live authentically under patriarchy.

The patriarchal construction of gender roles dichotomizes men and women into the respective

roles of domination and subjugation.

de Beauvoir makes use of the Hegelian notion of 'Othering' - with a capital 'O'- in relation to the

deviance that has been attributed to women in efforts to foster this sense of mystery and

abnormality around their actions. By having a stereotypical image upon which to project their

ignorance of women, men were afforded the ability to excuse their lack of understanding of women as being not *their* problem, but as indicative of the woman's deviance and subsequent need to be controlled and protected from everything, most of all herself. This same notion of protectionism discussed with respect to age is elucidated: forms of coercive power and control can be labeled as protectionary. This is a method by which the dominant position may perpetuate control in a context that casts them as mere actors in their own role, helpless themselves to the power definitions and the responsibilities that accompany them.

de Beauvoir's existentialist perspective is keenly noted in her perception that one 'becomes' a woman, and is not born one. It is by claiming this notion of what constitutes womanhood, and refusing to allow for patriarchal overtones to define this role, that the emancipatory notions present in second-wave feminism can be found within de Beauvoir's 1949 text. "What is male is what is 'not female'" (Renold, 2005, p.83). I contend that a most basic claim against patriarchy is for women to be consistently defined entirely outside of the context of their relationship to men. It is once this occurs as the norm that it can be considered a true symbol of the erosion of patriarchy.

Despite this, the interconnectivity of social constructs makes it enormously difficult, if not often impossible, to separate out their various pressures and influences exerted by and upon other constructs. These constructs are yielded from within these interactions and reproductions: "All gendered subject positions are to some extent subject to the heterosexual male gaze and all are produced within the heteronormative framework of 'compulsory heterosexuality'" (Renold,

2005, p.35). The lack of acknowledgement of difference is also about an acknowledgement of power discourses:

> The failure of academic feminists to recognize difference as a crucial strength is a failure to reach beyond the first patriarchal lesson. In our world, divide and conquer must become define and empower (Lorde, 1984, p.8).

Heteronormativity takes focus from the notion that difference is defined relative to others: "Femininity becomes the ultimate legitimator of masculinity… [it] offers to masculinity the power to impose standards, make evaluations, and confirm validity" (Renold, 2005, p.47). The negotiation individuals face with respect to defining gender roles is an unremitting process. The social construction of self is a process through which these negotiations must be considered for the constant reinforcement and arbitration required to maintain perceptions (or to change them, for that matter). This relationship can be better understood in exploring the concept of performativity, which I consider within gender roles.

> I found myself telling my friends beforehand that I was off to Yale *to be a lesbian*, which of course didn't mean that I wasn't one before, but that somehow then, as I spoke in that context, I was one in some more thorough and totalizing way, at least for the time being (Butler, 1989, para.1, italics added).

Butler (1990/1999) considers 'gender performativity' to acknowledge the active participation in 'doing' rather than the passivity associated with the notion of 'being' one's gender as a constant performance as opposed to a static aspect of self. Within the statement above, identity can be considered as an act, illuminating the active, ongoing construction that occurs as a key characteristic of self.

With a perception that embraces the opportunity that ethnography affords to underscore the relationship of gender and sexuality Renold (2005) considers this ongoing (re)production of performativity within her ethnography of 'white' British Year 6 primary school children. Renold employs Butler's (1990/1999) development of the concept in "making sense of children's despair at the impossibility of this task" [of gender performance] (p.5). One of the key aspects to considering gender performativity and children's negotiation of it is exposing that the "gaps, cracks, and trangressions" (p.5) of other children can often "serve to reinforce them" (p.5), as opposed to thwarting the exhaustive - and exhausting - efforts at 'doing' boy or girl.

An important aspect to consider within gender performativity is the notion of 'pulling it off'; such that much of the effectiveness of embodying one's role is by engaging in a consistent presentation of it, of constant reaffirmation. Those children in Renold's ethnography (2005) that were able to accede to the highest ranks of popularity are able to achieve that status by consistently playing their 'role'. Another key aspect to 'doing' boy or girl, as demonstrated in Renold (2005), is any aspect of Otherness being equally balanced by a greater attachment to a more acceptable role. The ability to transgress gender boundaries is facilitated by a stable position within a dominant and normative gender act.

The binaries of sex and gender have become normalized through generations of performance within society. It is through this constant reaffirmation that roles gain authority, that the pressures to take up these performances and actively police others for their performance adherence, that this is perpetuated. By acknowledging this aspect of 'doing', we are able to

make opportunities that allow for the recognition of this performativity, and split open those 'gaps and cracks' within gender and sex binaries.

