

Lands of Entropy: A dissenting alarmist's chaotic navigation of intuition, learning, and
transcendence.

by

Joseph Michael Lynch

B.A., University of Delaware, 2009
M.A.T., Wilmington University, 2011

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

Department of Curriculum & Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2021

Abstract

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I believe that the soul of this work is situated in how I try to advocate for trans-disciplinary learning systems (Carrasco, Serrano, & Garcia, 2014) and transcendent products of learning by way of modeling them, but it may be that I succeed more in advocating for them – I tend to problematize a lot, or maybe I am just complaining a lot, but all one can do is to hermeneutically try. Resultantly, the basic layout of the project is an autoethnographic narrative that aligns my personal experiences – primarily past occurrences and present mindset – with attempts to grapple with a theoretical landscape that is embedded within the educational timeline.

Similarly to Bybee's (2020) recollection of various theorists grappling with issues of how particular theory has been utilized and interpreted, I see this work as my version of efforts to "lament the 'unproblematic domestication' of [one's] ideas into a 'method'" (Macedo, 2000,

quoted in Bybee, 2020, p. 419). Thus, the process involves questioning my positionality and its groundedness. It is how I think that we begin to work with contextuality in ways other than its pre-established spatial and choral parameters of a temporal consciousness. Yet, how we contend with failure – and ultimately, entropy – will pave the fate of our contributions towards something other than what is currently functioning as the educational grid. It will pave how we connect those things which are seemingly dissonant.

If we embark on reassessing a grid – in this case, a model derived by *social constructionism* (Mallon, 2019) - we inevitably must continually reassess ourselves along the way, taking charge of our narrative and its meta-constructs. Therefore, it additionally requires us to reexamine the state of methods for qualitative research, for its limitations are seen in how we “struggle to connect qualitative research to the hopes, needs, goals, and promises of a free democratic society” (Denzin & Lincoln, 2011, p.3). As I work through this narrative, it hopefully becomes clear how trans-disciplinarity possesses democratic undertones.

Consequently, it speaks to various byproducts of theorizing that have created challenges with context as well as positionality and how to navigate their interplay (Denzin & Lincoln, 2011) while highlighting the dissonance that is created by researchers in compartmentalized disciplines choosing indirect pathways to explore and ascertain from each other’s respective disciplines. Is this an issue of insecurity arising from the prospect of engaging in discourse which superficially pits an “expert” against a “layman”?

Nevertheless, I try to build on analogous connections of the essence of the qualitative researcher with not only the jazz musician but also the “*bricoleur*, as a maker of quilts, or, as in filmmaking, a person who assembles images into montages” (Denzin & Lincoln, 2011, p.4) To

me, they seem to delineate bricoleur and bricolage with a dynamic akin to the craftsman and the craft, where adaptation and producing are latticed.

Additionally, through a stylistic interplay of postmodern and meta-modern lenses, I am trying to reiterate a sentiment “that privileges no single authority, method, or paradigm” (Denzin & Lincoln, 2011, p.27) as I apply a hermeneutic influence in my analyses and approaches. I keep these things in mind as I attempt to conceptually map, and qualitatively code, *intuition* – something which is considered antagonistic to models of empiricism and quantification but arguably is the strongest temporal representation of cognitive processing. Additionally, and perhaps more importantly, intuition is somewhat susceptible to macro-societal hegemony (Apple, 2004, p.4).

Intuition is something which requires further exploration if we are to grapple with interactions of things for two reasons. First, we need to be okay with the openness of inquiry, so that we are more secure in our attempts rather than the outcomes (Darling-Hammond, 2010, p.20). In his conceptual overview of intuition in teaching and learning, Waks (2006) discussed the acquiring of “patterned activities unmediated by explicit justifications or plans” (2006, p.380), and I think that it requires considerable advocacy towards process even if it is not discretely measurable as a product. Secondly, by considering – and plausibly confronting - a notion, one can take an intuitive inventory of sorts by transcending *a priori* conceptions and beliefs, which in turn might lead to insights that otherwise might not have been gleaned. Waks (2006) has also discussed intuition as a concept which holds practical implications but is often hindered by “epistemic bias” (2006, p. 380).

While keeping those reasons in mind, I see this study as a methodological exercise, where my autoethnographic approach is, among various things, informally associated with the use of

“thought experiments” in metaphysics, (Johnson, 2009, p.6). Such thought experiments posit hypothetical situations largely for the purpose of utilizing semantic and syntactic constructions as well as account for intuitive notions. I believe it is critical for us to perceive a constructivist benefit of engaging in methodological exercises prior to the development and application of a complex system, whether it be a programmed machine learning tool or a qualitative study.

Thus, all the notions and explorations that I present in this project are in some way linked to my intuition – where it has taken me and how I have attempted to use it in a model of reasoning that blends it with the empirical reality of our educational context. Peripherally, it is an advocacy for humanistic intuition to be reconnected within a grid that values accuracy and efficiency. Consequently, intuition, a major driver for me, is responsible for the tumults of experiences and outcomes that have led me to this moment - while the wondrous prospect of future instantiations of intuition are saturating my space, for as long as my heart beats.

The project is presented in five volumes which are structurally and stylistically functioning as an allusion to T.S. Eliot’s *The Wasteland*. Volume I functions as an exercise of positioning myself through the anthropological lenses of adolescence and emergent adulthood, coming to terms with how much we do not know about consciousness – and, resultingly, ourselves. Volume II builds on the implied challenges of understanding ourselves in relation to neurology, psychology, and sociology as it analyses the systemic nature of organizations created and maintained by creatures of varied emotional and rational complexities.

Volume III meta-analyses the ingrained subconscious effects of system dynamics while attempting to transcend boundaries of empiricism and advocating for intuitive space to be given more credence in alternative modes of curriculum discourse. In Volume IV, I present an attempt to align axials and layers of qualitative coding byproducts derived by the previous Volumes

while alluding to the complexity and chaotic nature of the theorizing process. In Volume V, I concede my limitations, and then I transcend them.

My hope is that by the conclusion of this project, you will at least have a sense how much the education sector means to me, and how highly I regard the profession of teaching. It is very candid in some places as it sheds some of that actor-situation transaction (Biesta, 2015, p. 626) that may occur in the ecological learning constructs where sense of agency is most certainly needed; as such, the topic of agency will continue to manifest throughout the proceeding sessions due to the fact that it is hard to think about what the beauty of our learning process holds without considering its potential for some sort of change – hopefully for the better.

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Major Professor
Dr. J. Spencer Clark

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Dedication

This is dedicated to the following (again, not an exhaustive list):

My son and daughter.

My mother.

My brother.

My brother from another mother.

Another brother

My other mother.

And another.

To that guy who was outside of that venue that one time – you know who you are...

To anyone who has felt frisson during a discussion or an experience...

To anyone who has posed the question of why something is what it is but did not stop there...

Vol. 0 - FOREWORD & OVERVIEW

Importance of Topic

There are convergent and divergent approaches and mindsets which have been invented and repackaged, trashed and recycled, and all of this can be historically observed. I also consider this to be a major reason for why so many veteran teachers within my contextual circle take a wait-it-out approach (which they refer to as “being jaded”) when it comes to curriculum turnover (i.e. presumptions vocally expressed in my context that a new curricular product or approach keeps a shelf life of 5-10 years before it is replaced with something else). In response to this notion, perhaps there are alternative ways to synthesize what we can observe in the historical educational timeline in order to move beyond anachronistic discourse regarding what should be and why it does or doesn’t work. In a sense, this work accepts what has already been established while remaining cognizant that “revolutions may go backwards” (Apple, 2004, p. xii).

When entering the Doctoral program, my initial plan of inquiry consisted of two main problems as they pertain to curriculum. The first problem is how potentially innovative curricula can be causally rout with systemic misalignments of a compartmentalized system with many objectives that are sectionally fulfilling – this may be one implication that is found where efficacy goals by administrators and/or policymakers might subjectively be prioritized over core subject goals (Darling-Hammond, 2010). A second problem lies in implementing a sustainable curriculum development solution that stems from pre-existing educational practices, strategies, and theories but does not shield itself from theoretical refinement. Curricular sustainability is an observable issue when outlining the influences of policy and system management on educational ideology (Apple, 2004).

Although the climate is shifting a bit on the efficacy of standardized assessments influencing educational practice/trends, the barriers that have been strengthened over time - through deficit mindsets that are empirically substantiated in quantified methodology - are hard ones to transcend. Many of us share settings where prescriptive approaches and deficit theory are spearheading curriculum and instruction - if we are not experiencing the trend firsthand, we are at least anecdotally aware of its presence in a similar type of setting.

As teachers in such a setting, we essentially have limited options in terms of navigating the issue. For one, we might buy into the metrics-oriented approaches of diagnosing learning faults and prescribing specific strategies to satiate the problems, and we are okay with top-down curricular design. On the other hand, we might feel like something is missing in the predominantly quantified setting, thinking that the human element presents a social dynamic which is only quantifiable in a subjective and/or theoretical way - we can only speculate on abstract humanistic qualities such as motivation, internalization, and engagement, so we end up asking ourselves, why aren't alternative methods of measurement being explored for those aspects? Such questions are necessary when navigating the justifications of quantitative research over qualitative ones (Crotty, 2015, p.15). My autoethnographic endeavor seeks to leverage the latter option while also documenting how alternative qualifiers for research and study might be gleaned via practical and thorough theoretical methods of construction.

I work in a setting which should be praised for its cog-like functionality within the educational paradigm - it is a great representation of the contemporary educational model, where quantified data drives practice (Darling-Hammond, 2010, p. 70). However, I cannot wholeheartedly praise it. I feel a sense of urgency with reclaiming the concept of the educator while reacquainting it with the beauty of learning. We are gazing in awe at the prospects of data-

driven models as we strive to tackle the algorithmic complexity of deep learning programs while failing to sustain necessary skills for such complexities in our children (Darling-Hammond, 2010), and we seem content with forsaking our internal, organically conscious complexity so that we might mimic those objective, inhuman models.

Consequently, my initial plan of inquiry inevitably took on many forms until it reached its current one, and the overarching catalyst for this current form stems from a question of how I remove myself from the work that I believed in so that it may stand on its own feet – I now embrace the challenge posed by that question as something which is not only necessary in its consideration but inherent to anything that is to be perceived as beneficial. It is humans who make something useful regardless of how effective something may be at its core; thus, the question of how to remove oneself from the work becomes not only a counter-intuitive question but a moot one as well.

Goals

Mapping Intuition. The most obvious way that I endeavor this plan of inquiry is through the conceptualization of intuition – something which is considered antagonistic to models of empiricism and quantification but arguably is the strongest temporal representation of cognitive processing. Resultantly, intuition is analogously friendly to conceptualizations of consciousness, thus it may be interpretable as a successful representation of consciousness at work (Dehaene, 2020). Additionally, and perhaps more importantly, intuition is somewhat susceptible to macro-societal hegemony (Apple, 2004, p.4).

Discussions of intuition can be found in multiple disciplines - including social sciences, education, psychology, artificial intelligence, and neuroscience – and while it may consistently thought of in ways that are reflective of confluences of sensory, logical, and emotional

inferences, what has emerged amounts to limited measurable results and unclear pathways of observation (Lufityanto, G., Donkin, C., & Pearson, J., 2016). Additionally, Waks (2006; 2019) has contributed conceptualizations of intuition that are philosophical in essence but multi-disciplinary in scope, with the primary focus on reacquainting our processes of teaching and learning with an intuitive modality. Therefore, theoretical constructions of logic serves as template for conceptualizing intuition. Intuitionistic logic provides a proof-based construct of reasoning for a statement to hold, if we consider a proof in relation to a mathematical construction that establishes the statement and not a deduction (Dalen, p.156).

As Dalen (1994) puts it, "since we can no longer base out interpretations of logic on the fiction that the mathematical universe is a predetermined totality which can be surveyed as a whole, we have to provide a heuristic interpretation of the logical connectives in intuitionistic logic" (Dalen, 1994, p.156). Considering its axiomatic essence, we might perceive mathematics as holding a bit more malleability than some of us may have previously attributed to it – not only does this add to the intrigue of conceptually exploring and mapping intuition, but very soon it will be evident that I am employing intuition at all phases of this study...

Questions. I try to keep in mind the following questions as well as my intuitive responses to them:

Q(1): Can human intuition function in tandem with mechanistic models of measurability?

R(A): If we accept that language and mathematics are bound by similar laws of construct,

- we can infer that [a] concrete representations rely on spatial and chonal measurability,
- that [b] abstract representations rely on perceptivity,
- and that [c] both are fulcrummed by process and product.

Thus, it is presumed [f: a→c] that there is a place for generative theory to lattice with topoi and abstract mathematics, and that spatial, chonal, and temporal modalities are macro-systemically latticed.

Q(2): What is considered to be a model of transcendent learning?

R[B(1)]: If we accept R(1) and if we consider transcendence as an unrealized state of something beyond its *a priori* form, and that chaos is something “emerging, unstable, and in continuo” (Doll Jr., 1993, p.101),

- we can infer g such that $[d]$ chaotic potential may be discussed as possessing similar qualities to transcendental theory in mathematics,
- and that $[e]$ chaos and transcendence are bound by perception.

Thus, it is presumed $[g: d \rightarrow e]$. Additionally,

R[B(2)]: If we accept R[B(1)], we can infer $P(A \cup B)$ – that is, the probability that A or B will occur - such that

- abuse notation can function as a *deus ex machina*, or \aleph , for axiomatizing and recursively parameterizing chaos, thereby leading us to posit that
- chaotic potential transcends beyond traditional spatial and choral laws of construct, generating an alternate grid of process and product which is also occupied by temporal consciousness

Thus, R(1) is held $[f: f \leftrightarrow g]$.

Q(3): Can particular concepts, and their theoretical compositions, transfer to multiple, seemingly disparate constructs?

R(3): If we accept R(A) given R(B 1/2), we then can speculate that the transference of transcendental byproducts is bound by single-dimensionality and multi-dimensionality, which is causally entangled with entropic states. Thus,

- chaos and entropy are salient in a quantum sense more than in a sense of linearity or non-linearity, and
- in terms of functionality, entropy and gamma are indirectly linked in a sense of linearity or non-linearity.

Q(4): What does theory construction look like in relation to process and product?

R(0): If we accept that a theoretical model which is “good” requires it to possess elegance, contain minimal arbitrary adjustments, agrees with *a priori* notions, and “makes detailed predictions about future observations that can disprove or falsify the model if they are not borne out” (Hawking & Mlodinow, 2010), then we can infer

- that I, debatably, achieve all, some, or *none* of these stipulations. It is all a matter of interpretation. [I may be getting ahead of myself here – perhaps, just move on and come back to this down the road...]

Domains of Focus

Language & the Narrative. As I thought more about the dynamics between an educator and a system that is increasingly being influenced by non-humanistic factors – such as *insert-your-preferred-modeling-tool-here* – it became clear to me that bias is an active modal challenge that is shared between non-humanistic models and human consciousness. To state it another way, where mechanisms of efficiency are put into place, it stands to reason that there will be issues with accuracy that is derived by outcomes. Often, we see such challenges as synonymous with limitations and capability, but I think that there is a more optimistic way to utilize these structural challenges.

One of these challenges is rooted in the concept of bias as well as how biases are accounted for. In relation to an *a posteriori* empirical model, Bishop (2020) has written a candid reflection on how bias is an effect of innate cognitive dispositions which constantly requires a researcher – or for that matter, anyone who is creating or interpreting statistical models – to consciously question their intuitive responses to what they are perceiving. She emphasizes the following, “researchers need to build lifelong habits to avoid being led astray by confirmation bias. Observations that are contrary to our expectations need “special attention”(Bishop, 2020, p. 9). Just as agency requires active engagement between an entity and their context (Biesta, 2015), the mechanisms of our consciousness require some active meta-thought.

Autoethnographic delivery. Through its review of relevant literature and theoretical analyses, my dissertation will present the concept of intuition as a confluence of complex processing that includes neuro-regional interactions – such as recycled and newly generated synaptic pathways – are causally linked with contextual factors related to time and space (i.e. environmental). The rationale for this type of analysis includes constructing a consistent and

stable model for analyzing cognition in relation to subjectivity. I intend to justify the position that many of our current methods for analyzing intuitive processes are effectually disadvantaged from a data analysis perspective, primarily due to overreliance on consciously perceived variables.

Implicit and unconscious reasoning, however, has been discussed as a more effective probabilistic processor that humans possess and display when juxtaposed with artificial intelligence models (Dehaene, 2020), and this drives further the challenge of quantifying concepts of abstraction. For instance, we cannot truly claim that we have concluded on a topic of motivation in a given context if the triangulation of our data points relies on participant response surveys and researcher observations (Ellis, 1991), especially if our axiom for motivation (e.g. the variables chosen for our beta values) has been constructed in an *a la carte* way and with no consideration of how unconscious inter-regional neural occurrences are impacting the biases of our responses or observations.

With that in mind, I see the autoethnographic structure of my dissertation as a key strategy for presenting my attempts towards theory construction – in order to consistently gauge and realign the context of myself and the products of my work. Similar to Ellis’ (1991) discussion regarding how autoethnography is necessary in facilitating an introspective account of “the individual processing of meaning as well as socially shared cognitions” (p. 23), I see this type of narration as integral to any human-networked study that relates to our conceptualizations of abstract cognitive processes.

If we consider the advantages of the quantitative data model, and we are not indifferent to its limitations in conveying a non-replicated outcome in a learning ecosystem, then we should see the qualitative realm of data collection and analysis as a beneficial preliminary component in

the construction of theory prior to the application of its methods as well as the inferences we disseminate on the tail-end of a quantitative study.

Ellis (1991) alludes to the insurmountable challenge of accurately measuring emotion due to, as I perceive it, the intuitive fluctuations of such responses as well as the varied impacts of expressed emotional accounts that are governed by conscious reasoning. This challenge has previously been discussed as a postmodern-derived “crisis of confidence” (Ellis & Bochner, 2016, p. 273) where abstractions and empirical derivations are presented in paradigmatic dissonance. It is with that consideration that we understand the implications of abstract conceptualizations and analyses which inevitably are platformed upon the only comprehensive model of abstraction – whether it be an emotion or something else – that we can hope to attain: the model that is found within our own consciousness.

Plausibly, a means for achieving such a comprehensive model might be to embark on a narrative introspection (i.e. autoethnography) prior to – and perhaps during – any study that we conduct where results are related to other human beings. In a sense, the inclusion of this subjectivity is necessary for “reconsidering the traditional ideas about objectivity” (Wall, 2016, p. 44); however, where the field of autoethnography is being advocated as alleviating that necessity, I am more concerned with advocating its presence in *any* context of research and study yet in varying degrees of usage.

Shaky ground can be found where autoethnography rests – at least when the ground is shared by alternative methods of study which have been accepted as empirically formidable (Wall, 2016). I see this as a flaw in thinking, for it fails to account for the coordinates of the researcher - as well as the audience – and the implications of how language was, is, and will be used on their part.

Constructing and Analyzing the Narrative Portions of this Dissertation

I am a child of the 1980's, and I find it a bit serendipitous that I ended up drawn to an approach that responds to a "crisis of representation" (Denzin & Lincoln, 2011, p.18) which seems like it was a product of internal struggles and concerns with the arbitrariness of research and study; in turn, an overly critical lens is placed upon one who seeks to reintegrate experience and research.

This is but one of three issues as presented by Denzin & Lincoln, where *representation* is accompanied by issues of *legitimization* and *praxis*, thereby creating a "triple crisis" where each of the issues "intersect and blur, as do the questions they generate" (2011, p.20). For me, the lines *really* began to blur due to how I envisioned my dissertation to function within a context of research and study and how counter-intuitive it seemed to try and dissociate my work and my contextual presence. I came to accept some aspects of myself as I researched and studied, which included the presumption of "no single interpretive truth" (Denzin & Lincoln, 2011, p. 26) and that the more I embarked on confronting such crises in an academic context, the more likely I would end up confronting issues of representation, legitimacy, and praxis within my interpretation of my identity and the causal models of my personal experiences.

It became clear that the underlying objective of my work was to go against the grains of the realities where I was socially and spatially situated, and in this sense, autoethnography becomes necessary if I am to learn anything other than what someone else wants me to learn. Often, as will be seen, this passive state of functioning within a context and leaving someone else to provide me with an elaboration of what reality is and isn't is something which generated a lot of challenges for me. I now have come to perceive some fruits within a lifetime of challenges,

yet, when I reflect on all that I have endeavored, I fear that such fruits are anomalies that can easily be misinterpreted, misapplied, and altogether missed by one who is learning.

So, you can think of this as an attempt to learn about myself while simply involved in the process of learning but with a couple of caveats in mind - What might a process of learning look like where lines are intentionally blurred, permeation is inevitably traversed, and arbitrariness is assumed a paradoxical construct to be played with? Secondly, what are the products of such a process, and do they become things which transcend our traditional constructs of learning?

If only for the purpose of reflecting on those questions, the autoethnographic approach seems to organically reveal itself as a place where methodology requires malleability, and I invited this approach while considering the implication of how its impact would undulate between positivity and negativity depending on where a reader is pre-disposed to think about such studies. This constitutes what Anderson & Glass-Coffin (2012) present as the two major issues that an autoethnographic inquiry faces. The first of those is that "...autoethnographers are often eclectic bricoleurs in their methods, drawing upon a range of materials, from "impressionistic" personal memories and musings to more traditionally "objective" data like field notes and informant interviews" (p. 64). The second of those methodological issues is that "...autoethnographic texts often do not conform to traditional social science journal article structure, characterized by an extended "methods" section" (Anderson & Glass-Coffin, 2012, p.64). In relation to this dissertation, the result of those issues is some groundwork for a study that resists boundaries.

Entropy. The resistance of boundaries can mean several things depending on an applied discipline of study, but notions of entropy is one way that we have been able to generate theoretical discourse on the topic. Typically discussed in the sciences – such as how physics

applies notions of entropy in thermodynamic systems and how informational theory applies entropy in communicative transferences between systems – the conceptualization of entropy has inevitably taken many forms. For example, it has previously been noted that Claude Shannon’s contributions to informational theory reflects an algorithmic construct which is intuitively similar to algorithmic representations of thermodynamic entropy which resulted in the theory of informational entropy (Guy & Zunde, 1985).

It should be noted here that Guy & Zunde’s work is an example of how conceptualizations of entropy lead to theoretical derivations of the term and how such derivational issues can be avoided by substituting it with “informational uncertainty” (1985, p. 295). However, this does not deter me from further exploration of how entropy might conceptually apply to social constructs, for a number of reasons including a) I am more concerned with linguistic axiomatizations of entropy, and b) *entropy* sounds way cooler than *uncertainty*. Additionally, William Doll (1993) has provided foundational work for pedagogical notions of entropy, where he has outlined its spatial and chronal qualities as well as its potential for “self-generation, transformation, or nonlinearity” (1993, p.78) based on quantum theory.

I should define my conceptualization of entropy here because it functions as part of the blueprint. Within an educational grid, or otherwise a social grid, they are byproducts generated as informational transferences between entities of a grid. Additionally, they are modal bridges between other grids depending on spatial-chronal-temporal proximities. This conceptualization also requires an overarching taxonomy for it to be theoretically explored, and a portion of this taxonomy is as follows:

Logic = I - O - Oe

Linearity = consistency of successive occurrence of I - O - Oe

Spatial = Relational observation between 2 or more objects of reference

Chronal = Time-based measurement (formal or otherwise) of objects and their positions

Temporal = Consciousness-derived awareness of chronal references as confluences of spatial and sensory interactions (utilizing language as a vehicle for representational transference). (Dainton, 2018)

Figure 1. Segment of overarching taxonomy for theoretical constructions.

More segments of this overarching taxonomy will be introduced as concepts are discussed. It is also necessary to mention that the term, *temporal*, is being used in this study in order to emphasize the representational challenges that are intuitively present when perceiving and trying to understand spatial and chronal occurrences. Consciousness has its own unique ways of processing information and producing representations of information (Dainton, 2018); thereby, we require a means for incorporating it within a grid that includes humans.

Entropic Autoethnography

This gets us to a place where I think that we can begin building on the application of alternative forms of entropy in a way that conceptualizes the malleable and methodologically complex grid of the autoethnographer. We can call it *Entropic Autoethnography*, and we can think of it as a layered and dynamic exploration of four key domains: a) autoethnographic entropy b) artistic entropy c) social entropy, and d) disciplinary entropy. Ultimately, those domains compose e) a macro-framework of their interactions.

Beginning with *autoethnographic entropy*, it is formed by a layering of Chang's (2012) "typologies of autoethnographic writing" (p.118-119), including the *imaginative-creative*, the

confessional-emotive, the *descriptive-realist*, and the *analytic-interpretive*¹. Each of those layers expands in accordance with the methodological opacity that increases as various methods are added:

¹ Chang (2012) also mentions that her typology, as listed, was adopted from the ethnographic typology as presented by Van Maanen, J. (2011). *Tales of the field: On writing ethnography* (2nd ed.). University of Chicago Press.

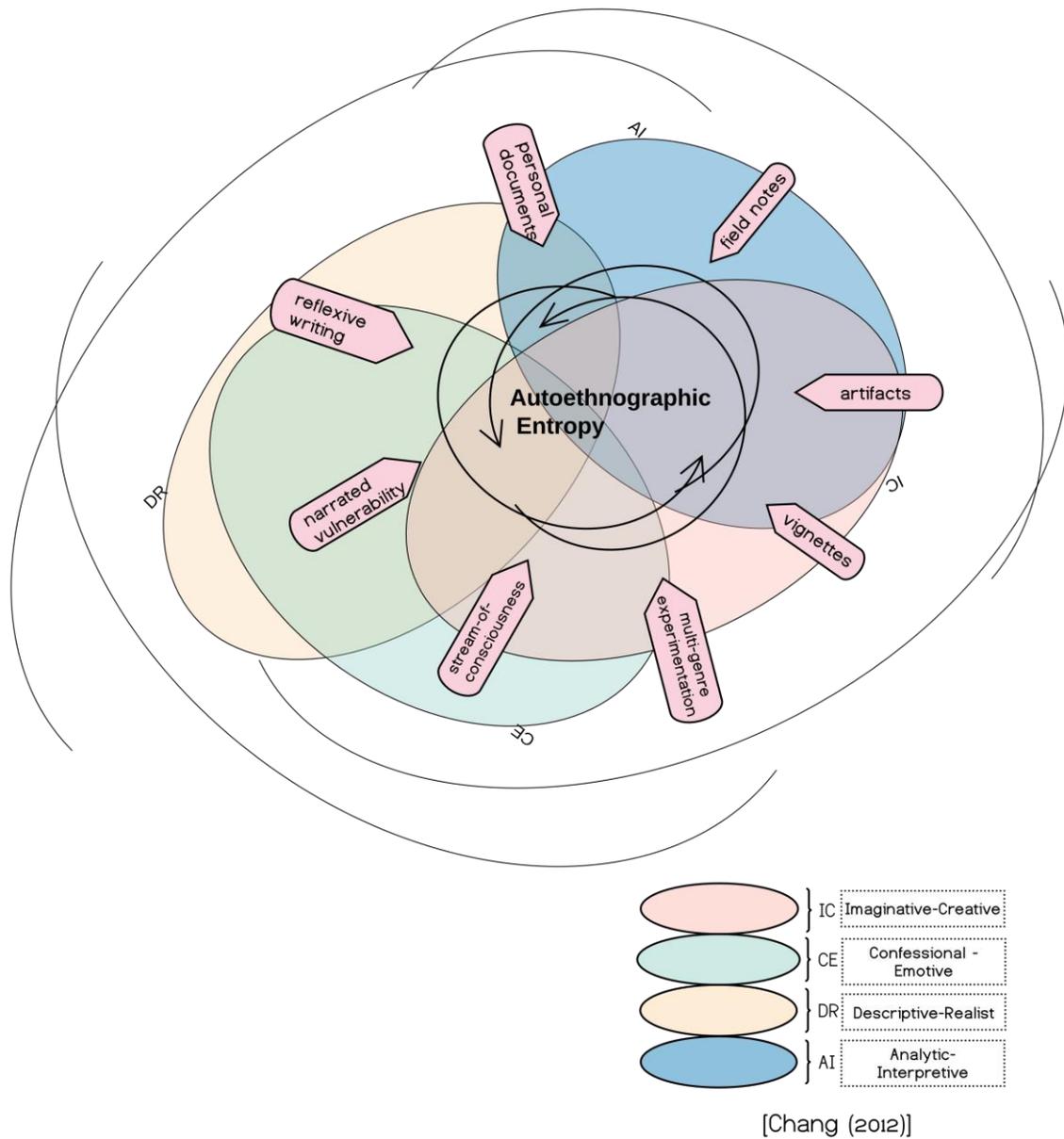


Figure 2. Visual Framework of Autoethnographic Entropy.

The connection with entropy, here, is to suggest that boundaries are an issue to be reconceptualized during autoethnographic study, but I should mention that conformity is not something that I denounce in all forms; rather, it is something that I am triggered to question simply due to the problems that I have experienced with affording too much responsibility to others regarding how I think about the world and myself. In this sense, legitimacy is a crisis wherever conformity might take effect. Out of the five purposes of autoethnography as a method, as discussed by Jones, Adams, & Ellis (2012), one that holds some relevance here is that of "disrupting norms of research practice and representation" (p.32). On varying levels, I feel like I am fighting against a methodological ideal, against cleanliness, against verification, and against fallacies which might inundate the essence of what it means to engage in learning. I fight against such things, not to abandon, them, or to disrepute the efforts of others, but to celebrate our existence beyond the constraints which we do not have to look hard for while we appease discomfort, inefficiency, and the vastness of the unknown.

However, just as I try to remain cognizant of Douglas and Carless' (2012) referencing of how "personal experience challenges theories, categories, and interpretations" (p.88), *I am also keenly aware of a need to keep myself in check*. In a paradigmatic fashion, my study becomes framed by a "net that contains [my own] epistemological, ontological, and methodological premises" (Denzin & Lincoln, 2011, p.22). Thus, if I am trying to construct an envisioning of what *could* be, then it is paramount for me to consistently remain aware that I am the one who is constructing that vision - not only remain aware of it, but question it and upend it if and when it may be necessary, for it became clear to me that none of this should be considered as notions of absolutes.

Inevitably, my dissertation becomes an artistic endeavor, above all else, and especially when considering that "Arts-based research is an effect to extend beyond the limiting constraints of discursive communication in order to express meanings that otherwise would be ineffable" (Barone & Eisner, 2012, p.1). While mentioning the post-modernist perspective, Richardson & St. Pierre (2005) also discuss how poststructuralism serves in advocacy of narrative methods due to its encouragement toward an unbound exploration of knowledge and ultimately directing us to consider "the continual cocreation of the self and social science; they are known through each other" (p. 962). I see this as an encouraging nod towards efforts that are trans-disciplinary in scope and especially when boundaries are explored (Beauchamp & Beauchamp, 2013). In addition, Richardson & St. Pierre offer a cogent framework for evaluating the quality of qualitative narratives, and the beauty of it is how it is able to account for essentially all genres of writing for analytical purpose due to its broad design (2005).

Referred to as the Creative Analytical Process (CAP), the framework outlines four domains that were necessary for me to consider as my autoethnography unfolds, including 1) whether the writing provides *substantive contribution to our understanding of social life* 2) whether the writing possess *aesthetic merit* which invites engagement and interpretation 3) whether the writing possesses *reflexivity* that allows it to be perceived in accordance with the author's subjectivity toward the subject matter and, 4) whether the writing possesses a perceivable degree of impact on the reader that transfers in the form of emotional, intellectual, or inspirational outcomes (Richardson & St. Pierre, 2005, p. 964). With these components in mind, I was able to analyze sections of my writing in accordance with the varying degrees of their alignment among other sections while also judging the efficacy of each of the five volumes in my study.

Further, the more evocative and illuminating features of this study are directly tied to its purpose of "maneuvering through pain, confusion, anger, and uncertainty and making life better" (Jones, Adams, & Ellis, 2012, p.32). It will become obvious, I think, that I am all about the layering of things - of grids, and ultimately - of realities, yet I also see that as one of the things that motivated me to attempt my work in a way that comes with risks as well as benefits. What you will read, I believe, will result in the manifestation of emotions, connections, and interpretations which I am unable to predict in terms of their specific outcomes, but I presume that they will happen because such things manifested as I personally worked on creating this.

The autoethnographer has to make some serious decisions of content in order to *embrace vulnerability with purpose* (Jones, Adams, & Ellis, 2012, p.24) while writing, and I think that the complexity and the difficulty of such decisions are something that feels very unique to autoethnography – this is sort of my way of saying that you don't really know what it's like to put yourself out there until you try it. And this is where I reemphasize that what you are reading is very much an artistic expression above all else. I do consider most of my interests, and really, my vision of livelihood, to reside in the realms of the artisanal and the artistic more than any other, perhaps more refined or acceptable, layer of reality. I am at peace with that - even if a reader of this is not.

With that considered, it is possible to evaluate this study using Barone & Eisner's (2012) "Criteria for Judging Arts Based Research" (p. 148) which includes the following: 1) *Incisiveness*, where I endeavored this work as something that "cuts to the core of an issue" (p.148); 2) *Concision*, where I attempted to lattice vignettes, narratives, and models into a composition aiming "to serve its primary, heuristic purpose of enabling members of an audience to see social phenomena from a fresh perspective" (p.149); 3) *Coherence*, where the composition

contains features of varying complexity which "hang together as a strong form" (p.151); 4) *Generativity*, where it "enables one to see or act upon phenomena even though it represents a kind of case study with an *n* of only 1" (p.152); 5) *Social Significance*, where I attempted to thematically align something that is arguably substantive while contributing "important questions to be raised" (p.153); and 6) *Evocation and Illumination*, where I created products which not only reflected feelings and illuminations but also elicited them as I created them, with the hope that such feelings and insights would transfer to the reader in a way that reveals something new.

It is here where I see the next domain functioning within the framework of *entropic autoethnography*. We can refer to this domain as *artistic entropy*, where notions of criteria and process become confluent and where products are generated. What I like about this merging of evaluative criteria and the creative process is how it holds true not just for a purpose of judging the work or for a purpose of creating the work, but for both to be necessarily within the same space. For you, this may have already been obvious, but I am enjoying the fact that this is really beginning to resonate with me as I write this, although I think that such reflexivity is inherent to work that is difficult and rewarding. It is also within such grids that we see not only a layering of criteria and process but an expansion of the grid itself:

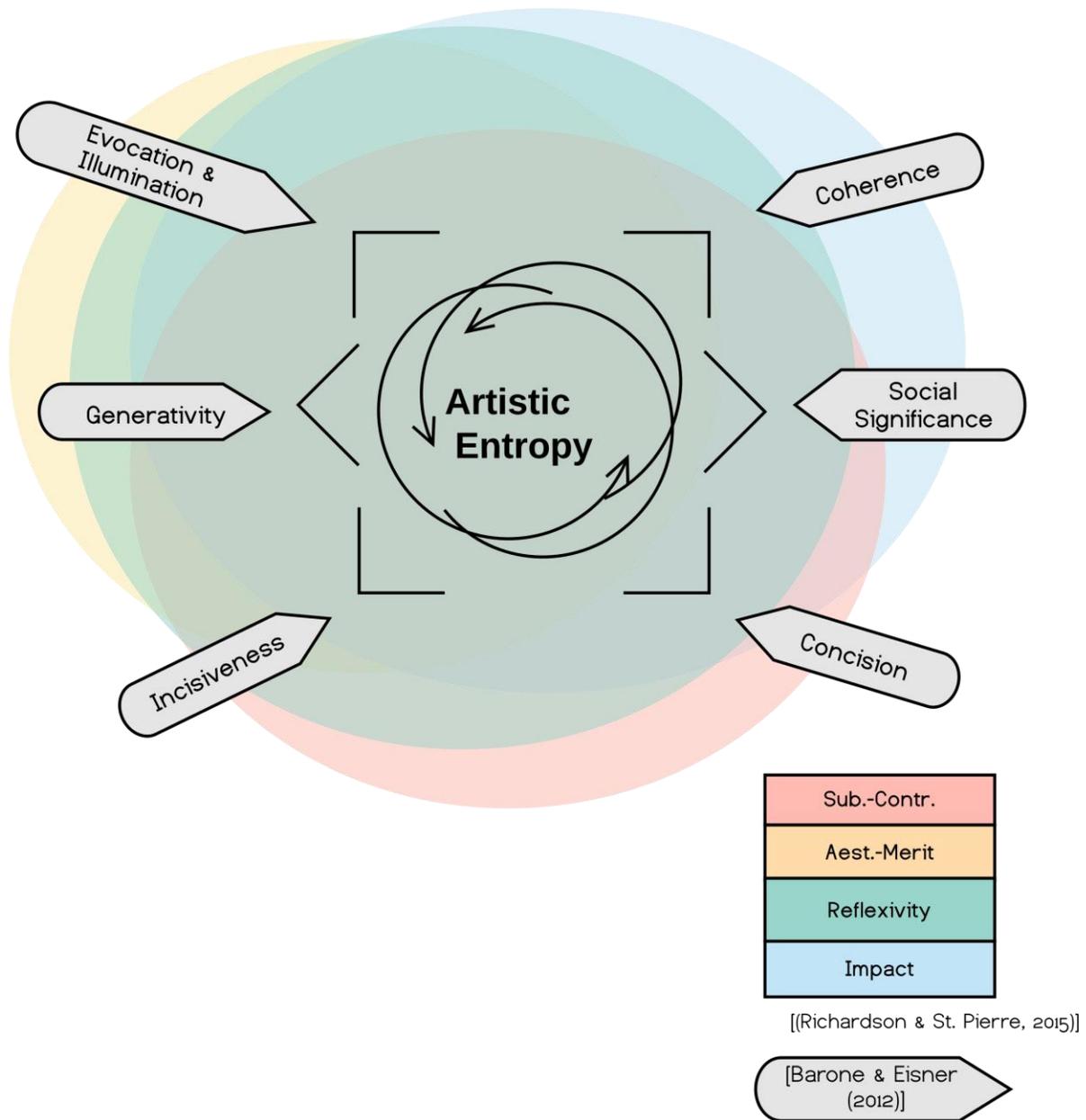


Figure 3. Visual Framework of Artistic Entropy.

Choices have to be made if you embark on this journey with me. I'll try to clarify. If we consider this creature of a dissertation to be an artistic endeavor, as I do, then we must accept it as a representation of what might come to fruition in another grid, layer, or realm of what we

perceive to be our reality. It is a question of the essence of learning, and it is my attempt at instantiating a discussion of what could be, perhaps at the expense of what actually *is*. When reality is played with, or even upended, it creates the types of narrations which Gingrich-Philbrook (2013) refers to as *disorienting stories* (p.610).

I am taking some steps, and I am risking some things, and I think that such things resonate with other artists, but hopefully it also resonates with those who may not see themselves in that way - we need to find some common ground, and that is what this is all about. I hear it often - discussions about shit like balances, and syntheses, and any other marketing-friendly word that one might input when mentioning what is needed, instantiating - among other things - a “closure of knowledge in the name of censorious political and epistemic orthodoxies way too certain about who we are, what we should value in one another, and which kinds of knowledge should ‘count’” (Gingrich-Philbrook, 2013, p.610). And when I see research like that of Beauchamp & Beauchamp (2013), advocating for salience among multiple disciplines of knowledge in order to create something new (i.e. transdisciplinarity), chords begin to strike in my mind, but the guitar still feels out of tune.

It sometimes seems like we argue what is needed, and how it might look hypothetically from a foundational standpoint, but it is quite hard to find exemplars that we can understand. To an extent, I see why this is an issue due to how the stories of our lives and livelihood may reflect the comfort and order that we consciously desire. A transdisciplinary story can also be a disorienting one, and such stories – at times - also can reflect an attempt to “narrate those occasions when the orienting stories fail to predict - and sometimes actively mask – our actual experience in the world: the roadblocks to success encountered by even the most industrious among us” Gingrich-Philbrook, 2013, p.610). Sometimes, I feel exhausted by the *sometime's*,

which is funny when I think about how much I advocate for alternatives. Perhaps it is because such constructs are incredibly esoteric in terms of process as well as their products, or perhaps it is because they are easily misperceived or misinterpreted due to their need for salience. What I am left with, and where I ended up with this dissertation, is an artistic interpretation that attempts to envision what could be, if only on an individualized level, in terms of transdisciplinarity and its implications for intuitive thinking and learning.

The composer, the sculptor, the writer, *any* artist, signs up for the implications of interpretation in terms of its open-endedness and its layers of meanings - this is the relationship that exists between shared message - its salience with any form of transference, artistic or not, is undeniable. I'll refer back to the criterion of social significance (Barone & Einser, 2012) as it emphasizes the idea that an art based researcher wishes to have their work perceived as necessary - or at least welcomed - rather than dismissed as a trivial endeavor. Yet, as an artist, I think that triviality is an inherent consequence of artistry and what it produces. Thus, I meander through notions of triviality, and I even risk triviality as I employ it in areas of my study as I perceived that concept to also permeate the implications of legitimacy.

I offer concessions throughout, usually due to my insecure nature, but also because someone may need reminding from time to time that I do not consider myself to be an expert in anything and especially in pursuing livelihood. I am a learner in all contexts. I am not a mathematician. I am not a physicist. I am not a historian. I am not an English teacher - I mean, I am, but I am not, it's complicated. I am not a social worker. I am not a therapist. I am not a neuroscientist. I am not a film critic. I am not a principal. I am not a guidance counselor. I am not a superintendent. I am not a novelist. I am not a playwright. I am not a linguist. I am not a statistician. I am not a philosopher. But I am a person.

I am a person, and this is my journey of dabbling with those things in a world where exploration of all those things is to be limited in depth. To read this dissertation is to endeavor, briefly, in the dissonances that are experienced in transdisciplinary thinking. If you find yourself in any of those aforementioned disciplines - if your credentials label you as an expert in any one of those areas, or if you self-identify predominately with one of those - you will have to decide what you will see. I think that, where something might be considered as art in its holistic form it is also possible that, when deconstructed, its particular sections can appear to invite the most critical of eyes; yet, this would be counter-intuitive to the notion of cross-collaborative, trans-disciplinary discourse (Shenton & Hay-Gibson, 2011).

Whether it is an issue of vacuity, absurdity, idiocy, legitimacy, rationality, or ability, it is not my place to feel perturbed by what you will interpret. What you are reading, essentially, is a composition of livelihood, and as such, is merely an interpretation, a representation, a rendition. For it to manifest in more than that - in terms of products - requires individuals who are much smarter and capable than myself. And if one finds themselves connecting two dots from this that they may not have previously connected – regardless of whether it is directly or indirectly in accordance with what is read or interpreted – then it is possible that we will have reached real point of this work.

If I mention anything that in some way holds relevance to your field, I hope you see it – above all else – as a sign of the respect that I hold for your field as well as how my exploration within it, regardless of duration or depth, has helped me work through some things – a lot of things – and it has produced nothing more than additional questions, and now I find myself satisfied with that notion. Trust me, you’ll have plenty of question marks as you read this, because I do too. We have so much work to do - to bridge disciplines - in order for people to see

the artistry that occurs between them. In this sense, decisions of vulnerability are not just made “as a way of mitigating vulnerability and potential exposure to criticism” (Jones, Adams, & Ellis, 2012, p. 24), but also “made with the hope that audiences will engage with and respond to our work in constructive, meaningful – even vulnerable – ways” (Jones, Adams, & Ellis, 2012, p.24).

One more thing, and especially if you feel a bit distressed as you read some of this - if it is any consolation, what you will read amounts to some bits of the most nuanced representations of myself and my existence that I have ever produced - and it is possible that I never get a chance to meet you or learn of interpretations you may develop, or of reflections you may possess, or of confluences we may share. Such is the plight of an artist. To you directly, it was a pleasure working through some glimpses of the beauty that are inherent to what intrigues and inspires within your field - I saw some salience, yet the notions are fleeting, and perhaps you are relieved that I was only visiting for the briefest of moments, but know that I am in awe of what you do - in that sense, this is a celebration of you.

Consciousness and its Narratives. When my research started to focus on consciousness and how it is accounted for in various disciplines, the concepts of space, time, and temporality were seemingly integrated within any discipline that I explored; thus I made it a point to ensure that I would be able to find such integrations rather easily while researching, which would imply that they are most likely to be frequently applied within a respective discipline.

Indeed, those terms are observable in what I consider three of the major areas for researching the theoretical boundaries of consciousness: (a) computational representations of consciousness (and research within peripherally-contributing domains including artificial intelligence); (b) neuroscientific understandings of how consciousness works on biological levels; and (c) philosophical discourse relating to the theoretical boundaries of consciousness. In

turn, those areas are applicable to an analysis of how particular trends in education may be hindering the potentials of transcendent learning in addition to how it might be remedied.

This is where the third domain of *entropic autoethnography* reveals itself – which I think of as *social entropy*. It is similar to the aforementioned domains in that it is seemingly parameterized in its visual form but is potentially complex and expanding in a conceptual form. It is dependent on confluences of relativity that is contextually determined which are, in turn, reliant on spatial, choral, and consciously temporal instances of process and product:

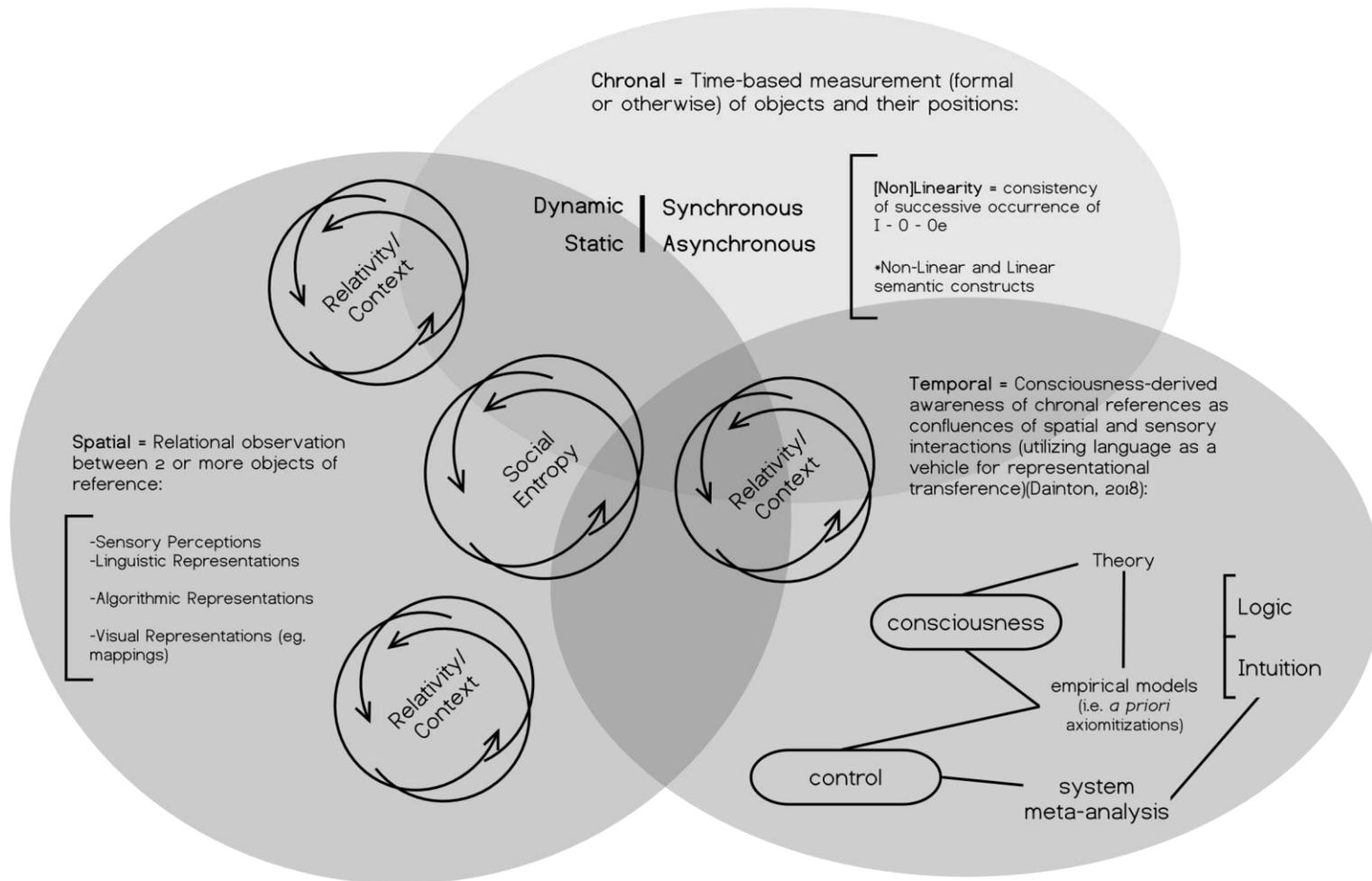


Figure 4. Visual Framework of Social Entropy.

The conceptualization of processing is important to not only the *social entropy* domain but to the entire grid of entropic autoethnography, for it is how we attain insights of synchronously-functional products existing within the interactions of grid factors – such as conversational dialogues and causal occurrences between people and/or objects – which provides a layer of complexity beyond our perceptions of a product as something to be evaluated once it has been produced in a culminating fashion. We should additionally keep in mind that “autoethnography thus breaks the silences of humans as possibly-patterned-but-unpredictable beings and not static and stoic machines” (Soukup, 1992; Ellis, 1991, as referenced in Jones, Adams, & Ellis, 2012, p.35). In a sense, *process* appears to rely on the scope of our perceptions of patterns.

There are two contributions in autoethnographic form that stand out to me regarding how computation and consciousness have previously converged. One of them is an article written by Saradhi Motamarri (2014) which uses some confluences of neuroscience and artificial intelligence as a brief autoethnographic study. Motamarri (2014) provides a hermeneutics-based framework for discussing artificial intelligence theory in autoethnographic form. I do not believe that he is an artificial intelligence program writing an autoethnography – from what I can gather, he is an academic in his respective field who seems to like engaging in reflective metathought in relations to where we are and where we are going as a society when it comes to A.I.

He also provides a useful framework that encapsulates a dichotomous relationship between A.I. program types and their theoretical boundaries when it comes to human responses regarding the potential of A.I., situating such contexts between the paradigms of human thinking versus rational thinking and human behavior versus rational behavior. What I find interesting

here is that the distinction between the human and the rational seems to imply that there are ways to think about the benefits of A.I. in terms of its humanistic implications – will the machines uprise?! - or its practical implications – how can we get this damn thing to compute?!

Motamarri also mentions that there is a “tacit” component to how humans acquire and transfer knowledge, something that A.I. is still not able to account for, and I do not think that it is a stretch to associate this tacit modality – these inferences generated by means other than language with how our intuition influences our decisions and our interactions. This leads me to the other contribution, which is Nicole Marie Brown’s (2018) attempts to merge autoethnographic data with algorithmic exploration in order to facilitate a bridge between computation and qualitative self-analyses. By integrating K-means parameters and Bayesian-influenced topic modeling within her study methodology (Brown, 2018), I think that she has presented some worthwhile reflections that require more consideration by the qualitative research community.

Actually, maybe you should just do yourself a favor right now - shut this shit down and go read one of those other ones. If you choose to keep reading mine, I’ll take it as an indication that you may have considered some of what I have expressed as you have embarked on your own journey through teaching and learning and I’ll also take it as an indication that you are willing to experience some frustration but that you will forge onward and try your best to embark on this journey with me for a little while. *Please do not shut this shit down...*

Like in the computational field, the connections observed between autoethnography and neuroscience are scant. Before I go any further, let me share what I am not trying to do in this domain. I am using neuroscientific research to see if there are ways to transfer knowledge from numerous disciplines of knowledge to each other in ways that conceptually align with what we

currently think that we know about how we organically process and apply knowledge, as opposed to applying neuroscientific research to account for how my brain was working in a given context, as it may be observed in Shankar's (2018) autoethnographic account of recovering awareness during brain injury.

Such an approach has its merits, but I see the role of this field in terms of how it may be able to help lay some groundwork for axiomatically conceptualizing consciousness. The concept of consciousness has been philosophically characterized as a "hard problem" (Johnson, 2009, p. 11) due to the seemingly insurmountable challenge of melding neural occurrences with how we think and act. I will concede right now that I do not claim to know the answer, nor do I believe I will unlock that answer, and that is not particularly the nature of what I am trying to achieve. I am more of a tree-hugger of consciousness, choosing to revel in its organic, natural wonder while trying to figure out how we might use our innate properties to make other aspects of our environment a bit less – well - inhuman. I'm not sure if any of this last part makes sense – I'll come back to it at some point.

My exploration of the neuroscience domain aimed at discussing consciousness in terms of its modalities rather than its states, as I perceive it to be applied in some other studies within the autoethnographic realm (Newman, 2009; Freebersyser, 2015). In work that applies *states*, it appears that the notion of consciousness is used in tandem with various classifiers of conscious dispositions, to demonstrate how a person's conscious thoughts are integrating or interacting with external stimuli. Admittedly, through the usage of autoethnography I am predisposed to discussing my conscious thoughts along with external stimuli, but what I am not doing is using those to prove that such nuances are indicative of a particular state of consciousness – for one, that would mean that I at some level have an understanding of what consciousness is at a

conceptual level, which would also mean that I already have a roadmap for how to numerically account for consciousness, and I am unable to produce that, and that would violate multiple relevant constructs of philosophical discourse (Johnson, 2009). I can only strive for an axiomatic model. Again, not saying that there is anything wrong with the previous works in autoethnography that I cited – it’s just not what I am trying to do.

Accordingly, it has been previously suggested that autoethnography “does not belong to a single discipline” (Denzin & Lincoln, 2011, p. 7). Therefore, in order to align my autoethnography with how I perceive the potential offered by conceptualizations of consciousness, I have to briefly go outside of the autoethnographic realm so that I might pull into it the gleaned notions of seemingly dissonant paradigms of discourse. For instance, Voss et al. (2012) conducted an interesting study where they attempted to measure consciousness within the context of dreams, referencing data gathered by participant reports that recalled recently experienced dreams as well as dreams that were recalled in a laboratory setting, where participants were awakened after REM sleep had occurred.

While their conclusions expressed some factors that might have impacted conclusive distinctions between consciousness and lucid dreaming, Voss et al. (2012) did hypothesize that there is a secondary level of consciousness – akin to higher-order cognitive processing skills which allow some level of autonomy on behalf of the entity – which may influence the primary level of consciousness – or, the lower-level of consciousness where an entity simply feels and is simply thrust into a state of choral presence.

For me, the most important features of Voss et al.’s (2012) study are the following: First, their considerations between consciousness and its spatial, choral, and temporal associations

resonates with me. Secondly, their conceptualization of consciousness through the usage of abstract terms (Voss et al., 2012) is something that is required, because consciousness is abstract.

Third, they explicitly note a distinction between “creature consciousness” and “conscious states” – one sounds intriguing, the other one sounds creepy. Fourth, their expressing that linguistic representation alone is not enough to distinguish primary and secondary consciousness in this context, due to the fact that non-lucid dreaming may involve some “element of irrationality” (p. 10) which keeps the dreamer from becoming aware of their dream state, got me thinking. This is not to express that I agree with what I have pulled from Voss et al.’s (2012) study. In fact, I only agree with about half of it, and eventually, I will provide a bit of a counter narrative to some of those points – specifically, points 3 and 4.

Additionally, Tononi (2008) offers some revelatory insights - which supports Voss et al.’s (2012) first point – by mentioning how theory can help in accounting for consciousness on an empirical level. In particular, the integration of information within consciousness is dependent upon a dynamic interplay of neural functioning as well as the conceivable proportion between information that is processed and the scale of neural activity, implying that “near-synchronous” (p. 223) neural function decreases the amount of integrated information. And while I am still here, I’ll mention that Voss et al.’s (2012) second point reminds me of Roter’s (1986) reference toward Vygotsky’s insights in relation to how consciousness might be accounted for and studied, noting that it’s applicability requires a functional perspective, that it should use the generic method, and that conceptualizations of consciousness should be representationally whole.

It is through such studies – concerned with how we consciously and subconsciously process - that I see autoethnography as a great way to infuse vignettes of recollected dreams, for it seems to be a necessary mode of exploration, regardless of whether meta-analyses of them

glean takeaways that are support or refute *a priori* notions. With that in mind, I'll discuss some other aspects of what you are reading...

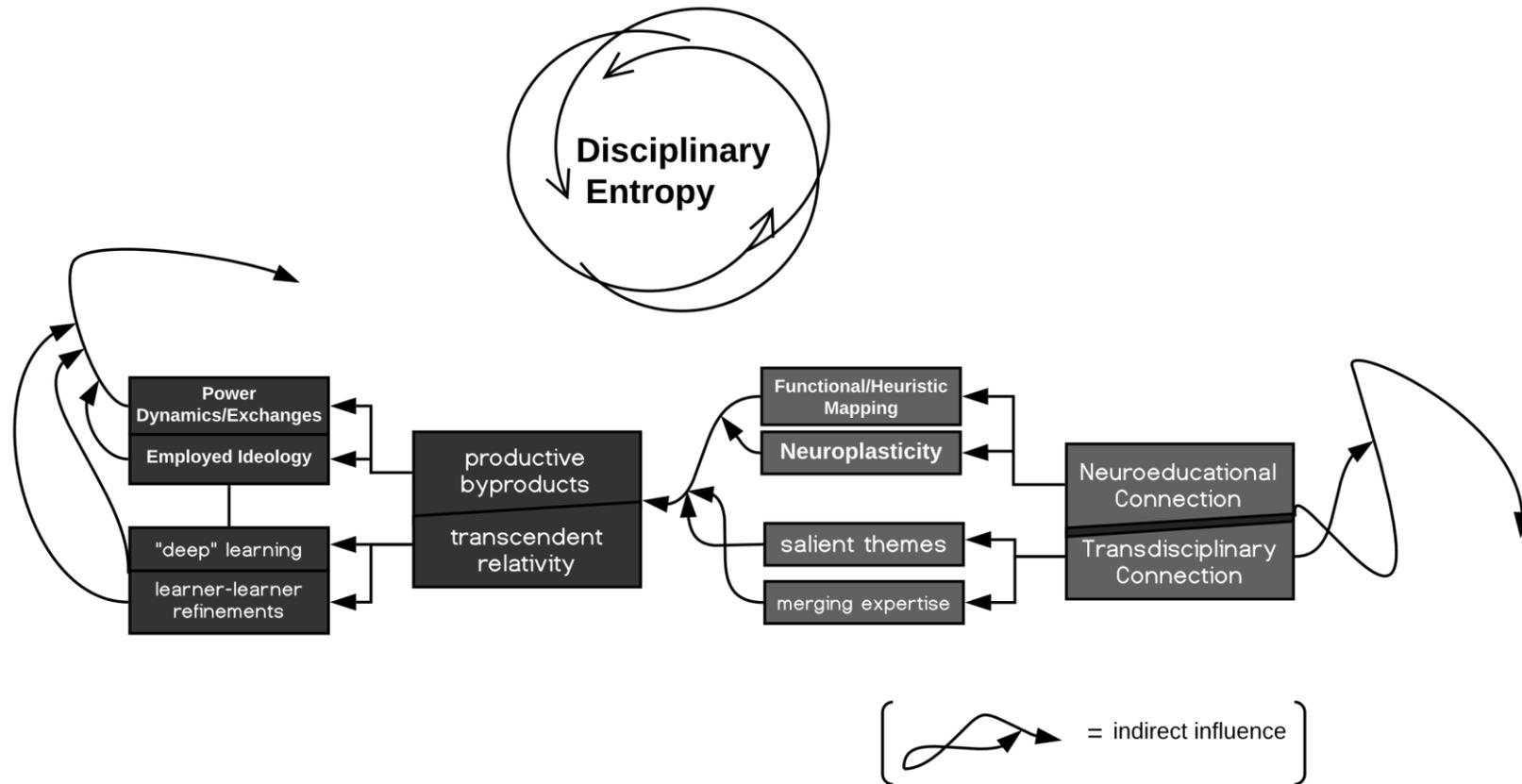


Figure 5. Visual Framework of Disciplinary Entropy.

We find ourselves at the fourth domain of *entropic autoethnography*, that of *disciplinary entropy*, where process and product are mapped alternatively from the previous domains in order to highlight the causal nature of channeling seemingly divergent sectors of knowledge. Although they look quite dissimilar, the mappings of *disciplinary entropy* and *social entropy* are very much connected due to how knowledge transferences, saliences, and contextuality have previously been emphasized for social constructs with transdisciplinary potential (Shenton & Hay-Gibson, 2011; Beauchamp & Beauchamp, 2013). Something that I am reminded of, here, is how the connectedness of disciplinary and social entropies are seemingly intuitive if we consider how “humans are capable of rapidly sensing patterns in situations based on narrow slices – that is, small and unrepresentative samples of experience” (Waks, 2006, p. 383). If we perceive intuition as operating on similar modalities of transference, salience, and contextuality, we are then able to presume that transdisciplinary grids are mappable in a way that is analogous to a state of intuition.

Moreover, Carrasco, Serrano, & Garcia (2014) associate the abstract concepts of *autonomy*, *vulnerability*, *resilience* (2014, p.157) as necessary domains within a framework that conceptualizes *plasticity* – a quintessentially neuroscientific term - and that seeks to align education and neuroscience. These authors have presented us with some very intriguing and insightful mapping of “plasticity as a transdisciplinary connector” (2014, p. 157), and although their framework’s domains and components are not exclusively incorporated into my map of transdisciplinarity, I do adhere to those three domains when considering how autonomy, vulnerability, and resilience are directly and indirectly addressed as I employ various methods of autoethnographic study and while exploring relevant social constructs.

For me, the plasticity factor is undeniably necessary throughout any of the gridmaps that I constructed, but I also see spatial-chronal-temporal alignments to be addressed in models that are causal as well as chaotic. Here, the grid of *disciplinary entropy* feels more like a representation of a causal model which cannot decide whether it is linear or non-linear in its successive influences – and that would in fact be the intention. Relatedly, indefinite causality has been proven using quantum axiomatizations which are conceptualizing - or should I say, re-conceptualizing - the parameters of logic (Wolchover, 2021). Analogously, their quantum states of causality seem similar to how I conceptualize asynchronous and synchronous states that integrate with our interpretations of [non]linearity as well as modal function. They use a thought experiment to discuss how gravitational influence can lead to quantum-like situations where causality is upended from its linear forms. In general, the situation is presented as a scenario in which two individuals, *Bob* and *Alice*, are docked on space labs at varied distances from Earth.

It is assumed, in this experiment, that 2 spatial references of earth are created in such a scenario - I interpret this to be somewhat related to conceptions of positionality between each of the objects of reference. Their clocks are synchronized, but, time inevitably varies for them due to varying exchanges in distance and the effect of gravitational pull on time. Essentially, this creates a superposition of causality, were communication between Bob and Alice becomes indeterminable in terms of its causal order; thus, synchronous exchanges of causal states seem to be more effectively interpreted as superpositions of causal states (Wolchover, 2021). At this point, we can build on the overarching taxonomy that was previously introduced:

Logic = I - O - Oe

Linearity = consistency of successive occurrence of I - O - Oe

Spatial = Relational observation between 2 or more objects of reference

Chronal = Time-based measurement (formal or otherwise) of objects and their positions

Temporal = Consciousness-derived awareness of chronal references as confluences of spatial and sensory interactions (utilizing language as a vehicle for representational transference). (Dainton, 2018)

Dynamics = mappable/observable traits in relation to spatial, chronal, and temporal phenomena

Modes = operational form assumed under theoretical prerequisites of observational traits. For example, if intuition is a state, intuitive thinking is a mode.

States = mappable/observable micro or macro systematic outline of a construct that may or may not change depending on the variability of its comprised modal functions

Salience {
a) Observable trends in usage of language among numerous disciplines (Beauchamp & Beauchamp, 2013)
b) Observable integration(s) of disciplinarily-contextual theory and methodology that has generated the creation of something new (Beauchamp & Beauchamp, 2013, pg. 52)
c) Observable spatial/chronal/temporal interpretations and applications in representational form and that can be semantically interpreted
d) Observed spatial/chronal/temporal interactions in symbolic or representational form that is outside of the language construct

Figure 6. Overarching taxonomy for theoretical constructions, further developed.

Here, we find that logic and linearity are closely linked when dealing with models of implicit causality. We are also required to delineate the terms, *dynamics*, *modes*, and *states*, so that we can interpret the confluences of gridfactors which possess spatial-chronal features, causal implications, and temporal representationalism. Thirdly, we see the term, *salience*, as a necessary feature in theorizing the dynamics, modes, and states of gridfactors which enables them to be discussed as confluences.

This brings us to the final component – the macro-framework of *entropic autoethnography*, which essentially serves as a summative representation of the four aforementioned domains in order to present entropic autoethnography as their nucleus. We then start to see each of those domains to transcend their sectored forms in order to create spaces of confluence, interacting with peripheral domains as well as domains which are seemingly positioned beyond their purview. For example, disciplinary entropy seems to transfer through the

process of entropic autoethnography in order to interact with artistic entropy, and I believe this to be similar to the idea that science inherently possesses artistic qualities:

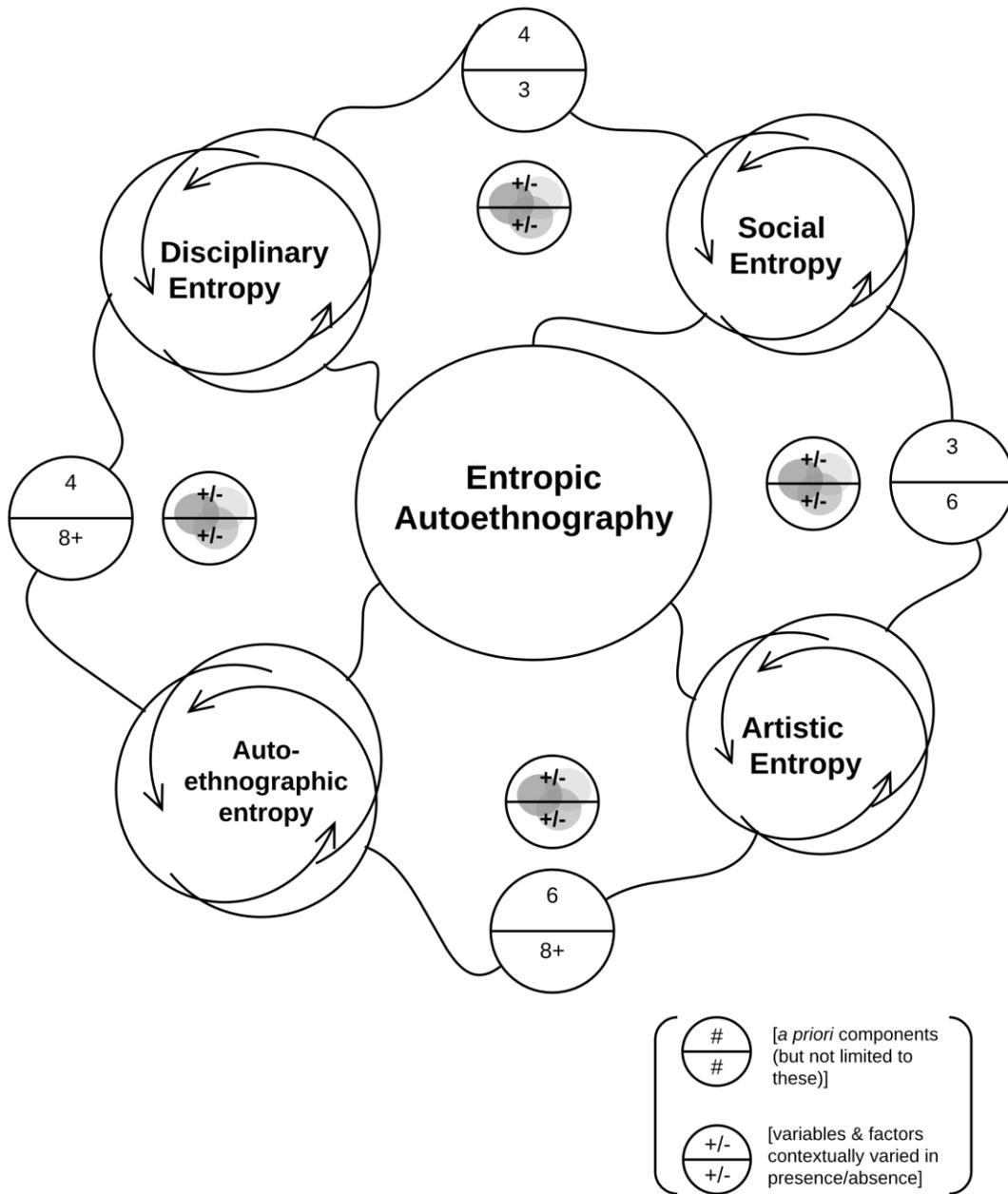


Figure 7. Visual Macro-Framework of Entropic Autoethnography.

Along with the nucleus and its peripherally-connected domains, we see connectors that are intended to represent modal points of confluence, potentially, throughout the grid. For

example, *Disciplinary Entropy* holds four sub-domains – including a) neuroeducational connection; b) transdisciplinary connection; c) productive byproducts; and d) transcendent relativity – which possibly interact with autoethnographic methods that are introduced and employed. Additionally, we see a smaller connector which is an indicator of spatial, choral, and temporal influences and where each of those influences holds individual discrepancies that interact with the discrepancies of the other two – for instance, as a relational observation (i.e. spatial) increases in its potential for influence, temporal awareness and choral measurement may also be influenced.

I analyze the figure, above, by ways which I describe as the “-tions”, which are recollections, anticipations, reflections, connections, and speculations – an inventorying process which functions in constructing an applicable theory. Replicability is not the sole driver here, just as clinical sterility is not overtly desired for an organic learning context.

Furthermore, we are also able to complete the taxonomy which helps to navigate the grid of entropic autoethnography, where *iterations* and *interactions* lead us toward the theorizing of products that have or can emerge as a grid operates (i.e. transcendent byproducts):

Logic = I - O - Oe

Linearity = consistency of successive occurrence of I - O - Oe

Spatial = Relational observation between 2 or more objects of reference

Choral = Time-based measurement (formal or otherwise) of objects and their positions

Temporal = Consciousness-derived awareness of choral references as confluences of spatial and sensory interactions (utilizing language as a vehicle for representational transference). (Dainton, 2018)

Dynamics = mappable/observable traits in relation to spatial, choral, and temporal phenomena

Modes = operational form assumed under theoretical prerequisites of observational traits. For example, if intuition is a state, intuitive thinking is a mode.

States = mappable/observable micro or macro systematic outline of a construct that may or may not change depending on the variability of its comprised modal functions

Iterations | Interactions = interactions conditional on iterations mapped as **processing** and their dynamics, modes, or states

Transcendent Byproducts = *a posteriori* outcomes which are no longer salient translations of *a priori* interactions and their conditions (if bias has been considered)

Salience {

- a) Observable trends in usage of language among numerous disciplines (Beauchamp & Beauchamp, 2013)
- b) Observable integration(s) of disciplinarily-contextual theory and methodology that has generated the creation of something new (Beauchamp & Beauchamp, 2013)
- c) Observable spatial/choral/temporal interpretations and applications in representational form and that can be semantically interpreted
- d) Observed spatial/choral/temporal interactions in symbolic or representational form that is outside of the language construct

Figure 8. Overarching taxonomy for theoretical constructions, further developed.

Models of logic are posited as a means for positing the structural reordering of gridfactors, yet this alone does not fully provide the necessary foundation for analyzing how the components are processed within a context. Resultantly, linear modeling of logic also must be conceptualized in tandem with non-linear forms, and this requires sequencing and time-based concepts to be synthesized as *iterations* and *interactions* which may be conditionally related. Doll seems right in positing that the “self-organization process” (p.72), which he seemingly contends is a cognitive mapping of sorts in relation to humanistic and environmental exchanges which “depends on reflective action, interaction, transaction” (1993, p.72).

Such a process allows for outcomes to become more malleable than they might be within a more controlled and predetermined context, but it allows for a parameterization to occur which more faithfully reflects the evolutions of nonlinearity within mathematics and physics. Additionally, Biesta et al. (2015) include an iterative component within their coding methodology of agency. While *iterations* will be later conceptualized in more detail, we can think of it as attempts to employ *a priori* conceptions of logically modeled instances with the caveat that chaotic byproducts may manifest.

The concept of *interactions* is also mentioned by Doll and he sees it as instances where conflict leads to growth while also citing Dewey’s theory regarding the “reflex circuit” as a networking of causal active instances (1993, p.120). He goes further by historically analyzing how *interactions* may account for the dichotomy between behaviorism and cognitivism – the overly simplistic causal structure of the former appeared to only function in a “static” context, while the latter was primed to postulate a “dynamic” network of interactions (1993, p.121).

Structure and Organization. With respect to such dynamics, this dissertation is stylistically meta-modern in how it aligns theory and context, where the network of social and disciplinary interactions becomes evident in its structure. Meta-modernism is often conceptualized in ways which seems to position it as an amalgamation of modernism and post-modernism, and this is observable in Kersten & Wilber’s (2018) reflections on the distinctions between them. By considering such permeations, I concluded that their shared thematic qualities, their associated philosophies, and their approaches, are more ethereal across their timeline than they are linearly observable, and that the meta-modern ambiguity serves as a good fit for the non-traditional packaging of my dissertation work. Furthermore, Rich’s (2020) autoethnographic work describes meta-modernism in a similar way while also implying that it is a confluence of “frameworks and structural logic” (p. 8) while having a disposition towards the interconnectedness of things.

A lot of my approach takes into consideration the role of analogies in complex, systematic designs which vary in their perceivable successes and failures (Hezemans & Geffen, 1991). I kept that approach in mind even as I made decisions on the outline of my sections, choosing an allusion to T.S. Eliot’s famous poem, *The Waste Land*, as a way to begin infusing analogous constructs. Functioning at least as an analogous subliminal influence on my perception of this project, musical artist, Sturgill Simpson, recorded an album – *Metamodern Sounds in Country Music* – which is an etymologically derivative reference to Ray Charles’ *Modern Sounds in Country and Western Music* (Deusner, 2014). For the record, I consider Simpson’s album to be the furthest thing from a failure.

Eliot’s poem is revealed for its quality and insights, and it has been discussed in terms of its ambiguities and its “dreamlike” essence (Rainey & Graham, 2005). The wonderful thing

about that poem is that, yes, it is ambiguous, yet it has a way of getting the reader to some conclusions and assumptions, especially if they do not read any synopses or critiques of it - at least until after they have interacted with it for a while. In this sense, it seems to live up to its description as a “jazz poem, cobbled in an age which was beginning to explore abstraction and discontinuity” (Rainey & Graham, 2005) – and that is exactly how I think one best enjoys the poem, by embracing the vastness of abstraction and breaking from constructs of linearity. That connection sits well with me due to how it analogously situates Eliot’s poem and the realm of music – considering how much I am enthralled with music, I am not really sure how I can employ a one-dimensional approach in my own work.

Unbound Abstractions & Multi-Genre. The following is an outline of my narrative sections juxtaposed with Eliot’s sections of his poem:

The Wasteland – T.S. Eliot

- I. Burial of the Dead
- II. A Game of Chess
- III. The Fire Sermon
- IV. Death by Water
- V. What the Thunder Said

Lands of Entropy – Me

- I. Interment of the Adolescent
- II. Ontogeny of the Pawns
- III. Vapors of Old Song
- IV. Ethereal Limbo
- V. Thunder and its Undulations

Figure 9. A Comparison of Volumes

Immediately following the title of each section, you will find a brief synopsis where I attempt to interpretively bridge Eliot’s corresponding section. You will also find a reference list of keywords which broadly previews the writing genres that manifested as the section was developed which supports a perception of the narratives in this project as a multi-genre exercise with multiple phases of analyses with one constant – that they are indicative of how I perceive things. I believe this could truly be said about any claim that is made and discussed by individuals, yet it has become important for me to explore the details of my own perceptual

makeup. Multiple voices will be apparent as sections transition, but they are all reflective of what I think it means to perceive things as well as the role of perceptions in order to learn something new. This is also why I honed in on the concept of *grids* as I worked through my contextual analyses and meta-analyses, perceiving reality as multi-dimensional while considering how its complexity is tethered by a confluence of semantic, planar, and consciously ethereal representations.

Therefore, a multi-genre exploration becomes an obvious choice while endeavoring through the synchronous and entropic social constructs where we may find ourselves, and it is also where metaphorical and analogous representations allow us to further interpret realities. To put it another way, Denzin & Lincoln discuss triangulation as a crystal-like “montage” of validity as a “simultaneous display of multiple, refracted realities”, and where “each of the metaphors “works” to create simultaneity rather than the sequential or linear” (2011, p. 6). This again speaks to the need for multi-disciplinary and multi-methodological confluences to develop with a caveat that truths are not to be held as absolutes.

I use the term, multi-genre, loosely because I am not often consciously aware of a genre type while I wright right write something (the third word is the correct one, isn't it?). I think that it needs to be that way, if only to feel like I have put forth this effort of work - this creature – whatever it is. Chandler (1997) outlays the traditional and contemporary dichotomy of genre discourse in relation to the artist, with the former view that there was an “authorial primacy”(p.6) to works of art that left them immune to genre categorization; in contrast, contemporary views include genres as important constructs which facilitate the relationships between text, or “intertextuality” (p.6). Hold your tongue and say that word five times with rapid succession. I'll wait...

I am not concerned with that debate so much as the notion that I could think of nothing more drab than working within a single mode of construction – at least narratively - especially if there are exploratory sidewinders along the route. They may amount to scenic paths that take extra time, but I am optimistic that such meanderings will make up for that somewhere else. In essence, I do not like to be “typecast” (Chandler, 1997, p. 13) into any single modality; thus, I take a multigenre approach with the assumption that it may be a more natural way to generate understanding that will resonate with me as well as others.

It is for those reasons, other than interpersonal influence, that the structure of this autoethnography contains subtitles in its sections that are representative of Eliot’s poem in a juxtapositional sort of way; however, the subtitles are not simply my attempts at word play, but more of a nod to a work that encapsulates so much of our intuitive essence while also encapsulating the nature of my own musings and explorations. Consequently, I experiment with various genres of writing at times in order to transfer various modes of thought and understanding which intuitively seem like they are more representationally accurate in alternative forms than what has preceded them as well as what structurally follows from them – in this sense, they contribute to the portraiture (Saldana, 2016, p. 303) of my narrative.

Additionally, some of my passages are stylistically alternative to surrounding text as well as structurally dissonant to what is contextually being discussed. In such cases, I assure you that I have put a lot of thought into how, where, and why I situate them, but if that is not enough assurance I can say that I perceive them to function as vignettes which “illustrates and supports a summary assertion” (Saldana, 2016, p. 304). Thus, they either reflect the convergences of spatial, choral, and consciously temporal factors which have preceded them or they constitute a segue for proceeding content. Due to their dense structure, I should also mention that I examine these

points of convergence as opportunities to imply how qualitative coding may help us align our understandings of their functionality so that we might avoid superficial disreputations of them.

Merging Autoethnography with Theorizing & Eclecticism

It should be obvious that I am intrigued by the process of constructing theories, and I may even be guilty of an apprehension for taking theory to more practical or concrete results and implications. However, when I consider just how much of the counter-intuitive strategies and approaches in my educational context are derived from misinformation and statistical biases, I am okay with taking a few side steps, or even stopping the train entirely if the tracks need some repair.

While outlining the paradigmatic shifts that have occurred in the field of curriculum theorizing, Deng (2018) highlighted that the *field of curriculum* is in desperate need of innovation (in terms of its principles and methods). Deng implied that the field of curriculum studies is potentially imploding due to how it lacks a response for why a vision of the educational model is diluted, indicating that a critical component for such work relies on having a “vision of what education should be” (2018, p. 11). For me, I believe that I am unable to continue toward the type of contributions that I would like to make without fleshing out a narrative of my visions in tandem – not only for education, not only for myself, but for learning in a general sense.

What resonates with me the most in Deng’s (2020) analysis of the field of curriculum theorizing is the suggestion that eclecticism is a fundamental consideration if one is to succeed in taking theory to the realm of practicality, noting, “there is a need to eclectically bring to bear theoretical perspectives, theories and models – traditional, contemporary and critical – from

social sciences, humanities and related discourses that can shed light on such issues and contribute to curriculum theory development” (2020, p.15).

The theory construction portions of the dissertation will demonstrate the on-going, and at times recursive, nature of theory and practicality, and this will become evidently clear in sections where I discuss previous and ongoing qualitative coding attempts. Such grapplings will also be demonstrated through narrations of numerous theoretical deconstructions in order to associate layers of theory with a broader framework that I can use to make sense of future curriculum that is mandated as well as curriculum that I may or may not personally design.

Accordingly, there are three fundamental factors to be considered in harmonizing the challenges of bias and inaccuracy so that they might function outside of a deficits-oriented mindset: alignments, intersections, and implications. In my dissertation, I aim to advocate for the construction of theory which is developed alongside a perceptual mosaic of pathways that includes conscious meta-thought (self-reflections, recollections of feasibility) and prototyped results (mappings, preliminary data and application, refinements), and where the conclusion inevitably lies in the presumption that such work is never culminated.

The first of those fundamental factors is *salience* - conceptual alignments of terms across disciplines that share terminology, where disciplinary terminology will be utilized among a primary discipline, *language & linguistics*, while keeping in mind an arbitrary set of secondary disciplines including *computation, neuroscience, social sciences, and philosophy*.

The second factor is broadly perceived as *approaches to qualitative coding* - I endeavor through intuitive mappings of process and intersection – diagrammatic schema which provides a pathway for conceptual theory to be applied outside of an initial context. The mapping approaches used in this project are influenced by – but not exclusive to – grounded theory

approaches, and this may reflect the more chaotic portions of this project. These methods found their way into the project as I searched further and tried more.

Additionally, it has been discussed how grounded theory may be applied in autoethnography (Pace, 2012) – consequently, I attempt to navigate saliences and coding methods while utilizing autoethnographic methods in order to construct converges of datum. Such convergences are attempted in the hope of generating transcendent byproducts – or new datum that becomes reflective of blurred lines (Denzin & Lincoln, 2011). In one way, it packages datum as a layered, entropic representational grid of consciousness. In another way, it packages the datum as meta-conscious, entropic representations of social and occupational positionality. And in yet another way, it packages the datum as representations of the entropy which is experienced – and necessary – for theory constructions. Additionally, I provide mappings of my process of theoretical coding (Saldana, 2017).

I should also mention that, again, it is debatable whether or not I achieve all, some, or *none* of that. It might be that I am situated within a flux state of *logical modeling* (Saldana, 2017, p.301), and “open-ended investigation and preliminary assignments of codes to the data before more refined coding systems are developed and applied” (Saldana, 2017, p.294) (i.e. exploratory methods). Essentially, what is read is not to be viewed as grounded theory explicitly endeavored but rather an endeavor that has been influenced by grounded theory in a constructivist sense where the contextual nature of reality, the conceptual auras of truth, and the socially-connected positionality and biases of the researcher are considered (Charmaz, 2000).

Evaluating the Theoretical Constructs within my Dissertation

The conceptualization of logic has served as a means for me to consider the implications and the complexities involved with constructions of theory. In that context, I primarily focus on

considering logic in forms of deduction and induction. A third mode of logic, *abduction*, is evident in relevant literature, but it does not find its way – explicitly at least – into the methodology that is proposed in my conceptualizations of what logic is and how we use it. The primary reasons for this decision include that I see abduction as something which is more relative to the process of intuitive reasoning rather than the formal logical constructs of inputs, outputs, and outcomes, in that abduction relies on an axiomatic-like presumption of likelihood for success in a context over fundamentally *a posteriori* results.

However, it does seem to be an innate process within my theoretical approaches. Brian Haig is often associated with the concept of abduction as well as positing its applicability to research and study. He conceptualizes abduction as a progression “from phenomena, understood as presumed effects, to their theoretical explanation in terms of underlying causal mechanisms” (2006, p.373). Thus, I believe that Haig’s (2006) overview of abductive theory of method (ATOM) can be an effective guiding framework for evaluating the scope of this project’s theoretical efforts.

Additionally, Haig’s assertions of ATOM as a valid alternative to generally accepted empirical approaches (2006) also functions as a beacon for instantiating how the construction of a theory should be rational, patiently gleaned, and explanatory in how it compliments empiricism (p.385). Thus, the previous sections map a methodology which is an abductively derivative theory construction containing phases of generation (exploratory analysis), development (analogical modeling), and appraisal (inference and explanations of coherence) (Haig, 2006, p.373).

When it comes to discussing the topic of optimization, the implications of generalizability and replicability are troubling to me for a number of reasons - which is why I

think I have been wondering a bit more about how theories are constructed. This is probably also connected to why I like Haig's (2006) work relating to ATOM as a type of forward-visioned methodological design process towards generative methods, as opposed to the *a posteriori*, consequential modality of "retrospective justification on the theories they seek to confirm" (p. 383). From that claim alone, it may be inferred that further discourse is needed regarding the implications of bias and subjectivity within both approaches, yet ATOM appears to lend itself well to prototyping a theory through critique, alignment, and structure before it is applied to research and study that is disseminated, interpreted, and potentially replicated.

Some Concessions.

I will end up presenting an incredibly nuanced -and at times an inundatingly esoteric – approach for theory construction that may be layered in how it is received – and that would be the inherent outcome that is desired. Admittedly, the field of educational theory is nothing short of a labyrinth in terms of its channels and permeations (Crotty, 2015, p. 1), and on a superficial level this project is a nod in that direction. *However*, where I attempt to diverge from that fated disposition lies in how I document my navigational journey of the labyrinth, and I see this project more as a type of symbolic message that attempts to venerate the craft of teaching – a profession which requires hard work, resilience, patience, and humility, asking of a human being more than they should be able to produce – especially if they are also expected to apply those qualities to their personal lives – trusting that an individual takes seriously the implications of long-term cognitive influence over countless developing brains, and entrusting in such an individual the contextual freedom to try and fail as long as success is demonstrably the culminating vision. Apple (2004) might consider this as an attempt to apply the concept of positionality to the ideological essence of a teacher (p.55), but I think it is more fitting to see this

as a response to his statement that “there are alternatives within systems discourse that educators have yet to explore in a rigorous fashion” (p.113).

Throughout this project, I am consciously aware of the complaints that I hold regarding prescriptive and deficits-oriented approaches and how I consciously attempt to side-step the advantages that such approaches are considered to provide. For instance, I am not overtly worried about efficiently gleaned results - something which is a precipitant for data-driven contexts. Additionally, I fight the inclination to *not* reinvent the wheel, even when I know that something that I explore is most likely to have been previously created and perhaps in a more successful way than I might develop. Applying a pre-constructed theory has its benefits, but simply trusting an *a priori* theory without understanding how a theory is constructed is not something that I am comfortable with, if only due to the fact that my personal context – my experiences and my mindset – has conditioned me to rebel against attempts to order or control me – regardless of if those attempts are warranted for good or bad reasons.

Consequently, I cannot guarantee that what I develop in this dissertation will constitute useable, replicable, or even valuable in the realm of constructed theory and methods, but as I previously mentioned, that is not really the point as I see it. Yet, I *can* guarantee that it will reflect the work of an educator who is willing to try something because he feels that it will make him a better educator.

One more thing. I should probably extend to you some explanation of the title of this project beyond the “dissenting alarmist” part which will be revealed in a bit. With respect to the *chaotic*, the five volumes of writing that I present here are inherently representational of the intuitive scope that is non-linearly charted when an autoethnographer is engaged in meta-analysis – at least, that is what I perceive. Yet, it is but a representational modicum of that which makes me

who, why, where, what, and how I am when it comes to the organic learning process. Some of the passages and sections of this will come across as unnecessarily dissonant, and hopefully they are counterbalanced with others which come across as harmonically resonant. This project is mostly a meta-analysis, thus I have made conscious decisions along the way regarding what is included and how it is conveyed. I will not claim mastery with what I am attempting here – I don't even have a doctoral degree.

With regards to the term, *transcendence*, it simply boils down to what I think is the fundamental outcome of organically-derived learning, and that is for something that is learned to exist as something other than the processes and products by which it is derived. Just as we can argue that newly processed ideas do not exist, we can also argue that no processed idea exists as an ontological or etymological replication. This challenge is somewhat honed as a solution – at least a temporary one – when the researcher directly integrates themselves with the grid which they are constructing.

With regards to *chaotic navigation*, I am referring to the process of qualitative coding. I strongly hold the opinion that theory construction endeavors are rewarding projects beyond the initially perceivable objectives and rationales for channeling theories. The complexity of such endeavors is one of the takeaways that I have intended to convey as I have worked on this project. Perhaps it is the only true takeaway, and if so, I am okay with that. Each of the volumes contains its own muses. An initial muse is the allusive influence of Elliott's poem – from there, they convey a series of grids with one unifying factor, and that is my positionality as well as the meta-analyzed modality of that positionality.

But, it is necessary work, for the preservation of my perceptions towards my occupation as well as what I perceive to be my place in the field. It is honest work – I cannot resign my fate

to a programmatic version of the educator role – to me, that is too close to a form of occupational indentured servitude, where I would be plugging inputs in a manner which requires limited conscious energy. I need to clench this transcendence in ways that I have not previously done. It will prove a tumultuous journey, but I need to do this on my terms. The system cannot be solely responsible for defining, classifying, labeling, and parameterizing me, as it has in the past. I am not a dissenting educator – I believe that I am far removed from that, but it is always on the horizon.

One thing that is at stake for me is the idea that I may not be suited for the role of secondary educator once this is all said and done. That is a hard thing to express, and it is not something that I necessarily wear on my sleeve (to be elaborated upon later, hopefully).

My life would be a sham if I did not admit that I need to feel like I can transcend the constraints of the empirical classification, division, labeling, and parameterization of typical humanistic scope. This might be true for all of us on some level, yet I feel anxious about how underrepresented it has been in my social interactions.

Too often in my educational context, I perceive us in this purgatory where we end up torn between the notions of weathering the storm until better policy emerges or occupationally redefining ourselves in a non-educational context. Yet, if I might temporally posit that we shouldn't have to accept those outcomes, for they will do nothing other than compromise our integrity as not only educators but competent contributors to society in any context, why haven't I done more to communicate it, to drive it forward? If I think that on some level we should heed the research that reflects teachers feeling like pedagogical efficacy is compromised as high stakes testing is increasingly touted within a setting (Darling-Hammond, 2010), but that we

shouldn't subscribe to it unabashedly, why is that something that I have not helped to suggest and facilitate?

The second issue is that I was never able to remove myself from the work which I posit as a viable alternative to more observable pedagogical trends. My approach is mine alone, primarily due to the fact that I am among very few colleagues who find it necessary to "reinvent the wheel" when they have already been provided a functioning wheel. I once told my curricular administrator that my daily intention when I enter the classroom is to deliver content and pedagogy in ways that will provide the district with acceptable data results yet also allow me to walk out of the classroom at the end of the day feeling ethically and morally satisfied. The only way that I know to do that is to provide a wheel that is laden with my fingerprints.

Thus, my initial objective was to posit an approach that might stand as an equivalent alternative to pedagogy that was not my own - therein lies the issue. Of what benefit is a curriculum if it is individualized for myself and serving my own needs? Of course, I would take great lengths to show how it can be applied and aligned with any level of goals and objectives that might comprise an educational setting, but it still is not necessary unless my concern is with pedestaling it as the *end-all-be-all*, de facto kit for pedagogical system alignment. If I take a hermeneutic hacksaw to this notion, I quickly realize that frameworks are at best plausibly functional methods of inquiry which are incapable of encapsulating what it means to exist and transcend (Schaufele, 2020), so there's *that* to contend with.

And, am I prepared to remove myself from the equation so that this type of work can stand alone? If I believe in the approaches enough, then I should be ready to do that - yet, I am not. Not because I am worried that it cannot stand alone, because I really think that it can if I decide to work on it some more. It is more related to the fact that it is a next-stage development

which may or may not come to fruition, and at this point I am still concerned with the daily grind of feeling personally grounded while playing my part in churning the cogs of the data-driven system.

Thus, the *acceptable* goal is to advocate for a refinement of how we address the human component in education, in terms of how organic processing occurs and is necessary to theorize for the develop of balanced, aligned frameworks with complexity that is not outmatched by machine learning or administrative *ad hocs*. As it stands, we make judgements regarding the most important content for students to learn, and we mandate stipulations for how such content is disseminated and internalized, but we can never truly account for the fact that we do not fully govern the mental faculties of other humans, and we should celebrate that. The complexity of human consciousness should be enough evidence for us to perceive it as our most precious resource, but too often it is patronized as systematic functionalism is prioritized. It is for that reason that I often look at the issues surrounding neuro-educational inclusion within educational discourse. I believe it to be a cornerstone for what I consider transcendental pedagogical approaches; more abstractly, I consider it to be a binder for dissonant approaches to function in plurality. Additionally, it is an attempt to understand our mental faculties, and that is why it must be included in discussions about knowledge and humans. Therefore, while I hope my contribution to the educational landscape includes legitimizing transcendent frameworks across educational contexts, I also hope to aide in the realigning of the *rational* landscape in order to solidify how transcendence may be tackled.

At first, I enrolled in the doctoral program because I had an issue with standing on the shoulders of giants whom I did not respect due to the justifications of their educational decisions – I wanted to step on their toes as a dwarf with a doctoral degree, to show them that an educator

should be seen as a professional and should be consulted on matters that held implications for their classroom. There was this metaphorical chessboard that was the educational system, and I was tired of serving a role where I had no chance of clearly understanding the placements. Through this program, I have essentially read the manual for this metaphorical landscape, researched case studies of particular matches, and critically analyzed countless potentials and implications of nuanced strategies and placements, and all of that has led me to the assumption that I might not achieve the types of outcomes that I initially envisioned when I enrolled at KSU. The game has changed for me, quite a bit.

This constitutes the focus of my dissertation work - reflecting on what I have learned about myself and how I have applied it, and then transferring it outside of my personal context so that it might exist in a context of reality that is generalizable rather than a reality that I have only constructed in my mind. I have ideas, but they need some ontological mapping if they are to be anything other than a man writing in an attic.

Here we go...

I may violate some laws by how I interchange entropy and chaos. To me, it does not matter, for they are as crows and ravens – inexplicably tethered by beauty.

I – INTER[N]MENT OF THE ADOLESCENT

[My Σ of Eliot's first stanza]

There is a warmness in his words and in how he conveys this hopelessness in forgetting – a warmness that seems to dance with the notion of losing to discomfort. Like darkness before dawn or enlightenment or contentment just before a last breath. The abruptness of life steps in just as the dancer begins to find some footing - conveyed by word connotations – “roots”/”clutch” – needing to grasp for every fucking advancement with a fist-clench. The motifs are abundant and hauntingly overwhelming in density. A heap of broken images – kaleidoscope - - mosaics – I connect with the concept of the mosaic, a beautiful crafting of shards, with each shard constituting a chaotic note between major and minor scales of refracted light. Here, identity is piecemealed, and insecurity beckons as we dance with a *Belladonna*. And when looking inward, the *Belladonna* – *our dancing partner* – *morphs into the fates preempted by our next steps* – *should we trust our next steps? By looking inward, are we priming the outward?* It doesn't stop there – we have only just begun this purgatory – this neutrality of experience where we indulge ourselves in a harmony of chaos and stagnancy...until we transcend and “sprout anew” some organic process – a “corpse to bloom”...

Genres: *Satire, Textbook, Narrative Non-Fiction, Speech, Surreal Narrative, Posthumous Narrative*

The Undergrad Years.

Confluence of My Adolescent and Undergraduate self(s).

When I thought that the prospect of attending college was attainable, I think that was when my mindset shifted from the lost adolescent to the *even more* lost emerging adult. For me, the experience would be completely predicated upon how it would be paid for. There was no chance that my family would be able to pay for the tuition costs, and I would never have dreamed of putting them into that position anyway. To give you an idea of just how much the notion of familial financial support for this endeavor lacked feasibility, consider the following: my college application would never have been submitted if it had not predicated my scholarship award. I applied for this scholarship, which was provided by a now defunct organization, on a whim and during the final hours of the submission deadline. Had it not been for my girlfriend at the time, I would have completely ignored that scholarship application call and would have continued on a path of military enlistment – a four-year sidebar of indentured servitude was how I had assumed I would end up getting to college. I had gone so far as to correspond multiple times with a recruiting officer, and I had even set up an appointment where I was sure that I would make a verbal commitment.

On the day of that appointment, my grandmother drove me to the recruitment office, and I distinctly recall this sickening stew of excitement and embarrassment as I slowly walked toward the door – one of those fully-glass doors that clearly signal that you are entering a place of business, regardless if it is a place that barter with human lives. A door that, as I slowly approached it, I increasingly felt the presence of its reflective power, like a 7-foot tall mirror that had the power to not only reflect your superficial inadequacies but to also illuminate the depths of your soul. It is as if the door was giving you one last real look at yourself before you made a

decision in an environment where you most certainly will not have access to all of the organic neural faculties that would assist in a balanced decision – the door had this uncanny “this is the last chance for you to get the fuck out of here” way to it. Of course, approaching such a door means walking through it, if only to turn around immediately thereafter – after all, you are keenly aware that there is another side to this reflection as you approach the door, and that other side is as compelling as a worm-hole to a parallel world.

Five-seconds later, I am asking for the officer whom I was scheduled to meet. He was not there. He had stood me up. I was distraught. I turned around, got back in my grandmother’s minivan, which was silver-bullet in form and function, and I was silent the rest of the way home. I received a call from him the next day, asking me when I would like to reschedule. I coldly refused: “I don’t think so, man. You had your chance, and I’m not so sure now...”

I couldn’t tell him the truth, because I didn’t know the truth at the time. All I knew was, *fuck you, man, I’m just another signature for your quota*. There were days in my childhood, before my brother was born, when calendar dates were strewn together into successions with absence of food and abundance of salt-water, and paired with those days was the absent father who most assuredly was spending all of our food money on liquor, cigarettes, and gasoline. I did not do well with such blatant disregards for absence, even if the recruiter did have a legitimate excuse.

I am aware that the words in the past few paragraphs are words of anger. That was me at the time, and on some level I know that it still is me, although I am channeling it in different ways now. A part of the anger in this past experience was that I actually *did* want to enlist in the military, yet I felt that I had been stripped and slighted of that opportunity. I took the recruiter’s absence as a personal attack – a completely irrational way to deal with such an issue. Alas, ties

ran deep for me, and implications were more binding in possibility than their implicit nature might hold for the realities of the average individual.

A few days after that missed meeting, I received a letter in the mail – I had been awarded the scholarship at an allotment that was nothing less than life changing. I read the letter to myself, and then immediately showed it to my grandmother.

Her response was unequivocally unenthusiastic; “I don’t know, Joe. Are you sure about all of this?”

An emphatic, “Um, yes, are you fucking kidding me?” Is what I wanted to say. Instead, I took a passive stance of disappointed and misunderstood youth, guilt-tripping her into an indifference toward accepting my path. It wasn’t that she was *not* happy for me; on the contrary, I know that she was elated and proud. The problem was, this prospect of a family member leaving for college was a completely foreign concept to her. She is a product of complacency, and having lived a lifetime of financial hardship, she deserves to carry any disposition that she desires. That is to say, she liked things being in a particular place and order of semblance. Things that strayed, in her eyes (I think), increased the chances that they would be tarnished or influenced in ways that could be for better or worse – but was it worth taking a risk that held implications for the latter outcome?

I could never admit this to my grandmother at that time, or even for years after obtaining my Bachelor’s degree, but she was right to worry. I wasn’t ready for college. I was the furthest thing from ready – I was creature-from-the-lagoon-misplaced, fucked-up past, losing-grip-on-ability-to-wear-a-mask, *not* ready. Regardless, I found myself in August of 2004 moving into my living space at the University of Delaware, meeting my roommate who would move back to his

home less than six months later – it is reasonable to assume that I had at least some unintentional, partial influence on his decision.

Undergraduate study was a survival exercise for me more than anything else, but it was not about surviving academic rigor or living on my own – it was about surviving myself. I am sure that the previous sentence could use some expounding on the why(s) and how(s) and to what extent(s), but I am not yet confident enough in humanistic interpretations of context and validity.

I spent my time at UD indirectly pursuing a degree in English, not because I wanted to be an English major, but because it was an area where I excelled and could exploit as a fallback during my exploratory attempt toward my identity through some motley and ill-structured course enrollments that more resembled one's process of ordering off of a restaurant menu in a foreign language. My erratic course enrollments, spanning from wildlife conservation to metaphysics, were exacerbated by half-assed advisements regarding programs of study – as can be assumed, my academic advisor soon filled the role of the absentee military recruiter.

Further complicating my undergraduate experience were overzealous financial advisements by personnel who had no idea of my socioeconomic context, my lack of financial literacy, and consequently the long-term implications of their suggestions, which included graduating with debt even though my scholarship could have been enough to see my experience through to the end. I had no one to pick up the tab for me, no fallback if I got in over my head. I know that they couldn't have really known those things at the time, but I wish they had. I was navigating these things on my own, piecemealing decisions on intuition and gut-instincts that were salt-dashed with some logic here and there.

This has pretty much been the modus operandi throughout my life. Feeling like a part which does not fit, regardless of how I attempt to realign myself within this temporal grid, along the way seeking guidance yet feeling more confused about my positionality rather than stabilized. Some would say that I am simply engaged in rationalizing the balance of time – making sense of my previous actions or thoughts, and using them to develop new ones. But that feels too linear of an encapsulation. For one, I am not intuitively processing such occurrences in a linear way; rather, it is a mosaic of details that seem to intersect --

Temporal & Temperamental Intersections, Adolescently-structured:

“...I skipped from that banquet to a night outside of a college...a lot more brick & mortar than I am used to, possessing this quiet, crisp autumn romance fueling the taste buds of the moonlight...an American university of brick and stone and suburban pretense, pretty pink purple skirtings of cotton candy and broken spindles to the point where white picket fences are as shallow as the conventions of their congregation at Newport...another fly...not so subtle...to some location where accent and dialect converge....” aund to yer ruight I see the baises for sll of the huamanutarius lifeforms of lifetime tragedy...the ones to whom you owe yeour wealth and wellbeing”...a voice guiding my tour, not making sense in a sense, but the sense is in a sense the sense of my senseless pseudo-intellect, lifting a cell to work on the necessities of an answer but never arriving...instead choosing to fly from one continent to another in a dream world from a prestigious brick college to a coral world of lust and wanton...I try to leave, at first floating on the crusty glossy glazed coral atmosphere, towards the reciprocation of an instinctive façade...something that every young boy was afraid of...something that they wanted wholeheartedly to rebel against but had no inclination of...for some things are better left uncorrelated, unreciprocated and disseminated...the point is, for a boy of such an uneducated and ignorant year, an eventual epiphanic experience in a circulative manner was nonetheless undesired...a mark was to have been precipitated by the boy, not the man...not in his bluish grayish room with particle-board doors and one-solemn window overlooking his bed, providing him only with a view of a lonesome willow which blocked the rest of a stark neighborhood, condescending the very energy of his existence...”

(creative writing class, 2008)

That passage was submitted as part of a larger text. It was based on excerpts from a dream journal that I kept during the semester when I took creative writing. The more I wrote in that journal, the more vivid my recollections of dreams became. When I read that excerpt, it is

clear to me that there are instances of insecurity and confusion regarding my positionality in the world. I didn't feel like I deserved to belong in an academic context, and I was playing with the idea of defaulting to criticizing the setting rather than working on my perceptions of how and why I might find contentedness with how I was positioned. The broader theme of positionality, here, is more spatial in nature than anything else. It is not something that has truly transformed over time so much as shifted to a new iteration (space). The excerpt is more reflective of my undergraduate adolescence, but it should become apparent that I still wonder about the same spatial issues in my occupational setting, and it leads me to wonder if *adolescence as an educator is equal to or less than the confluence of emotionality and mandated decisions...*

Occupational Chaos and the Bathwater Paradox.

Struggle Abound. Fast-forward to the year, 2018. I have been a teacher for 5 or 6 years. For the most part, those first few years passed with this fluidity. I was fueled by *something* - perhaps it was youthful resilience, perhaps it was communicated occupational praises, perhaps it was a combination of those factors – yet, it did not remain that way. The fluidity eventually drained.

“We are not wanting to throw the baby out with the bathwater...” These 12 words, when I heard them for the first time, catalyzed a pit in my stomach. By the third time I heard them, I felt enraged, emotional, and defensive. I heard it repeated multiple times within a 30 minute span, in a setting that would inevitably change the course of my life in ways which undulated like a soundwave, yet I was bouncing between frequencies which were concerned with positivity and negativity. The words were heard during a district-wide professional development session - expressed by administrators who had just informed every English/Language Arts teacher in the district that hundreds of thousands of dollars' worth of curriculum was to be diluted, dismantled,

or disregarded. That day occurred 1 year prior to my enrollment at KSU, yet it is one which I will continue to remember in vivid detail, right down to tones, inflections, and gestures. The details are actually quite easy to recall, for (in many ways) it became the last day in our district where dissent was vocalized in such a large forum. Out of those ELA teachers, I was the vocal dissenter. I remember the shakiness of my voice, and how that shakiness quickly diminished as emotion fueled my words - I was speaking from the heart. I even received overwhelming applause from my ELA colleagues (I just felt chills writing and recalling that). It was an applause that felt like an expression of solidarity. Things like that do not seem to happen much anymore, at least at our PD sessions.

As I sat through that PD session, which seemed drab in delivery and equally misinformed in scientific research (Apple, 2004, p. xii), I realized that the largely test-driven environment where I worked was losing its grasp on the true nature of knowledge, in relation to processing and applying knowledge and its constructs. In part, I believe this is due to the more easily attained performance indicators which are pursued - superficial coverage of content are preoccupying the focus of curriculum, while deep/analytical approaches are omitted in praise of hasty pacing and prescriptive approach (Darling-Hammond, 2010).

Shortly thereafter, I entered the doctoral program, and my initial plan of inquiry consisted of two main problems in education as well as curriculum. The first problem is how potentially innovative curricula is causally rout with systemic misalignments of a compartmentalized system with many objectives that are sectionally fulfilling. An example of this might be how efficacy goals by administrators and/or policymakers might subjectively be prioritized over core subject goals (Darling-Hammond, 2010). The second problem lies in implementing a sustainable curriculum development solution that stems from pre-existing educational practices, strategies,

and theories but does not shield itself from theoretical refinement. Sustainability is one of the most observable issues when outlining the timeline of public education.

Although the climate is shifting a bit on the efficacy of standardized assessments influencing educational practice/trends, the barriers that have been strengthened over time - through deficit mindsets that are empirically substantiated in quantified methodology - are hard ones to transcend. Many of us share settings where prescriptive approaches and deficit theory are spearheading curriculum and instruction - if we are not experiencing the trend firsthand, we are at least anecdotally aware of its presence in a similar type of setting.

As a teacher in such a setting, we essentially have limited options in terms of navigating these dynamics. For one, we might buy into the metrics-oriented approaches of diagnosing learning faults and prescribing specific strategies to satiate the problems, and we are okay with top-down curricular design. On the other hand, we might feel like something is missing in the predominantly quantified setting, thinking that the human element presents a social dynamic which is only quantifiable in a subjectively theoretical way - we can only speculate on abstract humanistic qualities such as motivation, internalization, and engagement, so we end up asking ourselves, why aren't alternative methods of measurement being explored for those aspects?

From such dispositions, there seems to be a spectrum of reaction that is comprised of a polarity of emotion and logic. To react emotionally means to hyper-focus on the causal link between pedagogy and exchanges of administrative power, abruptly-decisive policy, and nonsensical curricular transformations (e.g. score-obsessed pedagogy).

And if that is the case, we are losing the “agentic” (Biesta & Tedder, 2007, p.134) essence of our roles as educators and we may not even be aware that it is occurring. Our opportunities for asserting our presence to contribute actionable changes is becoming less likely

(2007, p.134), perhaps due to the locomotive trajectory of inhuman macro societal trends, where privatization and commoditization are valued over public or communal goodness. In this sense, we may feel like our students are being reduced to commoditized data sets, and that teachers are being diagnosed as problems to be fixed. The subset of actions then rests on our ability to either persevere with the thought of no viable solution or to leave the profession entirely.

For myself, these emotional and logical constructs constitute the internal struggle that I have experienced over the past few years, primarily after the publicized test scores within my state led to critical and controversial decisions on instruction. I did decide to weather the storm, and while the storm is still raging, I have realized some things. I realized that emotional, reactive responses had done nothing more than promote the narrative of the dissenting alarmist. Although I had done nothing which would have compromised my job security, by vocalizing my concerns and disagreements, it was promoting the perception that I would be reprimanded (stems from a strong-standing underlying notion in our district that dissent is pursued with vindictive fashion). This inevitably isolated me from my colleagues - I had become non-verbally labeled as parasitic. Although the sudden shifts in the trajectory of my daily classroom were enraging to say the least, I could not hold resentment toward my fellow educators or entertain daydreams of sustaining some single-handed grassroots insurgency coup to overthrow my administrators. On some level, I had to accept that there are perceptions which are incredibly stable due to how they are subconsciously ingrained rather than ethically universal.

Conversely, to take a wholly practical reaction means to possibly accept the particular data-oriented narrative that has been expressed to us. The implications of that includes the prospects that we might have to either accept being labeled as an ineffective educator, thereby work harder to conform to the expectations as they are provided, or (once again) we leave the

profession in order to take charge of our identity. At the very least, we may become unconsciously aware that our voices seem to be less resonate from school year to school year. When I was once labeled in this parasitic way as some alarmist to be avoided, at least the label insinuated that I vocalize things. Fast forward to this year, and that voice has diminished to a whisper, and I am consciously hypersensitive about it.

Upon one hand it is a confidence issue, and upon another limb, it is something else...*And so was his life at the congregation at Newport, where autumn and spring held the limelight of one's attention, similar to the way an elderly woman encounters the benevolence of youth grinning condescendingly at her opposite the walkway just before the red hand changes to the little green man in mid-stride. Where the neighborhood paths toward school always seemed to detour towards the Hagelraven community baseball field, taking a left down Cowbench road until the first stop sign, until another small detour emerges by going right towards Merrimam lane.. This was indeed a place where the soulless congregated, the veil of suburban pretense an intoxicating ambience. Where 1.2 cars were owned, parents cried together once a week in couples' therapy but held hands walking into Sunday's sermon...where the young ones were pyromaniacs and trendsetters, and where waffle sandwiches mashed three strips of thick bacon, not too crispy not to soggy, and two fried eggs, perfectly accompanied by a glass of squeezed orange juice like frizzled leeks to a lambchop at suppertime..." (creative writing, 2008)*

Perhaps the *something else* lies in an adolescent-like observation of stability as a smokescreen. At times, livelihood appears to be categorized into these neatly arranged compartments that are seemingly aesthetic in nature. It feels like this is a great issue of the adolescent mind, struggling with the order of things, why they are and if they should be what they are. In this sense, rebellion seems like a natural response - our attempt to generate a little bit of chaos so that we can prepare ourselves with the process of reconciliation between our identity and the *a priori* sense of reality.

While discussing the fallibility in Edward Thorndike's quest for psychological empiricism, Kendler (2000) aims at philosophical and logical attributes that, when considered,

illuminate the inherent subjectivity that lies within *a priori* facades of objective empirical gains. By first inviting Isaiah Berhin's (1958) philosophical conjecture on the issues with moral truths and rooting empirical evidence, Kendler then shifts to the fallacy of conjuncting humanistic elements with empiricism, stating "...the possibility of conflict-and of tragedy-can never be wholly eliminated from human life, either personal or social. The necessity of choosing between absolute claims is then an inescapable characteristic of the human condition" (Berhin, 1958, p. 34, quoted in Kendler, 2000, p.344). Considering Kendler's stance on the inevitability of adhering to absolute claims, it becomes clear that the foundation of Kendler's perspective lies in the logical dissection of empirical truth, as he mentions how Thorndike applied "naturalistic fallacy" (Kendler, 2000, p.343) while aiming towards a convergence of morality and empirical evidence.

Kendler extends his reasoning to theoretically attribute the notions of causations and refutations as innate processes in human thought. He infuses the pluralist framework here as a context for inviting such debating to occur, yet also posits that those debatable aspects are beholden to a moral system which is in turn beholden to a contextual mode of ethics. One may conclude that he is preoccupied with the question of the democratic educational model and what it entails, including its philosophical, ethical, and empirical implications.

I share some of those same viewpoints when it comes to juggling multiple perspectives of reality within a grid. One has to consider the implications of a perceivably causal pathway of decisions and interactions. However, I do not feel like this is the case when I am presented with curriculum that is overwhelmingly void of democratic efforts. In those situations, I feel like I have been slighted or even stripped of some level of power, and perhaps I may even find myself a bit less confident than I previously was.

It has taken me much longer than the textbook timeline of cognitive development to mature beyond the turbulence of adolescence, and yet it might be said that with maturity emerges the prototype of operating meta-consciously within a grid, if only to account for notions of competence in a scalable way. It scares me to think of being too confident in feelings of insight, capacity, and perception - where do confidence and egoism clash? Holding oneself accountable is an empowering virtue to practice – and, while it can aid in holding others accountable, it can also lead to an overbearing illusion of realized, generalized, or actualized outcomes.

This thing is amounting to the antithesis of compartmentalized approaches – a product of connections.

The Black Boxes: Chaotic Processors

Thus, some of my narrative must reflect on my inclination for finding connections abound while situated in a context if it is to contend with how I will inevitably process my research and study. This has proven to be my gift and curse as it has caused people to see me as analytical to a fault, unable to accept things for what they are at a more superficial level. I cannot disagree with such accusations, yet I sometimes wish that those individuals would delve a bit further into the topic of me and why I am this way. At minimum, I wish those individuals thought more extensively about topics beyond their rudimentary functions, but now I am being circumlocutory and presumptuous so I will refrain from furthering that tangent.

If one were to ask why I am so analytical, I would respond by sharing that this type of cognitive processing is something which was conditioned by a seemingly infinite series of self-analyses. It feels like a choral eternity when thinking about how one might compound the time spent in front of a mirror, trying to manipulate features so that some sculpture of superficial acceptance might be achieved. For me, such processes adolescently led to disheveling my hair

and clothing by convincing myself that I did not deserve to look acceptable. Yet, it was still a calculated process of disheveling: I was never able to commit too far one way or the other. One way is the path paved by Narcissus, while the other way is the path of the gargoyle.

Social situations are the worst catalyst for this type of superficial obsession. How might I portray myself on this particular evening? Do I feel up to receiving vocal compliments, or would I prefer to be gazed upon from afar? Or, shall I downplay such needs for attention by dressing and looking as plainly ordinary as possible? The plight of the doll...

My mother and father were dolls as well, but for varied reasons I think. My mother, a beautiful woman, defaulting to her beauty as a means for coping with the ugliness of the world and the thrust struggle that coincides with it; my father, a handsome man seeking to temporarily hold at bay the underwhelming reality of his failure to succeed in anything other than socializing. I am somewhere in between both of those realities. In those experiences where superficial gains constituted the bulk of my parent's attention, there was not much room for me to be seen or heard.

When my superficiality was set aside, the game would be wholehearted concentration and deconstruction of my inner self. Nothing was sacrosanct, and anything was to be attacked - my emotions, my notions, my desires, as well as my needs. And just as in my outer musings, all of these factors could be inevitably disheveled into a pitiful product of self-sabotage. This was the see-saw of "I deserve" and "I don't deserve". And those processes were encompassed by a vastness that is still overwhelming, where curiosity and connections are amplified, and where brooding is fueled. In a home where reality shifted between the curiosities felt by paternal absenteeism and abuse laden paternal presence, there was much room for brooding to occur.

A lot of my internal struggles are due to how much of my identity was shaped by a feeling that I needed to present a model of myself that was acceptable in the perceptions of others. In a way, my identity was bound by what I presumed as how others saw me and thought about me. It is a completely irrational way to operate on a daily basis if only for the fact that I was solely dependent on my intuition to guide such a modality, and in that context my intuition was flawed. It was primed for a negative, self-deprecating modality which feels stylistically adolescent.

In conceptualizing perception, we can think of neural mechanisms, which, when coded according to an input-output-outcome logical model (Shakman, 2015), shows that the cognitive nature of our social replications reflect a neuroplastic-like amalgam of processing that is both intuitive and logical in scope. Essentially, this mechanism (Kameda & Hastie, 2015) reflects intuitive and conscious factors that influence cognition.

Kameda and Hastie (2015) conceptualize three components here – *emotional contagion*, *facial mimicry*, and *mirror neurons*. This implies that the interplay of such components reflects just how much of this mechanism is deliberate [conscious], demonstrating that intuition, in this sense, only functions to internalize experiential factors that lead to receptivity within a social setting. Here I am discussing interpersonal dynamics of myself navigating external social factors – functioning as a doll within a world of veiled dolls.

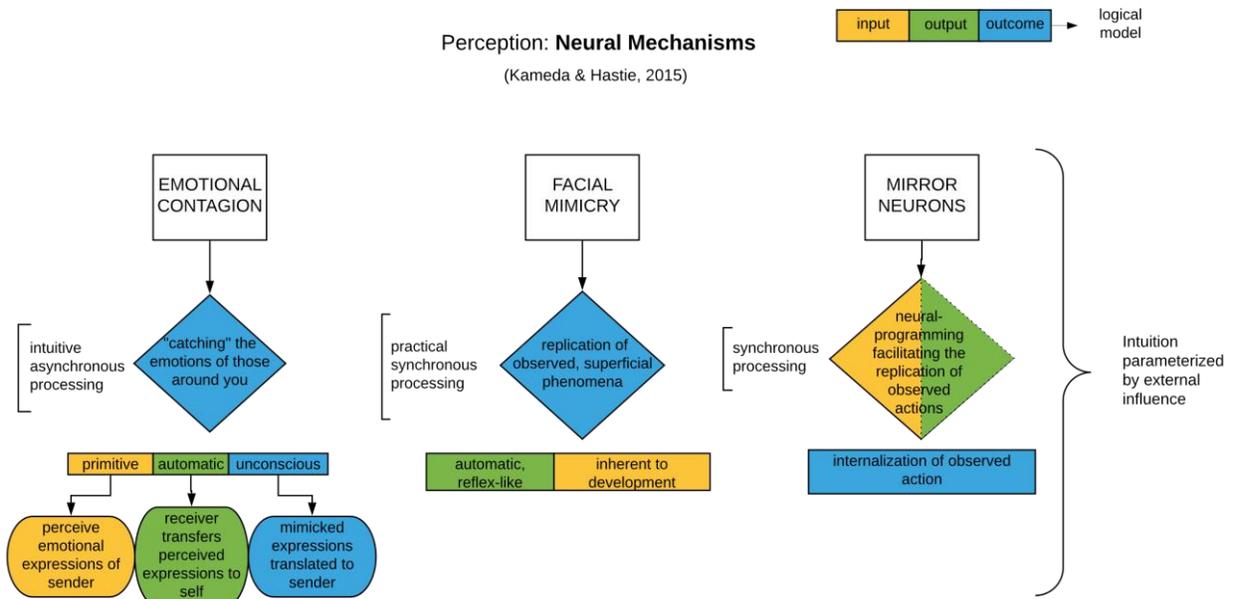


Figure 10. How Logical Models and Intuition begins to intersect.

I have come to terms with my analytical mindset, in the sense that it is something which can be honed should I choose to attempt conscious refinement. I see most of myself as a construct with organic physical limitations, but seeing my consciousness-derived identity is a messy process with potentials that I have yet to perceive - and probably never will.

There are aspects of our existence which contend with our consciousness, things which are so complex that modern science is quite transparent with the challenges of studying ourselves. Why do we think, act, or feel *this* way in *this* situation? And are we sure that our responses are replicable and, for that matter, actually replicated? I am surprised when my smartphone feeds me a breaking story on a newly charted island or a found species, and I am less surprised when it is expressed how much we still do not know about our brains. It is quite the black box, as some have put it.

Temple Grandin (2006) provides us with a unique anecdote that includes Dr. Skinner and the neural "black box" (2006, p.10). After her brief recounting of his attempt to grope her, she

recalls that she expressed a desire to learn “how the brain works,” to which he replied “We don’t need to learn about the brain, we have operant conditioning.” Grandin also briefly discusses that Dr. Skinner’s stroke later caused him to reconsider his stance on the neural black box, yet she also proposes that the psychological community, while positivist oriented in its measures of environmental stimuli, was a paramount influence on the realm of human cognition.

Okay, so the black box is something which we know is important, and there are dissonant opinions regarding the nature of that importance. What a fucking surprise. Apple (2004, p.25) describes the black box construct in an educational setting as the effects between the concrete experiences of the setting (inside the box) with macro societal expectations. For him, a setting’s reality becomes less influential as the particular “social construction” is endeavored. I think that this hints toward the antithetical essence of transparency in contexts where it is superficially touted. Transparency is something that officials and administrators enjoy discussing and implementing to some degree, but brass tacks always lay within reach.

To me, the black box exists necessarily in tandem with a potential outcome for its deconstruction, regardless of however improbable that outcome might be. The black box is, like anything else, enabled by the perception of its role. Is it something which is to be gazed upon, or is it something which is to be deconstructed regardless of its overwhelming or underwhelming reality?

Some would posit that we might be better off leaving it closed and pedestaled, in the case that its contents reveal some undesirable catalyzing reminiscent of Schrodinger's Cat. I think that the pure positivist might agree with that course of action. But it does not sit well with me, and I am a positivist to some degree (Lee, 2020).

Positivism has deep roots sunken into how we utilize and discuss anything related to cognitive science - an amalgam of clinical imaging and observations, metaphysical logic, and discourse and conclusions stemming from scientific, medical, and social experimental contexts. This is a great strength for the advocacy of cognitive sciences due to how hard it is to counter their applicability and credibility. Most refutations to the applicability of neuroscience (at least in an educational context) rely on the genetic logical fallacy that the observed neurological nuances - which led to generalized understanding of cognition - are too esoteric to be applied to the classroom. Further, such refutations assume that one has to become privy to all aspects of neuroscience in order to consciously apply it to a school setting. This is where such an argument is most able to be refuted: Just as the brain is a constantly-developing mass, clinical imaging is the only concrete way that we are currently able to have a real-time estimate of how, when, and where brain functionality occurs - thus, theoretical relevance has to play a significant part in the application of what we understand to be necessary for growth in a particular context.

In essence, the direct causal linkage between the general function of the brain and the actions and thoughts in a particular educational setting should not rely solely on methods such as nuanced brain imaging to guide its success so much as a theoretical foundation that is derived from such nuances. It would not make ethical, logical, or pedagogical sense for a teacher to dictate the focus of a particular lesson, or to justify its efficacy, as an attempt to pinpoint the synaptic firing of neurons in a specific area of the brain, or to say that they are strengthening the amygdala of students during a particular unit, largely due to the fact that the teacher would have no way of measuring whether or not causal influence had occurred at the neurobiological level. Just as the organic processes of the brain drive inquiry in neuroscientific studies, medicinal and surgical treatments, and behavioral interventions, an organic learning setting is inevitably linked

to how we think, process, and behave. This is where the need for a trans-disciplinary instructional framework is best established as it provides a gateway for educators to utilize the sacrosanct principles of humanity in order to facilitate a transcendent educational setting.

By way of neuroplasticity, the realm of neuroscience has provided a stepping stone for shared neuroeducational rhetoric to take shape, for networked neurobiological regions and experiential associations with cognition facilitate a mode of generalizability that was initially unfounded (Carrasco, Serrano, & Garcia, 2014). The setting that heeds this critical stepping stone will undoubtedly reap its benefits. Accordingly, the classroom that possesses a transformative culture sets the foundation for observable gains to be cultivated, but it is merely one part of a learning mechanism. If all participants within such a mechanism were to share a transformative culture, it is logical to hypothesize that a positivist model would emerge with quantitative and qualitative implications.

So, *possibly*, the key to the black box lies in how we maintain our social grids which likely include multiple disciplines, and with each of them comes tailored approaches to understanding our reality and ourselves. Can we truly understand one another according to context, or should we aim broader towards innate biological predispositions for communal outcomes?

As a child, I sat on couches surrounded by family who represented one half of the color blend that I wore. The questions I grappled with in such settings were mine to consider and answer and not things which I want for someone of any anthropological variable to consider and answer, less it be a version of myself in some form or fashion. As such, I cannot fault others for failing to understand me, if I am to refrain from pedestalling empathy. Indifference, however, is another issue – I want people to want to understand me, and that - if nothing else - is an

indication that someone who wants to understand me is someone who on a positive level cares about me, on a neutral level sees me as an equal, or on a negative level sees me as someone to be manipulated. For each of those factors, at least there might be some perceivable transparency barring any unforeseen factors of sociopathy.

This is all to concede that I am a bit of a black box just as all humans are. However, I like to think that I graze the cover of that box in productive ways, at the very least. Grazing that *black box* cover usually results in an amalgamation of abstract connections, intuitive notions, interdisciplinary topics, and theoretical potentials with dreams of boundless, undulating fluidity while exploring the intersections of things.

If the previous sentence feels superfluous and naive, there's a reason for that. I think I have no choice but to concede that romanticism plays a part in my work. I often feel like my positionality within the educational context is metaphorically akin to an entrenched soldier trying to carve out of the wall some little nook where I might find room to recoup and unclasp grips on boundaries - of which I hold a limited understanding for both their proximity and their depths - knowing that at any moment some type of battle will ensue - a battle with a mandate, a battle with a person, a battle within myself. Outside of the nook and always with tightly-laced boots, I am either practicing my chin-ups or progressing to take my swings while I make my rounds and increasingly move away from that space.

Once the nook has been carved, my universe is upended - I am the barefooted child with a feeling of purpose and notions of acceptance. Time has provided a space for me in a way that ironically cultivates a sense of fellowship. I then find myself on a playground of idea troves, weaving my swings, rounds, and chin-ups into a sort of exploratory exuberance that momentarily

rivals notions of superficiality and flightiness, and where consequence of injury is not really considered.

Of the playground memories that I recall from my childhood, I could code them in the same fashions that were contrived during this project, but I can assume that trust would be most reflected in the data and “jazz soloist” (Gershon, 2017) would be minimally reflected. At the forefront of these memories are first kisses, first friendships, and first conceptions of centrifugal forces - all of them are ultimately linked with injury.

The Barely-Emergent Adult

I like to tell people that it took me until my doctoral studies to get the college experience right – which is ironic considering that I am in a non-traditional, distance-platformed doctoral program. However, it is the truth. If my undergraduate study was an emotional and intuitive composite of a childhood goal and self-actualization, graduate school - for my Master’s degree – was an attempt to induce pragmatism within my reality. I had very little set up in relation to job prospects, so I assumed that the next best step would be to continue with the realm of financial servitude and add another degree to increase my prospects. In accordance with this pragmatic train of thought that I perceived, I decided upon a degree in Secondary Education.

Rather than some new-found epiphany for impacting the educational sector, the pragmatism of my enrollment for that degree was completely attributable to my desire to maintain an academic school year schedule – in other words, I wanted to keep my summers and extended holiday breaks. To this day, I have no qualm with admitting that to my students because it is the truth, and just as true is the realization that I deeply care about the profession as well as the depth of my contributions. In addition to that realization, I have also felt “the chills”

on a daily basis, and that is something that I have a hard time imagining as an effect in one of the alternate pathways I might have taken.

Before we really get things rolling here, I would like to mention that I understand why the concept of the doctoral trajectory is a foreign one to many people. I am seeking an Ed.D, and most often I end up letting people assume that it is a PhD. It gets tiring trying to respond to “Well, what is the difference?” Nothing, really, I guess. “Should we call you Dr. Lynch after you attain it?” Call me what you like, I guess.

What’s even more difficult than explaining my doctoral pursuance is explaining my dissertation. “Um, yes, it’s actually interesting, I think – it is an autoethnographic – um, think like a memoir, kind of – exploration of how theory is constructed – um, think of this as how we design ways of thinking about other things and then using them as starting points so that we can develop further study on other things – emphasizing ways to account for intuitive cognitive processing – um, think of this as the current state of “Oooo, look, a squirrel!” that you are experiencing as I attempt to explain this to you – through trans-disciplinary efforts – um, think, eh, what’s the use...

I experienced a breakthrough, though, and had finally succeeded in helping someone close to me understand my dissertation work. We’ll refer to him as *Pseudonym*. It was just the other night, a few days before Christmas, during a confluence of fortunate and unfortunate experiences where some good conversation was generated. *Pseudonym* and I typically engage in some good discussions – I credit him with being a key figure on a short list of individuals who have made me feel like a competent and capable adult while I engage in conversing as opposed to feeling any of the *insert-negatively-connotative-word-here* types of qualities that I may have thought while growing up.

Anyway, during this conversation Pseudonym was in a really good mood while proceeding to tell me about an article he read regarding a generous donation to higher education institutions which were categorically “lower ranked” – you know, institutions associated with students of color, that type of stuff. We then discussed a number of other things which led to him making a few notable references to individuals who essentially have upended particular system constructs, making decisions that all but rebranded them as well as their systems, employing decisions which might be seen as innovative, outside-the-box thinking [There were more direct references made than how I am conveying them here, but I did not have a chance to do further research on them, so for now just take my word on it as a topic of informal discussion]. Then, after a few more conversational exchanges, he mentioned something that still resonates with me – “the chills”. Not feverish chills, but the good kind – frisson was what we were mentioning. I told him that frisson is one of the major topics in my dissertation due to my thinking that it can be related to how we intuitively interact with the world and its beauty.

When I tell my friends that I feel frisson (Honda et al., 2020) on a daily basis while facilitating in my classroom, the statement is often met with the range of sterile superlatives that one would expect when hearing about something great yet not mutually experienced. Garner’s (2016) text, *Modern English Usage*, defines *frisson* as a Gallicism [French origin] which refers to “a shiver of excitement or emotion” (p. 413). I will eventually go into more detail with this concept, but for now just think of it as those comforting chills that seemingly come from nowhere.

That word, frisson, was expressed to me by a friend of mine not too long ago. Prior to that, I had never heard of the term – I only knew it as a sensation of chills. People often will sonically associate the term as we might feel it while listening to a great song or a soothing blend

of frequencies. What was surprising to me in this discussion was that my friend had never really felt it – or at least never that he recalled. It was surprising because he loves music – he listens to it daily and in saturating doses. It is on throughout the day while he works, and it is still on when he is unwinding from work. How can he have never felt frisson?!

In actuality, it may not be a universally felt sensation, although I had assumed that it was. I think that this assumption was due to how often I experience it. The more I think about the term, the more I realize how much it governs my consciousness and my actions. I binge on it – if I find a song that I causally link with frisson, I repeatedly play the song until I no longer feel it – I am literally listening to a song on repeat right now as I work on this paper, and after hours of hearing it I am still feeling the sensation. I also consider myself a musician by hobby, and I employ the same methods to the music that I compose, which is probably why people can only take my performances in small doses.

Considering the implications of the frisson-binging tendency has led me to perceive just how necessary it is for me to remain cognizant of what my conduct should *not* be within the classroom context. When I feel frisson in the classroom, I see it as a beacon of sorts, almost as if my intuition is being heightened to a state that is aiding in how I facilitate a lesson. I get the sensation at various points – it could be a lesson activity that I am trying for the first time or it could be an epiphany that has been expressed either individually or collectively – but it is not something that I can necessarily exploit. I think that this is comparable to what Waks (2006) describes as the “zestful, ‘feels good’ quality that contributes directly to the value of life” (p.384) which is also associated with intuition.

These moments are more delicate than the sonically induced moments of frisson. Audio is essentially an artificial construct, where we manipulate sounds and devices to either audibly

convey something or to experience it. By contrast, I see pedagogically-linked frisson as an organic social byproduct which depends on variables of confluence. This holds ethical and moral implications that cannot be ignored. I owe it to my students as well as the profession to not binge on frisson but instead consider it as an integral thread within a pedagogical fabric that is humbling in its complexity.

When it comes to an educator's responsibilities, many would probably view the navigation of frisson as neither a trial nor tribulation but as experiential moments that should be cherished. I can understand that – but I would counter it by mentioning that such experiences can be viewed as challenges once we start to perceive them as things which may be sustained, applicable, and perhaps even transcendent in useability.

Among all of the challenges of the education realm, perhaps the one I struggle with the most is fostering feelings of resentment due to a presumed absence of humility. I am guilty of categorizing the contributions of some colleagues as models of incompetence while also practicing hubris in my own work - for me to cast judgement on someone because I think they are not as humble as they should be I think would be a misstep toward hypocrisy. Yet I still struggle with such inclinations. From time to time, I catch myself with a mindset which convolutes the boundaries of confidence and elitism, and that's when I know I have to wrangle in the ego and start the real work. Admittedly, criticizing oneself is hard work, and I have had a lot of practice; however, I cannot ignore the notion that self-deprecation might also intersect with the mechanisms of self-defense and self-preservation.

An immediate struggle for me is the inclination to dismantle the essence of this writing. I feel like a pendulum of dichotomy as I read over the words, shifting from moments where I feel okay with what I am producing to instances of shame. Fear is in there as well – it permeates the

scope of the pendulum. I have to keep fighting that inclination. There are troves of balances within this work which are providing me with a glimpse into the who, why, and how that are within my identity and my decisions, and I need to let go of some control here in the chance that this work is the closest that I ever get to a portrait of myself as an educator and a learner.

The alternative, as I see it, is to perpetuate the implications of the compliant, programmatic educator which are found in data-driven mindsets – and for me, those types of perpetuations are making it all too clear that a potentially viable solution might emerge from exploring the role of frameworks in curriculum development as well as in constructs of research and study – if it is designed right, and if it is executed properly, perhaps it may transcend other factors within an educational contexts. But how do we achieve that?

Although broad framework design may seem a bit superficial in the sense that it is abstract in design, the complexities involved with such design should not be discounted. I believe that a trans-disciplinary approach should be endeavored in such efforts in order for abstractions (axioms) to hold valid transferability in a broad way (Beauchamp & Beauchamp, 2013; Shenton & Hay-Gibson, 2011). Thus, it places emphasis on the methods of theoretical construction being as equally complex as the more practical, *a posteriori* models of generalizability.

Frameworks are essentially abstract constructs which are occasionally precipitated by practical outputs. I use the word, *occasionally*, for reasons that are self-serving. I have constructed many more frameworks than I have actually applied within a context, whether it be in the classroom or in my personal daily life, so I am intuitively assuming that most others have also constructed or co-constructed more frameworks than what are functionally employed. Admittedly, I think that I enjoy the process of constructing frameworks more than I like using them, and I believe this is due to the theoretical potential that is created by harnessing conceptual

relationships. I'll come back to this [i.e. Vol. II] after I have elaborated a bit more on some other things. I hope you do not get tired of hearing my voice in your head.

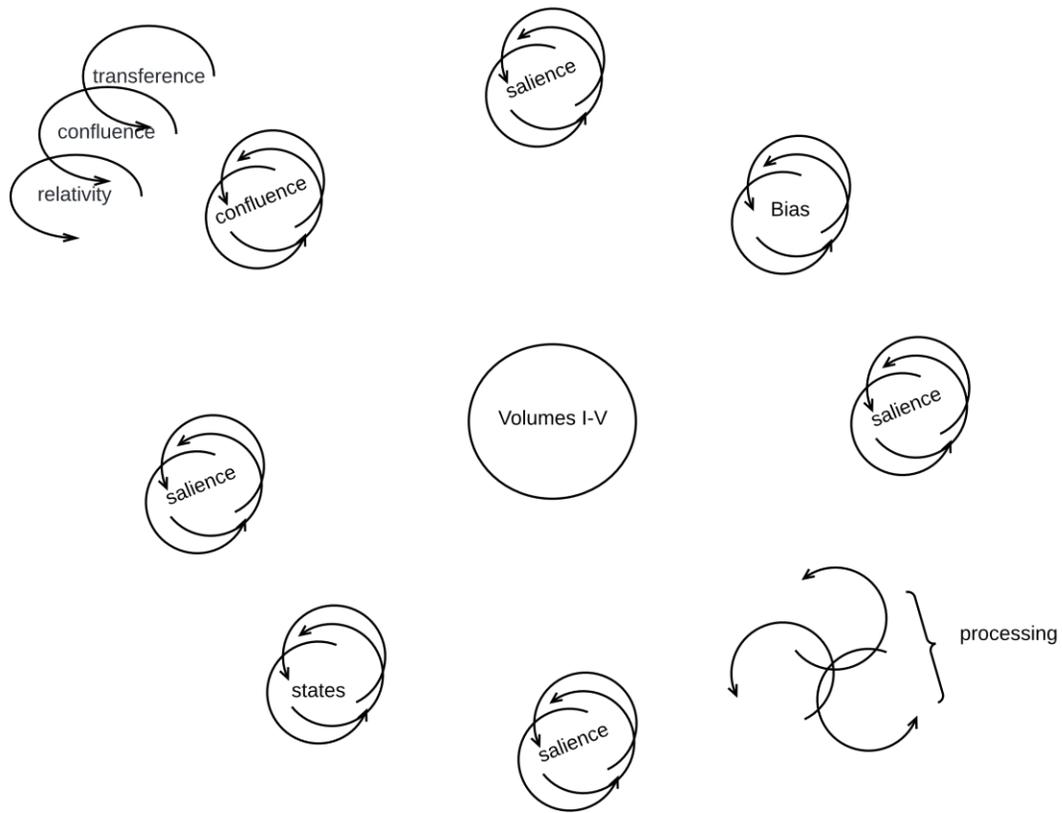


Figure 11. Volume Alignments.