Conclusion & Suggestions for Future Research

'The House That Critical Thinking Built' is a pursuit of metaphor to initiate an accessible elucidation of the intellectual resources that surround critical thinking as a concept. Developing a metaphor that relates to terminology of home construction, I find purchase not with the step-by-step, chronological building process, but instead with placing emphasis on the similar language employed, and the power it can exert. This is oriented toward considering the process of thinking critically as engaging intellectual resources to allow for the undertaking itself to become prioritized over attaining the idealized notion of a particular finished product.

Engaging metaphor in examination of the intellectual resources of critical thinking renders the concept accessible, a directive that is itself sought after as an aspect of critical thinking. The key conceptualizations underscored: disposition; aporia; context; quality of reasoning; autonomy; judgment and fallibilism, each find a 'home' within the construction world. The overarching pursuit of the research is striving to approach aporia, and considering this problematizing notion is the methodological directive. Foundational aspects of the notion of critical thinking are wielded toward two social constructs to ascertain how notions of critical thinking are engaged within education.

Education, contextualized as a microcosm of society, represents one of the three supports of the triumvirate of critical thinking disciplines: education (as related to learning); philosophy (as related to understanding); and sociology (as related to interpreting). The body of knowledge surrounding critical thinking in the context of the branches of thought act as the bones of the work. The critical social theory of critical thinking approach of this thesis has set the notions of structure and agency as the basis from which this analysis springs. In understanding these terms, structure refers to systemic and mediated aspects of society, and agency to the individual course of action and choices considered to be available based on constraints of structure. Furthering this conceptual approach incorporates two key socially constructed aspects of self, age and sex, critical thinking as a theory is anchored within society relative to constructs therein. In order to orient the importance of such a theory to education, this thesis explores the literature that surrounds critical thinking relative to a sociological paradigm. By making use of metaphor; situating these perspectives in social constructs; engaging with theoretical approaches and literature surrounding the outlined concepts; contextualizing these within their impact on the educative process. This work acts as a framework for the final production of a conceptual consideration of a sociological perspective of critical thinking in education.

This research has been presented from a position that orients around the student and the learning process relative to individuals, institutions, and agents of society. This will be applied in future research toward the notion of teacher education, synthesizing the dualism that can create a divergence in the educative process. Acting as a primer for future research, generating a metaphor to explore the notions surrounding critical thinking provides the inceptive orientation

into considering critical thinking within the dynamic of teacher education programs. A more thorough examination of the impact of critical thinking approaches within the education system is required. An examination of the discursive space of teacher, educators, and teacher educators necessitates contextualization; future research will carry forward the notion of wielding the tools within the tool belt toward an ethnographic exploration of the teacher education system and process.

The house that critical thinking built is a (systemic and metaphorical) structure in the midst of ceaseless refurbishment. Its blueprint is a jumble of crosshatches, additions and demolitions alike, more closely resembling an Escher sketch than Shahjahan's Taj Mahal. The value and essence of the structure lies in its interminable renovation process: scrutinizing past projects and being willing to risk starting from scratch, and employing new methods that may also require a complete rebuild. It is through embracing this uncertainty of outcome that the house as being built by and with critical thinking can be actualized, and at which point the tools of the concept can be directed toward other opportunities, finding and crafting good neighbours for the resources of critical thinking.

References

Adorno, Theodor. (1966). "Education After Auschwitz". (radio recording transcription). Retrieved October 15, 2008 from grace.evergreen.edu/~arunc/texts/frankfurt/ auschwitz/AdornoEducation.pdf.

Ah-King, M., and Nylin, S. (2010). Sex in an Evolutionary Perspective: Just Another Reaction Norm. *Evolutionary Biology*, 37(4), 234-246. Published online 2010 November 13. doi: 10.1007/s11692-010-9101-8.

Arendt, Hannah. (1954). The Crisis in Education, in *Between Past and Future*. (173-196). New York: Penguin Books.

Arnold, R. & Burke, B. (1991). *Educating for a Change*. Toronto: Between The Lines.

Bailin, Sharon. (1998). Skills, generalizability and critical thinking. Retrieved November 1, 2009, from http://www.bu.edu/wcp/Papers/Educ/EducBail.htm .

Bailin, S. Case, R., Coombs, J.R., & Daniels, L.B. (1999). Common misconceptions of critical thinking. *Journal of Curriculum Studies*, 31(3), 260-283.

---. (1999B). Conceptualizing critical thinking. *Journal of Curriculum Studies*, 31(3), 285-302.

Baxter Magolda, M. (1992) *Knowing and Reasoning in College*. San Francisco: Jossey-Bass.