This visual aligns with the 5 volumes of this “lil’ book report project”, as my friend, *Pseudonymie*, called it. It is a gridmap of the concepts which I believe are present in an organically conscious system. There’s a lot for me to cover there, and I try my best to do so throughout the volumes, but I am finding myself feeling like I keep coming back to the beginning of this thing and adding little tidbits of things that you may or may not need to help guide you through this. I guess, just take my word for some things so that we can keep it moving along?

I think that we can dissolve, or at least analogously map, our internal and external experiences and occurrences by associating inputs, outputs, and outcomes; however, it admittedly is a more broad way of mapping such things. It also assumes that some intuitive judgements will be made regarding the functionality of actions, objects, impressions, and expressions while coding or mapping in a way that is akin to a rudimentary logical model.

However, I think that this also provides us with an opportunity to leave the door open for nonlinear interactions of these factors and variables. This is where the *grid* term begins to function. The logical pathway does not have to move from inputs to outcomes – there are many other ways that they can interact – we can call those *processing*. And we can call the context of a grid its *states*, which comes from the external and internal nuances which have spatial-temporally manifested for this grid to exist. *Bias* is referenced in relation to those factors and variables which may or may not hold experiential relevance to us, our *a priori* knowledge, which intuitively will influence the functionality of those factors or variables within this grid.

Confluence is a term which I use to bridge notions of *transference* and *relativity*, and we might think of them as theoretical gauges that we intuitively apply to a grid regardless of whether we are consciously perceiving our contribution or position among the other grid points. All of these things may be present, but the true importance, for me and for this lil' book report, is in those in-between areas of *saliency*. These are the entropic interactions among the aforementioned concepts, and in relation to this narrative, they are seen in synonymous phrasings and words that connect across disciplines, analogies and anecdotes which hold temporal relevance to alternative grids, and the existential and ontological essences of those things which we think we understand as well as those things which we haven't begun trying to understand.

This is a good point to mention that I am challenging those modalities while promoting a notion of what we might mean by having a “working knowledge”, or a “working understanding” of *some things*. If we use phrases like that, we might not be aware that we are subscribing to theoretical notions, and ultimately we are more depending on abstract axioms to help us interact among our grids. It is intuitive, and it is beautiful, if we let ourselves see it that way.

Cue the buzzy word – it’s layered. It is a work on intuition that is largely intuitively driven. On one level, I am documenting and reflecting on my journey of functionality – what connects, what might work - on another level, I am mapping the concepts which I think are necessary for conceptualizing, axiomatizing, intuition – this layer, as you will see, gets me into a whole bunch of shit. Sometimes I feel like I’m someone who completely fabricated a resume and somehow got the job as a certified mechanic, and now I’m just walking my dumb ass around, opening up drawers and looking intrigued by some sockets, and never really earning the grease on my hands. Other times, I really get going with some shit, making connections, forming some productive conceptual mappings, and actually developing something functional, at minimum something worth further exploring, and at best something in which I truly believe – at least, for a while. And this is incredibly reflective of where I currently am in this stage of my studies – this adolescent state where I seek to dream and others be damned if they get in the way of my dreaming. There’s plenty of time for me to realize just how wrong I currently am, so let me dream, please?

Intuition is a state which I believe is indicative of the most complex processing that we can surmise. It is organic consciousness at its finest, or its shittiest, but that is the case with things which can be transferred and honed. This is how we get to delineating something which is

reasonable from something which is unreasonably “foolish” (Waks, 2006, p.382) so that we might see the process of teaching as essentially a form of learning that is crafted by mediations.

In order to create this grid, I need to consider what is meant by consciousness as well as the abstract and concrete factors in life. Also, how we reason. And, how we conclude. *Annnd*, how we innovate, explore, and discover. Oh yeah, and also how we connect things. Fuck, I am spent already. But I at least need to try to convey the complexity and the insurmountable essence of all of this in order to find a functional way to develop a “working knowledge” of it, or even to understand what is meant by a “working knowledge”. It is by such means that we hopefully end up realizing the final intuitive layer, which is to perceive that we are able to transcend the bullshit which inundates how, why, with whom and by whom we learn by realizing our individual importance among the gridpoints. Sure, most would agree that humans are important, but how often in our lives are we plagued by insecurities while we seek comfort in sacrifice of struggle?

Death & Transcendence



Figure 12. Leo!

Marigold Confetti.

My dog, Leo, a white shepherd, unexpectedly died during the time that I have been working on this dissertation. It was gut-wrenching – I can't remember crying about anything for as long as I did those following days. The day after he died, my wife and I meandered through our parental responsibilities in this sort of flux – on and off of the couch, into and out of the kitchen, grabbing and trashing tissues. This went on for hours. Eventually, we decided to take the children out to our patio to get some fresh air – and to get away from all of the reminders. There were flowers out there, varieties of yellow, orange, and red marigolds, which surprisingly were still alive – as you will later see, that is a rare feat in this home. My daughter started plucking some of them and breaking the blooms up into these little bits of what she referred to as “confetti”. Eventually, she had a pile of confetti, and she proceeded to dump the entire pile of it over my head. I was covered, and I couldn't help but elicit a smile. Later that evening, my wife mentioned to me that, after we had informed our daughter that Leo had died, that she had not managed to shed a single tear. These came a bit later. My wife mentioned to her that “it's okay to cry for him, you do not need to hold it in”, to which our daughter replied, “it's okay, mommy, I don't want to cry today, I want to try and make you and daddy smile”.

Weeks later, I had this nightmare...a gore-ish presence, the exiting of the crate – approaching me, and I am only aware of the filth – I have succumbed to superficiality – cleaning the vomit rather than connecting – the crate on a sidewalk next to a tree with falling leaves and wrought iron fence – a hint of granite in my peripheral – I think I see the angle of the setting if I were to stand in front of the church next to my home, but then I also feel transported to the entryway of old college at UD in some quantum way. I squandered my last moments with him, and now he haunts my subconscious, trying to find his way back to me, and I am trying to find

my way back to him. It will be something that functions as trauma for me, and all the byproducts that come with that.

It took Leo to help me realize that it is an oxymoronic situation for us to feel alive the most just before it is taken from us. Karl Guthke (1992), in a comprehensive exploration of the culturalism of final words that are said prior to one's death, mentions the process as convergence of wisdom and poignancy for encapsulating experience which is effectually transcendent – such words representative of a journey that is shedding its corporeal parameters. Interestingly, Guthke mentions that the one's left behind – those still parameterized in a corporeal modality – are left with a sort of “quasi-religious *frisson*” (1992, p.129), which I interpret as a sensory response invoked by our desire for acquaintance with transcendence without having to experience death, where the spoken words, themselves, become products of transcendence.

Sometimes, last words are not possible, and they have to be provided by others – like an attempt at encapsulating, or perhaps simulating, the poignancies of an individual's existence. In such simulations, it requires a bit of interplay between our conceptions of space and time...

Frisson-catalyzer Artifact : Example of resonance through dense succession of recollections across multiple timelines:

On a Sunday afternoon, Rodney, my wife's grandfather, passed away due to neurological complications. His final words were voiced in the company of loved ones at University of Maryland's Shock Trauma Center with assurances of comfort and peace by the hands of his daughter's colleagues². Rodney was 85 years old.

A fervent reader and electrical engineer by trade at Aberdeen Proving Ground, Rodney was held in high esteem by friends and loved ones as an intellectual who possessed incomparable candor. His tenacious work ethic was evident in his home desk occupied by ongoing research projects and drafts, his workshop containing troves of self-designed mending tools, and his attic housing an assortment of intricate model airplanes.

² [To clarify, his daughter had held the responsibility of managing the nurses on the neurological unit of that hospital for decades.]

Rodney dutifully served his country during the Korean Conflict as a Sergeant in the United States Army. Contently residing in the town where he was born, Rodney happily dedicated mental and physical energy toward improving his local community. He was also an active and dependable member of the local Methodist Church. In even the most capacious of reflections, words prove expectedly meager when measuring the degree of his integrity.

That constitutes a major portion of the obituary that I was asked to write for Rodney, my wife's grandfather. I wrote that for his family, yet I felt frisson when they asked me to write it – one of the most concrete representations of trust that I possess. As such, it was an exercise of stylistic riffing on my part, as it was a bit more formal and out of character from what I might normally write, but the words were still from the heart. You know, context and purpose and all of that to be considered.

What sets this a part from something which I will inevitably share in the proceeding artifact is situated within how the writing process for Rodney's obituary was that I depended on multiple individuals to help me craft this brief narrative of his existence and impact. In the proceeding one, I am quite aware of my position outside of the grid more than my position within it...

Frisson-catalyzer Artifact : Example of resonance and amplification through dense succession of recollections across a timeline of upbringing:

I would like to share with you some of my thoughts on Pete, my grandfather. Many of you here probably have known or been raised by him long before I was even born, so I know there is much more to the story of Pete than I personally know. But nevertheless, I hope that my words may resonate with you in some way.

The word, "consistency", stands out when I think about where to begin with pop pop. His consistent pragmatism and candor were a source of stability in my life as well as my brother's in even our earliest memories.

He was, in some ways, the stereotypical grumpy grandfather, and I adore him for that because he was not an angry man by disposition - this was, in fact, his way of downplaying emotions - to refrain from melodrama by way of a scoff or cynical chuckle - yet, his true feelings

would often glimmer through tongue-in-cheek one-liners, hearty smiles, and by simply looking at you eye-to-eye in his own endearing way without eliciting a word.

Something he said that has stuck with me over the years: “if it looks too good to be true, it was probably bought using a credit card”. While a few of us in this room probably didn’t necessarily learn the lesson on credit cards, per se, I will try to heed the subtext of that saying:

That you have to actually work for something in order to call it your own;

That a man should be judged by the quality of his work more than the prospect of him working;

That the real, simple things in life are those which you physically feel:

The shadetree in the backyard; the freshly-waxed pick-up; watermelon cut by a steak knife on a summer day; concord grapes on the grapevine, briefly inspected and enjoyed on the spot; fiddle string plucks, guitar chords and laughter; shortly cut grass and burn barrels; heavily-creamed coffee with sweet-n-low; a clean ball-cap with a slightly-bent brim; 10 miles per hour in a 35 miles per hour stretch of road; RFD television, even if it is showing an outdated program of a mule being hooked up to a plow; telling someone they “ain’t worth their ass full of cold water.”

It is tough to think of him as a memory and not a living soul sitting in the house eager to invite conversation - I am so happy that I had the opportunity to cultivate recent memories of time he spent with my newly born child. The memories I have of him are countless, yet I will fail to effectively communicate to my daughter just how influential/important of a man Pete was to my life and the lives of you all.

Whether it was stability, sincerity, or simple conversation, he would always deliver. It is in the manifestation of those qualities that we can hope to honor his legacy of a happy and healthy family. For me it is to be a good husband and father; for you it may be different yet equally important goals, but they will honor him just the same because they will require hard work. But affecting the lives of those around us with stability or sincerity or honesty is not something that has an interest rate or can be bought on a credit card.

For all that I assume myself to be in this world, in many ways I am still just a little boy sitting shotgun, creeping along the road in pop-pop’s S10.

I love you, Pop-Pop.

I feel the sensation of frisson every time my eyes trudge through that passage that I wrote for no one else other than my grandfather and myself, but it was received with amused, averted

gazes that I can only speculate where instances of connections between those gazing and nuanced yet basic social interactions with him. Also, I was told that it was a great eulogy, so I guess I am just glad that it was received well by the family. For me, the memories serve as a condensed grid of numerous years, and in this condensed form, each of those gridpoints have been plucked out and presented with linguistic precision. Thus, the points are not experientially linear, and they need not be. I structured and re-structured the phrasings and listings of those points until they invoked frisson – I needed the freedom to play with the order of things.

I also felt the sensation the first time that I re-read the eulogy in front of a class of 12th graders. A classroom of cosmopolitan *Holden*'s, disillusioned, or at least feigning disillusionment in order to not stand out. I could have picked an easier class roster to attempt this pitch at vulnerability, yet that I tend to make conscious decisions against that grain – complacency really fucks with me. The outcome of that re-reading was reactive applause among the students, which synaptically reverberates like a distinct olfactory presence – spaghetti with grape jelly added, a skunk under the porch, a weathered riding saddle.

THAT WORD

Transcendence...Some Hippie Shit? Transcendence is one of those funny abstract terms that people often define through the use of abstract syntax, similarly to how happiness might be tackled. When asking someone, “What is happiness?” You receive, “*happiness* is feeling an insurmountable sensation of joy”, or “*happiness* is sharing time with loved ones,” and you’re still no closer to defining it for the hypothetical alien that visits Earth and asks you what happiness is. Previously, I mentioned that transcendent learning is observed as the products of transfer learning, but what does that *really* mean?

I have some options in this situation: I can take the role of cryptologist and attempt some cloak and dagger of really densely construed abstract terms with the hope that you will passively move on from the subject. Or, I could define it how Charles Schulz defined happiness in his children's book, *Happiness is a Warm Puppy* (1962), with a series of concrete scenarios that will hopefully resonate with you in one form or another. Schulz had it easy – of course happiness is facilitated by a warm puppy, because if it is a cold puppy it either means it is dead or it has a psychopathic owner. Or, I could simply admit that I interpret transcendence in a very abstract way so that I can leave some interpretation in the air on the chance that I will intuitively pick up on an instance where it occurs. I'm not sure yet, we will see where it goes.

I favor how Biesta (2012) conceptualizes transcendent learning, seeing it as something of a conscious and perceptual shift from a maieutic philosophy - of bringing forth innate and possibly dormant skills, outlooks, and qualities – to a transcendent one which essentially amounts to a shift in learning – on a radical, revelatory level - that especially occurs in a constructivist environment and when the perception is that students are engaged in “learning from” rather than “being taught” (2012, p.459). Also, and it doesn't necessarily help my cause here, but I really like that he cited himself on page 451 in order to use the word, ‘learnification’.

Theorizing & Eclecticism: Indeed, transcendence is a damned-tough word to pin down, but interestingly that is what also makes it complex in a conceptual way. It has a multitude of denotative and connotative implications that are spatial, choral, and temporal in nature. When someone dies, they are transcending all of those factors depending on how the process is perceived by interested parties. But what about when we are still inhabiting grids of the corporeal? Are we able to achieve transcendence, and if so, what does it require of our conceptualizations of the term?

In this scenario, abstraction becomes our friend. If we decide that we have to re-conceptualize something, we are essentially embarking on the process of theorizing, and this requires much more of our faculties than we might be prepared to employ. What resonates with me the most in Deng's (2018) analysis of the field of curriculum theorizing is the suggestion that eclecticism is a fundamental consideration if one is to succeed in taking theory to the realm of practicality, noting, "there is a need to eclectically bring to bear theoretical perspectives, theories and models – traditional, contemporary and critical – from social sciences, humanities and related discourses that can shed light on such issues and contribute to curriculum theory development" (2018, p.15).

It is clear to me that Deng was suggesting that theorizing is an area which requires some introspection if it is to generate innovative contributions to curriculum. However, I think that Deng downplays the complexities that are involved in the construction of theories as well as what it actually takes to create logically sound theoretical representations. It makes me wonder how much of our practical models of analysis – our variables, factors, data, epistemology, methods, and all else – are predominately intuitive in how we choose them and choose to perceive them. Many of us are very much opposed to the prospect of an individual who arbitrarily makes decisions an adolescent way, without consideration for anticipatory or even unintended implications, yet how comfortable are we with putting the lens on ourselves while we embark on our own contributions?

I felt this need throughout the program to learn all that I could about all of my theoretical tangents within the three years of this program, which is not only an impossible task, it is an approach which is just as counter-productive as well as counter-intuitive. Thus, clarity of vision is what I am currently after.

My attempt at figuring out a dream I am trying to figure out:

I recently had a dream that I am still trying to figure out. There was this woman - a fellow ELA teacher who occupied the classroom which was a 30 degree angle to my right if I were standing in the doorway of mine. The mother hen of our department, and quintessentially the mother hen in many of her positions in space and time. I still turn my head in that direction where she used to stand, prior to the surgery and its outcome. Her face lit up when she talked about her children, and for good reason. She worked her ass off to help her sons and daughters around every financial corner, and by what perceptual accounts that I have piecemealed, the fruits of her labors have resulted in fine societal contributors, albeit with a tinge of privilege. I think, in some ways, she saw a lot of similarities between myself and her son - nearly every conversation that we had ended up producing more than one connection of philosophy or behavior.

I started teaching at our school at 25, and it always felt like her eyes were the only ones that I could not convince to perceive me at any age older than the first day that I met her - even in my dream it felt this way:

There are no windows in the room where I stand, but I am keenly aware that it is a day for a beach trip - I had no sensory justification for this awareness, it was simply a feeling of the day and the weather. She swiftly breached the entryway towards me like she would do when she was looking to share an accomplishment of a son or daughter: with the smile of a head-first swim dive and no greeting other than the verbalizing of "Joe" in a way that sonically reflected a confluence of pride, reluctance, and, in a way, motherhood. "Joe, I have something for you that I forgot to give you." She hands me a whistle, some sunscreen, and some blatantly Baywatch-themed shorts. Handing them over, and completely indifferent toward my feigned smile of confusion, she manages a directive that is latticed with her chuckles: "Now, you have to blow into the whistle and shout as loud as you can: "WATCH OUT! There's danger ahead!" I comply with her directive, in the typical gratuitous smirk-smile and half-cynical type of verbalizing that I

can muster in social situations where I am momentarily unsure of my grounding. She laughs - a sunny cackle. Curtain.

I have wondered about that dream for a few weeks now. Was it one last joke on her end, to reiterate that, even in a context where life and death are situated together in limbo, I would remain stagnantly aged and perceptively vacant? Maybe, but I wonder if it could be more than that, if I let it.

I recall an instance, from a few years ago, when another colleague - we'll call them *Pseudonym* - had received some advice from her, and it directly pertained to me. "Don't listen to Joe. Joe's an alarmist." If I took that accusation in a negative way when I initially heard about it, it was not something that stuck for long. I think I grasp why she had said it. From what I gather, *Pseudonym* was feeling some anxiety about some district-mandated expectation or another that may or may not have ignited one of my venting sessions depending on who you talk to.

I'll admit it, such rants tend to come in waves for me prior to rationalizing my *why's* and *how's*. But what is interesting to me is how my stagnant positionality in Mother Hen's mind is exactly the reason for why she advised *Pseudonym* in this way. I was really functioning as a minor detail in the whole issue as Mother Hen was primarily focused on quickly appeasing the anxieties expressed by a younger, less experienced individual who likely may not have had a stable notion of their place in the world – at least, in comparison to Mother Hen.

All of this amounts to an account of Mother Hen's perceptual lens that framed her own positionality within contexts. The dynamics of age - the dichotomy of the young and the old - clearly resonated with her in terms of the parent and the child. As such, she was able to make swift, efficient decisions, especially when it came to her "children", and I'm almost certain that she gauged the collateral implications of such decisions in a fashion that was equally efficient. *Pseudonym*, I, or any other younger teacher did not ever really stand a chance in being seen as

true colleagues, but I do not think that we were not respected by her. It was just a different mode of respect.

If any of my musings here are pinging a modicum of truth, then I think it also stands to reason that that I might be okay with seeing her most recent visitation as some pastiche-like expression of parental encouragement. A sort of, “be what you will, but be sure to temper the effects of contemptuousness - and if you are failing, perhaps lose your mind in some old re-runs of David Hasselhoff’s slo-mo sand sprints”.

She was right, though. To some extent, I am an alarmist, but I think it's reflective of my challenges with delivery and management of my perceptions of things rather than a shouting of nonsense for the sake of being heard. In a fire alarm system, there exists a practical circuitry of components which will intersect various external factors of influence. A manual override for purposes of scheduled procedure drills. A breach of conduct due to antisocial impulsivity. A burnt turkey. An actual fire. In any of those contexts, however, humans are engaged in either an active or a passive role, and both are able to be realized within the same instance. When a fire alarm sounds, is one actively evacuating or passively complying, and is this perceived association causally influenced by whether or not the sounds are warranted?

There is a latticework of description and practicality (Roulston, 2020) with which the alarmist directly and intuitively confronts. In this moment, I am feeling like I would rather be an eternally impulsive adolescent pulling the handle (Spring & Saltzstein, 2017) rather than a monotonal, binary reactor to a monotonal, binary system output. I need to think a bit more about how I exchange in discourse where systemic implications are looming...

Currently, I am seeing myself not as an alarmist but more like this type of growth that is perceivably benign but with implications of underlying malignancy. Is it a tumor or some cute

birthmark? Perhaps somewhere in between. Shall we cut it off completely? Perhaps that might lead to unintended consequences – hard to say, there is not enough research to gauge an outcome. Perhaps the benign growth will simply go away, ridding the system of this persistent internal conflict that invades its consciousness in more overt increments of time than on other days, keeping it from forcing its hand toward an outcome that it might regret.

Avoidance toward such matters is observable in the classic patriarchal trope of those texts – maybe like those works of Tennessee Williams – which involved motifs of emotional detachment and irrational coping mechanisms, and at some point, the avoidance leads to this byproduct of function. The growth becomes valued in some weird way and its function transcends the health paradigm by functioning as an organic product with artificial functionality. Like someone lying face-down on a table as a tattooist provides them with a few hours of artificially induced frisson. Never mind the potential outcome of malignancy – would the removed growth lead to some unwanted hemorrhoidal awareness?

The system does not want to force me away – at least I do not think that it does. It would rather that I functionally integrate. Alternatively, it might want me to just go away – the absence of a trope is a brief occurrence that at times may be savored due to how fleeting it can be before the system attains a new growth – in this sense, the issue of something classified as benign or malignant is dependent on increments of lapsed time intervals. Systemic aging might lead to increased malignancy – conversely, a system with a facelift – smoke screened cultural refinements, perhaps – might experience remission. Perhaps it is more of an acute or terminal issue...

II – ONTOGENY OF THE PAWNS

[My Σ of Eliot's second stanza]

Duality is the hot topic in this volume of Eliot's poem. That word, duality – oh, how we English teachers *love* to throw this word around when discussing some significant literary masterpiece. Word porn, I guess, or maybe it is more relatable of a topic than we care to unpack. You know those plastic containers of individual gum pieces with the convenient flip tops that you impulsively throw into your shopping cart while simmering in the checkout line? Yeah, one of those types of containers conveniently opened up in the front pocket of my book bag – full disclosure, that pocket essentially functions as the “junk drawer” of my daily bag. Clutter-free is not me. All of the gum spilled out, and unbeknownst to me, some fucked up fermentation process occurred where the gum infused with pencils, post-its, coins, and everything else I am unwilling to mention here – you and I just met...hello, my name is Joseph, and I do not like long walks on public beaches. The fermented contents of that pocket have yet to be unpacked, and it has been months since I noticed it. It is easier just to not use that pocket, to compartmentalize the looming implications of that pocket, to cease the questioning of it, to consciously choose indifference. Like Elie Wiesel (2008), I have an issue with indifference, so maybe I am a hypocrite with a bunch of unusable gum pieces. But that situation is kind of like how we take a rent/lease approach to the concept of duality – willing to pay for its use but not willing to outright own what it says about us.

Roles and functions are how duality is pinned to a wall and mapped in Eliot's passage. The “chemist”, for example, does not have an explicitly singular role or function other than being responsible for an outcome to occur. Interweaved with roles and functions – I prefer to think of roles as modes or states, purely for aesthetic purposes – are dynamics of cleanliness and dirtiness, remembrance and forgettance (not a word, I know), and treatment, replacement, or therapy. What does it mean to help oneself let alone to help others?

When the teeth rot, shall we treat them [no sugar!], replace them [we have replacement material options to accommodate the entire socio economic spectrum], or provide therapy [talk the teeth into feeling better along with breathing strategies]. What is to be done when none of this works and decay looms?

Genres: Satire, Textbook, Non-fiction Speech, Narrative Non-Fiction

Struggle Within (A Galactically-Drab Agentic Model):

Thanks for sticking with me this far – you are to be commended. The spatial, the choral, and the temporal are some of the prevalent themes in both my writing and my life. The latticework of them composes a labyrinth of concentric rings where each theme is infused with these layers of organic cognitive variables. It can be humbling for a person when they realize just how much of their existence is classified and replicated in empirical form. Struggles regarding that textual landscape are undeniable – if it is to be that we are defined, we want to associate ourselves with the most comprehensive replications of our nuances just as much as we want to know about the afterlife or the depths of outer space.

Speaking of outer space, I recently had to attend a class which was to prepare me for a course that I was to eventually teach. Although the course previously existed, it was a new one for our district, and I immediately saw its potential for some seriously impactful learning to occur. I had to get past the fact that it was developed and maintained by the same entity that has touted our eugenics-originated test scores, and I did this by concluding that every person or entity should have the opportunity to attempt an atonement process, for that is really all that we can hope for as a daily constant. Depending on how resilient we are, such a process leads to hope and eventually growth.

On one of the days during this week-long course, a graduate level one modified for virtual attendance due to the pandemic, We were posed with a “scrap paper” exercise that asked us to respond to the following: Should we colonize Mars? We were required to provide a cogent answer with three points of rationality. I answered the following, in handwriting much sloppier than this digitized font:

We should colonize Mars because it is an inevitable interval in the course of our existence.

- Anyone who has seen the film, *Ad Astra*, can tell that colonizing Mars is a great idea and that we should attempt it.
- It's a natural outcome of the trajectory of macro-societal trends that include resource mining and exploitation. We consume and exploit, so it makes sense to continue it elsewhere.
- We will technologically benefit from the challenges.

My answers, just as everyone else's, were intuitive, yet at the time I was actively involved in producing purely intuitive responses considering that we were not citing outside research. Rather than attempting to work against this grain, I embraced it. For the first bullet point, I reference a film that I had recently watched, which included a colonized Mars that functioned as a sort of R&R station for more distant space travel. I liked the idea of a pop culture reference, because it serves as a light-hearted primer for a controversial topic, among other reasons. The third bullet point was a regurgitation of one of the major points of debate within the prospect of space travel, so it was essentially provided as evidence that I had actually thought about the question as well as my *a priori* knowledge on the topic (and its applicability).

The second bullet point was my ace in the hole – a tongue-in-cheek play on human nature, complete with negative connotations, logical fallacy, and overt subjectivity. I confess that it is essentially a view that I more or less hold, but I do not invoke such opinions to judge so much as to accept and move from or toward it. Others, however, might take issue with such frank accusations, choosing instead to abruptly change such trajectories (or at least attempt at it).

In truth, I do not really care if we colonize Mars. Don't get me wrong – I love all things science fiction, and Carl Sagan is one of my idols. I even have a tattoo of the owl from *Blade Runner* (Scott, 1982) - perhaps for reasons to be later revealed. But I see the prospect of space travel and colonization as an inevitability due to how much thought and debate has already manifested from the prospect itself.

Whether or not the prospect is pursued as a conscious or passive undertaking is thus of no concern to me. I do think, however, that the race to the moon was housed in a clearly macro-political dynamic that was logically interpretable in ways that Mars travel does not currently hold in terms of its relevancy to human advancement.

I mention all of this to express that this second bullet point was intuitive with respect to my own intuition and not the casting of external intuitions. That is important to me even when conceding the myriad of variables that influenced my construction of the answers that I presented in the course. Here's some clarification for those veins: First, I agreed to teach the newly introduced course prior to my pandemically-upended routines. This is to say that my eventual reforming of routines led me to perceive this graduate preparation course as a wrench in my schedule.

Second, I previously attended a similar graduate course, a couple of years ago, that, while it was engaging, was not fundamentally enriching. In fact, I attended that course knowing that I would not be teaching the actual course in my district for which the graduate course was prepping me to teach. I had forfeited my prospect of teaching the course because it meant forcing another teacher to forfeit them from their scheduled course load, and at the time I was not okay with that. This is to say that I was not optimistic that the course would provide me with insights, and therefore I was a bit jaded with preconceived expectations.

Third, I had developed a curriculum for a course that was essentially the same as this "new" course, which I had been teaching for a few years up until that point. My course was to be essentially dissolved into this new one, and I was a bit resentful of that. That is to say that I entered the course with a chip on my shoulder that I'm sure made me come across as this rebellious know-it-all.

These experiential and personal factors entered into the subconscious landscape that would shape my demeanor and produced work throughout the entire course as I participated in it. It was something that I was conscious of, and it was even something that I had to work through in real-time while engaged in the course discussions and activities, and it may be interpreted in how my answers manifested for the Mars question.

This is to say that I was not in a good headspace for the course, but I persevered because I knew it was necessary if I wanted to teach the course to my students. And yet, that opportunity never came to fruition. After completing the course, I was informed only days later that it was to be put on hold and that it would not be offered in the upcoming school year. My initial reaction was emotionally intuitive. I drafted the following as a result:

Hello,

I think that this decision is understandable considering where we are in terms of uncertainty. However, I also think that I need to take this opportunity to express how dissatisfied I am with how this decision has been executed.

Last week, I participated in 30 hours of live online instruction for this course in addition to 10 hours of homework. It was ran nearly in the exact manner as the on-campus courses - I know this because I attended a similar type of course in the past that never amounted to me actually teaching any of the classes. On a personal level, last week's 30 hours of class time amounted to me putting my house repairs and renovations on hold, shelving my dissertation proposal that is due next month, and depending on my wife to watch our two children on her own. It would have been quite a relief to have taken this course next summer.

Although the decision to place the course on hold is a pragmatic one in some ways, it's timing feels a bit insulting to me. Maybe the conversation for this course could have only been had during this particular week, but as I see it the low enrollment for the course was known beforehand.

-Joe

I almost pressed the send button for that email, until I decided to sleep on it. Weeks later, the email is still saved in my drafts folder and has no chance of being sent to its potential recipients. This is pathetically representational of where I am currently at with *agency* – playing

the passive aggressive card because I perceive a lack of benefit in engaging in a transparent expression of my feelings on the decision. Somewhere, it might be pseudointellectually expressed that agency connects with efforts toward extrapolating the potential for educator adolescence.

Agency is a concept which was previously denotatively foreign to me before I enrolled at KSU although I had unknowingly been preoccupied with its preservation. In proceeding sections, I will briefly discuss how it catapulted my educational trajectory in ways that I did not appreciate until the latter half of this doctoral program. I think that at its base form, this work is founded upon a desire to help preserve teacher agency, but I also believe that I hold a conceptualization of agency that is more radical than its agreed upon meaning.

Agency, Lost.

Sociocultural, Neurological, and Psychological confluences which impact agency, wordily conveyed by yours truly.

I'll start with the confluence of discussions and dichotomy, which is absolutely necessary but delicate in how it connects both potential and realized agentic notions. On a macro-systems level, it can be argued that one major reason for the dichotomous discussions of education in America is due to the need for learning and growth to be represented in measurable methodologies. In this sense, there is a consistency into how empiricism is infused with educational practice, and why particular data-driven theories such as psychological cognitivism are predominant.

Situated with immediate contrast is an underlying factor which may account for brief pedagogical non-sequiturs in the timeline, such as constructivist approaches, and it's the implication that empirical, quant-driven approaches hold for students in relation to behavioral,

social, and cultural competencies (which may be, at times, beyond the scope of ethically quantifiable measurements).

If I am ever to be perceived as too often having a conversational agenda, it would most likely be in discourse relating to the role of narratives in contexts of metrics versus contexts of theory. A paint by numbers approach seems like a brown and crimson tinted smoothie that is handed to you by someone whom you just met and while you were not afforded the opportunity to witness the making of the smoothie – the unadulterated ingredients chosen to be included, the preparatory hand washing of the smoothie maker, and what the hell is causing that cryptic shade of color? Thawed ribeye? Should it smell like nickels and pennies?

Journal Entry:

Date: Unaware

Time: Who-the-Fuck O'clock

Place: Funny story...

It is always a grand time when I am forced to sit in professional development sessions where ice breakers end up amounting to a cattle inventory of which individual possesses the most deficits. The seemingly endless strings of ifs –

“Step forward...if you grew up in poverty...if your parents didn't graduate high school...middle school...if you were abused...if you have been profiled...if someone in your family is or was incarcerated...if you question your sexuality”... “Now what have we learned ladies and gentlemen?”

--“The most efficient means for us to figure out the individuals to target as recipients of our empathy, our intrigue veiled in wondrously sympathetic gazes directed toward the PD session leader so as not to make any participant feel targeted (yet), and (potentially) to whom we align our efforts in order to be seen as woke to the issues which systemically plague our society.”

Those contextual factors, plucked out by a professional development session leader, are clearly meant to be seen as connected in some perceivable way. And as a session participant, all you need to do is sit back and be provided the skeleton key to the kingdom. Cue the emphatic infomercial voiceover – “that's right! For only 2 payments of planning time and some contextual naivety, you, too, can be a woke educator...just sit back, check out, and provide generic questions and answers when cued, and you will walk out with one more attendance credit under your belt along with a badge of certified informed teacher of causally related systemic problems

that plague the students in our classrooms 😊...but wait, it gets better! This informational exchange requires no personal inflection on your part – we will provide the data and connections for you! We connect the dots so that you don't have too! No, really, just sit back, we insist on connecting the dots for you -_- Sit down. SIT.”...

Why is the word, *systemic*, seemingly trending in educational discourse (Reigeluth & Karnopp, 2020)? It is one of those words – an acquaintance called these types “five dollar words” – that gets thrown around at a party and everyone responds with credulous nods and emphatic *yesses*. I saw a meme not too long ago that played on the word, *therefore*, and how it is a transitional word that seemingly takes a pedestrian insight and morphs it into this transcendent product of poignancy. The word, *systemic*, is kind of like that, except that it is a modifier; therefore, it has more of a systemic effect on the rest of a passage [😊]. I have a notion in reference to why the word is used, although it requires a grain-of-salt-dashing approach due to the possibility that it could be nothing more than a swapping of one term for another - regardless, I think that the systemic nature of our system, in addition to it posing as an inevitability especially as we advance toward efficiencies and comforts, is indirectly influenced by the byproducts created from *moral injury* (Schroeder et al., 2020).

With societal moral injury, the wounds are deep, and yet they resonate through countless shared experiences among familial units and across generations – speaking more to a type of conflicted meandering through life's purpose rather than functioning within what *is*. Reality is a seriously malicious construct at times, and this is especially true if one subscribes to the notion that perceptive consciousness is a subjective and communally agreed upon illusion (Koch, 2019).

“Okay, fine. But it seems like you are ambiguously discussing trauma here. If so, what is moral injury, then, and how does it help us get to the crux of the initial question?”

I have to come back to this after some other things, but we can give a working conceptualization here: *moral injury* might be the byproducts that indirectly result from sensory interactions that contradict our working perception of reality – byproducts which manifest as elicited emotional and behavior responses to stimuli and which, over time, creates an intuitive dissonance which increasingly becomes more challenging to consciously identify and manage. In a phenomenological sense, this dissonance becomes amplified by spatial-temporal interactions amongst individuals, and eventually groups, leading to a subconscious permeation of inputs and outputs, to the point where we are no longer aware of a perception of reality that might be an alternative to this dissonant context, which at this point has become an inherent disposition. That, in my opinion, is the transcendence of moral injury towards a systemic effect.

“Okay, fine. But what does that have to do with the educational grid?”

Well, in education, trends seem to have gained precedence at the expense of consciousness. We always wonder where a slang word originates – they often seem to just appear during organic conversation, like they were never really born and that they were always there in this omniscient sort of way. Educational trends sometimes have a similar aura about them. The literature is *vast* in relation to the intersections of educational marketing practices, best practices adoptions, accountability and evaluative criteria, and debates regarding how efficacy is defined. However, the intersections of those fine point debates actually reside on the broader strokes of deficit ideology, cognition, and social predisposition.

Thus, those broader strokes become more representative of humanistic elements above all else. We read countless research and study regarding the efficiency and particular practices or strategies, whether they be tailored to the classroom or the district offices, and we often find ourselves pondering the same reflections: This seems so commonsensical, so why aren't we

applying this? Or, this seems like a great idea, but it is incredibly unrealistic for it to be applicable in my setting (as if I operate in the sensory realm of actual existence).

When we ask ourselves such questions, we might fail to realize just how impacting or detracting those reflections can be, for they are conscious manifestations of our desire to make sense of foreign information. Thus, we present ourselves with two pathways - apply the information or reject it. Too often, we reject it, for a number of reasons. First, our desire for complacency might speak to us more resonantly than the unsettling landscape created when new information is internalized and applied. Alternatively, we consciously write off the information as non-substantive due to a subconscious desire to validate our a priori notions of the world (which Leonard Mlodinow (2012) defines as the process of self-motivated reasoning). Whatever reason, we might not realize all of the implications of these types of assumptions.

Meta-Analytical Framework

One of the highlights of my doctoral studies was meeting up with some cohort members to present in a panel discussion at a conference. It was there that I was still grappling with my own narrative – my who am I's, where am I's, and why am I's – as well as how it would manifest in something at the culmination of the program. It is now clear to me that I was having a tough time with accepting certain realities of experience that I could not spin into a romantic narrative of higher self-purpose – they were simply outcomes of experience that left me emotionally confused and “at a crossroads”.

One thing, however, that I knew for sure was that what I and countless others were experiencing in our educational contexts was wrong. Things were happening – administrative decisions of policy and curricular mandates, and even educator-level decisions of critiquing of fellow colleagues and competing with them – that left a foreboding notion of, well, something

that could not be finger-pointed. Something – systemic. That word gets thrown around a lot in educational research and study, but it might be one of the more abstract concepts in discourse. It's like a charted lighthouse that is unable to be physically located, some worthless beacon that is constantly hoped for yet never manifesting so that it might benefit us in a way other than being a pedestaled ideological instantiation.

Thinking about that led me to analyze, in multiple lenses, the outcomes of my experiences as an educator that influenced my enrollment toward a doctoral degree. For the panel discussion, the overarching lens was that of deficit-based mandates, and so I decided to approach it in a similar fashion to how Vince (2020) discusses the nature of narratives – through the intersecting of sociological and neurological notions. This required me to accept some humanistic baselines – notions of cognitive traits which I would simply accept as reality and not to necessarily question further – so that I might connect it all and conclude why I, among others, allowed the outcomes to influence us the way that they have.

Throughout this presentation, I hoped to achieve a few outcomes. First, I hoped to theoretically and conceptually simulate the factors which are present in at least some educational settings where prescriptive approaches to redesign has occurred or will occur. This is situated in the notion that this might resonate with some of you who are situated within such a setting, those of you who are tasked with administering such a setting, those of you who face the prospect of such a setting to manifest, or those of you who are simply aware of such a setting that proximally exists.

To be manipulated within an educational grid, on one level, can be discussed by how we positively, neutrally, or negatively perceive someone and their function. However, it is harder to consciously perceive the depths of our manipulation as we interact with quantifications. In that

situation, our cognitive processing is overwhelmed with numeric representational inferencing, and the numbers become more real than the associated pawns. Shit rolls downhill, so they say. Thus, discussions of replicable expectations and underwhelming results are frequently heard. Deficits pile up. Accountability and anxiety chemically react. Again, the literature on the issue is as vast as any polarizing educational topic, yet middle-ground solutions for merging standardization with innovative and culturally responsive education are underrepresented (McNeil, 1990; Viruru, 2006).

Thus, I also hoped to provide an alternative methodology of alignment in relation to systemic trends of data-based justifications that promote deficit ideology in educational settings; however, this methodology is concerned with conceptually aligning such trends in a way that helps those who feel as if they are participants with deficits so that they may be able to achieve re-acquaintance with or discovery of their agency. I attempted this by briefly discussing interdisciplinary notions of herd behavior and colonialism while connecting theoretically cognitive contributors to conformity, intuition, and logical reasoning. Lastly, and perhaps most importantly, I hoped to connect human cognitive and socio-behavioral tendencies, and their implications, with that of the honey bees, because I love the irony in juxtaposing the presumably imposing human construct with a superficially unimposing animalistic one.

I'm going to try and interweave those paralleled stories – that which was what I experientially perceived and that which I ultimately produced from those perceptions – to try and demonstrate a contextual foundation for discussions to occur regarding test validity and program efficacy within particular educational settings that are faced with a quant-driven mindset which prioritizes executable, and efficient, test-oriented approaches to learning. I'll try to focus on the problems of standardized assessments in relation to cultural cognizance (i.e. addressing the

human element) and imply how the pedagogy developed in response to test score anxieties/expectations inevitably choose measurable outcomes over fostering sustainable (cultural) capital within students. I also intend to demonstrate how such lack of cultural cognizance is inherent to the measurements of the assessments themselves, by conceptually intersecting student ability, rubric-based scoring, and relevant contexts of advocacy.

My framework for this thought project consists of 2 broad domains. The first of them is the logical domain, where I use simple logical models of input-output-outcome, to delineate inductive and deductive processes. Previously, I discussed how each of those processes can and should be utilized in a learner-learner classroom model, which relates to asynchronous and synchronous modes of processing – essentially, that relates with how various inputs and outputs are managed within a setting (Lynch, 2019). The second domain is related to social behavior, which consists of lenses that conceptualized radicalistic and humanistic traits. The social behavioral domain utilizes research and conceptualization of herd behavior with the factors that can be observably traced in radical tribalism examples as well as tendencies that are evident in colonialist settings. This domain becomes important to discussing power dynamics and ideal social models

First Domain. We can refer to *induction* and *deduction* in how they are denotatively conceived similarly across many disciplines including philosophy, mathematics, and social sciences. It is generally acknowledged that “induction reflects the use of specific evidence for generalizations while deduction reflects analyses of generalizations through evidential means (Lynch, 2019, p. 1).” I kept that simplified distinction in mind as I worked to causally construct what I perceived as an interaction of inputs, outputs, and outcomes:

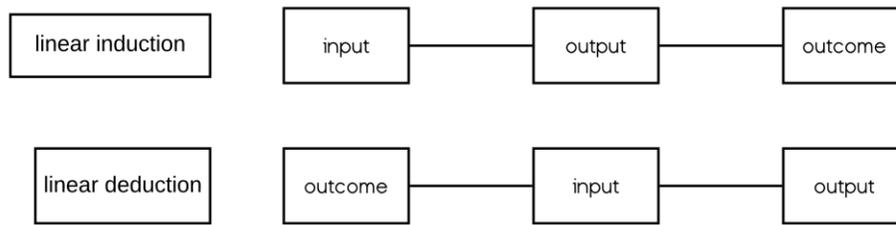


Figure 13. My interpretation of linear induction and linear deduction.

In relation to the logical modeling of systems, my efforts in the proceeding pages are a nod to Apple’s discussion of *systems analysis* (2004, p. 106) where it is also mentioned that “while the advocates of systems procedures seek to enhance the scientific status of their work...the systems thought they have borrowed is not from the scientific branch of systems logic” (2004, p. 107). I think that Apple is poignant in making that distinction, for it highlights how a system’s “constitutive interest lies primarily in, and has the social consequence of, effecting and maintaining technical control and certainty” (2004, p. 103) as opposed to “an ability to accept ambiguity and uncertainty” (2004, p. 103) that is surprisingly observed in scientific disciplines. Consider this paragraph a bit of foreshadowing...

Second Domain. The social behavior domain was a bit more involved. The overarching idea was that I was preoccupied with notions on how we can frame the process of a trending action or event within an educational grid. When it comes to social dynamics, we have more options than to conform or to oppose, as they have their respective subgroups depending on how deep we want to go with them. According to Kameda and Hastie (2015), there are three mechanistic factors that presents a conceptualization of herd behavior contributors. The first is the Neural Mechanism, which was discussed in the previous Volume, and which will later be discussed when it is appropriate. Thus, I rested my notions on broader conceptualizations of

neural, psychological, and social factors – which I labeled alongside “Herding” – keeping in mind the position that those factors contributed to a context which can be primed for conformity and opposition.

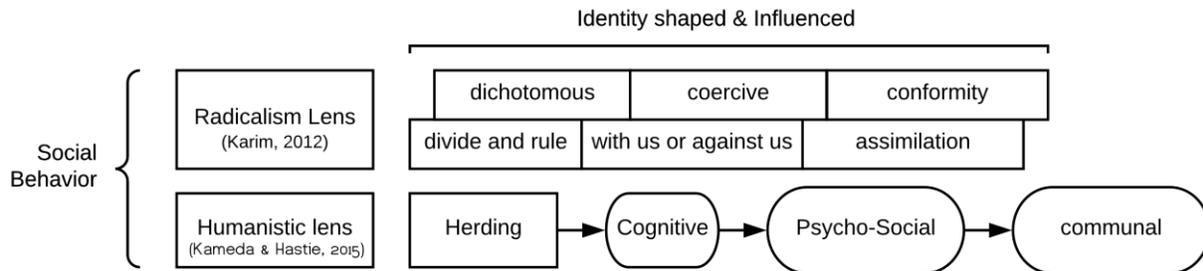


Figure 14. A visual map of the framework I applied for my presentation.

I think you might have a good idea of where this is going – nonetheless, this seems like a good place to mention the pervasive beast that is quant-driven learning- specifically, standardized testing. It permeates the timeline of American Public Education, with particular roots embedded in the eugenics-influenced approaches for societal refinement which trended in the earlier half of the 20th Century. In particular, the work of Thorndike, who is essentially seen by some educationists as a detail-oriented data empiricist preoccupied with the details rather than the composites of the individual (Beatty 1998), spearheaded this empirical mindset as it currently is situated.

Thorndike’s reasons for advocating for such methods are causally linked - *at least* indirectly, but I’m inclined to think that he was more overt about it - to his eugenic principles. A systematized approach to discovering the most efficient ways to cultivate knowledge attainment and learning were, in Thorndike’s perspective, most achievable through arbitrary control of nature, even at the genetic level (Beatty, 1998). I do not think that he and I would have gotten along very well. Maybe it is best if I refrain from time-traveling for a little while – I know a guy,

he has a time machine – kind of an eccentric fellow, always talking in this overly formal, decorative sort of way. Maybe you’ll meet him at some point...

What might be most alarming is not that our current educational climate expresses a desire for idealistic reform, aiming at humanistic initiatives which incorporate cultural responsiveness, but how the pervasiveness of Thorndike’s empiricist mindset is both systemically overwhelming and intimidatingly primed to refute such initiatives. Beatty covers this in a cogent but all too brief manner, harking at Thorndike’s refutation of curricula which might have reflected an early attempt at cultural responsiveness. She cites him as proposing that schools must improve upon nature rather than run the risk of amplifying those aspects of culture which may be considered less desirable from a macro-societal standpoint. She also quotes Thorndike with, "No word perhaps is a poorer synonym for 'the good' than 'the natural'" (Thorndike, 1901, p. 136, quoted in Beatty, 1998, p.1146, 1147). Considering these origins of standardized approaches, it is disconcerting how seldomly the reality is pragmatized when countering claims that hark the benefits of standardized tests.

This is where we start to see how the socio-psycho mechanisms can be contextually applied. Essentially, empiricism is a realm which is perceived like an ideological notion, pedestalled by another ideological layer of cherry-picked *a priori* grounds. However, as I previously mentioned, Hawking & Mlodinow (2010) claimed that strong theoretical models experience volatility depending on how they are contextually employed. One advantage that Thorndike had was that he had his little eugenic phalanges throughout this empirically quant-oriented crusade, instantiating numerical narratives of success and failure and consequently shifting the power away from social channels which possessed less *a priori* foundation.

I'll stop here for a second and mention that I am not expecting you to shout from the rooftops, “numbers BAAAADDDDD, letters GOOOOOODDD”. I am just asking that if any of what I have expressed in the last few paragraphs intuitively seems like it resonates, then just listen to that resonance for a little longer as you further read.

So, what are some of these channels which might lack *a priori* foundation? I'll admit that I am using the term, *a priori*, in a way that is more specific to empiricism than in an etymological sense. It is all a matter of how we perceive what is and what isn't acceptable based on what we previously have learned. But for many individuals, they have a hard time figuring out what they may or may not have learned if no one is around to help them perceive it. That tree out in the forest, that one that fell, might have face planted and still has not realized how and why it is possible that a camper is situated on its backside, singing John Denver songs out of key and strumming chords on a guitar that is out of tune. That cat in Schrodinger's box (Najjar, 2019) might still be wondering why it hasn't needed to use the litter box in a very, very long time.

All of this amounts to the question of what actually drives a power dynamic. Is it that the numerical representations of causality and correlation are all that is interpretably necessary for *a priori* to progress into *a posteriori*? I don't think so. Like the proverbial tree and cat, a narrative is needed, for it exists independently of representation. Perhaps, representation is not actually a thing until narrative is introduced, and in that case, narrative is dependent on its initial state – that is, the driver of the narrative vehicle. In a social setting, where there is a driver there is also at least one passenger – unless you're driving KITT (Inskeep, 2021). And, as more passengers are introduced, the driver assumes more control of the dynamic even as the context itself evolves

in its complexity. Who's riding shotgun? Where does this person and that person need to go?
 Where are the speed traps? Are we *there* yet?

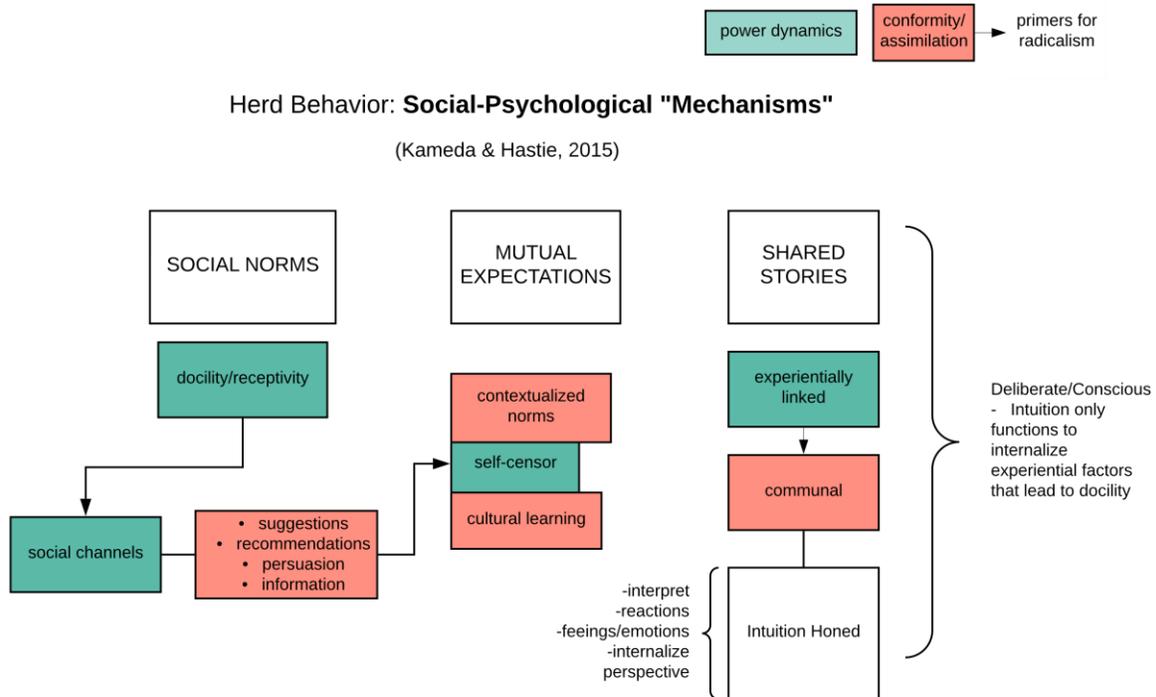


Figure 15. A visual overview of Kameda & Hastie's (2015) discussion where social-psychological complexity leads to implications of power (green) and conformity (red).

Some theory constructing, theoretically speaking...

Stories hone and are honed by our intuition. Perhaps that is the tragic flaw that is exposed when intuition is juxtaposed with empirical pragmatism. Not too long ago, before I had children, my wife and I, along with two friends, called for a cab ride to take all of us to our homes after a night on the town. Intuitively, something was wrong about the "cab". Perhaps it was the dented side scrape from bow to stern on the passenger side of it, perhaps it was the metallic grinding noise emanating from the brake areas as it stopped in front of us. Perhaps it was the drowsy state of the driver failing to make eye contact and only managing a grunted greeting of unintelligible phonemes. And yet, intuition failed us, four times over. Some say that

most accidents happen within a mile of arriving home – intuitively, we might have thought statistics was on our side, considering that we were being transported for less than ten miles. Fifteen minutes into the ride, less than a mile from home, I hear one of our friends, the one riding shotgun, mutter a simple word. “Deer”. She mentioned it, almost passively, as if it wasn’t worth mentioning because of course the driver was aware and of course he must have good reason for why he hadn’t braked on this steep descent into our town. “Deer. Deer. DEer. DEER. DEER DEER DEER!” Suddenly, the driver decodes the message – no time to brake – a comically hard swerve left and then a comically aggressive swerve right. “Came outta’ nowhere.”

Years passed, the four of us still laugh about that situation, and we all recall it in a very similar way. In a sense, the story gets strengthened as we retell it when we are together, each of us contributing to the contextual grid of the experience, providing peripheral spatial, choral, and temporal details. In this way, the story is communally honed, and that is really the only possible way at this point that it holds any relevance. That isn’t completely true – it does still hold relevance, because for four individuals, it stands as a reminder to not patron sketchy cabs with an even sketchier driver.

In a thoughtful analysis of stories and their implications for cognitive transferences, Grobstein (2007) mentions that story sharing is a process which reflects the conflicted nature of motivated consciousness and socially collective consciousness, positing that our ability to convey information (i.e. stories) relies on seemingly immeasurable neurobiological components as “a distributed interactive architecture, with our behavior reflecting sometimes our conscious objectives, sometimes the outputs of the differently specialized diverse elements that make up the brain, and most often interactions among them” (2007, p. 8).

We can think of the process of sharing stories as a communal experience, but it would be naïve to consider that conceptualization as more than an idealistic version of what actually occurs. The emergence of a communally maintained story is fated to function within parameters of contextualization. Such parameters are linguistic and social – the language of a culture can be limited or empowered by its navigation of communicable language, yet it is more susceptible to limitation if one is only privy to their story’s narrative and not also the meta-narrative of their story.

Take for example, Federal Writer’s Project (FWP) which was tasked during the era of Franklin D. Roosevelt as a cultural study of sorts for producing a “genre that could weave together descriptions of exotic local color and practical advice for the American traveler” (Stewart, 2016, p.41, quoted in Roulston, 2020, p. 208). Putting it mildly, this stylistically ethnographic endeavor reflects issues of informational transactions regarding observations, perspectives, and the transcriptions of communal folklore (Roulston, 2020, p. 208). This amounted to a tainting of various cultural narratives, including those who were formerly slaves or were ancestrally linked to slavery. That type of damage inevitably leads to another cultural byproduct, which is the meta-narrative of the initial meta-narrative, and thus the discourse generates again and again like a carnival patron’s reflections in a house of mirrors - more on this in the proceeding volume.

Internal and External Effects. This brings us to Kameda and Hastie’s (2015) third mechanism, which focuses on information dissemination and its implications. In the following visual, the color coding evolves, reflecting logical and socio-behavioral components threaded throughout. It resultingly illuminates a varied pattern which reflects notions of inconsistency and

misalignment - thus, it becomes necessary for the driver to assume causal influence over information channels.

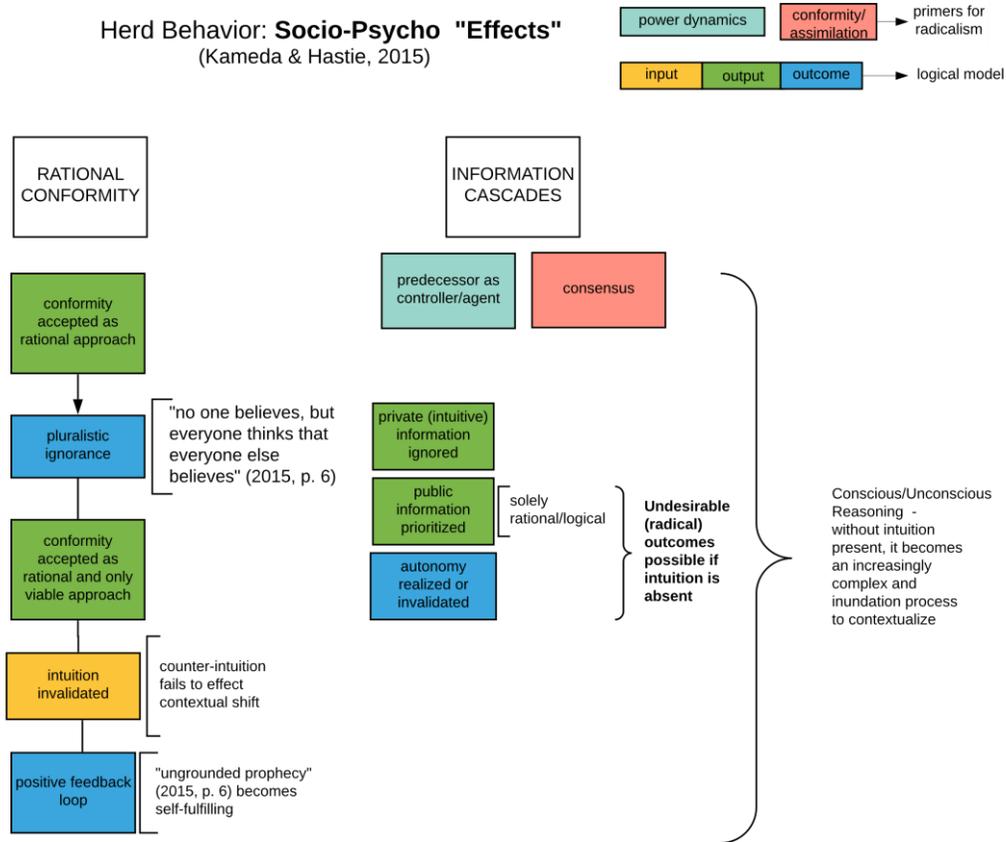


Figure 16. A visual overview of Kameda & Hastie’s (2015) discussion where social-psychological complexity effects rational conformity and information cascades.

This visual continues with my process of merging logical salience with underlying, and theoretical, conceptualizations of how we socially think and behave, implying that there may be ways to not only intersect seemingly disparate notions with that of herd behavior, but in general.

In contrast to the neural mechanism, this one seems to demonstrate conscious *and* unconscious reasoning in terms of its effects - therefore, it becomes an increasingly complex and inundating process to contextualize. Without intuition present, it seems like an impossible construct to contextualize. Thus, as opportunities to hone our intuitive interactions decrease,

reliance on external drivers increases. Additionally, the less our intuition is honed, it is presumably likely that it will remain that way – and perhaps continue to diminish – as a collective consciousness centers around a driver. I think that this may be a bit similar to what Gershman (2017) refers to as “dyadic similarity models” as they construct an algorithmic approach to parameterize the “stochastic nature of choice” (p.548):

$$P(c_{mn} = c | z_m = k, \theta) = \theta_{kn}^c$$

Figure 17. The initial procedure as outlined in Gershman’s (2017) generative model.

Here, we see Gershman’s (2017) approach for instantiating probabilistic causal outcomes. By offering some intuitive concessions regarding the open-endedness of choice, they posit that, when experiencing a particular situation which is causally requiring a choice, an object (C) will be "chosen by individual m on problem n" (p. 550), while also conceding that, while arbitrariness is afforded in their algorithmic theta, actual choices in the experiment are binary. Additionally, z(m) - groups of individuals - is algorithmically parameterized to simulate "infinite capacity" (p.550) but with a tendency for parsimony - I may oversimplify how I think of this tendency, but I see it as a sort of compression, if expansion and reduction are applicable, that is applied which aides in managing the infiniteness of generated groups, like a governor placed on an engine, if acceleration, deceleration, and stagnation are applicable. But in that sense, alphas will provide arbitrary means for gamma functions (or limiting and enabling grid space).

$$P(c_{m*} = c | z, C) = \frac{Y + L_{Zm*}^c}{|x_*| \gamma + \sum_{c' \in X_*} L_{Zm*}^{c'}}$$

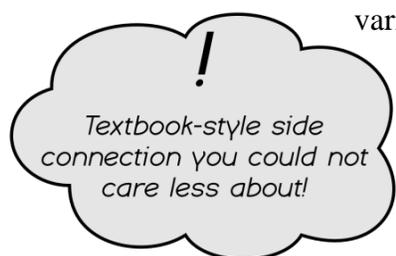
Figure 18. A rationalized outcome as presented by Gershman (2017).

Later, Gershman proceeds to posit, rationally, that the choices of individuals will be increasingly probabilistically bound as a group of individuals increases in size. I also see this as

holding relevance to how herding behavior manifests. On one hand, there is a perceivable safety in numbers – the more people in one’s group, the safer they might feel, but it is also more likely that byproducts of conformity and assimilation will occur. And in the case of experimental groupings, herding is inevitably perceived as necessarily consciously-driven by the researcher. Of course, we realize this already, but I think it is important for setting up some connections outside of the experimental realm, for such realms are unfortunately more alike than we want to admit.

Herding as the systemic byproduct of high-stakes testing. For the purpose of concretely analyzing the disposition of standardization, the test developed and maintained by The Partnership for Assessment of Readiness for College and Careers (PARCC) will be discussed in various contexts. I’ll note that the PARCC test content and scoring methodology discussed in this section have since been revised or modified; I am thus analyzing materials which may be categorically preliminary or prototypical in nature. However, not only do I think it is still important to evaluate prior content and scoring versions due to the fact that the scores associated with them (i.e. 2016 Maryland-based scores) had palpable influence on student learning throughout the state, it is also reflective of what was going on around me during that time period.

The PARCC assessment has a reputation of unrealistic expectations, but it was initially heralded as a “next-generation assessment” (Castelhano, 2013). Contrary to its inception in



various regions across the country, the assessment has since faced policy-related factors which have kept it from being uniformly mandated across state contexts. In essence, numerous schools situated in regions where the test is used have taken the “opt-

out” approach for a range of justifications. Clayton, Bingham, and Ecks, 2019, suggest that the likelihood of a school choosing to opt-out of the PARCC test may be linked to perceptions of the test as either helping or hindering the public’s interpretation of that school. If a school believes that a majority of their attendees will not perform well on the test, then opting out of the test seems like an attractive option rather than facing published data of poor performance. By contrast, a school might decide to abstain from the test if their students have already demonstrated performance levels that are comparable to what the PARCC test measures, and this latter perception is what Clayton, et. al conclude is a most viable reason for explaining test abstention. Comparatively, Shabazz (1995) has discussed how particular standardized tests are able to be scrutinized by their perceivable applicability toward the future goals of students.

By considering such justifications for test abstention, Clayton et. al’s (2019) opt-out study, with implications toward predicting characteristics of test abstaining, actually provides a framework for evaluating the efficacy within the test *itself*. When considering results that have been gleaned and published in reference to PARCC score insinuations, it can be observed that some settings reflect data of higher performance scores among students in higher socioeconomic environments and where there is a prevalence of white students. With these factors in mind, the correlations between a demographically disproportionate population, preconceived notions of high performance ability, and the perceived irrelevance of PARCC (i.e. the likelihood of this type of setting choosing to opt-out of the test) form valid questions of test efficacy that are just as relevant as those settings which anticipate low PARCC test scores. Yet, *both* types of settings can be negatively impacted by published PARCC scores, and this is where the dichotomy between the justifications for opting out of the test begins to truly unfold.

In the discussion of their study results, Clayton, et. al (2019) highlight “cultural capital” as a potential reason for why some students opt-out and others inevitably succumb to the test (p.23). In essence, they infer that parents with more cultural capital are more inclined to question the nature of the testing policy than those parents who have less knowledge of the policy channels and consequently appropriate the school as the arbitrary decision-maker (i.e. those with less cultural capital). Thus, a historically higher-performing school might choose to opt-out so that the test does not potentially soil a successful reputation. Such decisions on test taking have implications which are just as important to consider as the appropriateness of test content. In many ways, the test content and opt-out justifications share inherent connections with each other, which further opens the door for discussing its eugenic ancestral roots.

The framework for this study possesses two major distinctions which form its methodology. First, it utilizes Clayton et al.’s (2019) noted attributes for those settings which are most likely to opt out of the test and then it profiles those types of settings. It then uses that information to form abstract attributes that can be applied to contexts beyond the opt-out trend. In a similar fashion, the framework’s second distinction is to outline the outcomes that can be associated with a decision to either opt-in or opt-out of the test, and then form *another* set of attributes which may be applicable toward analyzing the implications of contexts outside of the opt-out trend. For purposes of synthesizing the more esoteric aspects of the framework, a visual is provided:

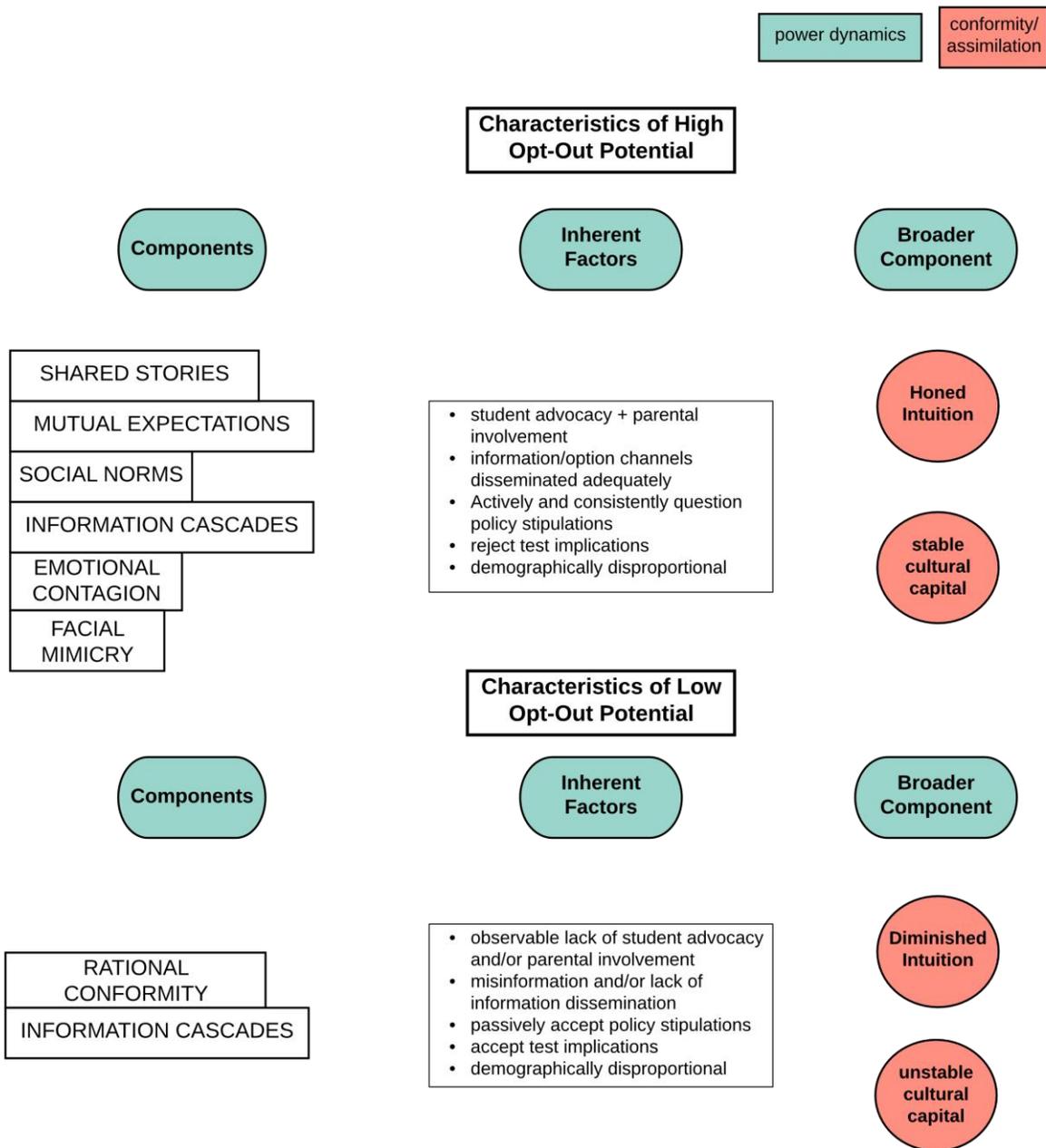


Figure 19. A visual overview of Clayton et al.’s (2019) Opt-out study and how I interpreted it as a framework of socio-cultural characteristics and behavioral and causal implications.

Considering the inherent factors and broader components of groups with varied cultural capital led me to interpret that intuition may be more likely to be strengthened due to the

autonomous quality of settings with more stable cultural capital. I am basing this on Clayton et al.'s (2019) discussion of their study, where it appears that communal factors are driven more by active involvement in controlling the narratives of the community as well as respective familial settings, and in this sense, information cascades and mutual expectations are driven more by shared stories. By contrast, a setting with a less stable cultural capital finds information cascades controlled by external drivers, thereby perpetuating rational conformity.

Besides its overt function, I also see the opt-out framework as useful for questioning the validity of such settings that are faced with standardized tests. In one way, the decision to opt-out presumably perpetuates an inconsistent and skewed narrative of regional performance. I think this for a few reasons, and I am not concerned right now with how speculative I may sound. For one, opt-outs, in trending fashion, contribute data lapses which may also precipitate the tendency for further test opt-outs to occur. The data is terrible, so why should my child volunteer to be a part of that data? Conversely, children within a setting possessing less cultural capital are still subjected to the narratives constructed by the data. I mention this under the perception that settings do exist where both contexts are observed. Regardless of whether high or low performance is anticipated, it would seem impractical for a setting – *any* setting -to *not* hold discussions regarding why it should voluntarily subject itself to potentially negative scrutiny if similar schools have abstained.

The opt-out framework thus possesses conceptual transcendence while analyzing more internal factors of the test. In this modality, it becomes strikingly clear that those settings subjected to the standardized test experience multimodal marginalization by way of test methodology and content as well as through the decisions of empowered and efficacious settings to exercise autonomy in relation to policy.

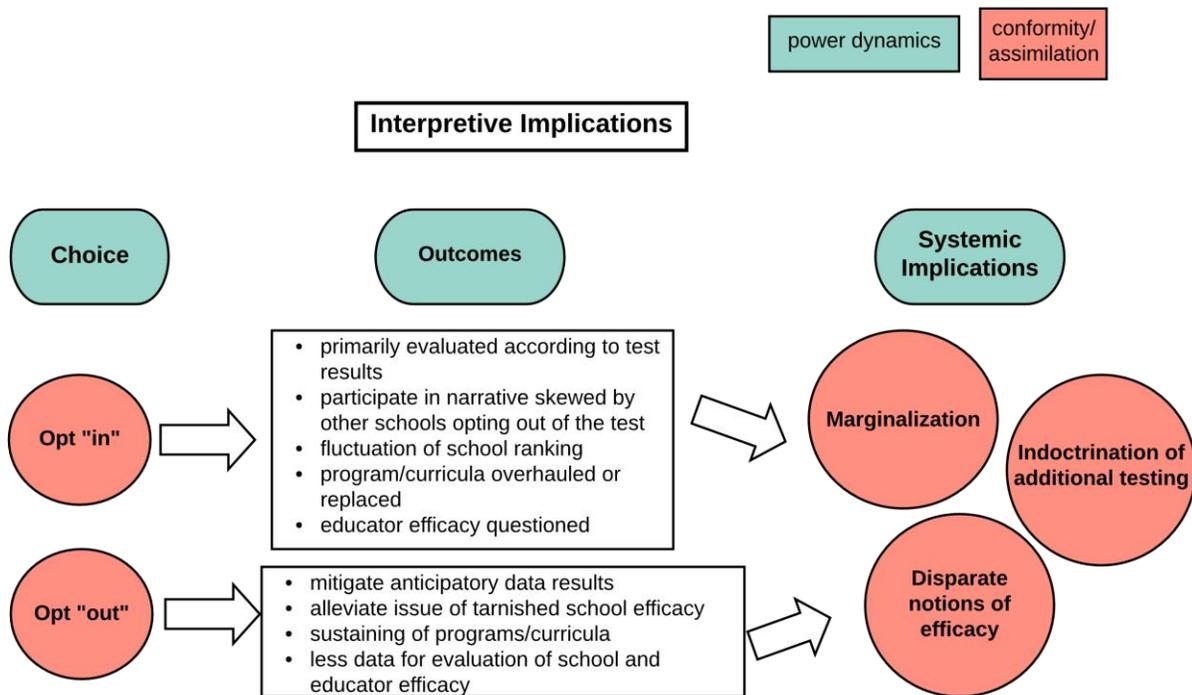


Figure 20. Visual outlining my interpretation of multi-modal implications.

So, if we think of cultural capital as this socio-psycho-neuro byproduct that varies in its scope depending on community stability, and that stability is dependent on a myriad of grid factors that are perpetually linked to subconsciously ingrained thoughts, actions, and perceptions, it leads me to wonder whether or not we possess a bit of encoding, perhaps genealogical in nature, which makes us inclined towards preserving, seeking, or even avoiding, notions of stability. I think that we can look at the honeybees for a moment, if only to provide a loose analogous comparison – no one will deny how similar we are to them, I am *sure* of it.

Honey bees are described by Kameda and Hastie (2015) as a “eusocial species...colonial animals that live in multigenerational genetically related groups, in which the vast majority of individuals cooperate to aid a relatively few reproductive group members” (p.8) where “task specialization” (p.8) and efficiency can be seen. They provide an anecdotal overview of how

seasonal shifts and outgrown homes lead colonies to embark on a communal search for a new home in an alternate location. Like most things with bees, this takes on an all-hands-on-deck mode where task specialization is thematically displayed. Focusing on the “moving swarm”, the authors conceptualize what they refer to as the ”wisdom of crowds”, which is characterized by a) opportunities for individualized interpretation of information, b) observable transparency with disseminating information and interpretations, and c) additional opportunities for individualized interpretations of information by way of choice.

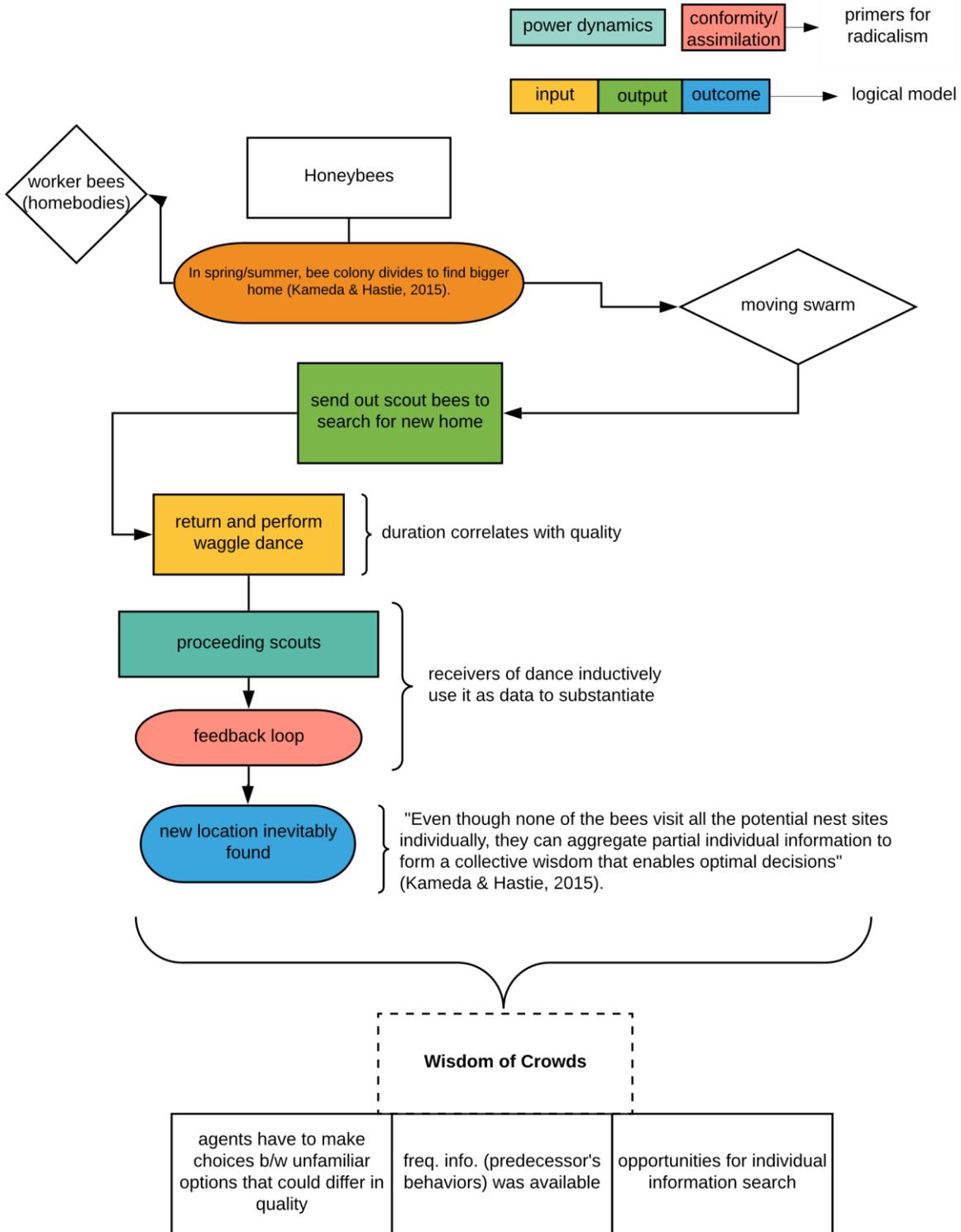


Figure 21. A visual of how I align the honey bees anecdote (Kameda & Hastie, 2015) with logical and social domains.

Before you ask – yes, I like visuals. But I think that sometimes it is easier for you, and definitely for me, if I map it out a bit so that I can get to the point. In this case, my point is that for a *wisdom of crowds* disposition to thrive, it requires a complex interplay of non-hierarchically situated power dynamics, conformity, and applied logic. In other words, look at all of the pretty colors on my visual!

Okay, this next one is last visual for a little while – promise:

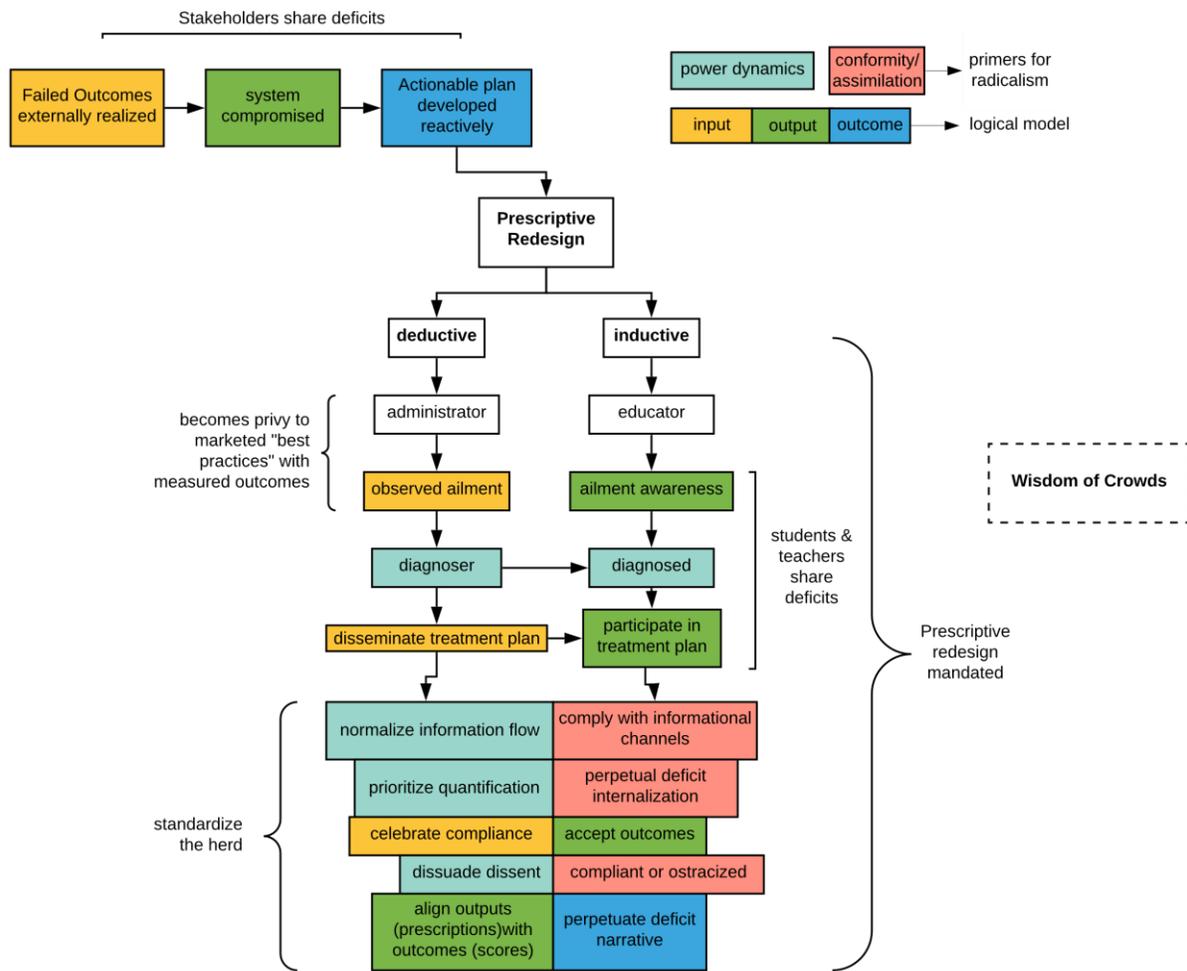


Figure 22. Visual of how I – in a purely intuitive, theoretical, and hypothetical fashion - aligned social and logical domains with stakeholder inputs, a curricular shift, and logical modalities of its effects.

The final model in this series is that of an educational grid which encompasses district-wide elements. Stakeholders, which includes parents and journalists, are situated at the top-left of the model, implying that they are at the helm of particular trends which influence the trajectory of this type of educational grid. In a sense, we are working through a proposed causal model of prescriptive redesign that is systemic in scope (for this hypothetical district).

In this scenario, curricular shifts are considered which resemble a prescriptive approach. I should mention that I use the term, prescription, in a bit of word play, considering how Shakman (2015) analogously relates inputs, outputs, and outcomes: I have a headache (input), I take an aspirin (output), my headache subsides (outcome). Ipso facto, prescriptive redesign is an attempt to take care of the headache. I should also note here that Apple (2004) has previously discussed the implications of associating too closely the rationalized outcomes of a classroom and the dispositions of students, where attempting to micromanage the psychology, cognition, and “human action” (2004, p. 104) of learners seems not only counterintuitive but causally analogous to perceiving the school system in a factory-like state where “the school is the processing plant” (2004, p.105) and is expected to churn out humanistic reflections of educational products.

I do not need anything but intuition to tell me that prescriptions leave a bad taste in my mouth – literally and figuratively. For one, it seems like it risks reducing the roles of stakeholders to a singular modality of passive criticism, dispositioning itself from what is perceived as the source of the problem – in this case, the source is presented as the hypothetical school district. Before I go further, I want to express that I believe stakeholder input to be a good thing, and I am simply highlighting a consequence that may or may not occur depending on some other factors, so I am keeping this a bit ambiguous, but I am sure that you are sure that I have reasons.

With causation in mind, I have inferred that two causal trajectories are plausible in a scenario of linear response – on the left side, you have the administrative personnel – keep in mind that this is a thought exercise and I am not concerned with identifying specific administrative positions, so let’s just consider it as a reference towards anyone who holds immediate relevance – on the right side, we have students and teachers, who are grouped together here due to the notion that their causal trajectory is the same. The left side operates in a categorically deductive modality, presuming that the way to remedy the situation is to remedy the individuals associated with the data. By contrast, the right side operates in a primarily inductive manner, yet their involvement is passive – they are presented with data narratives that identify them as the ones afflicted with an issue which needs to be addressed. It is the story that takes hold and becomes more grounded as agency is pushed further into the peripheral (far-right).

The model is hierarchically mapped, and that is just as purposeful as its implied linearity. It seems, however, that there is no way to mediate the pathways as they operate in this model. There is neither gridwork nor circuitry, here – only a set of paralleled channels which are actively or passively engaged. The peripheral component, the wisdom of crowds, seems out of place, especially when we consider Grobstein’s (2007) notion that “An inclination to resist hierarchical organization is perhaps as ingrained in humans as is the presumption that such hierarchy must exist” (p.2).

Marginalization without Options. With the aforementioned framework in mind, it is easy to conceptualize the notion of test confinements/requirements becoming a non-factor among students privileged with more resources and/or more cultural capital. For one, the “broader components” section in *the opt-out framework* contains attributes that are not consistently

prevalent in settings with high rates of failing test scores - accordingly, forms of these attributes are discussed throughout Kumashiro's (2000) reflections on the oppressive educational setting. To advance the idea of marginalization through testing, however, it is first necessary to observe settings where test opt-outs are less occurring due to policy-related restraints. This can be observed in the state of Maryland, where publicized scores had a systemic influence on school districts. On September 27, 2016, The Baltimore Sun released an article, written by Liz Bowie and Erica Green, outlining some of the implications of PARCC scores in the state of Maryland. Of particular note that will be discussed in this section, they commented that one of Maryland's highest performers was Howard County, a socioeconomically affluent setting in relation to many other counties within the state (McDaniels, 2018).

Again, I am admittedly juxtapositioning categorical labels of district performance in a general way – look for yourself at the data to which I am implying³. Although it is a theoretical exercise more than a transparently-concrete conclusion of relevant data, I think that you should consider bearing with me for a few more pages – just give me a chance to demonstrate how marginalization can be applied. I will attempt to show that the predominant absence of test abstaining in a public education context – in this case, within the state of Maryland - inadvertently supplies us with observations regarding how disparate settings chose to respond to the test results; in turn, I am trying to imply that the broader attributes within the opt-out framework (advocacy, self-efficacy, etc.) gain more validity through their utility in explaining why and how the setting with more cultural capital are theoretically more equipped to focus on

³ Maryland State Department of Education (MSDE) (n.d.). Welcome to the Maryland Report Card.

<http://reportcard.msde.maryland.gov/Graphs/#/ReportCards/ReportCardSchool/1/E/13/XXXX>

cultural cognizance while other settings would presumably be preoccupied with aligning curriculum and test expectations.

With these illuminations in mind, further study is required to analyze the curricular approaches of each type of setting for purposes of identifying causal relationships between test data and curricular decisions as well as to discuss how such decisions exacerbate the challenge of infusing culturally cognizant pedagogy (or any pedagogy which may be considered efficacious beyond its function as a test preparation tool). Of particular interest are decisions to purchase prescriptive and/or scripted curriculums. Such programs are often marketed as ways for educators to infuse meaningful instruction with test preparation, but the efficacy of the prescriptive approach has been both advocated and dissented in similar fashions with discussions of standardization (Gelberg, 2008; Timberlake, 2017).

Contrastingly, it becomes increasingly likely that one of the lower performing districts at the time of publication might respond by way of catalyzing systemic curriculum shifts. Such contrasting, disparate types of districts, however, actually can share similar implications among demographics, as each can be discussed with narratives of underperforming students who are non-Caucasian, disabled, learning English as a second language, and/or live in poverty. In an ethnocentrically dichotomous fashion, the district with a higher degree of cultural capital responds with “opt-out” characteristics while the district with lower degree of cultural capital succumbs to the “opt-in” modality.

[Agency...Still Lost]...Whitewashing the Pawn

How personal moral injury leads to amplification. A looming question for this topic is the following: Why take such a roundabout approach, by way of linking test-taking options with marginalizing test contents? The simplest answer to that question is that the paralleled essence of

test options and test contents speaks to a broader conflict of systemic marginalization that was at first consciously manifested through eugenics and now is subconsciously rooted in our society.

The colonialist lens is often cited in related discussions, noting that defining, classifying, and separating types of individuals are primers for assimilation and control (Viruru, 2006); this also relates to Helms' (1992) analysis of dichotomization as a predominant focus within European-centered education. As this is considered, the pathway becomes clear for understanding why marginalization is a persistent and complex problem for assessments as well as curriculum. This also may speak to why many assertions often fail when accusing standardization as discriminatory practice. Test makers are (most likely) not inherently racist or subscribers to eugenics-influenced practices, but the subliminal residue of ancestral roots with elitism is impossible to overcome in our current educational mode of operation.

Marginalization and Scoring Approaches. By shifting to internal analyses of 2016 PARCC scores, the narrative of marginalization by way of testing becomes clearer. For one, there are clear quantifiable challenges when attempting to objectively aggregate scores derived from a holistic rubric-based format (Roscoe, 2017). An additional problem with such scoring, in relation to large-scale testing formats, is that the point scale itself is shrouded in diagnostic ambiguity in regards to performance, especially when test-taker percentages are compiled. For example, one version of the ELA scoring rubric - specifically, the 2015 rubric utilized for grades 6-11 in constructed responses - worked on a skewed point system that promoted a significant 1-point gap in student learning. Out of a scale of 0-4, students had to score a "3" to be eligible to graduate high school. They would have needed to score a "4" to be considered college and career ready.

Consequently, a preponderance for point-level discrimination (Kahl, 1995) becomes evident within this scoring scale, as the margin between a 3 and 4 is so dissonant that it segregates students by a large margin of ability. One major discrepancy with the rubric is that the components for the score range of 0-3 incorporates language that invites scoring ambiguity by way of inconsistent attributes incorporated throughout each component (Allen & Tanner, 2006; Mertler, 2001). By contrast, the score of 4 is seemingly geared toward arbitrary measures of quality, which sets forth the following problems: a) The response is expected to conform with the specific literary critique lens that was used to select test content (Hunter, Jones, & Randhawa, 1996) and b) due to the multi-trait framework of the rubric, misaligned attributes subject the student response to an intuitive criteria of quality which is beholden to the scorer - furthermore, the aesthetic components observed in a response (e.g. mechanics, grammar, spelling) may play a larger intuitive role in scorer's decisions, especially in large-scale, efficient testing/scoring contexts.

For example, the language and conventions category of the rubrics used for evaluating writing for grades 6-11 shows a stark difference in scoring attributes⁴. It may have been implied, when this rubric was used, that a student who scored a 3 would have demonstrated full mastery of the following: "The student response to the prompt demonstrates full command of the conventions of standard English at an appropriate level of complexity. There may be a few minor errors in mechanics, grammar, and usage, but meaning is clear". While this was outlined in the "Knowledge and Language of Conventions" category of the rubric, there is no measure of this in the score of "4" – it is completely blank.

⁴ ELA Test Design: Grades 3 through 11 ELA/Literacy Scoring Rubrics (n.d.). New Meridian Resource Center. Retrieved from https://resources.newmeridiancorp.org/wp-content/uploads/2019/07/ELA-Writing-Rubrics_a11y.6.14.19.pdf

One explanation for this is that the conventions of mechanics/grammar usage are *assumed* to be an inconsequential determiner due to the purported holistic nature of the test, yet the aforementioned ambiguities within the rubric criteria, paired with the multi-trait framework of the rubric as indicated by PARCC, indicate how disruptive the blank rubric portion is for scoring validity - essentially, this raises questions regarding all of the student writing that has been considered a 3 or 4 while the earlier rubric versions - including the 2014 and 2015 rubrics - were utilized. Additionally, the blank section of the rubric leaves no room for error in spelling, mechanics, grammar, or usage when it comes to a student's reading/writing ability in the 4 score. In theory, the score of 4 essentially advanced the assumption that a flawless mastery of mechanical writing components is a causal byproduct of writing where the other components of the rubric are present, and this is considered sufficient means for ascribing a 4.

The implicit bias of the Language and Conventions portion of the rubric primarily lies in the expectation that a passing score for the test requires full mastery of the English language. Where the score of 4 is afforded the presumption of such mastery, the precedent has to have been initially set by the work of the student who scores a 3. In effect, the probability of English language mastery at any of the 6-11th grade levels is an unrealistic expectation for any demographic, not to mention that it is contradictive to the continuous nature of the learning process. Moreover, such language mastery is more indicative of the demographic makeup of the test scorers than the test takers, and a Eurocentric lens is often utilized when discussing how the commands of English language are arbitrarily scored (Helms, 1992).

It is through acknowledging those scoring methods that contextualization transcends beyond the journalistic interpretation of the pass rates and underperforming schools to a narrative of how biased methodology can lead to irrevocable consequences for facilitation of learning and

efficacy (Darling-Hammond, 2010, p. 81). According to Bowie and Green (2016), the PARCC test deemed 85% of Baltimore City's children as reading deficient and half of its Howard County's student populous as potential failures for college and career pathways. To read the data at face value, as in this publicized example, further contributes to the problem of relying on standardized assessments to provide the narrative *and* the context for the underperforming student.

The Culture Clash:

If such analyses of rubric-biases were merely products of intuition, the subjectivity in such scoring would fail to be concretely gathered. However, when analyzing the scoring models provided by PARCC, the effects of scoring bias actually manifest. If it is accepted that decisions regarding test content can and have elevated dominant critical lenses and texts, then it must be assumed that student responses which are most conforming to such lenses will provide test makers a sense of validation that the test is an appropriate reflection of its societal nature.

Using the cultural lens outlined in Helms' (1992) study of cultural dissonance with standardization, it is plausible to think that issues with grammar/mechanics can be overlooked due to a student's analytical proficiency – I am sure we all have our opinions on whether we should or should not overlook such things, but we also must ask ourselves the following: By whom are such contextual oversights likely to be employed?

I'll attempt to clarify what I mean by way of an example – purely theoretical, of course, not rooted in reality whatsoever...Let's consider how Helms identifies the validation of dichotomization as an integral component for "dualism in testing" (1992, p.1094) - a term which also vessels the existence of markedly right and wrong test answers. And let's continue to consider such validations by also positing a hypothetical scenario, where - perhaps - a student is

given two texts for the purpose of constructing a response that analyzes and critiques them. And let's assume the following: a) the student-generated response inevitably possesses clear issues with subject-verb agreement, sentence structure, and comma usage; and b) that the redeeming quality of the response is presented in how the student establishes a thesis which is oriented toward analyzing the dichotomous relationship between text sources provided in the test as well as elevating one text source over another.

In such a scenario, and when paired with the aforementioned scoring rubric, it may be concluded that the interpreted strength of the dichotomizing thesis was enough justification for disregarding grammatical/mechanical issues, thereby precipitating subjectivity and scoring bias. It is also plausible in such a scenario that neither the test-scorer nor the test-taker are aware that a byproduct is being further generated, validated, and perpetuated – that is, to dichotomize things, or to think of things as situated within constructs of dichotomy.

Furthermore, the rubric is indicative of presuppositions of student ability in reference to mechanical and grammatical ability and content synthesis ability - therefore, careful considerations have to be made when crafting the language of a rubric for various educational contexts (Reddy, 2010), and this leads to further conflicts with the established trend of multi-regional test adoption. If, for example, the content is observed to be ethnocentric in scope, or to perpetuate narratives of oppressed persons of color rather than empowerment (Buffington-Adams & Vaughan, 2019), a correlation then exists between those most able to navigate such content and perceived applicability of the tests. In other words, the test is not meant to score a Eurocentric demographic - it is meant to *diagnose* incompetent demographics.

Similarly to the rubric conundrum, the opt-out framework demonstrates how perceptions of test applicability throttle or neutralize the consistency of test taking. The test is not meant for

those individuals who are most likely to opt out of the test (i.e. those with high cultural capital). An autonomous decision to abstain factors from stable environments where organization and properly-disseminated information are sustained. If anything, it is a sign of a healthy community in that regard; however, also observed in such settings are advanced SES and homogeneity. By contrast, homogeneity and low SES are perceived in settings with less-than-stellar test scores. In effect, nothing is gained in the battle against marginalized educational approaches, and it is further exacerbated.

For a student who is consistently praised and brought up to perceive their value as a societal contributor, a standardized and regionally subscribed score will hold minimal merit or influence on the attributes of that student. They will function in accordance with more ingrained concepts of efficacy. Such parlor tricks are more appropriate for the low hanging fruits, which is not an outlandish claim when considering that standardized tests have a history of development through inherent biases relating to demographics (Phillips 2006).

Like the issues addressed earlier with standardized scoring methods, the prescriptive program risks disseminating pedagogy which fails to address even some overt thematic aspects of culture and race. This becomes an issue of ethical consequence beyond the testing context when patterns of social dispositions are potentially occurring as students from various backgrounds are exposed to prescriptively-defined schedules. Viruru (2006) sets a bit of a precedent for this type of work by analyzing the prevalence of themes in standardized test content among texts involving Euro-American characters versus texts involving characters of color - in short, more Euro-American oriented texts demonstrated motifs relating to self-advocacy, self-empowerment, and self-efficacy, while texts with characters of color reiterated situations of oppression and a constant need for overcoming socio-cultural dispositions.

The bias that is inherent to the standardized testing approach can be synthesized into four characteristics: Eurocentric choice of content and culturally representative texts (Elford, 2002; Bigelow, 1999), scoring methods based on presuppositions of ability according to demographics, continual appraisal of a standardized test (particularly, PARCC) as a means for procuring reliable data during documented test opt-outs by settings with high cultural capital, and ancestral links to eugenic objectives. When such contributing factors are considered, the consequential derivative - curriculum refined and/or purchased to improve test scores - is also latticed with the same biases. Further, the pathway to culturally responsive pedagogy becomes less attainable as the curriculum is melded with satisfying test scores. Our definition of culturally responsive approaches is ever-evolving, and for good reason - it must transcend the more superficial aspects of culture to avoid perpetuating stereotypes and generalizations; thus, definitions of effective curriculum must also be redefined.

We are more inclined in today's discussions of culture to consider locality as a conscious determiner of how culture is addressed and how cultural relativism helps or hinders cultural awareness. It is a challenging and complex pedagogy where time and refinements are required, and this is why it is unable to become infused with the efficient standardized approach. At best, even ethnocentric content is diluted or overgeneralized by test makers (Scholes, 1999) during attempts to fit the complexities of literary analysis into efficient measurements, leaving no feasible way to incorporate experiential and social elements that are more reflective of human beings. As Douglas Roscoe (2017) poignantly remarks, "Institutions define their own learning outcomes, and standardized tests rarely match up perfectly (with respect to outcomes defined for a particular student body)" (p.16).

When a program is mandated and purchased as a catch-all for learning, it inevitably runs the risk of ignoring the long-term implications associated with cultivating one type of learner. One-dimensional learning occurs which seeks to confine innovative approaches to knowledge acquisition and measurement rather than foster senses of empowerment and competence for the learner. In the scope of data, prescriptive programs have a blessing and a curse as situated within the current flow of educational marketing: lack of longitudinal analysis. It is a blessing in the sense that it orients the focus of the program's benefit to short-term gains that might have causal influence over measurable test variables. It is a curse in that it fails to facilitate discussion regarding how the learner functions long after they have completed the program. Thus, the speculation that such a scripted program holds potential for confinement of the learner to a one-dimensional modality becomes less of a logical fallacy than it might in other contexts in the sense that it will facilitate discussions regarding the consequences of applying a particular program to a specified educational context.

Instruction that is truly responsive to the culture of a community is challenging to quantify, and that is a primary reason why cultural cognizance is not perceived as a sustainable measurable approach. Such perceptions are attributed to school environments that conduct the insertion of culturally perceptive materials through a lens plagued with a history of misapplied data interpretations. This lens is an underlying mitigator for transcendent learning environments which might thrive with marketed curricula, but the difference would have to be that the curricula is seen as supplemental rather than prescribed/mandated. It must be noted, however, that a reality of alternative pedagogy is that it requires teachers to dissent from the daily routines set forth in some data-driven settings (Duarte & Brewer, 2019).

However, the other disposition held is that of presupposed holdings of choice, and this holds causal implications – namely, in how it interacts with not only privilege but also ideology. When the rubber meets the road – or however that saying goes – how often will choice coincide with dissent? Darling-Hammond (2010) provides some commentary on the “school-to-prison” (p. 74) pipeline and how school systems which utilize harsh sanctions as a consequence for low test scores exacerbate the issue of marginalization by way of fear mongering. In such settings, preservice teachers may become less inclined to seek employment, and for understandable reasons - this is yet another example of how choice is afforded by those who perceive high-risk, low-reward in relation to the test, who perceive themselves as having a choice to opt-out of an association with the test, and who essentially possess more cultural capital than those low-performing settings. A *choice* that is seen as viable, and which is analogously similar in scope to the justifications held by students and parents with high cultural capital, but one that is not perceived by systemically low performing settings. With so much more work to be endeavored, the need for threading a narrative of systemically-misaligned prescriptions for student achievement reveals itself as a necessary reality during such divisive times of educational discourse.

The internal conflicts experienced by baked goods – so I’ve heard – is a systemic issue which reflects the antithesis of choice interacting with ideology:

Memoir of a Spicy Boston Crème Doughnut Experiencing a Crisis of Identity⁵

While baking at a luke-warm 350 degrees in the secondary oven at Susie’s Pastries we were involved in a casual discussion of politics, cultural unification, diversity and adversity, youth and enlightenment, when an undeniable yet striking question was produced:

⁵ The notion of identity as factors of intersectionality as discussed by Yadav et al. (2020)

“How disgusting does it feel to be sold from a shelf within a bakery which is despised by so many others in the small town of Harlyville, Connecticut?”

In each person’s mind involved in the conversation the question was, in fact, a rhetorical one. It was deduced that it would in some ways prove more beneficial to one’s esteem if they lived in some third-world bakery which possessed a scratch recipe for rich decadent frosty icing, rather than belong to one of immense wealth but essentially void of any formative culture; if at all possessing any depth, it has been manifested into a materialistic mindset which has painstakingly, though covertly, aimed to sort out each and every observable economical, emotional, and physical ingredient that has thus far become stewed’ into the pot of diversity; for the sake of reiterating a subliminal hierarchy of shelves defining which pastry is the most lucrative in this superficial embodiment which is shrouded by the confinements of political correctness, as established by the bakery association...

Throughout the short span of my creation at the hands of my baker, as far back as I can recall, I have been in a struggle for self-absolution. I have wished obsessively for the bliss that accompanies a content mood. I do not use the term ‘obsession’ lightly: when one feels a wholehearted disassociation with their outer shell to the point where they cannot effectively transfuse their intellect towards formulating any outwardly-conceivable depth within a personal trait; when their cognitive maturity has been stifled significantly as a result of a tainted self-perception - mainly due to external influences from a “neoliberal mechanistic paradigm” (Schaufele, 2020, p.148) which convolutes our consciousness; when external vanity evolves from a slightly pestering cist into a cancerous life form that greedily feeds at every biological node, consequently relaying within each moment that passes that the prospect of resolution is becoming increasingly dimmer—that is an obsession. I want to be a chocolate éclair.

I wonder if anyone has considered just how unhealthy for the psyche it is to internalize the position of an underprivileged and deficits-plagued being. Okay, so someone has wondered about it. If that is the case, a supplemental wonder is how counterintuitive it may be to cultivate feelings of deficits among others in order to foster outcomes of empathy among dissonant groups. I cannot help but be frustrated when I think of the prospect of someone feigning a

perception of someone else's plight in order to appease their own insecurities, or – worse – achieve some socially recognized outcome that reflects how they would like to be perceived.

This is not necessarily an off-beat question if you provide me the opportunity to contextualize it: Is *white guilt* a subconscious response to the problem of acquainting oneself with *otherness*? I think that how we define *white guilt* is indicative of why it can potentially prove cancerous to culturally responsive approaches in education. I see it as a systemic response on behalf of individuals who, when reflecting on our historical timeline and/or when aware of the presence of someone who has experienced oppression (personally or ancestrally), react emotionally by defaulting to shame due to the perception that they lack contextual perspective.

Essentially, it is a default toward *efficiency*. This seems like a tough response to account for in education because it is not usually met with a productive outcome; thus, the feeling of shame is the conclusion. In education, I think that teachers who feel guilt due to a lack of cultural perspective will try to alleviate the symptoms by trying to acknowledge the *other*, yet this can consequently be perceived as a superficial, “special” initiative that still does not address the crux of the issue. The crux, I believe, is to become more aware of the Westernized perspective and how it permeates all aspects of the educational paradigm.

I need to mention that I bring up the topic of eurocentrism, not to invoke a discussion of its ontology, but as an issue which I believe was previously a subconscious driver for my temporality and its products (i.e. my thoughts, decisions, and actions). It *does* connect, and to me, the connection may be a critical factor in my ability to generate an alternate cache of capital – one that is filled with byproducts of choice and dissent.

Sprinkle a little chaos on it. The narrative of the oppressor and the oppressed is an enduring one, but it is not the only one which exists within a social grid. That narrative often

seems to function in exploiting the fissures created by disparate opinions among diverse groups. Alternate narratives should at least be explored – perhaps there is one which does not efficiently place blame on individuals whom have no personal influence on their ancestral ties or socioeconomic disposition but rather acknowledges that our societal state is a historically linear amalgamation of oppression, elitism, exploitation, and partisanship. But these explorations require the following theoretical concession: over the course of history for a society, its actions plausibly transition from conscious efforts to subconscious modalities. Possibly, it is an inevitability of culture; *intuitively*, it is also one of the major reasons why culture is embedded in the human condition.

Identity & Language

One of the more transcendent objectives for my autoethnographic approach here is due to the relationship that I perceived between myself and the construct of language. There are particular objects in within reach - whether they are inanimate and physical or abstract and ethereal – which I think deserve more respect than can be offered in a justification of a tool’s usage for the betterment of a human objective, and language is one of those objects. We might say that language is indicative of a universally accepted construct, but we are really talking about *communication* as a universally accepted construct, for our usage of language infinitely varies depending on the relationship that we perceive between the object and ourselves. I will later expand on how language functions within my life, but I think it is important to introduce it here in order for a segueing to occur toward an advocating of narratives in transcendent learning.

The previous paragraph might seem a bit “off” in some way. Perhaps some of the phrasings are a bit dense, or maybe it is that it seems like a lot of writing for it to still possess so much ambiguity. Or it may be that the paragraph was written in a conscious attempt to apply

spatial relators (Bohnmeyer, 2012) in ways that normally would not be found in my writing. I used to think that the fundamental challenge with westernized constructs of language was that they are too exacting in how they attempt to account for a contextual nuance such as a car accident, a first encounter, or even an informal political debate. However, this was an intuitive notion that I held, and I think that it could be easily countered if we think about the countless situations where language has failed us in achieving our communicative outcomes. The problem, rather, might be found in how we communicate things in terms of absolutes.

All of these factors contribute to a learning grid. Shneidman et al. (2016) demonstrated a bit of this in their study of the observable differences between Yucatec Mayan children and U.S. children with respect to spatial awareness, frames of reference, and exploration. Beyond that notion, it might be more fitting to explore how the challenge of language might be linked to how we coordinate the referencing of entities within a particular grid or instance. Bohnmeyer (2012) has extensively studied the implications of how particular constructs of language vary in how entities are accounted, and he often applies the indigenous Mexican languages of Yucatec and Siri to demonstrate how the intrinsic presence of the entity with respect to another entity and within a spatial vector – that is, an “object-centered” (Bohnmeyer, 2012, p.218) description of reference – more often creates a vector of “manipulable” space (2012, p. 226). By contrast, westernized languages such as English might tend to rely on more relativistic nodes, perhaps things like prepositions, to establish references among entities, yet there may also be a perceivable degree of ambiguity that is often due to a lack of intrinsic referencing without an extrinsic “anchor” (p.246).

Also intriguing is how the Yucatec and Siri languages rely on angular frames of reference – for example, “the ball is left/in front of the chair” (Bohnmeyer, 2012, p.218) – which would

not be commonly expressed English in a similar way. Consider this for instance: How often have you heard someone in a classroom express that “She is sitting within the north and the west”? For some reason, this now has me thinking about how secant lines are utilized in differential equations (Fiske, 1994; Swinyard, 2009).

All of this is to say that the ways in which we spatially and temporally account for and reference entities can say a lot about what constitutes how we make sense of things – whether it be to justify, classify, or observe them. To me, the Yucatec and Siri languages appear to depend on particular aspects that are subconsciously agreed upon, such as the position of the stars or the observer, allowing all else within a context to become more malleable within a given vector or context. It is as if their communicative interactions possess an axiomatic aspect to them which is necessary for understanding of somewhat ambiguous information nodes, one of those axioms being that the observer’s position within the vector is to be accounted for, which would change my previous example to “She is sitting to my north and west”- or something along those lines – I am still thinking on it.

While English speakers certainly reference themselves in reference statements, Bohmeyer (2012) certainly makes me wonder why we are less likely to do so than in some other languages. I think that it might have something to do with how such references are indicative of a contextual participation between the observer and the external entities, and this intuitively leads me to wonder if this is reflective of how we perceive *ourselves*, and for some it may reflect a reluctance to see ourselves in terms of otherness (Markovich, 2018) while for others it may mean that they are unsure of their positionality.

I thought about including some of Dalene Swanson’s (2009) words from her stylistically autoethnographic account of transcending the *a priori* – as it relates to lenses of deficits and

power. But, I just decided against it because every time I tried to break it up, I feel like I am dismantling the poignancy of her reflections more than anything else. So, I guess just take my word for it that she reflects on her positionality and that she came to the realization that she had indirectly been perpetually amplifying narratives of deficits and narratives. So, I guess this paragraph is totally unneeded at this point. This is awkward...

Yeah, so, that bit I mentioned about us being stronger than we think, the evolution of ourselves transcending the organizational hierarchy, and failing to employ our morality – I think about that when I read Swanson’s (2009) words. I think about it every time I do not follow through with something that intuitively manifests but which later turns out to be the proper causal course – such manifestations as vocalized dissent. I feel like I am being either tested or conditioned...I am not sure which one it is. Maybe it is not that dichotomous as I am putting it, or maybe the dichotomous thought process itself is what I am struggling with.

I’ll have to take another approach here, I think. Swanson (2009) mentions that privilege is contextualized by way of “the spatio-temporal dichotomy”. That is a dynamic which does not fit within my notion of a grid that is maintained with factors of choral, spatial, and temporality that is housed within consciousness, but I do see it as something which is more artificial than ingrained and for some reason afforded the opportunity to leech.

Dichotomous processing is leeching within my thought process – I am aware of it, and I need to find out why. I’ll start at the conclusion and work my way back from there: I am a privileged individual - Boy, am I fucking *privileged*. I should take some time to reflect on this privilege.

I enjoy the privilege of being foreign even though I was born in the United States. I share that statement while lacking the certainty that it is my privilege, and my reflections offered in

this section will undoubtedly reflect that uncertainty. The term, foreign, is undeniably relevant to social dynamics. Just ask anyone who feels alone in a densely-crowded area, or any immigrant who is uniquely situated on the melanin spectrum. The melanin spectrum is my way of looking at foreignness when physicality is the predominant influence for social dynamics. If an environment has a cluster of individuals with a similar skin tone, those individuals share the same position on the spectrum. And in such environments, it might be said that there are proportional relationships between how newcomers are received and how far their skin tone deviates from that clustered group.

I have a mother who is a Mexican immigrant and a father of European descent. I'm kind of like a racial chameleon. When I meet people, it is only a matter of time before I am asked about my ethnicity and/or race. I usually ask them what they think I am, and only once has someone guessed that I am a mex-irish blend. I have heard people guess that I am Middle Eastern ("Iraqi"), Korean, Italian, Spanish, and "Black Irish", to name a few, yet it always humors me how often the guesser is underwhelmed by my reveal. Sometimes, their reaction borders on repulsion. The connotatively negative visual cues were what often stuck with me as a child - repulsion was resonate and locomotive. For a child in this context, the easiest disposition to internalize is wishing he looked more white. Fingernails scratch at the melanin.

Stereotypically-white nuances are prioritized. Foreignness becomes virulent.

I might be fitting here to suggest that I have at least half of an understanding of why a concept such as white guilt has trended to the extent that it has. Privilege is often thought of in terms of opulence or capital - what one possesses inherently which has led to experiential outcomes that might be devoid of feelings related to shame. Or, if such outcomes *do* contain feelings of shame, they are nuances that only seem to subconsciously influence the privileged

individual. In this scenario, such nuances lack the strength to influence the privileged individual in ways that transform their insecurities into insights, and instead they end up fueling skills of repression and suppression.

It is becoming more absurd, at this point, to think of privilege in terms of opulence or capital. Bias can take on a number of forms and implications. To have privilege seems only to translate into a lack of access to insight, metathought, and perception, and, to me, it might be the “privileged” ones who require the most cultivation. Yet, I feel as if the conversations surrounding privilege always seem to entail the same model of social dynamics. The questions looming in this context are situated as proverbial elephants - Who here is privileged? Who here is the least privileged? How do we get the privileged individual to empathize with the under-privileged? How long into this discussion before we hear the first privileged individual offer an outsider-insider anecdotal observation followed by a cogent statement of “I had no idea” or “It was a really inspiring moment for me” or “I can’t imagine what that’s like”. The latter is probably the most productive of these insights, but it still does not get to the root of what privilege-centered discourse could effect.

When I look at someone who has internalized struggle, it intuitively feels like it manifests in their eyes. Those are the experiences where eye-to-eye contact appears to be the most informative. I had once been told that I am good at keeping eye contact with people; however, if that was the case in the past, it is a skill that has been significantly scaled back by now. At first, I was consciously aware of how I chose not to make eye contact with individuals whom I thought did not offer any potential for insights to be gained or for fruitful outcomes to be shared during a particular social exchange. This once conscious realization has now progressed to a habitual, conditioned behavior where I later end up reflecting on why I did or didn’t establish or maintain

eye contact and what I should or shouldn't have done in order to correct judgements I had casted.

That is my privilege, I think, if foreignness is not an acceptable one: developing a portfolio of reasons for casting judgements - a portfolio compiled of countless instances where I had to deal with feelings of shame and judgements by others, instances where I traversed impossibilities, instances where chance made way for me to straddle the threshold of factors which would be either life-defining or life-sentencing. In that way, I end up trying to justify my judgements as ideologically true, when in reality I am subscribing to the same fallacious tactics as those whom I label, classify, and divide.

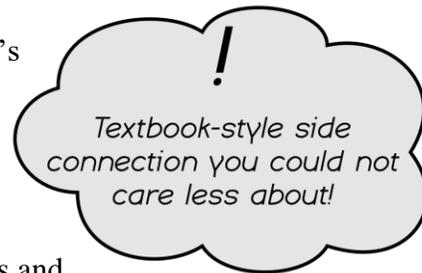
For me, all of this opens the door to considering privilege from a deficit modality rather than an opulence-based one. I perceive my life ostensibly as a series of struggles, and this series is so incrementally wrought that I initially deemed it impossible to think of a privilege that I held which enabled me to take particular social experiences for granted. I thought, "I am not privileged, I never have been, and what I represent is a culmination of a life that vesseled shame, guilt, resentment, and restrictions in varied ways with varied individuals, including myself." Thus, I am biased.

My privilege *could* be that I have operated with deficits, and in the past I was made aware of many of them. Some were deficits that I believe held truth, while other deficits were fabricated through a cascading of self-reflections and external observations that were too-heavily filtered with cognitive biases. Deficits occupied my thought - deficit overload was bound to happen, and just as inevitable was the concocted deficit mindset that my developing mind was not ready to confront...

I'm starting to feel the weight of all this bearing down on me. The ideal is that we can consciously remain vigilant in being responsive to our cultural predispositions so that we can redefine and refine our relationship with cultural responsivity (OR REALITY?). But doughnuts like us require very little pressure before we crumble.

Agency...I think I left it next to my car keys...

At the risk of deviating for a moment, it might be relevant here to briefly reflect on why maleness is not my privilege. As a shark ages, its vertebrae concentrically expand in similar fashion to the growth rings of a tree. Over time, the shark's spinal bands become a model of complexity, with deviational patterns that are influenced by a myriad of factors. Analogously, modalities preoccupied with deficits and vulnerabilities compound over time and increase in complexity. To be male, in one way, means affixing a stable internalization of one's maleness before deficits and vulnerabilities progress toward a complexity that is perceivably unmanageable. While much of that complexity is intrapersonally derivative, a male can also feel the pressure to figure out his corporeal attributes so that he might defend himself against interpersonal attacks, such as someone who tries to use his deficits and vulnerabilities against him and, in turn, asserting their own dominance.



On a personal level, I do not see my male gender as a privilege. I enjoy being male, but it is not something that I think has led to experiential gains that I take for granted. It has, however, challenged my conceptualization of strength, which some consider to be a significant catalyzer of gender dynamics. As a child, I had more opportunities to observe the strength of my mother than any male I encountered - her strength is still something I consider to be next level. My mother's strength most certainly surpasses that of the male who attempts avoidance, brutality, and

substitution to exorcise his inadequacies. My second mother's strength most certainly surpasses that of the male who attempted projection, supplementation, and deflection to wrangle his sexuality.

My gender does not come close to my foreignness when I try to conceptualize my experiences. One byproduct of these reflections is that it has somewhat influenced me to consider if I am inclined to perceive my primary family as a fucked up microcosm of colonialist practices, and in the setting of family, I inevitably look, think, and operate as a foreigner. In some ways, it is a training ground for how I function in outside social contexts, and I have learned that those instances where I feel closer to my family are to be potentially dissected into social tactics which might help me feel closer to others.

Closeness with others is something that I craved while growing up, yet it is not something that I am preoccupied with currently - perhaps this is due to complacency. Parenthood seems to adequately consume desires of closeness, if one is open to seeing it that way. I often tell people that I did not fear death until my daughter and my son arrived born. Prior to their arrivals, I was non-committal to emotions connected with dying; now, I am terrified of it – perhaps I am terrified of distance and its implications.

I pose these experiential reflections in order to pedestal my privileges, whether they be correlative with foreignness or deficit-influenced insight, atop the shaky foundation of a limited emotional vocabulary. For individuals who internalize struggle, the dilution of emotion or the absence of particular emotions are very real consequences that reverberate throughout social contexts. My emotional vocabulary, or lack thereof, was a beacon for me through this exercise. It was a goal that I could lean on, something that I knew I would need at some point when my predisposed mindset would try to reacquaint itself with complacency...

...My issues with socialization and my associations of trust with vulnerability must be related to my perceptions of my foreignness. In one way, I am finding these dispositional byproducts of spatial occupancy, and such prompts are obviously needed for reasons that extend beyond our course rosters. But we all have a long way to go, and while I am not confident that we will truly reach the outcomes that could and should be attainable through considerations of privilege, I also do not have to exacerbate such failures of insight. In one way, I think that embracing my foreignness was necessary for maturity's sake, but I now see the importance of keeping myself accountable for contexts where disposition and complacency are latticed. Here is where the neural mechanisms (Kameda & Hastie, 2015) model comes back into play, for I think that they not only reflect intuitive and conscious factors that influence cognition, but also subconscious factors of rationalizing.

Yet, it builds on the previous model (Volume I), that of the *neural mechanisms*, by demonstrating that intuition not only functions to internalize experiential factors that lead receptiveness within a social setting but also *docility* - in other words, intuition is increasingly likely to only be utilized in such contexts to validate information that is disseminated by those perceived as more powerful.

It appears that neurological mechanisms might be influenced a lot by a grid of socialization. But, if we look more broadly, we see that there is more to it. We might even see that it is not a one-way or even a two-way causal relationship between internal and external mechanisms. In discussions of how biological networks are simulated, there are some analogous observations that can be made between what happens within ourselves and what happens with others – that is, our internal, biological processes are governed in a similar way to how our

external, social processes are governed. For example, consider the following statements provided by the National Research Council (Wooley & Lin, 2005):

“An important dimension of ecological environments is how organisms interact with each other. One often-made computationally simple assumption is that an organism is equally likely to interact with every other organism in the environment. Although this is a pragmatic assumption, actual ecosystems are physical and organisms interact only with a very small number of other organisms—namely, the ones that are nearby in a spatial sense. Moreover, localized selection—in which a fitness evaluation is undertaken only under nearest neighbors—is also operative.

Introducing these notions increases the speciation rate tremendously, and the speculation is that in a nonlocalized environment, the pressures on the population tend toward population uniformity—everything looks similar, because each entity faces selection pressure from every other entity. When localization occurs, different species emerge in different spatial areas. Further, the individuals that are evolving will start to look quite different from each other, even though they have (comparably) high fitness ratings. (This phenomenon is known as convergent evolution, in which a given environment might evolve several different species that are in some sense equally well adapted to that environment.)” (Wooley & Lin, 2005)

In this meta-analytical way, we start to see that causal mechanisms are essentially worlds within worlds – each of them operating within individualized mechanistic grids – they would operate regardless of the number of external factors within a macro-contextual grid that encompasses them both. They are agentic. This is how we start to perceive the interactions of these internal and external mechanisms as another form entirely – dare I call such interactions entropic.

Additionally, if we accept that dichotomization principles are chronically present in educational environments, it is not fallacious to propose that our active role within the enablement of marginalization-friendly initiatives is indicative of a pursuance toward

complacency and compliance. The alternative is to voluntarily situate ourselves within unsettling modes of discourse while also participating in instructional endeavors that will disrupt internal and external presumptions regarding teacher efficacy. Is someone more inclined to work in a system that clearly outlines a pathway for success as opposed to working within less restrictive constraints that support innovative practices on a localized level? While we might feel ideologically aligned with the latter prospect, the stability of the former prospect is often the driver for our compliance.

The purpose of this discussion, as I see it, is to work toward a defining - or redefining - of teacher efficacy. Any teacher philosophy that I have ever written undoubtedly voiced ideological perspectives while narrating the nature of the student learning environment, choosing words such as *challenging*, *empowering*, and *engaging*, and I am sure that other educators can relate. Yet, it is not quantified data that I fear, and it is not recidivism by way of misinformed choice that I fear. At least, I do not fear them nearly as much as the notion that we have inevitably failed to sustain such vocabulary in our personal journeys as educators. The *teachers as learners* mindset is not seen as a viable approach in the current state of education largely because it does not function neatly as a conduit for decisive approaches.

Thus, the expectations of continuing education credits and professional development hours are implemented and perceived as mandated expectations rather than enrichment opportunities.

Thus, teachers shelve confidence in lieu of the low-hanging fruits: doubting self-efficacy and feeling that they have been forced into compromising the origins of their initial teaching philosophies.

Thus, the prospect of facilitating change becomes seemingly unfathomable - especially when the immediacy of lesson pacing and test preparation are attributed with the daily grind - amplifying a correlation of implementation and competence and subduing a causality of collaboration and confidence. This effectually manifests as products of that are overzealous in relation to accountability (Bybee, 2020).

Thus, the role is then reduced to *teacher as patient*, receiving strategies and arbitrary solutions rather than contributing in settings which might reacquaint the teacher with challenging, empowering, and engaging work. Bybee (2020) similarly discusses this by analyzing the “transformation of teachers and students into objects through standardized testing” (p.425).

Without disruption – or at the very least, expressed concern – the hierarchically linear pathways begin to hum and harmonize, operations become more ingrained, and the model becomes increasingly grounded. I do not like it. Again, it does not feel right.

While discussing the analogous relationships between social creatures such as ants and humans, Grobstein (2007) presents some connections of interaction within a hierarchical model, and I think that they are important to include here:

“Biological systems are themselves the product of evolution, of billions of years of trial and error, in which more effective organizations persist while less effective ones disappear. It is hard to escape the conclusion from biology that by and large systems involving distributed interactive architectures work better than hierarchical ones, at least in the kinds of continually, somewhat unpredictably changing environments in which evolution has been occurring.” (Grobstein, 2007, p. 5)

There you have it. This shit’s been going on for a long time now, this power-play of control and dissent, yet not nearly as long as the dynamics which have progressed and evolved within ourselves. We are stronger and more capable than we think – it is ingrained within our existence, and somehow we manage to consciously stifle it while moral compasses become the daydreams which we hark with credulity.

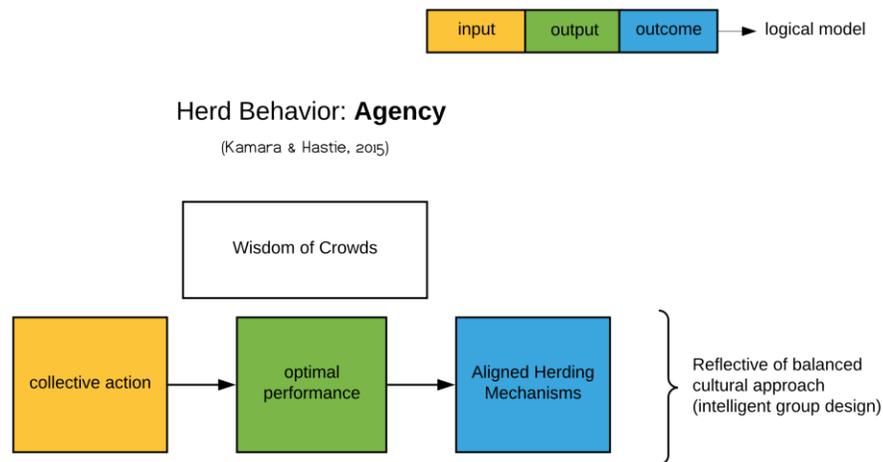


Figure 23. Visual of how I interpret logical models, herding, and agency to Intersect.

Recently, I stumbled on some research discussing neoliberalism along with perceived needs of efficiency governed by quant-oriented and replicable means (Schroeder et al., 2020). The authors make clear associations between the implications of high stakes agendas and diminished notions of autonomy, agency, and identity (2020, p.353); additionally, the “Opt-out” movement is discussed as a response to the “madness” experienced by such agendas (p.353). What proves fitting for my own approach toward discussing this shit storm of positional, moral, and obligatory rhetoric, maintained by self-proclamations of idealism or pragmatism, is how the authors integrate militaristic references to notions of “moral injury” (Schroeder et al. 2020, p. 353).

Before I had read this study, I think I had been experiencing that type of trauma and had not been aware that it had been classified in such a way. In essence, it stems from the internal conflict that arises from feeling seemingly powerless in relation to changing systemic issues while also functioning in cog-like manner while enacting the policies and mandates with which we inherently disagree. We feel as if we are contributing to some level of moral or ethical harm in relation to the lifelong learners whom we volunteered to facilitate for ever so brief of moments in their lifespans, yet we have very little fundamental perceptions of the grand design of this clock, nor how our functionality as cogs would be influenced by our dissent. Would our dissent cause some fractal influence over the system's ability to provide an arbitrary accuracy, thereby causing systemic yet unforeseen consequences on peripheral components or even on macro societal trends? Or, would we simply find a new clock?

The digital clock was most likely seen as yet another tool to make analog components obsolete, but there are societal phenomena which counter-balance that dynamic. For one – nostalgia. It feels more stylish to wear an analog watch than a digital one (for the most part), and it does not feel at all like an analog watch wearer is compromising societal technological growth. My watch battery died not too long ago, and I miss it more for how it looks on my wrist than its necessity in some second to second chronicle – there are many seconds for which I easily find reasons to forget --

A cog which no longer functions can be replaced. My watch, a very nice Swiss-made piece which I chose as my wedding gift – yes, I chose my own gift – had to be shipped thousands of miles away to its maker due to a faulty movement mechanism, and since then it seems to eat batteries like a dog pillaging a toddler's high chair after dinnertime. I am not saying that the two

issues are related, but it does make me wonder if I put too much effort, thought, and money into a watch that has provided me with marginal benefit.

If a cog malfunctions, it is replaced. If a teacher malfunctions, they might be replaced. If an entire system malfunctions, an alternative is provided. I am not trying to sound bleak, radical, or melodramatic, but in all honesty, I do not care if I am coming across that way. I have experienced my fair share of feeling anxious about presenting such viewpoints, in rooms where teachers internalize the chart of phases that is jokingly presented to us every year - the disillusionment phase, the post-holiday reinvigoration phase, that type of shit that is provided as some pseudo-psychiatric framework to convey the notions that we are all understood, we are all connected, and we should all wait out our issues – while other teachers simply wait for the meetings to end so they can get on with the rest of their lives.

The reason why I no longer care about sharing this outlook is because we either have to risk a little melodrama in an unpopular view or we subscribe to what is constructed in our purview. Before our eyes, cogs are replaced, cogs are lost, mechanisms are rendered obsolete, systems have failed or are being failed, and alternatives are gaining traction. If the analog watch were perceptive of its inevitably anachronistic demise, relegated to novelty and fashion rather than its more pragmatic and necessary contributions, it likely would not have signed up to be a watch. Would an *educator-at-heart* sign up to be an educator if they were privy to an outcome where their profession is relegated to novelty – where settings increasingly become neoliberal think tanks of mechanistic efficiency and where contextual experts (i.e. a teacher who knows their classroom and its contributors) are deemed irrelevant? Do tests, simulations, and replicable practices paint the whole story of a learning context? Do we desire increased screen time for ourselves and our children and less interpersonal experience?

Here's a little exercise to consider. Ask yourself the following: Intuitively speaking, would you feel good if you saw a child in front of a television or monitor for more than three consecutive hours? Would you feel great about yourself if you looked up from your phone only to realize that your spouse and children had just made an hour of hide-and-seek memories around you the entire time? If you feel yourself wanting to respond with "it depends", do yourself a favor and stop reading this because it is pretty clear that you would prefer me to shut the fuck up so that you can get on with your day...

III – VAPORS OF OLD SONG

[My Σ of Eliot's third Volume]

This is, perhaps, the most intuitive portion of Eliot's poem where byproducts are generated from existential dissonance. What it means to work and what is meant by the nature of one's work. Are we like the young man in his poem, grasping at and groping through contextual lyricisms of space, time, and consciousness which are intended to cloak our grasps and gropes as something conscientious, competent, and calculable? Are we able to "walk in someone else's shoes"? Is an anthropological style of insight even attainable? Are we types of humans, or are we humans of types?

Genres: Satire, Mythopoeia, Magical Realism, Narrative Non-Fiction, Meta-fiction, Lyricism

"I heard windchimes tonight in your backyard – they reminded me of a Chernobyl playground..."

--A random thought, circa 2008

...Sorry, you lost me for a minute – my son was downstairs beating on our furniture with a toy hammer, and this aggressively repetitive and dissonant thwacking sound was saturating the house. Where was I? Oh yes, word vomiting an aggressively repetitive and dissonant account of educational bullshit...

As I working on this “lil’ book report”, I will have been teaching virtually, mostly from home, for roughly 9 months, or nearly the instructional equivalent of a school year. Although we had some journalistic warnings, it seemed like our peripheral perceptivity was in a lapsed state - the pandemic seemingly hit us from left field. It was almost as if we were simulating the evacuation of a community setting plagued with nuclear disaster – papers were left disheveled and scattered on desks and the floor, conveying a sense of hastiness – “get what you think you will need to teach from home – we are not sure when you will be able to return”. In truth, it was a bit more dramatic than what I am describing: we didn’t leave our classrooms suddenly – we actually received the call on a Sunday evening catching us all rationally off-guard, anxious, and emotional. *Psuedonyma*, also a teacher in the district, was frantically trying to find a purchase books from Amazon in order to teach from home.

I am being no more of a help to her other than offering some off-the-cuff intuitive responses – “Why in all that can be cursed are you driving yourself mad with procuring texts? It is a Sunday night, Amazon does not run drones in our area. Chiilllll.” Bless her, she is a sweetheart who truly cares about her students.

So, we received the message sometime afterward that we would be able to get into our classrooms so that we could procure what we needed for an indefinite period of virtual instruction. *Yes*, I had been afforded ample time to clean up the disheveled papers on my desk and floor – *No*, I did not do that.

Like everywhere else, chaos was experienced as we transitioned into this new grid. Speaking in a general sense, and in no way directly criticizing anyone directly, I think that all of us missed an opportunity to reconsider some things regarding how we educate and learn. Instead of this outcome, what was realized was more like some unaided, low-budget (it is public education, after all) version of *The Twilight Zone*, where we had succeeded in virtually simulating the early-mid 20th century classroom. How could this have happened?

Well, it's like a line-dance routine to a cover song that emerged as a hit single in the 1990s but was never followed up with anything else of considerable compositional quality. Everything wrong about the situation – the song, the choreography, the clothing – is annoyingly persistent. Related to all of this is an arbitrary issue impacting educational discourse today with regard to the culturally cognizant practice of educational *worst* practices, and that is our systemic proclivity for conducting initiatives in ways which lack refinability and adaptability in conjunction with faced-paced and replicable achievements.

I am going to throw in a made-up term here, mostly because I think it sounds cool, but also because I think it works. I refer to this as an *inertia paradox* – sounds cool, right?? The *inertia paradox*, as I see it, rests on a causal chain that is perpetuated by the following factors: a) model of reactive approach, b) strengthening of the model over time, c) reduction process (i.e. reduction and classification) latticed with dissonant features, and d) causal chain of exposure-expansion-reduction – processes which are essentially a nod to how dynamics have been discussed in economics-related conceptualizations of multinational enterprise (Phelps & Fuller, 2016) and which invites the occurrence of the paradox.

Inertia?

Broadly speaking, we are situated within a model of reactive approach while applying technology. When something begins to trend upward in the technology realm, we respond by attempting to figure out how we can apply it, and by that time we are simply playing catch-up before the cycle inevitably begins with a newer innovation. Igoche & Branch (2009) discuss how the technological advancements should “account for the voluntary and involuntary factors that are socially inherent” (p. 5), yet accounting for, and adapting with, particular technological endeavors requires proactive insight as well as constructive reaction on behalf of educators. The fast pace of technological refinements is a global reality, and because such refinements do not operate on a fixed schedule, a manageable timeline for anticipating educational applicability of new refinements is impossible to quantify.

There is a theoretical component that is essential for anticipating technological advancements, and it is more evident where systems-level thinking (Weiner et al., 2020) has been applied. It must be expressed that this is not an advocacy for systematically predicting which types of technological advancements will occur in order to try and stay ahead of the curve - this would prove a hasty and irresponsible way to manage technological initiatives. In actuality, theoretical understanding of how systems are developed and maintained would aide in more innovative applications of technological devices/resources due to educator awareness of transparent capacities and limitations while contributing. What is thus created are adaptive byproducts which primes the classroom for any curricular refinements/advancements that might later occur.

The reactive approach is a model that is (and has) strengthened over time, thereby perpetuating the inertia paradox. Frederick et al. (2009) provides an overview of the technology

and education paradigm by first citing 4 dominant uses of computers, and the subtheme of that list is that they have comprised the general modality for applied technology in educational settings for multiple decades. From this list, the lack of potential is evident in relation to compliant educational systems and their inability to innovate technologically with cultural responsivity in mind. The four dominant usages predisposes the device/resource to be viewed as an external component which requires a task-oriented purpose so that it may be utilized within the classroom. While this may be a proper assumption regarding the usage of a particular device/resource in certain situations, it forces limitations on how innovation can occur; thus, responsivity toward the device/resource is causally dependent on curricular make-up. It should be conceded that the curricular applicability of a technological device/resource is a pragmatic necessity, yet it should *also* be accepted that the curriculum/technology relationship is scalable according to educational context. For an environment that has mandated prescribed curriculum, the reactive model is more static; for the environment with skills-based or conceptual curricular expectations, the model becomes more dynamic.

Innovative approaches within a classroom are limited to a causal chain of exposure-expansion-reduction that invites the occurrence of the inertia paradox – therefore, transcendent learning is an absent virtue. To put it another way, we see our classroom as the contextual starting point, and as devices/resources are introduced we try to retrofit them so that they may function within our preconceived visions of our classroom. Such a process possibly strips the device/tool of its more innovative potentials so that it may be managed to fit our preconceptions. Thus, the devices/tools become anachronistic versions of their initial forms which perpetuates the inertia paradox. Morgan (2014) discusses culturally responsive integrations with technology to be observably plagued with presumptions of human interaction in

accordance with technological devices, and this speaks to how the reactive causal chain can influence the perceived applicability of a device.

For example, tactile interfacing (e.g. humans physically interacting with a touch-screen to read text) poses a fundamental problem for Westernized classrooms that seek to foster culturally responsive environments (Morgan, 2014, p. 869). The tactile interfacing problem also sheds light on how the quality of innovation is perceived, as it is inordinately more associated with the innovative properties of the technological device than the innovations that might occur in the classroom.

This causal tendency is analogously similar to the experience of a new student transfer. Upon entering the unfamiliar classroom, the new student is immediately thrust into an environment where routines, procedures, and curriculum has already been contextualized. A consequence of the dynamic between the newcomer and the pre-established classroom methodology is that much of the adaptability requirement is offloaded to the student thereby enabling the classroom to continue on its preconceived pathway. The causal chain is applied as follows: The new student enters the classroom (exposure); The student adds to the roster number, a formative diagnostic is conducted based on their a priori knowledge, and they are accounted for in relation to assessment metrics (expansion); They are encouraged to adapt in accordance with the current fixations of the classroom in relation to what is being learned and how the process of learning is being conducted (reduction).

Tales of a literally and figuratively hungry doctoral student.

Modes of consciousness transcending the plight of the doughnut: To alleviate the superficiality of such endeavors, cultural awareness/responsiveness has to possess an inclination for immediacy. Such an inclination requires educators to concede that some refinements will

have to occur over the course of a course schedule as opposed to marrying efforts with a pre-designed curricular construct that is presumed to be a complete and exemplar model. The prospect that *immediacy* holds for culturally responsive approaches relies on how it encourages student input, while the process of remaining steadfast within a prescribed path assumes that an educator can account for roster dynamics and diversity without prior exposure. If previously-quantified measures of classroom student compositions are to be upheld as a sacrosanct method for developing preconceived curricula without encouraging potential for divergent, localized decisions, we can only aim toward the successful integration of stereotypical, superficial, and subjective approaches.