Biesta, Gert. (2001). How difficult should education be? *Educational Theory*, 51(4), 385 - 401.

Bourdieu, Pierre, and Wacquant, L.J.D. (2005). *An Invitation to Reflexive Sociology*. Chicago: The University of Chicago Press.

Brooks, Hugh. (1976). *Illustrated Encyclopedic Dictionary of Building and Construction Terms*. Englewood Cliffs, NJ: Prentice Hall. Retrieved October 27, 2010 from http://www.columbia.edu/cu/gsapp/BT/DOMES/GLOSSRY/gloss.html

Butler, Judith. (1999) [1990]. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

---. (1989). Imitation and Gender Subordination. in *Literary Theory: An Anthology*. Rev. ed. Eds. Rivkin, J., Ryan, M. Malden: Blackwell (722-30).

Callan, Eamonn. (2001). "Indoctrination and Parental Rights". *Philosophy of Education*. Eds. Hare & Portelli. Calgary: Detselig, 2001, 121-131.

---. (2008). *Teaching For Intellectual Virtue (and Against Intellectual Vice)*. Mount Saint Vincent University, Halifax, NS. 2 Oct 2008, Robert Jackson Memorial Lecture.

Cavanagh, Sheila L. (2007). *Sexing the Teacher: School Sex Scandals and Queer Pedagogies*. Vancouver, British Columbia: UBC Press.

Chang, Chingchung. (2008). Chronological Age Versus Cognitive Age For Younger Consumers: Implications for advertising persuasion. *Journal of Advertising*, 37(3), 19-32.

Chomsky, Noam. (2000). *Chomsky on MisEducation*. Oxford, UK: Rowman & Littlefield.

Cuypers, Stefaan E., and Haji, Ishtiyaque. (2006). Education for critical thinking: Can it be non-indoctrinative? *Educational Philosophy and Theory*, 38(6), 723-744.

de Beauvoir, Simone. (1989) [1949]. *The Second Sex* (H.M.Parshley, Trans.). New York: Vintage Books.

Daly, K.J. (2007). *Qualitative methods for family studies and human development: Epistemological considerations in qualitative research*. Thousand Oaks, CA: Sage.

Dawkins, Richard. (2006). *The God Delusion*. Boston: Houghton Mifflin Co.

Delpit, Lisa. (2006). Lessons from Teachers. *Journal of Teacher Education.* 57(3), 220-231. Retrieved from http://jte.sagepub.com on April 29, 2009.

Dewey, John. (1997) [1938]. *Experience and Education*. New York: Touchstone.

Carolyn Dinshaw, Lee Edelman, Roderick A. Ferguson, Carla Freccero, Elizabeth Freeman, Judith Halberstam, Annamarie Jagose, Christopher Nealon, Nguyen Tan Hoang (2007). Theorizing Queer Temporalities: A Roundtable Discussion. Enam, Paul (ed.). *GLQ: A Journal of Lesbian and Gay Studies* (1) 177-195. Retrieved March 28, 2009 from http://www.columbia.edu/cu/irwag/pdf-files/glqtheorizing.pdf

Elshtain, J.B. (2004). *Judge Not?,* in Pojman, L.P. (Ed.), *The Moral Life* (191-201). New York: Oxford Press.

Fausto-Sterling, A. (2003). The Problem with Sex/Gender and Nature/Nurture. in Williams, Birke and Bendelow (Eds.), *Debating Biology: Reflections on Medicine, Health and Society*. NY: Routledge. Retrieved March 31, 2011 from http:bms.brown.edu/faculty/f/afs/afs_publications_articles.htm.

Freire, Paulo. (2004). *Pedagogy of indignation*. London: Paradigm.

Freire, Paulo. (1970). *Pedagogy of the oppressed*. New York: Herder and Herder.

Gennep, A. (1961). *The Rites of Passage*. Chicago: University of Chicago Press.

Giroux, Henry. (1983). *Education incorporated*. Retrieved from
     http://www.henryagiroux.com/online_articles/education_incorporated.htm

Gregory, I.M.M, and Woods, R.G. in Snook, ed., *Concepts of Indoctrination,* 162-89; James
     McClellan, *Philosophy of Education* (Englewood Cliffs, N,J,: Prentice-Hall, Inc, 1976).

Hare, William, & Portelli, John. (2001). *Philosophy of Education*, 3rd Ed. (Eds.) Calgary:
     Detselig.

Hare, William. (2003). The ideal of open-mindedness and its place in education. *Journal of
     Thought*, 38(2), 3-10.

Harrington, Austin. (2005). *Modern Social Theory*. (Ed.) Oxford: Oxford University Press.

hooks, bell. (2010). *Teaching critical thinking: Practical wisdom*. New York: Routledge.

hooks, bell. (2000). *Feminism is for everybody: Passionate politics*. Chicago: South End Press.

Hongyu, W. (2005). Aporias, responsibility, and the im/possibility of teaching multicultural
     education. *Educational Theory*, 55(1), 45-60.

Horkheimer, Max. (1976). "Traditional and critical theory". In: Connerton, P (Eds), *Critical
     Sociology: Selected Readings*. Penguin: Harmondsworth, 213.

Hume, David (1739). *A Treatise of Human Nature*. London: John Noon.

Illich, Ivan. (1971). Deschooling Society. New York: Harper & Row.

Judge, A. (1991). *Metaphors as transdisciplinary vehicles of the future*. Retrieved March 18,
     2010 from http://www.laetusinpraesens.org/docs/transveh.php.

Kant, Immanuel. (1961). *The critique of judgement.* (J.Creed, Trans.) Meredith, London.
     (Original work published 1914).

Kida, Thomas. (2006). *Don't Believe Everything You Think: the 6 basic mistakes we make in
     thinking*. New York: Prometheus Books.

King, P, & Kitchener, K. (1994). *Developing Reflective Judgment*. San Francisco: Jossey-Bass.

Kember, D. (2001). Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education. *Studies in Higher Education*, (26), 205-221.

Kuhn, D. (1999). A developmental model of critical thinking. *Educational Researcher*, 28 (2), 16-26.

Lorde, Audre. (1984). The Master's Tools Will Never Dismantle the Master's House, in *Sister Outsider*. Berkeley, CA: The Crossing Press Feminist Series.

Malesic, Jonathan. (October 17, 2005). *The smell of indoctrination in the morning*. Retrieved May 1, 2009, from http://chronicle.com/article/The-Smell-of-Indoctrination/44944/.

Noddings, Nel. (1984). *Caring, a feminine approach to ethics & moral education*. Berkeley: University of California Press.

Okes, Duke. (2002). Organize your quality toolbelt. *Quality Progress*, 35(7), 25-29.

Papastephanou, Marianna, and Angeli, Charoula. (2007). Critical thinking beyond skill. *Educational Philosophy and Theory*, 39(6).

Paul, R. (1993). *Critical Thinking: What Every Student Needs to Survive in A Rapidly Changing World*. Dillon Beach, CA: Foundation For Critical Thinking.

Peterson, Barbara. (2007). Holding Teachers Accountable for Indoctrination: A Reexamination of I.A. Snook's Notion of "Intent", *Philosophy of Education*, 298-305.

Plato. (1992). *The Trial and Death of Socrates: Four Dialogues*. New York: Dover Publications. (translated from Greek by Benjamin Jowett, n.d.).

Postman, Neil. (2005). The Error of our Ways. Retrieved June 13, 2009, from http://www.edweek.org/tm/articles/1995/08/01/9error.h06.html

Postman, Neil. (1995). *The End of Education: Redefining the Value of School*. New York: Knopf.

Renold, Emma. (2005). Girls, Boys, and Junior Sexualities: Exploring Children's Gender and Sexual Relations in the Primary School. New York, NY: RoutledgeFalmer.

Russell, Bertrand. (2011). *The Analysis of Mind* [PDF document]. Retrieved January 16, 2011, from http://russell.thefreelibrary.com/The-Analysis-of-Mind/9-1-2.

Siegel, Harvey. (1991). in S. P. Norris, ed., "The Generalizability of Critical Thinking", New York: Teachers College Press, 1991.

Shor, Ira. (1992). *Empowering Education: Critical Teaching for Social Change*. Chicago: University of Chicago Press.

Thayer-Bacon, Barbara. (2001). "Constructive Thinking Versus Critical Thinking: A classroom comparison". *Philosophy of Education*. Eds. Hare & Portelli. Calgary: Detselig, 197-215.

Warner, Michael. (1991). Introduction: Fear of a Queer Planet. *Social Text*, 9 (4 [29]), 3–17.

Weiner, Gaby. (1994). Feminisms and Educations, in *Feminisms in Education: An Introduction.* London: Open University Press, p.51-73.

Yos, Thomas B. (2004). Philosophy for children and the cultivation of good judgment. *Thinking: The Journal of Philosophy for Children,* 17(1&2), 9-16.

Young, R.E. (1984). Teaching equals indoctrination: The dominant practices of our schools. *British Journal of Educational Studies,* 32(3), 220-239.