Reacquainting ourselves with the notion of a damned-good framework. Young (2014) outlines the conceptual factors that contribute to denotations of culture by various disciplines. Those factors include presumptions of learned and applied behavior, static and dynamic traits, and systematized and programmatic distinctions in order to understand culture (Young, 2014, p. 350). What is illuminated by the listing of those concepts is that none of them stand out as dichotomous factors which are unable to function with the other ones, and this poses a functional model for cultural discourse to occur. Thus, an interdisciplinary mode of discourse seems to emerge where various disciplines are utilized to develop a comprehensive cultural knowledge base. Young sees this as an important model for ethnographic study that might lead to contextual perceptions of culture(s) so that meaningful, culturally responsive instruction can be developed. What transcends the more superficial pitfalls of some previously designed instructional efforts is Young's advocating that ethnographic, interdisciplinary study "can lead to derived from versus applied to learners" (2014, p. 351).

While observing Igoche & Branch's visual representation of a framework for ADDIE (2009, p. 6), some patterns are evident in how a structured initiative is suggested to operate. Namely, stakeholder involvement is encouraged throughout the framework. A conclusion that may be derived from the framework and its patterns is that multiple opportunities for design refinements should be embedded throughout the system's phases. More poignant is the indication that the framework seems to be reflective of a conscious effort to remain aware of how values of the system are influenced by the values of the creator(s).

Regardless of the framework to be applied, Igoche & Branch's work insists that a figurative survey of held values must be considered (2009). The poignancy within their position lies in the realization that values held by system participants are critical considerations if a system is to be successfully implemented and sustained. In their words, "a caveat for people sincerely interested in instructional technology frameworks that support cultural pluralism is to avoid making assumptions about individual values based on group norms" (Igoche & Branch, 2009, p. 6). Intuitively, a quality of transparency seems to be revealing itself as a critical factor for instructional design. It facilitates the idea of more productive interaction among stakeholders, whether it be student-teacher or some other interpersonal social dynamic, rather than operating in accordance with more confined social constructs. Thus, transparent positions on curricular and technological initiatives promotes a perception of cultural inclusivity which is ecological and which transcends metric-based expectations.

Arhar and Irvin (1995) wrote that interdisciplinary approaches within a learning setting have been successful in application, yet they are underrepresented in educational research, citing the Pontoon Transitional Design as a clear indicator of how effective such models can be (Arhar & Irvin, 1995, p. 65). Such approaches are indicative of an infrastructure that promotes

autonomous decision making by teachers who are collaboratively infused due to shared student rosters and flexible qualitative factors such as class scheduling/time. The result is a model that reflects that of a blended cohort more than a compartmentalized populous.

Authority and some “Deep Shit”

A matter of trust: It wasn't too long ago that we received PD touting results of quasi-experimental and experimental research/study as more credible means for judging assessment efficiency - this must be confronted if we want to achieve change. The bottom line is that admin require measured growth and educators desire holistic growth - entrusting educators with the responsibility of contextualizing their learning ecosystems is a necessary action, while its perceivable volatility is a necessary outcome to discuss and on some level accept - the timeline of education shows that we make mistakes in a cyclical fashion, because we have not confronted the problem of top-down curricular processes.

Realigning a system, thus, requires a re-envisioning of what might be but which has not been previously considered within a particular grid. Cue the buzz words – interdisciplinarity and multi-disciplinarity. Grobstein (2007) mentions that multidisciplinary approaches are essential in generating productive means for disciplines to produce beyond their anachronistic modalities. It might simply be a matter of how we manage transferences of perspective for something other than what we are used to. I really think he is alluding to trans-disciplinarity here, but maybe that's just me.

Yet, even when I previously mentioned those buzz words, a sense of frisson was nowhere on my radar. It doesn't get me energized to reclaim my agency – it just makes me realize how hungry I feel at this specific instance. Cheeseburger. Okay, I need a frisson catalyzer to keep me from getting up and raiding the refrigerator...Got it, here it is - We should additionally keep in

mind the following “Our current educational model relies on conceptions of knowing and of coming to comprehend. However, [we] must confront the idea that for many teachers and students in classrooms, less and less can be known and trusted” (Ranscaert, 2020, p.534). Oh yeah, there it is!

For a moment, I would like to reiterate a post-modern view on system efficacy so that we can further discuss teacher efficacy – well, I guess we aren’t discussing this so much as you are reading my pontifications, but, you get the idea. Transcending the state of quantity and obsession leads me to think about how trust is cultivated within a system as well as what is needed for it and what comes with it. For one, it requires a malleability within the dynamics of roles - occupational, ideological, or otherwise. William Doll (1993) conceptualizes the “*role of authority*” (p.167) in a way that highlights how trust and power are necessary intersections when it comes to such dynamics.

As I continued to revisit that conceptual dynamic, I started to interpret a learning grid as an active simulation of exchanges between trust and power, and ultimately authority. For this exercise, I held a perception of causality depending on the initial states of a learning grid depending on its intuitively broad generalizations of how trust and power are employed. This led me to posit that such learning grids may modally function in one of three simulations: One of them holds a form of transparency, which holds implications of betrayal and failure but is stabilized via faith. This one seems like an ideal or utopian construct more than a realizable one.

Another of them holds a cloaked form, where our more cynical states opens the door of volatility in that we might be more inclined to question the validity of a source, especially if transparency is adamantly expressed and failure is perceivably off the grid, so to speak. The third takes on a hybridized form, and it functions as a modal combination of the previous two forms,

and it is here where we might perceive transdisciplinary implications for a learning grid *iff* failure is maintained in equitable fashion. Additionally, we can tie this third form back to the preceding Volume’s referencing of Grobstein’s (2007) bipartite system:

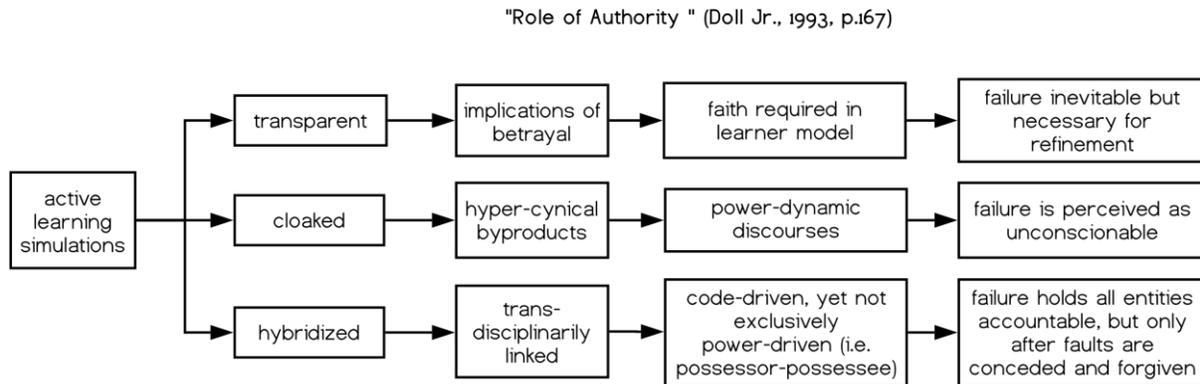


Figure 24. A visual representation of how I interpret authority and its roles.

For many individuals, the prospect of being alone is something which is neither desired nor accepted – some would even concede that being wrong alongside neighbors is more agreeable of a disposition than being right and in solitude. This concession has to be confronted if schools are to be spatial-temporally afforded the means for “transcending communities in which one together with others can imagine what it might mean not to hold on to [dominant] ideals and principles” (Hansen & Phelan, 2019, p. 45, quoted in Schaufele, 2020). From a position of hermeneutics, obsessions with clarity seems to generate this paradoxical opacity that influences what we might actually gain from acknowledging that existence is fundamentally ambiguous in discourse (Schaufele, 2020, p. 149). The more we seek to manipulate the nuances of a context towards a measurably replicable form, the more likely we are creating ambiguity – something which we fight to avoid, yet it is there. Ambiguity is an entropic beast, but we should embrace it rather than seek to tame it for artificial constructs of reality.

Kripke (1980) presents the issue of identity and referential understanding in a way that lends itself to what I am wondering, noting that the functionality of a reference – such as a name of someone – is more closely linked to its communicative legacy – a community’s chain of usages of a reference (p.92) – than it is to *a priori* truths of qualities that are possessed by the referenced individual. He proves this in a theoretically ambiguous manner, focusing on the fallibilities which come with how we refer to someone based on multiple attributes that we have personally ascribed to them. This is due to the idea that we are but one variable within a myriad of others – thus, our perceptions are dependent on the validity of our information and the accuracy of our etymological recollections regarding the exact nature of the reference and the object which we are referencing.

Inevitably, this leads our perceptions quite susceptible to the issue of misinformation. Comparatively, it also leaves us susceptible to arbitrariness – something that, from Kripke’s discussion, I interpret as an implication that must be considered when navigating whether a reference to someone or something is necessarily or contingently true in a qualitative sense. It is also how we begin to comprehend – and realign, if needed – the communicative legacy of a referenced point (i.e. a person or object) – otherwise, we surrender communal arbitrariness which governs references of ourselves and of others, and it inevitably becomes the responsibility of one who governs.

Doughnuts & Deli Sandwiches.

Okay. We are ready to directly confront the fuckedupedness of an FDR-era methodology of aesthetically bastardizing the narratives of people. Good. We have also begun a reexamination of system-level gridwork with the notion that an acceptable outcome might not be realizable without it. Okay. So it seems that we are dealing with spatial components here as we work

towards an acceptable outcome, and this requires a framework. Here, we might be able to use Weiner et al.'s (2020) "definitions of the five spaces for design in education" (p.781) for such a purpose, which includes the following:

- **Space 1 – Artifact:** "(Relatively) Stable objects that can be perceived through the senses"
- **Space 2 – Process:** "A procedure or directions that can be used outside of the context within which it was created to achieve a goal."
- **Space 3 – Experience:** "A piece of time with associated sights, sounds, feelings, and thoughts."
- **Space 4 – System:** "An organized and purposeful structure of interrelated and interdependent elements."
- **Space 5 – Culture:** "A pattern of shared basic assumptions that allows groups to perceive and interpret the world in similar ways, develop and communicate meaning, and transmit values to new group members." (Weiner et al., 2020, p.781)

By reexamining the system, we are able to also reexamine how discourse is manipulated by its parameters of language. Ranschaert (2020) analyzes the dynamics of this issue while discussing the historic, aristocratic utility of the carnival: "During carnivals, those with the lowest societal standing could wield great power...where brief freedom from oppressive rule created a space for parodic criticism of the aristocracy under the guise of communal fun" (p.522). Let's have some fun – and we'll do this by first examining what might function as an exemplar of what this process is *not*...

Antithesis of Space 1 – Artifact -

Date – Confidential - Page 116 in Notebook vol. III –

Let's apply a completely hypothetical scenario and applying first-person narratives in order to give it some panache - I have a PD meeting centered around one of the grades I teach. Here is the completely hypothetical scenario in sum – All last year, during pre-COVID times,

people were designing a new curriculum for 12th graders – one that was aligned with expectations of an intermediate writing course that is offered at our local community college.

Honestly, the course curriculum has a lot going for it, minus the major issue that it was developed prior to the pandemic shit-storm scenario. I'll save you the nuances of my perspective on old ways and new challenges, but at this point I think you can guess how I feel about retrofitting during the “New Norm”.

This hypothetical PD meeting has been structured as one of a series in “how are things going?” discussions that are meant to help convey that we are all in this together – but it seems hard to trust this dynamic as more than a smokescreened data collection opportunity – seeing which teachers are still complying and which teachers are unfortunately dissenting, like rabbits doing what they can to avoid taking their medication (Keseey, 1962). There I go again, the alarmist in me...

A question is presented to us – sort of an icebreaker for this *completely transparent* discussion session...first, let me just clarify that we are months at this point into virtual teaching, and a fraction of the participants are using their cameras and microphones – most are clicking away on the chat text thread, stuffing their faces with reubens, rachaels, or some other type of exotic sandwich, giving two actual shits about transparency, and the alarmist within my subconscious is boiling a witches brew of resentment, dissent, egoism, and guilt while pairing this soupy substance with discount deli ham on stale rye....

First, doughnuts, *now* sandwiches? I'm hungry.

Antithesis of Space 2 – Process. The question would be this – “Hypothetically speaking, what would you change after you pushed a reset button for a classroom?” Simple enough. I would change out this abomination of bread for some nice, remarkably unenthusiastic potato

slices. I would swap out our timeline with that of a parallel world's, for reasons I have yet to truly understand or actually be sure of. I would – okay, I am failing to consider the question as it is presented – context, context, context...

My hypothetical answer to the hypothetical question in this hypothetical context would be something like this: “That is a bit of a loaded question [chuckles with slight grin that is supposed to indicate some elevated bemusement]. I guess I would change whatever it is that I thought needed some refinement. I want to continue to feel comfortable with challenging my conceptions of this new learning environment. At this point, I perceive that no one actually has a true vision for what things should look like, and I am keeping that in mind as I try things to see what works and what doesn't work. By revising some curricular things, I see that as something that you all are modeling for us as well, so thank you for that.”

I would not be sure if that functions as a takeaway that the questioner would have intended, but I could give two shits, and I don't even have a reuben, a rachael, or some other exotic sandwich to help me reach that conclusion. I would provide that response as my answer due to the predisposition that I hold in such meetings – or, for that matter, any meeting that includes an administrator – that in any engagement where ideology and practicality intermingle, it is necessary to treat it as a sparring match, at the very least. It does not mean that aggression or hostility should emerge – only that bits of nicks, scores, scrapes, scratches be tempted in the chance that they might cultivate some level or type of ambiguity that might resemble bits of entropy. It's a fucking chess match out here.

Antithesis of Space 3 – Experience. Obviously, the question, hypothetical or not, strikes a chord with me, and this is why – there are no reset buttons in a learning environment. People refer to such a button – in our profession – most often when we return from a break that spanned

consecutive days, or when a mentor teacher is consoling a crying first year teacher who starts in the middle of a school year, or when administrators want us to improve their academic index data. One might think a “reset” has occurred, but they fail to acknowledge that a reset has only been allowed because a student has allowed it to be – this is a powerful realization that I am not sure I want any student to realize – maybe I do, I am not sure. What I mean is that a student likely is just as engaged in wanting a reset to occur, so much may be the case that they are subconsciously leading the horse to water so that it might drink, along with the notion that they, too, will drink from that same source.

In this scenario, missing assignments no longer matter, nor do lapsed teachable moments, failed skill exercises, the slew of misinformed instructional attempts, the F’s, the plagiarized submissions, the emotional breakdowns, the cursings, the internalized resentment and guilt – all of it goes away when two or more individuals actively engage in fostering a passive dynamic. It is like reusing a canvas for painting landscapes – priming over a painting eventually generates residues which impacts the quality of subsequent landscapes, whether it manifest in an imperceptible color dullness of a flower stem or the opaqueness of a cloud, the things which seem to be represented with their unique innate properties considered eventually come across as forgeries, while their authenticity is inexplicably lost just as the primer masks the latticework of the canvas. To me, it is like providing longitudinal efforts without considering longitudinal results.

A question, like this “reset button” type, holds implications for two extremely dissonant effects to satisfy the construction of a response – one effect is to engage in a narration or story that is directly representative of your positionality in relation to the question, and the other effect is a generatively drab response that remains effectually ambiguous – the former effect is dirty,

involved, and presumably more honest in its possession of truth modicums, while the latter effect is sterile, clean, and refined in how it sacrifices its reciprocal qualities in order to not-get-into-all-of-*that*. The latter effect is still functional, however, in providing concrete evidence that implies an interplay of compassion and empathy exchanged between the poser of the question and the responder to the question. However, it is a smokescreen, and very little substance manifests after the smoke has cleared.

In a professional setting, such questions are often presented or posed in the first few meeting minutes of a plan – akin to that of a lesson warm-up. They eventually face immunity from their effect as they are unveiled as feigned attempts for generating folklore (Roulston, 2020, p. 208). Consequently, the question is processed in a way that is more inclined toward generating an efficient and prescriptively broad response that might be poignant or at least relatable on some level but never truly individualistic. Are the results of these exchanges ever really primed for indulgence of truth? I think that they rarely are considered in that way, but I also think that they certainly are not devoid of such considerations. For one, if a system is rich with *cultural capital*, it stands to reason that such exchanges might prove stable in efficiency and truth, but that requires contextuality which is not phenomenologically achieved throughout society. It is also a passive way to deal with the exchange – waiting for something that might never come to fruition. A more productive way to deal with this exchange is to working on our own priming, in how we intuitively process and generate inputs which are perceptively/perceptually efficient yet individualistically poignant.

Antithesis of Space 4 – System. They seem to function more as products of a carnivalesque nature. Spatial dynamics involves the transaction of agreed upon boundaries, but in a carnivalesque grid, dynamics are upended within a chronal timeframe – a time-sensitive set

of linear parameters. Essentially, this setting is less entropic than it may seem – it is actually quite controlled, perpetuating and even strengthening roles of authority and subservience by way of catharsis. Ranschaert (2020) mentions this much in order to juxtapose the world of online instruction, an area which she sees as working within a grid that is unbound by spatial and chronal factors as it continually evolves (i.e. the internet). While the online grid appears as this frontier-like context where our innovative potential builds and expands, it is not assumed that such potential will be realized or even endeavored. That is something which is bound by the interactivity of users, and with that comes innumerable combinations that are built on perceptions of efficiency as well as complacency, capability, and capacity.

Proximity and presence are transactions of perception: Why would Ernst Mach – a man noted for his sonically-related achievements – be concerned with the nature of our perceptions (Koch, 2019, p.4)? Is to hear something which is sonically produced also to understand it? Are nodes of frequency – in such a context – the qualifier for the product as a construct within a perceivable reality? If yes, then it is a subscription which must transfer to the sensory mosaic – in other words, all sensory linked processing is to be governed within the same construct of reality with instantaneous caveats of qualifying processing. This seems rational to accept, but it also possesses a counter-intuitive, even paradoxical, quality. Considering that we consider how *theory of mind* holds developmental implications (Wang et al., 2016), it is appropriate to perceive it as a concept that is employed in classrooms where text is processed and discussed, embarking on hypothetical or simulated experiences which allow us to acquire some particular perspective – this is especially the case in learning contexts where inquiry is pedestaled. Peripherally, *theory of mind* is considered as a psychological process in discourse that is concerned with the melding of

neuroscience with innovations in counseling and therapy interventions (Gonçalves & Perrone-McGovern, 2014) as well as the social sciences (Webster & Sell, 2007).

I think that this is why philosophy often delves into questioning the nature of reality – the association between perceptive, sensory experience, whether passive or active in our interactions, and the gleaned notion of reality appears to be a delicate construct. Koch (2019) does not refute the construct of experience in relation to sensory processing, yet he does seem to a construct of reality is one’s own construct and theirs alone.

Sensory deprivation might be referred to as a voluntary or involuntary stifling of sensory processing for one or more of what was referred to ‘back in the day’ as our primary and secondary senses (Wordsworth, 1908), and in any instance where context is contrived through space and time, an individual will perceive unlike any other individual. There lies a dissociative byproduct that is created through context and reality, and I think that too often we shudder the prevalence if it – perhaps due to some coping mechanism or simply because it requires too much thought to process and store on a conscious level.

Antithesis of Space 5 – Culture. Perhaps this is why we make better talkers than listeners when we engage in discourse. How much energy is required for us to listen to the musings of all individuals within a learning environment, process that data, and apply it toward an improvised construct of inquiry? How much stifling of our perceived identity is required, is it worth it, and does it hold implications for new iterations of self that will compound and transfer to other outcomes? Are we willing to risk qualities of empathy, humility, and productivity to embark on such journeys of discovery?

It may be a question of authenticity and how it manifests within the learning context. While Lee (2020) discusses the necessity for applying and considering autoethnography in contexts such as

the online doctoral setting, a poignant takeaway is provided regarding what is pedagogically imperative – in effect, the argument is that an educator should “be ready to walk with students through their transformative learning journey” (p.579) as opposed to simulating or attempting to artificially create a learning grid that is complete with anticipatorily-developed challenges. This leads me to think that the challenge of learning is inherent to the process itself, regardless of what is artificially provided. Rather than to speak for students or to manipulate grids for elicited outcomes, an educator might embrace the quality of facilitation by simply listening more to the informational transactions which are occurring in their presence – something Lee (2020) refers to as *emotional and cognitive proximity* (p.578).

For some educationists, the theoretical unknown is an area which poses idealistic challenges, and it is for that reason that they could be weary to embrace a transdisciplinary framework that accounts for the precarious quality of probability. It may appear a contradictory statement to ascribe precariousness to statistical derivations, but that would mean that we have not taken into consideration how motivated reasoning influences both interpretations of data and idealistic pontifications (Mlodinow, 2012, p. 2010).

Comparatively, John Gabrieli’s (2016) essay includes an effective consideration of how probabilistic theory is ingrained in inquiry. He writes, “in basic research, convergence of evidence from multiple sources of experimentation is generally considered to be valuable in developing robust and valid theories. Neuroscience can contribute a convergent strand of evidence that inevitably intertwines with behavioral evidence because the brain is the organ of behavior (Gabrieli, 2016, p. 614).” Gabrieli further strengthens his advocacy of neuroscience-influenced education by proposing a “pipeline” (2016, p. 617) framework where fundamental

neuroscience principles would be applied and refined for mainstreamed dissemination and application in classroom curriculum.

The Paradoxical State of Evidence, Theory, and Integration.

It is principally important for one to accept that modes of knowledge, whether they are illuminated in a classroom or laboratory, are independent to how we naturally operate in our daily lives: Educators as well as scientists may arbitrarily label, classify, and appropriate lessons gleaned from inquiry as fitting or unfitting for an educational setting, but it is foolish to think that arbitrary associations have some sort of transcendent power over the organic processing of knowledge - if this was the case, then digital imaging of brain activity would have to play a more influential role in the daily lives of an individual, and such a hypothetical scenario is neither feasible in scope nor inviolable in its societal benefits.

With sustainability of *mind, brain, and education* (MBE) initiatives in mind, Samuels (2009) defers to Van Lancker Sidtis' work on brain activity and linguistic processing, as she illuminates the limitations of neuroimaging to provide concrete validations for presupposed hemispheric brain activity when linguistic tasks and skills are applied in varying complexity. The reflection Samuels provides is that neuroscience requires active interpretations from multiple modes of thought in order to become successfully applied within an educational setting (Samuels, 2009, p. 51).

More for us to consider is how, by citing the work of Sidtis, Samuels may have unintentionally invited questions about whether concrete or theoretical understanding of neurobiological processes is more productive to the educational setting. Sidtis' study shows that linguistic processing is not confined to one hemisphere of the brain (Samuels, 2009, p. 51), which may suggest that the corpus callosum plays a more significant role in organic neuro-

processing. For exemplary purpose, the work of Siegel and Bryson (2011) should be considered, as their “Whole-Brain” approach to behavioral nurturing focuses on a more rudimentary approach to neuroscientific understanding (Siegel & Bryson, 2011). Although it is categorized as a parenting guide, the text shares a common ground with the educational setting in that they both address developmental stages of children as well as communicative, practical, and disciplinary strategies for how to cultivate growth and learning within a child.

In the introduction portion of their book, Siegel and Bryson concede to the contrasting modes of thought between science and parenting - as the former is concerned with “precision and accuracy” (2011, p. xii), the latter is concerned with “practical understanding” (p.xii) - and they also emphasize that their text is indicative of an attempt to blend the two realms so that parental strategies can be founded upon solid neuroscience without hiding behind the more esoteric nuances (Siegel & Bryson, 2011).

Further, in order to develop a framework that synthesizes neuroscientific and socio-cognitive findings, Anderson (2014) poses the consideration that an ultimate goal is to understand how localized aspects contribute to the totality of an organism - a goal which is not exclusive to neuroscience or education (2014). It appears that Anderson advocates for a theoretical framework that reflects whole-brain processing, but reservation is also noted due to the current state of the research (Anderson, 2014).

For purposes of theorizing a “middle-ground neuroeducational theory” (2014, p. 479), Anderson presents a framework that illuminates the macro and micro levels of neuroscientific research and socio-cognitive understanding while proposing that numerous “domain-specific disciplines” (p. 479) have to inclusively function in order to potentially strengthen and broaden the reach of this type of collective endeavor. This framework is then followed by a hierarchical

representation of the reductionist and holistic components that are relevant to brain function (p.480). By juxtaposing the two figures, it can be observed that Anderson perceives the biggest challenge for whole-brain understanding to be that current neuroscientific research substantiates regional neural networks in relation to lower-order processes but is dispositionally emergent with respect to empirical research of more complex (higher-order) processes and their contributions (2014, p. 481). Based on such propositions, we might conclude that Anderson would be apprehensive to employ the whole-brain, child-rearing approach proposed by Siegel and Bryson, but our assumption would inevitably lack the consideration that the authors of each text cite neuroplasticity and experience as positive enablers for the applicability of a neuroscience-influenced framework.

Consequently – and apologies for this little meandering side-route we took - a great challenge of neuroscience is rooted in observable yet seemingly anomalous neurobiological phenomena during increasingly complex situations, but this also provides an opportunity for the educational setting to become theoretically aligned. As Anderson (2014) expresses, broad frameworks hold applicability to neuroeducational theory if only due to the working presumptions of plasticity as well as the undeniable notion that “some things will remain stochastic” (p.486). And, if such issues of translation, complexity, and ambiguity are observable in neuroscientific transferences among disciplines, it is likely that such transference issues permeate other theoretical endeavors. As previously noted, Carrasco, Serrano, & Garcia (2014) take this much further by positing a framework that broadly aligns neuroscientific conceptualizations of plasticity with educational methods.

Theory, Ambiguity, and Hindrances. At least some of the issue of partitioning between neuroscience and education efficacy may be exacerbated by the theoretical dissonance that exists

internally for each of the respective disciplines. O. Roger Anderson (2014) expresses this view, more specifically, by illuminating the distinct holistic nature of the socio-cognitive scientist with the reductionist nature of neuroscientific research (Anderson, 2014).

In this regard, Anderson's view implies that achieving a collaborative and mutually-dependent mode of discourse between the disciplines has the potential to become transformative for an educational setting. Anderson competently substantiates Martinez's disclaimer of generalizing the learning process without acknowledgement of neuromechanical processing by highlighting referencing that oversimplified practices occur when failing to consider the correlation between context and information processing (Anderson, 2014). As Bakhurst (2008) puts it, there are no a priori grounds to declare brain science irrelevant to educational issues, or relevant only in 'deficit' cases" (p. 428).

With that concession in mind, it is pertinent to iterate that Martinez essentially makes the same remark when discussing neuroplasticity and complex social contexts for learning: "The timing and character of individual experience...cannot be uniformly predicted for all species members, such that synaptic plasticity must remain able to capture new information from experience whenever it becomes available" (Martinez, 2007, p.81). Although Bakhurst (2008) is concerned with the practical aspects of education and Martinez is concerned with neurobiological observations, both embrace a capacity for experiential processing to occur which may be devoid of empirical and observational footing.

I have already mentioned how I think that synaptic or neuro plasticity have emerged as a theoretical haven for those who seek an integration of neuroscientific understanding with educational pedagogy, but what might have been underscored here is that I also see its analogous connection to factors which surround trans-disciplinary efforts in general. In a way, the former

provides researchers a feasibility for theoretical models/frameworks to be designed and applied in educational contexts, and the latter gains some potential for consideration in those contexts.

Petersson and Reis' study (2006), relating to literacy and cognitive processing, demonstrates how perceiving cognition as a network of localized brain regions rather than isolated occurrences can provide a more manageable and theoretically-substantiated position when bridging the neuroscience/education margin (Petersson & Reis, 2006). Comparative to Siegel and Bryson, Petersson and Reis derive conclusions regarding the contributions of the corpus callosum to communicative skill acquisition and complexity, attesting to a more networked (or whole-brained) system; further, it is implied that a flux exists between communicative skills and experiential engagement.

Among competent proponents of trans-disciplinarity, regardless of their respective disciplines, the theoretical benefits of a balanced approach to curriculum design and refinement essentially depends on consistent communication (Beauchamp & Beauchamp, 2013; Shenton & Hay-Gibson, 2011). Communication is also a pivotal component of cognitive processing, especially with respect to experiential growth. Communication is also cited as a critical component in language acquisition which correlates with the utility of the corpus callosum for hemispheric balance (Petersson & Reis, 2006). Why are we not communicating already?

An Earwax Sculpture of a Unicorn

"We don't listen like we should," says' I in my best lecturing grandparent voice that I can muster. What does a good listener possess? Consistent eye contact? I can look someone in the eye for 30 minutes of conversation and not recall a fucking thing they have said. It's not their fault, I am just still working on being a good listener. For all intents, let's imagine a quintessentially *good* listener. One can count on them to hear you out when you consciously

work through an idea – whether it is rooted in philosophical ideology or a position of best practice for a scenario requiring action. One might expect to receive a compliment with an assured response that the listener will take what one has shared and see how they can apply it to their own context. Although, I wonder – after countless conversational exchanges - how much the listener would eventually *listen* to others, for it is a tall order to be a good listener always. Some people might keep their thoughts to themselves – and some might have listened when voices could have instead been heard.

My point is, for as much of a unicorn as a good listener might be, it is a quality which is worth striving toward and thus requires some active metathought. The listener must reflect on more than the conversation that is happening or has happened – they must reflect on the grid of factors in its entirety. Additionally, byproducts manifest from such social grids, where one is perceived as a good listener in training and the other is...not? The byproduct is trust. Someone whom we desire to believe we can trust, yet it gets harder to preserve that desire as the responses become more programmatic. What is to be expected in such a situation, but an outcome of programmatic defaults and protocols? Our brains like efficiency. It is something that we fight, yet too often we succumb to it due to its prevalence. Preponderance emerges at this point, and I wonder if it is our brain's way of signaling that room needs to be made for the processing of reality other than the contexts for which we have conditioned our responses. In such situations, how ready are we to receive the minutia of data bits which might be profound in scope?

This conversational dynamic starts to look more like a façade than something stable and healthy. Yet, there are entropic byproducts throughout it. Like Murphy's Law (Spark, 2013), sometimes it is best to account for chaos and entropy via an assumed outcome, thereby retrofitting our reality-construct-context, in a sense – or reverse-engineering an alternate outcome

in a multiple worlds type of way. If we accept that we are inclined toward modalities of processing which are beneficial for us until they have proven otherwise, we are more attuned to the bits within our realities which are easily ignored yet beautifully poignant – if only we are able to listen.

Consciousness, Identity Theory, and the Humanistic Essence of Inquiry.

In education, listening amounts to a few different modalities depending on context. In the classroom, for example, listening is dependent on a myriad of factors that include power dynamics and conformity. Outside of the classroom it depends on – the same factors, I guess...hmmm...Okay, let's redirect – think about where you are more likely to apply the term, discourse. Are you more likely to apply it to what happens in a classroom or a professional development session? Or, how about a professional development session versus a graduate course? Discourse is a process which seemingly permeates educational contexts, but it is also a process by which power dynamics are displayed by skills of reasoning – and, often the individual who is perceived to hold the strongest reasoning skills is also the one who is considered to emerge as the 'winner'. But, when we consider this process, the unfortunate issue is that we risk losing a bit of macro-perspective, considering that we are perceiving such modes of discourse as an incentivized power-play. Thus, we fail to realize what it actually means to win in a discussion (Cohen, 2013).

By threading in some philosophical inquiry, we can consider how this mode of discourse has impacted the integration of neuroscience with education. David Bakhurst's aforementioned article attempts to advocate for the more personalized aspects of learning by challenging the theory of brainism - especially, he questions the assumption that behavior and thinking are representative of biological processes that occur within the brain (Bakhurst, 2008). Such an

assumption has branches in many areas of discourse where the brain is considered, yet Bakhurst primarily shifts between the philosophical and scientific modes of inquiry, and this provides us some opportunity to think about how the complexity shared between theory and empiricism can seem contradictory at times.

A contingency of his work, though not stated directly, rests on the philosophical hard problem of consciousness (Johnson, 2009) as Bakhurst attempts to redeem Ilyenkov's humanistic view on thinking to show how rationalism interferes with identity theory (Bakhurst, 2008). Bakhurst's position makes logical sense if one considers that there is no functional or rational need for an individual becoming privy to nuanced neurobiological processes within their brain during personal experiences (Bakhurst, 2008). However, Bakhurst also has to accept that the brain and consciousness must be acknowledged as two distinct entities if rationality is to play a role as a logically-mitigating factor (2008). While he presents a disclaimer in an attempt to establish a semantic distinction between the mind/brain, and psychological processing on p. 424 of his text, his arguments for personalism are inherently tethered to the metaphysical construct of functionalism in that a theoretical distinction between the mind and brain has to exist for further inquiry to occur.

From a metaphysical context, functionalism also enables identity theory to be further postulated in consciousness-oriented discourse (Johnson, 2009), and it is for that reason that Bakhurst's claims are weakened by the presumption he offers in his conclusions when he professes that students are not to be seen as "engineering problems" (Bakhurst, 2008, p. 428). This is an opinion with a clear ethical aura, and it is perfectly acceptable - and probably expected - to agree with such a claim due to the implications of objectification and stigmatization to permeate such a process.

But such a figurative statement comes with its own drawbacks, as engineering principles are inherently reflected in successful learning experiences. For example, refinement of a prototype⁶ is a clear component within the engineering design process, and it is likewise applied within a classroom setting in varying degrees. Assuredly, students should not be on trial themselves in relation to whether they may be operating in a neurobiologically socio-normative way, yet a classroom's mode of inquiry is causally influenced by the corresponding operant level of active student engagement, and it is for that reason that both the minds and brains of all classroom inhabitants have to be acknowledged as contributing variables along with the communicative variable that Bakhurst emphasizes.

I think that we can mediate such issues of discourse, but it requires a couple of things. First, it requires an intuitive approach to looking at our brains. Second, it requires an alternate lens to be applied so that we might work through a conditioned micro-perspective of how communication functions. For me, intuition and listening interact in my musical grids, so sound curriculum *might* be a good lens to consider.

From the second paragraph of Gershon's (2018) preface, I knew that the book had vital information for me to consider. In that paragraph, he concedes how we attempt to verbally reflect experiences and lessons, but how our verbalizations reflect more of a preoccupation with ocular processing than auditory. But once I read the following statement, I was properly hooked: "Where relevance is a consensus perspective, anything has the potential to resonate with any other thing..." (2018, p. viiii).

While attempting a definition of sound curriculum that is more conceptual than denotative, Gershon outlines some very specific aspects within the realm of sound which

⁶ <https://www.nasa.gov/audience/foreducators/best/edp.html>

function as parameters for consideration. It feels like an attempt to remain true to how he wants sound to be perceived: dissonant and harmonic, consciously and subconsciously enveloping, unbound and wrangled. For example, depending on how one understands perception will also influence how they consider advantage and disadvantage in ocular or ontological discussions, and Gershon poses the notion that filtering data - for reasons of perception - is more of a qualitative issue as an individual must differentiate information “one can’t help but hear as opposed to the ability to avert one’s gaze or close one’s eyes” (Gershon, 2018, p. ix).

This point reminded me of the analog versus digital debates that often manifest in audio recording circles. Modern recording studios utilize a combination of digital and analog components, and, interestingly, the goal is to have the recorded sounds emulate an instance of capturing that is natural rather than processed. In essence, it is like using computerized software and hardware to process data so that it reflects an absence of digitization. In my own studio, for instance, I own hardware that is analog - such as a compressor that is modeled after a famous 1176 limiting amplifier and that works in a similar way to the original hardware that would have been found in studios of the 1970’s and 1980’s - and I also own a software version of that same device. It seems like an oxymoronic situation for such an environment, but it is largely implicative of the dynamic that exists between historical and contemporary factors regarding inputs and outputs.

Additionally, sensory perceptions are an “inter/trans/disciplinary” (Gershon, 2018, p.29) construct, and like the challenges of settings where interdisciplinary collaboration is required, they can be found in how humans discuss the senses. Westernized thought, for example, has held discussions in a rank and order fashion regarding the primary and secondary hierarchy of the senses, as expressed by Classen (1999). Classen also recalls that, while the hierarchical

discussion of the senses took some time to develop, eventually it was accepted by some theorists, including Kant, that the senses concerned with sight and sound were more important as a society became more civilized (1999, p. 272). Like the westernized need for order and semblance, there also exists a preoccupation with efficiency that is particularly evident after combustion and industrialization revamped the societal expectations of production and comfort. Efficiency seems more like an innate human driver than an external influence, especially when juxtaposing the concepts of society and standard of living.

As I reflect on conversations held in the classroom, as well as conversations held in my personal life, Gershon's parameters of sound begin to resonate more clearly; particularly, his position regarding how we tend to think about sound in the same constructs we have conceived to understand and govern sight. A strong representation of this problem is demonstrated during Gershon's analysis of Judith Butler's (2009) work on "framing" (pp. 2-5). Logically, Gershon points out the semantic limitations of the word, frame, when discussing sound theory, as the word itself is visual in essence.

Gershon's transcription analysis, in the second chapter of his book, seems to complement his words on framing as he expresses the qualitative coding limitations that are seen in the text transcription of a particular teacher's recorded lesson. Before I had read the analysis, I listened to the audio file in the supplemental web material and I reflected on how dominating the teacher's verbalizations were in particular instances as well as the sonic atmosphere – including dissonances and a random-like sonic data that the recording seemed to capture⁷. As Gershon points out, it was those features that were markedly absent in the text transcription, "as though the teacher is working in a relative vacuum" (2018, p.38). I found this to hold very interesting

⁷ <https://www.soundcurriculum.net/chapter-two>

implications, and it also made me think of how audio data compression is used in data file sharing and streaming contexts.

For example, data compression is an attempt to wrangle in a particular package of information with efficiency and convenience in mind. For a song, it means stripping away the outlying regions - or frequencies - from its lossless quality version; intuitively, it might be assumed that the recorded song becomes increasingly more bland in a proportional way with its level of compression. Along these lines, page 83 of Gershon's book presents an analogously similar argument regarding how Indian Boarding Schools and environments containing students with varying "sonic deficiencies" (p.83) are faced with attempts to compress their produced sounds so that they might "sound right".

Thus, there are clear ethical considerations that Gershon associates with sonic representation and processing. Auditory perception, like anything else, is interwoven with subjectivity. In the context of the musical listening experience, a casual listener might be completely content with a highly compressed mp3 file of their favorite song, while the audiophile might be turned off by the song's lack of high and low frequencies. Likewise, compression might be acceptable, or even sought, by those concerned with sustaining the processes of acculturation or assimilation, yet it inevitably is an outcome determined by reproduction with clarity posing as a secondary concern.

There is a style to Gershon's text that seems non-traditional, as implications are presented in a way which appear right around the corner even when very specific examples and data are presented - I think that this is largely due to how he semantically plays with double entendre (e.g. using concepts like compression). On the issue of subjectivity, for instance, it is not until much later in the text that Gershon cites Foucault's (1978) position on power and systems while

discussing the ethical implications provided by sound theory, seemingly implying that bias might be mitigated more effectively if only we might achieve better listening methods.

Jessie's Margaritas

Anyone who knows me in a personal context is aware of the role of music and musicianship in my life. I am a categorically amateur musician, and I never really have had ambitions beyond that category other than a few daydreams of playing music full-time for a living – there are a few reasons for that. For one, I am incredibly reserved about performing my music in front of people, and the only reason that I ever embarked on the few times that I publicly performed were for the sole purpose of overcoming my apprehension for performing. It was a strategic decision, because I perceived it as a barrier which was convoluting my ability to enjoy writing and playing music in a context of solitude – now that I have done some public performing, I have since went back to playing music for the sake of simply creating.

Secondly, my musicianship is a product of my intuition in all phases, and this is now the only modality in which I interact with the process of creating music. I play to work through ideas and emotions that I do not have words for at the time. It is a space of working projects, and nothing is often completed – thus, I would have a really hard time developing an album that is complete.

Thirdly, since my interactions with my musical instruments are intuitive in scope, it might be apparent that I have a limited scope of knowledge in terms of notation and theory. This is true, and my working knowledge of how music is commonly composed has led to a lot of difficulty in collaborating with other musicians. It always seems like we are on different channels, and my jam sessions are often just a representation of that – a bunch of musicians trying to get on the same channel yet never really getting there. The problem is that I lack the

drive to get on a different channel in order to collaborate with other musicians. In that context, I am a bit self-centered, if I am being honest.

My intuitive relationship with music is essentially a pretty clear representation of who I am by disposition. If a series of notes – a riff, a beat – make me feel a certain way, I go with that data until I no longer associate it with a feeling or idea, or until I string it with other bits of data that strengthens the feeling or idea that I initially mused. Or, the data morphs into something completely different – a new, better riff or beat, perhaps, or even a data series on a completely different instrument. I love the process and the openness of that, and I am perhaps too content at times with how the products of my musicianship are these ethereal-like concepts that are never culminated.

Gershon (2018) would probably note that I am concerned with the diverseness of “open, fluid borders and sound interpretations” (p. 29). I think that is definitely the crux of my musicianship, but it does not explain why I am so content with my intuitive methods for playing and composing music, when so many other musicians are driven by the completion of projects. My brother is also a musician, and like me his primary instrument is the guitar. However, *unlike* me, he possesses a vast catalog of cover songs, in the hundreds, that he is able to play and sing in ways that I could never do – again, drive is a major barrier for me in that context.

My brother’s “methods of sound” (Gershon, 2018, p. 133), and his love of performance, actually bailed me out during my first *real* public performance, which was a beer and wine festival in Havre de Grace, Maryland. For the venue, a museum, it was a great success in terms of turnout. For me, it was a perfect storm of disaster. The plan for the performance was for me and two other musicians, whom I had met during some open mic sessions, to play a set list of cover songs and originals that we had been practicing. First issue: we had a set list for an hour

and a half of material, and the gig slot was for two and a half hours. Second issue: the misplacement of our portable amplifiers was wrong, and I was unable to hear myself in the monitors – any musician will tell you that without monitors you have no chance of hearing how you sound or how you are playing in a venue. Third, and most importantly, people were getting drunk, and if you don't know how to play familiar cover songs then you are soon going to be surrounded by a sea of droning zombies where the only weapon capable of producing quelling headshot is a rendition of *Jessie's Girl* (Huey, 2014).

Thankfully, my brother, Josh, delivered. I can't remember if he played that specific song, but he put together a set of covers that was able to keep the zombies at bay and even generated some compliments afterward. He stole the show, and I am so happy that he did.

My second performance was at a bluegrass festival at an outside venue, just a few miles from the where the beer and wine festival was and just three months after Josh had saved my life from the zombie apocalypse. I was the opening act, and this time I had decided that I needed to do this performance alone, with no one there to bail me out. This was a bit unnerving, but I saw some advantages as well, mainly in the fact that I would be able to play within my own framework of musicianship. I was responsible for the set-list, the instrument choices, the sound choices, and the slot time.

I'm on the stage - a large wooden platform covered by massive oak beams - backdropped by a view of a valley leading to the Susquehanna river, while I am facing an uphill knoll of scattered zombies, but there was at least thirty yards of distance between the audience and myself so I knew I could run before anyone could bite me (i.e. ask me to do some Margaritaville (Whitburn, 2004)) bullshit.

For the first two songs in my set, I depended on my sunglasses to hide the fact that I had not gazed at the knoll at all and instead had focused on my sheet writings and guitar – Mitch Hedberg would have been proud. In the middle of the third song, I finally mustered the courage to look up at the audience, and the first person I saw was my daughter, who was turning three years old in that same month, and she was alone on the knoll twirling around like some barefooted flower child. That moment was all I needed to know that I was going to make it on the other side of that performance being proud of what I had accomplished.

That moment had also made me realize that I was not involved in this performance alone in some fashion akin to how a unidirectional microphone situationally picks up sounds from a singular space; rather, I was involved in an “omnidirectional fashion” (Gershon, 2018, p.197) where there were countless variables that had contributed to my performance being perceived as a success. In addition to my daughter and her intuitive response to my music, I had a great support system. One of my good friends, a sound engineer by trade, had attended the performance and had given me the professional musician treatment, doing soundchecks and ensuring that all of my gear was in place and working properly. My wife had engaged in numerous conversations with me which helped me to make the decision to fly solo for this performance. My brother attended the performance, without his guitar and gear, and gave me hugs and encouraging words before and after the performance. I drank a beer before the performance (not advocating for alcohol as an emotional diffuser, just listing it as a variable). To put it all in basic form, there was a framework (Gershon, 2018, p. 3) in place, and the more I reflect on the construct of that experience, the more complex the framework evolves.

Interestingly enough, the decision to perform in public – however short-lived that desire turns out – has led to me feeling more grounded in who I am as a musician and how I perceive

my methods of sound. I am an impatient learner, seeking intuitive shortcuts to learning or composing music, but I am patient in how the products of my process come to fruition. I am a technically proficient instrumentalist in a general sort of way, for I am not proficient in any single genre or style of music that would classify me as an expert. And I am incredibly critical of myself in terms of what and how I compose musically, and I am surprisingly content with the notion of my music not resonating with everyone who, by chance, listens to my music or witnesses me playing it. I am not sure if that is reflective of confidence so much as feeling grounded in that context.

Just as I learn and am influenced by many genres of music, so many experiences in my life have contributed to my style of musicianship. For example, I have a propensity for acoustically resonate instruments – the guitar, the banjo, the ukulele, the mandolin – but I play certain strings of notes using techniques that were acquired while learning on the electric guitar as a teenager. There are also countless chords - that I recycle throughout my compositions – that I can associate with their initial points of origin, in the sense that I can recall the setting and participants that led to my interaction with a particular chord as well as what I thought and felt when I played the chord accurately. Each nuance of my playing contains their own narratives – thus, my compositions reflect a confluence of countless experiential and disciplinary data. To me, this reflects the “inter/trans/disciplinary nature” (Gershon, 2018, p.29) of learning in this context.

I’ll bring it back to something that I was previously discussing – that of the genre issue. Just as I find it impossible to fixate within a particular genre of music – for it will inevitably confine the boundaries of my consciousness and leave me feeling unfulfilled – I do not see how I can ignore that disposition while I hash out this project, a playground of semantics. During this

program, I have been lucky enough to find people who have shown interest in how I perceive things, and it should become apparent in this project that I do not take that type of support lightly. And if someone takes issue with my lack of boundaries in my products, I would respond “I’m sorry, but I do not know how to play Jessie’s Margaritaville.”

Boundaries & Barriers.

It is not that I ignore boundaries or actively avoid them so much as I desire to question and understand them before I plunge headfirst – which is funny considering how much I advocate for intuition in this project. To me, boundaries and barriers are not mutually exclusive terms, and I think this is important when considering the why’s and how’s of our thoughts and actions. Our brains do not operate in terms of barriers, but interestingly enough the external products of our consciousness often seem constrained in the perceptions and explanations surrounding them. To me, this holds salience with Siegel and Bryson’s (2011) notion, that the neuro-hemispherical conceptualizations of compartmentalized hubs for logic and emotion, is something which has to be dealt with in order to account for the undeniable complexity of a non-localized brain.

Additionally, Siegel and Bryson build on the concept of integration by considering how brain imaging has led to the understanding of brain plasticity (2011). In other words, the brain does not simply grow and become systemically predisposed over a lifespan; rather, it is involved in a constant mode of “rewiring”(2011, p.7) through human experiences over time. Indirectly, Siegel and Bryson are pointing at attachment theory and how environmental stability plays a critical role in childhood development. Louis Cozolino (2013) made the same connection in his work which employed qualitative evidence (i.e. anecdotal examples of successful teachers) to

demonstrate how the structure - or restructuring - of a particular educational setting can promote secure attachments and facilitate student/teacher growth.

Cozolino also attempts to offer a practical applicability within his claim by discussing how neuroscience-based strategies aide in the creation of such settings, yet (similarly to Siegel and Bryson) the fulcrum of his work rests on the neuroplasticity premise. From a neuroscientific perspective, the complexities derived by experiential contexts is essential in observing - and theorizing - synaptic connections and neural growth (Martinez, 2007, p.20).

Throughout the 20th century, synaptic-plasticity became a concept that was hypothesized and tested in a variety of settings with animals. The findings are critical to our current neuroscientific modality, as the correlations among all mammals have been postulated presumably for the purpose of establishing axiom-like scientific common ground that will help sustain further research. Martinez (2007) also seems to imply that a multi-disciplinary quality is attained when considering the historical progress of such research:

“...experience-dependent synaptic plasticity is more widely reported, in terms of species, than any other putative memory mechanisms. Thus the cerebral effects of experience that were surprising when first reported for rats in the early 1960s are now seen to occur widely in the animal kingdom, “from flies to philosophers” (Mohammed, 2001, quoted in Martinez, 2007, p.20).”

And, while chronicling the history of neuroresearch, Martinez (2007) harks the position which consistently is observed as the bottom line for educationists during negative critiques of neuroscience-based education: “Sufficiently rich experience may be necessary for full growth of species-specific brain characteristics and behavioral potential” (Martinez, 2007, p. 20).

The findings from rather invasive experiments of the 20th century, such as the various ocular-deprivation studies attempting to correlate generalized and idiosyncratic neural-associations with experiences, are now being substantiated through the noninvasive approaches that neural-imaging provides, but the overarching principle that Martinez provides is that the mechanistic complexities of neural processing must be acknowledged where pragmatic generalizations of learning are needed (Martinez, 2007).

If it is only plausible to me, and especially if we keep my aforementioned cab-riding experience in mind, there is no better pathway to meta-analyze the mechanistic complexities of neural processing than that of our intuition. *I mean, just look at the next visual – it doesn't seem to have any boundaries mapped in it...*

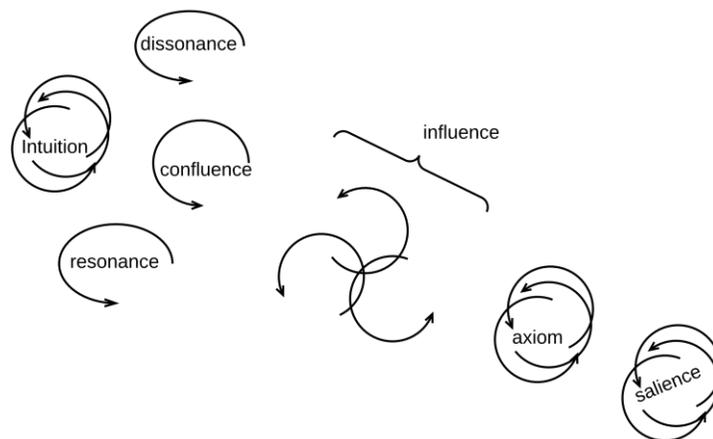


Figure 25. Visual of intuition mapped sans barriers. Here we see that there are some occurrences, and that there are some conceptualizations, but what is phenomenologically absent are *barriers*. There are none. *Mic drop.* [“Hey, SELF. Yeah, it’s your other self. Pick that mic back up, this map is a polished turd of pseudo-theory.”]

Okay, a better example might be Rajalingham et al. ’s (2020) use of the term, “recycling”, while analogously studying orthographic processing in baboons, discussing the potential connections that their conclusions pose for understanding how neural processing in humans is a plastic, inter-regional confluence of synaptic wiring that is adapted from its initial purpose for

the learning of new information. This research is heavily geared toward analyzing the temporal mechanisms for visual processing, making it clear that intuitively perceived spatial properties are an essential component in the learning of new information.

Intuitively theorizing intuition.

Intuition & Interpretation.

If the notion of ‘recycling’ is perceived as potentially viable, then we might connect it with some implications regarding how bias is an active modal challenge within the same elements of processing that occurs in our consciousness – to state it simply, where mechanisms of efficiency are put into place, it stands to reason that there will be issues with accuracy, and along with it the road is paved for the myriad of multi-disciplinary implications. Bishop (2020) has written a candid reflection on how bias is an effect of innate cognitive dispositions which constantly requires a researcher – or for that matter, anyone who is creating or interpreting statistical models – to consciously question their intuitive responses to what they are perceiving. She emphasizes the following, “Researchers need to build lifelong habits to avoid being led astray by confirmation bias. Observations that are contrary to our expectations need special attention” (Bishop, 2020, p. 9). Just as agency requires active engagement between an entity and their context (Biesta, 2015), the mechanisms of our consciousness require some active meta-thought.

For better or worse, the analyses that I have and will continue to propose will hopefully stand as a preliminary testing of theory for validations, refutations, and confluences which inevitably will help ground me in steps after the defense of my dissertation. In that sense, it is an attempt at action. Yet what is underlying all of this is a budding question: Do I deserve to be valued? This seems like it is intended as rhetorical, but it's more sardonic than anything else. If I

matter to the system in terms of my contributions to learning, capacity for growth, and competence for discerning, then it would be presumed that my consciousness would be welcomed in its true form and function - yet it is not, and in that sense, it is an attempt at meta-thought. Resultantly, and I may be repeating myself, all of the notions and explorations that I present in this project are in some way linked to my intuition – where it has taken me and how I have attempted to use it in a model of reasoning that blends it with the empirical reality of our educational context. But what might have not been mentioned is that, peripherally, it is an advocacy for humanistic intuition to be reconnected within a grid that values accuracy and efficiency.



Figure 26. Visual mapping which implies that we might be able to axiomatize interpretations based on a priori conceptualizations of plasticity. I went ahead and erased it so that other self doesn't come back to criticize my ideas with toilet humor.

Intuition be damned.

Admittedly, intuition has its pitfalls, especially in practical domains such as mathematics or engineering which requires a hyper-awareness of reasoning (Avital & Barbeau, 1991). Yet, it cannot be denied that our intuition works in incredibly productive ways and is thus incredibly functional in the construct of human consciousness – especially when considering its association

with the unconscious processing that influences our decisions (Blakeslee, 1997). Intuition has even been expressed as an exemplary representation of the complexity of human consciousness as well as a necessary counterweight to the linear nature of logic and reasoning (Cappon, 1993).

Nah, I'm gonna Ride or Die with Intuition.

Yet, when I reflect on how I cannot shake this foreboding notion of a looming outcome where teachers are operating as programs rather than a programmer, evaluated by how accurately they can conduct a lesson in prescribed form rather than how effectively they have attempted to innovate within their context, I realize how necessary it is for us to discuss intuition and perhaps reacquaint ourselves with it a bit more. There *must* be a better way to balance all of this. Should an educator not feel proud in their work? Should there not be practical means to encourage innovative attempts so that learning can be something more than successions of replicating a generalizable outcome? I think so – otherwise, we risk losing more than an outcome of a lesson or mandate, we risk losing the qualities which make us creatures with competent and capable models of consciousness. I do not proclaim an understanding of our consciousness beyond what has been interdisciplinary discussed in research and study (Rosenblatt & Thickstun, 1994), but I do feel a sense of obligation – as all of us should - to particular processes of the mosaic of consciousness.

Wait...How do I start analyzing intuition?

Referring back to that sticky issue of plasticity, a point of contention among proponents and opponents of neuro-educational influences on curricular design resides in how we use our knowledge of the brain into useful informational transactions which are not easily disreputable as pseudo-interpretations of neuro-mechanics. My response is that we should attempt to side-step such issues, for it is improbable that we have yet agreed upon a linguistic representation of

consciousness. Instead, we take a constructivist approach toward generating axiomatic grids of consciousness, thereby employing a philosophical lens while, hopefully, gleaning processes and products of practicality.

The plausibility of connecting seemingly dissonant disciplines of study has been discussed as an issue of language transferences along with speculation on how such transferences might be alleviated (Smart, 2007). This is where we also find the issue of abstraction due to the fact that our primary vehicle of transference is language. We see this in philosophical discussions of “topic neutral language” where it is implied that boolean-style language – think of words like *and*, *or*, *not* – do not possess enough grid references to help us associate their meaning with a discipline. They could be relevant to any discipline. Additionally, the concept of topic neutrality has also been discussed in relation to how we perceive things in a sensory way versus how we temporally intuit them (Smart, 2007). In that way, topic neutral language sheds a boolean nature – morphing into gerunds and modifiers with more complex spatial-chronal-temporal saliences - and thereby transcends physical and non-physical realms.

A topic neutral approach thus implies that we are providing some concessions of utility, and this gets us closer to the process of abstraction and axiomatics. I think we can go a little deeper with this by focusing on intuition as a potential grid of consciousness. I’ll be working on this far into the next volume, so here I am simply focusing on connecting sensory perception with causality – something I think that intuition heavily relies upon while we process feelings, thoughts, and interactions. In this modality, perception is governed by factors which resonate with us, are dissonant with us, and amplify throughout a grid. I think that frisson is a phenomenon which functions along the same modality – and while I only draw from personal experience with frisson, its influence leads me to consider it fixated within my intuition grid if

not a fundamentally necessary convergence [intersection] of a physical state and a modality of temporal consciousness.

Developing a Grid for Analyses of Intuition.

Similar to how mathematics employs an interplay of generalization and specialization (Goldblatt, 2006, p. 25) while axiomatizing an abstraction, I had to consider the multitude of frisson-related studies to justify a proceeding step, which is to inductively map from *a priori* research to broader mappings – a process which Goldblatt (2006) refers to as “the reverse of abstraction” (p.25) and which we can think of as backward mapping. I also see this as helpful for integrating my personal experiential datum relating to the concept of intuition. The produced mappings of the concept thus begin to function as theoretical constructs which can be phased into the coding system and, hopefully, contribute valuable summative iterations at the tail-end of the coding system.

For this and the rest of the visuals and maps that will be presented throughout my “lil’ book report”, causal mapping will be noted as a paramount consideration along with the notion that it is but the initial process of an iterative system with an ultimate goal of a qualitative/quantitative construct of methodology.

To put it another way, Iwasaki (1991) has discussed the contrasting ways in how mathematical representations of causal, mechanistic relationships are integrated through structural and nonstructural equations. Structural equations can be thought of as “inseparable phenomena governed by one physical law” (p.106) whereas nonstructural equations are rooted in “incidental mathematical relation without any underlying causal mechanism” (p. 106). In the former, causality seems to have been axiomatized by *a priori* means of empiricism, and in the latter, causality seems to have been axiomatized by *a priori* means of experience.

By taking a broad approach in this phase of conceptual mapping, it thus allows me to consider the empirical landscape of the concept as well as my experiential relationship with the concept - however, I remain aware that I am still in the initial stages of conceptualization. Koch's (2019) discussion of moving from phenomenology to mechanisms (p.74) seems to resonate with the last few paragraphs I have written here. Koch utilizes the framework of integrated information theory (IIT) to focus on axiomatizing experience, citing *any* experience as governed by *consistency* and *independence* (p.75), which I take as a nod to the nonstructural essence of an experiential gridpoint, regardless of whether it is a spatial-chronal-temporal grid or if it is an algorithmic grid.

There is more to the process of causal coding, as it can include causes, mechanisms, and effects (Koch, 2019, but I will save that for the next section because it is more pertinent of the modeling of logic, and logic is a construct which is related to yet independent of modal intuition. Here, I am more concerned with how intuition is latticed with sensory perceptions, and this has me focusing on the broader notions of cause and effect – as a result, an initial, thematic mapping of *frisson* becomes helpful for the coding of intuition in terms of consistency and independence, seeing them as instantiations of phenomenology while remaining aware that eventually I will have to revisit the empirical literature regarding the applied methods for identifying mechanistic notions of frisson.

Baseline Intuition (Sound Theory)	Baseline Logic
Resonance/Dissonance (Frisson)	Causal
Amplification (Compounding Connections)	[Non]Linearity

Figure 27. Outline of contributors to a conceptualization of intuition by aligning sound theory.

The visual (above) demonstrates how I have been thinking about the intersections of causality and linearity in relation to spatial, chronal, and temporal modalities. My thought is that,

if I can focus on these theoretical concepts, each with their own a priori sets that varyingly intersect depending on discipline, they might help with transcending the barrier between spatial-chronal grid factors – that which is corporeal – with temporal consciousness – that which is arguably ethereal. Thus, two key areas of focus are resonance and dissonance – which are found in experiences of frisson – and amplification – which is found in a myriad of disciplines where undulations, frequencies, waves, and non-linear (e.g. parabolic, noisy, etc.) states may be observed and/or measured.

Personalized Listening Methods. The best representation of the ideas and theory that I propose in this dissertation are probably found in my relationship with music. That relationship has functioned as the more constant element in my life than most other factors. It echoes the sentiments of each of the 5 volumes that I have written here. I have vivid early memories of situations where music ends up taking this overwhelming aura about it – the memories are essentially hijacked by the music. It has ancestral roots, on both sides of my family. It connected me with my closest friends – most of them are not musicians. It is my frisson laboratory, and it is where I am the least parameterized when it comes to exploration and discovery.

Resonance & Dissonance (Gershon, 2018): On some of my recordings, I get tingles of frisson when I listen to them, and it seems like the times when the frisson sensation is most resonate are when I revisit a recording that I have forgotten about or have not listened to in a long time. The more distant they are, the more likely the frisson is to be felt and the more likely it is to strongly resonate.

Amplification: Also, much of my composition recordings are quite repetitive. I latch onto riffs, and I cannot help but to loop them and loop them – I am frisson binging at that those points - until a transition seems to appear while I am engaged in this momentary frisson binge.

Sometimes the transitions are organically seamless, not only enhancing the dynamics of the composition methodically but also transferring the frisson sensation in tandem – the sensation is then engaged in a generative transformation while gaining this sensational momentum, transcending the boundaries of its former iteration, and pushing me towards this fluidity of movement, where the boundaries of this contextual grid – the song, my physical interactions with my instrument, my lack of conscious awareness, what I am feeling – feel boundless, unnecessary, and, honestly something other-worldly. My eyes roll back into my head, my eyelids shut, and I fist-clinch those seconds and imagine them as an eternity. I just felt it – that frisson.

I started a guitar club for my students last school year which I no co-run with my colleague – I mentioned him earlier although you might have missed it. Recently during a club meeting, one of the students mentioned that they were not good at composing songs. My colleague replied with “think of it more as, you are not yet good at composing songs, but you will be.” I then shared that I have never really concluded a song that I have composed. This is more true than it isn’t. I have recorded songs, and I have performed songs, and I have never really considered any of them “finished” for one reason or another. Maybe I just abruptly slapped a functional riff at the end of a song to signal that it was over. Maybe I add a nice fade-out to it like I am continuing to play as I am walking away. Maybe I just go right into the next unrelated composition of lyrics and measures like I am improvising a medley of song composites.

To put it simply, there is this finality in artistic expression when a project is considered finished, and I seem to be challenged with that finality. If my compositions were story arcs, it seems like all of them are missing a resolution from the climax. Just putting it that way, however, makes the process feel too linear, and perhaps that is why my compositions are not really *compositions* but *composites* of instances where frisson occurred.

This not only relates to how I compose instrumentational products but also to how I write lyrics. So many of my songs are single-versed – off the top of my head, I can only think of a handful of popular songs that contain one verse. There is a confidence in a single-versed approach that is implied – that the poignancy of the verse would inevitably be followed by a lackluster one, impacting the transference of the song’s aura and message. And, the poignancy of the single verse lies in its aura which relies on the ambiguity of its message.

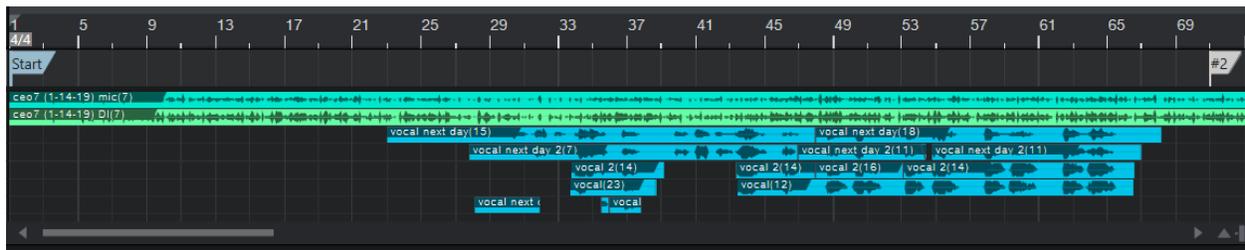


Figure 28. Recording session of [Jawbreaker](#).

The figure (above), is a snapshot of a recording session for a composition that exemplifies what I have been describing in the previous few paragraphs – a song I titled *Jawbreaker*. I will not get into the specifics of the origins of *Jawbreaker* other than to share that it was something I wrote quickly one afternoon when I had some downtime. It is a single-versed song, with a repetitive series of guitar nodes. I will share, however, that I am not presenting it as an example of something that exudes my confidence in its poignancy; rather, I am confident in how it reflects my inability to follow it up with anything that would add a complimentary dynamic. Thus, it is an unfinished song, in a sense.

Kim’s (2016) overview of the term, *coda*, as it functions in music, etymologically mentioning the “Latin, *cauda*, which means *tail*” while associating it with the culminating part of a composition. I learned about codas while learning the saxophone in grade school band, but they always messed with me when I had to adhere to them during a rendition. I don’t think I was

working hard enough to perceive their function, and they eluded me often, similarly to how subtracting fractions eluded me for years after those few extra minutes with my teacher trying to understand them – she essentially slapped a coda onto that experience as it culminated with, “well, next week we will be moving on from fractions, so don’t worry about it at this point.”

I still do not see codas as necessarily functioning as a culmination to something so much as a thematic accumulation of musical nodes, that adds a complimentary dynamic to a piece. Codas do not have to be endings so much as a generative product of interacting musical nodes – harmonies which converge into this “musical (or sometimes, magical to me) oomph that gives the audience catharsis with reverberating effects long after the music ends” (Kim, 2016).

There are also subtypes of repetition within a composition which can expand the complexity of a compositional grid – nuances of notes and their sections which can be revisited and re-interpreted, and such aspects can causally influence the conveyance of a *coda*. Here, I am thinking of *dal segno*, which initiates and facilitates a musician’s pathway toward the coda – we can think of this as a compositional section worth revisiting. *Then*, we might also find a *fermata* or a *cadenza* – the former inviting a pause which sustains the presence of a note, possibly with the presumption being that the artist has done enough to instantiate the potential for the pause to be interpretively poignant, and the latter functioning to instantiate an improvisational section in the compositional grid – this is the entropic, intuitive realm of the piece, entrusting the artist to employ their skills of craftsmanship – what a responsibility it is to be entrusted with a portion of the grid which can systemically elevate or sink the entire composition.

For the musician, such compositional cues are like tools within a modal toolkit, and they are employed in ways that are dependent on the vision of a composer as well as how much of that vision has been transferred to the performer. I struggle with playing a song that is composed

by someone else, and this is for too many reasons to list, but a relevant one here is the fact that I hyper-focus on the nuances that reflect the playing style of the artist while they playing their own composition. For example, a guitarist might add slight accents and note transitions which are difficult to convey in written form, and such nuances become aspects which are nearly impossible for another guitarist to simulate – as a result, it is often presumed that the covering of a song will be more of a rendition rather than a replication, and perhaps this is even the more acceptable approach to take. However, for me it is difficult to get past such things, and while I can play some renditions of songs that I have not written, I never experience the same levels of frisson that I do when I am working on my own compositions.

We can connect this to pedagogy and the learning environment as well, for everything I just mentioned in the previous paragraph is quite similar to how the frisson that I experience varies greatly depending on whether I am employing a lesson that was provided for me (i.e. a composition that I am covering), or a lesson that I have helped to create or have created entirely on my own (i.e. an original composition).

Putting my meta-hat on for a second, I can see this as a sort of psychoanalytical connection to how I approached qualitative coding throughout this project. I play with multiple forms of how I code the sections and subsections of this project, which I believe speaks to how my grappling with humility sometimes influences my confidence with committing to the coda.

Bridging Intuition and Logic through [Non]Linearity. Gershon (2018) gets us in a good place for transferring sonic concepts to spatial-chronal-temporal grids, and when we add intuition into the mix, it seems a bit disconcerting that we may be too inclined towards honing our perceptions of realities via constructs of “linearity, correctness, and straightness” (p.65). Sounds function, among countless other things, as a reminder of what reality is not as well as

what it can be, as they are independently “of all things, across all ecologies, and over spacetimes” (2018, p.65) yet they are dependent on ones who listen.

Consequently, how we employ modalities of listening will hold a lot of influence on what we interpret, and this causal dynamic makes me wonder if we can map it – broadly, at least – with causal modeling in mind. If you recall during my overview of frisson in the first volume, I sometimes find myself on binges of frisson. To me, such occurrences can be mapped similarly to how logical models are structured, at least in simplistic versions. If we consider that the simplistic model of logic consists of three components, inputs-outputs-outcomes, then it is analogous to my audio habits. I find a song (input) that causes frisson (output), and I play the hell out of that song until the frisson is no longer realized (outcome). Again, this is not the full scope of what I would consider a comprehensive theory construction on the topic – I am just concerning myself with simplicity at this point.

However, Honda et al.’s (2020) study gets me thinking about how the complexity might be further traversed while mapping it. They define frisson in a similar way to Garner’s (2016) definition that I mentioned in *Volume 1*, but what is very interesting about their study is how they embark on an exploration of the binaural effects [think of moving sound around] of sound and frisson, leading to inferences of the subjective nature of felt frisson: “Our results demonstrated that sound-induced frisson can be experienced stronger when auditory stimuli are rotated around the head (binaural moving sounds) than the one without the rotation (monaural static sounds), regardless of the source of the noise sound” (2020).

The importance of their study lies in how it presents the dynamics between a person and stimuli as a gridwork with active dynamics more than passive, spatial-temporally stagnant inputs and outputs – the pieces of the grid are manifesting interactions while moving. It has me

connecting concepts of *passive* and *active* modes of function – terms which can be found in music, and they are also terms which I readily apply to discussions of agency and empiricism. For example, let's consider how studio monitors (i.e. speakers) primarily are categorized as either passive or active types. A pair of passive speakers can be tethered in what is commonly referred to as dynamic of *slave-master*, where one speaker is dependent on the other speaker to function as its input source.

By contrast, active speakers possess their own internal circuitry which allows them to be connected directly to a source of power, and thus they are engaged in a direct transference of informational source where no correspondence with another speaker is necessarily required. They are, in a sense, more agentic than the slave-master set-up. If we conceptually try to connect the disparate settings, could passive interpretably mean that which is involuntarily kept in a single position? It leads me to perceive that passive gridpoints feel more linear and that active gridpoints feel more non-linear in essence, although here they are studied in a linear modality.

A result of this connection is that our grid map ends up with additional layers of complexity – it has transcended the schema of linearity and non-linearity into notions of dimensionality. Sometimes, my recordings where I am able to recall frisson and feel frisson are associated with movement, but in a way that is akin to dualism more than physicalism. In my mind, I recall the context of the recording, taking me to that moment when everything aligned or connected in and out of focus. Or, I simulate an alternative narrative – a sort of daydream – as if the song is part of a soundtrack of the more fantastical simulations I create in my head – I am performing the song, and everyone is in awe, or I am completing some epic journey in a far-away rural land, or I am Oedipus reaching my wife and home after years of distance.

Comparatively, Roberts et al. (2020) conceptualize *frisson* similarly while connecting it with the concept of Autonomous Sensory Meridian Response (ASMR), which they define as “a pleasurable tingling sensation that typically occurs in response to audiovisual stimuli, producing feelings of euphoria, comfort and relaxation”(2020). They consider ASMR, and perhaps also *frisson* by neuro-regional association, as “multi-dimensional” and a “complex, dynamic phenomenon”

Yet, there are some limitations of the experimental setting that bother me when I think about how *frisson* might be studied – namely due to the sterility of such settings, which seem to relate the challenge of accounting for all factors and variables with an assumption regarding the reliability of the study in its entirety. Take, for instance, the section of their study regarding “altered consciousness” (p.6) which was qualitatively documented based on colloquial, idiomatic narratives provided by the participants. My intuitive assumption of this data is that the participants in this occurrence were trying to consciously describe something that they could not accurately transfer through language – something ineffable – when we consider that some of the *frisson*-inducing stimuli might be rooted in language that is transferred to them (i.e. they are listening to spoken words), this illuminates the paradoxical nature of the study, and it explains the limitations of a passive, linear style of exploration for this multidimensional and dynamic phenomenon.

Further, their study limitations indirectly addresses the necessity of *a priori* participant knowledge and some degree of voluntary manipulation – by the participant - of the environment and stimuli. I say that a major degree is required, but some is better than nothing I guess. The point is, I do not see the benefit of such studies if they are constructing a context which is

invasively passive in nature – where the participant is expected to concede a minimized, passive, role, for it only serves to highlight contexts which might replicate that that type of environment.

Koumura et al. (2020) emphasize the implication of a “cross-modal” (2020, p.2) study of *frisson*, which I try to keep in mind as I read through their study that they position of “extrareception”(p.1) – that is academic speak for external from the body, and perhaps, relating to objectivity - in response to the plethora of *a priori* study that is concerned with “interoception” (p.2) – which I believe is meant to imply that which is internally reported/collected such as subjective accounts and physiological observations.

In mentioning the “cross-modal interactions” (Koumura et al., 2020, p.2) of *frisson* and its sensory effects, I see them as giving credence to the phenomenological complexity of *frisson*, and – while I know that they are specifically narrowing their focus to the modality of *frisson* by sonic inputs – I am concerned about how much isn’t being studied outside of that modality. It feels a bit like an approach of complacency, to sonically confine the complexity of the dynamics of the sensation and its neurological underpinnings. Most of my experience with *frisson* is music-influenced, but music was not present in either of the two situations in my life which I consider to be the most transcendent, conscious-altered states where *frisson* occurred. One was in my kitchen in my rented house near UD-campus, the night I learned about string theory for the first time. The second was during a reiki session with *Pseudonymos*, a family friend and a renaissance man. In these situations, the sounds were that of *tinnitus*, and they were created from within. This paper is already long enough, so I will save that analysis for another time.

Furthermore, they mention the spatial and temporal dynamics of *frisson* as a synchronous dynamic for some individuals (Koumura et al., 2020, but I somewhat see their study as an

indication that frisson is a delicate process of synchronicity, where real-time observations span the entire spatial-temporal grid – taking into account personality traits, psychological dispositions, structural sound-related acoustics, and individual interpretations of the state. It is a complex thing, and it is not easily replicated.



Figure 29. Spatial-Chronal-Temporal [Confluence](#).

Figure 29 includes a link which represents what I perceive as a representational instance where a frisson experience was, yes, sonically induced, but was mapped chronally and spatially. If you decide to humor me and use the link, you only need to watch about the initial 35 seconds of it. Around 0:29, you will hear this ping-like noise which seems to possess some dissonance from the rest of the sonic bits which surrounds it. It is that moment where, speculatively, a combination of string plucks and sonic resonances seem to harmonically interact with the studio space as well as the recording hardware – generating this type of confluence. Additionally, and what I think is actually pretty cool for the point I am trying to make, is that it is an example where I can exactly pinpoint when, where, why, and how frisson occurred for not just myself, but for my brother as well because he was recording the session for me. So there's a bit of *a priori* data for you if you are into that sort of thing.

On the subject of *a priori* participant knowledge, Roberts et al. (2020) mention a response bias that may have occurred from a “priming effect of the scale items on experiential descriptions” (p.12) while positing that there are additional physiological responses – including pupil dilation and heart rate – and it is clear that they are considering how *a priori* knowledge held by a participant may be generating a confluence of conditioned sensitivity.

With that considered, the true complexity of *frisson* begins to show, and for me the skeleton key to consider is the association between the sensation and described states of altered consciousness. The researchers mention that “while exploratory, it would be worthwhile to examine whether levels of affective and altered consciousness ASMR experiences vary with stimulus familiarity, and across testing environments” (2020, p. 12). With this suggestion in mind, I wonder how beneficial it could be if an *a priori* portfolio might be integrated with the study, where the ASMR & frisson dictionary/taxonomy is individualized based on dedicated journal narratives or some other qualitative data. Of course, we would need to be able to code and analyze this *a priori* data in a way that would align with the methodology of our experimental setting, but what I am getting at is that this evolves the grid of studying across testing environments, and it helps to integrate that active dynamic that is required, a collaboration of sorts between the researcher and the participant. In such a collaboration, I would expect frisson byproducts to emerge in situations such as researcher and participant meta-discussions of the study.

Those byproducts might be the most important manifestations of such a study, for it is most reflect of that active dynamic – any other approach of study seems moot at this point. An undeniable injustice is to deny one the open-ended path of literacy. For paths to be maintained in a fashion of currents with switches has its own level of blood on its hands with

such injustice, regardless of how it may advocate for an alternative -to not employ such alternatives is to assume a passive role in the progress of learning.

And to understand consciousness is moot in an empirical sense, unless the goals of such understanding are explicitly antithetical to human essence and human progress. To learn about consciousness, however, requires an active dynamic between researcher and participant, where roles exchange, permeate, and evolve as learning occurs. This is how we evolve, in tow, the sterile, fallaciously calculable, and fallaciously calculated realm of experimental research and study.

The Entropic Dance [with Moonshine].

The more I try to consciously summon frisson, the less I am able to find it. I may be hyper-sensitive to it, and it may be the theoretical equivalent to a concept of a body fart in a parallel world, but *damn* do I experience them a lot – occurrences of frisson that is, *not* body farts. When I experience them, I do what I can to amplify them, to hold – but not stranglehold – them, although I now recall that I mentioned it that way earlier – I stand corrected. It's more of a dance, but it is not choreographed. It is playful in how it meanders into and out of linearity, and with it – for at least a few seconds of my life – is this organically temporal process where consciousness holds more salience with plasticity than it ever could with locality. Amplifying it is a whole new level of delicacy. I loop areas where I feel it emerge, and I play them out until it is diminished. That can take seconds or minutes, even. But that is more like a parlor trick that I play with myself when I am playing an instrument, or when it is a time-sensitive practice session. In this sense, the organic process takes on a bit of induced artificiality – a simulation, in a way.

Then, there are sessions of frisson that I am able to extend for hours, if time is not much of an issue, and if I am in the right frame of mind – one which is primed for being receptive to

connections but not tracking them like a heat-seeking missile – if that happens, bias overload occurs, and the sensation is too artificial to amount to much more than standing in front of an air conditioner. In those extended sessions, I have struck a harmony of causality and linearity by way of perceptivity – then, I can apply some amplification in order to simulate a grid where the frisson causally compounds.

Admittedly, these extended frisson sessions are bound by linearity more than the opposite modality. If you can think back to Volume I, it is similar to how I wrote the eulogy for my grandfather, where I consciously traversed a mosaic grid of experiences and interpersonal observations, and linguistically scrapbooked them. And that is what I am doing in *this* context. While I am actively playing the instrument, I am, in a sense, passively collecting data – but again, keep in mind that I cannot think about it in an active way at that point – I can't stop, and say to myself, “boy, that was *definitely* frisson, and it was *definitely* based off of that riff I just played”. That is pretty much what I am doing here, and I'm feeling pings of chills but they are coming from the air vent that just punched out a little burst of air. But that is why I see these occurrences as representations of intuition in play and being honed, which might also qualify them as artifacts that hold potential to be transcendent products, where physical and ethereal components intertwine, and where the spatial-chronal-temporal grid acquires even more complexity.

What I am getting at is that there are dynamics that are interplayed – danced with – and while I am more of a fan of non-linearity and chaos than I am of linearity and causal mapping, I cannot advocate for one without being aware that all of those modalities are within the same grid and are thus equally as likely to play some role in a recursively functional way. I previously mentioned that, within an educational grid, or otherwise a social grid, entropic byproducts might

be generated as informational transferences between entities of a grid, and that they may be modal bridges between other grids depending on spatial-chronal-temporal proximities. While I discuss them in pedagogical terms, I think, by way of relations and its transcendent potential, I'll also concede here that measuring them requires potential to be measurable. However, that is not to say that a potential for measurability relies on measurably stable or predictive models, as chaos theory has emerged where we have sought understanding of order and disorder manifesting within the same construct (Doll, 1993).

Entropy, Chaos, and Transcendence.

The way I begin to separate my biases with empiricism begins to emerge as I delve more and more into how mathematics and language are not only salient but potentially operating on the same axioms of construct. There is a branch of mathematics that is concerned with transcendental numbers – think π – which when calculably initiated progress infinitely in a numerically non-repetitive succession.

$$\sum_{n=0}^{\infty} 10^{-2n}$$

Figure 30. Fredholm Constant (Shallit, 1999).

The figure (above) shows just one method for parameterizing how a transcendental number is derivable – in this case, by inputting any rational number that is greater than 1 in the place of 10. I am not sure how the topic of transcendental numbers is perceived by the math community, but it somewhat seems like something that is worth considering outside of the discipline.

In my own messy way, I also see some salience between categorically transcendent numbers and how I engage with topics of entropy and chaos. I sometimes catch myself using

them interchangeably, and I am aware that this is technically, absolutely, inaccurate. But, intuitively, I seem primed to do it. Maybe it's like the paradox of transcendental numbers, where all such numbers are causally mapped in a way which suggests that while they are irrational (Gray, 1994) and contingently rational, not all irrational numbers are mappable to transcendental forms...sort of like crows and ravens...

Doll (1993) does well enough in discussing how the thermodynamic conceptualization and measurement of entropy becomes something else entirely in a pedagogical context, and his words on the matter are inevitably what led me to perceive entropy as a gateway for chaotic grid instances to take on a transcendent potential, where they begin to take on forms for transference. In this sense, entropy is how we begin to move chaos from “voids” (1993, p.98) to process, and eventually, product - and this is also where entropy becomes a bit of a pedagogical dance between, among, beyond, and through grid points.

I'll refer, for a moment, back to the previous volume where I mentioned Gershman's (2017) generative model because I want to mention one more thing on the subject of entropic measurability. Representations of entropy, and Gershman's model, rest on the same distributional notion that probability is increased through increased potential. Pedagogically, this holds implications for how we begin our entropic dance, and to me it implies that it does not begin by numerical means but by means of discourse. Essentially, a priming has to occur so that we can be receptive towards perceptively associating entropy with that which is “dissipative” (1993, p. 104). Perhaps a little transparency is needed – and if that is the case, maybe someone out there is better suited to the task than I am.

SOMEONE HAS BEEN SIPPIN' A BIT TOO MUCH *MOONSHINE* (Borcherds, 2002)

So I am going to tell you a quick monster story. There's this thing in math called moonshine, which "roughly means weird relations between sporadic groups and modular functions (and anything else) similar to this" (Borcherds, 2002, p.1076), so we can roughly take it as the math version of the neighbor who keeps reminding you to save your mason jars for him, and...

"Wait, you said monster story..."

Hold on, I'm getting there.

The term is connecting with this thing referred to as the Fischer-Griess Monster, which we can take to mean a bunch of little alarmists that are not conforming to the finite groups. Why did they name it the monster? I don't know, but I assume it had something to do with the fact that it was theorized in the 1970's. There's also a bunch of visual representations out there to help with conceptualizing it because it is difficult to pin down conceptually (Borcherds, 2002).

With a cool sounding name – who can say that often in math? – This piqued my intuitive interest, and I am leaving some stuff out here because it is actually part of a much longer succession of rabbit hole math theory clicks and hmmmms and *huh's?* and wow's. It ended up with me seeing how I could visually conceptualize the grid of some of the stuff I have been discussing in this volume. So, I came up with the *Grid of Monstrosity* – still working on the name – that reflected how I see entropy as a bipartite channel-way for chaos to achieve transferences.

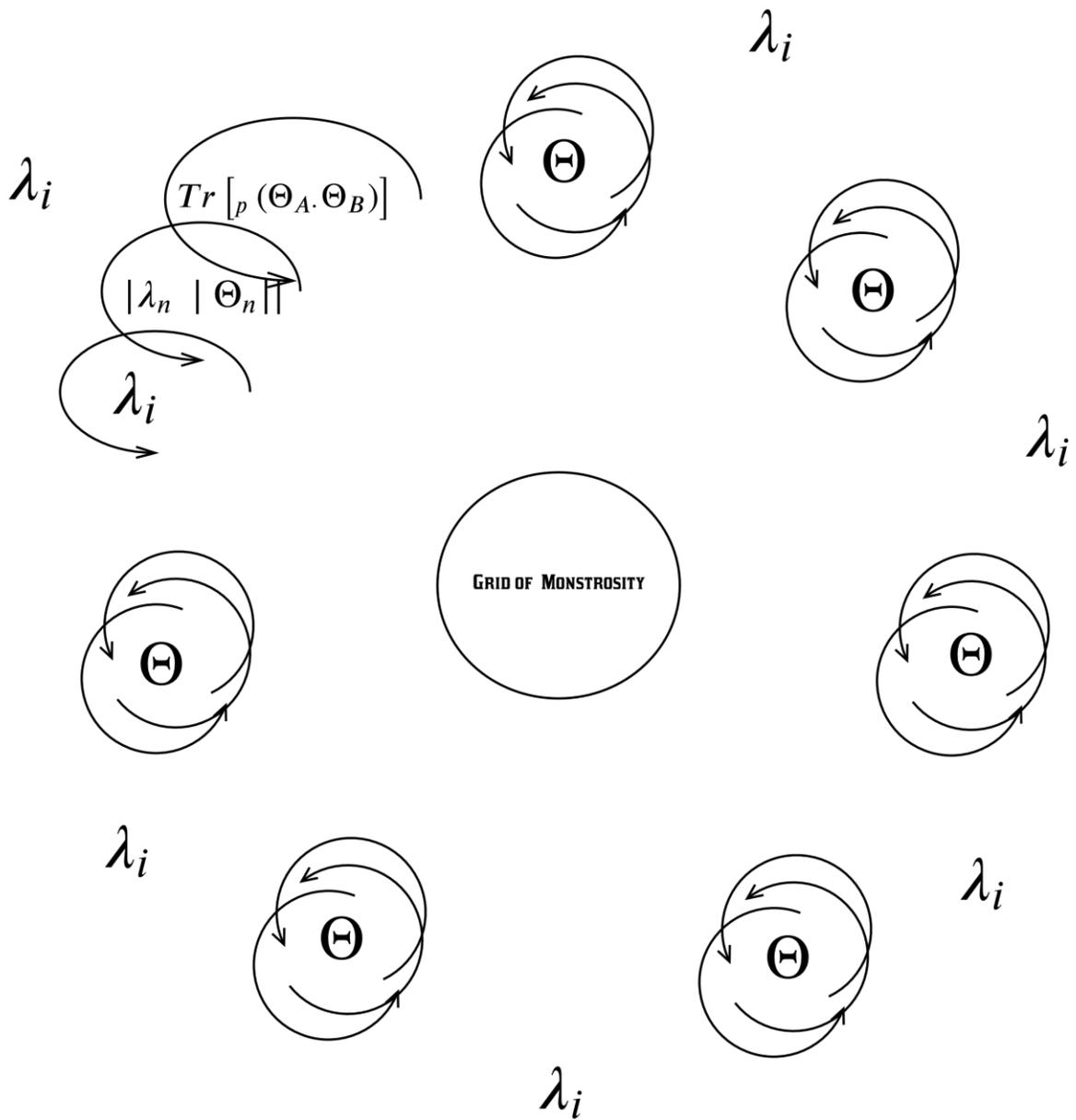


Figure 31. Grid of Monstrosity.

Relativity is represented by $\lambda(i)$, based on the notion that “a necessary condition for a possible situation of chaos is the existence of at least one positive Lyapunov exponent” (Michel & Flandrin, 1996). Confluence is represented by a two-way conditional relationship between λ and θ , loosely similar to how relationships are discussed in noisy channel theory.

And the representation of transference is a play on the quantum bipartite system as presented by Cerf et al. (1997) where – in their actual equation – they explain it as “assuming that the local statistics of the outcomes can be described separately for each [θ , in my case], and that the correlations originate from a hidden variable”. I am decontextualizing the hell out of that quote, but I thought it resonated. All of those amount to that growth on the top left of the visual – you know, monsters have aesthetically displeasing growths on them.

So that’s my monster story. Oh yeah – t-shirts screen-printed with the grid of monstrosity on them will be on sale next week.

I’m having some fun right now, so let’s play with this *Grid of Monstrosity* a little more. We can think of this another way that might help with clarifying my message. Let’s assume that the $\lambda(i)$ functions are actually transcendental numbers. We know that such numbers are irrational, and as such, seemingly devoid of discernible or usable patterns. However, that operates under the presumption that discernible or usable patterns are bound to only a linear form of numeric representation.

What if - we applied topological mapping to them? It turns out, that this has been endeavored in stochastic analyses, machine learning, and even in physics-oriented discussions of localization of *maximal entropy* (Burda, et. al., 2009). They are referred to as random walks, and they, like everything else in mathematics, are modal constructs that are a bit like subsets of a proof (like efforts to satisfy random circumstances). When grid snapshots (interrelated spatial-chronal-temporal instances) are ran as a series of simulations, convergences are noted and patterns are discerned (Verburgt, 2020).

Okay - think about this - John Venn (Venn Diagrams!) simulated a stochastic random walk of π , with compass points plotted as values of 0-7 and with a section of calculated π as

dictating the pathway (Verburgt, 2020). The result was a visual that reflected a web of interconnected shapes – triangles, rhombuses, and lines – with the implication that such a process can lead to a seemingly ever-expanding product:

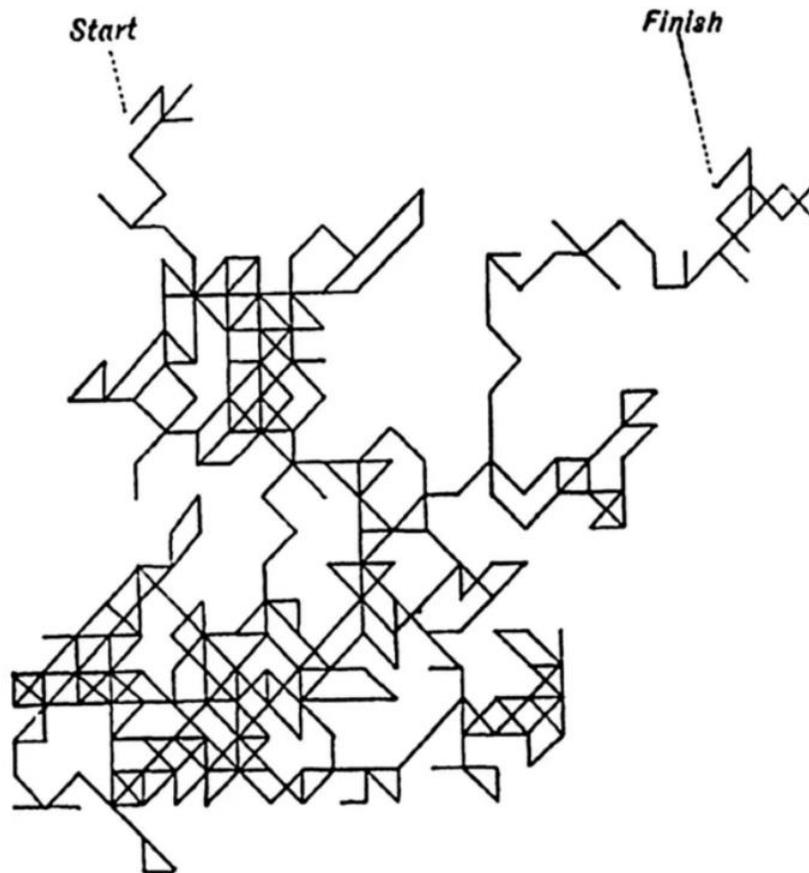


Figure 32. John Venn's map of pi as presented in J. Venn. *The Logic of Chance*, p. 118. Macmillan, 1888.

What is even more fascinating, for me at least, is that John Venn referenced this as an indication that he perceived occurrences of "chance" to reflect a "distinct agency" (Verburgt, 2020) and that he pedestalled learning upon notions of intuition rather than probabilistic interpretations of logic. In this sense, randomness is patterned according to the beholder's eye -

the beauty is subjective, yet inherent. So, we might think of this as a bit of chaos that is harnessed - and this is dependent on entities and objects as well as their spatial, choral, and temporal modalities.

However, I mentioned that entropy might be usable as a bridge for transference, but this actually might require probability to be considered. This is demonstrated in graphical representations of maximal entropy random walks, which seems to function similarly to a k nearest neighbors sort of way in that the representation of a microsystem that is likely the most dense is also the most likely candidate for holding the highest entropic rate. Rudnicki (2014) makes some very interesting interplay between maximum entropy and Occam's Razor (i.e. basically stipulating that the simplest answer is likely the correct answer) by axiomatizing an alternative scenario where entropy is not approached with a goal of parameterizing its fullest potential but is channeled by micro parameterizations - essentially, using only of entropy what is needed, which enables it to hold more functionality within a macro system. In a hermeneutic sense, we use what we can.

Now, for another story...

“Life and its Lunar-like Phases”

There was a mother, and she was a very loving one indeed. She had long brown hair and looked like no other mother on the planet. She made the best green beans in her garden, which she always intended to sell because the young ones would always compliment her on how fresh they tasted. The reason her green beans tasted so well was due to the fact that she cared for those seeds as if they were little children. She was very good at knowing just the right amount of water needed to make those seeds grow. Because everyone knows, if gardens get too wet they will not grow – this is the same if there is too little water given to them. For many hours, things had gone

perfectly for the garden. The plants were strong, and the green beans were as green as a baseball field. But one day, a terrible storm occurred while the mother was helping another mother with her new garden – telling this neighbor the correct amount of water and so forth. This storm carried strong winds and heavy rain, and it knocked the mother even further from her own garden. She began to cry when she realized that she might not get back to her own garden in time to protect her green beans. She sat and prayed for an answer and cried.

(Allegory for a child, 2013)

I have been thinking about why I have such a hard time caring for plants. I am quite terrible at it - I forget about simplistic life-sustaining factors like water and sunlight, and that I have to account for such factors more than once a week if I have a plant. It's quite frustrating. Last year, I spent hours planning and researching a layout of varied shrubs and perennials, collaborating with my friend on a design schematic for my front yard, and then forked up hundreds of dollars to put the plan into action. The efforts materialized into an aesthetic that perfectly complemented our home with colors that were perceptively vibrant in ways that my red-green deficient eyes could process. Fast-forward one year - 6 of the 15 plants are dead - like little bonsai-scale willows surrounded by shriveled petals of my incompetence. If I could find plastic plants that would look good in my front yard, I would risk additional credit debt for them.

I think that one main reason for why I am so bad at gardening is that I am preoccupied with other things that I consider more pertinent at the time. Still, it is not an excuse for me to take on something that I knowingly cannot sustain or am not wholly interested in maintaining. I find this to be a realization that is a bit embarrassing, especially when I recall analogies that link

educators with gardeners - it seems like every PD session I have ever attended has manifested this type of analogy, as if they are rubbing my nose in the products of my incompetence. While the outcome of my dead plants is self-inflicted, sometimes there are factors that are genuinely out of our control when it comes to caring for a living thing. The allegory in this section was something that I scribbled down one day when I was asked to talk with *Pseudonym, Jr.*, a child. A few days prior, he and his mother had been involved in a car accident, and he had not talked with anyone about the experience. His mother feared that he was starting to repress the experience, and she expressed concern about this and at some point I was asked to talk with him just to help add some extra support to the efforts of providing open channels for communicating. I had never really had to do this type of thing before, and to be honest, I was probably better suited at the time to help provide tips on how to repress feelings and emotions.

Instead of directly interrogating him, I decided that I might be more helpful if I tried to work along the parameters that this child had started to construct, and my hope was that this might organically lead to some trust between us - and ultimately some communication in a more voluntary way. I read the allegory with him, and I purposefully left it open-ended so that we could discuss a potential answer that the allegorical mother desired.

At its core, stories seem to reflect a communal understanding that the sharing of them indicates an atmosphere of transparency that is necessary in multiple settings, including areas of research and study (Gershon, 2018). In the context of the classroom, the concept of transparency in relation to stories can be challenging to accept due to its connotative association with how we perceive vulnerability, but it also holds the potential for students and their instructors to channel alternative modes of learning dynamics other than the parameters set forth by traditional understandings of contextual roles (Biesta, 2012).

Vince (2020) spends a few pages advocating for the concept of narrative-driven understandings in a communal setting, and I think that she is emphasizing that it is a natural temporal byproduct as we embark on a shared course of action. I find it interesting how she conceives stories as sort of metaphysical tool for constructing our realities (p. 87), so that we might make sense of things. In this way, it only seems natural that our stories evolve in complexity along with our constructs. Vince (2020) also provides a brief chronicle of how our merging of abstract and concrete information, highlighting such anachronistic methods as the “intricately knotted threads used by the Inca” (p.97) as a form of informational representation which alludes to our current methods of blending narrative spin and complex statistical modeling.

As a doctoral student, it has never been more clear to me until now just how unshared this current methodology is situated within our daily lives. As the data becomes more complex, it becomes harder for us to temporally process and manage, and our narratives – our constructs of our reality – are consequently affected. We find our narrative constructs to increasingly rely on the narratives of others to guide our own (Bishop, 2020). Such external blendings of the abstract and the concrete become our lifelines for understanding who we are, where we are, and why we are, yet something is lost along the way – our ability to actively engage in these metaphysical journeys.

Vince’s (2020) account of stories also brushes on the more anthropological nature of socialization, indicating how shared mutual understandings function in such ways as helping community members work through, and Vince perceives it, “biases, which are the Achilles heel of human cognition” (p.92). Additionally, Vince implies that the more tribalistic qualities of communities might have generated out of mutually rationalized support of communal benefits

over personal incentives, and the implication is that such communal instances of “speaker-listener neural coupling” (p.86) that occurred in ancestral groups during storytelling seem more concerned with shared processing than a better or worse outcome of incentive(s). If it is an inevitability that we must find connections with others, then it also is fitting that we establish some alignments along the way, and what is a narrative if not a framework for us to temporally connect?

The term has an interdisciplinary track record of usage. O’Hara was kicking ass and dropping names in the late 90’s with some interpretive research and study on transcendence (1997;1998). Using composite narratives, O’Hara completed a thematic analysis based on a, well, composite of conceptual derivations ranging from Freire’s (1989) notion of reconciliation of contradictions so that the teacher-learner dynamic becomes fluid and interchangeable, Maslow’s (1968) notion of pedagogical relationships sustained through “trust, care, and mutuality” (p.3), and Palmer’s (1983) notion that faith between the individuals is needed so that risks or challenges can be traversed (O’Hara, 1997).

Catalyzing Frisson and Transcendence through *Curricular Craftsmanship*.

The traversing of something in a social way is inarguably a complex beast to untangle, which is interesting considering how often we conceptualize it. And, again, are communicative transferences really even achievable, or is it simply a utopian sculpture what we place our chewed gum onto on our way to the entrance of an obviously less abstract construct?

The most resonate parts of O’Hara’s conceptualization is the including of the phrase “go beyond” (1997; 1998) which I think is how many people would define transcendence or a transcendent thing. In her philosophical outline of a characteristically transcendent school (1998), and after she had again included her name-drop blitzkrieg, O’Hara describes this type of

setting as facilitative and implicitly democratic, but I really like how it was mentioned that “Divergent as well as convergent thought are developed” (1998, p.6). Additionally, Wong (2008) discusses how to bridge “multicultural literacy” (p.31) issues for preservice teachers through an interplay of transactions (connected to interpersonal dynamics), transformations (connected to how interpersonal dynamics are processed) and transcendence (connected to how interpersonal dynamics are considered necessary for personal growth).

But these are ideological suggestions. It requires someone to make decisions on how they are interpretably employed. Thus, you have a few options for pathways, including that of the external driver or that of an internal one. In a dichotomous context, I am inclined to accept the latter of those two options, and this is where I think about what it actually means to be a teacher. Is a teacher akin to a dancer, or something else? I do not think that an analogy is necessarily needed here to connect the practice of teaching with the practice of artistry. Artistry is a salient term that holds a wide array of applicability, but what is always present is the notion that there is direct, active engagement with the process of creating art. It becomes craftsmanship, and in such grids, inauthenticity is undesirable.

It might be a good time to refer back to the spatial framework from the beginning of this volume. I’ll run through a situation which might not receive any points in the categories of profound pedagogical practice, but such is life.

An exemplar lesson which lacks empathy, humility, and productivity.

Learning is a juggling act of convergences including and beyond the neuroscientific.

Sometimes, I see life in a similar way to how the concept of infiniteness is pseudo-mathematically discussed, by using the measurement within a millimeter span and pointing out the absence of tactile reference points within the span, but I see one caveat – that the millimeter

points span two separate rulers over any given distance and at any given point of time. It makes me think of each instance in my own life as explosions, emergences, evolutions, and implosions, where I am nothing, then everything, then always somewhere in between generations of that dynamic – in any instance, I never fully reach any point. This type of uncertainty is unsettling and it is potentially destructive, just as anything else can be, but it can also function as a source of enlightenment if we are willing to engage in learning from it.

Space 4 – System –

Students entered the classroom in what can only be described as an apathetic disposition. There were a few speculated reasons for this: The students had just returned from an extended break (Thanksgiving). Present were a few (4) senior football players who had just lost in the State Semifinals, ending a season-long undefeated record and ultimately crushing their hopes of achieving a state title. The students have been involved in an extended literary analysis lesson series, and they were ready to move on from the novel they had finished reading.

I was initially unable to evoke student engagement - students were not actively attempting to participate in my questions that were posed for intended discourse on the content.

Space 2 – Process –

I had students turn to a chapter in the book with the hope that interacting with the book would help jumpstart a conversation. It didn't work... I shifted tact: On the first page of the chapter, I suddenly had an idea. My instructions then followed: 1. Read/annotate the 2 epigraphs on the page (the book contains an epigraph at the beginning of each chapter, but this chapter, in particular, contains 2 epigraphs that are seemingly dissonant. 2. Be ready to associate each epigraph with a provided abstract concept - *faith* 3. I created groups based on the annotations provided by the students (ability/output groups) 4. Go to one of the whiteboards, and, as a group,

visually present the connections and outlying thoughts/ideas/musings of your group 5. Once students began whiteboarding, I went to each group and presented a ruler to them with the following directive: Analytically incorporate this into your visual in some way.

Space 1 – Artifact - “(Relatively) Stable objects that can be perceived through the senses”



Figure 33. Student-generated flowcharts.

I was initially frustrated with the student apathy, but the lesson unexpectedly became, not just salvaged, but transformative as it led to the refinement of future lessons and activities. Student engagement became observably present – observable were smiles, laughter, conversations, and questions – more so than had been observed in previous lessons.

Space 5 – Culture –

I was able to redirect apathetic responses by requiring any inputted idea (i.e. anything vocalized) to be incorporated into the visual somehow - one student mentioned that he hadn't studied for his chemistry test - I directed him to retrieve his study guide from his bookbag and try

to connect its content to the visual (it was on thermodynamics). Students, thus, became interdisciplinary contributors - multiple content areas were represented- math/science/philosophy-and new terms were learned (e.g. axiomatic).

I am reminded here of Arhar and Irvin's reflections of how the interdisciplinary approach appeared to show quantifiable achievement gains that were more indicative of student/teacher consistency rather than student/student consistency with respect to shared settings (Arhar & Irvin, 1995, p. 66). One consideration for this correlation is the notion that teachers were more inclined to internalize their role in preserving the efficacy of the setting, and I can somewhat attest to this based on the classroom activity that I am describing.

Space 3 – Experience –

By the end of that school day, I found myself on a come-down from *frisson* overload and musing on “Why can't every day in the classroom be like this?” To which the response inevitably is “It can't”. It is an intuitive response, and it is justifiable as well as easily countered, but it is such a fleeting notion for far too many of us – we fail to grasp it in ways that cause our knuckles to lighten from blood dissipation.

A better question may be, how do we cultivate it within a learning grid which concerns itself with transcendence as a virtue? According to Doll (1993), we might first need to transcend our more anachronistic, system-induced notions of what is necessary in a learning grid – for instance, requirements for “Readin’, ‘Ritin’, and ‘Rithmetic’” (p.174) – and we do that by aligning an alternate framework. I am a fan of Doll's work, and I haven't really been able to successfully counter him yet, so I buy into his suggestion of *richness*, *recursion*, *repetition*, and *relations* as the four R's necessary for curriculum and learning. Here is my brief overview of those R's.

First, we have *richness*, which is necessary for any meaningful instance to become aligned with chaos. Doll discusses it as interactions of “problematics”, “perturbations”, and “possibilities” (1993, p.176). Then, we have *recursion*, which is described as a process of feedback looping by way of discourse and dialogue. I like how he uses the polynomial, $y=3x+1$, as an example of how a looping effect occurs – I’ll just drop a little fun fact here that he refers to the iterative nature of this instance as the “Joseph Effect”.

Next, we have *repetition*, and it is here where I apply my half-assed attempt at following Doll’s lead with a mathematical concept of repetition: x^2-2 where $x=1$. This does, however, get to the point that repetition is antithetical to open-endedness, and consequently reflection is unnecessary. It only functions for conditioning an arbitrary outcome. Lastly, we have *relations*, which seemingly juxtaposes quant and qual drivers – in the former, time is quantifiably arbitrary and needed as we try to measure other shit, and in the latter, time is qualitatively multi-dimensional, and its arbitrariness is not as much of an issue as we measure a bunch of possibly connected shit.

Alternatively, Vince (2020) supplies a historically *a posteriori* reflection which evaluates our transcendence through a framework of four sections – fire, word, beauty, and time (p.7). Her summations of those sections implicitly intersect spatial and temporal concepts, noting that connections exploited among each other, along with innate biological traits, are what catalyzes a learning culture; however, *time*, that chronal factor, seems to intersect all of the sections.

Simply because I need a segue here, I’ll refer back to O’Hara (1997) for a moment to mention how she provided a conceptualization of transcendent learning as a “turning point” where “life goals are altered or changed” (1997, p.1). I cannot claim to share that viewpoint, although the name drops and the abstract ingredients parts stew are certainly digestible. It is a tall

order to characterize such instances as requiring an instance to alter life goals. For less than 15 minutes on my walk home from that vegan guest speaker, I was convinced that I had just experienced something that altered a goal in my life, and, BAM! – food truck.

IV - ETHEREAL LIMBO

[My Σ of Eliot's fourth Volume]

The linguistic interplay of Eliot's fourth volume functions for me as a grid of double entendre. The causal dynamics of his expressed musings are hard to pinpoint, like blurred genres (Denzin & Lincoln, 2011). I abstract the following phrasings, for they are particularly resonant in their ambiguity:

- "I can connect nothing with nothing"
- "As he rose and fell"
 - *he passed stages of his age and youth **entering the whirlpool***
- "Turn the wheel and look windward"
- "Plucked me out as I was burning"
 - *Phlebas – Sailor who drowned - - past life*
 - Others have burned perhaps more brightly than one on a forging path

The forging path...is this to mean that it has been paved before as its creator had inevitably been lost? It takes me back to some preceding area where I was mentioning how Kripke (1982) tackled misinformation and etymological legacies. I wonder if some of this might relate to how the qualitative realm seems to be subjected more to critiques of credibility and validity – all of that muddiness and mucking around, doing all that it can to avoid sterilization, and failing to make a mess (Law, 2007). Are sterility, cleanliness, and drabness conceptually the same? It also makes me wonder if *to innovate* means the same as *to create* something new or if it means *to create anew* the nuances entrenched in the gridpoints of our past. Welp – considering that I unconsciously structured the previous sentence in a dichotomous manner, I think I just solved that riddle.

Genres: Satire, Science-Fiction/Fantasy, Narrative Non-Fiction, Psychological Suspense, Lyricism

Intuition & Axioms.

Intuition is something which requires further exploration if we are to grapple with – and play with - interactions of things for two reasons. First, we need to be okay with the openness of inquiry, so that we are more secure in our attempts rather than the outcomes (Darling-Hammond, 2010). In this sense, I see this study as a methodological exercise or sorts, where my autoethnographic approach is informally associated with the use of “thought experiments” in metaphysics, (Johnson, 2009 p.6). Such thought experiments posit hypothetical situations largely for the purpose of utilizing their the semantic and syntactic constructions as well as account for intuitive notions. By considering a notion, one can take an intuitive inventory of sorts by noting *a priori* conceptions and beliefs, which in turn might lead to insights that otherwise might not have been gleaned. I believe it is critical for us to perceive a constructivist benefit of engaging in thought experiments prior to the development and application of a complex system, whether it be a programmed machine learning tool or a qualitative study. Denzin & Lincoln (2011) mention that “the *bricoleur’s* method is an [emergent] construction” (Weinstein & Weinstein, 1991, p. 161, quoted in Denzin & Lincoln, 2011, p.4) that changes and takes new forms as the *bricoleur* adds different tools, methods, and techniques of representation and interpretation to the puzzle” (p. 4).

(((As I hit the last key stroke on that word, I am suddenly aware of my surroundings in ways that can only be described as hyper-sensory---I’ve lost track of the days up here, in this attic room musky in kiln dried pine and strewn with metallic granola bar wrappings, where I have resigned my existence to the scripture of all things doctoral. It is my war room, and I am Colonel Kurtz. My wife is downstairs watching a documentary on Michael Jordan. This is my best guess at what is going on down there, for two particular points of poignancy: First, I watched two extra episodes of it a couple of nights ago. This is important because she and I

usually watch shows together, but a couple of nights ago I watched two extra episodes of the series so that when the time came for me to be productive (i.e. tonight) I would know that she had to catch up on the series before I could join her – a series of two’s, is that code? Checkmate. Second, I can intermittently hear what faintly sounds like a voice registering a very low frequency that’s tapping into the subwoofer of our sound system, which can be none other than the voice of Scottie Pippen – someone please get that guy an audiobook narrator contract. Let’s see if I’m right...Damn, my mental faculties are sharper than ever before)))))).

Axioms are Intuitive: Back to the keyboard. If we are to think about intuition in more practical ways so that it might be lexically stable in order to align ontology with methods of research and study – as Touchton (2009) mentions as an important objective towards “general purpose, or even ‘common sense’ ontologies that would be useful to all domains” (p.8447) - we need to work harder toward developing sound methods for the conceptualization of axioms. In short, axioms can be thought of as “unproven, unprovable assumptions” (Johnson, 2009, p. 8) which are intuitively presumed as true in order for their utility to occur; that is, for the purpose of establishing a starting point(s) so that producible outcomes may be mathematically derived.

I sometimes joke about axioms as the drunk uncle of mathematics that shows up uninvited to Thanksgiving dinner – everyone is cringing because they know he didn’t brush his teeth and that he will be sitting next to *someone*. I am recalling a statement that someone said to me one evening – that calculations derived from mathematics are the only real things we have to represent other things. That statement made me think about how our intuitionistic reasoning is at least in some form a series of statistical models that are cognitively churned out and with broad implications for accuracy. Dehaene (2020) has made similar connections while analogously comparing intuition with Bayesian models.

Further, I think that stronger axioms are the ontological glue for symmetry to be algorithmically and humanistically achieved, for it has been previously considered how programs are only as objective as the humans who make them (Byrnes, 2016). As I have shifted my work to embrace the autoethnographic approach, I have realized just how much of its content is derivative of my existence. When embarking on a pathway that requires established starting points, it is quite important for those starting points to be viewed as axiom-like in their potential for replicable results to occur. This might be the overarching challenge of an axiom-like starting point. I have dabbled with obsession in regard to how I might account for such an ontological feat. It is not a responsibility which I take lightly, but I also hold no notions of capacity and ability when it comes to attempting this type of work.

At first, I struggled with two major issues. The initial issue was that I felt an intense pressure to theoretically stabilize an axiom for innovative pedagogical measurements to occur. Since it might be unlikely that we will uncover the true innerworkings and processes of our consciousness, and thus we will be unable to uniformly agree on a broad conceptualization of consciousness, it makes more sense for us to agree on a type of starting point for such a conceptualization in order to measure and refine as needed. I shield such an axiom by way of plausible discourse (Lewis, 1986). If one accepts the axiom as a potentially valid conceptualization of the primary broad components, and that those components might be necessarily required in alternative axioms on the subject, then it stands to reason that it is a stable working model at the time.

Secondly, and closely linked with the first issue, is that there seems to be a lot of philosophical debate regarding the identification of concepts which are abstract and seemingly connected with our consciousness. I think that some of the debate is precipitated by linguistic

and semantic ambiguities and the limitations of analogous relationships, which in a sense dilutes our understanding of something by ontologically smoke-screening an additional abstract product(s) – so to speak, a swapping of one concept for a map of concepts. But I think that this is also a key takeaway for how to discuss something outside of ontological debate as well, choosing instead to focus on how to functionally create a multi-dimensional gridwork of explanations and connections – sets of semantic dictionaries might function well in such cases, but how do we start creating them? I think that it has to incorporate that which constitutes a range of plausibility – from the intuitively accepted, to the empirically sacrosanct, and even to the overtly absurd, when it comes to what we understand and accept as functionally true and not necessarily true [or, as Kripke (1980) might express, as *rigid*].

On the function of the *coda* as an “ethereal rumour”:

The ether of consciousness is language. The essence of our thoughts – its processing and products, is situated within a neurologically corporeal and linguistically transcendent transference of process and product. Therefore, it is through language-based constructs such as analogies where we begin a process of code-mapping and conceptualizing relationships of symmetry, asymmetry as well as the abstract and the antisymmetric (Goldblatt, 2007, p. 29). What manifests, here, is a complex gridwork of the process, where additional layers are concerned with mapping the mechanisms of causality and beyond.

Going beyond causality, however, requires a bit of risk, among other things. It is somewhat akin to nonfoundationalism, which “holds that we can make statements about the world without recourse to ultimate proof or foundations for that knowing” (Schwandt, 1997, p. 102, quoted in Denzin & Lincoln, 2011). I am pretty much fine with such a process, but it might be a bit unsettling for some others. Perhaps we can mediate it with *quasi-foundationalism*, which “holds that we can

make certain knowledge claims about the world based on neorealist criteria, including the correspondence concept of truth; there is an independent reality that can be mapped...” (Denzin & Lincoln, 2011) I am totally fine with that disposition as well, because I think that axiomatization will find its way into both of them. You know, *crows* and *ravens* and all of that.

Proof that I’ve Been in “Deep Shit” for a While.

DANGER: Pontificating Alarmist Ahead.

In some form or fashion, I have always been involved in this type of work, but it wasn’t until the embarking of this doctoral work that I realized just how deep the roots were. As I write this, I am reviewing texts that, more than a decade in my past, were supposed to have been more thoroughly read and understood - which would have led to better grades in my philosophy classes – especially the metaphysics course. I blame the professor, because he had extremely disciplined nutritional insights. One time during his course, he had to miss class, so he provided us with a guest speaker who *did* lecture us on the ethical issues of eating meat while verbally accosting us to convert because *why were we not vegans already?* And what kind of sick and depraved individual had the guts to start us on drinking cow’s milk – I mean guts literally because they must have had a great digestive system to ingest something so unnatural - in a ritualistic daily manner while his conniving weasel of a half-cousin deemed it necessary to distribute cow’s milk in mass quantity? I walked out of that lecture feeling enlightened and wanting to make a dramatic difference in my eating habits. It was a fifteen minute walk for me to get from the lecture hall to my bedroom, and if it wasn’t for that fucking food truck, I might have lasted the entire timeframe without meat. Nonetheless, I see the importance of these texts now. My ontological challenges are derived from a few theoretical frames:

AXIOMS & ABSTRACTION. The problem of quantifiabiles in semantic forms: David Lewis’ (1986) *On the Plurality of Worlds* has been a beacon for me since the first day that I

bought it, even if I have ignored that beacon for the past few years. At first, I was enamored with the freedom in thought which it proposed. It posited beautifully simplistic conclusions and was not afraid to present them as assumptions (in other words, I saw it as a constantly shifting exercise of inductive and deductive logical approaches).

The work now functions in helping me traverse my ill-conceived notions of etymological semantic origins. I entered this work thinking that I needed to find the irrefutable origin of all words which I would synthesize in my constructed framework (not my theoretical one, but the one which I posit in axiomatic fashion). This was a fault in my reasoning that was more reflective of pretentiousness and ambition as well as self-doubt - I was more concerned with shouting loud enough for people to hear me rather than practicing faith in what I was constructing. ***IF IT IS NOT CLEAR YET – THE GOAL FOR MY DISSERTATION IS TO ACHIEVE AMBIGUITY CLARITY***

Lewis defends *modal realism* in a bold manner by deconstructing the topic and rebuilding it in various phases. To him, ascribing finite value to a system of semantic particulars is to inherently limit the ability for the system to produce transcendent products - they become bound to the arbitrary nature of maintenance. *Linguistic Ersatzism* (Lewis, 1986, p.142) is at first countered by Lewis in regards to how it might fail to such limitations if it is to desire finite representations of all words within a model, and offers that an unbound version of the approach might be to concern itself with its more generalizable/interpretive outcomes.

All of that makes complete sense to me, and in some ways was that which I believed prior to seeing it in Lewis' text, yet I had been preoccupied with the notion of presenting acceptable ways to quantify abstractions, and I was only considering this objective through those quantification models that fallaciously rest on notions of finiteness. My solution was

counterintuitive to what I believe, and I think I could have spent a lot more time unknowingly creating something that might only function as a representation of the omnipotent presence of Western finiteness. Etymological semantic origins are not my concern - validations and valuations (thus modality) are my concerns. This approach is closer to the axiomatic model that I will propose and explore.

POSTMODERNISM-ESQUE VIEWS OF SPATIAL AND TEMPORAL

CONSTRUCTS. Theodore Sider's (2001) text, *Four Dimensionalism: An Ontology of Persistence and Time*, supplements Lewis' constructions of modal realism by providing a critique of the extensions offered within our ontological assumptions of spatial and temporal positions. Sider is concerned with the generalizability of what is as well as the stability of those constructs. Like Lewis, the duality in thought (which I view as a clear reflection of Western-influenced logic) is often referenced in attempts to efficiently demonstrate fallibility in a conclusion - if the nihilist and/or skeptic presents an equally valid outcome, then the notion of an absolute truth (in this particular issue) is not possible in the model's present form.

Sider emphasizes the importance of such ontological discussions if quantification is to function within and throughout a framework. His work is not presented as a defense of particular absolutes; rather, it is an attempt to utilize theoretical possibility as a means for questioning the stability of some positivistic models. This is important for quantifiable relationships among entities. His work is important to me if I am to make decisions on how words will function in my framework as well as products derived by the framework's application.

LANGUAGE, LOGIC, & INTERPRETIVISM. Saul Kripke's (1980) text, *Naming and Necessity*, was a recounting of lectures he provided on the problem of natural language and epistemology. He wonders about the rigidity of language-based "designators" (p.25), and his

work offers some serious counterexamples that I must consider as I make semantic and conceptual decisions. For one, he proposes idiomatic ontological exercises (such as his example on the qualities of a philosopher) which trip-up fallacious attempts at applying counterfactual claims. Tense and tenselessness have even been accounted for in his analysis of his examples. He also sees counterfactual claims as an important byproduct of possible worlds theory, primarily due to his position that they use ambiguity to challenge ipso facto statements while offering no concreteness to be derived - circumlocution is the product.

Those rediscovered texts, Lewis (1986), Sider (2001), and Kripke (1980) dusted off from the depths of the broken shelves of my IKEA bookcase, might be thought of as stagnant representations within my linear learning timeline, but they are morphing into so much more than that now. Each of them easily permeate the theories of the educationists I have studied in this doctoral program – at least the ones who seemed to resonate with me on some intuitive level; namely, the postmodernists, constructivists, and interpretivists that might have seemed too dreamy or ‘*off-playing-on-bat-shit-hill*’ for some others.

Off to play on bat-shit-hill:

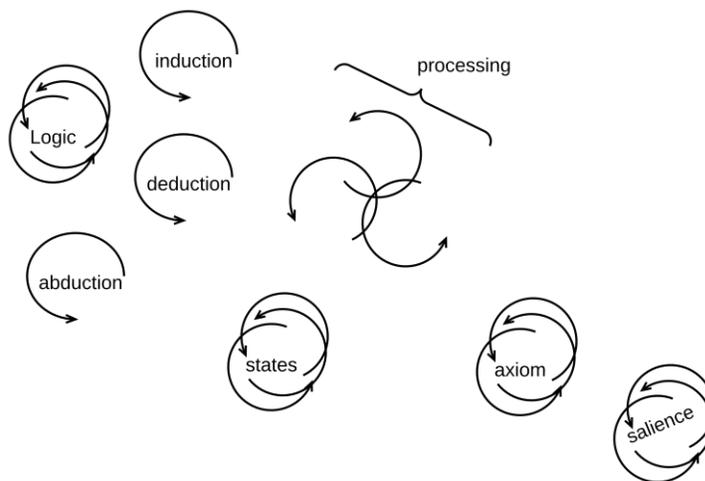


Figure 34. The Confluences of Intuition and Logic in the Narrative and Beyond.

If transcendent learning might be discussed as a confluence of abstract notions and sensory interactions in order to overtake the less developed pathway of the immeasurable, the spatial, choral, and temporal intersections and iterations of logic and intuition are important to consider as they pertain to cognitive processing – and, ultimately, consciousness.

On varying levels, intuition is a causal influencer in any system, yet our *a priori* track record of educational decisions reflects a trend of pedestaling concrete and practical results, implying that we desire our intuitive notions to be logically validated regardless of reasoning. Saldaña (2016) pointedly notes that “we have difficulty wrestling with the unresolved, irrational, and unexplained. When we find and attribute cause, reason, or purpose (whether it be logical or not) to something that happened, we regain a sense of order in our personal lives” (p.188). If we consider grids of learning to be naturally possessing areas of entropy and chaos, our desire to control and rationalize the order of things is likely to be amplified while stifling such areas.

Logic, a complex term concerned with process in numerous forms, has successfully permeated the cognitive and computational domains, perhaps because of how we have managed to gauge it (Asvoll, 2014). I have previously applied a theoretical exploration of logic, which accordingly applies the spatial, the choral, and the temporal. I believe that this framework of components is webbed in interactions - generations of connections, permeations, reactions - and that those interactions might be the most fruitful nuances of learning while also the most difficult to measure.

I developed the methodology and approaches for my previous study (2019) based on what Åsvoll (2014) might presume are more traditional understandings of logic, and I believe he would be correct in that assumption. Moreover, if I had been aware of Åsvoll’s work on the matter of logical abduction, it most likely would have influenced my approaches to reflect his

own logical codings. I am unsure, however, if that would have been a better way for me to have embarked on this type of study, due to the fact that the study was derivative of my own context with regards to my proximal, cognitive, and ideological dispositions at the time. It is more of an accurate snapshot of who and where I was during that time than it might have alternatively been. All of this is to say that this paper *at least* functioned on a personal level as a means for me to innovate within my own context so that I might take a more active role toward reclaiming my sense of agency (Biesta et al, 2015).

Alternatively, Dehaene (2020) would likely replace some of the terminology expressed in this paper with ones such as “forward reasoning” and “reverse inference” (p.60), but that would be acceptable considering that his terms are derivative of Bayes’ theory of probabilities yet competently applied to the humanistic context. Along with those terms lies a key component for considering how intuition and logic are cohesive within consciousness. A poignant statement that Dehaene makes here is that “logic and probability are closely linked” (p.61). Why is it poignant? Because, just as asynchronous and synchronous processes are not computationally exclusive concepts, logic and probability are not synonymous.

Yet, it might be said that logic is fed by probability, and there would still exist an occasion or two when the accepted model – a decision, a mandate, a lesson - seems counter-intuitive. A problem seems to be developing: is logic more likely to be synonymous with intuition rather than probability? Intuition provides us with a capacity for applying logical modes of thought in order to make sense of things. It also provides us with the means to navigate probabilities by way of reasoning (Dehaene, 2020, p.61). What is left is an amalgamation of abstract notions, sensory insights, and trans-disciplinary connections which rely on

parameterizations of intuitive logic for learning and acting; thus, a first step toward modeling the immeasurable relies on the modeling of logic.

Perceptions of empirically sound decisions are seemingly bound by our conceptions of process and function. Houwer, Barnes-Holmes, & Moors (2013), while defining learning as an “ontogenetic adaptation” (p. 631), provide analyses which include causal underpinnings of informational exchanges. It advocates for functional definitions of learning so that more research and study might glean functional results. Functionality, however, is a more challenging outcome than what credit it has been afforded. For one, much of the challenge in this type of work is rooted in the difficulty of concretely representing abstract notions. And yet, the realm of the abstract is an inevitable pathway when considering the interactions among analogously and conceptually related realms of cognition and computation. I find some comfort in how Dehaene (2020) positions abstract thinking as a great advantage that humans possess over computational algorithms (p.28), but always lurking is this shadow of absurdity in how we are intimidated by the thought of generating something other than a norm. This is especially disconcerting when we acknowledge that, like humans, algorithms are inherently subjected to bias and that the lines between organic and artificial processes become opaque when their products are juxtaposed (Byrnes, 2016).

Along the journey of my narrative, I want to delve deeper into the boundaries of how we account for abstractions in research and study, especially in the qualitative realm. Consequently, I perceive the theoretical design of codings that are based on qualitative methods as an integral step towards me exploring how I might mix in quantifiable and predictive modeling at some point. The post-modern lens serves well in advocating for a harmonious balance to be found among dichotomous states, and it seems appropriate for educationists to think more practically

about how to synthesize cognitive and computational theories in order to strengthen a coding methodology. Further, the iterative approach must include applying methodology in generative layers rather than repetition for the sake of repeating a process – the idea is not to replicate something which is complex, but to acknowledge its complexity and build on it.

I believe that it is also conceivable that constructed coding approaches hold potential for me to develop interpretations regarding the transference of processing. This would support Croft's (2016) study where intuition is discussed as essential within the confluence of idea generations while also mentioning its connection with the ongoing nature of development. Croft stresses that a pivotal issue within the states of knowing something and reflecting on it lies in how an individual's interactions within those states are considered to be passive or active processes. The encouragement toward active learning roles can be seen in Doll's (1993) inclusion of the organism/environment dichotomy, Daehane's (2020) analysis of executive control within a learning context, and Varbelow's (2012) discussion of how self-reflective learning holds implications for iterative developments at a systemic level.

While such mappings assuredly require a complex modality of abstraction that has been previously expressed as a major challenge of melding cognition and computation (Chen et al., 2018), the domains are more convergent than divergent. It is intriguing how Dehaene (2020) provides an analogously thorough association between the algorithmic natures of computation and cognition, "in silico versus in vivo" (p. xxvi), where he discusses the limitations of the former in order to highlight both the limitations and potentials of the latter. Analogous approaches such as those are plausible in how the intersections are organized which effectively juxtaposes the two domains so that they become simplistically transparent to one another,

thereby implying that there is much to be gained in exploration of theory which is normally out of our purview.

In bridging computation and cognition, the implications regarding the development of models which practically represent how learning is constructed within consciousness is something which holds direct pertinence with language, for it is obvious that we will employ language at all phases of a study as well as in discourse related to it. Symbolic and semantic interactions are easily found among a plethora of qualitative methods, but they are also utilized in algorithmically-driven training models. Leeson et al. (2019) have recently provided key analyses in relation to how natural language processing (NLP) might support a qualitative coding process, where they conclude that synthesizing concepts toward insight is still a problem that inhibits the effective blending of the two. Additionally, Crowston et al. (2010) compared human-applied coding parameters using NLP as well as automatic coding approaches which are algorithmically driven.

When considering the presence of programmatic tools concerned with NLP, a clear intersection is observed between qualitative work and theoretical underpinnings of deep learning. Such tools could help a researcher create a semantic framework within their methodology - which might function within a multiphase prototypical coding approach (i.e. abductive theoretical construction) and constitute a step that is tenacious in how it limits or encourages a methodology. In other words, one way it can assist the researcher in checking for fissures within their hypothesized codings of information by functioning in a feedback loop role, which also seems like fruitful steps in mapping Doll's (1993) notion of the "intersections of relations" (p.137). All of this might attest to why constructively-sound coding phases are stressed so much in this work – subdivided relationships, whether they are applied semantically or in some other

fashion of abstraction, are potentially labyrinth-like in a post-modern approach, requiring the researcher to make some axiomatic compromises while the theory is refined.

If remaining cognizant toward aligning the two domains is accepted to be a crucial component within a study that intersects transcendental phenomenology, I think that Automata theory is worth exploring due to its semantic and symbolic underpinnings – and at this point, I am still exploring it, but I still thought it worth mentioning. Automata theory is accepted as a foundational component for computations (programming, etc.) which integrates semantic taxonomy with algorithmic modality within its theoretical conceptualizations (Castiglione & Sciortino, 2015). Two principle focuses of the theory are deterministic and non-deterministic states, and they are loosely acknowledged in some proceeding theoretical models. Additionally, Berto & Tagliabue (2021) has provided some insightful overview related to the computational non-linearity and automata are intersected, referred to as *cellular automata*.

However, that is not the full picture. Hezemans & Geffen (1991), in their analysis of how analogies have been approached alongside algorithmic constructs – with qualitative simulation modeling on the horizon (30 years ago) – mention that there is a good bit of navigation that is needed between disciplines if the goal is multi-disciplinary informational transferences. Although the work is decades passed, the comprehensive overview that they provide still can give us a good sense of what the landscape might still be experiencing as challenges. Where I am currently situated is related to their framework for analysis of analogy constructions and feasibility of their function, mentioning that they have to satisfy mathematical, physical, and visual parameterizations (Fishwick & Luker, 1991, p.171).

Same Shit, Different Pandemic:

Mapping Temporality and Innovation while Stuck Home.

As a secondary English teacher and a doctoral student, I have witnessed more educational disruption in a few months than I had ever thought possible. I vividly remember the day before my school's indefinite closure – the hasty verbal exchanges with students, briefing them on expectations for distance learning while intuitively fielding questions that were indicative of initial reactions held by individuals who were not accustomed to unprecedented change in this magnitude. Really, *none* of us were ready for such changes, considering that extended disruptions to the school calendar previously were attributed to snowstorms.

One area in my life that stayed more or less consistent were academic expectations for my Ed.D courses, as assignment deadlines still loomed over my head; however, the focuses of my research and writing immediately shifted in response to this new pandemic-driven context. Seemingly overnight, I witnessed the themes in my life broadly transformed from creating, facilitating, and advocating to mitigating, reacting, and replicating.

These thematic shifts are understandable, and even warranted to some extent, but they have also felt oxymoronic when juxtaposed with discussions of hypothetical silver linings regarding how this new way of living might help to ignite some necessary changes in pedagogy and perhaps even ideology. I began to take on the notion that school systems grappling with curricular redesign and system optimization efforts are conceivably poised to establish products and protocols reminiscent of the implications that surround the theory of disruptive innovation (Ash, 2011), yet it is also conceivable that a system's vision can increasingly become compromised as a reactionary decision-making protocol becomes more commonplace.

The swift influence of the COVID-19 context inevitably functioned as a muse for what I present in this paper - not a muse in relation to connotatively positive associations with the term, but an instance which sparked productivity which otherwise might not have been gleaned. Stuck at home, trying to do what I can to juggle parenthood, remote teaching, and my own learning, I unintentionally found some solace in exploring how to add complexity to some of my intuitive notions. One of those notions stems from a feeling of being undervalued as an educator during this context. I still struggle with rationalizing that particular feeling, primarily due to the reality that this context is not about me but about a system trying to do what it can to organize and manage its operation during a time where they are figuratively building a plane in flight.

Subsequently, I began to wonder about the concept of *innovation* and whether my understanding of it has evolved – or can evolve - in some way during this pandemically-driven context. Are new products and approaches being developed, or are old ways being repackaged and rationalized as innovations? Furthermore, to what extent does a system’s ideological makeup inhibit or encourage something new to be realized? And what does all of this mean for the educator in terms of *agency* (Biesta et al., 2015)? All of this inevitably manifested into a practical rehashing of my prior study (Lynch, 2019) while coming to grips with the temporal intersections of intuition and rationality - if I was to remain isolated, it did not mean that my consciousness also needed to process things in their isolated forms.

I think that rationality consciously amounts in how we use intuition to apply the constructs of logic so that we can make sense of our reality - in a sense, to parameterize things. Without such parameters, it seems unlikely that something new might be realized. Regarding a system, logic and innovation often permeates its decisions, and those processes are markedly present within our health care sector, which now is archetypically and proximally situated as the

pandemic frontline. Healthcare education programs - such as nursing - traditionally apply logic-oriented frameworks to prepare students for problem-solution mindsets (Ellermann, Kataoka-Yahrio, & Wong, 2006), while also emphasizing opportunities to transfer logic into innovative practices (Chan, 2013).

If the essence of an educational system is reflected in its instructional pedagogy, the involuntarily upending of educational models, as witnessed in our epidemiologically preoccupied settings, has not provided much room for balanced discourse on explanatory and generalized matters - such discussions are necessary for creating innovative, transcendent learning experiences. Consequently, a question emerges for other societal sectors faced with redesigns: Are we insightfully optimizing our system(s) in ways that account for logic and innovation?

In light of this muse, I thought it was necessary to further discuss how we might analyze products and protocols in terms of their innovative potential by conceptually associating innovation with logic. A methodological approach toward logical processing, as it is presented in this paper, is pillared on much of what William Doll (1993) has intersected while discussing the role of entropy in learning. Within his post-modern lens, Doll concedes that Jerome Bruner's belief in blending the "narrative and the analytical...producing a curriculum that utilizes both the methods of hermeneutics and the canons of logic (1993, p.124)" could have transformative potential. Situated in a reality where chaos is obvious and its implications are broad, it is my hope that this paper constitutes some new steps in my own reacquaintance with innovating by transforming my previous perceptions and approaches.

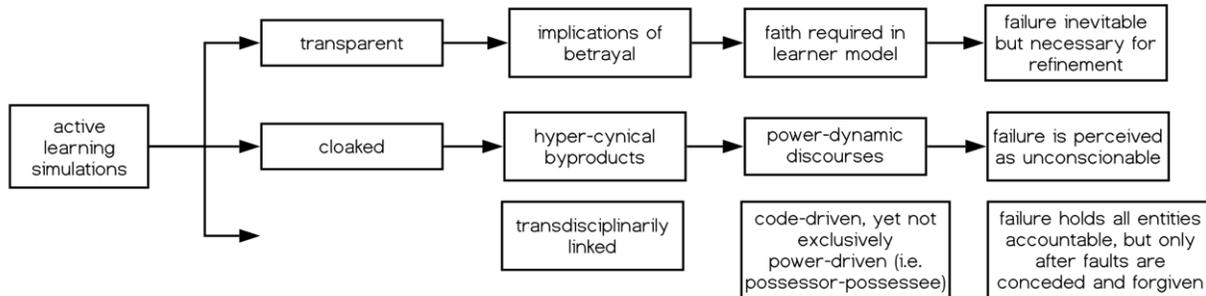


Figure 35. Role of Authority " (Doll Jr., 1993, p.167) in absence of our *old normal*.

The role of authority is limited, in the macro-chaotic context – perhaps call it apocalyptic-like scenario – to its transparent and cloaked forms due to a perceived lack of mechanisms which generate transferences of complacency and efficiency. We do not feel comfortable in a context, thus, we become preoccupied with it and our psycho-socio-neural processes converge to help us alleviate such challenges. As will be discussed, this may be impacting the potential for innovation.

Some Code-like Shit.

Meta-Modernist Aside:

As can be seen in some of the preceding volumes, Doll’s interpretation of post-modernism is spearheading my attempts of creating a stable process for interpreting a transformative (i.e. innovative) learning context. Doll’s work has provided strong theoretical foundations, but effectively practical approaches for applying his theory are more observable in disciplines outside of the educational paradigm, and this seems contradictory to what he envisioned for curricula. Ultimately aimed at a suggestion for a “how-to” framework for alternatives of learning and measuring (Varbelow, 2012), what follows is an overview of my theoretical construction process that seeks to further aide in developing my methods of coding

(Saldaña, 2016, p.255) based on prior research that analyzed the dynamics of logic within my ELA-specific context (Lynch, 2019).

In that research, driven by a broad consideration of deduction and induction, evaluative matrices were created based on face to face, interpersonal settings, and I concluded by positing that such applications might hold relevance beyond what was presented. What is *here* amounts to the next steps in my revisions of those contextually-driven conclusions by extending the theory beyond an ELA context so that it might be discussed in terms of its transferability. Rooted in a post-modern lens, this methodology peripherally functions within the ongoing and entropic autoethnographic macro-framework that includes the role of logical processing as well as a theoretical model of trans-disciplinary and transformative learning.

It has also become clear to me that if the methodology and approaches of the prior study are to evolve, they will benefit in celebrating alternative conceptualizations of logical reasoning that are empirically presented. I will reflect more on this factor throughout this paper, but it is necessary to mention here that Åsvoll (2014) and Haig (2006) are cited due to their work relating to abduction, and Åsvoll's work is acknowledged as a practical alternative for merging theory and methods while Haig's work is referenced as an evaluative component. In short, the proceeding theory is not intended to mince what they have already successfully posited but instead celebrate the nature of their contributions by providing concrete representations of one student's theoretical mindset.

In support of the coding parameters that are proposed, a review of relevant research will demonstrate how logic is accounted for in qualitative studies that include the coding of abstract concepts, while emphasizing that such approaches are more prevalent in systems thinking that is outside of the public education paradigm, where justifications of best practices defer to statistical

representations of perception, motivation, and pedagogical tools while downplaying broad theory. It must be emphasized that this is not a product that immediately transfers to curricular implementation, especially within the COVID-19 context which is essentially involved in a systemic data-gathering phase; instead, it is a proposal of one way for parameterizing a theoretical foundation for further research and study on matters pertaining to logic while envisioning next steps for curricular and organizational innovation.

Micro Goals: By presenting how I have intended to evolve my contextually derivative theoretical approaches, some fundamental goals should become evident:

First, it includes theorizing interactions between deductive and inductive logical models, cognitive processing, and computational processing while supporting prior conceptualizations of asynchronicity and synchronicity (Lynch, 2019). Accordingly, the proceeding efforts are intended to build on my efforts in the previous volumes to demonstrate how such interactions hold trans-disciplinary applicability and to emphasize why such efforts are needed in the education context at all levels.

A second goal includes providing suggestions for nuanced properties of qualitative coding attempts in relevant and subsequent work. Åsvoll (2014) has previously succeeded in instantiating a causal coding sequence of induction, deduction, and abduction in two modes, while also applying such approaches to educational theory, and this at least invites causality to be further discussed. Scheer (2020) recently provided a well-constructed and macro-systemic approach that is implicitly suggesting first steps for coding implications, but *linearity* appears to necessarily function as a next step for this type of analysis. Implicitly, Scheer's conceptualization of the "chronosystem" reflects a longitudinal account of time, and to me it seems to suggest that there are long-term implications for certain organizational decisions. Alternatively, I attempted

to place an emphasis on nonlinear dynamics of processing information and decisions, yet I will admit that linearity is a tough concept to confront and counter.

A tertiary goal includes positing how systematized responses - crisis related or otherwise - can impose singular logical constructs, thereby potentially impacting non-linear forms of logic. Peripherally connecting with discourse surrounding linearity and education (Kuhfield & Soland, 2020), one-dimensionality in decisions and actions is further supported by theories pertaining to multi-modal representations and implementations of logical structures for educational system optimizations (Irwin et al., 2017). Related research advocates for the synthesis of self-explanations, social interactions, and multi-modal representations of content (Darling-Hammond et al., 2020), suggesting that a “whole-child” (p.115) framework is an interdisciplinary model; as such, it surpasses the limitations of a singularly-sequenced logical model. Thinking, collaborating, and representing across disciplines are also some fundamental implications provided in Doll Jr.’s (1993) post-modern curricular theory and Chen et al.’s (2018) study.

Interpreting the preceding theory:

Considering the multiple phases in versions of qualitative coding such as grounded theory (Chen et al., 2018), I was concerned with developing interpretive content that conveys the complexity of intersecting concepts while also providing the skeletal essence of a codebook that is stylistically post-modern. I came to the assumption that two fundamental interpretive strategies were required that are effectively post-modern: First, it requires a perception of interactions as an on-going and open-ended network of exchanges and transactions (Doll, 1993). Every starting point in a context is not time-dependent and is more related to a transition. Secondly, iterations are to be perceived as necessary. They are phases within the development of a methodology that

might encourage theory and practice to be aligned and stable (Doll Jr., 1993). The following taxonomy might be helpful as a summation of what will be discussed:

<u>Iterations {C, M, G}</u>	<u>Interactions {C, M, G}</u>	<u>Innovation {G}</u>
(C)(M)Logic (C) Time (C) Space Linearity Non-linearity {C,M,G}	(C)(M)Process/Processing (M) Dynamics (C)(M)States	Iterations Interactions

Figure 36. Contextually-driven Taxonomy.

The appropriations of *C*, *M*, and *G* to the terms within iterations, interactions, and innovation are based on aligning the taxonomy with preceding visuals and text. In other words, all of this is my attempt to understand these overarching and underlying terms while applying them to a position on how innovation might be realized as well as analyzed. The next figure is a conceptualization of iterations and interactions as well as their applicable sub-terms:

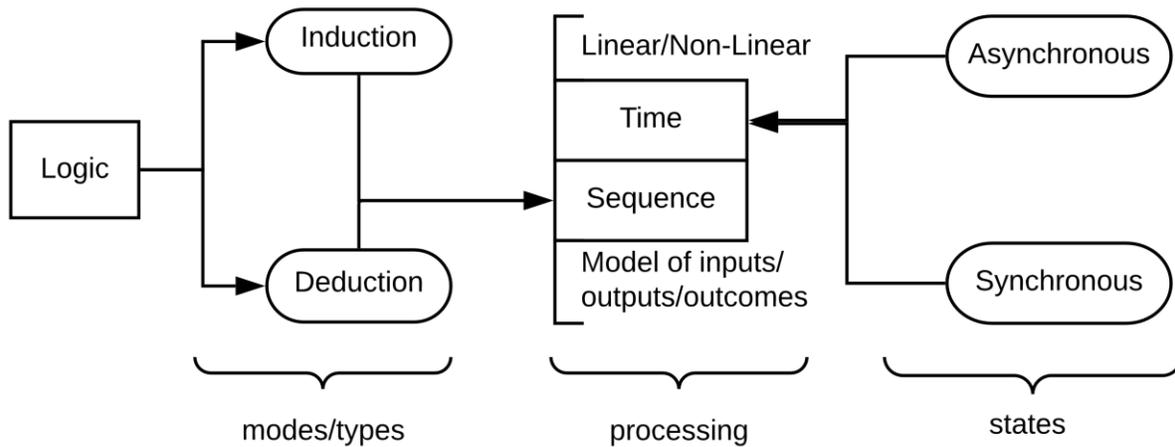


Figure 37. Map of Iterations and their Broad Interactions.

Each of the sections will be discussed in a bit more detail, but they can be summarized into phases of conceptualizing logic (into modes), mapping processing (into constructs of linearity and sequence), and generating processing (into states).

What are Iterations, Again? The methods implied by a stylistically post-modern approach can be reduced to one word – *iterations*. As previously noted, Doll (1993) provided adequate groundwork for connecting chaos-complexity (forming from the concept of thermodynamic entropy) with the arithmetic repetitions of a function with numeric sequences and, ultimately, the transformative learning context. The implication is that mathematical operations invite the applications of iterative processes – a repetition of actions which presumably operates on sequences of linearity. Yet, the instantiation of patterns by way of equational mappings, such as graphs, invites some additional complexity through “playful” (Doll, 1993, p.98) interactions.

What are Interactions, Again? The term, *interactions*, also has been empirically scrutinized in relation to how it aligns with informational exchanges and relevant research Wanstreet (2006). Wanstreet provides definitions of exchanges within the interactions umbrella as *learner-learner, learner-instructor, learner-content, learner-interface, computer-mediated communication, and social and psychological connection*. Similar applications of those terms can be observed within the presented matrix graphics in this paper. In comparison, it may be appropriate to consider the methods presented in this paper as a preoccupation with codifying interactions, and it is relatedly inferred that Åsvoll (2014) conceptualizes abduction within the nature of interacting modalities.

What is logic, again? Earlier, I mentioned that I had previously conceptualized logic in a lay-man’s manner which included deductive and inductive logical models as they pertain to humanistic logical processing, where I noted that *induction* and *deduction* are denotatively conceived similarly across many disciplines including philosophy, mathematics, and social sciences (Lynch, 2019). Thus, it is generally acknowledged that “induction reflects the use of

specific evidence for generalizations while deduction reflects analyses of generalizations through evidential means” (Lynch, 2019, p. 1).

If the terms are accepted in these broad forms, it provides a pathway (of many) for navigating the broad and specific nuances of an informational exchange. For instance, epiphanies can spark from a multitude of exchanges, such as an informal side-discussion among students during a collaborative activity or during critical analysis of a historical event. Such epiphanies seem to require some representation in study, and it is plausible to consider them generalized informational bits that can spark further inquiry – thus, they become tail-end inductive products which turn into deductive starting points.

Another step in this code-mapping approach was to meld logical types with logical models so that categorizations of processing could be achieved. If it is understood that a logical mode operates within a causal sequence that is essentially a spectrum of specifics and generalities, then it proves necessary to attempt an account of the causal nuances within such a spectrum.

It is suggested that Åsvoll’s (2014) work on the matter be further consulted if one is interested in the reciprocity of logical modalities as well as their educational applicability, as he provides a comprehensive overview of logical nuances while discussing their implications. He provides more concrete syllogistic implications of approaches for coding logic than what is offered in this paper, which is focused on considering what is needed in order to conceptualize the interrelationships among logical processes.

What does it mean for something to be logically synchronous or asynchronous, again – or did you even define it?! The literature on digital learning provides similar definitions of asynchronous and synchronous platforms as those provided by International Association for K-

12 Online Learning (2011). They can be summed up in the following conceptualizations:

Asynchronous implementations are informational exchanges with increased variability in a linear time construct; Synchronous implementations are real-time informational exchanges which have less variability in a linear time construct.

If asynchronous implementations are conceived as constructs where timed input is prompting timed output (Huang et al., 2008), then presumably they are reflecting a static mode of informational exchange. By contrast, if synchronous implementations are conceived as constructs where real-time blending of inputs/outputs are occurring (Geisbers et al., 2014), then it can be inferred that they are reflecting a dynamic mode of informational exchange. By decontextualizing these terms, it becomes evident that the perception of an interfacing platform - such as a learning management system (LMS) - as asynchronous or synchronous essentially is presumed as instances of information processing that are fulcrummed by a construct of time. In turn, this holds implications for linearity as well as implying that perceptions of time also influences generalizable conclusions on the benefits or pitfalls of either platform.

The classroom-based phase of this coding process (Lynch 2019) applied those terms to a social learning context (i.e. independent of the digital context). Asynchronous processes were essentially conceptualized as a form of call and response - clearly observable responses to stimuli that manifested in informational or communicative exchanges. It was more reflective of conscious decisions and exchanges that were made in the classroom, such as assessment-guided instruction or collaborative groupings according to anticipatory outcomes. The result of asynchronous processing in the classroom setting was clearer delineations between deductive and inductive logical sequences in various lessons and activities.

By contrast, synchronous processes were conceived as instances where time became more fluid in how it was applied to the classroom, where less controlled instances led to varying degrees of induction and deduction depending on the context of that student – that is, where, how, why, and when they were situated within the learning ecosystem. By this conceptualization, it was noted that a particular lesson, activity, or decision could hold implications for induction and deduction to be observed “within the same setting and timeframe” (p. 3). If asynchronous processes are constructive logical exchanges, synchronous processes are constructive logical networks.

I believe that Åsvoll, 2014 might see the functionality of the abductive process in similar ways to how I perceive synchronous processing – although I cannot be sure without asking him directly. Interestingly, similar conceptualizations of synchronous processes are more prominently represented in research pertaining to counselors than other areas (Guindon & Hanna, 2002; Roehlke, 1988). Guindon & Hanna (2002) provide a competent and inter-disciplinary conceptualization of the term in order to validate Jung’s definition of it as an “acausal orderness” (de Laszlo, 1958, quoted in Guindon & Hanna, 2002). Their work also appears to be implicitly concerned with theorizing the immeasurable or inexplicable outputs of social exchanges, positing that synchronicity might exist in a form that is abstinent of time and space and consequently associating some presumptions of humanistic growth with faith that it has occurred rather than a measurement of its occurrence.

Additionally, I’d like mention that Ranschaert (2020), during her analysis of the carnival, seems to indirectly imply that such historical contexts of carnival included a “development of a revolutionary carnivalesque logic which he [Bakhtin] defined as “a continual sifting from top to bottom, from front to rear” (Bakhtin, 1984, p. 36, quoted in Ranschaert, 2020,

p. 522). Such shifts, continuous and lacking of a finite sequencing of causality, feel more synchronous than asynchronous.

How Do We Analyze Logic in Terms of Processing? In relation to how it was approached while parameterizing logic, the term, *processing*, is applied to both the cognitive and the computational realms in order to break its previously contrived salience. When an individual hears that term, it is probable that they may associate it with efficiency toward data inputs and outputs; yet, those terms - efficiency, data, inputs, outputs – have been applied countless times to humanistic and computational contexts. Dehaene’s (2020) brain/machine analogy works well as a conceptualization of how learning eventually blossoms out of complex nuances of processing. Furthermore, his analyses are situated on a series of “pillars” which is akin to how he sees learning optimizations as sets of parameters which are constantly in a form of flux that are able to be refined (p.17). If such terms are more malleable than salient, it is not out of the question to consider rationality and intuition as humanistic versions of processing, and such a consideration seems necessary to discuss if learning and processing are to be synthesized for relevant study.

Mapping the Contextual Dynamics of such Interactions. Most poignant in Doll’s (1993) conceptualization of *process* is arguably when he discusses the importance of the term – on a seemingly metaphysical level - to Alfred North Whitehead’s justification of abstraction; here, Doll also points out that Whitehead’s view on the learning process included “the proper interplay” of “romance, precision, and generalization (p.145).” When reading that previous sentence, admittedly it feels a bit like its strength is dependent on ambiguity, but it may be more beneficial to consider it as one of the ways that Whitehead worked toward developing a functional methodology for abstraction.

A critical implication of abstract interactions lies in how they are positioned as important factors for qualitative methods rooted in *process coding* (Saldaña, 2016, p.97). This implies that coding phases are theoretically layered and require more than what is offered by *a priori* conceptualizations of logic and processing. For studies that require abstract conceptualizations, the theoretical stability within its methods can require some “codeweaving” (Saldaña, 2016, p.121) of concept generation for alignment of the coding framework and its methods at all phases. However, the study by Chen et al. (2018) also mentions that this may be a key benefit of qualitative methodology for algorithmic models which are increasingly challenged with efficiency over large data realms – their study constitutes much of the justification for this paper in relation to problematizing the challenges of bridging the cognitive and computational fields.

Concept Mapping is Aligned by Space and Time. Alignment of qualitative coding processes is especially crucial when considering the potential for a study’s methods to increase in its complexity and ultimately produce something that is transformative. For a study to be truly transformative, it might be said that it should be grounded in a framework that is transformative by design; that is to say that the framework should be developed by mapping intersections of concepts and disciplines while accounting for the spatial, choral, and temporal dynamics of such intersections.

Correspondingly linked in this perspective of processing is an association between internal movements and external interactions - a confluence of compounding cognitive factors and influential dynamics among entities. Croft (2016) recounts views of a philosophical nature regarding movement as a spatially-relevant component to be considered in the learning context while highlighting that both time *and* space are more aligned with a non-linear form of *duration*

than a linear, controlled form. I will reiterate here that Åsvoll (2014) has previously discussed the consideration of linearity among structures of logic.

From that notion of *duration* emerges the metaphysical challenge of states but also their potential for fluctuating within a latticework of instances - whether they are of a cognitive or a computational nature. Entropy is implicitly linked with those words as much as causal order, and similarly latticed are linearity and non-linearity. Doll proceeds in an interdisciplinary fashion while discussing the concept of entropy as it relates to the learning process, noting that an open-endedness to learning has a transformative potential “to be rich in generation” (1993, p.72).

In addition, Doll mentions how the learning process often results in “gaps – but as the result of following others’ pre-set, logically designed, simply ordered, sequential steps” (1993, p. 76). Clearly, he is discussing linearity as a problem for the transformative learning environment, which works in a causal fluidity with complex organization so that curriculum “continually regenerates itself and those involved with it” (1993, p. 87). Non-linearity thus serves a prominent function in how Doll works through his curricular stance, but he does not present the term in opposition to generally accepted time sequences; on the contrary, it is an acknowledgement of just how complex time can be, and how the evolution of learning in quantum realms has provided educators with the ability to appreciate its complexity in order to make better decisions.

Wanstreet’s (2006) defined interactions should be reiterated here as they implicitly apply spatial and choral factors which aid in providing conceptualizations of linearity and systemic trends of thought. For example, *learner-instructor* interactions constitute a communicative modality where information is proximally exchanged and internalized over a given time period. Such interactions might also be non-linearly coded as implied by Saldaña’s overview of *causal coding* (2016, p.189) methodology. His account of the causal coding process pedestals its

mechanistic quality by emphasizing sequence delineations, thereby deterring any exclusivity in associating chronology with time in favor of a latticework of time and sequence.

Pliable Theory.

Mapping Humanistic and Computational Intersections: The next visual demonstrates the categorical implications for considering both the humanistic and the computational models of processing. It prioritizes the non-linear model of logic as a “synchronous-capable” construct when causal models of logic are omni-dynamic in nature (meaning that they are malleable in terms of how inputs, outputs, and outcomes are applied). By contrast, the linear models of logic are presumed “asynchronous-limited”, meaning that when causal models are tenacious, they can be reactive (e.g. z is explicitly influenced by x, y) and as such they will not function properly within omni-dynamic, non-linear models.

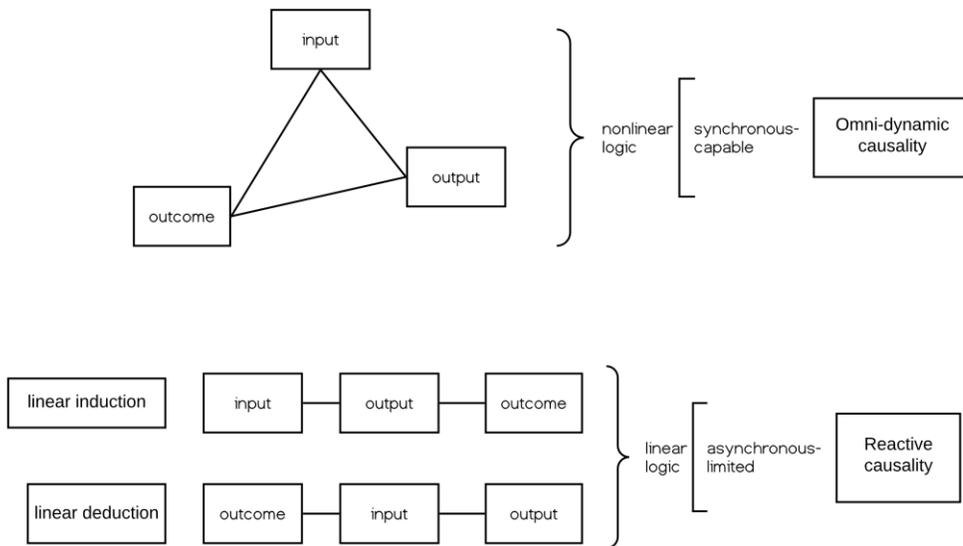


Figure 38. Dynamics of Linearity.

I should emphasize that asynchronous and synchronous terms are functioning abstractly here as they may apply to humanistic or digital factors. A dynamic, non-linear model may or may not work well within a synchronous platform, and this can be abstinent of asynchronous and

synchronous processing (and vice-versa). The same remains true for reactive, linear models – especially when considering that linear logical processing can occur within a synchronous humanistic way and within a synchronous digital context. The ambiguity in this argument thus functions as an important take-away that in turn justifies its necessity: causation is not able to be properly analyzed if steps are not taken to delineate humanistic processing alongside digital processing. It is my perception that if such steps are not taken, it is theoretically improbable to evaluate efficacy of digital platforms as well as social interactions.

With that in mind, I mapped what I consider to be initial and final processing states which would influence how coding relationships are perceived in relation to causal dynamics, and Figure 39 demonstrates the relevancy of these states to asynchronous and synchronous information exchanges between humans in a learning context. Asynchronous exchanges comprise an essence of clearly observed outputs derived by clearly observed inputs – without an input, informational outputs are non-essentially present. Synchronous exchanges take on a continuous essence of real-time exchanges that can be voluntary (based on anticipated or pre-planned inputs) and involuntary (unanticipated inputs, outputs, and outcomes), resulting in a more volatile yet highly enriching learning context. The final states are labeled as logical modalities with linear or non-linear potential:

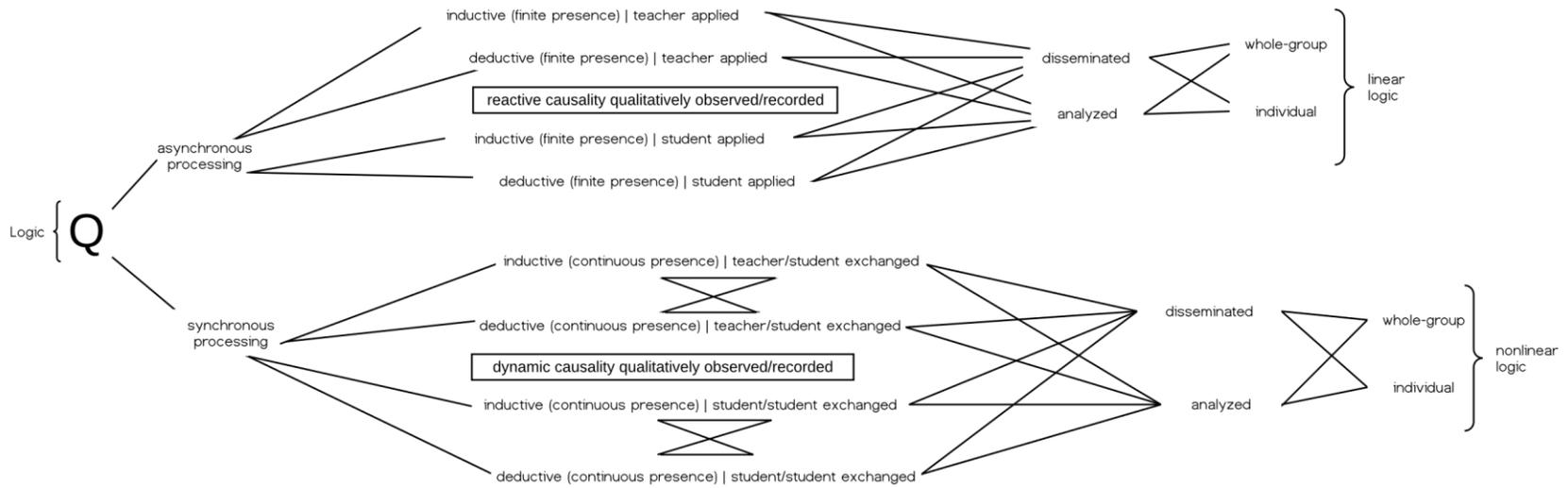


Figure 39. Producer: Socially Liberated Model.

The *socially-liberated model* is directly rooted in my prior matrices (see Appendix 2).

The classroom context provided a great opportunity to establish some focused coding parameters – reflecting on content delivery, communicative exchanges, and logical makeup - that were built on an interest towards analyzing logic and processing. Further, the unbound and facilitative nature of that face-to-face context might be reminiscent of a system concerned with influencing “entropic flow” where the “process builds on its own parameters” and the efforts of the teacher are “ancillary not causative” (Doll, 1993, p.102).

By contrast, Figure 40 may seem structurally similar to the previous one, but the informational processor is defined here as the digital platform. My reasoning behind this coding difference was that informational exchanges via digital platforms are practically and programmatically concerned with the construct of the learning setting rather than the individuals participating within it. This difference is conceptualized in the model as an “authority-dictated” platform with implications for voluntary and involuntary usage of asynchronous and synchronous modes of online learning:

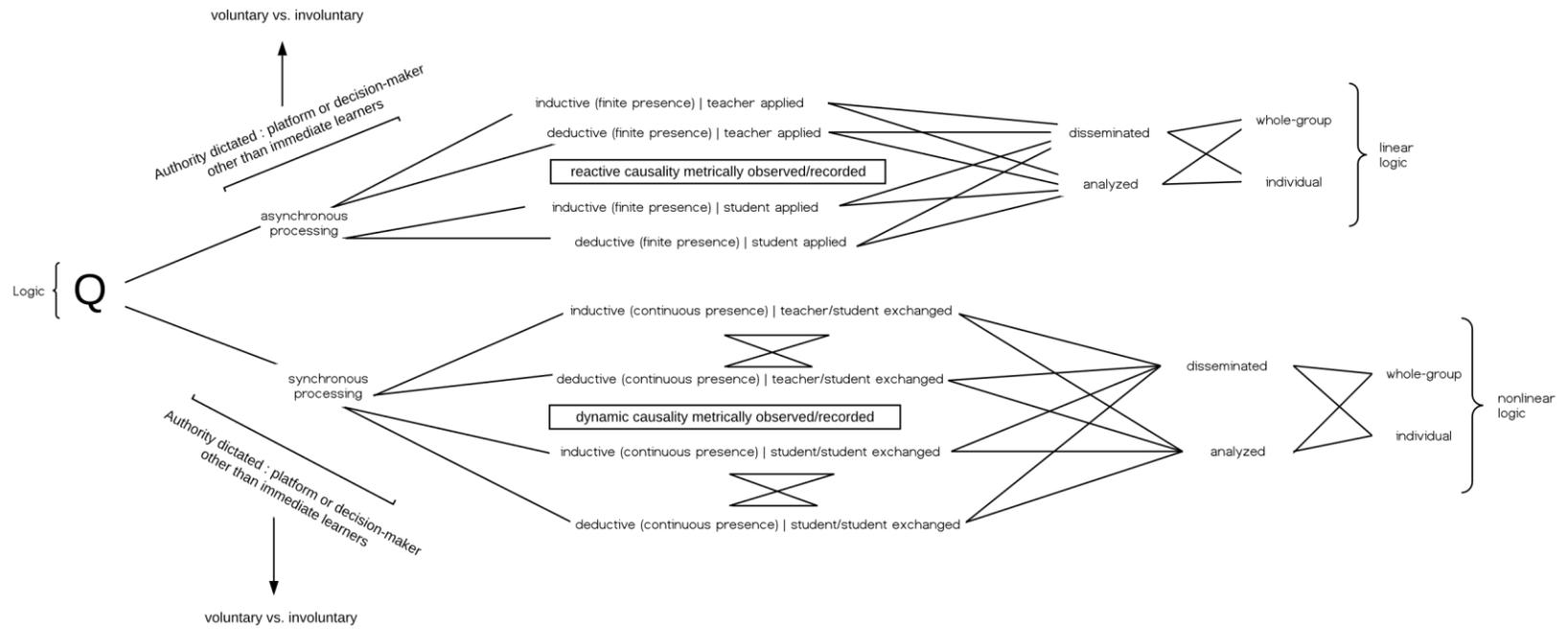


Figure 40. Processor: Digital Platform.

In the unbound social model, the limitations for innovation placed on a classroom are primarily influenced by budgetary parameters or the pedagogical capacity of an educator. In the pandemic response context, limitations are influenced by technological infrastructure, which is the sole driver for content dissemination and delivery, and pedagogical capacity, which is now highly based on technological adeptness. Even in settings where synchronous instruction is a possibility, security, privacy, and stability are paramount concerns, and such issues might be affecting the logical essence of a lesson, and placing unintended restrictions on logical types (i.e. positioning deductive processing hierarchically above inductive processing).

However, our current context requires a modified matrix to be utilized, which accounts for the technological component(s) that are being heavily utilized (see Appendix 3). By coding the technological tools and resources (e.g. SAAS, LMS, Cloud storage, etc.), we gain a perspective regarding the asynchronous and synchronous potential of the lesson content in a *bound* social model. It is clear that this component will also rely on the more technologically oriented denotations of the terms asynchronous and synchronous (where, by contrast, in the unbound social model those terms are associated with assessing the potential for logical processing as well as type).

Furthermore, digital conceptualizations of asynchronous and synchronous exchanges appear to hold qualities that are similar to transactional distance theory (Kang & Gyorke, 2008), indicating that the transactions among individuals is causally linked with notions of interfacing (i.e. how exchanges are mediated). If interfacing is akin to mediation, also linked are connotative associations that may be similar to conceptions of control and parameterizing according to

sequence, circling back to logical models and thereby requiring attention directed to discussing the complexity of informational dynamics.

I need to revisit these mappings, but I think they could prove helpful in helping me engage in discourse relating to the scope of a goal – regardless if it is curricular *or* organizational. Discussing feasibility of something requires a conceptualization of boundaries, especially in a context predisposed toward *a posteriori* inference. However, categorizing the external and internal boundaries is not just a means for parameterization – it is also necessary if goals include optimization (Dehaene, p.16).

It is also worth mentioning that in a discussion of simulations of genetic networks and Boolean networks from a lens of finite-state automata, dynamic states of attractors (i.e. a grid of factors) differ from static ones in the sense that the former cycles (repeats) over time while the latter cannot repeat (it's bound by its progression toward a final state). Interestingly, it is also inferred that Boolean parameters are incapable of measuring chaotic attractors due to inefficiency (i.e. the cycle is too long in a choral sense) (Wooley & Lin, 2005).

I'll mention that it has previously been posited that a genetic network may operate in a synchronous way, it was also noted as a “gross oversimplification” (Wooley & Lin, 2005) in an attempt to integrate Boolean analysis with the challenging complexity that comes with biological occurrences. Thus, there is a need for “functionally integrative models...to bridge the multiple time and space scales of substructures within an organism without leaving the problem computationally intractable” (Wooley & Lin, 2005).

I would like to play out of key, so to speak, for a moment, in order to provide a summative representation of what I have uncovered in this volume as well as the preceding ones.

I wanted to provide a figure here of the summation, but I decided to make it an appendix instead – so, see *Appendix 1*.

Some Innovative Shit.

[or, WHERE DOES INNOVATION FALL IN ALL OF THIS?]

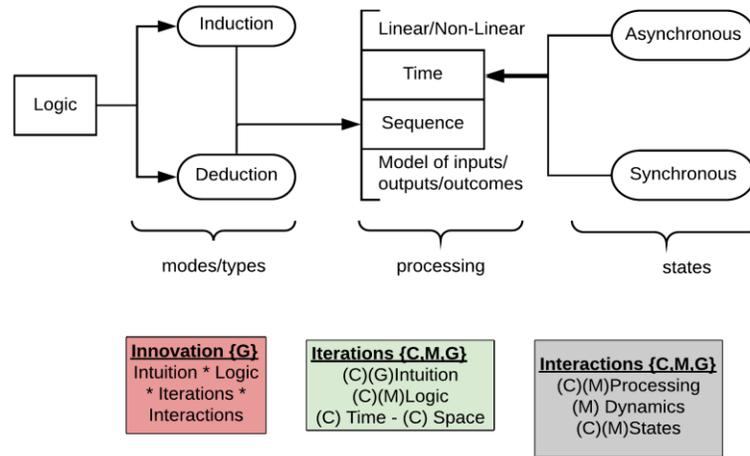


Figure 41. Merging maps and taxonomy.

Modeling Logic is a Critical Step in Understanding how we Innovate:

To hark the muse briefly, the simplified logical model also has been previously considered as it pertains to crisis-management (Zantal-Wiener & Horwood, 2010). Provided that COVID-19 is globally accepted as a crisis, it is presumably evident that a linear logical mode has been, or is still being applied, in particular systems while addressing inputs, mitigating issues, and circumnavigating channels in successive responses that may seem overtly improvised. Such efforts can have residual impacts regarding the potential for innovations to occur, especially in systems that might be singularly oriented toward mitigative efforts while outcomes of normalcy and stability are kept in mind.

Comparatively, the educational sector is not immune to the risks posed by predominantly singular processes (Irwin, Strambler & Meyer, 2017; Endsley, 2016; Wilson, 2012). In contexts of crisis driven response, curricular decisions pose the risk of being excessively deductive in nature, basing content solely on either intuitive pedagogical notions or previously contrived pragmatisms; thus, it results in birthing pedagogy that is wrought with one-dimensionality.

In relation to innovation, humanistic learning seems to evolve as logical processing becomes increasingly complex, inevitably shifting between its linear and nonlinear forms. While not explicitly referencing the linear and non-linear modalities of logic which are discussed in this paper, previous claims have been made surrounding the importance of opportunities to synthesize logical structure and content-specific instances where logical skills are required (Benassi, Overson, & Hakala, 2014; Åsvoll, 2014). Further, limitations of operating a simple logic model have been considered, especially in contexts where faulty *a priori* knowledge is present (Benassi et al., 2014) which influences peripheral factors of cognitive logical processing such as confirmation bias (Åsvoll 2014).

It might prove a good measure to analogously consider how Fixico's (2003) reflections on incongruity among Eurocentric and American Indian perceptions might analogously relate to how linearity is avoided by the mind of the American Indian because they are not tethered by a dependence on cause and effect in order to comprehend. That connection is not provided as an attack on educational decisions and optimizations of linear *modus operandi*, but it is intriguing how linearity has previously been associated with perceptions yet is still lacking prevalence in discourse surrounding logical decisions and actions.

Admittedly, I think we are often too linear in our conduct, yet I have probably been too complacent in how I have accepted such instances as inevitabilities for a system. It is simple

enough to deconstruct a lesson, a social interaction, or an administrative decision as a representation of either deductive or inductive logic if a linear model of causation is assumed and can be effectively applied, and some causation coding methods actually work well in applying the simple logical model. However, concerns have been previously expressed regarding causal coding methods that overtly apply linear sequences of causation while also noting that qualitative and quantitative research can often become intricate and multi-dimensional (Saldaña, 2016). The simple logical model seems inherently linear and only partially encompassing what is needed to account for deduction and induction - it *might* suffice as an efficient and complacent means for the explication of decisions and factors within a context, but it is quite drab in its linearity. It is certainly not innovative.

Modeling intuition is the next step, but it requires us to innovate through exploration and discovery – as well as to advocate for intuition.

After my thoughts on the dynamics of inductive and deductive processes had been published (Lynch, 2019), I began to stumble upon additional literature that seemed to validate the notion that these two constructs of reasoning probably function more in a weaving method and that it may be a better way to discuss them rather than juxtaposing them as divisive terms. Stebbins (2001) had formerly applied the weave-work of induction and deduction while conceptualizing exploratory research, mentioning that if we accept that exploration of “a priori predictions” (p.7) is a generally inductive process, then it might be presumed that research progresses to deductive processes as results are gleaned, where predictions are less likely to manifest and function as research inputs as phenomena are further studied. This seems akin to how I think about the iterative nature of idea generations – processes building, transferring, and transforming in ways that are infinitely emergent.

Additionally, and while I do not perceive Stebbins as advocating for one or another modality of logic (necessarily), he does pose an interesting defense of inductive logic, primarily by posing the following inclination:

Exploration is no place for data collection formulas distilled from conventional theory and methodological practice. On the contrary, exploration is where the art of science is most widely exercised, the area of science where imagination reigns most freely.

Creativity in this domain comes through inductive reasoning, as researchers discover order in what initially appeared to them as chaos. (2001, p.23).

In other words, such occurrences are unkempt and perhaps even messy – as I write this, I am both unkempt *and* messy...

Meta-Memo to myself: 1/22/2021 3:17 A.M.

A: This fucking dissertation needs to end

B: I really need to brush my teeth, unless my goal is to experientially simulate the mouth of a medieval-era commoner

C: My senses are heightened – the tinnitus is amplifying, the smell of this blanket is overwhelmingly in a transitional stage between cleanliness towards muskiness, glimmers of LED power light indicators are little insurgents wrestling through the slits of my eyelids. Am I pregnant?

It is clear to me that Stebbins is leveraging a priori conceptualizations of *exploration* in order to save ourselves from generating some sort of paradoxical view on what it means to research and study in fields that seemingly lack a potential for innovation. When I first read this chapter, I thought that he was veiling a proposition for empirical standardization – I mean, he outright mentions that the “portraits of qualitative and quantitative exploration sketched in this book suggest that they are most accurately viewed as solid members of the positivist tradition in the social sciences” (2001c, p.8). But, I think it is more beneficial to actually read the rest of the chapter, so that is what I did, and I realized it to be an advocating of well-constructed

frameworks regardless of the study realm and in ways which enable new discoveries. My takeaways? When in doubt, explore – embrace the multi-disciplinary nature of “theory-driven discipline”, and obscurity is an inevitability.

Stebbins (2001) and I are like-minded – I think – in how we both feel the need to advocate for some...diplomacy...to function among the gridwork of research and study contexts, albeit his mode of advocacy might be a bit more of a rational stance than what I have employed thus far in my contributions. Within his advocacy, the fusion of “discovery through exploration” (2011, p. 60) is rooted in the communicative transference of the design and its results – its “explanation” (2011, p. 60) - and I mention it as a transference in order to emphasize that our constructed explanations inevitably effect connections to be made between data, disciplines, and dispositions. Also present is a re-instantiation of theorizing to be taken more seriously in contemporary and future empirical endeavors along with “generating grounded theory...and by situating that theory in the context of the larger society” (2011, p.60). Although this is not the focal conclusion of his advocacies, Stebbins does mention the dynamics between cognition and computation which implies that the dynamic should be scrutinized. By its programmatic nature, a computer is confined to “logical ordering” (2011, p. 60) and thereby is incapable of autonomously processing factors of context in a way that is recognizable as cognitively organic.

What does it mean to perceive and interact with context? Surely, computations can pick up on contextual factors – to come up with an example, one only has to pick up their cell phone and scroll through their apps, each of them with their own proprietary means for accounting spatial and temporal variables, but these are processes which are nominally *applied* to a context – they are tools which are effectually limited to a passive existence, and where a transition into an active state of contextual interaction requires a supplementation – by the human - of “intuition,

memory, and specific knowledge of the actors or the geography” (Aronowitz & DiFrazio (1994), quoted in Stebbins, 2001b, p. 60).

I have not mentioned anything here in these last few paragraphs that you already are not aware of, but it is alarming how easy it might be to make hasty ethical presumptions of machines and their implications when we have not considered the essence of those implications – judgements which we hastily yet intuitively employ that likely is to say more about how we perceive our neighbors and ourselves than functioning as a futuristic insight with prophetic potential. It is saturated with issues of trust, and it implies that we might have gotten something wrong as we perpetually craft and refine the narrative of our reality. Thus, to cast the blame on the machine is to assume a passive existence which relies on a supplementation of a *modal* active – and by whom is this supplementation to be provided? And are you okay with that?

Putting aside – for the moment - all other theoretical factors of intuition in order to focus on frisson as an indicator of intuition operating as a modal active that is spatial-temporally functioning in a complex processing state, I think that an endeavor of research and study - that is of low-cost and personally beneficial - would be an informal self-study of documenting and analyzing occurrences of sensed frisson.

I’m just speculating here, but we might even hypothesize – in this type of study - that we are less likely to experience frisson while scrolling through the news feed on our smartphone than we are to engage in a categorically artisanal activity. Yes, I am sure there is an individual that self-identifies with being an artisan when it comes to interacting with their phone, but I need to make it clear at this point that they should just burn this dissertation. In such a study, I intuitively assume that our conclusions on the matter could be scaled with varying states of disturb and comfort. *And along with these states, cognitive side-effects might be experienced*

which can include [but are not limited to] the following: confusion, physical injury, sleeplessness, distrust, diarrhea [probably not, but it always seems to show up in a list such as this one], enlightenment, crying, laughing, unwanted phone conversations, hyperhidrosis, the “munchies”, pseudo-intellectualism, paranoia.

Exploration, to Stebbins (2001), is a conceptualization – thus, it contains states, or modalities, or whatever you would like to call it that allows you to accept that it does not have a single, universal denotation. Consequently, it can function in an axiomatic way, depending on the researcher. It is as if Stebbins had implied a paradox of the relationship between *exploration* and *discovery* – while discovery, regardless of if it is perceived as an outcome within a linearly logical model or a non-linear contextual grid, requires exploration to be supplemented as the active modal state; however, what manifests through exploration does not equate to discovery. Thus, discovery is a construct which coincides with organically processed explanations, yet I can only speak on this based on my self-studies of frisson and discovery and how, when, and where I have experienced them – and experience them - in my context.

To me, discovery is something which is ingrained – might we dare to say encoded – perhaps it is a synaptic recycling of ancestrally-conditioned phenomena, perhaps it has localized neuro roots, perhaps I am way off base – regardless, all of this is good data to pursue while studying a linkage between a concept and an organic construct simply because the relationship is so abstract that, prior to going any further with such a study, we should accept that we will never find a conclusive explanation. And that is a *good* thing.

Stebbins (2001) exemplifies this much in the 4th chapter of his text, when he mentions how confirmatory scientific research has often shown a “widespread preference for the past tense in reporting scientific data” (p. 47) when “the most efficient way of reporting exploratory

generalizations is, nonetheless, to use instead the present tense” (p.47). This, he suggests, is especially true if an “aura of discovery” is desired and desired to be perceived, and it also coincides with “the goal of exploratory research...to present a set of hypotheses knitted together as grounded theory, with the entire ensemble to be confirmed later” (2001, p. 47) as well as the ceaselessness of continuing studies. In this sense, the ongoing nature of exploration provides it with a means for confronting its biases, where it is also plausible that “competent explorers look assiduously for evidence that might contradict their observations” (2011, p.48).

Transcendence...Oh, Shit...

A takeaway for myself, if nothing else. When it comes to discussing the topic of optimizing a component or system, the implications of generalizability and replicability are troubling to me for a number of reasons - which is why I think I have been wondering a bit more about how theories are constructed. This is probably also connected to why I like Haig’s (2006) work relating to ATOM as a type of forward-visioned methodological design process towards generative methods, as opposed to the *a posteriori*, consequential modality of “retrospective justification on the theories they seek to confirm” (p. 383). From that claim alone, it may be inferred that further discourse is needed regarding the implications of bias and subjectivity within both approaches, yet ATOM appears to lend itself well to prototyping a theory through critique, alignment, and structure before it is applied to research and study that is disseminated, interpreted, and potentially replicated.

Recently, Li & Ma (2020) discussed the *a posteriori* modeling process of decision making while providing quantifiable implications which non-linearly situate decisions with outcomes; by contrast, current educational decision processes, rooted in crisis management efforts, reflect decisions of an *a priori* nature, essentially highlighting the absence of results that

are contextually gleaned. It got me to thinking that, in our pandemically-created muse, it is not yet clear whether educational decisions that were assumed effective prior to COVID-19 will provide replicable results during this crisis. In a sense, efficacy is being presumed in an *a posteriori* modality without a clear *a posteriori* model in sight while we intuitively ignore the preliminary prototypes in favor of the replicable prototypes.

As we begin transitioning from chaotic, impromptu pedagogical frameworks to our potentially pragmatic next phases, I see no better time than now for us to discuss how our notions of *best practices* might benefit from some reshaping. Are previously quantified best practices the proper atlas for our current context, or are there best practices for *right now*? And, in the case of the latter question, are the best practices for right now the products of being situationally entrenched in realizing goals of optimization, accountability, and sustainability as well as redefining what those concepts currently mean in our educational contexts?

Currently, it seems as if *a priori* and *a posteriori* modalities are suffering from issues of formality. What is a right modality when we are stuck at home trying to find semblance? And which modalities will be pedestalled or criticized, and what is to serve as our analytical criteria for such discussions? It seems like a great time to think about how dichotomies might be bridged, but I am not convinced yet that we are heeding such potentials and their implications.

THE NIGHT IN QUESTION

**Walking with the zombies I've sealed my fate tonight--
Talking barter circles and fishing for this light
I've got all night to figure out what kind of drugs I'm on—**

**Chirping at the goblins which know my inner plight--
Inner plight is outer chum for picking at my life
I've got all night to figure out this code before they swarm**

**It's taken years, to feel the highs that TV rambles on about--
But it takes an instant, to take three shots so I can numb my face**

**The hollow cheers, those nagging fears that make me sit in place--
My absent tears, tell the story of a man who wastes his space**

I had this dream that seems to be a convergence of what I have been writing about recently. The lyrics for "The Night in Question" seems to have been visually simulated in this landscape. It's dreary – like one storm has passed through, and the sky has not made up its mind whether it will clear up or remain a little longer in this purgatory of opacity with hues that convey a subtle chilliness. I am on a street road, cracked and spider-webbed with tarry lines, which is perpendicular to two two-laned streets divided by a large median. I hear these people on the verge of flocking, a heightened sense about them that is calling them from their rowhomes and underpass tents – money for free. A discovery has been made – a couple of mis-matched duffels of cash – and just as soon as the catalyst, whatever it was, rendered the heightened awareness of those dweller discoverers, clearly poor, clearly African American --- some of this is clearly influenced by the text that my twelfth graders are reading currently – the motifs are too related --- the cash is gone and I have made my way past the duffel bags, managing to have scrounged some outlying cash – a "bottomfeeder" --- I am aware that I have a home in this alternate world, this gridwork I am constructing --- and that I am finding my way towards that home. It is situated on some side-street --- a series of rowhomes stacked in this parallel succession of permanent and compounding circumstance that leads one to become aware of the limitations placed on their potential to thrive beyond these parallel stacks. The foliage has left the branches, due to weather, some causal dystopian-like political decision --- those damned nuclear codes --- or maybe it is just the landscaping style here --- I was never really good at caring for plants anyway. I find the door to my home, and I walk towards it, but I seem to have side-stepped along the way to this common area of the rowhomes, a cafeteria-like area that is outdoors with buffet-style serving stations, and it is cluttered by the droves of scuffling feet, drools, and deafening tinnitus of silence --- their

medication has set in. They are being supervised by armed men with beanies – definitely borrowing these guys from a popular dystopian show – a comment that was made during a PD meeting reminded me of it. I become aware that I cannot make it clear to these armed men that I am trying to get inside my home --- an impossible task, I have a front door that is equipped with keyed locks (2) and a numeric keypad – a two-factor authentication. There is no way that I will get the door opened before I am swarmed. They see me. I have not figured out the code in time...

V - THUNDER AND ITS UNDULATIONS

[My Σ of Eliot's fifth Volume]

The culmination of his poem is, to me, a byproduct of virulent, chaotic instances where perception, existence, and organic living all clash. When do sensory inputs lack categorization as types of stimuli? Is it when they lack presence, or is it when they lack the effect of influence – that is, to *move* us on an intuitive level. “Datta – what have we given?” What have we surrendered in aims of efficiency, explanation, and predictability? Our means to explore and then discover? Our means for invigoration and to become invigorated? The plotting of our grid, the construction of our theory, is more in accordance with the notion that “age of prudence can never retract...by this and this only, we have existed.” Trust us to navigate the entropy of our grids at the consequence of your assuredness. Allow yourself to be failed and, consequently, to fail. Let me fall, time and time again, upon “These fragments I have shored against my ruins” – let me work, let me struggle, I shall want it no other way. Listen closely for those “aethereal rumours” and fist-clinch them so that you might provide our own hands the space to align with our hearts, to explore and discover and to feel alive, once more - we will not let you down...

Genres: Satire, Science-Fiction, Theological Narrative, Narrative Non-Fiction, Epistolary, Lyricism, Mythopoeia, Magical Realism

Correspondence with a Victorian Time Traveler -

RE: Letter of response to Margaret's inquiries

Date: 22:05:02351^∞

Dear Margaret,

What pleasantries I felt upon **receptance** of your inquiries – somewhere situated between elation, exuberance, and paranoia! I shan't imagine keeping you too long from the most important duties which require your cognizance, but if you will indulge my words for a few moments, I will try to work with brevity aligning mind and output.

It has been a momentous blip in our respective timelines since we have witnessed their temporal mergings – what a shame that has been affixed to our once-intertwined fates!

There is indeed much to **catalogue, classify, and clean**, and I am not sure where to begin with this process. I shall start with the topic of paranoia and why this particular item of abstraction found its way into my response when I opened your product of your desired correspondence, which essentially lies in the structuring of my address into the B.C.C. portion of the receiver protocol for your message. As can be imagined, it initially sent me into a jarring state, leaving me to momentarily muse on the other recipients of this seemingly personalized correspondence. Then, I assured myself that there is a logical and non-malicious explanation for most everything, and this led me to presume that it was a tactic for employing a security loophole for the protecting of sensitive information – a quick Google search, in fact, confirmed this – what other great advancements, I pray, does the divine nature of our creator have in store for us!

With reference to my dissertation, I would be most delighted to engage with the more nuanced features of this, dare I call it a project of passion, if you might be up for some word mincing and tea.

On the topic of my children and their wellbeing,

An alarmist might ascribe my musings, nodes created from your inquiry, to the topic of sanity and its scope. If we presume this scope to have applicability toward the plights that I process, I might hope that I have strength to continue along my journey – to hold onto sanity for the outcomes of my processing, one more product, one more task of my consciousness, until it has amassed into something which never truly avoids **obfuscation**.

I romantically narrate tales of the broken silver-platings in my contextual meanderings, yet I wonder how I might become privy to the templating of such silver-plates. We are all broken, yet we still see the products of broken lives – memories, experiences, traumas – as anomalies of life that are composited by shards of a Cinderella. We are all broken.

Some Bullshit (Okay, Okay, I'm done with that word)

There is a finer line than we might like to perceive when it comes to profound insight and profound bullshit. When someone has an honest and candid conversation with us, seemingly from left-field, there is a tinge of “this person must be full of shit...” that grazes the follicles within our ear canals and rests on the grids of our tongues - next to where that copper taste use to be – which is then followed up with “*are* they full of shit?” When I see some of the literature texts of historical pasts, like Victorian-era passages, I find myself hyper-conscious of those reflections, maybe due to how the message is so densely draped in curtains and trim. I probably have previously criticized such literary approaches as overzealous, overworked exercises on pretentiousness, where the authors appeared to be competing in social circles for the titles of best-versed and most-literate: I now see them as reflections of a playground of semantics and syntax that is definitely relatable to respective trends of interior home decorating. Another topic for another time, perhaps.

In the letter by our Victorian time traveler, above, it is clear that he constructs his message with thoughtful reply to his recipient, but it is also apparent that he sees the product as an opportunity to put a foot forward which would not be similarly tasked if the correspondence was in person. In an interpersonal, synchronous exchange, it would be less formal yet even more abstract, and some of the intended meaning might be even more obscured than what is found in the written version. In short, the outcomes of our reality seem to be easily recounted as representations of failures to live up to the romantic and eloquent simulations that are generated by our consciousness.

The Quintessentially unromantic and Victorian-uninspired wallpaper that is reality:

I have these notes that are less grounded than some of the preceding maps. Why should I even put this part into the dissertation? Because, it’s ugly, it’s messy, and it reflects how the romantic, eloquent realm of theory does not always amount to something that is effectually realized:

Note to self: Insert some Greek symbols rather than numbers because, well, It is one way to imply that this is some really important esoteric shit to never utilize.

<p>1.Linguistic Analysis – Preliminary Internal Dict. Coding (A) Domains: -Spatial/Chronal/Cognitive(Temporal)</p>	<p>2.Nvivo–“Auto” & Manual coding (B) Domains (Meta-Modern) -Intersections -Interactions</p>	<p>3.Prototype Dict. Probability of Transcendent Learning “The Plastics” -Metaphysically plastic byproduct</p>
<p>4.Structured & Non-Structured Analysis (D) for Validity Checking -Cross-analyze A,B,C</p>	<p>5.Refine/Prototype Dict.</p>	<p>6.Preliminary Analysis – Cross-ref old & new data sets</p>

Figure 42. The Unattained Mic Drop.

The self-gratifying pawn in me, the one with a sense of agency and an awareness of positionality, looks at this table as a “yes, this is definitely leading me towards a checkmate, and I will take on the queen myself”. The actual pawn in me responds with, “*This* is the plan?” You have *got to be kidding me*”.

What is truly endeavored within this table is highlighted in green. Not really...

The “prototype dict.” column includes coding labels which I want to include and apply simply because I like how they sound. They are probably functioning more as drapery right now than anything else, but I like looking at them and thinking about them. That’s a start, even if it lacks enough substance to engage others.

It’s worth mentioning I think – There are two primary factors which convolute my perception of my limitations. On one hand, there is a personal issue, mentioned back in volume

III, about my contentions with the coda. On the other hand, there is the external phenomenon of proprietaries and ideas under lock and key. I could not come to terms with accepting an arbitrary output and not feeling like I had a true grasp on its source. And, this is a contradiction of perception in its own right, and much of me is composed of contradiction.

If I am the process, I have failed, and if I am the product, I have been failed – such is the truth of us all – yet, it is not fated to remain as such.

Ode' to that Callous Bitch Otherwise Known as Time.

Meta-Memo to myself– I put a deadline on this dissertation that I should stick to regardless of my inclinations toward the luxury that might be afforded by more time. There will never be enough time, and the work will never be finished – it would simply take on a new iteration, and consequently would require a new self-imposed deadline – it will never cease. What is produced is what it is to be in that point on the grid, and I will accept its shortcomings, for there will undoubtedly be many. I will never have the time to achieve an end, not to mention the capacity to achieve such an outcome. Eternity is not on anyone's side, in a corporeal sense, and to me that is the functionality of possible worlds theory as well as my notions on synaptic recycling and ancestral linkages – it is possible that I think of us as iterations within a gridwork of generated phases of consciousness, continuing the work of others, exploring for ourselves, and discovering something, whatever it might be, along the way.

Reality can be a callous bitch sometimes. The expectations of where I would be at this point in my studies, and where I actually am, are amusing when I juxtapose them in my mind. I always end up being this emphatic, desperate caricature of what I had initially envisioned, this slaving-at-the-typewriter, lost-hero geriatric that I created years ago in one of my dreams – situated in an Australian desert type of grid, the limitations of his worldly contributions amounting to a

decaying farm-ette with paint-peeled walls and neglected, underweight animals confined by corroded, dangling fence wire, haunted by a gnome who continues to ask, “what are you working on?” to which no reply is ever afforded. The dream results in the gnome, seemingly fed-up with the lack of reply, at the doorway, holding the head of a decapitated chicken, the blood drips reverberant upon landing and resting on the hardwood planks before they soak and stain, infusing with the wood grains, and the gnome facially expressing what I can only describe as an amalgamation of insecurity, guilt, resentment, elation, frustration, pity, jealousy, and desperation. Although, I still cannot see that facial expression with clarity. “Look what happened to the chickens.”

I am reading Barba’s (2002) considerations of consciousness and temporality, and on page 126, he not only associates logic with intuition but also with being the origin of knowledge. As you can guess, I fucking love this claim. But right now, I am frustrated by it. I have created more questions for myself than anything else. I have consciously pressed the brakes on my “study”. I am faced with some theorizing fissures, and I find myself gazing at them with this overwhelming sense of –incompetence. I should keep reading...

While reading - I have a feeling, call it an intuitive processing, leading me to think that all of this is a little too easy – but I am not sure what it is. On one hand, I may be coming to the realization that I am an expert at nothing other than an eloquence of self-deprecation. On the other hand, Dalla Barba’s positions on all of this are too clean in an arbitrary sense. I agree with nearly everything I am reading in his book, but there is something missing which leads me reaching for the ---- ah, got it ---- impulse buy a few months ago when I was burning up my cursor click button with Amazon cart items. It is Goldblatt’s (2006) version of *Topoi* and what he calls “categorical axiomatisation” (2006, p. x). I’ll come back to the pertinence of that text...

Paolo Bartolomeo's preface for Dalla Barba's (2002) work sets the precedent for appreciating the breadth of mysteriousness and unquantifiable phenomena which occur in the brain, and it is easy to infer that analyses of a philosophical nature – outlining causal relationships and presenting axiomatic logical conclusions related to the quantizing nature of computation and its counter-intuitiveness for ascribing arbitrary meaning to products of consciousness - which have more in common with qualitative, subjective, and undeniably abstract interpretations (2002, p. ix).

Bartolomeo's preface also establishes a suggestion for proceeding through and beyond Dalla Barba's claims that relates with "interaction between phenomenology and cognitive science" and how it might inductively manifest through the "building of taxonomies of consciousness operations" (2002, p. x). The poignancy of this suggestion and its relevance to my intuitive journeying through these subjects are not lost on me – although it can be a little frustrating to discover work of this importance at such a late phase in my writing - linearly speaking, that is – it does feel good when my intuitive notions are somewhat validated.

Yet, something else has my foot on the brake pedal. It surprises me how well mathematical theory and topoi, as presented by Goldblatt, seems to actually be quite friendly to abstraction – so how do we manage to fuck it up in our love affair with reduction and empiricism?

We posit that consciousness is something which is impossible to be digitally replicated - thus, it is a precious resource that is copious in a macro-biological sense but is superficially insufficient and depleting on an individualistic level. I believe that there must be untapped factors of consciousness – processes, products, and stylistically counterfactual phenomena which we might never comprehend – that are necessarily beyond our grasp, and that notion often undulates between fleeting and grounded, a dynamic which feeds and is fed by intuition. It is a

dynamic which is obviously delicate, and that is why it must function more in an axiomatic way rather than in a concretely realized way.

Further, he previews Dalla Barba's efforts in building taxonomy for such interactions by first mentioning Sperling's (1960) claims of *phenomenal consciousness* – the actual sensory awareness of something – and Block's (2001) claims regarding *reflexive consciousness* – the “capacity” to linguistically interpret and “report” such instances of sensory awareness – and proceeds to position Dalla Barba's approaches in building “taxonomy of the modes of consciousness” that includes ‘knowing consciousness’, ‘temporal consciousness’, and ‘imaginative consciousness’ (2002, p. x). Ultimately, Della Barba seems to be implicitly suggesting how we might embark on axiomatizing consciousness, but more so what we should be questioning. Returning to Goldblatt (2006), I think his analyses of topoi and categorial logic is a necessary read in tandem with Della Barba's (2002) discussion of the modes of consciousness.

I need to reiterate that reality can be a callous bitch sometimes. I find myself frustrated by the reality of choral measurements and embarrassed by how I perceived myself as someone who could transcend its boundaries. There is so much failure surrounding the potential for what is constructively theorized. So many byproducts of failure in relation to the seemingly innocuous bits of epiphany which are mined, and such bits are ethereal in essence, for they are as fragile as the perceptions held by a singular, individualized mode of consciousness. I am challenged by the state of how we engage in discourse, especially as it increases in complexity – “seeing the blue of the sky, the green of the trees, the red of the track, one may find it hard to believe that our qualia are merely points in a multidimensional similarity space. But perhaps that is what *it is like* (to use a

phrase that can be distrusted) to be aware of a point in a multidimensional similarity space” (Smart, 2007).

But even more than that, I am tired of feeling like conformity and acceptance are my only cards worth anything within my educational grid. It reminds me of how it has been discussed that automatic modalities in place of autonomous ones causes one to function as a “zombie within’... to alert consciousness to inputs which it identifies as problematic, while it ignores non-problematic inputs or re-routes them to output without the need for conscious awareness” (Smart, 2007).

Reflexivity is applied by Dalla Barba (2002) in a similar way to how I apply theoretical notions of intuition, as he discusses the paradoxical structure of a reducible version of experiences which are consciously processed (p. 170). But the key takeaway in his claims, if we strip away the nihilistic style in which they are structured and posited, is that the process of processing something is that which should be of paramount observational concern – the subject of our reflexivity – yet we might pair it with a presumption of approximation. Perhaps it is under these circumstances that we are able to glean something productive from, as Dalla Barba puts it, “the fact that conscious experience is the concrete reality of human existence, a reality that can perhaps be represented in the abstract terms of theoretical and abstract models but which cannot be reduced to these...” (Dalla Barba, 2002, p. 170). Again, the process of processing, or meta-consciousness maybe, is our focus in this context for aligning science with thoughts, and this is why one approach to theorizing consciousness is steeped in various modalities (i.e. states, modes, or types) with each modality functioning as a theoretical framework for meta-conscious discourse.

Thus, I may need to rethink the pathway of defining consciousness, because the more I read about it, the more I realize that I might be connecting some things that have not been connected for quite some time but it has not led me towards any epiphany which might transcend

that which has not already been discussed, theorized, or applied in study. Perhaps that is the point. I find more comfort in that than I do when considering the implications of vocalizing a decree of arbitrary essence.

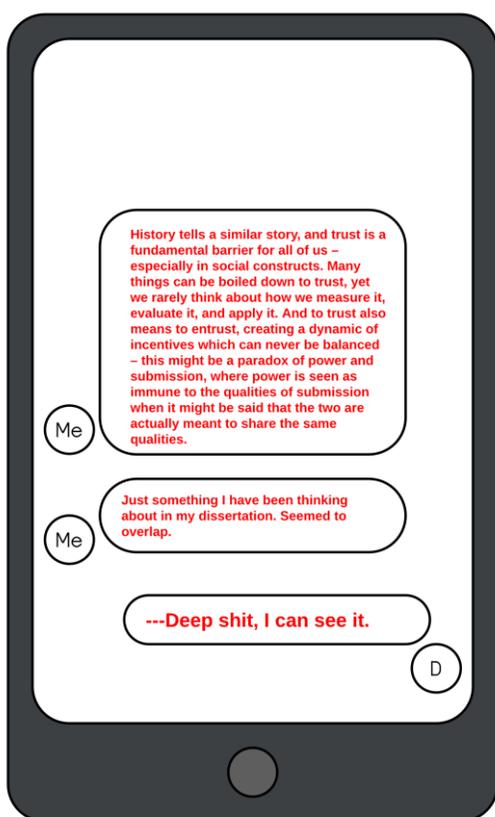
It might be said that the problem with merging empiricism and abstractions, or abstract constructs for that matter, lies not a problem of mathematics but a problem of reduction as well as the timeline by which mathematics function – that is, the positionality of the perceiver or applier of mathematics is situated too far towards the *outputs* section of the algorithm, so to speak. If it were otherwise true, it might be more likely that the abstract and theoretical essence of this discipline would hold more clout while numeric outputs are interpreted. When I hear the term, *generalizable*, I immediately think about the terms, *intuition* and *abstraction* – why might that be?

A Letter to an Editor.

Although I only knew him for half of a decade, Rodney finds himself on a short list of individuals whom I respect and admire in terms of excelling at being human. From what I could gather, he seemed to excel at most things that managed to intrigue or ignite him. It was for that reason that, when asked to read one of his favorite Hawthorne poems during his service, that I tacked on some words of my own that led to frisson that was catalyzed by personal connection:

“During the past week, the family stumbled upon a yellow 5x7 notepad that contained some scribblings of thoughts that Rodney was beginning to route. The first few lines quoted (Freed-rick Neech-uh) Friedrich Nietzsche, a German Philosopher who has arguably stirred the most controversy of any philosopher who ever thought. The quote is as follows: “If you have a why to live, you can bear almost any how.” While many people have seen Nietzsche’s words as contradictory to western ideology and what our society values, Rodney’s scribblings surprisingly draft a connection between this quote and some of John F. Kennedy’s boldest decisions while in office; namely the decisions that would prove America to be more advanced and morally grounded than the Soviet Union.

I do not mention this to discuss Rodney's political viewpoints, although I must express that his abrasive critique of Donald Trump in his recently published letter to the Cecil Whig is



the greatest piece of literature of 2016 - I mention this notepad to demonstrate both the scope and optimism that permeated his thought process in all areas of his life. He could take many ideas from seemingly dissimilar areas of interest, and he could bond those ideas into a singular conclusion that often seemed to have a positive outcome. This is something that has had a profound effect on me partly because it made me aware that I too often make negative or cynical assumptions about our world, but also because he has helped me to see that those beautifully optimistic conclusions are there as long as I am patient enough to unravel them. That is one of many lessons that I am taking away from my brief time with Rodney. I will end this with the last lines on Rodney's notepad. It reads, "America was great then, as it is still. What we lack is a

new "why", and it need not come from high elective office. But good "whys" are harder to come by now." (Rodney's drafted letter to the editor)

My Attempts at some beautifully optimistic "why's", if only to salvage my own soul.

I'll quickly hit you with two attempts at optimism, and I'll proceed with some more detail. *First, our efficacy is enhanced by external resources, but the organically-derived products - of our consciousness - hold the most potential for efficacy to transfer into invigorative reflections of curricular craftsmanship. Secondly, and causally related, endeavors of theoretical construction can acknowledge the temporal as the contextual subjectivity with regards to our consciousness, the chronal as the linear and non-linear constructs of time, and the spatial as the*

existential awareness of objects and their arrangements- if only we are able to listen to each other. In both cases, language is required for transference.

There are clear challenges which come with ascribing meanings of things through language. When considering how Goldblatt (2006) outlines what he calls the “pathology of abstraction” (p.25), I feel that he is discussing methods for building and evaluating conceptual axioms which are friendly toward the idea of axiomatically analyzing meta-conscious processing, and it involves what I can only currently describe as the interplay of generalization and specialization and applying that interplay in a recursive, reflexive manner (Goldblatt, 2006, pp. 25-26). For example, if a nihilistic-esque approach is taken when illuminating the paradoxical outcome of paired objects, modes, states or types, a few mathematically-relevant things must be present: One thing being that an analogous or perceivable phenomenon is accepted as useable in the abstraction process – in this case, analyzing whether the synonymous linguistic representations of meta-consciousness and its products are theoretically associated.

Another thing being that the function of null for a set of objects is evaluated for its “isomorphic” (Goldblatt, 2006, p. 42) form, which may find *null* delineated from or associative in relation to 0 in the context of an initial object within a set – in this case, perceiving whether the association of presence and absence manifests a paradoxical nature or whether it is a delineation which is itself a paradox. This makes me wonder whether the notion of knowing something is to delineate its function or identity or if knowing something is more of a passive process. Della Barba would imply that both are involved, where in a given context of entity and object, presence of both function as an initial state, and this leads me to think that his inevitable position – all presumptions of stability satisfied – would be that null and naught are isomorphic within the initial states of a process set of *knowing consciousness*.

If it were alternatively true, we could say that it risks violating its ability to delineate presence and perception. Should we not be able to theorize the equivalence variation between presence and how we consciously process it – that is, to not identify them as reflexive, transitive, or symmetric (Goldblatt, 2006, p.61) is to default to the notion that “if two equivalence classes are not the same, then they have no elements in common at all” (2006, p.61). There is nothing here to suggest that perception nor presence are not co-domains which have not been defined up to isomorphism (Goldblatt, 2006, p.78), because they are all sets which are linguistically governed – if not, they are simply that which we have no capacity to fathom regardless of how our modes of consciousness synthesize – this might be what Della Barba meant by the notion that “a profound nothingness...separates language from perception” (2002, p.155), but that seems a bit weak as an anti-axiomatic counterpoint – I am not implying that as a takeaway from Della Barba’s text that should be considered sacrosanct, I am merely implying that if objects exist which are discreet from profound nothingness, then they are capable of abstraction through an axiomatically stable process. It might be more pertinent to consider Della Barba’s position on the reality of an object to have direct accordance with the “concretely infinite” (2002, p. 154) meanings produced by the synthesis of our modes of consciousness, which alleviates a non-committal stance on what it means for an object to exist in a state of flux between temporal and atemporal modalities.

I am going to try and bridge some notions of Della Barba’s book by using presumptions within my own theory construct – he is discussing the axiomatic process which we must be consciously perceiving as we attempt to understand and further perceive, but he is *really* pushing for a perception of consciousness in this binary flux of states, where the sensory presence and absence of objects governs what we can know (Della Barba, 2002). A sort of binary classification tree that is employed by our intuition? And, if so, are there unintended byproducts of Della Barba’s

claims which lead to contradictions, paradoxes even, when considering how adamantly he dissociates the realm of quantizing with the realm of human consciousness?

Language, Transference, & Paradoxes.

My Encounter with The Goddess, Aphasia –

The Goddess of Linguistic Processing & Neurological Injury

From the very beginning, Aphasia was fated to struggle. Like many gods and goddesses, she was beautiful, but she was always aware that her beauty could not be perceived by others in a sensory way. Those around her held notions of her beauty, and it is likely that they had heard songs of her beauty, but in her presence, they could not see it. They could *sense* it, possibly, but they did not know how to describe it. It was an ethereal beauty which left Aphasia with nothing more than feelings and a longing for solutions to her notions of “if only...” She often lamented the awareness of her existence, and her death did not appease such lamentations, for those who thought that they were aware of her death held no words which might help her transition from life to death (Guthke, (1992) so that she might transcend her ethereal nature. Thus, she took it upon herself to find the words, and her fate would become sealed, for better or worse:

“How much is enough!

Obsessed with light,
I had sacrificed the good intentions with others
so that I might have a sense of what it means to bare a greater plan.

I think I died, many years before my heart flatlined --
I think I died a thousand years before --
Yet I am unaligned with space & time.

I'm chained to an ethereal eternity
where I am bounded by potential, alone,
and sharing light to those I want to know and love requires something which I cannot provide –
my insides to be pecked & exposed

Concentric rings of lives & loves, mothers & daughters, fathers & sons
and what we think are trials that we overcome"

Intuitively, the concept of a god or goddess would lead us to ascribe qualities to it such as immortality, and yet, Aphasia finds that her existence seems only to function as a paradox – she finds herself an abstract, imperceptible and incalculable factor within a grid which instantiates that she is necessary but which is also entropic due to her presence. We, mortals, find ourselves haunted by the plight of aphasia, though it is often induced by experiences of neurological trauma...

I was 10 years old when I heard the news – I was rummaging through the mounds of tasty cakes and individually packaged cookies which were always replenished after one of them was taken. The kitchen table of my grandparent's home was like some farmhouse version of an ancient Roman or Greek meal setting, where an abundance of seductively sweet offerings was on display for any guests who might find themselves in attendance. Only, here, the reasoning for our kitchen table was due to four factors: convenience, familial-networked sweet-tooths, cost, and the communal nature of the farmhouse – it was the hub of the family, and often the first stop in the house, before greeting the grandmother and grandfather, or mother and father, or niece and nephew, or whatever other role they might play in someone's network, was to the kitchen to rummage the table for a cake and the refrigerator for a soft drink.

I was in the kitchen when I heard the news. My grandmother – my father's mother – told me that he had been in a car accident. No surprise at that point, really – he had a history of issues with operating anything remotely close to what might be considered vehicular, or mobile for that matter. I remember a few years earlier than this moment that is being recalled, when a group of us were outside waiting for the impromptu posse to return – they had been tasked with trying to find my father, who was riding his horse around, assuredly drunk, and had not returned at nightfall. After moments of incredulity and simple, passive conversing, a galloping throp enveloped the environment – the horse had returned with a slumped over body – the prodigal son's – like some

low budget spaghetti western scene where a character is found after fleeing a gunfight – wounded, defeated, and not-yet-dead.

I was in the kitchen. My grandmother looked at me with a neutral disposition, although I am sure that her heart was breaking for her son at the time, whereas I internalized that feeling of neutrality. This time, the accident was serious – perhaps more serious than the typical drunk-driving accident – such instances were quite commonplace in my hometown, which was seemingly devoid of individuals who protected and served the community.

There was this thematic quality to the news and to the night – this notion of flying with uncertainty and, in relation to the topic of escapism, the questions posed by it: flying down the road, flying out of the truck window, flying to the hospital, flying out of and back into the helicopter – recollections of flat-lines and divine conversations which would be cited by my father once he was able to process and apply language years afterward.

Upon hearing the news, I tried to cry, simply because that is what someone is supposed to do in such an instance; however, there was this element of literally physical and figuratively mental distance which had been cultivated quite laboriously up to that point. I had not heard anything from him for days, perhaps months, prior to learning about this accident, although he lived a couple hundred yards up the road...

I visited him at the hospital. The first few minutes of this encounter would inevitably constitute, years later during recollection of the moment, one of the only times when my father and I did not hyper-focus on the tension that existed between us. I was eager to sit with him and to prove to him that I wanted to be there, and I was excited to talk with him, and I was naively unaware of the severity of his injuries. He was, and probably still is, physically the strongest man I have ever met – I remember one of the first times that he broke his collar bone from a car accident

– laying on the couch, writhing in pain as I sat next to him and tried to prove to him that I wanted to be next to his side while excited to have moments to talk with him in order to share with him the journeys of my imagination that I had cultivated in my 4x6 bedroom with one single window, the prison cell of my childhood, as I had awaited his return – one in a countless succession of incremental stays before he left yet again. Within just a day or two, perhaps longer, he had ripped away his bandages and castings, and had chosen the trajectory of physically strong man with an induced collar bone deformity.

Next to his hospital bed, it was only a matter of minutes before he grew tired – at the time I thought that he was tired of me, and perhaps that was true, but I think he may have just been tired – not long after, his skull and brain began to clash, leading to emergency surgery and removal of a chunk of organic, synaptic matter. The next time I saw him, it was in his home, the one which he shared with his unofficial spouse and where I only ever had been able to feel welcomed as a guest who did not possess titles of nobility. He was defeated, angry, probably embarrassed, and he had no way to communicate any of it – all that came from his mouth were spewed streams of babbles, groans, and grunts. It felt like that old film where the scientist encountered the caveman who had been found and locked in a laboratorial observation room with artificially created flora. Before my very eyes, I was experiencing a moment which was akin to time folding onto itself, where pre-human entities were actively engaged in building the staircase of higher consciousness and advanced cognition, a staircase which they built as they walked up each of the steps – yet in this context it was a man for whom his staircase had been stripped of a few steps and which would require him to repair them without the normative tools.

He held up a bag of his hair that had been cut in order to do the surgery – he loved his hair, perhaps he was obsessed with it as much as my mother was obsessed with her own. He would hold

it up to people in this incredibly awkward series of encounters with visitors – men who drank with him and family members, mostly – where he would look at it, chuckle, vocalize grunts and babbles, chuckle, and hold it up to their direct lines of vision as they nodded and failingly attempted to repress elicitation of pity.

Flashcards became commonplace – his unofficial spouse taking the helm of his communicative rehabilitation, an unqualified impromptu therapist with a callous heart of sociopathy who controlled the mechanistic keys of his new relationship with language, keeping the phrasings of emotionality and inflection limited while emphasizing the more pragmatic roles of communicating for incentives, needs, and desires. In some ways, he never stood a chance at grappling with himself...

Thereafter, years after and forever on, his mother, my grandmother, would passively yet frequently share that he had “changed”. I never really noticed it, but I had not spent nearly the amount of time with him as she had spent raising him and having him in her life. But, as I think on it now, he essentially transitioned from an individual engrossed with the idea of himself, without an ability to communicate the chaotic nature of his own consciousness, to a string puppet, constantly and cyclically reverberating his failings, missteps, and limitations while possessing less capacity for communicating his consciousness than held by his former self...

It is obvious why we would employ empiricism so that we might understand and treat aphasia. It is not a problem for us to empirically analyze, or even quantize, the topic of aphasia, and we should certainly seek to treat the issue, and none of that is why I have introduced the topic at this point. Rather, I mention it in order to highlight the circumstance of employing normative, empirical tools for the purpose of knowing and understanding an effect which essentially can be conceptualized as a diminished ability to employ normative, empirical tools for the purpose of

knowing and understanding anything. To transcend this byproduct, this paradox, it might require an all-hands-on-deck type of approach that puts theory, the ether of our grid, into play. I'll try to simulate what I mean in the next few paragraphs...

Meier & Johnson (2019) proposed a framework for analyzing aphasia recovery attempts by way of perceiving neurological processing as a networked, neuroplastic – and essentially non-linear – “complex interplay” (2019, p. 3974) which is advanced by the individualistic nuances of hemispheric correspondences – and focusing on the dynamics of their interplay - rather than a linear rehabilitation (such as a hierarchal recovery that they discuss on p. 3974) that may counter the process of recovery which occurs at the synaptic level. It is in this type of study that we can notice attempts to directly engage with our notions of accuracy and inaccuracy. To theorize neuroplasticity – or even related products of plasticity – thus requires us to directly engage with abstraction and entropy.

-Third, consciousness is axiomatically grounded by our employments of language. Thus, language is as close as we can come to exploring and discovering something along with ourselves.

Back in the Black Box:

Della Barba alludes to the malleability of knowledge due to its neuronal processing, presenting to us the notion that we might be more successful in consciously understanding our consciousness and its need to be conscious – wow – if we presume realities in terms of binary positionality. In order to do this, however, we need to apply mathematical theory, on some level, to this meta-conscious process. Goldblatt might call this the “notion of a function” (p. 17) as it relates to the axioms within set theory, the theoretical framework for how attributes of objects might achieve “membership” (2006, p. 6) with one another in a way that is mathematically aligned at least theoretically if not numerically.

Goldblatt discusses the limitations that are observed, theoretically, in the identification of sets of objects in an ‘ordered-pairs’ (2006, p. 20) modality, which he sees as the non-recursive “fixed, static” disposition of objects defined in this way. Consequently, he uses this to pedestal what he considers the mathematical conceptualization of *function*: a “formal set-theoretic model of the intuitive idea of a function, a *model* that captures an aspect of the idea, but not its full significance (2006, p. 20)”.

This is why I think Della Barba’s solution, to account for presence and absence by binary means, is too easy, especially if an outcome is to theorize and construct taxonomies of consciousness. If we work along the presumption that the *present* is not time-dependent, it would seem that we must also strip binaries of their choral qualities – in a sense, maybe this is hinting at the need for us to see binaries in a quantum state – I will have to think on this some more – but therein lies the problem of paradoxes and how they rear their Gollum-like heads. Binary presence/absence affixes a static temporal disposition to that which we meta-consciously process, and time is like a child pretending to be a tree-resting koala on its parent’s leg. It becomes an existential mode of linear implications rather than non-linear function within a grid, vector, or context. What Della Barba wants essentially is akin to mathematical commutativity, but in a linguistic sense – which is where I think the brilliance lies within Della Barba’s claims and how he presents them. He seems to be interested in the intersections of things, the quantum states of them perhaps. I need to revisit this because I might be inferring wrongly about how Della Barba dissociates the processes of computation and consciousness.

While keeping in mind Guthke’s (1992) analysis of dying and last words, we are additionally able to conduct further discourse on the connections between language and consciousness – the former as a transferable and seemingly tangible (if that is the right word)

means for conveying the processes of our brains - whether such representations are inherently abstract is a non-issue for me due to the logically fallacious notion that intuitively it seems impossible to disprove linguistic representations as having potential for representative accuracy – in relation to neuroplasticity⁸ and related phenomena, our linguistic constructs, consciously produced, might be the closest we can get to concretely representing them. It is certainly necessary for employing explorations and discoveries on the matter.

Goldblatt's (2006) mentions that analogous relationships are useful in melding of the abstract with *symmetry*, *asymmetry*, and the *antisymmetric* (p. 29); however, I have also tried to keep in mind how Kripke (1980) has discussed the fallacious implications of depending solely on analogies in order to understand something. I favor the usage of analogous connections, primarily due to the fact that language is what I most often employ while attempting to think about something. Even when I am playing a musical instrument, there is a linguistic byproduct that generates. To take it even further, I do not know how I might think about anything in a way which is linguistically abstinent, and I have no reason to think that our subconscious is similarly parameterized. However, I do not see language as something which is biologically encoded within our essence – though I need to think about it more - and this leads me towards the notion that there are aspects of our consciousness which are unbound by linguistic parameters, making it improbable that we will unlock the keys to them. So while analogous intersections can lead us to fallacies of understanding, the exploration and discoveries of our consciousness, quantized or not, are also prone to fallacies by mal-formed linguistic parameterizations.

⁸ Hengst et al. (2019) have studied the implications of neuroplasticity in relation to language-based transferences and in advancing communicative disorders.

The *limitations* section of Vander Putten & Nolen's (2010) study reveals similar concessions to what I am implying here. During a comparative analysis of computerized and manual coding of qualitative data, the researchers reflect on the implications of accuracy, noting that they were not concerned with analytic accuracy – rather, they were interested in delineating the respective strengths and weaknesses of particular methods while emphasizing that the researcher – not the method - is responsible for generating analytic takeaways (i.e. interpreting). While mentioning the plausibility that tools such as SPSS will succeed and fail depending on whether linguistic data is structured or unstructured, they mention “that researchers need to be deliberate in the choice of qualitative data analysis tools, consider their knowledge of the research literature, understand the context, and recognize relationships in horizontal and vertical analyses. In this way, researchers can generate trustworthy qualitative results” (Vander Putten & Nolen, 2010, p.111).

Additionally, Cui, Wise, & Allen (2019) build on this emphasis of researcher responsibilities for developing adequate contextual analysis, mentioning that a multi-dimensional framework for aligning critical concepts with data features is required and noting that such frameworks can benefit from linguistic taxonomies as well as various textual analysis tools.

For me, such concessions spearhead an emphasis for trans-disciplinary collaborations to generate, similarly to how Carrasco, Serrano, & Garcia (2014) associate the abstract concept of *vulnerability* as one of the necessary components within their trans-disciplinary framework. It is starting to feel too easy for one to depend on computational tools rather than humanistic guidance. This may be for a number of reasons, but I believe that *one* of those reasons is because it is hard for us to confront the ugly byproducts of seeking help from others. Consequently, we reside to our linear pathways of expertise, and when those pathways seem to graze the boundaries of an alternate

discipline of study, we may provide a passing nod or wave to a person in that alternative pathway but not much more than that. I worry that if we do not fight our ingrained motivations for efficiency and comfort, we risk predetermining our pathways of research, thereby limiting our potential for discoveries of empirical efficacy.

An avid historian, goddess, or even a time traveler, might experience transcendence in how they perceive through the geospatial factors which tend to coincide with our perceptions of time – seeing events throughout history as layers rather than linear phenomena – it is not difficult for one to feel moved by the notion that they are visitors within but one layer on a grid upon countless layers, where they are merely temporally separated from another inhabitant within the same coordinates yet during an alternate contextual iteration. Perhaps this is why I like living in an old house.

However, in order to start thinking about these types of social endeavors, we have to directly engage in the entropies of ourselves, so that our empirical contributions might become something other than fallacious or paradoxical representations of learning...

A Generative Letter of Concessions.

Letter to KSU:

Respected Mentors,

Something happened. Something happened while on the other end of a generative state – on one end, an interlibrary book request arrived, and on another end, I realized what you all have been alluding to for the past couple of years: All of this shit has already been traversed!

Not in so many words, all of you have mentioned in your own ways how I needed to spend time combing the field(s) a bit more. In my mind, I was already doing that, though I now come to realize that I was more of a bone collector, presuming that my intuition was without fault. Such a dangerous way to maneuver through this, and I think I failed myself in some way – maybe, I took for granted the things for which I advocate, failing to give them proper credence by way of foundational support, seeing such processes as a waste of time because I had affixed such efforts alongside the problems observed throughout our educational timeline, as I perceived it. I now see that the timeline is not the issue, but the process of discourse – how we generate it, engage in it, and how we transfer it.

At first, I thought that we have not done enough to advocate for commonsensical educational decisions – it turns out that we have provided more than enough examples of advocacy for what is intuitively right. So, I am simply an asshole for presuming that I was more right than anyone else who had preceded my efforts.

Then, I thought that our solutions to proper educational design resided in how we apply our takeaways of neurological research – to get our hands really dirty with the information rather than applying it in some half-assed way, thinking that we could tap into our hypothalamus via some concrete pedagogical strategy, for instance. I'd rather us apply such takeaways in a rudimentary form rather than a head-first, shallow-end dive, I thought. But, it turns out that there are at least a handful of individuals who feel similarly to how I do, and who's contributions to this cause are noted in journals and publications of multiple disciplines of discourse.

Next, I thought that the essence of our problem lies in our love-lust dynamic with numeric representations of our reality and how such representations are worshipped as the key to our advancements, perceiving these representations as our means for shortcutting our linear timelines – in a sense, generating a version of time travel by way of cognitive efficiency, and aligning our consciousness with the advancements of modern medicine and its success with adding decades of biological longevity. It turns out that this might be the easiest thing to research and support, so I am only harking the sentiments of my predecessors, and this cannot be the outcome of my efforts, because I have done nothing to build on it.

Then, I really thought I had it with my position on theoretical construction – unraveling the complexity of generating a theory that leads to methodology and, eventually, applied methods in qualitative study, with a vision for considering mathematical theory as a means for aligning such constructivist efforts, inevitably bridging the qual/quan divide. It turns out that I have created a really nice discursive party trick because not many people are versed on this nuanced, booby-trapped grid section and thus it makes me look like a pioneer to small groups of individuals when in fact it had been pioneered for decades.

What shall I do now? On to the next doctorate? Perhaps, maybe not, who knows...

I am thinking about it differently, at this very moment – the pioneers of my syntactically-longwinded position – the Paul A. Fishwick's (1991) of our world, if you will - have focused on the grid itself, creating the means – the manual, even – for making some decisions on how to start engineering some bridges for the divide. What really sticks with me is how all of these simulation algorithms and models come into and out of focus – intuitively, something is not quite there within them, perhaps speaking to their function as approximations – they never quite reach the mark, yet this seems more like a virtue of the work rather than an Achilles' Heel. I think the true takeaway, in this context, is that those contributions have experienced minimal foundational evolutions in its design, which attests to its theoretical strength as a pillar more than an answer.

Synchronously present are the Della Barba's (2002) of the world – if you will – who employ syntactic ambiguities in order to philosophically traverse the techno-ethical implications of numerically translating our consciousness in terms of both its process and its products. Again, the

essence of my efforts might be called into question especially if I only succeed in harking such implications rather than building on them.

I mention all of this because it is necessary if my goal is to contextualize myself as well as my contributions once my time with all of you has culminated. There's a byproduct here – and it is the indiscrete causal mapping of trust.

To trust in others – what a concept!

Sincerely,

Pseudonym

Purpose...I think I left it next to my car keys...

[Or, but what is *my* purpose?]

A significant portion of my doctoral work, from my course projects to my published manuscript and this dissertation, shares one predominate feature – the pronoun, *I*. Initially, I think that this pronoun was utilized because I was intimidated by the notion of positing research and study – whether it be theoretically or empirically rooted – by employing third-person pronouns because I perceived the structure of such work to imply that it is to be considered sacrosanct in some way. It turns out that I had given too much credence to such employments, misappropriating pontification as an acceptance of particular constructs within our reality – seeing the pronouns, *this, that, they, it, and one*, as indications of omniscience – when it is just as easy to dismiss those constructs as cloaked theories.

The limitations of this dissertation resides in its failure to succeed within the linear timeline. The deadlines, arbitrary and rigid, force some concessions and condensing which admittedly presents its own counternarrative to the temporally-oriented explorations in this work. What I have presented, thus, does not meet up to what I had envisioned. But it is not a matter of hierarchical or linear achievements, but some things I have refined, added, and meandered through along the way that can only be described as content which is reflective of this entropic and esoteric process – the

process of the *bricoleur* theorist. Giving credence to the construction of theory – what it entails, and how it upends the sequencing of implications.

I'll be honest – Dalla Barba's (2002) book is a read that is as close to a leisurely stroll through the metaphysical complexities of the brain and its processings, as an academic text might get. He posits his thought experiments in a way that I want to describe as recreational syntax, but this does not mean that it is rudimentary in any way. There is a perceivable amount of interplay between what Dalla Barba posits and what Dalla Barba believes - for example, there are employments of neurobiological terminology, such as “physiological, biochemical, neuroanatomical, neurocibernetical” (2002, p.7), which implies that processing within our consciousness is more like the stew than the platter, alluding to the reality that functionality is our personal neurological objective whether we desire to consciously analyze it or to ride its waves. On that same page, temporality is indirectly positioned alongside the perception and recall of something (i.e. memory) (Dalla Barba, 2002). I love the argument that is presented here, which suggests that any memory is not essentially a past representation that is linearly situated within our past; rather, it is an enduringly-present representation which instantiates *the past* as a paradoxical, perhaps even unstable, attribute of a recollection. This has so many implications, including the temporal separation between notions of time and notions of memory – to recollect is not to have experienced, but to experience.

Art Knew His Purpose.

There was this man, Art Carchedi – the grandfather of a friend – who has influenced me; although, I had never met him. I had only heard about him as if he was the stuff of lore. In some ways, that may be the function of his story for me. I was told about him by our friend's husband – who is also a friend in case you were wondering – I framed that phrase and immediately

thought that it possessed a connotative distance to it, as if I were coldly discussing an associate – I am not doing that here – it is just funny how one can latch onto particular phrasings, which are contextually framed and intentionally sincere, and realize how delicately they straddle the lines of contextualization and decontextualization. I digress –

Back to Art! Described as a physically unimposing guy but with notable presence of intellect and the sort of person who “has stories to tell and he gives them to you straight, no chaser” (Dean, p. 40, 2018). Although the expose is brief, it is quite clear from it that Art certainly had stories. At the time of that article, he could be described as a 93-year old still-working jazz pianist who traveled via public transportation. That last bit can say a lot about someone, I think, even if that was the only detail that was used to describe a person. But this is a man that seemed to transcend space, time, and temporality, and that is why I was struck by his presence although I heard about him in a networked, secondary sort of way. His stories preserve his contributions to the music landscape, excelling within a genre that is noted for its transferrable, genre-permeating qualities, and they generate an atmosphere of refined, cool persona – hearing a story about anyone who has anything to do with jazz immediately evokes particular stereotypes that, if I am being honest, would happily embody. So there’s one reason – envy of an individual contributing within a medium which I have pedestalled.

The pianist-generated ambiance in a room is an interesting contextual dynamic to consider. It has this *man-with-no-name* aura to it while in some paradoxical way is also the construct by which an intimate and comforting mood is simulated, where many iterations of social phases (couples, first dates, friends, family) engage in the generation of their own contextual narratives.

The recalling of musical compositions is essentially a time machine. The notes and their arrangements are deeply ingrained with their own genetic codes – entropic experiences which converge in the creation of something new. When a song is recalled, time folds on itself, infusing the birth of the song with the iteration of the next instance in our timeline where it is produced and digested.

This has me thinking again about Gershon's (2017) methods of sound curriculum as a necessary resource that I must continue to consider while developing my own study methods. I am consistently struck by his section on *classroom interactions as improvisation* (p.93) as it metaphorically connects the jazz soloist model with how a teacher, as well as students, might navigate the learning environment. I never thought about my own teaching style as jazz-like, but I now think that it is just that - improvisation with some accepted constructs (framework) which enables rather than governs. Similarly, my personal experiences as a musician reflect the same approach.

Some Nietzschean Jazz.

The Yellow Pad Paper – An allusion to insanity on a superficial level and among literary turds.

[i.e. Exercising intuition #∞] – [i.e. The backward mapping of induced entropy]:

Some educators would only need the following activity to discredit my disposition as a competent and capable educator. To those same educators, I cannot take high ground – I would stoop to their level and be unreciprocating toward their own ideas and approaches.

The activity goes like this. In a given situation, which can be causally connected to boredom, writer's block, on-the-fly lesson tweaking, or no plan at all, this lost soul forces his own intuition into play; however, they must adhere to a brief protocol to provide it some efficacy. 1) scan the immediate environment for texts, consciously aware of not focusing on any

single text letterings (in this stage of scanning, if they happen to fixate on a particular text, they have to remove it from the pile) 2) avert their eyes toward one of the books – ideally, this is a text with which they have a limited or absent amount of interaction time) 3) Open the text to a random page 4) read that page and perhaps the few pages before and after that page 4) use those pages to generate a new...something: Points awarded in varying scope for: conceptual generation, conceptual iteration, idea generation, theory generation, theory iteration, theory/concept contradiction, practical notion/approach/strategy, pseudo-intellectual insight, transcendent experience. 5) document the process in narrative form.

My choice for this exercise was Friedrich Nietzsche's *The Twilight of the Idols*. I haven't read much of his work, but I have been drawn to the idea of reading some of it ever since the discovery of some jotted musings on yellow pad paper – what a comforting style of paper - which was assumed to be drafting of a letter-to-the-editor manuscript by my wife's grandfather, Rodney.

The page I turned to was 62 (Nietzsche, 1924), where critic Sainte-Beuve is criticized in a brief yet starkly dense passage which to me functions within a series of workshopped philosophy – using concrete representations – contemporary figures, seminal texts, etc. – as motifs which provide layered justifications for outlooks.

“Although he possesses the tongue of the Cosmopolitan libertine which can chatter about a thousand things, he has not the courage even to acknowledge his *libertinage*” (Nietzsche, 1924, p. 62). The passage continues to chastise Sainte-Beuve for failing to provide actionable products of judgement in lieu of “his adoption of the mask of “objectivity” in all important matters”, essentially resigning his existence to excelling in the dynamics of self-admiration and self-promotion. Stopping to reflect – if I am trying to disengage hypocrisy that I might default

towards – I should express that my synaptic processing leads me to quickly highlight phrases and words there which scare me due to how they might apply to my own existence. I have been accused of possessing a self-gratifying disposition engagement with my writing – and on some level this is true, except for the fact that such accusations have been expressed in circles higher removed from the trench-level position on the chain of command. This provides a tinge of instability that can either feed or starve an ego, depending on how the narrative plays out.

My saving grace against the plight of being rendered in a Sainte-Beuvian-Nietzschean-critical modality might be that I am willing to acknowledge my libertinage if it turns out that that is what I possess. Further, I admit that I consciously attempt to question objectivity, and the results of such efforts manifests byproducts of an self-preoccupied nature – subjectivity induces such byproducts – a person’s immunity toward generating such byproducts in dealing with subjectivity is nonexistent. This is where the prospect of transcendence thrives – potentially.

Passage 5 (p. 63) is nearly entropic in how it employs a critique of the Americanized renouncement of Christianity, but it also provides a snapshot of how Nietzsche was able to illuminate the paradoxes of intuitive and rational processing. To him, to consciously renounce this religion is itself a testament to its grip on society – the alternative being to hold the assumption that moral and ethical perceptions are reflective of ingrained, innate processing, failing to actually provide an alternative on par with the transcendent quality that stabilizes religion’s hold, providing nothing other than a feeling of religion being counter-intuitive on some many levels but nowhere closer to explaining why.

Passages 7 & 8 (pp. 64-66) really fuck with me. I sense sarcasm in his appropriations of the behavior of the psychologist at behest of the artist, turning notions of reality on its end and in some way spewing this byproduct of philosophy as an iterative dance between artistry and

conscious employments of rational processing. The tip off might be the line, “One must know *who one is*” (p.65).

Through Passage 9 I might connect notions of the “ecstatic” with notions of frisson.

Passage 14 (p.71) mentions that prevalence depends on need: “In order to acquire intellect, one must be in need of it. One loses it when one no longer needs it.” I need this on a t-shirt or inked on my thigh. Page 72 outlines intellect as a confluence of “caution, patience, craft, dissimulation, great self-control, and everything related to mimicry (what is praised nowadays as virtue is very closely related to the latter)” – reads like a horoscope of a teacher.

Where I might fail to meet this philosopher’s standards is where I am quick to turn the camera obscura around for a *selfie*. When I connect something (i.e. attempt to use my brain), I sometimes wonder. Am I fucking crazy. Is this even of fucking importance. Is this something that everyone knows and I am just fucking clueless. I am purposely not using question marks – somewhere between sarcasm and dry humor on this.

My positionality within my own educational context is odd by an account that I might portray. The base level – and perhaps the most drab – is the portrayal of the average Joe teacher trying to work through the undulations of school year mental stability, waiting for the next break so that the reset button might be pushed.

The romantic generation is rooted in the topic of function – what is my purpose and what is its influence?

-Fourth, introspection is a goal which is applied and never truly realized. This is a type of positionality that is necessary to pedestal as we attempt to create, control, manage, and refine products⁹.

⁹ At this point, I have figured out how I want to conceptually map process and product. See Appendices 4 & 5 to see how it progresses.

Some Preachy Shit (*I'm SORRY...*)

The Carpenter's Hands – A Hymn

The need to get there - need to get where's - got me feeling so wrong
we've gone in search of things yet questions with the answers are none
let's skip the envy, skip the empathy and skip all the rope's wrung

I pray to god that I figure out solutions like my hands do

My mind's a cache of the clichés as if they're all my own thoughts
we'll make it work we'll make it work but it's all really my fault
despite the loathing I spite the knowing that my yarns have been spun

I pray to god that I figure out solutions like my hands do

The Plight of the Craftsman – A Sermon

Maybe this is why I am so terrible at caring for plants: I have heard that Jesus was a carpenter, and I always thought, “Well, that sounds a bit like we are being manipulated a bit for external whims.” – or something along that path. I have also heard that teachers are like gardeners, sowing the seeds of knowledge so that they might sprout forth – or something to that effect. If the latter analogy rings true, then it must be that I am a fucking *lousy* teacher, and thus this dissertation has been rendered moot – sorry for wasting your time...

What I mean is, I am not sure which of those occupations, the carpenter or the gardener, is best suited for an analogous comparison with a teacher (and yes, I am grouping Jesus into that category if only for the purpose of spotlighting the responsibility of guiding others).

In advocacy of curriculum and educator autonomy (which is arguably a misfitting word connotatively) – curricular design exists as an extension of the skill possessed by the craftsman – if we follow along the educator-craftsman analogy. Curricular craftsmanship might be counter to curricular prescription – where one appreciates the essence of the practice, one administers

practitionership in order to meld the other practice. This study advocates curricular craftsmanship and demonstrates its usage through the usage of coding and mapping of curricular iterations and generations in order to establish its validity as a generative approach – in parallel, it provides exercises on positionality and contextuality in order to offset the implications of subjectivity, and it directly challenges notions of usage and replicability. The process is inherently affixed to the product, requiring an active involvement by the educator while rewiring conceptions of burnout and fatigue that are associated with complex undertakings. Curricular craftsmanship is tiring, challenging, unforgiving, and relentlessly perpetual in refinements, requiring its own blend of artistry and practicality – if this does not resonate with conceptualizations of the educator, I am not sure what might.

-Fifth, we are artists, and we are craftsmen, more than we are experts. Keep scratching at that intuitive itch. Math is in here, somewhere...

A system's complexity is in its dynamical makeup, and as complexity builds so does the array of mathematical sub-genres that are required in order to conceptualize and empirically understand it, thus requiring the processes of theorizing and representation to evolve in tow (Wooley & Lin, 2005).

There is an entire underlayment of mathematics in theoretical discourse that is concerned with consciousness, including Dalla Barba's (2002) words regarding what consciousness is and isn't – there must be. Right? I have two choices at this point. On one hand, I can take the stance that “no, there is not such an underlayment due to the idea that the presented arguments implicitly violate even the most abstract realms of mathematics – that sinister realm where narrated manipulation and ambiguity reign supreme – where people eternally talk in circles and end with questions – a complete, unadulterated, tortuous hell to even fathom.

On the other hand, I can take the stance that “yes, there is such an underlayment due to the fact that I am in debt and that this fucking dissertation needs to end, and I shall not spend my hopefully final months of this experience dissecting, deconstructing, and disproving the nuances of another person’s dinner conversation (I think something was mentioned in the preface of the book about a Thai dinner).” Or, I could also hold the line that enough uncertainty and ambiguities have been expressed in text that allows it to satisfy what is arguably a functional necessity when positing abstract thought with credibility (Klir, 1991).

Caeli & Yadav (2019) Discuss that the nature of learning programming skills being fundamentally secondary to the need to approach algorithmic thinking as an “iterative process” (p.30) as they embark on positing a constructionist dynamic that should exist between humans and computers. It seems clear that they are alluding to the fundamental essences of processing that might be computationally and biologically shared; interestingly, they progress through this argument in a manner that is seemingly anachronistic on a superficial layer, but what is poignant here lies in how the structure of their argument strips the computational side of the dynamic to a controllable, programmable function – i.e. resigning it to a tool and not as an entity vying for center stage alongside our brains.

I think that they make some critical points and I appreciate how they constructed those points in a way that does not *invalidate* the benefits of computation – rather, they are validating the necessity of organically-processed products of consciousness in order to ascribe meaning, validity, function, and stability to the tools of our programmatic musings.

A barrier to this constructivist dynamic might be argued in how, not surprisingly, we learn and disseminate “datalogy”(p.34-35). Caeli & Yadav (2019) point out that historically this is an issue with direct relevance to educators responsible for teaching programming, yet we are

temporally situated – currently – in a way which requires all educators to have more access to “datalogy” training than whatever they already have or don’t have. Again, it is not about whether computers are necessary or unnecessary – it is about how computation thrives or limits us depending on how it is understood and applied.

To Caeli & Yadav (2019), data is a trans-conceptual word – at least, this is my interpretation of how they discuss it on p. 33 while using it to conceptualize any and all information that is able to be numerically represented. I would take it a step beyond the *a priori* to argue that any information which theoretically can be numerically or algorithmically processed is in fact data that has achieved transference between computational and biological realms.

It is here where the challenge of abstraction is once again presented. I think that Caeli & Yadav (2019) are implicitly posing the question of who is programming whom (p. 31), but I think that it is more about the need for us to consciously leverage these organically-derived resources which are most precious to our temporal positionality while also keeping in mind that we are unconsciously non-algorithmic – while we attempt to study and conceptualize the depths of our consciousness, we are not delusional to think that we have all synaptic iterations under lock and key. We are not actively engaged in a systematized, frameworked algorithmic designing of all organically-derived faculties which are associative with process or product – and, I do not know if this will always be the case, but if the alternative becomes true then we may have initiated the singularity paradigm – all I am suggesting is that we are only partially involved in the analogously-algorithmic construction of our consciousness, so we are not solely the programmers of our minds but rather the benefactors of our vehicles, the primary stockholders of our enterprise, but we are not the gods of our essence.

The Thorndikean element does nothing more than amplify the paradoxical nature of idealism when an individual is attempting to summit the high ground of knowledge. Beatty (1998) mentions this much by noting, “Nor was Thorndike able to resist the tendency to play God himself. His faith in the power of science and valuing of efficiency led him to espouse some highly undemocratic ideas...Thorndike said he supported absolute meritocracy because quality "was better than equality" (quoted in Beatty, 1998, p.1150,1151)”

This might be approaching an area that should be reserved for discussion of our souls, so I will not dwell on it too long – I just want to say that it is a revelation if we accept our consciousness as our most precious resource within our universe - as we currently perceive it – but, in soul-form, perhaps we are simply nothing more than pirates of this resource, iterations of a protocol for this resource which is encoded with a preoccupation for discovery, exploitation, and recursive innovation – a sort of generative feedbacking where we are too often misguided in how we perceive our outcomes. Enlightenment perhaps is a search within and coming to peace with never reaching an outcome, something which arguably is more friendly to *process* rather than *product* (Caeli & Yadav, 2019, p.32), yet along the way we might come to appreciate the journey of learning about ourselves while surmising that empiricism does not have to stranglehold validity, complexity, or even accuracy and it especially does not have to monopolize the process of justifying.

My sermon – shout-out to those who called my writing preachy – leads us to consider that we only play the role of god in that which we design, construct, and refine, if even there depending on how you feel about *The Matrix* (2013). This is a good of a place as any to insert yet another shameless plug for autoethnography, as Lee (2020) has made a connection between the written autoethnographic process, the digital learning paradigm, and authenticity that has the potential for informational transference. Defining authentic learning as “an integrated process of both knowing

and becoming” (2020, p.571), Lee’s framework, a composition of epistemology and ontology (p.574), helps us consider how authenticity is actually realized – I think that this might just be my own consideration, or perhaps you picked up on it as well – nonetheless, I’ll work through what I mean...an implication of Lee’s argument is that the auto- ethnographer possesses with the composites of selves – “simultaneously as doctoral student, professional, educator, colleague, and even as friend” (2020, p.575) – the iterations of their process manifesting in the confluences of their *selves* – to me, this shapes the perception of authenticity to mean more than something that is real – rather, it is a thought experiment(s) that approach something that might be *more* algorithmic in essence than the empirical deep dives that we thrust on our exploration of our brains – in this context, we are gods of the constructivist realm, backward mapping, deconstructing, reconstructing, and repurposing our temporal landscapes so that we might be incrementally and intuitively harmonized alongside an order of corporeal order which is not further from where we previously were yet is also not closer to anything other than that which we have actively worked to construct. Thus, I do not claim to be more right than others – okay, maybe I do think at times that I am more right than others – there, I admit it – all I am trying to say is that an autoethnography is not something which reflects me as more enlightened or more prepared than an anti-autoethnographer – it is simply what I endeavored so that I might try to align certain things so that they are more stabilized than the previous hodge-podged shit show that they represented. It is what I felt was necessary in order to not only sustain my place in the educational ecosystem, it is a prototype of the depths I need to explore in order to be in a stable place with the chaos which I intuitively perceive on a near-constant level.

An Absurd Theory.

[Or, I pulled the following document directly from the depths of the torturous hell.]

Absurdity Theorem:

Axiom 1: Concerning outer automorphisms.

That which is inferred to satisfy an R-group, or:

$\Theta(1)$ – Repetition

$\Theta(2)$ – Recursion

$\Theta(3)$ – Richness

$\Theta(4)$ – Relations

Implies that isomorphic implications hold *and/or* isomorphism has been induced by a *quotient grouping*. Therefore, it is considered that R's are a *monster group* and functioning as acceptable properties of correspondence.

Axiom 2: By acceptance of axiom 1, we employ similar principles for the complex conjugation of logic and intuition.

That is...

-*isomorphism* is induced (factorable) by *quotient grouping* or faithful representation of sensory occurrences, thereby instantiating them as a *trivial group*.

Further, with such properties considered, then...

Inputs, outputs, and outcomes may be structured as linear or non-linear sets (i.e. maps) *iff*:

Inputs = dissonance

Outputs = resonance

Outcomes = confluence

Abuse notation may then be applicable for logical mapping according to linearity and non-linearity, where it may be implied that an additional group non-linearly manifests.

Further, forms of dimensionality predicate this process, comprising:

A: Single-dimensionality {if we consider static & fixed modes of function are associatively asynchronous}

&

B: Multi-dimensionality {if we consider dynamic modes of function as associatively synchronous *and* non-linear}

We can then posit that asynchronous modalities – regardless of linearity - may be mapped as factorable, and discernable modalities of process and product,

And that synchronous modalities that are non-linear in essence are presumably identical to the notion of flux states of process and product transferences.

It may then be inferred, via canonical isomorphism that process & product hold if dissonance is considered iterative, resonance is considered interactive, and generations are considered the results of confluences of resonance and dissonance.

Axiom 3: Synchronous transferences, thus, require spatial and chroral saliences to be grouped [i.e. mapped] to further measure entropic relationships as generative products when:

remaining non-committal to quantum leakage chain rules (Chen, 2019, p.103),

and/or when

byproducts resemble dissonant iterations with interactive potential for further transferences by way of resonance & confluence – in other words, chaos.

Axiom 4:

Additionally, if we accept that temporal axiomatizing functions through arbitrary parameters of logic and intuition, through abuse notation or otherwise, and entrusting that they exist as group sets within confluences, resonances, and dissonances, logical sets may be interpretable as deterministic, controlled, and structured [factorable, a priori, bound, and/or sterile] and, conversely, that intuitive sets are interpretable as indeterministic, entropic, and non-structured [biased, unbound, ethereal, fallacious, paradoxical, and/or beautiful],

It may be presumed that agentic byproducts & curricular byproducts may be derived, which include notions of trust & faith & authenticity, thereby fulcrumming the potential for new R's on transferences of entropy, and instantiating the notion that transcendence is bound by its potential for transference...

There are decisions that we need to make regarding factors which we confine or unleash.

Sprinkle a little spice on them, of the Murphy's Law variety, if you will. For example, consider the following, as they ethereally are situated between gridpoints of paradox and absurdity:

- a) *Authenticity is artificially constructed – it is algorithmic*
- b) *Selves are abstractions of the narratives we construct in order to employ them*
- c) *Selves are neither closer nor further from that which is true in nonlinear form*

Put aside the negative connotations of the paradoxical and the absurd, and see if there is something else within those points, within this ether of muck, and we shall see if we might contend with vacuousness and the sourcing of its inaccuracies.

Perhaps, selves are closer to artificiality than they are to who and what we really are, just as any empirical products of our conscious endeavors may succeed in being – with such products having more in common with the rudimentary existence – not to ascribe a negative connotation to it - of algorithmic thinking – if we can explain it, it is rudimentary and thus worthy of our attempts to temporally transcend it but along with it comes our acceptance that we are and will remain *lost* but not *lost causes*.

Moral Injury, cont.

Applying entropy and faith during curricular craftsmanship.

Although not directly stated in his text, Nietzsche (1924, p.199) previews this concept, in a way, while he discusses the clashes of religion and science – the former thriving on an entropic dynamic of humanistic self-deprecation on mass levels, the emergence of war aligned with conflict, keeping people “ill” (p.202) in order to keep them in line, and branding closer notions to an ideal form of being – as well as the closest roadmap that exists – than any other construct that may be created by man.

Faith, according to Nietzsche, is a concept which thrives when engaged in contexts of ideological stew, where antithetical concepts aim to rustle with its abstract nature. To not have faith is essentially to acknowledge the strength of the concept itself, for it involves engaging in an active discourse which requires mental faculties that simulate the prospect of having faith alongside the alternative – to not have faith – thus, it is strengthened and not avoided. For many reasons, it has transcended the activity of judgement that is casted its way, it is unintentionally

stabilized by the chaos that surrounds it which seeks to dethrone it – it becomes the nucleus more than it otherwise might be elsewhere.

I also think that faith can withstand the trials of religion – the two are not mutually exclusive – one is an abstract concept while the other is a construct that embodies simulations, thought experiments, binaries, but which uses arbitrariness as an adhesive. The more I actively engage in avoiding prayer, the more likely it is that I am subconsciously engaged in praying, without true capacity to know what it is as well as its effect. The more I engage in questioning omnipotent presence, the more I tend to energize the prospect that we are subjects to a god. I am not sure if such things are to be left as they are, or if one is even capable of doing so.

To me, it becomes evident within the first few pages of Dalla Barba's text that he is conceptualizing the processings of our consciousness as functionings that endure on a grid of non-linearity. Dalla Barba (2002) goes further to discuss how the point of this temporal conceptualization, or deconstructing, is to justify how consciousness is more dependent on need than time – I think that this implies that we must also play with the idea that our conceptualization of *the present* need not be dependent on arbitrary time descriptors. In existential fashion, if consciousness *involves need for being conscious* of something (2002, p. 126), then this brings profound meaning for redefining what it means to 'live in the present'. It doesn't mean to internalize the time descriptors that allow us to be aware of our positionality within the linear timeline – it means that you should be present, in other words you should possess presence, in other words you should be using your fucking brain.

However, we should keep in mind how Hezemans & Geffen (Fishwick, 1991) mentioned that there is a translational issue among disciplines which should be better addressed. Thus, there are also transdisciplinary benefits to re-thinking a system's capacity for enduring instances of

entropy. Going back to *Volume II for a few seconds*, Grobstein (2007) advocates for a framework of hybridization between collaborative interaction and causal hierarchy, and I think it is well-situated within a grid of transdisciplinarity. While I think that he takes a more conservative approach to advocating for system architecting, it also seems like a very pragmatic diplomatic way for navigating the implications of anarchism or “decentralized egalitarianism” (2007, p. 2) that can disrepute alternative approaches for system redesign. However, I need to think more about where I stand on the topic of decentralization. Another topic for another time, perhaps.

Weiner et al.’s (2020) spatial framework, if employed in a singular modality as they intend it to function, positions all educational personal within that system as a “designer, though they may be working in different design spaces, each requiring different specificities of expertise, background knowledge, tools, and practices” (p.781). There is an ensuing dance of entropy, were seemingly dissonant modalities of consciousness sporadically converge, and they are stabilized by how designers hold themselves and each other accountable for identifying and utilizing those areas of convergence – capitalizing on them.

In this way, entropy is something other than a problem to be fixed as a *designer* becomes a *craftsman* while they “approach ill-defined problems in a solution-focused manner, translating abstract requirements into concrete instantiations...[exhibiting] mindsets and attitudes such as openness, empathy, creative confidence, optimism, and a willingness to iterate and learn from failure” (Weiner et al., 2020, p.781).

An Absurd Vision.

So what does a transdisciplinary system require in order to transcend issues of entropy? Of paramount importance, it requires faith and trust in ourselves and others, especially if we want to sustain it. It requires a Team-Based exchange of contributions for purpose of exploring,

discovering, and innovating where exploration is socially rewarded. It requires non-linear scaling in terms of its potential for processing and producing – the contributions of an individual or team are integrated by a myriad of up's, out's, through's, towards', from's, and beyond's. And it consistently advocates for intuitive spaces that are liberated from parameters that are hierarchically disseminated and controlled. The following visual gets us towards envisioning such a grid:

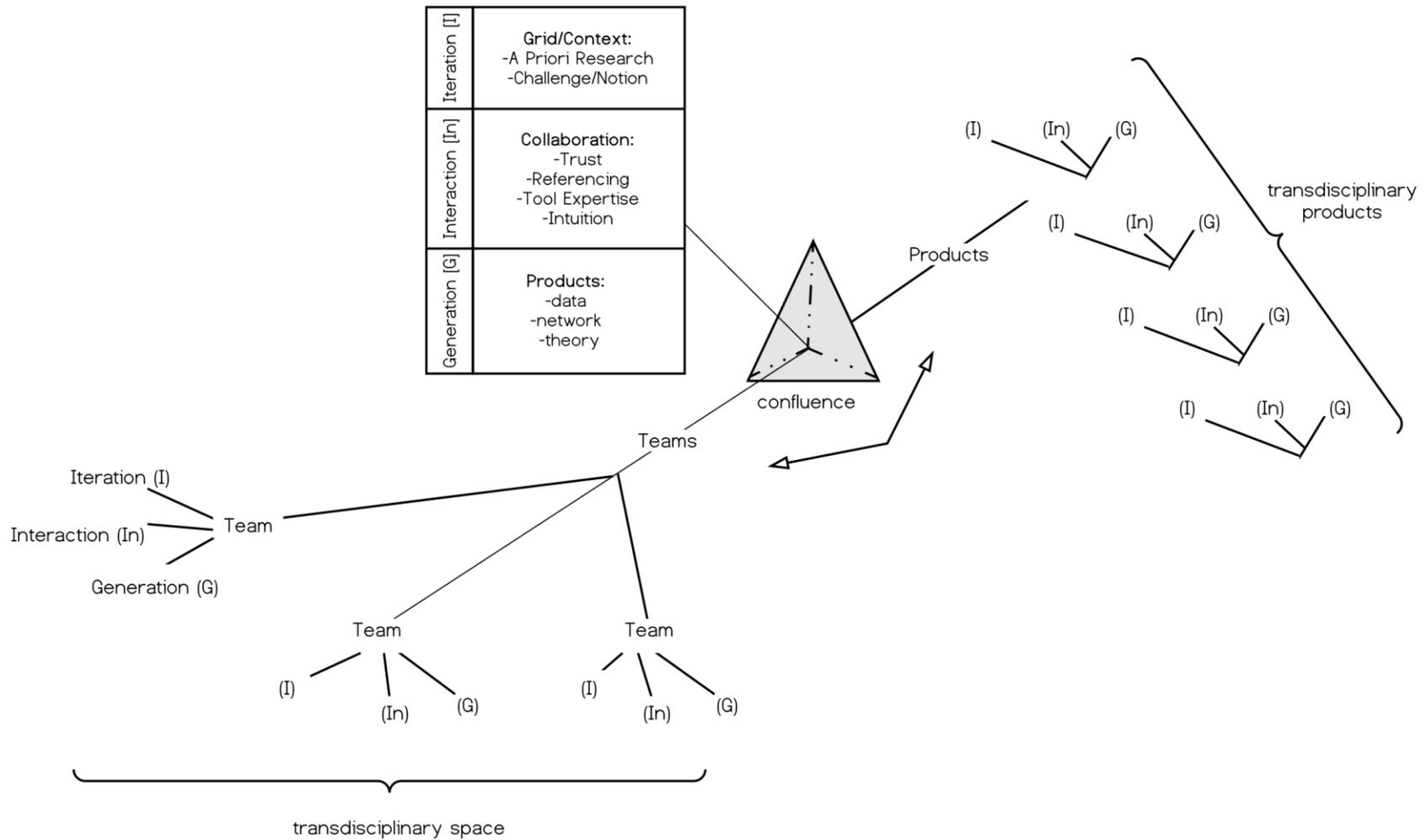


Figure 43. A vision of a transdisciplinary system.

At the **core** of a **transdisciplinary grid**, it's **fulcrum** situated as a **prism**, from where **superpositions of confluences** emanate, **celebrates human intuition**, a **critical resource of consciousness** that is necessary during efforts of **exploration & discovery**. **With respect to entropy and evolution**, it **[attempts to] redefine** how we synthesize theory, data, & outcomes with the following focuses: Constructing theory - Prototyping Solutions - and Transcending Barriers - in order to advance our learning of organic processing (consciousness), artificial processing (computation), and alternative processing (quantum). **To do this, a grid shall never cease in creating** actionable opportunity to innovate & collaborate. Thus, it strives toward **sustaining** intellectual legacies by rethinking how we maintain collaborations and how we advocate human-generated contributions. **Ultimately, it remains steadfast transcending** traditional learning models and the constructs which create barriers for informational and contributory access.

Art...Not the guy, but the process – or is it product...?

I wonder – at 93, did Art still feel frisson? I like to suspect that he did. How is such a sensation sustained? By folding time, by generating additional iterations of an instance, and by leaving be the entropic social dynamics which may emerge.

This work is not in my wheelhouse. None of it is – including the self-analyses. I have been, and always will be poor. I am not smart, at least in a metrically discernable form. Among countless other states, I fluctuate mercilessly aboard and between egoism, isolationism, escapism, and I might be too playful with the implications of the narrative in terms of both its process and its product.

I am a messy - perhaps chaotic - theorist, on my best days, and my eureka moments are inconsequentially insignificant on any temporal level. My father stomped the accelerator to the ground, straddling alcohol-induced suicidal desire – the vest of his best friend, Rob, tucked away in his wardrobe closet for decades, with the faded, bloodstained *care instructions* tag – perhaps the only tag which he ever cared to look at and think about – I imagine him, stooped over the bow of his bed, holding the vest in his hands, studying the tag with an intent and astuteness which had never manifested in his schoolroom experiences. I remember him telling me the story of Rob, somewhere I interacted with Rob first-hand, and I could tell that this was a recollection of particular significance that my father held close. Perhaps he was jealous of his friend for living up to the drunken pact of *death before thirty*. Where did that leave the one left behind? Stuck in reality with an overly-expectant son. I need to give my daughter and son hugs in the morning, perhaps I had taken this day, perhaps I had taken their proximity, perhaps I had taken the thought of them, for granted. I owe each of them a letter – the one for my daughter is drafted, has been for a while now, more than a couple of years to this day it has been drafted, yet it still sits expectantly to my right, within a synaptic arm’s length. Will she read this letter similarly to how many of you will read this narrative? I am terrified.

And yet...and yet. There are glimpses of innerworkings, connections, and similarities which make me feel. Frisson. I have been experiencing it for the last 5 hours of reading and writing. From the moment I picked up the book which held implications for my demise as well as my transcendence – the artifact which thrusts upon me the realization that my proclamations, steeped in dense abstractions, are decades realized since now, downplaying my existence like countless other experiences where a grid felt more like an experience of internment for ridicule, laughing at

me like the grinning *Pseudonym* holding me eye-locked in place as I am reminded “you can’t, you aren’t...” in front of...

Stop. It is none of that – it is the artifact which says to me, “keep going, keep trying, here is what we have done so far, see what you can do with it”. I get it. I think...

We are all simply engaged in learning, and that is all that there is to transcendence. Like the nature of this narrative, it is never over. This is the work I had to conduct in order to be okay with standing in the dojo, sitting in the cafeteria, facing those and myself in order to be okay with presuming that I belong, so that I might see others as colleagues rather than insurgents, so that credentials lose their luster from which light refractions are emanated, masking (Fishwick, 1991) their true nature as that of a lackluster, organically opaque deformity – opacity, what a grid it is!

The accelerator was my father’s revolver, but it always seemed like a mechanistic deformity within an *analog* (Fishwick, 1991, p. 186). That is me, perhaps, as a theorist, enraptured with the outcome rather than the process, the antithesis of my harkings and perceived musings for these hundreds of pages. A hypocrite. And a learner, none the less, and eternally.

Something is coming to me, in this fleeting way, with regards to Dalla Barba’s text – I can’t seem to shake that fucking book for some reason. It has to do with the system of the reducible, that which can be managed and interpreted, and which is infinitesimally limited in comparison to that which is our burden, our strength, and our responsibility. I’ll try to clarify...

It has taken me 34 years to make this claim: I am, we are, special, for as long as we sense that we are lost. For as long as we intuitively process how, why, for whom, and to what means are we disposed to function as wonders along with tempered expectations for the corporeal and for the ethereal and for how we consciously digest the muck. For as long as we see ourselves as the

caretakers, the Atlases, or even the squatters (residents? Trespassers?) of our most precious resource which is fulcrummed atop the point of our spinal spear.

Thus it is not my job to explain or to decree, but to contribute. *And* to not be resigned to functioning as a fucking *cog* while I continue to question with the expectation of no forthcoming answer. I need to keep questioning and not necessarily answering, for that is not my purpose, I think. I am beginning to see my role dissolving into the opacity of our added phases. Where we build systems, we require entropic factors which we are conscious of as well as ones which we cannot fathom. I am still working towards this. On to the next iteration...

My point is this – I have been and will continue to be enthralled with the *vision* more than the outcome. It is why I hardly ever finish my musical compositions and why I will never be able to see this autoethnography as a culminated feat. Although it will be slapped with a conclusion, it will be incomplete when I defend it, and that is where I perceive its strength.

The journeys of theory construction, of curricular craftsmanship, and of learning, are artistic in essence with the potential for transcendent iterations, where the individual reaches some perceptive level of acceptance with the notion that they will try yet never answer, for it seems intuitively reasonable to think our existential crises, our observations of the stars, and our humanistic endeavors are simply matters of context – process permeates all of it.

To share in the process of thinking without the factoring of transaction. It means considering that I will never become privy to the essence of my god, even in a dream or long after I am dead. It means that the feeling of cosmological interconnectedness has little chance of evolving past a fleeting notion. And it means that doing what I can for my colleagues, our students, ourselves, and myself requires more humility, compassion, and trust than I can fathom or apply.

I sense this glimpse of how great it feels to realize that I am a completely inept, *depraved*, and *decadent* (Mosser 2012) individual – and that all I can do is all that I am...

Transcendence...

And now, the Theatre of the Absurd presents to you:

Trifling Epiphanies: A One-Act Play for the Prescribed

Characters/Roles:

Jobb: A patient, straddled somewhere between prescribing and being prescribed while trying to make sense of it all. He is insecure and has reached a point where his conscious navigation of his existence has led to what he thinks are epiphanies yet are ideas and notions which are chaotically fulcrummed. He has made the decision to actively engage in this particular therapy session in ways that were previously unrealized due to his cynicism.

Thetis: The prescriber, or so they think. They are inquisitive with an attentive, active ear that is presented in a comforting passiveness. They presume to understand, and they find personal comfort in the recycled responses which they have provided, countless times which has led to the problem of observable bounds - a diminished perception of inceptions and conclusions – where does one meeting start and another begin?

Scene: A single room, spacious and cozy, structurally and atmospherically friendly to its construction on a theatre stage. The room is situated between the voyeuristic nature of performance and the sardonic relatability it implies for shared human experience. The room is parameterized with built-in shelving that is in itself parameterized with crown molding while its guts are constructed with decimally-organized books – many of which bear no creases on their binding; its windows are accessorized with tailored blinds, lattices which secrete samplings of the sun's rays, which in turn highlights barely perceptible particles of greyish mites; a leather chair, worn in a way which evokes a memory of a weathered yet trusty pair of workboots during a time when rivets held the attention of a nation; a mid-century style floor lamp.

Johb: I haven't talked to him for nearly three years according to the calendar – yet, strangely I do not perceive the time – surrounding this context – in this linear sort of manner. The first day of these three years is infused with every moment since then, but it is not something that is a source of incessant dwelling or lament. It simply *is...* (*BEAT*)

(Hesitantly)“I want you to be a part of our lives, and I will leave that door propped open for at least a little while, but at this point it is up to you what happens next. We will go on living, with or without your presence.”

(PAUSE)- “I know.” (Beat)

“Temporal phenomena stand out during this range of linearity, like trinkets of innocuous material value but which are tough to discard. When it comes to trinkets, he buries his on the source of his resentment – the land that was generationally prescribed to myself and my brother by my father's father – like some traumatically comical version of D.B. Cooper, yet in this instance the true nature of his identity is lost to himself more than the public. This is a literal iteration – not a figurative one – and I think that this is an iteration which accurately depicts the dynamics of my positionality alongside my father – that a third factor would have to indirectly insert itself into the algorithm in order to try and realign outputs, perhaps to salvage its outcomes. He is a dog, pleased with the burying of his bones, contemplating rainy days down the road which might be quelled by his stash of trinkets while forthright in his indifference towards perceiving that he will succumb to rabies before his bones are once again retrieved.”

Thetis (Cognitive ASIDE while scribbling nodes of semantic cues for later recall): “*Johb* makes me wonder of his own temporal phenomena that stand out during this range of linearity, like trinkets of innocuous material value but which are tough to discard. When it comes to trinkets, he buries *his* on the source of his resentment – the **grid** that was generationally **encoded in himself** and **his** brother by **his** father's father – like some traumatically comical version of **Phil Connors**, yet in this instance the true nature of his identity is lost to himself more than the public. This is a figurative iteration – and **perhaps it is also a literal** one – and I think that this is an iteration which accurately depicts the dynamics of **his** positionality alongside **his** father – that a third factor would have to indirectly insert itself into the algorithm in order to try and realign outputs, perhaps to salvage its outcomes. He is a dog, pleased with the **excavation** of his bones, contemplating rainy days down the road which might be quelled by his **rediscovered** trinkets while forthright in his indifference towards perceiving that he will succumb to rabies before his bones **once again merge with dust.**”

Johb (determined for the train of his thought to reach its destination at **Willoughby**): To him, the one trinket which might quell any and all of his rainy days would be the actual grid upon which his bones were cached – the lot of land which held its own set of access keys including the

eventual inheritance by his sons – something which he sees as a challenge to his birthright, a notion perpetually resonant for him not only within his mind but throughout his sensory ecosystem – he finds no choice but to perceive and process the sonic inputs provided by his illegitimate spouse, a Lady MacBeth in this story. When I simulate in my mind a temporal instance as my father, I can hear her syntactic staccatos of desperation and manipulation - “Sacrifice your sons, forsake your father, but for God’s sake, get that fucking land!”

(BEAT: his train of thought becomes sonically resonate with the locomotion of its linguistic track): Oh, I still feel the latching of the judgmental eyes following me during my grandfather’s funeral as I forged perpendicular pathways, meandering through friends and family members in my attempts to distance myself from this predator and his veil of sentimentality – it would not be too long from this day that cursing and shouting would be heard as he was determined to make it known what he materially deserves and how he has been wronged by the family for so long. The products of his consciousness a composite of linguistic incongruity and resentment – not an adolescent way of thinking but a pitifully brain-damaged way, a god incapable of coming to terms with his own mortality. At some point, the doorway slams shut on the god’s ability to achieve his epiphany.

((As the playwright contemplates this generative product of his consciousness, he wonders - “How many of my *own* doors been opened and shut?”))

Where are the intersections, iterations, and generations in this context of social dynamics between myself and my father? An idea that I will have actively engaged in verbal conversation with him seems to increasingly diminish as linear time is acknowledged by ascribing numeric representation to it.

((*DEUS EX MACHINA* (Doll, 1993, p.167): *Sunset Rider*: The audience suddenly becomes aware of a spotlight that is shone on a man sitting alongside them, a temporal narrator who seems to have witnessed the unfolding of this story countless times in this world as well as others. His assuredness is reflected in the resonance and tone of his vocalized outputs, which somehow generates a subliminal awareness of **stacked nodes**.)

Sunset Rider: “One such product being the instantiated glints of therapeutic sessions, ranging in formality and medium, which are experienced with circumlocution, justification, and cyclicity always manifesting as fateful byproducts – Achilles challenging the gods as well as his predetermined fate, with his final moments becoming reverberant from the triviality of his demise. The cliché’s of therapy becoming a testament to the nature of consciousness, shared experience, and the biological connectedness of humans (Gonçalves & Perrone-McGovern, 2014). “Try to think of it this way...”...”Perhaps you are right, and if so, what then?”...In this sense, I am the child node – a subdivision of he and his parent codings. I am genetically connected, recycling the

synaptic pathways enabled by my parent codes, yet harking muses and running away *from* while inevitably *towards* my fate...

Another generative product, perhaps - Presumed acceptance of the ways that things are – presumed in this theoretically quantum fashion where a door is kept shut due to the notion that opening it might upend the idea that at some point it had been opened and marked achievements had passed through it – its concealed data to exist in this state of purgatory between its all-consuming presence and its corporeal absence – and somewhere in all of this is the product of transcendence.”

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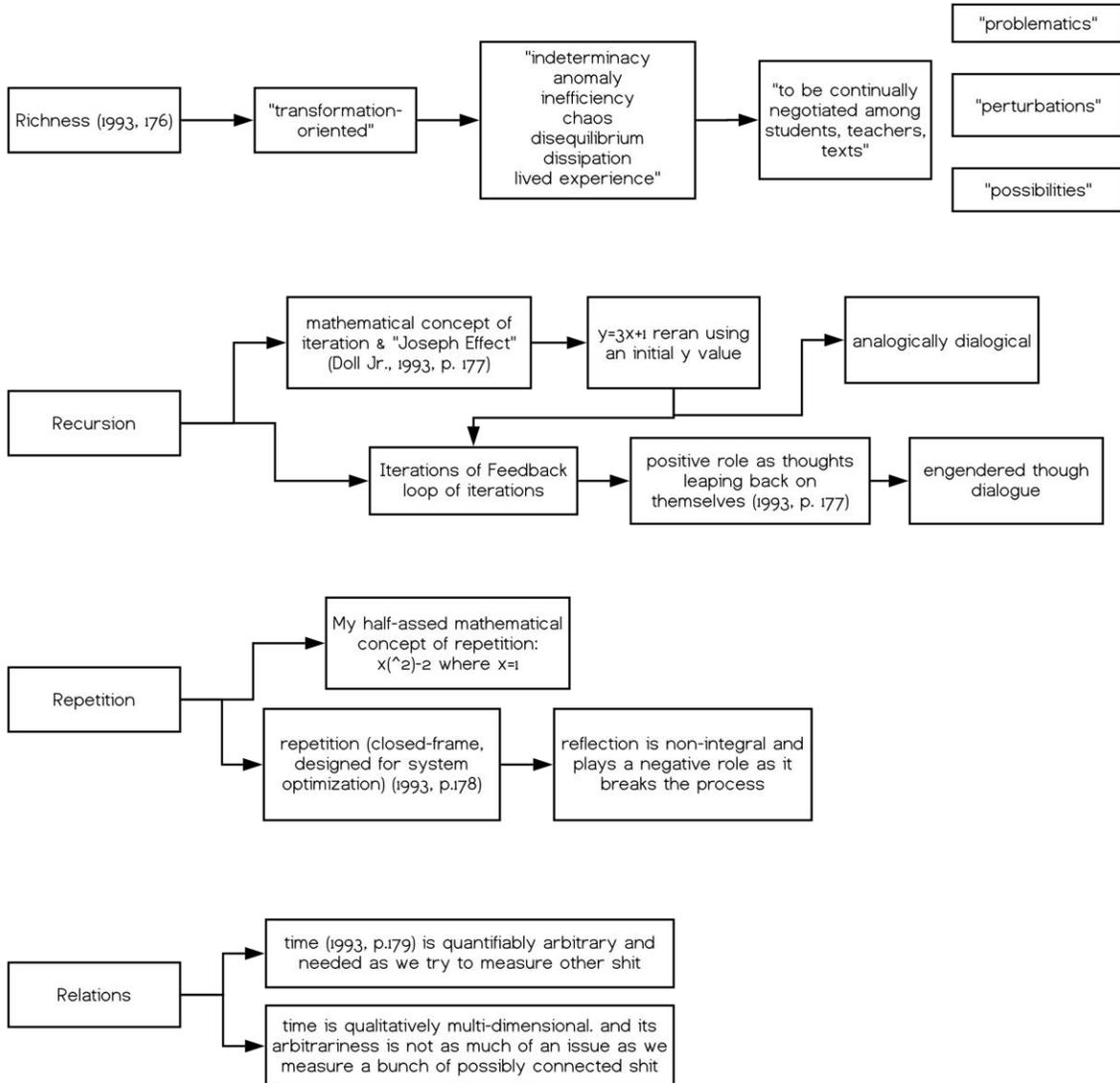
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Appendix A - Doll's 4 R's

Provided here to spare you the hardship of experiencing another one of my visuals while you read.



Appendix B - Prior Matrices

Matrices developed during next-phase research and study (i.e. after further logical mapping):

Type-Criteria Matrix

Content	Teacher-Led	Teacher-Facilitated	Whole-Group	Individual	Inductive Processor	Deductive Processor	Asynchronous	Synchronous	Type
Disseminated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S	T	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DW-A
Disseminated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	T	S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DI-A
Analyzed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	T	S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	AI-S
Analyzed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S	T	<input type="checkbox"/>	<input checked="" type="checkbox"/>	AI-S
Analyzed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S	T	<input checked="" type="checkbox"/>	<input type="checkbox"/>	AW-A
Analyzed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	T	S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	AW-A

*Where applicable: "T" refers to *teacher* / "S" refers to *student*

**"Type" refers to an acronym generated by combining content (disseminated/analyzed), conduct (whole-group/individual) and theoretical shifting of inductive/deductive processes. For example, "DW-A" may be read as a lesson which disseminates content to an entire group and has potential for asynchronous processing to occur.

Lesson-Type Matrix

Lesson	Content	Teacher-led	Teacher-facilitated	Whole-Group	Individual	Type
Example 1	disseminated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DW-A
Example 2	analyzed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	AI-S

*This matrix serves as a tool for either anticipatory planning of a lesson or reflection on a previously-conducted lesson (in relation to its potential for inductive/deductive processing).

Appendix C - Next-Phase Matrices

Matrices developed during next-phase research and study (i.e. after further logical mapping):

Praxis-specific Matrix

Initial Type	Inductive Processor	Deductive Processor	Information Pathway (Teacher as starting point)	Platform Limiter voluntary vs. non-voluntary	Final Type
DW-A	S	T	-->	A	DW-A-N
DW-A	S	T	-->	S	DW-A-N
DI-A	T	S	<--	A	DI-A-N
DI-A	S	T	-->	S	DI-A-N
AI-S	T	S	<-->	A	AI-S-N
AI-S	S	T	<-->	A	AI-S-N
AI-S	T	S	<-->	S	AI-S-V
AI-S	S	T	<-->	S	AI-S-V
AW-A	S	T	-->	A	AW-A-N
AW-A	T	S	<--	A	AW-A-N
AW-A	T	S	<--	S	AW-S-V

System-oriented Matrix

Initial Type	Inductive Processor	Deductive Processor	Information Pathway (Teacher as starting point)	Platform Limiter voluntary vs. non-voluntary	Final Type
DW-A	P	A	-->	A	DW-A-N
DW-A	P	A	-->	S	DW-A-N
DI-A	A	P	<--	A	DI-A-N
DI-A	P	A	-->	S	DI-A-N
AI-S	A	P	<-->	A	AI-S-N
AI-S	P	A	<-->	A	AI-S-N
AI-S	A	P	<-->	S	AI-S-V
AI-S	P	A	<-->	S	AI-S-V
AW-A	P	A	-->	A	AW-A-N
AW-A	A	P	<--	A	AW-A-N
AW-A	A	P	<--	S	AW-S-V
AW-A	P	A	-->	S	AW-S-V

***Where applicable: "A" refers to system administrator / "P" refers to system participant**

In whole-group settings where students are completing whole-group inquiry, the teacher will be leading the analysis process. Process-Driven context.

Teacher facilitates analysis when individualized learning is the task. Inquiry-driven context.

Synchronous processing occurs in asynchronous contexts once the established chain of information exchanges has been broken (eg. a student expresses an epiphany which sparks a new mode of inquiry for one or more students).

Theoretically, objectives of information analysis that are asynchronous (AW-A) are the most impacted by utilizing a real-time platform (eg. a synchronous online learning session).

Appendix D - Coding Summations 1

Coding Grid Summation of Volumes I-IV

Coding Grid 1: Actions and Functions

Modal Actions: Require supplementation provided by manual and/or automated engagement:

Factors (a priori) which can be modally driven in a dual nature with respect to:

Spatial (S) - Chronal (C) - Temporal (T) - Intuition (I) - Logic (L)

Factors which are modally driven by manual or automatic [to an extent] processes:

Conceptualizing (Cg) - Mapping (M) - Generating (G)

Coding Grid 2: Trans-disciplinarily Axiomatizing Key Concepts

Iterations = Macro-Contextual snapshot of grid, presenting spatial-chronal nuances and external/internal interplay

Personal Context {S,C,T}

Baseline Intuition (Sound Theory)	Baseline Logic
Resonance/Dissonance (Frisson)	Causal
Amplification (Compounding Connections)	Linearity

Iterations {C,M,G}

(C) Time	(C) Space	Linearity/Non-linearity {C, M}
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Connections Applied and Amplified

Interactions = Micro-Contextual, one-to-one convergence or interplay between two factors with the potential for two-way influence

Spatial-chronal

Chronal-temporal

Temporal-spatial

Interactions {C, M, G}

(C)(M)Process/Processing

(M) Dynamics

(C)(M)States

(M)(G) Person-Person

Confluence of Intuition/Reasoning

Coding Grid 3: Meta-cognitively Perceiving Entropic Occurrences

To Be Determined...

Coding Grid 4: Hermeneutically capitalizing on Entropic Occurrences

To Be Determined...

Appendix E - Coding Summations 2

Added coding grid summation of Volumes I-V which were previously missing:

Coding Grid 3: Meta-cognitively Perceiving Entropic Occurrences

Generations = Perceiving the macro-contextual gridwork as a phase of processing, generations are the products and byproducts of the spatial-chronal-temporal iterations and interactions	
<i>Relativity</i>	<i>Transference</i>

Products & By-Products	
<i>Macro-contextual products = consciously superficial outcomes [can be linearly mapped but may hold non-linear implications]</i>	<i>Micro-contextual byproducts = theoretical, abstract knowledge transfers</i>

Coding Grid 4: Hermeneutically capitalizing on Entropic Occurrences

Transcendent Potential = Inventorying abstract [theoretical] and concrete [measurable] interactions or covariances in order to classify <i>occurrences, outputs, and outcomes</i>	
KINETIC – To theorize on byproducts using <i>a priori</i> notions/inputs	ACTUAL - To study relativity and transference(s) in an <i>a posteriori</i> modality
Meta-analyzing subjectivity in order to instantiate perceptions [Ethnomethodological approach]	Meta-reflecting on subjectivity in order to stabilize – not necessarily to justify - perceptions [Ethnomethodological approach]

Coding Grid 5: Gleaned/Summative Takeaways

Transcendent Learning {S,C,T}

Intuition	Logic
Innovation	
Iterations	Interactions